

SCS ENGINEERS

October 30, 1992
File No. 08-89015.06

0162-SR-2 - 48884
0123-SR-2 - 48885

SCANNED AND ENTERED

RECEIVED

NOV 4 1992

Handwritten notes:
1187-50
123-SR-2
162-SR-2
11/11/92

Mr. Thomas Boston
Chief, Solid Waste Division
Arkansas Department of Pollution
Control and Ecology
8001 National Drive
Little Rock, Arkansas 72209

CSN: 72-0144 Permit No. 123-SR-2
Media: Air, Water, Solid, Hazardous
Sort: Permit, Compliance, Legal, Misc.

Subject: Sunray Services, Inc. - Third Quarter 1992 - Groundwater Analysis

Dear Mr. Boston:

In compliance with condition No. 20, of Solid Waste Disposal Facility Permits No. 162-SR-2 (Site 4) and No. 123-SR-2 (Site 3), attached please find the groundwater analytical data for the water samples collected by Sorrells Research Laboratory, for the period of July 1 to September 30, 1992.

The nine monitoring wells surrounding the Sunray operation were purged on September 1, 1992, and sampled on September 2, 1992, under the direction of SCS Engineers personnel. Monitoring wells No. 10 and No. 11 were purged on September 16, 1992, and sampled on September 17, 1992, under the direction of Sunray Services personnel. The samples were hand carried to the Sorrells Research Laboratory in Little Rock for the required analytical testing.

If you have any questions or comments, please contact either of the undersigned at your convenience.

Sincerely yours,

Larry D. Lowry
Larry D. Lowry, P.E.
Senior Project Engineer
SCS ENGINEERS

S. Kirk Ellis
S. Kirk Ellis
Project Manager
SCS ENGINEERS

LDL:SKE:r

Enclosures

cc: Randy Holcomb, Sunray, w/o enclosures
Monte Miller, Sunray, w/o enclosures
Glen Carter, Sunray, w/o enclosures





**SORRELLS RESEARCH
LABORATORY AND FIELD SERVICES**



CHEMISTS
ECOLOGISTS
CONSULTANTS
PLANNERS

8002 STANTON ROAD
LITTLE ROCK, ARKANSAS 72209

(501) 562-8139

LABORATORY ANALYSIS

Date of Report: October 09, 1992
Date Received: September 17, 1992

FOR: Sunray Services
P. O. Box 1301
105 Old Missouri Road
Springdale, AR 72765

JOB: Landfill Monitoring. 40 CFR Part 258
SAMPLE FROM: Well 10 09-16-92 08:40

*Please Note - Reported in Milligrams per Liter or Standard units.

ANALYTE	Well 10	Max Cont. DW Stds.	Levels TCLP
Antimony	.003	NA	NA
Arsenic	.008	0.05	5.0
Barium	0.015	1.0	100.0
Beryllium	N.D.	NA	NA
Cadmium	0.001	0.01	1.0
Chromium	N.D.	0.05	5.0
Cobalt	N.D.	NA	NA
Copper	N.D.	1.0	100.0
Lead	0.002	0.025	2.5
Nickel	0.054	NA	NA
Selenium	N.D.	0.01	1.0
Silver	N.D.	0.05	5.0
Thallium	N.D.	NA	NA
Vanadium	0.007	NA	NA
Zinc	0.055	5.0	500.0
Acetone	N.D.	NA	NA
Acrylonitrile	N.D.	NA	NA
Benzene	N.D.	0.005	0.5
Bromochloromethane	N.D.	NA	NA
Bromodichloromethane	N.D.	NA	NA
Bromoform	N.D.	0.1	NA
Carbon disulfide	N.D.	NA	NA
Carbon tetrachloride	N.D.	0.005	0.5
Chlorobenzene	N.D.	NA	100.0
Chloroethane	N.D.	NA	NA
Chloroform	N.D.	0.1	6
Dibromochloromethane	N.D.	0.1	NA
Dibromo-3-chloropropane, 1,2-	N.D.	NA	NA
Dibromoethane, 1,2-	N.D.	NA	NA
Dichlorobenzene, o-	N.D.	NA	NA
Dichlorobenzene, p-	N.D.	0.075	NA
Dichloro-2-butene, trans-1,4-	N.D.	NA	NA
Dichloroethane, 1,1-	N.D.	NA	NA



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ANALYTE	Well 10	Max Cont. DW Stds.	Levels TCLP
Dichloroethane, 1,2-	N.D.	0.005	0.5
Dichloroethylene, 1,1-	N.D.	0.007	0.7
Dichloroethylene, cis-1,2-	N.D.	NA	NA
Dichloroethylene, trans,1-,2-	N.D.	NA	NA
Dichloropropane, 1,2-	N.D.	NA	NA
Dichloropropene, cis-1,3-	N.D.	NA	NA
Dichloropropene, trans, 1,3-	N.D.	NA	NA
Ethylbenzene	N.D.	NA	NA
Hexanone, 2-	N.D.	NA	NA
Methyl bromide	N.D.	NA	NA
Methyl chloride	N.D.	NA	NA
Methylene bromide	N.D.	NA	NA
Methylene chloride	N.D.	NA	NA
Methyl ethyl ketone	N.D.	NA	NA
Methyl Iodide	N.D.	NA	NA
Methyl-2-pentanone, 4-	N.D.	NA	NA
Styrene	N.D.	NA	NA
Tetrachloroethane, 1, 1, 1, 2-	N.D.	NA	NA
Tetrachloroethane, 1, 1, 2, 2-	N.D.	NA	NA
Tetrachloroethylene	N.D.	NA	0.7
Toluene	N.D.	NA	NA
Trichloroethane, 1, 1, 1-	N.D.	0.2	NA
Trichloroethane, 1, 1, 2-	N.D.	NA	NA
Trichloroethylene	N.D.	0.005	0.5
Trichlorofluoromethane	N.D.	NA	NA
Trichloropropane, 1, 2, 3-	N.D.	NA	NA
Vinyl acetate	N.D.	NA	NA
Vinyl chloride	N.D.	0.02	0.2
Xylene, o-	N.D.	NA	NA
Xylene, m-	N.D.	NA	NA
Xylene, p-	N.D.	NA	NA
Xylenes	N.D.	NA	NA



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ANALYTE	Well 10	Max Cont.	Levels
		DW Stds.	TCLP
Ammonia nitrogen	0.117	NA	NA
Bicarbonate	85.4	NA	NA
Calcium	54.3	NA	NA
Chloride	11.99	250	NA
Iron	0.037	0.3	NA
Magnesium	7.48	NA	NA
Manganese	0.048	0.05	NA
Nitrate	0.02	10.0	NA
Potassium	2.28	NA	NA
Sodium	9.38	NA	NA
Sulfate	8.83	250	NA
Chemical oxygen demand	34.0	NA	NA
Total dissolved solids	174.0	500	NA
Cyanide	N.D.	NA	NA
Mercury	N.D.	0.002	0.2
pH, units	7.5	6.5-8.5	<2 OR>12
Specific conductance, us/cm	220.0	NA	NA
Temperature, .c	17.8	NA	NA

Collected by:
Vern Mahaffey
Analysis by:
KEH/BWG/JBS/KES/KESII/CAS

Sample Preservation and Laboratory Analysis Conducted According to EPA 40 Part 261. Test/Analyst/Time/Coeff./Var./ QA Plan filed with A.D.P.C. & E. Includes 10 % Replication and 10 % Recovery Studies by Random Selection. Calibration Records Maintained.

Copies to:

MR. GLENN CARTER
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SPRINGDALE, AR 72765

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P.O. BOX 1310
SPRINGDALE, AR 72765

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SCS ENGINEERS
10401 HOLMES ROAD, SUITE 400
KANSAS CITY, MO 64131



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LABORATORY ANALYSIS

Date of Report: October 09, 1992
Date Received: September 13, 1992

FOR: Sunray Services
P. O. Box 1301
105 Old Missouri Road
Springdale, AR 72765

JOB: Landfill Monitoring. 40 CFR Part 258
SAMPLE FROM: Well 11 09-13-92 11:20

*Please Note - Reported in Milligrams per Liter or Standard units.

ANALYTE	Well 11	Max Cont.	Levels
		DW Stds.	TCLP
Antimony	N.D.	NA	NA
Arsenic	N.D.	0.05	5.0
Barium	0.015	1.0	100.0
Beryllium	N.D.	NA	NA
Cadmium	N.D.	0.01	1.0
Chromium	N.D.	0.05	5.0
Cobalt	N.D.	NA	NA
Copper	0.005	1.0	100.0
Lead	N.D.	0.025	2.5
Nickel	0.051	NA	NA
Selenium	N.D.	0.01	1.0
Silver	N.D.	0.05	5.0
Thallium	N.D.	NA	NA
Vanadium	N.D.	NA	NA
Zinc	0.014	5.0	500.0
Acetone	N.D.	NA	NA
Acrylonitrile	N.D.	NA	NA
Benzene	N.D.	0.005	0.5
Bromochloromethane	N.D.	NA	NA
Bromodichloromethane	N.D.	NA	NA
Bromoform	N.D.	0.1	NA
Carbon disulfide	N.D.	NA	NA
Carbon tetrachloride	N.D.	0.005	0.5
Chlorobenzene	N.D.	NA	100.0
Chloroethane	N.D.	NA	NA
Chloroform	0.004	0.1	6
Dibromochloromethane	N.D.	0.1	NA
Dibromo-3-chloropropane, 1,2-	N.D.	NA	NA
Dibromoethane, 1,2-	N.D.	NA	NA
Dichlorobenzene, o-	N.D.	NA	NA
Dichlorobenzene, p-	N.D.	0.075	NA
Dichloro-2-butene, trans-1,4-	N.D.	NA	NA
Dichloroethane, 1,1-	N.D.	NA	NA



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ANALYTE	Well 11	Max Cont.	Levels
		DW Stds.	TCLP
Dichloroethane, 1,2-	N.D.	0.005	0.5
Dichloroethylene, 1,1-	N.D.	0.007	0.7
Dichloroethylene, cis-1,2-	N.D.	NA	NA
Dichloroethylene, trans,1-,2-	N.D.	NA	NA
Dichloropropane, 1,2-	N.D.	NA	NA
Dichloropropene, cis-1,3-	N.D.	NA	NA
Dichloropropene, trans, 1,3-	N.D.	NA	NA
Ethylbenzene	N.D.	NA	NA
Hexanone, 2-	N.D.	NA	NA
Methyl bromide	N.D.	NA	NA
Methyl chloride	N.D.	NA	NA
Methylene bromide	N.D.	NA	NA
Methylene chloride	N.D.	NA	NA
Methyl ethyl ketone	N.D.	NA	NA
Methyl Iodide	N.D.	NA	NA
Methyl-2-pentanone, 4-	N.D.	NA	NA
Styrene	N.D.	NA	NA
Tetrachloroethane, 1, 1, 1, 2-	N.D.	NA	NA
Tetrachloroethane, 1, 1, 2, 2-	N.D.	NA	NA
Tetrachloroethylene	N.D.	NA	0.7
Toluene	N.D.	NA	NA
Trichloroethane, 1, 1, 1-	N.D.	0.2	NA
Trichloroethane, 1, 1, 2-	N.D.	NA	NA
Trichloroethylene	N.D.	0.005	0.5
Trichlorofluoromethane	N.D.	NA	NA
Trichloropropane, 1, 2, 3-	N.D.	NA	NA
Vinyl acetate	N.D.	NA	NA
Vinyl chloride	N.D.	0.02	0.2
Xylene, o-	N.D.	NA	NA
Xylene, m-	N.D.	NA	NA
Xylene, p-	N.D.	NA	NA
Xylenes	N.D.	NA	NA



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ANALYTE	Well 11	Max Cont.	Levels
		DW Stds.	TCLP
Ammonia nitrogen	0.177	NA	NA
Bicarbonate	92.7	NA	NA
Calcium	39.5	NA	NA
Chloride	9.99	250	NA
Iron	0.038	0.3	NA
Magnesium	0.68	NA	NA
Manganese	0.003	0.05	NA
Nitrate	1.66	10.0	NA
Potassium	1.14	NA	NA
Sodium	2.04	NA	NA
Sulfate	12.67	250	NA
Chemical oxygen demand	38.5	NA	NA
Total dissolved solids	223.8	500	NA
Cyanide	N.D.	NA	NA
Mercury	N.D.	0.002	0.2
pH, units	7.0	6.5-8.5	<2 OR>12
Specific conductance, us/cm	210.0	NA	NA
Temperature, .c	17.9	NA	NA

Collected by:
Vern Mahaffey
Analysis by:
KEH/BWG/JBS/KES/KESII/CAS

Sample Preservation and Laboratory Analysis Conducted According to EPA 40 Part 261. Test/Analyst/Time/Coeff./Var./ QA Plan filed with A.D.P.C. & E. Includes 10 % Replication and 10 % Recovery Studies by Random Selection. Calibration Records Maintained.

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