REAC SUPPORT ORGANIZATION
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133580

DATE: April 3, 1990

TO: George Prince, EPA Work Assignment Manager

DRAFT

FROM: David Miller, REAC Task Leader Dave Miller

THRU: Craig Moylan, REAC Section Chief VD for CM

SUBJECT: BROWN'S BATTERY BREAKAGE SITE
WORK ASSIGNMENT # 2303 - REVISION 2 TRIP REPORT

BACKGROUND

The Brown's Battery Breakage Site is located on approximately 14 acres in Tilden Township in the State of Pennsylvania (Figure 1). It is an abandoned lead battery recycling facility which operated from 1961 to 1971 (Figure 2). The types of materials handled were primarily lead alloys, vulcanized rubber, and acids.

The recycling operation involved breaking vulcanized rubber battery casings, draining the acid from the batteries, and recovering the lead alloy grids, plates and posts. The broken battery casings were originally disposed of on the property adjacent to the railroad tracks and Mill Creek, in approximately the same vicinity as the present containment area. A subsequent change in the breakage process resulted in smaller pieces (2 to 5 inches) of battery casings, which were used as a substitute for road gravel and fill.

Sampling of surface water, sediments, soils, air, and groundwater at the site was conducted by the Pennsylvania Department of Environmental Resources (PADER) on June 24, 1980, and from January through June, 1983; and by the US EPA in 1983 and 1984. The Pennsylvania Department of Health (PA DOH) sampled blood from children living on the site and reported blood lead concentrations which exceeded action levels. Surface water and sediments from Mill Creek and the Schuylkill River, and soils on site all contained elevated levels of lead (Revised Work Plan, RI/FS, Brown's Battery Breakage site, August 25, 1989). However, lead was not detected at quantifiable concentrations in the two residential wells or in the three monitoring wells on site. The US EPA initiated immediate removal (IR) activities on site in November, 1983. The activities, completed by June, 1984, included, in order:

- Temporary relocation of the three families residing on the site.
- Initiation of an Immediate Removal Feasibility Study.
- Installation of security fencing.
- Excavation of contaminated soils and battery casings from the site and deposition in a containment area.
- Backfilling of excavated areas.

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SCALE 1:24000

Sources: USGS, 1979, Auburn 7.5 minute series Quadrangle and USGS, 1977, Hamburg 7.5 minute series Quadrangle.

US EPA ENVIRONMENTAL RESPONSE TEAM RESPONSE ENGINEERING AND ANALYTICAL CONTRACT W.A.# 3347-11-01-2303	Figure 1 Site Location Map

AR100026

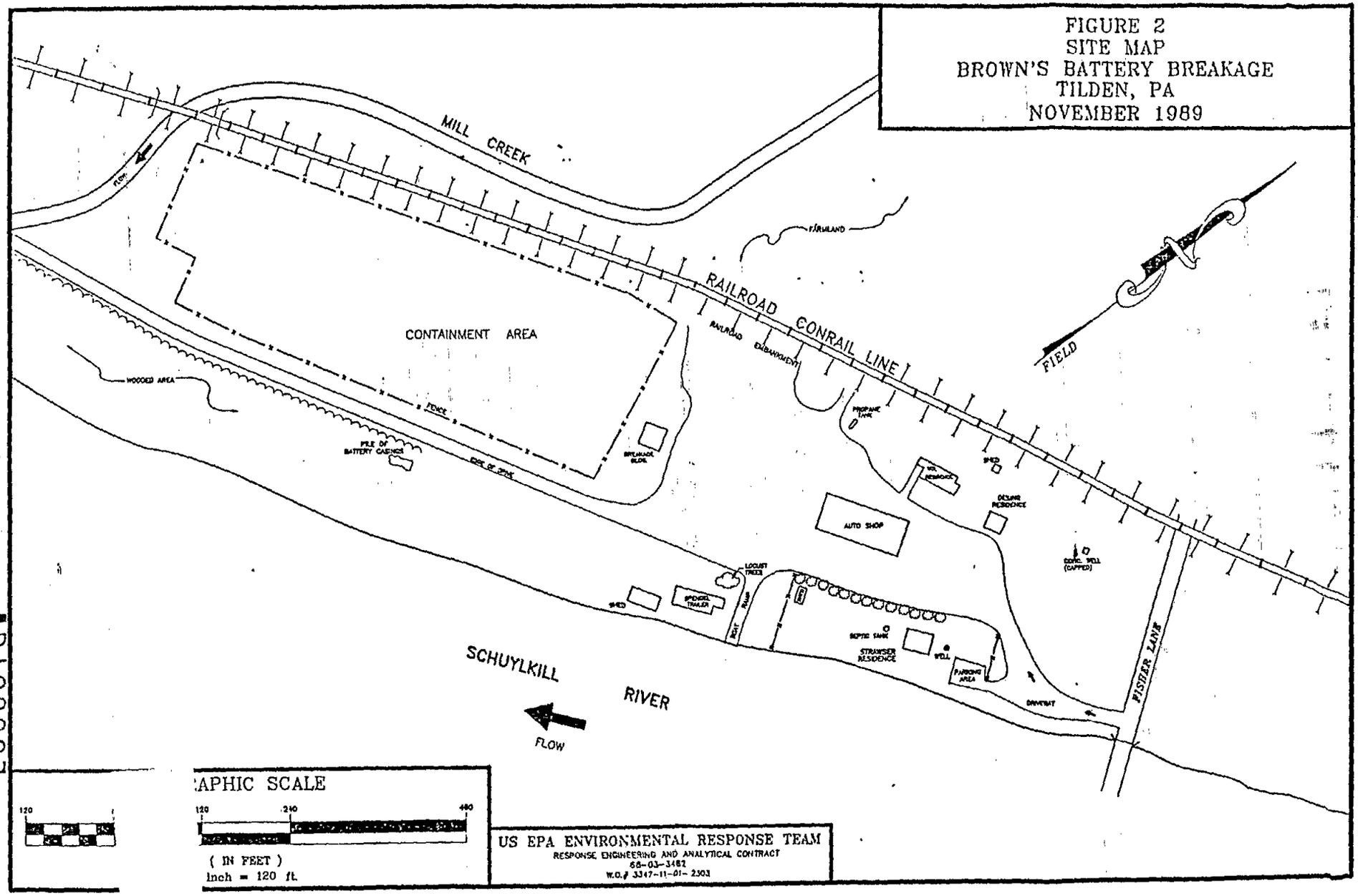

FIGURE 2
SITE MAP
BROWN'S BATTERY BREAKAGE
TILDEN, PA
NOVEMBER 1989

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- Capping the containment area with clay.
- Spreading of topsoil and seeding.
- Return of the three families to their homes.

The Brown's Battery Site was placed on the Superfund National Priorities List in October, 1984. The US EPA requested Potentially Responsible Parties (PRPs) to undertake a Remedial Investigation/Feasibility Study (RI/FS). These parties have been unwilling or unable to do this. Therefore, US EPA has been authorized to perform the RI/FS.

On August 31, 1989, REAC was issued a work assignment to assist the EPA/ERT with soil sampling at the Brown's Battery Breakage Site. At that time, REAC initiated the development of a Health and Safety Plan (HASP), a Quality Assurance Work Plan (QAWP), and compiled the necessary equipment to achieve the objectives stated in the work assignment. REAC provided on-site analytical capability for heavy metals analysis. An X-ray fluorescence spectrophotometer (XRF) was used for this purpose.

From late September through December, 1989, over 200 locations were screened for lead by XRF at the ground surface. Forty-five locations were screened for lead at depths up to ten feet and seven subsurface soil samples were collected for treatability studies. Concentrations ranged from non-detectable to above the calibration range of 12,000 mg/kg.

ERT/REAC's activities and findings to January 17, 1990 are documented in the Final Report for Soil Sampling at the Brown's Battery Breakage Site, January, 1990. In February, 1990, REAC was requested to perform additional XRF field screening and collect additional samples for lead analysis by nitric acid digestion/atomic absorption at the ERT/REAC laboratory in Edison, NJ.

The purpose of this Trip Report is to document the activities performed by ERT/REAC on March 5, 1990 at the Brown's Battery Breakage site.

OBSERVATIONS AND ACTIVITIES

On March 5, 1990, REAC screened 121 in-situ surface soil locations for lead with a portable XRF unit. REAC collected subsurface samples from 23 locations at one, two, and three foot depths. The 23 borings were completed using stainless steel hand augers. REAC SOPs #2012, Soil Sampling and #2002, Sampling Documentation were used as guidelines for the collection and tracking of all soil samples.

The 121 soil sample locations were concentrated in the wooded area and dirt road between the Schuykill River and the containment area fenceline. This area extended from the southern tip of the site to the southern edge of the Brendel residence. The surface sample locations are labelled 201-321. The locations were surveyed with a Topcon survey instrument and will be plotted on a map to be included in the revised Final Report. Prior to screening for lead with the XRF, a five by eight inch patch of ground was scraped clean of vegetation, rocks, and solid debris, so that the XRF probe could be placed directly on the soil. Each location was screened in two adjacent places within the cleared patch. The two XRF screening results for each patch were later averaged and the final results are listed in Table 1.1 of Appendix A.

The subsurface borings were located at surface sampling locations 301-321. Two additional soil borings were completed between the two houses at the northwest area of the site. Soil samples were collected at one, two, and three feet below the surface and transferred to the ERT/REAC field laboratory. Each sample was screened twice with the XRF unit. The two results were averaged and are presented in Table 1.2 of Appendix A. After screening, the soil boring samples were emptied in a hazardous waste containment drum already on site. The soil boring sample containers were decontaminated for disposal at a recycling center.

Approximately ten percent of the surface and subsurface samples were chosen to be analyzed for lead by nitric acid digestion/atomic absorption at the ERT/REAC laboratory in Edison, NJ. Preliminary results are listed in Table 1.

While collecting soil samples in the wooded area, two raptor pellets were found at the base of two individual trees approximately ten meters apart. Raptor pellets are the undigested remains (such as small mammal fur and bones), from a bird of prey's diet. There was concern that lead might possibly be present in the pellets, indicating potential lead exposure to these animals of prey. The presence of these pellets on site however, does not guarantee that the consumed animal lived on the site or accumulated lead on the site. The pellets were sent to National Environmental Testing, Inc., for hydrofluoric digestion/atomic absorption analysis. One of the pellets contained 24.2 ug/g (ppm) of lead and 12.9 ug/g of cadmium and the other contained no detectable metals. While these results are inconclusive as to whether animals on site are being impacted by lead contamination, they may warrant a further biological investigation to assess the lead contamination's impact on small mammals, plants, and upper level consumers on site.

The matrix spike recovery for both the lead and cadmium in this sample was outside the acceptable range (Weston/REAC Final Analytical Report, April 2, 1990), therefore, the results should be interpreted with discretion.

Chain of custody records for samples submitted to the ERT/REAC laboratory are presented in Appendix B. Field data sheets for all subsurface samples are attached in Appendix C.

FUTURE ACTIVITIES

Future activities include the preparation of a Final Report, containing validated results from the atomic absorption analyses of the soils and raptor pellets. The following updated figures will also be included in the Final Report.

Figure 1 - Site Location
Figure 2 - Site Map
Figure 3 - In-Situ Pb XRF Surface Soil Sample Locations
Figure 4 - Soil Boring and Monitor Well Locations
Figure 5 - Posted Pb XRF Surface Soil Concentrations
Figure 6 - Contour Map of Surface Data
Figure 7 - Soil Boring Pb Concentrations vs. Depth

The Final Report for the Brown's Battery Site is targeted for delivery on April 13, 1990.

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Table 1

Results of the Metals Analysis

Project # 2303 BROWN'S BATTERY SOIL SAMPLES

Concentration reported as mg/kg

REAC#	Client#	Parameter: Location:	Lead
030890-924	-	209-surface	620
030890-925	-	219-surface	570
030890-926	-	223-surface	810
030890-927	-	238-surface	600
030890-928	-	246-surface	44000
030890-929	-	250-surface	5900
030890-930	-	247-surface	380
030890-931	-	265-surface	9900
030890-932	-	277-surface	33000
030890-933	-	289-surface	9600
030890-934	-	295-surface	1000
030890-935	-	311-surface	170
030890-936	-	309-surface	39000
030890-937	-	255-surface	130
030890-938	-	320-surface	18000
030890-939	C 5870	309 - 3'	10000
030890-940	B 5861	318 - 2'	12000
030890-941	B 5859	319 - 2'	27
030890-942	B 5887	322 - 1.8'	28000
030890-943	B 5879	303 - 2'	14
030890-944	B 5877	304 - 2'	42
030890-945	B 5864	314 - 2'	290
030890-946	B 5863	315 - 2'	330
030890-947	A 5871	312 - 1'	2100
		DETECTION LIMIT	5

U -denotes detection limit

APPENDIX A

XRF PROCEDURES AND RESULTS

BROWN'S BATTERY BREAKAGE SITE
TRIP REPORT - REVISION 2
APRIL, 1990

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PROCEDURE FOR IN-SITU SURFACE SOIL XRF ANALYSIS

All organic matter and large rocks were removed from the area (approximately 8 inches by 5 inches) to be analyzed. The area was then rendered flat with a stainless steel trowel.

The XRF instrument was initiated for a sixty second measuring time while the probe was held flush against the soil surface. The sample location and the XRF analysis result were logged into a field notebook.

The XRF analysis was then repeated selecting a different analysis point within the prepared area.

TABLE 1.1

RESULTS FOR IN-SITU SURFACE SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

sample #	recovered mg/kg	average mg/kg	final mg/kg
201A	1320	1197	1197
201B	1074		
202A	2403	2056	2056
202B	1709		
203A	10570	12885	12885 *
203B	15200		
204A	7518	8573	8573
204B	9628		
205A	1519	1819	1819
205B	2118		
206A	287	207	207-J
206B	127		
207A	95	142	142-J
207B	188		
208A	264	213	213-J
208B	162		
209A	352	341	341
209B	329		
210A	347	279	279-J
210B	210		
211A	1096	1173	1173
211B	1249		
212A	932	910	910
212B	888		
213A	651	658	658
213B	664		
214A	1052	1137	1137
214B	1221		
215A	147	247	247-J
215B	347		
216A	68	73	ND
216B	78		
217A	1	37	ND
217B	72		
218A	150	150	150-J
218B	150		
219A	71	71	ND
219B	42		
220A	196	147	147-J
220B	97		
221A	167	163	163-J
221B	159		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification limit (310mg/kg).
* = sample conc. is above the linear calibration

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TABLE 1.1 (CONTINUED)

RESULTS FOR IN-SITU SURFACE SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

sample #	recovered mg/kg	average mg/kg	final mg/kg
222A	131	116	116-J
222B	100		
223A	1024	1037	1037
223B	1049		
224A	760	740	740
224B	719		
225A	561	590	590
225B	618		
226A	528	454	454
226B	380		
227A	751	801	801
227B	850		
228A	273	191	191-J
228B	109		
229A	85	88	ND
229B	90		
230A	0	20	ND
230B	39		
231A	116	106	106-J
231B	96		
232A	262	212	212-J
232B	162		
233A	172	131	131-J
233B	90		
234A	161	188	188-J
234B	213		
235A	5865	6469	6469
235B	7073		
236A	810	807	807
236B	804		
237A	972	902	902
237B	831		
238A	620	655	655
238B	690		
239A	44	22	ND
239B	0		
240A	1233	530	530
240B	138		
240C	220		
241A	0	0	ND
241B	0		
242A	70	40	ND
242B	10		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification [illegible]
* = sample conc. is above the lin[illegible] [illegible]ge.

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TABLE 1.1 (CONTINUED)

RESULTS FOR IN-SITU SURFACE SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

sample #	recovered mg/kg	average mg/kg	final mg/kg
243A	41	51	ND
243B	70		
244A	82	41	ND
244B	0		
245A	64	57	ND
245B	49		
246A	18970	17890	17890 *
246B	16810		
247A	285	429	429
247B	572		
248A	1186	1111	1111
248B	1035		
249A	905	1024	1024
249B	1142		
250A	2001	2054	2054
250B	2106		
251A	0	22	ND
251B	44		
252A	53	51	ND
252B	49		
253A	59	63	ND
253B	66		
254A	19	28	ND
254B	37		
255A	0	0	ND
255B	0		
256A	2582	3208	3208
256B	3834		
257A	29	47	ND
257B	65		
258A	107	70	ND
258B	32		
259A	741	758	758
259B	774		
260A	1058	1019	1019
260B	979		
261A	722	788	788
261B	853		
262A	605	586	586
262B	567		
263A	423	445	445
263B	467		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification limit (310mg/kg).
* = sample conc. is above the linear calibration range.

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TABLE 1.1 (CONTINUED)

RESULTS FOR IN-SITU SURFACE SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

sample #	recovered mg/kg	average mg/kg	final mg/kg
264A	413	365	365
264B	317		
265A	4963	5554	5554
265B	6145		
266A	1204	3517	3517
266B	5830		
267A	31	203	203
267B	374		
268A	2862	3396	3396
268B	3930		
269A	1021	1721	1721
269B	2420		
270A	899	809	809
270B	718		
271A	353	414	414
271B	474		
272A	848	855	855
272B	862		
273A	608	636	636
273B	664		
274A	282	224	224
274B	165		
275A	222	349	349
275B	476		
276A	1431	2321	2321
276B	3210		
277A	1791	3744	3744
277B	5697		
278A	1309	2410	2410
278B	3511		
279A	3200	2380	2380
279B	1560		
280A	449	403	403
280B	356		
281A	741	1465	1465
281B	2189		
282A	2285	1748	1748
282B	1210		
283A	654	501	501
283B	348		
284A	884	771	771
284B	657		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification limit (310mg/kg).
* = sample conc. is above the linear calibration range

TABLE 1.1 (CONTINUED)

RESULTS FOR IN-SITU SURFACE SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

sample #	recovered mg/kg	average mg/kg	final mg/kg
285A	1533	1532	1532
285B	1530		
286A	318	403	403
286B	487		
287A	3059	6381	6381
287B	9703		
288A	11340	8333	8333
288B	5326		
289A	7938	12234	12234 *
289B	16530		
290A	9489	8183	8183
290B	6876		
291A	1697	1058	1058
291B	418		
292A	80	78	ND
292B	78		
293A	0	172	172
293B	343		
294A	175	2663	2663
294B	5151		
295A	1038	911	911
295B	783		
296A	415	624	624
296B	833		
297A	399	608	608
297B	817		
298A	2427	2808	2808
298B	3188		
299A	15	168	168
299B	321		
300A	5799	2962	2962
300B	124		
301A	318	2764	2764
301B	5210		
302A	7211	5461	5461
302B	3711		
303A	10300	8667	8667
303B	7033		
304A	12330	8214	8214
304B	4098		
305A	13597	14238	14238 *
305B	14878		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification limit (310mg/kg).
* = sample conc. is above the linear calibration range.

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TABLE 1.1 (CONTINUED)

RESULTS FOR IN-SITU SURFACE SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

sample #	recovered mg/kg	average mg/kg	final mg/kg
306A	18770	19030	19030 *
306B	19290		
307A	16410	15330	15330 *
307B	14250		
308A	16590	17955	17955 *
308B	19320		
309A	19590	19330	19330 *
309B	19070		
310A	11270	15280	15280 *
310B	19290		
311A	69	42	ND
311B	12		
312A	5287	4325	4325
312B	3363		
313A	6429	5070	5070
313B	3710		
314A	12240	12915	12915
314B	13590		
315A	381	333	333
315B	284		
316A	10700	8268	8268
316B	5835		
317A	69	169	169
317B	268		
318A	6540	7101	7101
318B	7661		
319A	62	31	ND
319B	0		
320A	5738	7738	7738
320B	9737		
321A	8357	14044	14044 *
321B	19730		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification limit (310mg/kg).
* = sample conc. is above the linear calibration range.

PROCEDURE FOR HOMOGENIZED BORING SOIL XRF ANALYSIS

The soil boring sample was removed from the sample jar and placed into a large disposable plastic bowl. Large rocks and organic matter were removed from the soil and discarded. The remaining soil was broken up and homogenized with a stainless steel spoon for one to two minutes.

The soil was then formed into a half inch thick cake. The XRF instrument was initiated for a sixty second measuring time while the probe was held flush against the soil surface. Each soil sample was analyzed in duplicate. The sample number and XRF analytical results were recorded in a laboratory note book.

TABLE 1.2

RESULTS FOR HOMOGENIZED BORING SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

ID #	depth (feet)	recovered mg/kg	average mg/kg	final mg/kg
288A	1	0	0	ND
288A	1	0		
288B	2	0	0	ND
288B	2	0		
288C	3	0	0	ND
288C	3	0		
290A	1	0	1	ND
290A	1	1		
290B	2	0	0	ND
290B	2	0		
290C	3	0	0	ND
290C	3	0		
298A	1	0	0	ND
298A	1	0		
298B	2	0	0	ND
298B	2	0		
298C	3	0	0	ND
298C	3	0		
301A	1	0	0	ND
301A	1	0		
301B	2	41	21	ND
301B	2	0		
301C	3	0	0	ND
301C	3	0		
302A	1	3091	3046	3046
302A	1	3001		
302B	2	0	0	ND
302B	2	0		
302C	3	59	30	ND
302C	3	0		
303A	1	8	30	ND
303A	1	21		
303B	2	0	9	ND
303B	2	17		
303C	3	0	6	ND
303C	3	11		
304A	1	6789	7696	7696
304A	1	8603		
304B	2	0	0	ND
304B	2	0		
304C	3	0	0	ND
304C	3	0		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification limit (310
* = sample conc. is above the linear calibration

TABLE 1.2 (CONTINUED)
RESULTS FOR HOMOGENIZED BORING SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

ID #	depth (feet)	recovered mg/kg	average mg/kg	final mg/kg
305A	1	0	0	ND
305A	1	0		
305B	2	27	14	ND
305B	2	0		
305C	3	53	27	ND
305C	3	0		
306A	1	21030	20195	20195 *
306A	1	19360		
306B	2	19070	20475	20475 *
306B	2	21880		
306C	3	3485	3731	3731
306C	3	3976		
307A	1	19070	18520	18520 *
307A	1	17960		
307B	2	0	9	ND
307B	2	17		
307C	3	0	0	ND
307C	3	0		
308A	1	5945	6287	6287
308A	1	6628		
308B	2	0	0	ND
308B	2	0		
308C	3	11	6	ND
308C	3	0		
309A	1	19020	18645	18645 *
309A	1	18270		
309B	2	17290	15420	15420 *
309B	2	13550		
309C	3	7691	5691	5691
309C	3	3691		
310A	1	0	0	ND
310A	1	0		
310B	2	21	11	ND
310B	2	0		
311A	1	69	62	ND
311A	1	54		
311B	1	0	0	ND
311B	1	0		
312A	1	2475	2574	2574
312A	1	2674		
312B	2	159	248	248-J
312B	2	336		
312C	3	281	291	291-J
312C	3	301		

ND = not detected.
J = sample concentration (conc.) is between t
(93mg/kg) and quantification limit (310mg/kg)
* = sample conc. is above the linear calibrat

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TABLE 1.2 (CONTINUED)

RESULTS FOR HOMOGENIZED BORING SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

ID #	depth (feet)	recovered mg/kg	average mg/kg	final mg/kg
313A	1	29	15	ND
313A	1	0		
313B	2	18	9	ND
313B	2	0		
313C	3	0	0	ND
313C	3	0		
314A	1	7893	6858	6858
314A	1	5823		
314B	2	293	190	190-J
314B	2	86		
314C	3	32	21	ND
314C	3	10		
315A	1	508	422	422
315A	1	336		
315B	2	239	239	239-J
315B	2	238		
315C	3	17	9	ND
315C	3	0		
316A	1	29	15	ND
316A	1	0		
316B	2	23	17	ND
316B	2	11		
316C	3	8	4	ND
316C	3	0		
317A	1	22	40	ND
317A	1	57		
317B	2	27	14	ND
317B	2	0		
317C	3	49	31	ND
317C	3	12		
318A	1	1732	1572	1572
318A	1	1411		
318B	2	4865	3321	3321
318B	2	1777		
318C	3	11	9	ND
318C	3	6		
319A	1	766	879	879
319A	1	992		
319B	2	18	9	ND
319B	2	0		
319C	3	0	16	ND
319C	3	32		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification limit (310mg/k
* = sample conc. is above the linear calibration rang

rd:eh/MILLER/TR-2303.R2

TABLE 1.2 (CONTINUED)

RESULTS FOR HOMOGENIZED BORING SOIL XRF LEAD ANALYSIS
BROWN'S BATTERY SITE, TILDEN, PENNSYLVANIA
W.A. NO. 3347-11-01-2303 PHASE III MARCH, 1990

ID #	depth (feet)	recovered mg/kg	average mg/kg	final mg/kg
320A	1	2662	4213	4213
320A	1	5763		
320B	2	731	582	582
320B	2	433		
320C	3	2301	2393	2393
320C	3	2485		
321A	1	6361	9421	9421
321A	1	12480		
321B	2	10	30	ND
321B	2	49		
321C	3	115	107	107-J
321C	3	98		
322A	1	0	0	ND
322A	1	0		
322B	1	19180	19655	19655*
322B	1	20130		
322C	3	0	0	ND
322C	3	0		
323A	1	764	922	922
323A	1	1080		
323B	2	0	0	ND
323B	2	0		
323C	3	0	0	ND
323C	3	0		

ND = not detected.
J = sample concentration (conc.) is between the detection (93mg/kg) and quantification limit (310mg/kg).
* = sample conc. is above the linear calibration range.

APPENDIX B

CHAIN OF CUSTODY RECORDS

BROWN'S BATTERY BREAKAGE SITE
TRIP REPORT - REVISION 2
APRIL, 1990

rd:eh/MILLER/TR-2303.R2

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

CHAIN OF CUSTODY RECORD/LAB WORK REQUEST

No:

Project Name:
Project Number:
RFW Contact: Phone: Due Date:

SHEET NO. ____ OF ____

SAMPLE IDENTFICATION | **ANALYSES REQUESTED**

Sample No.	Sampling Location	Matrix	Date Collected	Container/Preservative					

Matrix:
(S)- Soil
W- Water
O- Oil
DS- Drum Solids
DL- Drum Liquids
her

Special Instructions:

Items/R	Relinquished By	Received By	Date	Time	Items/Reason	Relinquished By	Received By	Date	

AR100045

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

CHAIN OF CUSTODY RECORD/LAB WORK REQUEST

No: 2210

Project Name:
Project Number:
RFW Contact: Phone: Due Date:

SHEET NO. ____ OF ____

SAMPLE IDENTFICATION | **ANALYSES REQUESTED**

Sample No.	Sampling Location	Matrix	Date Collected	Container/Preservative					
	314 - 2'								
	15 - 2'								

AR100046

Matrix:
S- Soil
W- Water
O- Oil
DS- Drum Solids
DL- Drum Liquids
er

Special Instructions:

Items/Re	Relinquished By	Received By	Date	Time	Items/Reason	Relinquished By	Received By	Date	

APPENDIX C

FIELD DATA SHEETS

BROWN'S BATTERY BREAKAGE SITE
TRIP REPORT - REVISION 2
APRIL, 1990

rd:eh/MILLER/TR-2303.R2

FIELD DATA SHEET

№ 005881

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____
Date: 3/6/90
Time: 1733

Samplers: PRINCE, Miller
Site Name: _____
Sample Location: 288

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

Level ground in Woods sta (288)

A81 - 1' dee
B81 2' "
C81 3' deep

silty sand
l dust
"
clayey sand no coal

AR100048

FIELD DATA SHEET

№ 005882

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: Prince / Miller
Date: 3/6/90 Site Name: Brown Battery
Time: 1740 Sample Location: 290

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media _____
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

near schuylkill
level ground.
in woods.

A 5882 - 1' [illegible] no [illegible] dust
B - 82 - 2'
C - 82 - 3' Black silt some coal

AR100049

FIELD DATA SHEET

№ 005883

Roy F. Weston, Inc.

REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: /
Date: 2/6/90
Time: 1750

Samplers: Prince / Miller
Site Name: Browns Battery
Sample Location: 298

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
wet ice
dry ice
ambient

BIOASSESSMENT
See attached data sheet
See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

Sta. 298
Level ground at edge of woods & road.

- 58 83 - 1' grey sandy silt some clay
- 83 - 2' "
- 11 - 3' Red Brown Sandy silt some clay

AR100050

FIELD DATA SHEET

№ 005880

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

Lab No.: _____ Samplers: BEETHAM / PRYATELY
Date: 6 MAR 90 Site Name: BROWN'S
Time: 1500 Sample Location: 301

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS: 301

80-A - 1 ft = BLACK SAND W/ SILT, COAL-LIKE
80 B - 2 ft = DARK BROWN SILTY SAND
80 C = 3 ft = DARK BROWN SILTY SAND
LOCATION @ END (SW) OF PENNISULA @ CONFLUENCE OF MC & SR, ONE BATTERY CASING

AR100051

AR100051

FIELD DATA SHEET

№ 005878

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: Burdell | Corbett
Date: 3/6/90 Site Name: _____
Time: _____ Sample Location: 302

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
A. halogenated & aromatic volatiles
B. volatiles-USEPA 624
C. trihalomethanes
D. pesticides/PCB
E. PCB
F. base neutral/acid extractables-USEPA 625
G. pesticides, drinking water
H. herbicides, drinking water

INORGANICS
A. metals, priority pollutant
B. metals scan (ICP)
C. metals, other _____

LIMITED CHEMISTRY
A. total cyanide
B. total phenol
C. petroleum hydrocarbons
D. pH
E. alkalinity
F. hardness
G. total dissolved solids
H. total suspended solids
I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
wet ice
dry ice
ambient

BIOASSESSMENT
See attached data sheet
See comments

RCRA
A. EP toxicity _____metals _____pesticides _____herbicides
B. ignitability
C. corrosivity _____pH _____
D. reactivity

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

Waste file 1Ft ~~78~~ A brown, fine silt (black mix.
3Ft B black, fine gr
Battery casings 3Ft C 50% black fine gr, 50% brown fine gr
surface

AR100052

FIELD DATA SHEET

№ 005879

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

Lab No.: _____ Samplers: BEETHAM | PRYATELY
Date: 8 MAR 90 Site Name: BREWN'S
Time: 1500 cop 1445 Sample Location: 303

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
A. halogenated & aromatic volatiles
B. volatiles-USEPA 624
C. trihalomethanes
D. pesticides/PCB
E. PCB
F. base neutral/acid extractables-USEPA 625
G. pesticides, drinking water
H. herbicides, drinking water

INORGANICS
A. metals, priority pollutant
B. metals scan (ICP)
C. metals, other _____

LIMITED CHEMISTRY
A. total cyanide
B. total phenol
C. petroleum hydrocarbons
D. pH
E. alkalinity
F. hardness
G. total dissolved solids
H. total suspended solids
I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
wet ice
dry ice
ambient

BIOASSESSMENT
See attached data sheet
See comments

AR100053

RCRA
A. EP toxicity _____metals _____pesticides _____herbicides
B. ignitability
C. corrosivity _____pH _____
D. reactivity

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS: 303

A-79 - 1 ft - YELLOW RED SILTY SOIL W/ SAND
B79 - 2 ft - YELLOW RED SILTY CLAY, FIRM } SOILS
C 79 - 3 ft - YELLOW RED SILTY CLAY, FIRM W/ FEW ROUNDED QUARTZITE PEBBLES BATTERY

AR100053

SAMPLE LOCATION: EDGE OF MILL CREEK ~25 FROM WOODS EDGE CASINGS ON SURFACE

FIELD DATA SHEET

№ 005877

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

Lab No.: _____
Date: 3/6/90
Time: _____

Samplers: Bundell | Cobett
Site Name: _____
Sample Location: 304

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

1 ft 77 A dk brown sandy silt
2 ft 77 B black - fine gr.
3 ft 77 C black - very fine / clay

Pile - Battery casings @ surface

AR100054

FIELD DATA SHEET

№ 005876

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: BEETHAM / PRIVATELY
Date: 6 MAR 90 Site Name: BROWN'S
Time: 12:00 Sample Location: 305

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS: 305

A 76-1' = BLACK SAND FOW FINES, HOMOGE
B 76-2' = BLACK SILTY SAND
C 76-3' = DARK BROWN AND BLACK SILTY SAND MIXTURE

SAMPLE LOCATION: EDGE OF WOODS, TAKEN @ SOIL SURFACE BENEATH LEASING / RO CONTAINER

AR100055

FIELD DATA SHEET

№ 005875

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: BEETHAM / PRYATELY
Date: 6 MAR 90 Site Name: BROWN'S
Time: 1150 Sample Location: 306

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	(wooded)	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS: 306

A 75-1 = DARK BROWN SILTY SOIL W/ LOAM CAS
B 75-2 = DARK BROWN SILTY SOIL W/ LOAM CA
C 75-3 = DARK BROWN SILTY SAND W/ FEW CASING FRAGMENTS

LOCATION: IN MADE PILE ~ 2' TALL, MOSTLY CASINGS IN PAR 100056
EDGE OF WOODS. BATTERY CASINGS ON SURFACE + DUMPED METAL SHEETS IN

FIELD DATA SHEET

№ 005874

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: Corbett / Rundell
Date: 7/6/90 Site Name: _____
Time: _____ Sample Location: 307

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

74 A 1 Ft - brown - silty sand
74 B 2 Ft - black coal silt
74 C 3 Ft - black coal silt

AR100057

FIELD DATA SHEET

№ 005872

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____
Date: 6 MAR 90
Time: 1050

Samplers: BEETHAM / PRYATELY
Site Name: BROWNS
Sample Location: 308

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	(wooded)	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
wet ice
dry ice
ambient

BIOASSESSMENT
See attached data sheet
See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:
308
A 72-1 = BLACK SILTY SAND, V HOMOGENOUS
B 72-2 = BLACK SAND W/ FEW FINES, COAL-LIKE
C 72-3 = BLACK SAND W/ FEW FINES, COAL-LIKE
SAMPLE LOCATION @ EDGE OF WOODS [illegible] 15' HIGH [illegible] AT SURFACE

AR100058

FIELD DATA SHEET

№ 005870

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: Rundell / Corbett
Date: 3/6/90 Site Name: _____
Time: _____ Sample Location: 309

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	(wooded)	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color black			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	(soil)	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____
Collection Media _____
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
(glass jar)	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

COMMENTS:

Large battery casings

AR100059

FIELD DATA SHEET

№ 005873

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: Rundell / Corbett
Date: 3/6/90 Site Name: _____
Time: _____ Sample Location: 310

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		coal silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color black			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

Several large casings @ surface
Adjacent to river.

Coal Silt

73A - 1 ft coal silt - fine
73B - 2 ft coal silt - fine
73C - No sample - Roots

AR100060

FIELD DATA SHEET

№ 005869

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: Rundell / Corbett
Date: 3/6/90 Site Name: _____
Time: _____ Sample Location: 311

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	(gravel)	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color dk. brown			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	(soil)	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions 1ft. snow
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
(glass jar)	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

Total Depth 1.5 ft

Missing data sheets 67 and 68

Sample A 1 ft
" B 1.5 ft

Small Cie is adjacent to mainland -- in Schuylkill R.

AR100061

FIELD DATA SHEET

№ 005871

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

Lab No.: _____
Date: 6-MAR 90
Time: 11:00

Samplers: BEETHAM / PRYATELY
Site Name: BROWN'S
Sample Location: ~~3X~~ cap 312

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
A. halogenated & aromatic volatiles
B. volatiles-USEPA 624
C. trihalomethanes
D. pesticides/PCB
E. PCB
F. base neutral/acid extractables-USEPA 625
G. pesticides, drinking water
H. herbicides, drinking water

INORGANICS
A. metals, priority pollutant
B. metals scan (ICP)
C. metals, other _____

LIMITED CHEMISTRY
A. total cyanide
B. total phenol
C. petroleum hydrocarbons
D. pH
E. alkalinity
F. hardness
G. total dissolved solids
H. total suspended solids
I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
wet ice
dry ice
ambient

BIOASSESSMENT
See attached data sheet
See comments

RCRA
A. EP toxicity _____metals _____pesticides _____herbicides
B. ignitability
C. corrosivity_____pH_____
D. reactivity

AIR SAMPLING
Sampling Method _____
Sample Flow Rate_____
Sampling Time _____
Volume Collected _____

Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

COMMENTS: ~~3X~~ cap 312
A71-1 = BROWN-BLACK SILTY MATERIAL w/ 3
2 = YELLOW RED CLAYEY SILT w/ FINE SAND
3 = YELLOW RED SILTY CLAY, FIRMA w/ SAND,

AR100062

SAMPLE LOCATION @ EDGE OF WOODS, ~~0-20' WITHIN WOODS, BETTER CASING ON SURFACE~~ NO cap

FIELD DATA SHEET

№ 005866

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Chain of Custody No. _____

Lab No.: _____ Samplers: Corbett / Kundell REAC Task Leader: _____

Date: 3/8/00 Site Name: _____ EPA Task Monitor: _____

Time: _____ Sample Location: #~~315~~ 313 cop Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

A 66 1ft Black coal silt
B 66 2ft Black coal silt
C 66 3ft Black coal silt & brown clayey silt

AR100063

FIELD DATA SHEET

№ 005864

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

Lab No.: _____
Date: 6 MAR 90
Time: 10:20

Samplers: BEETHAM / PRYATELY
Site Name: BROWN'S
Sample Location: #314

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media _____
Special Shipping Instructions _____
#Field Blanks _____ #Sample Blanks _____

COMMENTS: 314

A 64 - 1' = MIXED SOIL & BLACK ORGANIC & IN SMALL (<½") YELLOW & GREEN SHALE
B 64 = 2' = DARK BROWN CLAYEY SILT WITH YE MEDIUM TO LIGHT BROWN SILTY SAND MIXED WITH BLACK BROWN & BLACK ~~SAN~~ CAP SILTY SAND.
C 64 = 3' = YELLOW RED SILTY SOIL - FIRM IN PLACE - SMALL AMT CLA SAN RESIDUAL SOIL

SAMPLE LOCATION NORTHWEST OF #315. VERY SMALL MADE PILE OF SOIL 1' HIGH; BATTERY

AR100064

AR100064

FIELD DATA SHEET

№ 005863

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: BEETHAM / PRYATELY
Date: 6MAR90 Site Name: BROWN'S
Time: 09:25 Sample Location: #315

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

AIR SAMPLING
Sampling Method _____ Collection Media
Sample Flow Rate _____ Special Shipping Instructions _____
Sampling Time _____
Volume Collected _____ #Field Blanks ____ #Sample Blanks ____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

AR100065

COMMENTS: 315

A 63-1' = BROWN-BLACK SILTY SAND
B 63-2' = BROWN BLACK MS MOTTLED W/ BLACK-COAL-LIKE MS.
C 63-3' = MEDIUM BROWN BLACK SANDY SOIL W/ SMALL AMOUNTS OF COAL-LIKE SILT.

AR100065

FIELD DATA SHEET

№ 005865

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____
Date: 3/6/96
Time: _____

Samplers: Corbett / Rundell
Site Name: Brown's Battery
Sample Location: 316

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	slit
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

A 65 1' Black coal
B 65 2 ft Black coal
C 65 3 ft Black coal silt

AR100066

FIELD DATA SHEET

№ 005862

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract [illegible]

Lab No.: _____ Samplers: BEETHAM [illegible]ATELY
Date: 6 MAR 90 Site Name: BROWN'S
Time: 07:00 Sample Location: # 317

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

AIR SAMPLING
Sampling Method _____ Collection Media
Sample Flow Rate _____ Special Shipping Instructions _____
Sampling Time _____
Volume Collected _____ #Field Blanks _____ #Sample Blanks _____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

COMMENTS: #317

A-62 1' = MOTTLED LIGHT YELLOW RED, DARK BROWN & BL

B-62-2' = VERY HOMOGENEOUS, BLACK SILTY SAND, COAL-LIKE DISCOLORATION

C-62-3' = V. HOMOGENEOUS, BROWN BLACK, SILTY SAND

Sample taken in Oil Pile East of woods. Pile is 2' HIGH. Old drum near pile

AR100067

FIELD DATA SHEET

№ 005861

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: ____ Samplers: Rundell / Prince
Date: 3/5/90 Site Name: Brown's Battery
Time: / Sample Location: 3/8 1,#2,3 J

Chain of Custody No. ____
REAC Task Leader: ____
EPA Task Monitor: ____
Project No.: ____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color ____	width ____	rock	silt
industrial	(wooded)	lowland riverrine	gravel	muck	odor ____	depth ____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow ____	velocity ____ cm/s	gravel	organic
residential	gully		silt	peat	direction ____	pools ____ %	shell	other ____
hedgerows	floodplain		color ____			riffles ____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color ____	pH ____	ambient temp ____
groundwater	pond/lake	trowl	other ____	odor ____	ORP ____	barometric pressure ____
brackish	river	bucket		temp ____	salinity ____	relative humidity ____
ocean/saline	effluent	sugar		DO ____	sample depth ____	weather conditions ____
sediment	sludge	ekman		cond ____	tide stage ____	

ANALYSES TO BE PERFORMED

TOC required? ____Yes ____No
If No, explain ____

Grain size analysis required? ____Yes ____No
If No, explain ____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other ____

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
____
____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other ____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity ____metals ____pesticides ____herbicides
- B. ignitability
- C. corrosivity ____pH____
- D. reactivity

AIR SAMPLING
- Sampling Method ____
- Sample Flow Rate ____
- Sampling Time ____
- Volume Collected ____

Collection Media
Special Shipping Instructions ____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

A 61-1' Dark Brown & Orange [illegible] silt
B 61-2' Dark Brown sandy si
C 61-3' Light Brown Sandy Silt

AR100068

FIELD DATA SHEET

№ 005859

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: Corbett / Prince
Date: 3/5/90 Site Name: Brown's Battery
Time: _____ Sample Location: 3/4 1', 2', 3'

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	(wooded)	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

AIR SAMPLING
Sampling Method _____ Collection Media _____
Sample Flow Rate _____ Special Shipping Instructions _____
Sampling Time _____
Volume Collected _____ #Field Blanks ___ #Sample Blanks ___

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

COMMENTS:
A 59 1' Black coal silt
B 59 2' Black coal silt
C 59 3' Black coal silt

AR100069

FIELD DATA SHEET

№ 005858

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: [illegible]
Date: 5/5/90 Site Name: Bloomfield Battery
Time: 1500 Sample Location: 320 - 1', 2', 3'

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	(wooded)	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity_____pH_____
- D. reactivity

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

AIR SAMPLING
Sampling Method _____
Sample Flow Rate_____
Sampling Time _____
Volume Collected _____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

A - 5E in 1' Orange - Br. .. Fill sandy
B - 5E 2' Orange - Silty ~~sand~~
C - 5E 3' Black sandy silty

AR100070

FIELD DATA SHEET

№ 005860

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

Lab No.: _____ Samplers: Corbett / Rundell
Date: 3/5/90 Site Name: Brown's Battery
Time: _____ Sample Location: 321 1' 2' 3'

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	(wooded)	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH _____
- D. reactivity

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____
Collection Media
Special Shipping Instructions _____
#Field Blanks ____ #Sample Blanks ____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

COMMENTS:

A 60 1' Dark Brown silty sand
B 60 2' Dark Brown silty sa...
C 60 3 Light brown silty sand

AR100071

FIELD DATA SHEET

№ 005887

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Lab No.: _____ Samplers: Rundell / Corbett
Date: 3/6 Site Name: _____
Time: _____ Sample Location: 322

Chain of Custody No. _____
REAC Task Leader: _____
EPA Task Monitor: _____
Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
- D. pesticides/PCB
- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
- H. herbicides, drinking water

INORGANICS
- A. metals, priority pollutant
- B. metals scan (ICP)
- C. metals, other _____

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

AIR SAMPLING
Sampling Method _____
Sample Flow Rate _____
Sampling Time _____
Volume Collected _____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
wet ice
dry ice
ambient

BIOASSESSMENT
See attached data sheet
See comments

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

Grassy area between Liebensperger residence and trailer home

87A 1 ft tan sandy silt
87B 1.8 ft Discrete fragments, black soil 2"-3" fragments
87C 3ft Dk brown - yellow silty clay

AR100072

AR100072

FIELD DATA SHEET

№ 005886

Roy F. Weston, Inc.
REAC, Edison, N.J.
EPA Contract 68-03-3482

Chain of Custody No. _____

Lab No.: _____ Samplers: _____ REAC Task Leader: _____

Date: _____ Site Name: _____ EPA Task Monitor: _____

Time: _____ Sample Location: ~~[illegible]~~ 323 Project No.: _____

SITE DESCRIPTION			SOIL TYPE		SURFACE WATER	STREAM	BOTTOM	
landfill	old field	upland palustrine	rock	clay	color _____	width _____	rock	silt
industrial	wooded	lowland riverrine	gravel	muck	odor _____	depth _____	rubble	clay
commercial	farmland	lacustrine	sand	loam	flow _____	velocity _____ cm/s	gravel	organic
residential	gully		silt	peat	direction _____	pools _____ %	shell	other _____
hedgerows	floodplain		color _____			riffles _____ %	sand	

SAMPLE TYPE		DEVICE		SAMPLE INFORMATION		WEATHER PARAMETERS
stream/surface	soil	kemmerer	ponar	color _____	pH _____	ambient temp _____
groundwater	pond/lake	trowl	other _____	odor _____	ORP _____	barometric pressure _____
brackish	river	bucket		temp _____	salinity _____	relative humidity _____
ocean/saline	effluent	sugar		DO _____	sample depth _____	weather conditions _____
sediment	sludge	ekman		cond _____	tide stage _____	

ANALYSES TO BE PERFORMED

TOC required? _____Yes _____No
If No, explain _____

Grain size analysis required? _____Yes _____No
If No, explain _____

ORGANICS
- A. halogenated & aromatic volatiles
- B. volatiles-USEPA 624
- C. trihalomethanes
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- E. PCB
- F. base neutral/acid extractables-USEPA 625
- G. pesticides, drinking water
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LIMITED CHEMISTRY
- A. total cyanide
- B. total phenol
- C. petroleum hydrocarbons
- D. pH
- E. alkalinity
- F. hardness
- G. total dissolved solids
- H. total suspended solids
- I. sulfate

OTHER ANALYSES (specify)
_____
_____

SAMPLE PREPARATION

CONTAINER	PRESERVATIVES
glass jar	HNO3
plastic jar	NaOH
acetate core	Zn Acetate
plastic bag	HCL
plastic bucket	Na2SO4
4L plastic	other _____

STORAGE
- wet ice
- dry ice
- ambient

BIOASSESSMENT
- See attached data sheet
- See comments

RCRA
- A. EP toxicity _____metals _____pesticides _____herbicides
- B. ignitability
- C. corrosivity _____pH_____
- D. reactivity

AIR SAMPLING
- Sampling Method _____
- Sample Flow Rate _____
- Sampling Time _____
- Volume Collected _____

Collection Media
Special Shipping Instructions _____
_____
#Field Blanks ____ #Sample Blanks ____

COMMENTS:

A 86 1ft lt. brown-orange silty clay
B 86 2ft light brown silty clay
C 86 3ft light brown silt clay

AR100073