



Florida Department of Environmental Regulation

Southeast District • 1900 S. Congress Ave., Suite A • West Palm Beach, Florida 33406

Lawton Chiles, Governor

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NOV. 25 1992

SOIL THERMAL TREATMENT FACILITY INSPECTION REPORT

1. TYPE INSPECTION: COMPLAINT ROUTINE FOLLOW-UP PERMITTING

2. FACILITY NAME Rinker Portland Cement Corp.

DER/EPA ID FLD981758485 GMS ID

3. ADDRESS 1200 NW 137th Ave, Miami, FL 33182
Mailing: P.O. Box 24635, West Palm Beach, FL 33416-4635

COUNTY Dade PHONE 305-221-7645 DATE 11/13/92 TIME 10:00

4. TYPE OF FACILITY Thermal Soil Treatment Facility

5. DESCRIPTION OF OPERATION:

Facility Operations include limerock mining and contaminated soil processing to produce cement.

Rinker uses kilns fired by coal, natural gas, or used oil in production.

6. APPL. REGULATIONS: 17-2, F.A.C. 17-775, F.A.C.

7. RESPONSIBLE OFFICIAL: (Name and Title)

James Jenkins, Vice President

8. SURVEY PARTICIPANTS AND PRINCIPAL INSPECTOR:

William Lee Martin and James Marmon, FDER
Dave Marple, Rinker Materials

9. FACILITY LATITUDE 25°46'48" LONGITUDE 80°25'10"

10. TYPE OWNERSHIP: FEDERAL STATE COUNTY MUNICIPAL PRIVATE

11. NOTICE NO: SO13-195017 DATE ISSUED: 4/17/91 EXP. DATE: 4/4/96

(P)
Rev 1/8/92

A routine inspection was conducted at the Rinker Portland Cement Corporation's soil thermal treatment facility regulated pursuant to Chapter 17-775, Florida Administrative Code. This facility operates a rotary kiln and utilizes the petroleum contaminated soil in the manufacture of cement.

BACKGROUND INFORMATION:

Rinker was issued a General Permit #SO13-195017 to operate a soil thermal treatment facility on April 17, 1991 which expires on April 4, 1996. The Rinker facility was operating as an existing facility as defined in 17-775.200, FAC prior to the effective date of this rule. A complete process description is provided in the Rinker permit application; however, the process was reviewed at the inspection as follows:

According to Dave Marple, prior to accepting any soil for thermal treatment pursuant to 17-775, FAC, Rinker requires a soil analysis profile. Based on this profile, and concurrence from Metro Dade Department of Resource Management (DERM), soils are brought by truck to the new soil storage facility. All materials accepted by Rinker still receive approval from DERM in the form of a standardized form letter. This is required as a condition of the facility's current Dade County permits but may change in the future due to the increased administrative workload experienced by the County. At the time of the inspection the new soil storage facility is in use and the old temporary soil storage facility is under closure. Contaminated soils have been removed from the perimeter of the old facility concrete slab and a closure plan has been prepared which includes soil sampling for confirmation and continued groundwater sampling from the four wells around the slab for a specified period of time before closure approval. Rinker claims to accept no hazardous wastes as defined in 40 CFR Part 261.

Rinker has operated a materials substitution program for the last four years. This program researches and evaluates different alternative materials for use as raw materials in the production of cement or for use as an alternative fuel source in the kilns. Two alternative materials currently in use include the substitution of fuel contaminated soils for clean silica sand and the substitution of "on-spec" waste oil for fuel oil in kiln burners. Other alternative material substitutions under discussion and/or evaluation for possible future use include: (1) substitution of oily waste water for part of the slurry makeup water, (2) burning tires for fuel, (3) replacing FP&L slag with other power plant ashes such as ash from MSW incinerators, and (4) blending oily sludges with contaminated soils. Rinker has received approval for a trial burn using old tires as a fuel and iron supplement. The tires are injected whole, two at a time, through a patented system during each rotation of the kiln. The point of injection is approximately midway along the kiln where the temperature is approximately 1800 ° F. The trial appears to be progressing well and a compliance burn is forecast in the near future. Dave Marple estimates the kiln could burn as many as 4,000,000 tires per year.

Additionally, the afterburner system for the petroleum contaminated soils is in operation, although the soils process through a preliminary kiln and afterburner first, then go through the cement kiln. Preliminary in house analysis of the soils, although not required, indicate the soils meet clean soil criteria before they are processed through the cement kiln.

SOIL STORAGE FACILITY:

Incoming soils to be thermally treated by Rinker arrive by independent contractors via truck to the new soil storage facility. Rinker does not handle drums or containers; therefore, in the event a contractor delivers contaminated soils in drums or containers the contractor is responsible for emptying and removing the drums and/or containers from the facility. The new facility located South of the railroad tracks became operational February 9, 1992 and consists of a 100' by 300' monolith concrete slab sealed to solid concrete walls on three sides with a concrete curb across the

front. The facility has an open front to accommodate trucks and equipment, enclosed sides, and a roof. The floor slopes to the southeast corner where a sump and holding tank are located to collect any contaminated water from wind blown rain seeping through the contaminated soils. Minimal water has been collected to date. No standing water was observed around the perimeter on the Northeast corner of the facility on this visit. An additional interior concrete curb, with water a stop, sloping away from the Northeast front wall toward the interior of the facility has been installed. The previous standing water outside exhibited an algae growth, mosquito larvae, and a slight sheen but a water sample taken and analyzed in Rinker's lab indicated no volatiles present. This should be watched in the future. The points along the outside wall approximately two feet off the floor previously discharging small quantities of water around previously plugged holes appear to have subsided. The small quantities, the presence of iron staining, and the absence of any odor or sheen indicate this may be internal condensation draining. This should be watched in the future and investigated if it increases. The four groundwater wells off the corners of the facility have flush mounted, secured manhole lids. The wells appear to be located on ground high enough to prevent flooding; however, the presence of watertight, lockable well caps could not be confirmed.

The improved screening capability and metal removal by magnetic methods remain in operation. The metal and plastics removed from the soils are collected for transport to the County landfill. The larger concrete debris screened out initially are taken to the rock crusher to be pulverized separately and mixed back in with the contaminated soils at the soil storage facility.

Damage attributed to Hurricane Andrew appeared minimal. Some skylight sections were blown off the roof but these had been replaced. Some of the metal wall fascade panels were dented/torn and most of the roof gutters were missing but most of the replacement material was on site and a contractor was due to start work soon. No other structural damage was observed and Dave Marple indicated no flooding was experienced in the soil storage facility. The plant has a comprehensive hurricane preparation plan used to minimize damage which includes activities such as sealing critical electrical motors/pumps, etc. in plastic to prevent water damage.

RECORDKEEPING:

Rinker has received a Department alternative procedure approval (File No. AP-STTF001) for testing of contaminated soils. Rinker relies solely on the test results supplied by other labs; however, Rinker requires acknowledgment of a Department approved Quality Assurance plan from the labs supplying the data. Rinker performs spot checks of some samples. Random review of records over the past several months indicated one batch of untreated soils was received between 8/27/92 and 8/31/92 which exceeded the clean soil criteria for selenium of 165 mg/kg. Laboratory results were provided which confirmed this was a misprint and soils were received below the appropriate criteria. No treated soils analyzed since the last visit through October 25, 1992 exceeded the VOA or TRPH criteria for clean soil in 17-775, FAC.

SUMMARY:

The new soil storage facility incorporates "state of the art" technology in handling and storing petroleum contaminated soil and significantly enhances Rinker's capability to process contaminated soils in an environmentally sound manner.

EXHIBIT E
Florida Department of Environmental Regulation
STATIONARY SOIL THERMAL TREATMENT FACILITY
INSPECTION REPORT

Name of Facility RINKER MATERIALS CORP.
Location 1700 NW 137th AVE, MIAMI, FL 33182
General Permit No. SO 13-195017 Date of Inspection 11/13/92
Contact Person DAVE MARPLE
Person Completing Report LEE MARTIN/JIM HARMON

Instructions: Complete the appropriate spaces for each item listed below. Use comments space to provide additional information for each item. Additional paper may be used if necessary.

Yes No SITE SURVEY

- ____ 1. Does information provided on general permit notice of intent form coincide with actual facility?
- ____ 2. Is soil sampling procedure correct?
- ____ 3. Are monitoring wells properly installed (proper number and location)?
- ____ 4. Are monitor wells being properly sampled and analysed for required parameters?
- ____ 5. Is untreated soil stockpiled separately from treated soil and properly identified?
- ____ 6. Is untreated soil adequately covered by roofing?
- ____ 7. Do floors for storage appear to be properly constructed and in good condition?
- ____ 8. Are floors properly bermed to provide runoff control?
- ____ 9. Is a leachate collection system provided?

Yes No REPORTING FORMS

- * ____ 10. Are untreated soil reporting forms being properly completed? starting date 7/27/92 end date 10/23/92
- ____ 11. Are treated soil reporting forms being properly completed? starting date 6/22/92 end date 10/25/92

* SEVERAL LINE ENTRIES IN AUG/SEPT 92 HAD NO ANALYTICAL RESULTS RECORDED; HOWEVER, THESE WERE CONFIRMED TO BE CLEAN SAND SOLD TO TURKEY POINT FOR HURRICANE¹ ANDREW RECOVERY ACTIONS

12. Indicate frequency clean soil criteria is being met?

- 39 % TRPH - 10 mg/kg, or
- 61 % TRPH - 50 mg/kg, PAH - 6 mg/kg, and VOA - 50 ug/kg

13. Indicate ranges and approximate median values of untreated soil analyses for the following parameters.

- TRPH 21 mg/kg to 45700 mg/kg, median 8930 mg/kg
- VOA BDL mg/kg to 145300 mg/kg, median 5185 mg/kg
- Arsenic BDL mg/kg to 8.36 mg/kg
- Barium BDL mg/kg to 230 mg/kg
- Cadmium BDL mg/kg to 2.8 mg/kg
- Chromium BDL mg/kg to 120 mg/kg
- Lead BDL mg/kg to 70 mg/kg
- Mercury BDL mg/kg to .581 mg/kg
- Selenium BDL mg/kg to 23.56 mg/kg
- Silver BDL mg/kg to 8.56 mg/kg

14. Indicate ranges and approximate median values of treated soil analyses for the following parameters.

- TRPH BDL mg/kg to 27.4 mg/kg, median 12.89 mg/kg
- VOA BDL mg/kg to BDL mg/kg, median BDL mg/kg
- Arsenic BDL mg/kg to 3.2 mg/kg
- Barium 13.6 mg/kg to 30 mg/kg
- Cadmium BDL mg/kg to .4 mg/kg
- Chromium BDL mg/kg to 19 mg/kg
- Lead 2.5 mg/kg to 11.5 mg/kg
- Mercury BDL mg/kg to BDL mg/kg
- Selenium BDL mg/kg to BDL mg/kg
- Silver BDL mg/kg to 3.6 mg/kg
- ____ mg/kg to ____ mg/kg
- ____ mg/kg to ____ mg/kg

Comments: _____

William L. Martin
Signature

11/19/92
Date

Florida Department of Environmental Regulation
 Soil Thermal Treatment Facility
 Untreated Soil Reporting Form

Name of Facility: BUNKER MATERIALS CORP.
 Air Permit No.: A013-172154
 Soil Treatment Permit No.: SW-01117-91
 Stationary XXX or Mobile Facility: _____

Month: August _____

Year: 1992 _____

Day of Mo.	Soil Batch ID#	Sample Number	Amount Volume or Weight cy/tn	Analytical Results								Totals			Indicate Other Analyses	
				AS	BA	CD	CR	PB	HG	SE	AG	VOA	RPH			Attach Lab Results Only
07/27/92	108-92169	1	1.31	BDL	3.0		1.4	BDL	BDL	BDL	2035	65				
07/27/92	108-92170	1	0.52	BDL	BDL	.9	BDL	6	BDL	BDL	93	78				
07/27/92	108-92171	1	4.22	3	1.5	BDL	3.5	9.3	BDL	BDL	BDL	14.7				
07/27/92	111-92188	1	1.08	211	4.9	1.29	4.98	31.9	.00607	.0882	.579	<9	25.3			
07/27/92	111-92189	1	1.58	<.4	5.08	<.05	4.28	.687	<.001	<.5	<.05	<9	1110			
07/27/92	143-92012	1	38.88	BDL	BDL	BDL	5.20	13.2	BDL	BDL	BDL	BDL	280			
07/27/92	165-92005	1	40.30	BDL	2.7	BDL	9.1	16.0	BDL	BDL	BDL	BDL	20			
07/28/92	143-92012	1	115.29	BDL	BDL	BDL	5.20	13.2	BDL	BDL	BDL	BDL	280			
07/28/92	240-92012	1	52.32	2.02	31.82	.12	4.80	33.75	<.01	3.31	.01	86.8	1050			
07/29/92	103-92014	1	1.67	<.4	17	<.5	.6	26	<.02	<1	<1	<1	BDL	<5		
07/29/92	108-92167	1	24.93	<1.0	3.7	<.5	4.9	4.9	<.03	<1	<1	<1	22000	130		
07/29/92	240-92011	1	123.42	3.68	74.59	.07	7.75	6.91	<.01	8.33	1.23	10776	800			
07/29/92	264-92006	1	21.40	BDL	2.8	BDL	2.7	3.2	BDL	BDL	BDL	BDL	2100	2830		
07/30/92	111-92187	1	0.31	BDL	2.6	BDL	4.7	1.8	BDL	BDL	BDL	BDL	29.1			
07/30/92	111-92191	1	0.47	BDL	1.8	BDL	2.1	1.2	BDL	BDL	BDL	BDL	20			
07/30/92	111-92192	1	0.41	BDL	1.7	BDL	2.7	1.1	BDL	BDL	BDL	BDL	3160			
07/30/92	111-92193	1	1.54	.0244	1.14	.0880	1.61	3.72	.0047	.00887	<.05	<12.41	18.8			
07/30/92	111-92194	1	0.41	BDL	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	12.6			
07/30/92	111-92185	1	0.38	BDL	2.6	BDL	4.3	2.0	BDL	BDL	BDL	BDL	105			
07/30/92	143-92011	1	74.35	<1	<20	<.5	5.0	13	<1	<.5	<1	<1	BDL	84		
07/30/92	240-92010	1	20.47	2.47	3.71	.39	2.02	.7	<.01	5.32	2.63	<26.8	<10			
07/31/92	108-92188	1	13.57	.49	18.9	<.8	23.3	21.6	<.05	<.4	<1.8	BDL	6888			
07/31/92	111-92190	1	0.82	.692	3.83	<.05	4.25	1.91	.0168	.01	<.05	24.3	16.3			
07/31/92	143-92011	1	70.12	<1	<20	<.5	6.0	13	<1	<.5	<1	BDL	84			
07/31/92	240-92013	1	23.63	2.49	115.28	.07	3.78	1.68	<.01	.98	.14	BDL	<10			
07/31/92	305-92002	1	82.04	.49	102.8	<.8	4.0	.52	<.05	<.4	<1.6	BDL	10			
08/03/92	108-92174	1	188.67	1.4	75.2	<8	48.3	32.6	<.05	<.4	<4	BDL	613			

Florida Department of Environmental Regulation
 Soil Thermal Treatment Facility
 Untreated Soil Reporting Form

Name of Facility: **RINKER MATERIALS CORP.**
 Air Permit No.: **A013-172154**
 Soil Treatment Permit No.: **SW-01117-91**
 Stationary **XXX** or Mobile Facility:

Month: August

Year: 1992

Day of Mo.	Soil Batch ID#	Sample Number	Amount Volume or Weight cy/tn	Metals								Analytical Results				Totals		Indicate Other Analyses Attach Lab Results Only	
08/03/92	240-920113	1	14.13	2.49	115.28	.07	3.79	1.68	<.01	.86	.14	BDL	<10						
08/03/92	305-92002	1	18.27	.49	102.8	<.8	4.0	.52	<.06	<.4	<1.6	BDL	10						
08/04/92	106-92174	1	45.72	1.4	75.2	<.8	48.3	32.6	<.06	<.4	4	BDL	813						
08/04/92	106-92176	3	252.99	7.37	204	<.8	15.7	66.87	<.05	<.4	1.7	BDL	3309						
08/04/92	106-92177	6	30.79	8.1	89.3	<.8	5.47	<4.0	<.05	<.4	<1.16	BDL	88.33	12213					
08/04/92	114-92036	1	11.97	BDL	20	BDL	3.8	17.6	.2	BDL	3.8	BDL	56900	6360					
08/04/92	305-92001	1	313.29	0.84	198	<0.80	5.6	4.4	<0.050	<0.40	2.0	229	86						
08/05/92	106-92177	6	209.66	8.1	89.3	<.8	5.47	<4.0	<.05	<.4	<1.16	BDL	88.33	12213					
08/05/92	136-92012	1	57.77	<1.0	3.3	<0.50	4.8	24	<0.030	<20	<1.0	BDL	10	18					
08/05/92	278-92032	6	538.26	.182	154.34	.332	2.9	8.8	.14	<1	1.24	BDL	8888.4						
08/06/92	106-92176	1	19.81	BDL	BDL	3.7	27	BDL	BDL	BDL	14	BDL	140						
08/06/92	111-92197	1	46.04	BDL	8.20	1.30	3.60	19.1	BDL	BDL	1.00	BDL	2.7	74					
08/06/92	278-92032	6	497.19	.182	154.34	.332	2.9	8.8	.14	<1	1.24	BDL	8888.4						
08/07/92	106-92177	6	158.17	8.1	89.3	<.8	5.47	<4.0	<.05	<.4	<1.16	BDL	88.33	12213					
08/07/92	224-92002	1	21.52	1.67	14.5	0.026	10.4	15.3	<0.05	2.84	0.16	BDL	8850.0						
08/07/92	230-92004	1	68.24	1.13	102	BDL	3.0	BDL	BDL	BDL	1700	BDL	728						
08/07/92	278-92032	5	18.57	.182	154.34	.332	2.9	8.8	.14	<1	1.24	BDL	8888.4						
08/07/92	278-92033	1	15.95	.068	2.16	.002	.085	.178	.078	BDL	.008	BDL	.01						
08/07/92	278-92034	1	4.08	.049	3.44	.083	241	2.477	.681	BDL	.027	BDL	.018						
08/07/92	278-92035	1	43.93	<1	<4.0	.1	.5	1.7	<1	<1	<4	BDL	21.1						
08/07/92	305-92001	1	215.48	0.84	198	<0.80	5.6	4.4	<0.050	<0.40	2.0	229	86						
08/10/92	106-92177	6	117.80	8.1	89.3	<.8	5.47	<4.0	<.05	<.4	<1.16	BDL	88.33	12213					
08/10/92	278-92033	1	11.19	.068	2.16	.002	.085	.178	.078	BDL	.008	BDL	.01						
08/11/92	106-92173	1	22.86	8.2	63	<.6	18	54	<.03	<1.0	BDL	6.2							
08/11/92	111-92196	1	0.49	.337	4.38	<.05	3.68	13.6	.0139	.0248	.0614	<9	160						
08/11/92	240-92014	1	29.84	1.9	79.56	.04	6.16	1.12	<.01	23.56	.10	BDL	<10						
08/11/92	240-92015	1	15.13	4.44	208.08	.12	10.03	25.37	<.01	12.72	6.44	BDL	16						

Florida Department of Environmental Regulation
 Soil Thermal Treatment Facility
 Untreated Soil Reporting Form

Name of Facility: HINKER MATERIALS CORP.
 Air Permit No.: A013-172154
 Soil Treatment Permit No.: SW-01117-91
 Stationary XXX or Mobile Facility: _____

Month: August _____

Year: 1992 _____

Day of Mo.	Soil Batch ID#	Sample Number	Amount Volume or Weight cy/ftn	Analytical Results								Totals	VOA	RPH	Indicate Other Analyses Attach Lab Results Only
				AS	BA	CD	PB	HG	SE	AG	VOA				
08/12/92	106-92173	1	49.52	8.2	.63	<.5	18	.54	<.03	<1.0	<1.0	BDL	6.2		
08/12/92	273-92092	1	34.27	1.87	230	2.1	13.4	9.3	.13	BDL	3.7	145300	4840		
08/13/92	106-92172	1	12.12	<1.3	<25	<1.1	7.0	8.0	<.13	<1.3	<2.5	BDL	<40		
08/13/92	111-92198	3	121.38	.0475	2.66	<.05	1.73	<m.398	.013	.008	<.05	BDL	23.2		
08/14/92	111-92198	3	36.85	.0475	2.66	<.05	1.73	<m.398	.013	.008	<.05	BDL	23.2		
08/14/92	219-92004	1	12.63	<1.0	5.4	<.5	6.2	6.8	<.03	<10	<1.0	10450	950		
08/14/92	293-92006	4	121.57	.84	<3.93	1.24	12.75	32	<1	<.67	2.68	25.6	882.8		
08/14/92	293-92007	1	65.88	<.29	<22	<.708	<2.8	53	<1	<.21	3.63	BDL	440.2		
08/14/92	293-92008	1	38.28	<363	<26.7	<.76	<3.0	<5.03	<1	<.23	<2.3	BDL	161.9		
08/14/92	302-92005	1	3.97	2.8	5.1	BDL	3.5	40.3	BDL	BDL	BDL	BDL	850	139	
08/17/92	111-92198	3	12.29	.0475	2.58	<.05	1.73	<m.398	.013	.008	<.05	BDL	23.2		
08/17/92	273-92003	1	77.28	.723	45.8	.105	37.5	14.6	.0489	.235	<.05	<9	34.4		
08/18/92	114-92034	1	4.22	6.74	BDL	BDL	6.87	BDL	.89	BDL	13.02	74.0			
08/18/92	114-92037	1	7.08	BDL	6.3	BDL	6.6	19.6	BDL	BDL	BDL	BDL	197		
08/18/92	114-92040	1	2.51	1.72	BDL	BDL	6.68	BDL	BDL	BDL	7.05	115			
08/18/92	134-92010	1	81.07	BDL	2.2	BDL	3.6	1.4	BDL	BDL	BDL	BDL	55500		
08/18/92	263-92009	6	215.63	1.25	<74	.89	16.8	21	<1	<.67	<4.98	BDL	<40.58		
08/18/92	240-92016	1	25.82	2.08	225.12	.07	6.88	70.0	<.01	4.94	1.97	<12	82		
08/18/92	243-92005	4	63.87	.285	BDL	BDL	9.40	59.75	BDL	2.045	BDL	275	12330		
08/19/92	293-92008	6	13.97	1.26	<74	.89	15.8	21	<1	<.67	<4.98	BDL	<40.58		
08/20/92	111-92198	1	64.78	.144	1.00	1.125	2.4	8.495	.019	.016	1.27	18278	593		
08/20/92	111-92204	1	0.90	BDL	16.2	BDL	2.60	1.80	BDL	BDL	2.10	BDL	51		
08/20/92	111-92205	1	0.22	.0288	<1	.975	1.5	8.97	<.001	<.002	<.01	<8	170		
08/20/92	111-92206	1	0.35	BDL	1.8	BDL	1.0	6.6	BDL	BDL	BDL	BDL	11000	40	
08/20/92	111-92207	1	0.38	1.46	41	1.9	2.5	3.8	BDL	BDL	BDL	BDL	16100	172	
08/20/92	114-92039	1	108.19	<1	12.3	<1	4.94	17.3	<1	<1	<1	24900	36100		
08/20/92	243-92006	4	70.43	.285	BDL	BDL	8.40	69.75	BDL	2.045	BDL	275	12330		

**Florida Department of Environmental Regulation
Soil Thermal Treatment Facility
Untreated Soil Reporting Form**

Name of Facility: RINKER MATERIALS CORP.
Air Permit No.: A013-171254
Soil Treatment Permit No.: SW-01117-91
Stationary xxx or Mobile Facility:

Month: August Year: 1992

1	2	3	4	5	6	7	8	Analytical Results										Indicate Other Analyses Attach Lab Results Only	
								Day of Mo.	Soil Batch ID#	Sample Number	Amount Volume or Weight cy/m ³	Metals						Totals	RIPH
								AS	BA	CD	CR	PB	HG	SE	AG	BDL	BDL	BDL	BDL
08/21/92	108-92178	1	0.49	BDL	8	BDL	4.0	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	930	
08/21/92	108-92179	1	0.38	.74	13.6	<.8	<4.0	14.8	.10	<.40	<1.6	BDL	BDL	2480					
08/21/92	108-92180	1	0.94	BDL	BDL	BDL	2.0	10	BDL	.9	.2	BDL	BDL	363					
08/21/92	108-92181	1	1.56	2.6	5	.2	6	22	BDL	BDL	BDL	BDL	BDL	3414	33				
08/21/92	111-92200	1	0.87	.103	10.7	<.05	2.38	13.2	.0276	.0118	<.05	<18.85						7.12	
08/21/92	111-92201	1	0.82	0.0232	1.11	<.0500	.656	1.06	.003820	.00771	<0.560	<0.00						33.6	
08/21/92	111-92202	1	1.81	.0906	2.43	.0741	1.66	.486	.0152	.106	<.05	<8.80						86.2	
08/21/92	111-92203	1	1.50	.0788	1.10	.041	2.42	3.69	<.001	.0284	<.05	<57.884						419	
08/21/92	114-92038	1	20.92	BDL	2.7	BDL	3.2	2.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	35	
08/21/92	114-92041	1	25.02	BDL	2.7	BDL	3.2	2.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	35	
08/21/92	218-92005	1	7.78	BDL	48	BDL	1.60	1.30	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	137	
08/21/92	243-92006	4	44.57	.285	BDL	BDL	9.40	59.76	BDL	2.045	BDL	275	BDL	BDL	BDL	BDL	BDL	12330	

Florida Department of Environmental Regulation
 Soil Thermal Treatment Facility
 Untreated Soil Reporting Form

Name of Facility: BINKER MATERIALS CORP.
 Air Permit No.: A013-172154
 Soil Treatment Permit No.: SW-01117-91
 Stationary XXX or Mobile Facility: _____

Month: SEPTEMBER Year: 1992

Day of Mo.	Soil Batch ID#	Sample Number	Amount Volume or Weight cy/tn	Analytical Results								Totals	Indicate Other Analyses Attach Lab Results Only	
				AS	BA	CD	CR	PB	HG	SE	AG	VOA	RPH	
08/27/92	101-82010	5	371.71	1.46	8.14	.148	20	50	<1	201	8.56	<13	532	LEAN SAND SOLD
08/27/92	307-82002	0	105.76											TURKEY PT
08/28/92	101-82010	5	485.18	1.46	8.14	.148	20	50	<1	201	8.56	<13	532	
08/28/92	307-82003	0	284.19											1
08/31/92	101-82010	5	41.41	1.46	8.14	.148	20	50	<1	201	8.56	<13	532	
08/31/92	307-82004	0	227.26											17
09/01/92	111-82208	3	228.43	.0327	1.32	<.05	.907	5.13	<.0028	.008	<.06	33112	<12.20	
09/01/92	243-82007	4	44.09	.285	BDL	BDL	9.40	59.75	BDL	2.045	BDL	275	12330	
09/01/92	307-82001	0	46.25											1
09/01/92	307-82004	0	449.89											1
09/02/92	103-82015	2	70.34	BDL	BDL	BDL	1.075	BDL	BDL	BDL	BDL	4.5	247	
09/02/92	243-82007	4	23.36	.285	BDL	BDL	9.40	59.75	BDL	2.045	BDL	275	12330	
09/02/92	265-82012	3	108.79	<1.13	<110	<2.77	10.7	<44.7	<1	<57	<6.8	<1696	103	
09/02/92	302-82008	3	126.17	BDL	6.9	BDL	2.07	1.6	BDL	BDL	BDL	285	302.6	
09/02/92	307-82004	0	43.58											1
09/02/92	308-82001	3	100.31	4.84	46.93	.08	14.71	2.1	<.01	2.49	.017	<2	8387	
09/03/92	134-82011	3	213.80	BDL	6.9	BDL	12.87	.47	BDL	BDL	BDL	48.7		
09/03/92	243-82007	4	77.68	.285	BDL	BDL	9.40	59.75	BDL	2.045	BDL	275	12330	
09/03/92	285-82011	3	254.81	<1.1	<51.3	<1.3	8.7	<62	<1	<.65	<1.1	<636	1600	
09/03/92	308-82001	3	110.32	4.84	46.93	.08	14.71	2.1	<.01	2.49	.017	<2	8387	
09/04/92	243-82007	4	27.95	.285	BDL	BDL	9.40	59.75	BDL	2.045	BDL	275	12330	
09/04/92	308-82001	3	101.58	4.84	46.93	.08	14.71	2.1	<.01	2.49	.017	<2	8387	
09/08/92	114-82042	1	7.40	<1	12.3	<1	4.94	17.3	<1	<1	<1	24900	38100	
09/08/92	243-82007	4	55.17	.285	BDL	BDL	9.40	59.75	BDL	2.045	BDL	275	12330	
09/08/92	308-82001	3	194.28	4.84	46.93	.08	14.71	2.1	<.01	2.49	.017	<2	8387	
09/09/92	111-82209	1	0.18	2.5	7.9	BDL	4.5	25.6	BDL	BDL	BDL	64.4		
09/09/92	111-82210	1	2.03	1.19	49	2.8	4.5	3.6	BDL	BDL	BDL	3.6		

775.800(2) * Should have been Z-1 - see far in file

Florida Department of Environmental Regulation
 Soil Thermal Treatment Facility
 Untreated Soil Reporting Form

Name of Facility: RINKER MATERIALS CORP.
 Air Permit No.: A013-1172154
 Soil Treatment Permit No.: SW-01117-91
 Stationary XXX or Mobile Facility:

Month: October

Year: 1992

Day of Mo.	Soil Batch ID#	Sample Number	Amount Volume or Weight cy/ftn	Analytical Results												Totals	Indicate Other Analyses	Attach Lab Results Only
				AS	BA	CD	CR	PB	Hg	SE	AG	VOA	RPH					
09/21/92	265-82015	3	44.49	<20	<20	<.50	<1.10	<9.83	<.091	<20	<.89	1688	<5.77					
09/21/92	278-82037	3	42.08	BDL	4.17	BDL	1.43	4.43	BDL	BDL	BDL	5325	85.7					
09/22/92	215-82005	1	18.83	1.3	3.2	<.05	<5	2.4	<1	3.4	<.05	<11	120					
09/22/92	243-82008	4	18.68	2.66	BDL	BDL	9.40	59.75	BDL	2.045	BDL	275	12330					
09/22/92	278-82037	3	91.20	BDL	4.17	BDL	1.43	4.43	BDL	BDL	BDL	5325	85.7					
09/23/92	278-82037	3	21.45	BDL	4.17	BDL	1.43	4.43	BDL	BDL	BDL	5325	85.7					
09/24/92	111-82218	1	0.11	BDL	1.6	BDL	BDL	BDL	BDL	BDL	BDL	2.76	457000					
09/24/92	111-82219	1	0.58	0.0856	1.64	<.0600	2.56	1.24	.00850	0.0153	0.749	<5.54	86.1					
09/24/92	111-82220	1	1.70	0.116	1.61	<.0500	0.902	<.0200	0.0135	0.0183	<.0500	1085	31.7					
09/24/92	111-82221	1	0.30	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.6					
09/24/92	217-82003	1	63.85	1.9	60.4	<.8	6.8	<4	<.05	<4	2.6	881	88					
09/24/92	265-82014	1	46.84	2.8	3.7	BDL	2.8	21.4	BDL	BDL	BDL	BDL	54950					
09/24/92	265-82015	3	43.33	<20	<20	<.50	<1.10	<9.83	<.091	<20	<.89	1688	<5.77					
09/24/92	308-82002	3	22.67	4.84	45.83	.08	14.71	2.1	<.01	2.49	.017	<2	8.38					
09/25/92	108-82134	1	10.25	1.0	38	0.50	120	4.5	BDL	BDL	BDL	BDL	85.5	BDL				
09/25/92	111-82222	1	2.04	<0.4	1.26	<0.05	2.1	.884	.00886	<0.5	.382	<5.34	85.9					
09/25/92	217-82003	1	16.35	1.9	50.4	<8	8.8	<4	<.05	<4	2.6	881	88					
09/25/92	265-82014	1	18.28	2.8	3.7	BDL	2.8	21.4	BDL	BDL	BDL	BDL	54950					
09/28/92	108-82184	1	4.88	1.0	38	0.50	120	4.5	BDL	BDL	BDL	BDL	3206.7	14.0				
09/28/92	278-82037	3	24.77	BDL	4.17	BDL	1.43	4.43	BDL	BDL	BDL	BDL	7.2	15.6				
09/29/92	278-82038	1	17.31	1.3	4.6	BDL	3.0	1.8	BDL	BDL	BDL	BDL	70	42				
09/29/92	291-82003	3	100.01	BDL	BDL	BDL	18	.37	BDL	BDL	BDL	BDL	8860					
09/30/92	111-82223	1	0.83	BDL	1.5	BDL	3.4	4.3	BDL	BDL	BDL	BDL	70	42				
09/30/92	143-82013	1	45.36	3.0	36	BDL	9.1	42	BDL	BDL	BDL	BDL	8860					
09/30/92	278-82038	1	42.22	1.3	4.6	BDL	3.0	1.8	BDL	BDL	BDL	BDL	8860					
09/30/92	291-82003	3	78.46	BDL	BDL	BDL	18	.37	BDL	BDL	BDL	BDL	3206.7	14.0				
10/01/92	143-82013	1	43.45	3.0	36	BDL	9.1	42	BDL	BDL	BDL	BDL	8860					

Florida Department of Environmental Regulation
 Soil Thermal Treatment Facility
 Untreated Soil Reporting Form

Name of Facility: RINKER MATERIALS CORP.
 Air Permit No.: A013-1172154
 Soil Treatment Permit No.: SW-01117-91
 Stationary XXX or Mobile Facility:

Month: October

Year: 1992

Day of Mo.	Soil Batch ID#	Sample Number	Amount Volume or Weight cy/tn	Analytical Results								Totals			Indicate Other Analyses	
				AS	BA	CD	CR	PB	HG	SE	AG	VOA	RPH	Attach Lab Results Only		
10/01/92	230-92055	6	99.49	1.85	91	BDL	3.77	5.43	BDL	BDL	2.76	BDL	3040			
10/01/92	278-92038	1	54.85	1.3	4.6	BDL	3.0	1.8	BDL	BDL	70	42				
10/02/92	111-92225	1	34.75	8.88	8.82	<0500	6.28	8.74	0.0187	0.0323	<0.500	<0.00	106			
10/02/92	227-92012	1	24.84	<1	5.9	<5	6.1	.65	<.03	<5	<1.0	BDL	18			
10/02/92	230-92016	6	188.57	1.85	91	BDL	3.77	5.43	BDL	BDL	2.76	BDL	3040			
10/02/92	278-92037	3	38.48	BDL	4.17	BDL	1.43	4.43	BDL	BDL	BDL	BDL	6325	96.7		
10/02/92	278-92038	1	22.48	1.3	4.6	BDL	3.0	1.8	BDL	BDL	BDL	BDL	70	42		
10/05/92	264-92038	1	32.28	BDL	14.0	BDL	7.1	3.2	BDL	BDL	BDL	BDL	8308			
10/06/92	111-92227	3	189.90	0.556	25.23	0.463	3.15	45.87	0.103	0.0211	0.482	<0.00	339.83			
10/06/92	114-92044	1	15.56	BDL	8.1	BDL	5.1	17.7	BDL	BDL	BDL	BDL	1280	2446		
10/07/92	111-92225	1	46.25	8.88	8.82	<0500	6.28	8.74	0.0187	0.0323	<0.500	<0.00	106			
10/07/92	111-92227	3	162.15	0.556	25.23	0.463	3.15	45.87	0.103	0.0211	0.482	<0.00	339.83			
10/08/92	108-92185	1	59.89	<4	<10	<.8	8.0	<4.0	<.06	<4	3.6	BDL	72			
10/08/92	278-92039	1	21.33	BDL	BDL	BDL	58.5	14.7	BDL	BDL	BDL	BDL	BDL			
10/08/92	278-92040	1	10.81	2.0	BDL	BDL	20.9	20.0	BDL	1.69	BDL	BDL	BDL			
10/08/92	278-92041	1	28.44	BDL	BDL	4.38	38.2	.988	BDL	BDL	BDL	BDL	24.0			
10/08/92	111-92226	1	2.65	BDL	3.3	BDL	3.9	1.3	BDL	BDL	BDL	BDL	12.8			
10/08/92	278-92042	1	28.81	1.68	165.4	BDL	20.5	6.10	BDL	.68	BDL	BDL	BDL			
10/12/92	292-92002	1	10.54	.5	28.8	1.6	4.4	6.2	.05	.4	1.6	1.6	114			
10/12/92	292-92003	1	20.31	BDL	BDL	4.4	13.2	BDL	BDL	BDL	BDL	BDL	56.0			
10/13/92	111-92226	1	3.23	BDL	3.3	BDL	3.9	1.3	BDL	BDL	BDL	BDL	12.8			
10/13/92	111-92228	1	0.16	BDL	1.8	BDL	BDL	BDL	BDL	BDL	1.3	BDL	21.1			
10/13/92	194-92007	1	6.89	2.5	14	<5	5.1	64	.033	<20	<1.0	BDL	860			
10/14/92	230-92008	1	42.84	1.3	137	BDL	6.30	12.7	BDL	BDL	4.40	BDL	765			
10/14/92	265-92018	1	44.88	<1.1	<110	<2.7	<5.4	<64	<.088	<.54	<6.4	BDL	1900			
10/14/92	281-92004	3	308.14	2.6	28.3	1.63	84	6.47	.081	1.73	2.6	<32	140			
10/15/92	114-92044	1	1.61	BDL	6.1	BDL	5.1	17.7	BDL	BDL	BDL	BDL	1280	2446		

Florida Department of Environmental Regulation
Soil Thermal Treatment Facility
Untreated Soil Reporting Form

Name of Facility: **RINKER MATERIALS CORP.**
 Air Permit No.: **A013-172154**
 Soil Treatment Permit No.: **SW-011117-91**
 Stationary **XXX** or Mobile Facility: _____

Month: October _____

Year: 1992 _____

Day of Mo.	Soil Batch ID#	Sample Number	Amount Volume or Weight cy/ftn	Analytical Results								Totals	Indicate Other Analyses	Attach Lab Results Only
				AS	BA	CD	CR	PB	HG	SE	AG			
10/16/92	265-82016	3	138.56	1.4	4.87	BDL	3.63	8.8	BDL	BDL	BDL	37.00		
10/16/92	265-82017	1	58.72	<12	<24	<.81	5.8	24	<11	<.68	<1.2	<2300	73	
10/16/92	281-92004	3	184.38	2.6	28.3	1.63	64	5.47	.061	1.73	2.8	<32	140	
10/16/92	111-82229	1	1.14	BDL	2.0	BDL	BDL	BDL	BDL	BDL	BDL	.10	38.9	
10/16/92	114-92044	1	1.38	BDL	6.1	BDL	5.1	17.7	BDL	BDL	BDL	1290	2446	
10/16/92	310-92001	1	7.89	2.76	4.85	BDL	7.70	39.00	BDL	BDL	BDL	8.9	1095	
10/19/92	111-822230	3	90.09	<1.1	<.51	<1.29	6.87	24.87	<10	<.54	<2.57	BDL	47.3	
10/19/92	111-822234	1	0.42	BDL	3.7	BDL	2.2	7.2	BDL	BDL	BDL	BDL	222	
10/19/92	265-92019	5	396.70	.18	2.44	BDL	2.1	8.42	BDL	BDL	BDL	333	23.26	
10/20/92	111-822230	3	37.70	<1.1	<.51	<1.29	6.67	24.87	<10	<.54	<2.57	BDL	47.3	
10/20/92	265-82018	5	467.49	18	2.44	BDL	2.1	8.42	BDL	BDL	BDL	333	23.26	
10/20/92	278-92043	1	83.23	BDL	22.84	BDL	.003	.055	.024	BDL	BDL	.0166	100	
10/20/92	278-92044	1	2.60	.120	2.1880	.0008	.1102	.1980	BDL	BDL	BDL	.0038	.081	.022
10/20/92	311-92002	1	62.52	2.80	26.80	0.05	3.91	0.58	<0.01	5.27	0.07	<12.00	<10.0	
10/21/92	111-822235	1	0.67	0.112	16.8	0.178	2.49	18.8	0.0274	0.0462	0.238	<9.00	94.0	
10/21/92	265-92021	1	32.43	<1.2	<23	<.58	7.0	27	<11	<.68	<1.2	<3.10	700	
10/22/92	111-822233	1	3.38	0.631	BDL	BDL	3.02	0.735	BDL	0.688	BDL	BDL	68.8	
10/22/92	114-92044	1	1.75	BDL	6.1	BDL	5.1	17.7	BDL	BDL	BDL	1290	2446	
10/22/92	114-92046	1	0.41	3.7	9	<0.5	4	0.6	<0.02	<1	<1	<14.50	<5.0	
10/22/92	114-92047	1	2.11	<0.4	2	<0.5	3.8	5.8	<0.02	<1	4	<85	8.8	
10/22/92	114-92048	1	2.14	<0.4	5	<0.5	5	1.8	<0.02	<1	<1	<18.50	<.50	
10/22/92	114-92049	1	0.89	<0.6	8	<0.6	<0.5	2.5	<0.02	<1	<1	<8.50	<5.0	
10/22/92	265-92022	1	44.27	<1.1	<25	<.59	4.7	32	<.08	<.56	<1.2	<3.23	610	
10/22/92	311-92001	1	24.65	2.22	18.78	0.08	2.84	2.06	<0.10	3.78	0.20	<12.00	300.0	
10/22/92	312-92001	1	76.78	<1.0	2.38	<1.0	2.09	3.01	<0.1	<1.0	<1.0	BDL	35	
10/23/92	111-822231	1	2.65	.0821	.0767	<.05	<1	<.02	.0169	.0280	<.05	508.13	10.5	
10/23/92	111-822232	1	0.28	<0.5	4.2	<0.5	2.7	1.9	<0.050	<1.0	<1.0	BDL	<.2	

**Florida Department of Environmental Regulation
Soil Thermal Treatment Facility
Untreated Soil Reporting Form**

Name of Facility: RINKER MATERIALS CORP.
Air Permit No.: A013-172154
Soil Treatment Permit No.: SW-011117-91
Stationary xxx or Mobile Facility:

Month: October Year: 1992

Florida Department of Environmental Regulation
Soil Treatment Facility
Treated Reporting Form

Name of Facility: _____
 Air Permit No.: _____
 Soil Treatment Permit No.: _____
 Stationary: _____ or Mobile Facility: _____

Month: _____ Year: _____

Day of Mo.	Soil Batch ID#	Sample Number	Length of Run, Hours	Amount, volume or Weight cy/tn	Analytical Results												Total S		
					Total Metals														
					As	Ba	Cd	Cr	Pb	Hg	Se	Ag	Ba	Cd	Cr	Pb	Hg	Se	Ag
6-22	42	168	112.7	3.2	3.0	1.9	1.9	6.6	60L	60L	1.9	60L	60L	60L	60L	60L	60L	60L	7.2
6-28	42	168	102.7	2.4	22.6	1.3	14.8	55.1	60L	60L	1.7	60L	60L	60L	60L	60L	60L	60L	10.34
7-5	42	168	118.1	2.2	22.3	1.2	16.2	6.1	60L	60L	1.3	60L	60L	60L	60L	60L	60L	60L	11.48
7-12	42	168	121.1	1.9	21.2	80L	12.3	6.3	60L	60L	3.3	60L	60L	60L	60L	60L	60L	60L	11.81
7-13	42	168	121.1	1.9	21.2	80L	12.3	6.3	60L	60L	2.7	60L	60L	60L	60L	60L	60L	60L	11.81
7-17	42	168	82.7	1.6	24.3	80L	12.3	9.2	60L	60L	2.7	60L	60L	60L	60L	60L	60L	60L	12.84
7-20	42	168	175.4	1.6	13.5	60L	8.9	3.7	60L	60L	2.8	60L	60L	60L	60L	60L	60L	60L	12.85
7-21	42	168	156.4	1.9	27.5	60L	14.1	11.5	80L	80L	2.0	60L	60L	60L	60L	60L	60L	60L	12.88
7-22	42	168	115.3	6.0L	23.9	60L	1.0	6.1	60L	60L	1.3	60L	60L	60L	60L	60L	60L	60L	20.33
8-16	42	168	630	2.7	26.8	80L	11.5	6.9	60L	60L	2.5	60L	60L	60L	60L	60L	60L	60L	47.44
8-17	42	168	122.9	6.0L	24.6	60L	20L	2.5	60L	60L	2.2	60L	60L	60L	60L	60L	60L	60L	47.44
8-23	42	168	404	1.6	26.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	38.88
8-24	42	168	168	1.6	26.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
8-30	42	168	122.9	6.0L	24.6	60L	20L	2.5	60L	60L	2.2	60L	60L	60L	60L	60L	60L	60L	47.44
9-1	42	168	182.3	60L	23.6	60L	12.7	8.4	60L	60L	3.3	60L	60L	60L	60L	60L	60L	60L	46.87
9-7	42	168	168	1.6	26.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
9-13	42	168	147.7	6.0L	24.6	60L	10.2	6.7	60L	60L	2.2	60L	60L	60L	60L	60L	60L	60L	47.44
9-14	42	168	145.8	1.6	20.2	60L	12.0	8.1	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	47.44
9-20	42	168	168	1.6	24.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
9-21	42	168	168	1.6	24.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
9-28	42	168	124.4	1.4	26.4	60L	10.5	5.2	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
10-4	42	168	126.6	1.3	23.8	60L	11.1	5.4	60L	60L	0.32	60L	60L	60L	60L	60L	60L	60L	27.4
10-5	42	168	168	1.6	24.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
10-11	42	168	168	1.6	24.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
10-12	42	168	118.2	1.4	19.3	60L	12.1	6.5	60L	60L	0.26	60L	60L	60L	60L	60L	60L	60L	27.4
10-18	42	168	1.90	1.5	23.8	60L	17.8	9.8	60L	60L	0.29	60L	60L	60L	60L	60L	60L	60L	27.4
10-23	42	168	168	1.6	24.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
10-26	42	168	168	1.6	24.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
11-1	42	168	168	1.6	24.6	60L	17.4	60L	60L	60L	0.4	60L	60L	60L	60L	60L	60L	60L	27.4
11-8	42	168	849																

See reverse side for instructions

FACSIMILE**Rinker Materials****TRANSMISSION**Rinker Materials Corporation
1200 N.W. 137th Avenue
Miami, FL 33182P.O. Box 650679
Miami, FL 33265-0679

MATERIALS SUBSTITUTION

FAX # 305-220-9875

WE ARE SENDING 6 PAGES INCLUDING COVER SHEETTO: 1-407-433-2666 DATE: 11/18/92ATTENTION: Lee Martin FROM: D. Mangl

Lee:

Correction for
untreated soil in 11/18/92
inspection form

Concerning Batch 101-92010

The solenium results reported
were a misprint.Report should have read 2.1 not
201

Analyses to verify are attached

If you have any other questions, please
let me know.

A CSR America Company

88/05/92

E 305 235 6214 CLH ENGINEERS

02

**engineers-scientists
LABORATORY**

11960 S.W. 144 STREET, MIAMI, FL 33186
(305) 233-1411 • FAX: (305) 235-6214

FINAL REPORT OF ANALYSES

CHEROKEE GROUNDWATER
5884 STIRLING ROAD
HOLLYWOOD, FL 33021-
Attn: MR. JOEY REMIS

ESL Project No: CGW1-317
REPORT DATE: 07/28/92
PROJECT NO. : ER2T-1588A
PROJECT MANAGER : CHARLES OVERSTREET

LOCATION: 2398 NW 119th ST., MIAMI, FL

SAMPLE NUMBER : 17617 SAMPLE ID : SOIL PILE 1
 DATE SAMPLED : 07/15/92 SAMPLED BY : C. OVERSTREET
 DATE RECEIVED : 07/15/92 SAMPLE MATRIX : SO
 RECEIVED BY : LWH

Page 1 of 3

ANALYSIS	METHOD	SAMPLE PREP	ANALYSIS	BY DATE	BY	RESULT UNITS	DET. LIMIT
TOTAL ARSENIC (AS)	EPA 7060	07/17/92 WMH	07/17/92 AP			1.1 mg/kg	0.5
TOTAL CADMIUM (CD)	EPA 7131	07/17/92 WMH	07/17/92 WH			0.13 mg/kg	0.005
TOTAL CHROMIUM (CR)	EPA 7191	07/17/92 WMH	07/20/92 AP			12 mg/kg	0.25
TOTAL LEAD (PB)	EPA 7421	07/17/92 WMH	07/17/92 WH			46 mg/kg	5
TOTAL SELENIUM (SE)	EPA 7740	07/17/92 WMH	07/17/92 AP			1.9 mg/kg	0.5
TOTAL SILVER (AG)	EPA 7761	07/17/92 WMH	07/20/92 WH			4.4 mg/kg	0.05
TOTAL BARIUM (BA)	EPA 6010	07/17/92 WMH	07/17/92 WH			7.2 mg/kg	0.5
TOTAL MERCURY (HG)	EPA 7471	07/17/92 WMH	07/17/92 WH			< 0.1 mg/kg	0.1

**engineers-scientists
LABORATORY**

11980 S.W. 144 STREET, MIAMI, FL 33186
(305) 233-1411 • FAX: (305) 235-6214

FINAL REPORT OF ANALYSES

CHEROKEE GROUNDWATER
5884 STIRLING ROAD
HOLLYWOOD, FL 33021-
Attn: MR. JOEY BENIG

ESL Project No: CGW1-317
REPORT DATE: 07/28/92
PROJECT NO. : ER2T-1586A
PROJECT MANAGER : CHARLES OVERSTREET

LOCATION: 2398 NW 119th ST., MIAMI, FL

SAMPLE NUMBER : 17610	SAMPLE ID : SOIL FILE 2
DATE SAMPLED : 07/18/92	
DATE RECEIVED : 07/15/92	SAMPLED BY : C. OVERSTREET
RECEIVED BY : LMR	SAMPLE MATRIX : SO

Page 1 of 3

ANALYSIS	METHOD	SAMPLE PREP	ANALYSIS	DET.	
		DATE	BY DATE	RESULT UNITS	LIMIT
TOTAL ARSENIC (AS)	EPA 7060	07/17/92	WMH 07/17/92 AP	0.79 mg/kg	0.5
TOTAL CADMIUM (CD)	EPA 7131	07/17/92	WMH 07/17/92 WH	0.26 mg/kg	0.005
TOTAL CHROMIUM (CR)	EPA 7191	07/17/92	WMH 07/20/92 AP	16 mg/kg	0.25
TOTAL LEAD (PB)	EPA 7421	07/17/92	WMH 07/17/92 WH	20 mg/kg	5
TOTAL SELENIUM (SE)	EPA 7740	07/17/92	WMH 07/17/92 AP	2 mg/kg	0.5
TOTAL SILVER (AG)	EPA 7761	07/17/92	WMH 07/20/92 WH	25 mg/kg	0.05
TOTAL BARIUM (BA)	EPA 6010	07/17/92	WMH 07/17/92 WH	4.5 mg/kg	0.5
TOTAL MERCURY (HG)	EPA 7471	07/17/92	WMH 07/17/92 WH	< 0.1 mg/kg	0.1

08/05/92 40

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88

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FINAL REPORT OF ANALYSES

CHEROKEE GROUNDWATER
5884 STIRLING ROAD
HOLLYWOOD, FL 33021-
Attn: MR. JOEY BENIS

ESL Project No: CGW1-317
REPORT DATE: 07/28/92
PROJECT NO. : BR2T-1588A
PROJECT MANAGER : CHARLES OVERSTREET

LOCATION: 2398 NW 119th ST., MIAMI, FL

SAMPLE NUMBER : 17619	SAMPLE ID : SOIL FILE 3
DATE SAMPLED : 07/15/92	
DATE RECEIVED : 07/15/92	SAMPLED BY : C. OVERSTREET
RECEIVED BY : LNH	SAMPLE MATRIX : SO

Page 1 of 3

ANALYSIS	METHOD	SAMPLE PREP	ANALYSIS	RESULT	DET.
		DATE	BY DATE	UNITS	LIMIT
TOTAL ARSENIC (AS)	EPA 7060	07/17/92	WMH 07/17/92 AP	2.1 mg/kg	0.5
TOTAL CADMIUM (CD)	EPA 7131	07/17/92	WMH 07/17/92 WH	0.13 mg/kg	0.005
TOTAL CHROMIUM (CR)	EPA 7191	07/17/92	WMH 07/20/92 AP	26 mg/kg	0.25
TOTAL LEAD (PB)	EPA 7421	07/17/92	WMH 07/17/92 WH	60 mg/kg	5
TOTAL SELENIUM (SE)	EPA 7740	07/17/92	WMH 07/17/92 AP	2.5 mg/kg	0.5
TOTAL SILVER (AG)	EPA 7761	07/17/92	WMH 07/20/92 WH	3.8 mg/kg	0.05
TOTAL BARIUM (BA)	EPA 6010	07/17/92	WMH 07/17/92 WH	15 mg/kg	0.5
TOTAL MERCURY (HG)	EPA 7471	07/17/92	WMH 07/17/92 WH	< 0.1 mg/kg	0.1

89/85/92 12:22

X 305 235 6214 CLHR ENGINEERS

11

**Engineers-Scientists
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(305) 233-1411 • FAX: (305) 235-8214

FINAL REPORT OF ANALYSES

CHEROKEE GROUNDWATER
5884 STIRLING ROAD
HOLLYWOOD, FL 33021-
Attn: MR. JOEY HEMIS

BEL Project No: CGW1-317
REPORT DATE: 07/26/92
PROJECT NO.: ER2T-1588A
PROJECT MANAGER: CHARLES OVERSTREET

LOCATION: 239B NW 119th ST., MIAMI, FL

SAMPLE NUMBER : 17620	SAMPLE ID : SOIL PILE 4
DATE SAMPLED : 07/15/92	
DATE RECEIVED : 07/15/92	SAMPLED BY : C. OVERSTREET
RECEIVED BY : LMH	SAMPLE MATRIX : SO

Page 1 of 3

ANALYSIS	METHOD	SAMPLE PREP	ANALYSIS DATE	BY DATE	BY	RESULT UNITS	DET. LIMIT
TOTAL ARSENIC (AS)	EPA 7060	07/17/92	WMH	07/17/92	AP	1.4 mg/kg	0.5
TOTAL CADMIUM (CD)	EPA 7131	07/17/92	WMH	07/17/92	WH	0.12 mg/kg	0.005
TOTAL CHROMIUM (CR)	EPA 7191	07/17/92	WMH	07/20/92	AP	34 mg/kg	0.25
TOTAL LEAD (PB)	EPA 7421	07/17/92	WMH	07/17/92	WH	84 mg/kg	5
TOTAL SELENIUM (SE)	EPA 7740	07/17/92	WMH	07/17/92	AP	2.4 mg/kg	0.5
TOTAL SILVER (AG)	EPA 7761	07/17/92	WMH	07/20/92	WH	4.4 mg/kg	0.05
TOTAL BARIUM (BA)	EPA 6010	07/17/92	WMH	07/17/92	WH	7.5 mg/kg	0.5
TOTAL MERCURY (HG)	EPA 7471	07/17/92	WMH	07/17/92	WH	< 0.1 mg/kg	0.1

**engineers-scientists
LABORATORY**11960 S.W. 144 STREET, MIAMI, FL 33186
(305) 233-1411 • FAX: (305) 235-6214**FINAL REPORT OF ANALYSES**

CHEROKEE GROUNDWATER
5884 STIRLING ROAD
HOLLYWOOD, FL 33021-
Attn: MR. JOBY BEKIS

ESL Project No: CGWI-317
REPORT DATE: 07/28/92
PROJECT NO. : ER2T-1588A
PROJECT MANAGER : CHARLES OVERSTREET

LOCATION: 2398 NW 119th ST., MIAMI, FL

SAMPLE NUMBER : 17621 SAMPLE ID : SOIL PILE 5
DATE SAMPLED : 07/15/92 SAMPLED BY : C. OVERSTREET
DATE RECEIVED : 07/15/92 SAMPLE MATRIX : SO
RECEIVED BY : LMK

Page 1 of 3

ANALYSIS	METHOD	SAMPLE PREP	ANALYSIS DATE	BY DATE	BY	RESULT UNITS	DET. LIMIT
TOTAL ARSENIC (AS)	EPA 7060	07/17/92	WMH	07/17/92	AP	1.9 mg/kg	0.5
TOTAL CADMIUM (CD)	EPA 7131	07/17/92	WMH	07/17/92	WH	0.1 mg/kg	0.005
TOTAL CHROMIUM (CR)	EPA 7191	07/17/92	WMH	07/20/92	AP	20 mg/kg	0.25
TOTAL LEAD (PB)	EPA 7421	07/17/92	WMH	07/17/92	WH	40 mg/kg	5
TOTAL SELENIUM (SE)	EPA 7740	07/17/92	WMH	07/17/92	AP	1.7 mg/kg	0.5
TOTAL SILVER (AG)	EPA 7761	07/17/92	WMH	07/20/92	WH	5.2 mg/kg	0.05
TOTAL BARIUM (BA)	EPA 6010	07/17/92	WMH	07/17/92	WH	6.6 mg/kg	0.5
TOTAL MERCURY (HG)	EPA 7471	07/17/92	WMH	07/17/92	WH	< 0.1 mg/kg	0.1