

5562

QUARTERLY UPDATE

FOR APRIL 1, 1993 THROUGH JULY 1, 1993

HISTORICAL RELEASE REPORT (HRR)

PREPARED BY

ENVIRONMENTAL RESTORATION
FACILITIES OPERATIONS MANAGEMENT

EG&G ROCKY FLATS, INC.

W.A.

REVIEWED FOR CLASSIFICATION/CONTROL
BY <u>G. T. Ostdiek</u> <i>640</i>
DATE <u>7-1-93</u>

July 30, 1993

ADMIN RECORD

**Quarterly Update to the Historical Release Report
for period of April 1, 1993 through July 1, 1993**

The enclosed Historical Release Report (HRR) quarterly update complies with section I.B.3 of the Interagency Agreement (IAG). Information making up this update process consists of an assessment of newly identified areas of known, suspect, and potential environmental releases or discoveries at the Rocky Flats Plant (RFP).

Newly identified areas of concern undergo review by the Environmental Protection Agency (EPA), Colorado Dept. of Health (CDH), and the Department of Energy (DOE). Upon final review, EPA and CDH will determine if further investigation for these areas or incidents is warranted. This update process shall incorporate pertinent correspondence letters (when available) identifying what actions and/or recommendations have been made. Additionally, this format includes all Rocky Flats Hazardous Substance Release Reports (HSRR), and Contingency Implementation Reports available for the quarter.

Information submitted in this update is formatted in the same reporting style as that of the HRR for consistency. A total of 6 reportable findings or incidents have been assigned Potential Area of Concern (PAC) reference numbers for this report. Please note that PAC NE-1404 has been re-submitted as PAC NE-1405 due to an error identified in reviewing the last quarterly report for the period of January 1, 1993 through April 1, 1993. The PAC number (1404) was mistakenly submitted for a new PAC when a duplication was identified with a previous number used to address a former area.

Final incorporation of these findings and/or incidents into the current HRR will take place upon your review and recommendations for which you feel further investigation is warranted.

PAC REFERENCE NUMBER: NE-1406

IHSS Number: Not Applicable
Unit Name: 771 Hillside Sludge
Approximate Location: N752,000; E2,084,600

Dates(s) of Operation or Occurrence

Unknown. The possibility of waste disposal in a previously undisclosed location was identified in June, 1992. The identified area is approximately 80 feet by 80 feet, but the northern extent of the possible disposal area has not been fully characterized.

Description of Operation or Occurrence

During excavation activities for construction of piping and tankage to store groundwater collected in the solar pond area (Operable Unit 4 area), an area of odoriferous and dark-colored soil was identified. This soil appeared to be highly organic in nature and could possibly be sanitary wastewater treatment plant sludge disposed in a previously undisclosed location. Review of currently available aerial photographs for the area do not indicate any soil disturbances in this location.

Physical/Chemical Description of Constituents Released

Historical research is continuing on this potential area of concern, but at this time it is assumed that the materials identified in this location consist of sanitary wastewater treatment plant sludge from the Rocky Flats Plant sanitary wastewater treatment plant. This sludge is expected to be largely similar to other sanitary wastewater treatment plant sludges, but it may have other contaminants, including low levels of radionuclides. Older sludge would have had primarily uranium contamination while newer sludge would have had an increasing amount of plutonium contamination. Total long-lived alpha activity present in the sanitary wastewater treatment plant sludge has been reported between a minimum of 382 picoCuries per gram (pCi/g) in August 1964 to a maximum of 3,591 pCi/g in June 1960.

Soil samples collected in the area in which this atypical soil material was identified contained 24 ± 3 and 27 ± 3 pCi/g of gross alpha activity and 35 ± 3 and 34 ± 4 pCi/g of gross beta activity. The pH of the sample, measured as soil pH in water, was 6.2 standard units. Nitrate concentrations in the soil were found to be 0.60 and 0.43 milligrams

per liter (mg/l) as nitrate, while ammonia was undetected at 0.03 mg/l.¹ Volatile organics and semi-volatile analysis on the soil samples identified no volatile or semi-volatile organics above detection limits,¹ and fecal coliform analysis indicated that the material contained less than 2 fecal coliform bacteria per 100 milliliters of phosphate buffer extract.²

A total metals analysis identified a chromium concentration of 22.9 milligrams per kilogram (mg/kg) and a lead concentration of 25.1 mg/kg in the soils. A total metals analysis for the sample is attached in Table 1.¹ These samples were collected in July, 1992.^{1,2}

Responses to Operation or Occurrence

Samples for laboratory analysis were collected from the area in July, 1992. The area in which this material is located has also been cordoned off to restrict access. Evaluation of the area is continuing.

Fate of Constituents Released to the Environment

Evaluation of this area is continuing.

Comments

References

¹1992, Elmont, T.H., "Waste Characterization Data 92G0138, 771 Hillside, Waste Stream 771-0-0," General Spectroscopy, Building 881, EG&G Rocky Flats, September 2.

²1992, Light, L., "Analytical Report, 123 Lab - Bacteriology Laboratory," Bacteriology Laboratory, Building 123, EG&G Rocky Flats, October 14.

TABLE 1
771 HILLSIDE SLUDGE
TOTAL METALS ANALYSIS

Concentration Units: mg/kg

ANALYTE	CONCENTRATION	QUALIFIERS
Aluminum	23000	
Antimony	0.92	Below Instrument Detection Limit (IDL)
Arsenic #	6.2	Above IDL but below Contract Required Detection Limit (CRDL)
Barium	144	
Beryllium	0.90	
Cadmium	0.56	
Calcium	3660	
Chromium	22.9	
Cobalt	8.0	
Copper	14.7	
Iron	15000	
Lead #	25.1	
Magnesium	2970	
Manganese	259	
Molybdenum	0.63	Below IDL
Nickel	12.7	
Potassium	3700	
Selenium #	3.4	Above IDL but below CRDL
Silver	0.23	Below IDL
Sodium	130	Above IDL but below CRDL
Strontium	35.1	
Thallium #	6.5	Below IDL
Vanadium	45.5	
Zinc	53.1	

PAC REFERENCE NUMBER: NE-1405¹

IHSS Number: Not Applicable
Unit Name: OU 2, Phase 2, Field Treatability Unit
Approx. Location: N750,000; E2,087,500

Date(s) of Operation or Occurrence

The OU 2 Field Treatability Unit has been in operation from May 13, 1991 to the present.
An occurrence was reported on January 14, 1993.

Description of Operation or Occurrence

A release to the environment of greater than the reportable quantity (RQ) of RCRA-regulated hazardous waste was reported at 9:00 a.m. January 14, 1993. The hazardous substance release was the result of overfilling a diesel fuel tank which supplied a portable generator for the OU 2 Treatment Facility.

Approximately 20 gallons of fuel were spilled onto the ground while fueling operations were taking place. The release was cleaned up with absorbent material and later excavated until all indication of fuel presence was gone. Seventeen gray drums were filled the following day with soil contaminated by diesel fuel.

Physical/Chemical Description of Constituents Released

Based upon process knowledge, diesel spills and excavated soils are managed as RCRA-regulated waste until sampling and analysis can confirm that levels of benzene do not exceed the TCLP limit. The EPA waste code for this waste is D018. The location of the spill is not within an IHSS boundary.

Responses to Operation or Occurrence

Prior to excavation of soils in the spill area, sampling was conducted to determine if potential RCRA contaminants were present. Six total samples were collected from the spill area. Two samples were collected from soil mixed with diesel fuel, another two samples were collected from a nearby snowbank which absorbed some of the diesel. Analytical data show that the spilled diesel fuel was not a RCRA-regulated waste. The analysis consisted of TAL VOA's and TCLP volatiles. The soil was then excavated until no presence of contamination was evident. Seventeen drums were filled with soil and road gravel were placed in the excavation.

¹Previously reported as NE-1404

Rate of Constituents Released to Environment

Containerized soil (17 drums) awaits off-site shipment to an incineration facility.

The area impacted by this release is submitted in accordance with the Interagency Agreement, Sections I.B.3 Notification and I.B.5.

Comments

None

References

As enclosed: Analytical Data for Volatile Organic Analysis.

PAC REFERENCE NUMBER: NE-1407

IHSS Number: Not Applicable
Unit Name: OU 2 Treatment Facility
Approx. Location: N749,900; E2,087,000

Date(s) of Operation or Occurrence

The OU 2 treatment system has been in operation from May, 1991 to the present.

The spill occurred on Tuesday, March 9, 1993 at 3:10 p.m.

Description of Operation or Occurrence

Approximately 50 gallons of separately collected seepage/spring water that would otherwise flow into South Walnut Creek leaked. The leak occurred from a ruptured elbow in a secondary containment line as the water was pumped to the OU 2 treatment facility. An employee of Reidel Environmental Services discovered the release in response to an alarm signalling that the release had occurred.

The leaked water was separately collected to be treated in a chemical precipitation/microfiltration/granular-activated carbon system as part of an Interim Measures/Interim Remedial Action (IM/IRA) being implemented at OU 2.

Physical/Chemical Description of Constituents Released

The analytical results of 56 sampling events performed from May 29, 1991 to February 13, 1992 have indicated that the subject influent contains the following F001 listed hazardous waste constituents: carbon tetrachloride, trichloroethane and tetrachloroethane. Chromium and 1,2 dichloroethene were also found, but at levels below those of a Toxicity Characteristic Leaching Procedure (TCLP) characteristic RCRA-regulated hazardous waste. The level of contamination is slightly above drinking water standards. The above-referenced data are provided in Tables 2 and 3.

Responses to Operation or Occurrence

The pump was turned off immediately after the leak was discovered. Soil within the spill area was diked to limit the area of the release to 150 square feet. Reidel personnel notified the Rocky Flats Plant Shift Superintendent and the Department of Energy Shift Duty Officer who arrived at the spill area within 2 hours of the occurrence. Reidel personnel, wearing protective clothing, repaired the pipeline and resumed plant operation within 3 hours. Before the pump was re-energized, CDH and EPA Region VIII were notified.

Fate of Constituents Released to Environment

Based on previous analytical results of the contaminated water, the contaminant concentrations in the soil should not pose an unacceptable risk to human health and the environment.

Comments

Data for the concentrations of dissolved and total metals, and volatile organic compounds are attached to this report. Contaminant concentrations in the soil should not pose an unacceptable risk to human health and the environment. A release notification to the National Response Center was not required because analytical data were available and a reportable quantity of the F-listed constituents was not released. The description of this release is submitted in accordance with the IAG, Sections I.B.3 Notification and I.B.5 Historical Release Report for final disposition.

References

As enclosed: RCRA Contingency Plan Implementation Report No. 93-002.

TABLE 2

BASELINE DATA FOR INFLUENT DISSOLVED
AND TOTAL METALS (mg/l)*

Analyte	Highest Value Detected (mg/l)	CRDL (mg/l)	RCRA/TCLP Regulator Limit (mg/l)
Barium (D005)	Below Detection Limit	0.200	100.0
Cadmium (D006)	Below Detection Limit	0.005	1.0
Chromium (D007)	.015	0.010	5.0
Lead (D008)	Below Detection Limit	0.003	5.0
Mercury (D009)	Below Detection Limit	0.0	0.2

CRDL - Contract Required Detection Limit
TCLP - Toxicity Characteristic Leaching Procedure

TABLE 3

VOLATILE ORGANIC COMPOUNDS*

Analyte	Highest/Average Value Detected (mg/l)	SWDA MCLs (mg/l)	Regulatory Limit (mg/l)
Trichloroethane (F001) (D040)	0.011/0.006	0.005	0.05
1,2-dichloroethene (D028)	0.043/0.016	0.005	0.50
Carbon Tetrachloride (F001) (D019)	0.008/0.006	0.005	0.50
Tetrachloroethylene (F001) (D039)	0.020/0.005	0.005	0.70

MCLs - Maximum Contaminant Levels

Volatile Organic Compounds sampled for but not found:

1,1-Dichloroethane (D029)	Methylene Chloride (F001)
Chloroform (D022)	Vinyl Chloride (D043)
Acetone (F003)	

*Based on 56 sample events from May 29, 1991, to February 13, 1992.

PAC REFERENCE NUMBER: 000-501

IHSS Number: Not Applicable

Unit Name: Asphalt Surface in Lay Down Yard North of Building 130

Approx. Location: N749,000; E2,080,500

Date(s) of Operation or Occurrence

The spill occurred on Thursday, March 18, 1993, at 11:41 a.m.

Description of Operation or Occurrence

A total of three used, lead-acid batteries fell from a pallet while being transported from a weigh scale on the north side of Building 130 to a multi-purpose receiving and storage yard on the south side of Building 130. The batteries were being stored for recycling. The first battery fell when the forklift hit a bump. The forklift driver could not see the fallen battery and drove over it, resulting in another jolt from which two more batteries fell off the pallet. The first battery was crushed and the other two were overturned, resulting in a 2'x15' spill of sulfuric acid on the asphalt and sulfuric acid on the forklift's front wheels and forks.

Physical/Chemical Description of Constituents Released

The spill was characterized as approximately 2 to 4 quarts of sulfuric acid and lead based on previous analysis of the same type of batteries. These analyses identified lead concentrations in the acid at up to 20 ppm.

Responses to Operation or Occurrence

The Building 130 warehouse manager, the Shift Superintendent and the Fire Department were notified immediately. The forklift operators (who were wearing personal protective equipment) restored the fallen batteries to an upright position. The Fire Department Hazardous Materials (Hazmat) team arrived at the scene by 11:47 a.m. The area was roped off and all personnel near the incident and within 300 feet upwind were evacuated. Readings of the spill were done for pH which was found to be at a level of zero. Approximately five gallons of sodium bicarbonate was placed on the spill as well as on the forklift's front wheels and forks. The waste materials from the crushed battery were picked up, double-bagged and placed into a five-gallon Department of Transportation-approved drum which was stored in a RCRA 90-day accumulation area. The two damaged batteries were placed into a 20-gallon "lab pack" and returned to the pallet. The Hazmat equipment was decontaminated to a pH of 7 with water. This water was pumped to drums to await treatment in Building 374.

Fate of Constituents Released to Environment

Sodium bicarbonate was used to neutralize the acid and pick up the spilled solution. The resulting spoils were handled as a hazardous waste and placed in a 90-day accumulation area.

Comments

The Property Utilization and Disposal department, which was involved in the incident, will review the wrapping and packaging of batteries to see if a more secure method is available. The department is also writing a desk reference procedure to outline precautions for transporting batteries. The description of this release is submitted in accordance with the IAG, Sections I.B.3 Notification and I.B.5 Historical Release Report for final notification.

References

As enclosed: RCRA Contingency Plan Implementation Report No. 93-003.

PAC REFERENCE NUMBER: NE-1406

IHSS Number: Not Applicable

Unit Name: OU 2 Test Well; Current Well Number 219-93

Approx. Location: N750,000; E2,087,200

Date(s) of Operation or Occurrence

The spill occurred on Monday, April 26, 1993 at 4:00 p.m.

Description of Operation or Occurrence

Approximately 10 gallons of groundwater was spilled when a casing being inserted into a new bedrock monitoring well forced the water out of the hole and onto the ground. An approximate 2 foot by 8 foot area was wetted in the incident.

Physical/Chemical Description of Constituents Released

Analytical testing of a well 20 feet upgradient (well 36-87) has identified the following F-001 contaminants in the groundwater: carbon tetrachloride, trichloroethylene and tetrachloroethylene. Chloroform and 1,1-dichloroethylene, both of which are chemical analytes covered by Toxicity Characteristic Leaching Procedure (TCLP), were also identified in the water upgradient from the spill site. Data from laboratory testing of water from the spill-site monitoring well are not yet available.

Responses to Operation or Occurrence

A desiccant was immediately applied to the area to absorb the water and prevent it from spreading. The wet desiccant, wet dirt from below the desiccant, and a layer of dry dirt were removed from the area, containerized, and are being managed as investigation derived material.

Fate of Constituents Released to Environment

The soil wetted by the spill was cleaned up and placed into barrels with "Aqua-Set." Approximately 1-1/2 barrels of material were removed. The material is being managed as investigation-driven material pending the results of laboratory analysis. The area was cleaned up until dry soil was encountered. Therefore, no additional threat to human health and the environment has occurred as a result of this release. The nature and extent of contamination found in well 36-87 is still under investigation as are the chemical characteristics of new monitoring well 219-93.

Comments

Table 5, below, identifies the Volatile Organic Compounds likely present in the released water along with the regulatory limit for those compounds. A release notification to the National Response Center was not required because analytical data from a nearby monitoring well were available and a reportable quantity of the F-listed constituents should not have been released. The well at which this release occurred has now been numbered as monitoring well 219-93. The description of this release is submitted in accordance with the IAG, Sections I.B.3 Notification and I.B.5 Historical Release Report for final disposition.

References

RCRA Contingency Plan Implementation Report No. 93-005.

TABLE 5
VOLATILE ORGANIC COMPOUNDS*

ANALYTE	HIGHEST/AVERAGE VALUE DETECTED (mg/l)	REGULATORY LIMIT (mg/l)
Trichlorethylene (TCE) (F001) (D040)	96.0/50.8	0.50
Carbon tetrachloride (CCl ₄) (F001) (D019)	0.870/0.58	0.50
Tetrachloroethylene (PCE) (F001) (D039)	1.10/0.510	0.70
1,1-Dichloroethylene (1,1-DCE) (D029)	1.044/N/A	0.70
Chloroform (D022) (CHCl ₃)	1.10/0.540	6.00

Volatile Organic Compounds Sampled for but not found:

Acetone (F003)
Methylene Chloride (F001)
Vinyl Chloride (D043)
1,2-Dichloroethane (D028)
Carbon Disulfate
Toluene (F005)

* Based on quarterly sample events from March, 1991 to May, 1992.

SK/cb
931-082.000
(RF\HRR.1)

PAC REFERENCE NUMBER: 500-906

IHSS Number: Not Applicable

Unit Name: Asphalt Surface near Building 559

Approx. Location: N750,100; E2,083,500

Date(s) of Operation or Occurrence

The spill occurred on Monday, March 22, 1993 at 2:00 p.m.

Description of Operation or Occurrence

Approximately 1 gallon of F001 waste water spilled from a hose that was used to extract excess water from a tanker. The water was from the P304 sump which collects water from the exterior of the Building 559/561 tunnel and the Building 561 basement. Normally this water is released into the surface water drainage system through pumping to a footing drain system that flows by gravity. However, the water in question was found to exceed Segment 5 stream standards for some analytes, and was thus being removed by tanker. The tanker was accidentally filled beyond the level allowed by Rocky Flats Transportation Guidelines. These guidelines require no more than four-fifths of the capacity of the tanker to be used. After approximately 1000 gallons of water had been off-loaded from the tanker into drums, the hose that was used leaked some water as it was transferred back to storage.

Physical/Chemical Description of Constituents Released

The water contained F001 hazardous waste constituents: carbon tetrachloride, trichloroethylene and 1,1-dichloroethylene. This statement is made based on four sampling events which occurred from July 1992-March 1993. Chemical analytes covered by the Toxicity Characteristic Leaching Procedure (TCLP) were also identified, but the concentrations were below those of a characteristic RCRA hazardous waste. Contamination levels exceed Segment 5 stream standards for some constituents.

Responses to Operation or Occurrence

Oil-dry was used to absorb the water; the wet oil-dry was then managed as RCRA-regulated hazardous waste. Portions of the release were absorbed by the asphalt and evaporated into the air.

Spill pans are now being used during transfer operations. These spill pans are effective in providing secondary containment for any possible releases.

Fate of Constituents Released to Environment

Direction was given to use oil-dri to absorb the water and to manage the absorbent as hazardous waste. Containment of the released material was attempted; however, a portion

of the release immediately evaporated due to the ambient air temperature and a portion was absorbed by the asphalt. The absorbent material (oil-dri) was applied to the remainder of the release; it was then cleaned up (approximately two pounds) and is being managed as a RCRA-regulated waste.

Based on the extent of the release, the immediate removal of the affected asphalt is not required because the contamination constituents in the asphalt do not pose an unacceptable risk to human health or the environment.

The exact source of the contamination in the groundwater collected in sump P304 is *unknown*.

Comments

Table 4, below, compares the levels of carbon tetrachloride, trichloroethylene and 1,1 dichloroethylene in the waste water to regulatory standards.

The description of this release is submitted in accordance with the IAG, Sections I.B.3 Notification and I.B.5 Historical Release Report for final disposition.

References

RCRA Contingency Plan Implementation Report No. 93-004.

TABLE 4

Data Showing the Average Value over Four Sampling Events as Compared to Regulatory Standards

Analyte	Result Average	RCRA TCLP Limits	CWQCC Segment 5 Stream Standards	Drinking Water MCL
Carbon tetrachloride	245 ppb	500 ppb	18 ppb	5 ppb
1,1-dichloroethylene	48 ppb	700 ppb	57 ppt	7 ppb
Trichlorethylene	178 ppb	500 ppb	66 ppb	5 ppb

Definitions:

TCLP - Toxicity Characteristic Leaching Procedure

CWQCC - Colorado Water Quality Control Commission

MCL - Maximum Contaminant Levels (source: 40 CFR Part 141)

ppb - parts per billion

ppt - parts per trillion

**REFERENCES
AND
ATTACHMENTS**

ANALYTICAL REPORT

EG&G ROCKY FLATS, INC.
ROCKY FLATS PLANT
P.O. BOX 464
GOLDEN, COLORADO 80402

GENERAL LABORATORY
BUILDING 881

DISTRIBUTION:

M. L. Johnson, Spill Response, T130C
Ron Teel, Liq. Waste, 374
Ron Henry, Surface Water, T130B
Norm Cypher, Liq. Waste, 374
Wastren

LAB NUMBER: 93X0001
DATE: February 2, 1993
ACCOUNT NO: 986961

File

APPROVED: 
T. D. Santa Cruz

SAMPLE DESCRIPTION

Six samples were collected on 01/04/93 from the diesel fuel spill (fuel conditioner had been added to polar power). Two samples were taken from the soil with diesel, two of the fuel, and two from the snow. The samples were analyzed for TAL VOAs and TCLP Volatiles.

ANALYSIS RESULTS

See Attached Reports.

bmr

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00103

Lab Name: GLAB

Contract:

Lab Code: GLAB

Case No.:

SAS No.: 93X0

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: PURE FUEL

Sample wt/vol: 1. (g/mL) G

Lab File ID: JAN2201

Level: (low/med) MED

Date Received: 1/14/92

% Moisture: not dec. 0.

Date Analyzed: 1/22/93

Column: (pack/cap) CAP

Dilution Factor: 10.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO. COMPOUND UG/KG G

74-87-3	Chloromethane	500.	U
74-83-9	Bromomethane	500.	U
75-01-4	Vinyl Chloride	500.	U
75-00-3	Chloroethane	500.	U
75-09-2	Methylene Chloride	89.	BJ
67-64-1	Acetone	500.	U
75-15-0	Carbon Disulfide	250.	U
75-35-4	1,1-Dichloroethene	250.	U
75-34-3	1,1-Dichloroethane	250.	U
540-59-0	1,2-Dichloroethene (total)	250.	U
67-66-3	Chloroform	250.	U
107-06-2	1,2-Dichloroethane	250.	U
78-93-3	2-Butanone	500.	U
71-55-6	1,1,1-Trichloroethane	250.	U
56-23-5	Carbon Tetrachloride	250.	U
75-27-4	Bromodichloromethane	250.	U
78-87-5	1,2-Dichloropropane	250.	U
10061-01-5	cis-1,3-Dichloropropene	250.	U
79-01-6	Trichloroethene	250.	U
124-48-1	Dibromochloromethane	250.	U
79-00-5	1,1,2-Trichloroethane	250.	U
71-43-2	Benzene	33.	J
10061-02-6	trans-1,3-Dichloropropene	250.	U
75-25-2	Bromoform	250.	U
108-10-1	4-Methyl-2-Pentanone	500.	U
591-78-6	2-Hexanone	500.	U
127-18-4	Tetrachloroethene	250.	U
79-34-5	1,1,2,2-Tetrachloroethane	250.	U
108-88-3	Toluene	320.	U
108-90-7	Chlorobenzene	250.	U
100-41-4	Ethylbenzene	380.	U
100-42-5	Styrene	250.	U
108-38-3	Xylenes (total)	450.	U
60-29-7	Ethyl Ether	250.	U
75-69-4	Trichlorofluoromethane	250.	U
76-13-1	Trich-triflthane	250.	U
141-78-6	Ethyl Acetate	250.	U
95-47-6	o-Xylene	470.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00101EB

Sample Name: GLAB

Contract:

Lab Code: GLAB

Case No.:

SAS No.: 93X0

SDG No.:

Matrix: (soil/water) WATER

Lab Sample ID: OIL IN SOIL

Sample wt/vol: 5. (g/mL) ML

Lab File ID: JAN2101

Level: (low/med) LOW

Date Received: 1/19/93

Moisture: not dec.100.

Date Analyzed: 1/21/93

Column: (pack/cap) CAP

Dilution Factor: 10.00

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L G

74-87-3	Chloromethane	100.	U
74-83-9	Bromomethane	100.	U
75-01-4	Vinyl Chloride	100.	U
75-00-3	Chloroethane	100.	U
75-09-2	Methylene Chloride	12.	BU
67-64-1	Acetone	100.	U
75-15-0	Carbon Disulfide	50.	U
75-35-4	1,1-Dichloroethene	50.	U
75-34-3	1,1-Dichloroethane	50.	U
540-59-0	1,2-Dichloroethene (total)	50.	U
67-66-3	Chloroform	50.	U
107-06-2	1,2-Dichloroethane	50.	U
78-93-3	2-Butanone	100.	U
71-55-6	1,1,1-Trichloroethane	50.	U
56-23-5	Carbon Tetrachloride	50.	U
75-27-4	Bromodichloromethane	50.	U
78-87-5	1,2-Dichloropropane	50.	U
10061-01-5	cis-1,3-Dichloropropene	50.	U
79-01-6	Trichloroethene	50.	U
124-48-1	Dibromochloromethane	50.	U
79-00-5	1,1,2-Trichloroethane	50.	U
71-43-2	Benzene	50.	U
10061-02-6	trans-1,3-Dichloropropene	50.	U
75-25-2	Bromoform	50.	U
108-10-1	4-Methyl-2-Pentanone	100.	U
591-78-6	2-Hexanone	100.	U
127-18-4	Tetrachloroethene	50.	U
79-34-5	1,1,2,2-Tetrachloroethane	50.	U
108-88-3	Toluene	50.	U
108-90-7	Chlorobenzene	50.	U
100-41-4	Ethylbenzene	50.	U
100-42-5	Styrene	50.	U
108-38-3	Xylenes (total)	50.	U
60-29-7	Ethyl Ether	50.	U
75-69-4	Trichlorofluoromethane	50.	U
76-13-1	Trich-trifluoroethane	50.	U
141-78-6	Ethyl Acetate	50.	U
95-47-6	o-Xylene	50.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

00502

Lab Name: GLAB

Contract:

Lab Code: GLAB

Case No.:

SAS No.: 92X0

SDG No.:

Matrix: (soil/water) WATER

Lab Sample ID: B-2 SOIL

Sample wt/vol: 5. (g/mL) ML

Lab File ID: OCT2902

Level: (low/med) LOW

Date Received: 10/29/92

% Moisture: not dec.100.

Date Analyzed: 10/29/92

Column: (pack/cap) CAP

Dilution Factor: 10.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO. COMPOUND Q

74-87-3	-----Chloromethane	100.	U
74-83-9	-----Bromomethane	100.	U
75-01-4	-----Vinyl Chloride	100.	U
75-00-3	-----Chloroethane	100.	U
75-09-2	-----Methylene Chloride	50.	U
67-64-1	-----Acetone	100.	U
75-15-0	-----Carbon Disulfide	50.	U
75-35-4	-----1,1-Dichloroethene	50.	U
75-34-3	-----1,1-Dichloroethane	50.	U
540-59-0	-----1,2-Dichloroethene (total)	50.	U
67-66-3	-----Chloroform	50.	U
107-06-2	-----1,2-Dichloroethane	50.	U
78-93-3	-----2-Butanone	100.	U
71-55-6	-----1,1,1-Trichloroethane	50.	U
56-23-5	-----Carbon Tetrachloride	50.	U
75-27-4	-----Bromodichloromethane	50.	U
78-87-5	-----1,2-Dichloropropane	50.	U
10061-01-5	-----cis-1,3-Dichloropropene	50.	U
79-01-6	-----Trichloroethene	50.	U
124-48-1	-----Dibromochloromethane	50.	U
79-00-5	-----1,1,2-Trichloroethane	50.	U
71-43-2	-----Benzene	50.	U
10061-02-6	-----trans-1,3-Dichloropropene	50.	U
75-25-2	-----Bromoform	50.	U
108-10-1	-----4-Methyl-2-Pentanone	50.	U
591-78-6	-----2-Hexanone	50.	U
127-18-4	-----Tetrachloroethene	50.	U
79-34-5	-----1,1,2,2-Tetrachloroethane	50.	U
108-88-3	-----Toluene	31.	U J
108-90-7	-----Chlorobenzene	50.	U J
100-41-4	-----Ethylbenzene	21.	U
100-42-5	-----Styrene	50.	U
1330-20-7	-----Xylenes (total)	120.	

