F-14 Accumulation Point Site Assessment Report

Camp Stanley Storage Activity, Texas

Prepared for

Armstrong Laboratory/OEB, Brooks AFB, Texas, and Camp Stanley Storage Activity, Texas

February 1993

AU344

PARSONS ENGINEERING SCIENCE, INC.

F-14 Accumulation Point
Site Assessment Report
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Prepared by

Engineering-Science, Inc.
Austin, Texas

February 1993

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EXECUTIVE SUMMARY

A preliminary site assessment was performed by Engineering-Science (ES) at the F-14 point-of-accumulation site located at the U.S. Army installation, Camp Stanley Storage Activity (CSSA), in Boerne, Texas. Armstrong Laboratory/OEB at Brooks Air Force Base in San Antonio, Texas, retained ES for the Army Directorate of Engineering, Housing and Environmental Management Affairs. The scope of work was to determine what, if any, effects there might be to the subsurface from the previous onsite storage of drummed waste.

The point-of-accumulation site was utilized by CSSA from at least 1984 to 1992. Wastes were stored in drums on pallets or in appropriate metal container in an area surrounded by a limestone wall, front berm, and fence. CSSA records and interviews with CSSA personnel indicate that stored wastes consisted of petroleum hydrocarbons, chlorinated solvents, one herbicide, two pesticides, Stoddard solvent (PD-680), nickel penetrate, and transformers, some of which contained polychlorinated biphenyls (PCBs). Accordingly, this site is determined to be a solid waste management unit. All stored wastes were removed from the site in the spring of 1992.

To investigate the possible presence of pesticides and PCBs, preliminary assessment actions included collection and analysis of three shallow soil samples to evaluate health and safety protection that might be necessary during subsurface investigation. Three shallow soil samples were analyzed, and laboratory results indicated no concentrations of pesticides or PCBs in the shallow soils of the storage area.

Drilling actions were then conducted on October 9 and 10, 1992, to further assess subsurface soils. Logging of ten soil borings indicated dry, buff-colored limestone with occasional marl layers. The lithology correlates with the Cretaceous-age upper member of the Glen Rose Formation. Groundwater was not encountered during drilling operations. Preliminary screening of the soils and rock core did not reveal the presence of any volatile organic compounds. Two soil samples were collected from the rock core obtained from each boring, and one sample was composited from berm soil. A soil cuttings sample and a decontamination water sample were collected to determine disposition of soil and rinsate generated during the assessment. These samples were analyzed for constituents of compounds previously stored at the site (i.e., petroleum, aromatic, and halogenated hydrocarbons, pesticides, PCBs, herbicides, and nickel).

The majority of the target compounds were not detected. However, total petroleum hydrocarbons (TPH) concentrations ranged from 13 to 67 parts per

million (ppm) in eighteen subsurface samples and the berm composite sample. Total nickel concentrations ranged from below detection limits to 8.3 ppm. In addition, the berm and soil cuttings samples contained 1,1,1-trichloroethane (TCA) concentrations of 0.486 and 0.507 ppm, respectively.

Applicable regulations (31 TAC 335.69) require that units used for hazardous waste storage be closed in accordance with appropriate standards, including removal of any affected soils or structures. The regulations further require notification to the Texas Water Commission (TWC) prior to closure. ES recommends that a site closure plan be prepared and submitted to the TWC in accordance with 31 TAC 335 to clean close the site. This plan should include removal of affected soils to clean or background levels to prevent postclosure escape of waste to groundwater or surface water or to the atmosphere.

F-14 ACCUMULATION POINT
SITE ASSESSMENT REPORT
CAMP STANLEY STORAGE ACTIVITY, TEXAS

INTRODUCTION

Camp Stanley Storage Activity (CSSA) is a U.S. Army installation located in south central Texas, approximately 20 miles northwest of downtown San Antonio and 10 miles south of Boerne. The inner cantonment encompasses about 1,760 acres and is approximately 2.4 miles long, 1.3 miles wide, and oriented in a north-south direction (Figure 1). The surrounding area is primarily rural with some residential and commercial development scattered around the perimeter. The primary mission of CSSA is ammunition storage under the command of the U.S. Red River Army Depot in Texarkana, Texas.

As part of its operations during the 1980s, CSSA temporarily stored hazardous waste compounds at a designated and secure site for less than 90 days before transport and proper disposal. As of spring 1992, CSSA had removed all stored compounds and containers. In August, CSSA retained Engineering-Science, Inc. (ES) of Austin, Texas, to perform a subsurface assessment.

SITE HISTORY

CSSA utilized the point-of-accumulation site from 1984 until 1992 for less-than-90-day storage of drummed wastes. The site may have been used prior to 1984, but no records were reviewed that indicated such use. The storage area is located about 100 feet west of road F-14 on the eastern portion of CSSA inner cantonment (Figure 2).

According to an interview with Fred A. Stahl of CSSA, the storage containment area was created during the early 1980s by excavating about 30 feet of the side of a limestone hill to form a flat area with a cutoff wall on the west side. The front portion of the area was then bermed with soil about 1 to 3 feet high. The base of the area was limestone rock with a thin covering of limy soils and pea gravel. The native soil and rock base and wall were not lined. The storage area is about 55 by 90 feet. A locked fence surrounds the entire area.

Drummed wastes were stored on wooden pallets and in metal containers appropriate for the compound of storage. Known wastes included the following:

- Chlordane
- Crankcase oil (VCI) waste

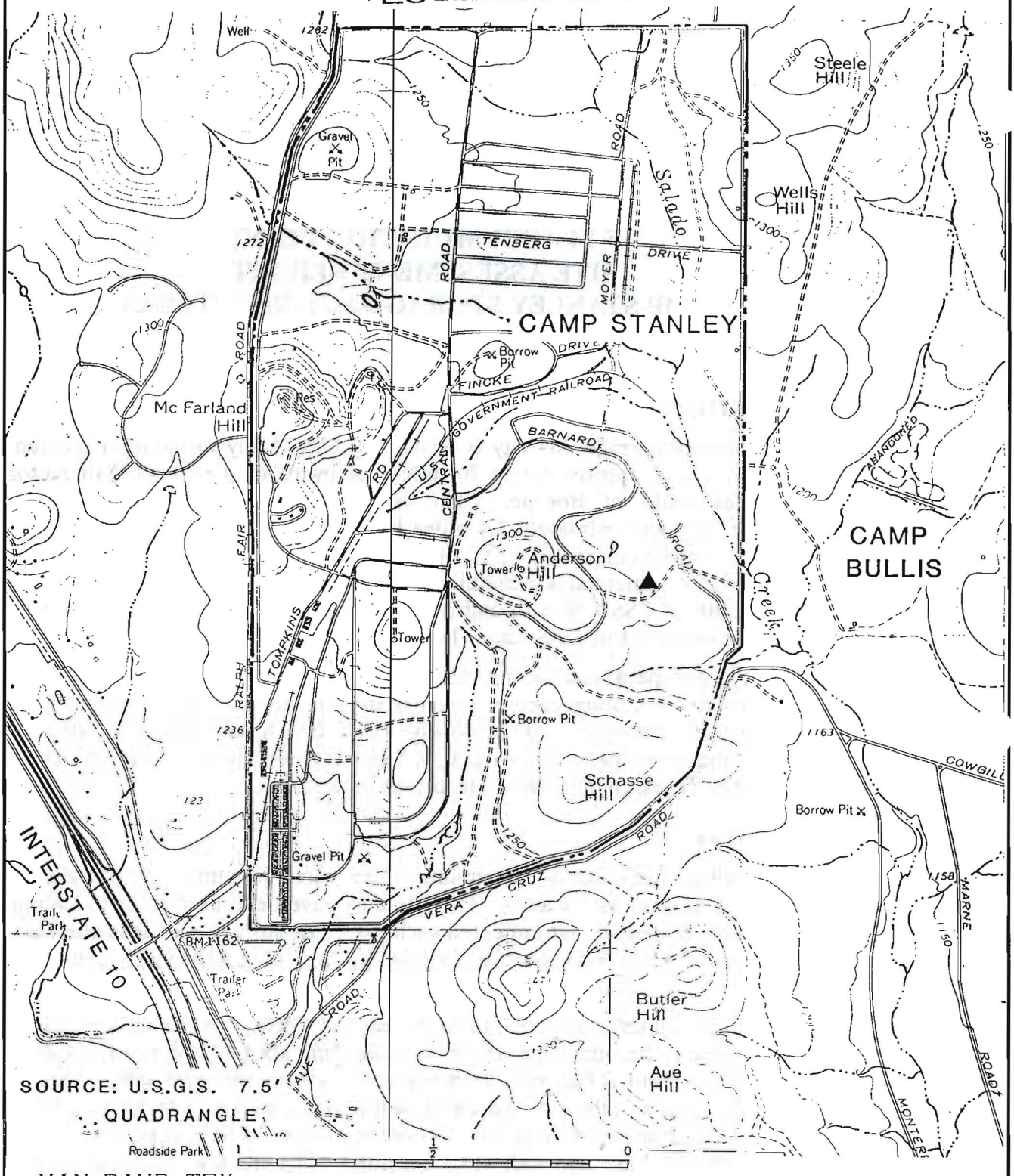


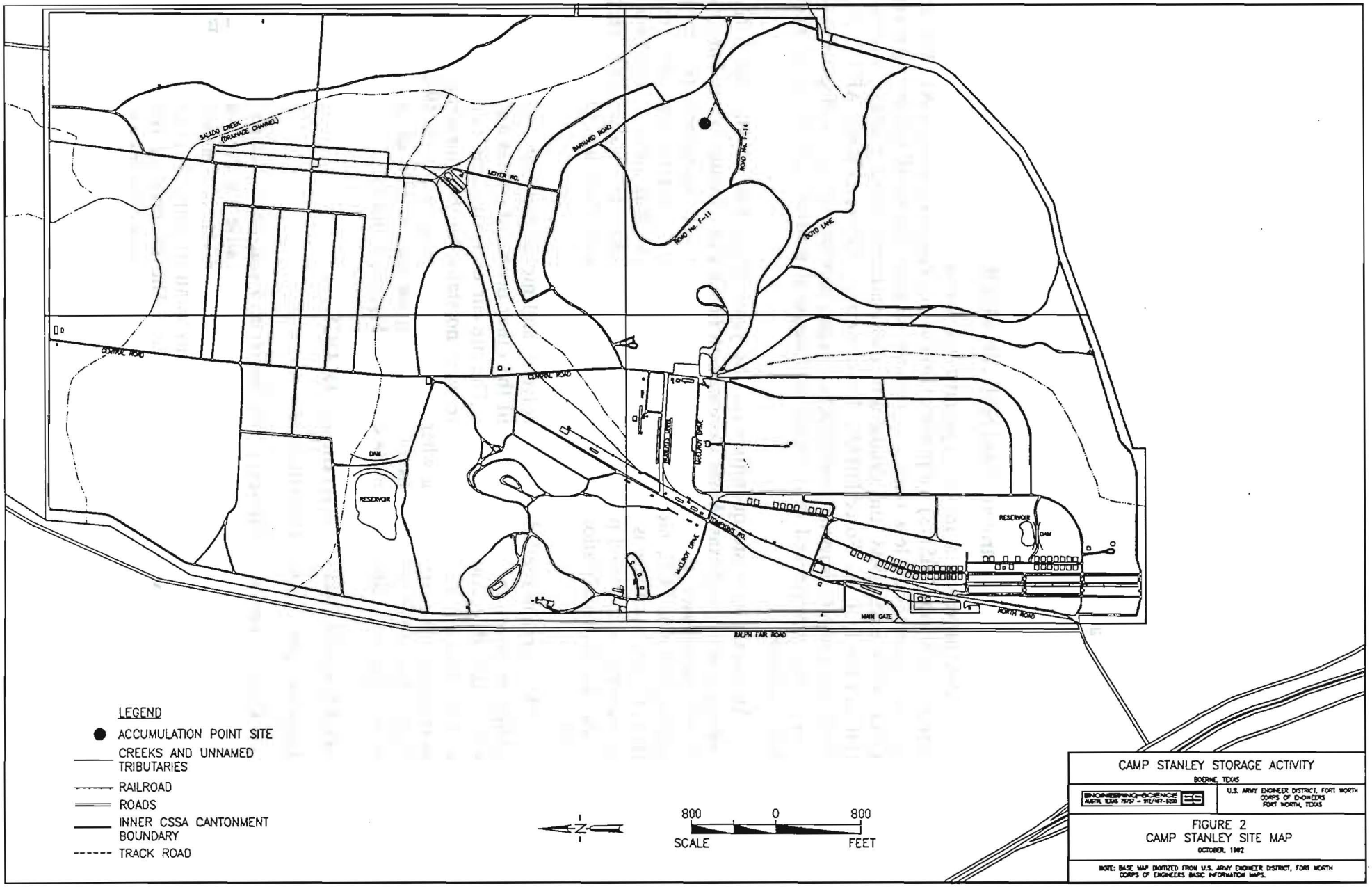
FIGURE 1

PROJECT LOCATION MAP
F14 ACCUMULATION POINT SITE ASSESSMENT

OCTOBER 1992

CAMP STANLEY STORAGE ACTIVITY

MAPBOR


SALADO CREEK (DRAINAGE CHANNEL)
MOTOR RD.
BARNARD ROAD
ROAD No. F-14
ROAD No. F-11
SOTO LANE
CENTRAL ROAD
CENTRAL ROAD
DAM
RESERVOIR
McQUADY DRIVE
McQUADY DRIVE
McQUADY DRIVE
SIMMONS RD.
RESERVOIR
DAM
MAIN GATE
NORTH ROAD
RALPH FAIR ROAD
LEGEND
ACCUMULATION POINT SITE
CREEKS AND UNNAMED TRIBUTARIES
RAILROAD
ROADS
INNER CSSA CANTONMENT BOUNDARY
TRACK ROAD
800 0 800
SCALE
FEET
CAMP STANLEY STORAGE ACTIVITY
BOERNE, TEXAS
ENGINEERING-SCIENCE AUSTIN, TEXAS 78757 - 512/467-8300 ES
U.S. ARMY ENGINEER DISTRICT, FORT WORTH CORPS OF ENGINEERS FORT WORTH, TEXAS
FIGURE 2
CAMP STANLEY SITE MAP
OCTOBER, 1992
NOTE: BASE MAP DIGITIZED FROM U.S. ARMY ENGINEER DISTRICT, FORT WORTH CORPS OF ENGINEERS BASIC INFORMATION MAPS.

F-14BASE

- Diesel fuel waste
- Leaded gasoline waste
- Malathion
- Nickel penetrate
- Stoddard solvent
- Tetrachlorethylene (PCE)
- Transformers with PCB and non-PCB oils
- Veg-a-Kill (petroleum base herbicide with Bromacil and 2,4-D)

CSSA provided a memo regarding the storage of compounds and material safety data sheets (MSDS) for presentation in this report (appendix A). The quantities generated were less than the amount allowed for small-quantity generators. From 1984 until 1988, the drums and their contents were properly disposed of through the U.S. Air Force DRMO Environmental Office at Kelly AFB, Texas. In 1988, the DRMO Environmental Office began subcontracting the disposal work to contractors experienced in transport and disposal actions such as Safety Kleen of San Antonio.

Manifests of waste quantities for the years 1988, 1989, 1990, and 1992 were recorded with the Texas Water Commission (TWC) in "Annual Waste Summaries." These summaries indicate disposal of PCB-containing transformers, petroleum wastes, solvent, PCE, nickel nitrate, and chlordane. Asbestos was also removed from CSSA, but there is no indication that it was stored at the site. Oil from each transformer was tested prior to disposal (appendix A). The wastes were recorded under EPA identification number TX2210020739 and TWC identification number 69026.

The tetrachloroethylene, oils, solvent, and nickel penetrate wastes were completely removed in 1990. CSSA had the other drums of wastes and storage pallets removed in the early spring of 1992. The site currently contains no drums or pallets, and the fence is kept locked. There were no stains on the limestone floor and no noticeable odors in the area when ES visited the site in March 1992. However, September 1992 photographs of the site show the outline of removed storage containers in the limy soils on the site floor (Figures 3 and 4).

SOILS, GEOLOGY, AND HYDROGEOLOGY

Physiography and Soil Classification

CSSA is located northwest of the Balcones Escarpment, which defines the geomorphologic boundary between the Blackland Prairie to the southeast and the Edwards Plateau to the northwest (Fenneman, 1931). In general, the Edwards Plateau is a rugged region dissected by many small streams. Topography at CSSA is also hilly with several intermittent streams. The majority of runoff from CSSA drains east-southeast to Salado Creek, and runoff from southwest CSSA drains to Leon Creek (Figures 1 and 2).

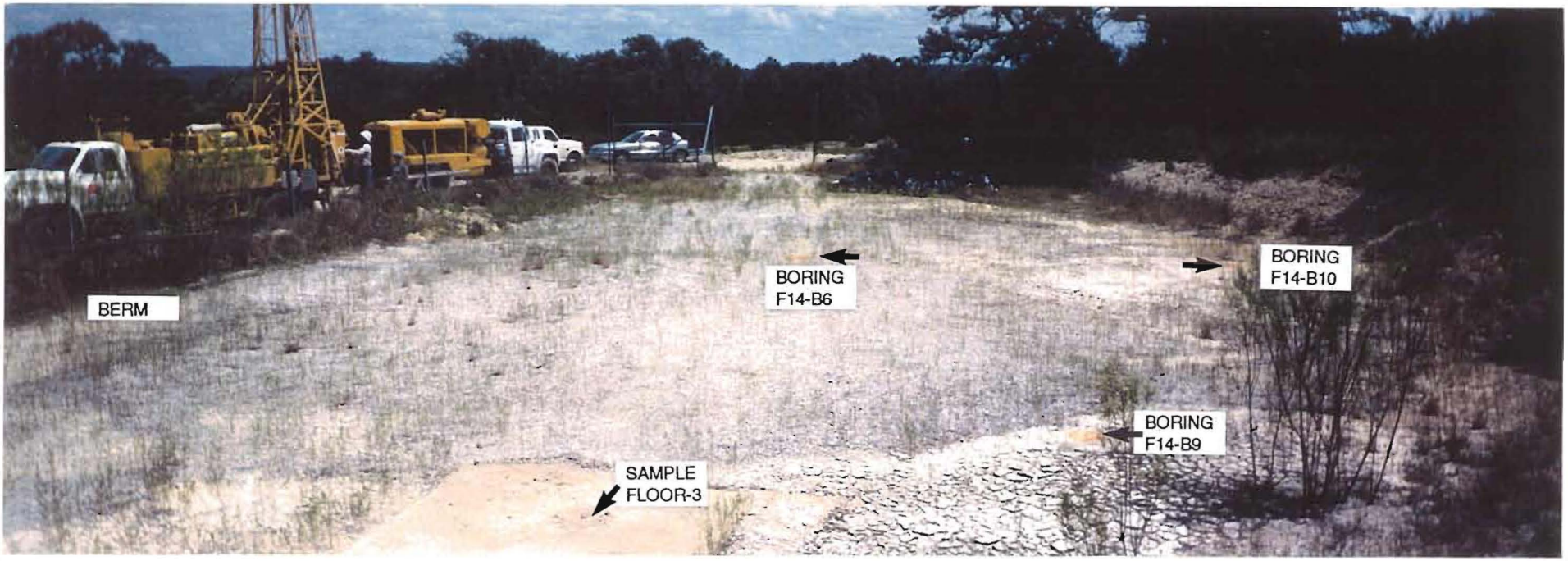


Photo 1. View northeast across accumulation point area. Drilling of soil boring F14-B2 is in progress. Gate and decontamination area are located in the top central area of photo; other features are noted. Photo taken 9/9/92 by S. Roberts.

FIGURE 3

PHOTO 1
F-14 ACCUMULATION POINT
SITE ASSESSMENT

OCTOBER 1992

CAMP STANLEY STORAGE ACTIVITY

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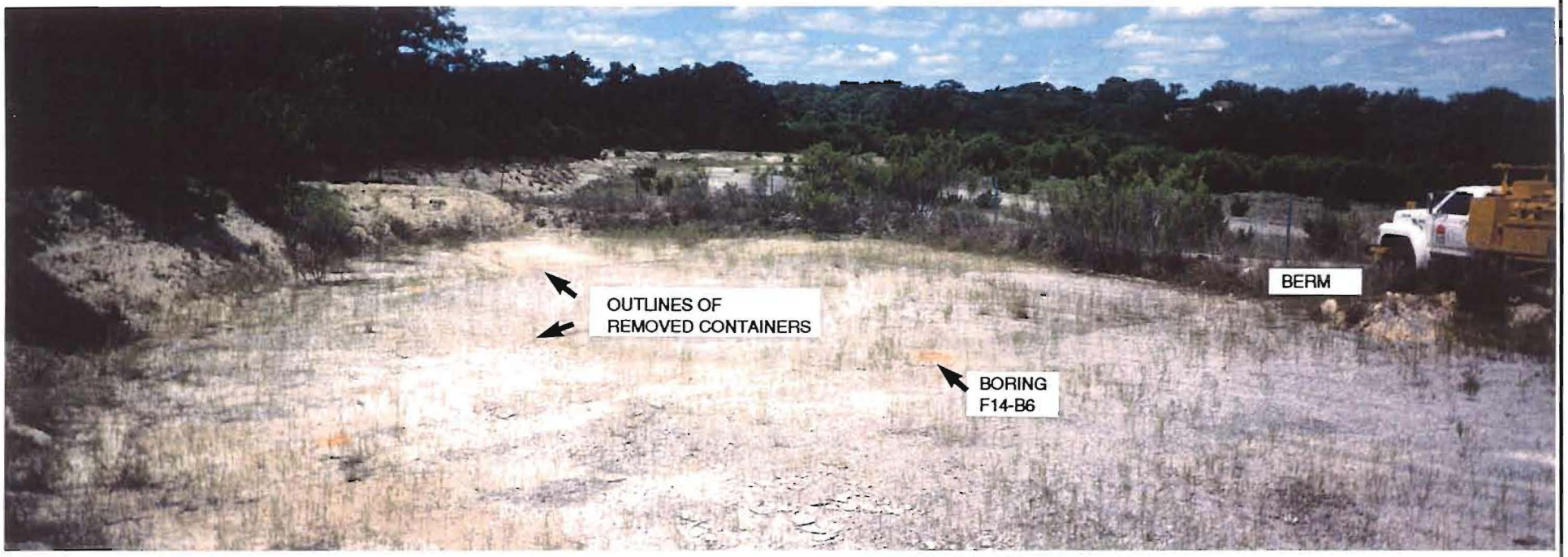

Photo 2. View northwest across accumulation point area prior to drilling. Boring locations, berm, and other significant features are noted. Photo taken 9/9/92 by S. Roberts.

FIGURE 4

PHOTO 2
F-14 ACCUMULATION POINT
SITE ASSESSMENT

OCTOBER 1992

CAMP STANLEY STORAGE ACTIVITY

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Soils in the F-14 accumulation area are defined as Brackett soils by the Soil Conservation Service (U.S. Department of Agriculture, 1966). These soils are extensive in northwestern Bexar County and occur over long slopes associated with the "stairstep" topography formed by alternating layers of hard and soft limestone that are found in the F-14 area. The Brackett soils can be light colored and very shallow, and the dominant mineralogy is calcareous. The soils are considered clayey, shallow, well drained, nonarable, and best suited to native grasses.

In the F-14 area, soils are less than 1 inch thick but do support grasses and shrubs. Figures 3 and 4 are photos showing an approximate 360-degree view of the accumulation point site and associated features. Some grasses were observed on the floor of the site around the previous storage areas of containers (indicated by impressions on the site floor). The berm area, however, supports abundant grasses and shrubs that are up to 10 feet in height.

Geology

CSSA is located on outcrops of the upper member of the Cretaceous-age Glen Rose Formation, which is overlain with recent (Quaternary) stream deposits (Texas Department of Water Resources, TDWR, 1983). The Glen Rose, a member of the Trinity Group, is characterized as thin-bedded dolomitic, hard limestone with alternating layers of soft marl. The alternating layers, when exposed to weathering and erosion, form a "stairstep" topography. The Glen Rose is about 600 to 800 feet thick in the area of CSSA and is underlain by the Hensell Sand/Bexar Shale and the Cow Creek Limestone, which are also members of the Trinity Group.

Structurally, CSSA is on the uplifted Edwards Plateau about 5 miles northwest of the Balcones Fault zone. This zone is a series of normal faults which downdrop to the southeast. The faults trend northeast-southwest along the edge of the Balcones escarpment. An unnamed fault trending northeast-south and perpendicular to Leon Creek and Interstate 10 appears to terminate in the southwest corner of CSSA (Bureau of Economic Geology, 1983).

Hydrogeology and Water Wells

The Trinity Group is the major aquifer underlying CSSA. The saturated thickness of the aquifer is about 100 feet in the outcrop area and 1,200 feet in the downdip portion. Recharge of the Trinity occurs from rainfall on outcrops and seepage from lakes and streams (TDWR, 1983). Movement of groundwater is generally to the south-southeast and takes place in solution channels of various sizes, producing varying well yields and coefficients of transmissivity. Discharge occurs primarily through pumping wells, with some discharge from seeps and springs and leakage to underlying beds. Depth to groundwater beneath CSSA has been measured at 105 to 207 feet below ground level (BGL) (water levels collected by ES personnel in water supply wells). These wells are completed in the lower Glen Rose and Cow Creek Formations.

Rainfall in 1992 has been higher than the recorded yearly average of 29 inches, or 2.41 inches per month. The heaviest rainfall usually occurs in May and September. However, rainfall from December 1991 to May 1992 averaged 7.4 inches per

month. Most of the rainfall may run off the site quickly due to site slope and minimum soil cover, and there was no shallow saturated zone detected.

SITE ASSESSMENT

The project scope of work required that the field assessment actions consist of drilling ten soil borings (110 linear feet) in level D personal protective equipment (PPE) followed by collection and analysis of up to twenty-two soil samples and two water samples. However, the possible presence of PCBs and pesticides affected the selection of required health and safety personal protective equipment, as these compounds have very low allowable exposure levels. ES therefore requested a no-cost modification to the scope of work for collection and analysis of three preliminary soil samples for the compounds noted above to determine the necessity of upgrading level D to level C or level B PPE. Analyses of the preliminary soil samples were evaluated prior to the initiation of drilling.

Prior to drilling activities, ES personnel located ten soil borings. Gene Perales of CSSA granted utility clearance for drilling.

Drilling was performed by Jones Environmental Drilling, Incorporated (JEDI), of San Antonio, under the direction of ES. Soil and water samples were analyzed by Chemron Incorporated (Chemron), 431 Isom Road, Suite 135, San Antonio.

Predrilling Assessment and Results

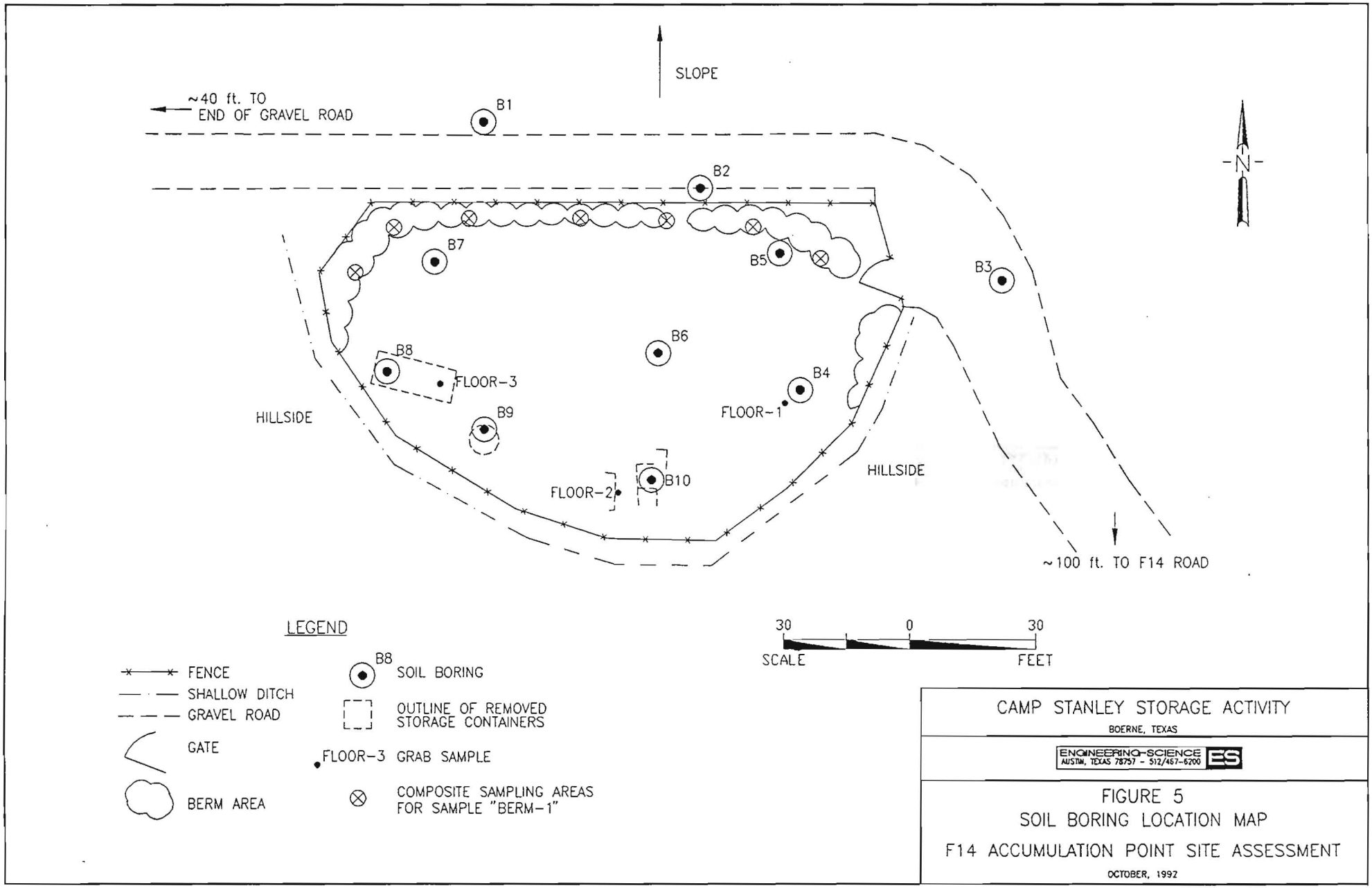
On September 2, 1992, three soil samples were collected from the floor of the accumulation site. The soil sample locations were selected in areas of removed storage containers (Figure 5). ES personnel worked in level C protective equipment, including Tyvek suit and air purifying respirator equipped with organic vapor and high-efficiency particulate cartridges.

The floor of the site was approximately 1 inch of limy soil underlain by limestone. Samples from 1 to 6 inches BGL were therefore collected with hammer and chisel. Soil samples were subsequently placed in 8-ounce glass jars with Teflon-lined lids, labeled, and placed in a cooler chilled with ice, then transported the same day to Chemron for analysis.

The laboratory reports did not indicate the presence of PCB or pesticide compounds (Table 1). Copies of the laboratory reports and associated chain-of-custody documents are in appendix D. These results indicated that subsurface assessment actions could be initiated in level D PPE.

Subsurface Assessment Actions

Drilling began at the site on September 9, 1992, and was completed the following day. The drilling was performed by JEDI using a truck-mounted rotary drilling rig. Air rotary drilling techniques were used to advance ten soil borings with a 2-inch-diameter core barrel. The locations of the borings and other sampling points are indicated on Figure 5. Figure 6 features a close-up photograph of one drilling location (boring F14-B9) showing the outline of removed storage containers. Boring locations were selected to best delineate possible areas of contamination inside the site and around its perimeter, including the entry gate.



CAMP STANLEY STORAGE ACTIVITY

BOERNE, TEXAS

ENGINEERING-SCIENCE ES
AUSTIN, TEXAS 78757 - 512/467-6200

FIGURE 5
SOIL BORING LOCATION MAP
F14 ACCUMULATION POINT SITE ASSESSMENT

OCTOBER, 1992

SBLOC

Table 1
Analytical Results for Shallow Soil Samples
F14 Accumulation Point Site
Camp Stanley Storage Activity, Texas

Analytical Method:			SW418.1	SW8260	SW8270	SW8080	SW8140	SW8150	SW7520
Sample ID	Sample Date	Sample Depth (in. BGL)	TPH (mg/kg)	Aromatic and Halogenated Hydrocarbons (mg/kg)	BNAs (μg/kg)	Organochlorine Pesticides and PCBs (mg/kg)	Organophosphorous Pesticides (μg/kg)	Herbicides (μg/kg)	Total Nickel (mg/kg)
Floor 1	9-02-92	1-3	-	-	-	BDL	-	-	-
Floor 2	9-02-92	1-2	-	-	-	BDL	-	-	-
Floor 3	9-02-92	1-2	-	-	-	BDL	-	-	-
Berm 1	9-10-92	3-6	30	1,1,1-TCA 0.486	butyl benzyl phthalate 110	BDL	BDL	BDL	2.8

Notes:
Methods are from EPA "Test Methods for Evaluating Solid Waste Physical/Chemical Methods," EPA publication SW-846, 1986.

TPH = total petroleum hydrocarbons
PCBs = polychlorinated biphenyls
BNAs = base/neutral acids
- = not analyzed
in. BGL = inches below ground level
BDL = below detection limits
mg/kg = milligrams per kilogram
μg/kg = micrograms per kilogram

E5/AU34401/F14-T1.wk1

Photo 3. View northwest from south-center of accumulation point prior to drilling. Rectangular area is outline of removed storage container; sample "Floor-3" was collected from the east end. Orange paint marks the location of boring B9 in lower area of photo. Photo taken 9/9/92 by S. Roberts.

Photo 4. View of core taken from soil boring F14-B1 from 1.5 feet BGL (left side) to 4.5 feet BLG (right side). Light gray cores are limestone and the brownish-yellow layers are marl. Photo taken on 9/9/92 by S. Roberts.

FIGURE 6

PHOTOS 3 & 4
F-14 ACCUMULATION POINT
SITE ASSESSMENT

OCTOBER 1992

CAMP STANLEY STORAGE ACTIVITY

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Air monitoring was performed continuously during drilling with an HNU photoionization detector, HMX combustible gas indicator, and Mini-Ram particulate monitor. The HNU did not function during the second day of drilling, so a Sensidyne pump equipped with benzene and organic compound prefilter tubes was used for monitoring. The HNU and Sensidyne tubes did not indicate volatile organic compounds (VOCs) in the breathing zone or the area of drilling, and the HMX did not manifest explosive conditions. The particulate monitor displayed readings of 0.00 to 0.01 milligram per cubic meter (mg/m^3) in the breathing zone and up to 0.22 mg/m^3 when the monitor was placed next to each dust plume resulting from air coring. The driller therefore wore an air-purifying respirator during drilling, and other personnel remained out of the dust plume.

Downhole drilling equipment was decontaminated by a high-pressure steam cleaning prior to initiating field work and between actions at each boring. JEDI also steam cleaned the rig before site entry and after completion of all drilling actions. Rinsate from onsite steam cleaning was contained in a temporary decontamination pad. The core barrel samplers were decontaminated by the following procedures:

1. Phosphate-free soap wash
2. Potable water rinse
3. Isopropyl alcohol rinse
4. Final distilled-water rinse.

The drilling and sampling equipment was allowed to air dry prior to use.

Continuous cores were obtained with 2- and 5-foot core barrels for lithologic logging. The site lithology consisted of buff-colored, dry, hard limestone occasionally interbedded with marl or clay lenses (Figure 6). Some iron staining and shell fragments were observed. The limestone correlates with the upper Glen Rose Formation on the *Geologic Atlas of Texas* San Antonio sheet (Bureau of Economic Geology, 1983).

ES personnel field screened the cores using an HNU or Sensidyne pump equipped with benzene and organic compound prefilter tubes to differentiate intervals with the highest concentrations of VOCs; no VOCs were detected in any of the rock cores. A 1-foot section of each 5-foot core was therefore selected for laboratory analysis based on the core lithology. The exception was the 20-foot boring (F14-B6), from which two soil samples were selected from 10-foot core intervals. Clay or marl intervals were typically chosen for analysis because of the potential for contaminant migration through these less resistant soil and rock types.

Two soil samples from each boring were submitted to Chemron for further testing. One shallow sample from the 0- to 5-foot interval and one sample from the base of each boring were retained for laboratory analysis. A representative sample was immediately placed in two 8-ounce soil jars with Teflon-lined plastic lids. The sample jars were capped, labeled, and packed on ice in coolers for transportation to Chemron under standard chain-of-custody procedures. These soil samples were analyzed for total petroleum hydrocarbons, aromatic and halogenated hydrocar-

bons, pesticides and PCBs, total nickel, base/neutral acid compounds (BNAs), and herbicides. Only one subsurface soil sample was selected for analysis of organophosphorous pesticides, as these compounds have a half-life of 30 days and are rapidly degraded when exposed to air.

A composite soil sample was collected from the berm (Figure 5). This berm is located along the north site boundary parallel to the fence and is about 1 to 3 feet above grade. The composite sample was composed of soil from seven sampling points located approximately 15 feet apart along the interior berm. A stainless steel trowel was used for sample collection to a depth of 6 inches below the berm surface. A representative sample was immediately placed in two 8-ounce soil jars which were capped, labeled, and packed on ice in coolers for transportation to Chemron under standard chain-of-custody procedures. The berm sample was analyzed for TPH, aromatic and halogenated hydrocarbons, pesticides and PCBs, total nickel, BNAs, herbicides, and organochlorine and organophosphorous pesticides.

Assessment Results

Results of the subsurface sample analyses are presented Table 2. The sampling date and depth of collection are also presented. TPH and total nickel were detected in most of the rock samples. TPH concentrations ranged from below detection limits (BDL) to 67 ppm, and total nickel concentrations from BDL to 8.3 ppm. No compounds of aromatic or halogenated hydrocarbons, BNAs, pesticides and PCBs, or herbicides were detected above detection limits in the subsurface samples collected from borings. The one sample analyzed for organophosphorous pesticides did not contain these compounds.

Considering the analytical results of the subsurface soil samples, the effects of storing containers of hazardous waste substances for less than 90 days are limited to petroleum hydrocarbons and nickel detected in the subsurface site and perimeter boring samples. Petroleum hydrocarbons were detected at levels less than 70 ppm. The nickel concentrations appear to be low (less than 8.5 ppm). Groundwater was not encountered during drilling. It is possible that first groundwater is the Glen Rose aquifer, with water levels of 100 to 200 feet BGL.

As the composite berm sample is considered a shallow soil sample, analytical results for this sample are shown in Table 1. This sample contained 30 mg/kg TPH, 0.486 ppm 1,1,1-trichloroethane (1,1,1-TCA), 0.110 mg/kg butyl benzyl phthalate, and 2.8 ppm total nickel. Pesticides, PCBs, and herbicides were not detected.

As phthalates are often detected because of their use in plastics, low levels of phthalates are considered common laboratory contaminants. Butyl benzyl phthalate was detected at only 0.010 mg/kg above the detection limit and is probably a result of laboratory contamination. Total nickel and TPH also were found in low concentrations. The 1,1,1-TCA concentration was detected only in the berm area. This compound was detected in one other soil sample – the composite collected from soil cuttings (discussed in "Waste Disposition" section below).

Table 2

Analytical Results for Subsurface Soil Samples

F14 Accumulation Point Site

Camp Stanley Storage Activity, Texas

Analytical Method:			SW418.1	SW8260	SW8270	SW8080	SW8140	SW8150	SW7520
Sample I.D	Sample Date	Sample Depth (ft BGL)	TPH (mg/kg)	Aromatic and Halogenated Hydrocarbons (mg/kg)	BNAs (µg/kg)	Organochlorine Pesticides and PCBs (µg/kg)	Organophosphorous Pesticides (µg/kg)	Herbicides (µg/kg)	Total Nickel (mg/kg)
B1-2.5	9-09-92	2.5-3.5	49	BDL	BDL	BDL	-	BDL	6.5
B1-9.0	9-09-92	9.0-10.0	68	BDL	BDL	BDL	-	BDL	BDL
B2-1.0	9-09-92	1.0-2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL
B2-9.0	9-09-92	9.0-10.0	30	BDL	BDL	BDL	-	BDL	2.0
B3-1.0	9-09-92	1.0-2.0	36	BDL	BDL	BDL	-	BDL	4.8
B3-8.0	9-09-92	8.0-9.0	53	BDL	BDL	BDL	-	BDL	1.3
B4-2.0	9-09-92	2.0-3.0	20	BDL	BDL	BDL	-	BDL	4.8
B4-9.0	9-09-92	9.0-10.0	63	BDL	BDL	BDL	-	BDL	12
B5-1.0	9-09-92	1.0-2.0	14	BDL	BDL	BDL	-	BDL	8.3
B5-9.0	9-09-92	9.0-10.0	37	BDL	BDL	BDL	-	BDL	10
B6-1.5	9-10-92	1.5-2.5	26	BDL	BDL	BDL	-	BDL	4.3
B6-17.7	9-10-92	17.7-18.5	67	BDL	BDL	BDL	-	BDL	BDL
B7-1.0	9-10-92	1.0-2.0	BDL	BDL	BDL	BDL	-	BDL	2
B7-9.0	9-10-92	9.0-10.0	43	BDL	BDL	BDL	-	BDL	BDL
B8-2.5	9-10-92	2.5-3.5	49	BDL	BDL	BDL	-	BDL	7
B8-9.0	9-10-92	8.0-9.0	18	BDL	BDL	BDL	-	BDL	6.8
B9-2.9	9-10-92	2.9-3.9	27	BDL	BDL	BDL	-	BDL	1.6
B9-9.0	9-10-92	9.0-10.0	13	BDL	BDL	BDL	-	BDL	1.8
B10-1.5	9-10-92	1.5-2.5	30	BDL	BDL	BDL	-	BDL	1.6
B10-9.0	9-10-92	9.0-10.0	14	BDL	BDL	BDL	-	BDL	BDL

Notes:

Methods are from EPA "Test Methods for Evaluating Solid Waste Physical/Chemical Methods," EPA publication SW-846, 1986.

TPH = total petroleum hydrocarbons

PCBs = polychlorinated biphenyls

BNAs = base/neutral acids

- = not analyzed

ft BGL = feet below ground level

BDL = below detection limits

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

E5/AU34401/F14-T2.wk1

WASTE MANAGEMENT AND DISPOSITION

Soil

One composite soil sample was collected from soil cuttings generated during drilling. Approximately 4.5 cubic feet of soil cuttings and soil remaining from compositing the berm sample were contained in a 55-gallon drum. The sample was collected with a clean trowel and composited in a stainless steel bowl. The resulting sample was contained in two 8-ounce jars, capped, and placed on ice for transport to the laboratory.

The soil cuttings sample was analyzed for target compounds in accordance with other soil samples collected. The results of this analysis are in Table 3. The majority of compounds were not detected with the exception of 0.507 mg/kg 1,1,1-TCA and 7.7 mg/kg total nickel. These concentrations are similar to those detected in the berm sample. Laboratory reports and chain-of-custody documents are in appendix D.

It is possible that further assessment actions will be needed, and additional decontamination water will thus be generated. One-time disposal of this water at the end of the assessment should reduce project costs, and it is therefore recommended that disposal actions be performed after completion of site actions. In addition, the contained soil cuttings should remain at the site until all field actions are completed. Transport and disposal of soil at one time should reduce costs for those actions.

Water

Approximately 55 gallons of rinsewater was generated during the assessment. ES personnel sampled this water, which was subsequently analyzed for the target compounds of concern in the soil assessment (Table 3). No compounds were detected with the exception of 1.7 milligrams per liter (mg/L) TPH. A matrix spike sample and a duplicate sample were analyzed by the laboratory in accordance with quality control procedures. Results for these quality control samples were within the expected limits for the associated analyses. The quality control laboratory reports as well as the sample reports and chain-of-custody documents are in appendix D.

Table 3
Analytical Results for Waste Disposition Samples
F14 Accumulation Point Site
Camp Stanley Storage Activity, Texas

Analytical Method:		SW418.1	SW8260	SW8270	SW8080	SW8140	SW8150	SW7520
Sample ID	Sample Date	TPH (mg/L)	Aromatic and Halogenated Hydrocarbons (mg/kg-soil) mg/L-water)	BNAs (μg/kg-soil) (μg/L-water)	Organochlorine Pesticides and PCBs (μg/kg-soil) (μg/L-water)	Organophosphorous Pesticides (μg/kg-soil) (μg/L-water)	Herbicides (μg/kg-soil) (μg/L-water)	Total Nickel (mg/kg-soil) (μg/L-water)
Cuttings 1	9-10-92	BDL	1,1,1-TCA 0.507	BDL	BDL	BDL	BDL	7.7
Decon Water 1	9-11-92	1.7	BDL	BDL	BDL	BDL	BDL	BDL

Notes:
Methods are from EPA "Test Methods for Evaluating Solid Waste Physical/Chemical Methods," EPA publication SW-846, 1986.

TPH = total petroleum hydrocarbons
PCBs = polychlorinated biphenyls
BNAs = base/neutral acids
- = not analyzed
BDL = below detection limits
mg/kg = milligrams per kilogram
μg/kg = micrograms per kilogram
μg/L = micrograms per liter
mg/L = milligrams per liter

E5/AU34401/F14-T3.wk1

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CONCLUSIONS AND RECOMMENDATIONS

The F-14 point-of-accumulation site was evaluated for possible effects from storage of hazardous waste compounds. Records and interviews with CSSA personnel reflected that the site was utilized for waste storage from at least 1984 until 1992. Thus, the site is a solid waste management unit subject to federal and state regulations 40 CFR 260-270 and 31 TAC 335, respectively. Disposition of wastes was handled through Kelly AFB DRMO Environmental Office from 1984 to 1988 and manifested through a Kelly AFB subcontractor during 1988, 1989, 1990, and 1991. Storage was discontinued in spring 1992, and no effects of storage were observed during an initial site visit at that time.

According to the data collated from this assessment, the F-14 point-of-accumulation site did not contain pesticides or PCBs in the shallow soil inside the fence. However, low levels of petroleum hydrocarbons and total nickel were detected in the subsurface both in the accumulation area and around its perimeter. These compounds were also detected in low concentrations in the composite berm sample, as were the compounds 1,1,1-TCA and butyl benzyl phthalate. The waste disposition soil sample contained TPH, 1,1,1-TCA, and total nickel, and the decontamination water sample contained TPH.

Considering the assessment results, solid waste residues in the form of petroleum hydrocarbons and nickel are present in the site subsurface and also are present along with 1,1,1-TCA in the site berm. Applicable regulations require that the area be closed in accordance with environmental performance criteria, and that the TWC be notified 90 days in advance of undertaking such closure activities (31 TAC 335.69, 31 TAC 335.6[g]). ES recommends that a clean closure of this area be undertaken by removing all solid waste residues in accordance with 31 TAC 335 and 40 CFR subpart G. This action should minimize future economic and regulatory liability. This activity should be coordinated with the TWC via notification and plan submittal at least 90 days prior to conducting the closure. ES also recommends that plan implementation be supervised and certified by an independent professional engineer registered in the State of Texas. This work should be performed in accordance with TWC guidance document 1, "Closure Requirements for Hazardous Waste Less than 90-day Tanks and Container Storage Areas" (October 1990). However, should the TWC promulgate the draft risk reduction rules (proposed on January 22, 1992) prior to submittal of a closure plan, ES recommends that the newly promulgated rules be taken into account for closure of the F-14 site.

The closure plan should be designed to minimize the need for further maintenance, to control postclosure escape of wastes, and to ensure compliance with specific closure requirements. Excavated soils should be profiled for waste characterization and then treated or disposed of at an authorized treatment, storage, and disposal facility. Sampling and analysis should be performed to verify the clean closure and approved by the TWC.

Currently, the TWC is examining the applicability of risk reduction assessment for closures and cleanups of Texas sites. Rules for risk assessment are not yet proposed or in effect. Application of risk assessment could result in removal and disposal of less contaminated soil to attain clean closure, thus reducing the ultimate cost of closure. The site closure plan should reflect the option of applying the risk reduction rules if they are promulgated prior to completion of closure activities.

REFERENCES

Fenneman, N.M. *Physiography of the Western United States.* New York: McGraw-Hill Book Company, Inc., 1931.

Bureau of Economic Geology, *Geologic Atlas of Texas*, San Antonio sheet, 1983.

Code of Federal Regulations (CFR) Title 40, Protection of Environment, Parts 260-270.

State of Texas. Title 31, Texas Administrative Code (TAC), Chapter 335, Industrial Solid Waste and Municipal Hazardous Waste.

Texas Department of Water Resources. "Report 273: Groundwater Availability of the Lower Cretaceous Formations in the Hill Country of South-Central Texas," 1983.

Texas Water Commission, Hazardous and Solid Waste Enforcement Section, Closure Guidance Document No. 1, October 1990.

Texas Water Commission, Risk Assessment Workgroup, "Draft Risk Reduction Rules Package", January 22, 1992.

Soil Survey of Bexar County, Texas. United States Department of Agriculture, Soil Conservation Service, June 1966.

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Appendix A

Statement of Work

ES
ENGINEERING-SCIENCE, INC.

7800 SHOAL CREEK BLVD.
SUITE 222 WEST
AUSTIN, TX 78757
Tel: (512) 467-6200 Fax: (512) 467-7044

September 29, 1992

Via facsimile

Lt Mark Bishop
Armstrong Laboratory/OEBQ
Brooks AFB, Texas 78235-5000

Re: Contract F33615-89-D-4003, Order 52
Accumulation Point Site Assessment, Camp Stanley, Texas

Dear Lt Bishop:

Engineering-Science requests a no-cost modification to the Statement of Work (SOW) for Order 052. The third sentence of section 1.4.3.4 of the SOW states that "Should monitoring indicate the need for Level C personal protection equipment, the work shall cease and the scope of work modified." Due to the very low exposure level allowed for polychlorinated biphenyls (PCBs) which may be present at the site, some or all field work may have to be performed in level C protective equipment. Therefore it is requested that this sentence be taken out of the SOW as shown on the attached revision of page 2 of the SOW.

In addition, it is requested that preliminary field samples be collected in level C protection and analyzed for PCBs with 3-day turnaround time to determine the level of required protection. This preliminary field work will 1) allow ES to remain on schedule and 2) perform field actions within appropriate protective levels. The cost of the preliminary field work and analyses will be adjusted from the existing labor and support costs. The proposed revisions to the SOW are shown on the attached pages 2 and 7 of the SOW.

Please call me if you have any questions about this request for a no-cost modification to the order or the proposed revisions to the SOW.

Sincerely,

Susan V. Roberts
Project Manager

st

xc: R.C. Wooten
File

STATEMENT OF WORK
ACCUMULATION POINT SITE ASSESSMENT
CAMP STANLEY, TX

I. DESCRIPTION OF WORK

1.1 Introduction. Camp Stanley is an U.S. Army installation located in Boerne, Texas. A diked gravel area approximately 60 feet long by 50 feet wide was previously used as a 90-day accumulation point. The accumulation point is no longer used. There is no evidence of any previous chemical spills. A site investigation is required to verify that the site has not been contaminated.

1.2 Scope. This statement of work outlines the requirements for determining if any soil contamination is present at the accumulation point. The SOW also addresses the services, materials, equipment, and labor required to determine if any soil contamination has occurred. The work will involve sampling and analyzing soil samples collected from soil borings.

1.3 General Background. Guidance and requirements shall be drawn from applicable government regulations and industry and regulatory guidance documents. These documents are referenced in the following subsections.

1.3.1 U.S. Environmental Protection Agency, Title 40 (Protection of Environment), Code of Federal Regulations, Parts 260 - 265, July 1, 1990 (promulgated under authority provided in RCRA).

1.3.2 Occupational Health and Safety Administration, Title 29, Code of Federal Regulations, Part 1910.120, July 1, 1990.

1.3.3 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," (EPA publication SW-846).

1.3.4 Texas Water Commission (TWC) Rules are as stringent or more stringent than U.S. EPA rules. TWC rules are enforced in the State of Texas by the TWC.

1.4 Task and Technical Requirements.

1.4.1 Inspections and Records. The contractor shall designate a Field Team Leader (FTL) to remain on the job site during all field work. FTL oversight is especially important during sampling and analysis efforts. The FTL shall ensure that all phases of the field work are in compliance with appropriate regulations, job specifications, and safety requirements, and shall document and photograph all phases of the soil borings and sampling efforts. A log of the conditions and materials penetrated during the soil borings shall be maintained by the hydrogeologist/geologist on site. The field team leader shall coordinate and interface with any TWC inspectors, government points of contact, and other authorities during the course of field activities.

authorities during the course of field activities.

1.4.2 Regulatory Requirements and Permits. All soil borings; soil sampling; and other activities pertaining to this effort must conform to state and other applicable regulatory agency requirements. Complete permits, applications, and other documents which may be required by local and/or state regulatory agencies before performing the field work.

1.4.3 Boreholes. Soil borings shall be performed to determine if soil contamination is present. The borings shall be performed to meet the following criteria:

1.4.3.1 Borehole Drilling. A maximum of 10 boreholes shall be installed not to exceed a total of 110 linear feet. The borings shall be inspected by visual means for signs of contamination. Qualitative indications of the presence of volatile organic compounds present in soil or rock at the site subsurface will be obtained by performing head space analysis on samples retrieved from borings using an organic vapor analyzer. Samples from each boring shall be selected on the basis of head space analysis and analyzed for parameters listed in Table 1. Soil samples will be collected using a split spoon sampler or core barrel. All drilling augers and sampling equipment will be decontaminated using a steam cleaner and mild phosphate free detergent prior to drilling. All sampling equipment will be decontaminated prior to each sampling event. Two QA/QC samples shall be taken from the rinsewater following decontamination procedures. Samples shall be analyzed for the parameters listed in Table 1.

1.4.3.2 Sampling and Laboratory Analysis. Soil and/or rinsate sampling and laboratory analysis shall be conducted as necessary to quantify concentrations of contaminants. The contractor shall provide experienced field personnel and the necessary equipment to obtain soil and/or water samples as required by the TWC. Samples shall be collected in glass sample jars with Teflon-lined lids or other appropriate container, preserved if required, placed on ice, and sent immediately to an approved laboratory. Samples shall not be held on-site for more than three days. Standard sample chain-of-custody protocol shall be followed to document sample handling. A maximum of 22 soil and 2 water samples shall be analyzed for parameters listed in table 1 with an additional three soil samples to be taken during preliminary field actions to determine possible pesticide and PCB levels (a maximum of 25 soil analyses by SW 3550/8080)

1.4.3.3 Borehole Log. For each borehole, prepare a borehole log showing stratigraphy changes of the drill cuttings and how the borehole was constructed. Include boring logs in the Site Investigation Report.

1.4.3.4 Air Monitoring During Drilling. The contractor shall monitor the ambient air during all soil boring work with a photoionization meter or equivalent organic vapor detector to identify the generation of potentially hazardous and/or toxic vapors or gases. If soil encountered during borehole drilling is suspected to be hazardous because of abnormal discoloration, odor or air monitoring levels, containerize the soil cuttings in drums and labeled. ~~Should monitoring indicate the need for Level C personal protection equipment, the work shall cease and the scope of work modified.~~ Additional sampling and analyses for disposal

purposes are not part of this scope of work. Enter into the boring logs the depth(s) for which suspected contaminated soil cuttings were collected.

1.4.3.5 Sealing Boreholes. The contractor shall tremie grout the boreholes to the surface with a bentonite/cement slurry. Boreholes must be adequately resealed to preclude future migration of contaminants (if present).

1.4.3.6 Marking Borehole Locations. The contractor shall permanently mark each soil boring location and record the location on a project map. Include the project map in the Site Investigation Report.

1.4.3.7 Precautions. Consult with Camp Stanley personnel to minimize disruption of Camp Stanley activities, to properly position the boreholes with respect to site locations, and to avoid underground utilities. A utilities map, if available, shall be consulted before any boring activities take place. Drilling locations will be cleared by Camp Stanley personnel prior to commencement of the field work.

1.4.3.8 Cleanup. The contractor must use containment methods during drilling that will not allow cuttings or water contamination of the surface areas. All borehole cuttings will be drummed and left on-site for disposal by Camp Stanley personnel. Camp Stanley will designate an area to store any drums of contaminated cuttings. Clean cuttings will be used at the discretion of the Camp Stanley POC. Camp Stanley will assist the contractor by providing equipment to handle the clean drill cuttings.

1.5 Reports and Plans.

1.5.1 Site Investigation Report: Technical information gathered during the site assessment will be used to determine if contamination is present at the storage area (para 6.1, Seq 4) and if further action is necessary for the site to be closed. The analytical results shall be plotted on the project map. The project map shall be included in the site investigation report. The report shall also provide documentation addressing all field activities associated with performing the soil borings. The documentation shall include a detailed log of the conditions and materials penetrated during the borehole installation, laboratory analyses of soil and rinsate, conclusions made from the borehole installation and analytical results, notification documents, and chain of custody documents. If contamination is present the report shall address if further investigations are needed to determine the extent of contamination. If further investigations are not necessary, remediation options will be addressed.

1.5.2 Health and Safety Plan. A Health and Safety plan (para 6.1, Seq 4) shall be developed in accordance with 29 CFR 1910.120. This plan shall address emergency procedures, discuss any hazards that could be encountered during field operations, address accident prevention, and present appropriate action levels for any contaminant likely to be encountered.

1.6 Miscellaneous Requirements

1.6.1 Kick-off Meeting. A contractor representative shall attend a kick-off meeting within 7 days of receipt of contract award. The kick-off meeting will be held at Camp Stanley, TX. The kick-off meeting can be held in conjunction with initiating the field work.

1.6.2 Security Requirements. Camp Stanley is a closed military installation requiring all visiting personnel to process through the Chief of Security Office. All contractor personnel will be required to sign in and out of the installation every time they enter or exit the facility. Other security requirements are listed below:

-- Matches, lighters, alcoholic beverages, narcotics, unauthorized tools, firearms, explosives, and illegal knives are not allowed on the installation.

-- Only United States citizens are permitted to work on the installation.

-- Seven days before site work begins, the contractor shall provide names and social security numbers of all personnel to the Camp Stanley POC. Badges will be provided to personnel granted access to the site. The badge shall be worn on the upper part of the body so as to be clearly visible at all times when on the work site. They badges shall not be removed from the installation. They will be picked up at the gate each day from the Security Office, and will be turned back in to them upon departure.

-- Vehicle license numbers will be provided to the Camp Stanley POC before beginning work.

-- Predetermined traffic routes to and from the work site will be followed with no deviation. Personnel will not leave the job site, whether on foot or vehicle, nor will they enter any building or pass any barricade without first obtaining permission from the Security Office.

1.6.4 Vehicle Refueling. Equipment or vehicle refueling must be done at least 100 feet from any building. Interconnecting grounding straps will be used when fueling equipment or vehicles from a fuel truck.

II. SITE LOCATION

Camp Stanley
Boerne, Texas

III. POST SUPPORT

Camp Stanley shall support contractor activities by providing the following:

-- An escort to assist in site visit.

-- Access to the sites during daylight hours, Monday through

Friday while work is in progress. Overtime shall be coordinated with the Camp Stanley POC. Overtime is any time other than 0730-1600 hours, Monday through Friday (except Federal holidays).

-- Emergency response points of contact.

-- Locations of underground utilities at the site (preferably marked on the ground surface).

-- Disposal of any hazardous waste generated during borehole drilling activities.

-- Storage area for any hazardous waste generated.

-- Equipment and personnel for the handling of clean drill cuttings.

-- Access to a telephone and restrooms.

-- Records of materials stored at the site so that the Health and Safety Plan can be prepared.

IV. GOVERNMENT-FURNISHED PROPERTY

None

V. GOVERNMENT POINTS OF CONTACT

AL Project Officer
Capt Nancy S. Miller
AL/OEBE
Brooks AFB, Texas 78235
(512) 536-3305
FAX 512-536-3945

Mr. Fred Stahl
Camp Stanley Storage Activity
RRAD
25800 Ralph Fair Road
Boerne, TX 78006
(512) 221-7441
FAX 221-7463

VI. DELIVERABLES

6.1 Documents. In addition to sequence numbers 1 and 5 listed to attachment 1 to the basic contract, which apply to all orders, the sequence numbers and dates below are applicable to this order:

Seq.	para	Block 10	Block 11	Block 12	Block 13	Block 1
4 H&S PLAN	1.5.2	OTIME	7DAC	8DAC	N/A	2
4 Site Inv Rpt	1.5.1	ONE/R	30DASA	31DASA	60DASA	6*

DASA - Days after site assessment complete.

* A draft report and a final report shall be produced. Two copies each of the draft report shall be provided to the Camp Stanley POC. Three copies each of the final report shall be provided to the Camp Stanley POC. One copy each of the draft report and the final report shall be furnished to the AL POC. The government POCs will have 15 days to review the draft report. After POC review, the contractor has 15 days to incorporate the revisions and to provide the government POC with the final report.

TABLE 1

ANALYSIS

ANALYSIS	METHOD	# OF SAMPLES
TPH (soil)	SW3550/418.1	22
TPH (water)	418.1	2
Aromatic and Halogenated Hydrocarbons(soil)	5030/8240	22
Aromatic and Halogenated Hydrocarbons (water)	5030/8240	2
X Pesticides and PCBs (soil)	SW3550/8080/8140	~~22~~ 25
Pesticides and PCBs (water)	SW3150/8080/8140	2
Nickel (soil)	SW3050/7520 or 6010	22
Nickel (water)	SW3010/7520 or 6010	2
BNAs (soil)	SW8270	22
BNAs (water)	SW3150/8270	2
Herbicides (soil)	SW8150	22
Herbicides (water)	SW8150	2
Organophosphorus Pesticides (water)	SW8140	2
Organophosphorus Pesticides (soil)	SW8140	3

Appendix B

CSSA Records

Per your request the following information is furnished in regard to hazardous waste/material holding area (F-14):

1. The last hazardous item removed from F-14 was on 25 Mar 1992, a container that held Veg-A-Kill plus 2,4D.

2. The following identified substances have been located at F-14 and removed since 1984, to my knowledge.

*Tetrachloroethylene waste
*Solvent waste
*Crankcase oil waste
*Oil, petroleum waste
Malathion
Chloradane
Veg-A-Kill plus 2,4D
PCB and non-PCB (transformer oil)
*Nickel Penetrate
Contaminated gasoline and diesel

* = removed by Safety Klean in since '90

DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY, RRAD
POST OFFICE BOX 690627, SAN ANTONIO, TEXAS 78269-0627

August 21, 1992

Support Division

Ms. Susan Roberts
Engineer Science, Incorporated
7800 Shoal Creek Blvd.
Suite 222 West
Austin, Texas 78757

Dear Susan:

Enclosed per your request are copies of MSDS' for substances formerly stored on a temporary basis in the F-14 hazardous waste holding area. I don't have an MSDS for the PCBs contained in electrical transformers that were stored in the area for a period of time.

If I can be of further assistance in this matter, please don't hesitate to call me.

Sincerely,

Paul B. Oliver
Chief, Support Division

Enclosures
as

FD
REHABS

ATERIAL SAFETY DATA SHEET

TYPE OF DATA SHEET: NEW REVISED

SECTION I - GENERAL INFORMATION

MANUFACTURERS NAME	FSCM:FSCNM	CONTRACT NUMBER OR ORDER NUMBER
Chemical Specialists & Development	05W216	[redacted] GS-10F-49741

MANUFACTURERS ADDRESS	PART NUMBER, PRODUCT AND/OR TRADE NAME	NATIONAL STOCK NO., ACTIVITY CONTROL NO. OR LOCAL STOCK NO.
45 Hackberry Lane Cut & Shoot, TX 77303	Tetrachloroethylene, Technical	6810-00-270-9962

HAZARDOUS MATERIAL	SPECIFICATION	TYPE GRADE AND/OR CLASS	NCR LICENSE NUMBER	EPA REGISTRATION NUMBER
Yes	O-T-236C	Grade A-Dry Cleaning Grade	N/A	N/A

CHEMICAL NAME AND SYNONYMS	CHEMICAL FAMILY	FORMULA
Tetrachloroethylene	Halogenated Hydrocarbon	$Cl_2C{=}CCl_2$

TYPED NAME OF COMPANY POINT OF CONTACT	SIGNATURE	EMERGENCY PHONE NUMBER	DATE
David Shipp — (409) 756-1065	David Shipp	(800) 424-9300	10-1-90

SECTION II - COMPOSITION

If present, IARC, NTP & OSHA carcinogens and chemicals subject to the reporting requirements of Sara Title III Section 313 are identified in this section.

NIOSH NUMBER	CHEMICAL NAME (INGREDIENTS)	% BY WEIGHT	PEL	TLV	NOTE
KX3650000	Tetrachloroethylene / CAS # 127-18-4 (Identified as a CARCINOGEN by IARC)	100	25 PPM	50 PPM	(1)

NOTES:
(1) ACGIH short term exposure limit (STEL) for Perchloroethylene is 200 PPM. This chemical is subject to the reporting requirements of Section 313 of Sara Title III

SECTION III - PHYSICAL PROPERTIES

BOILING POINT: 250°F, 121.11°C @ 760 mmHg	CRITICAL TEMP: Not Available	SOLUBILITY IN WATER:	SPECIFIC GRAVITY: 1.618-1.622

VISCOSITY (water = 1): Not Available	AUTOIGNITION TEMP: Not Available	EVAPORATION RATE: (n-Butyl Acetate = 1): 2.80	VAPOR PRESSURE: 13mmHg	CRITICAL PRESSURE: N/A

DECOMPOSITION TEMP (°F & C): Not Available	% VOLATILE BY VOLUME: 100	CORROSION RATE: Not Corrosive	VAPOR DENSITY (AIR = 1): 6.7

pH: N/A	FREEZING (melting) POINT: Not Available	MAGNETISM (MILLIGAUSS): None	APPEARANCE & ODOR: Clear, little if any color; characteristic odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None	FLAMMABLE (EXPLOSIVE) LIMITS: N/A

EXTINGUISHING MEDIA: Water fog.
HAZARDOUS DECOMPOSITION PRODUCTS: May form toxic materials:, carbon dioxide and carbon monoxide, hydrogen chloride, phosgene, various hydrocarbons, etc
FIREFIGHTING PROCEDURES: Water may be used to keep fire-exposed containers cool until fire is out. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.
SPECIAL FIRE & EXPLOSION HAZARDS: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL: 25 PPM. THRESHOLD LIMIT VALUE: 50 PPM.

EFFECTS OF ACUTE OVEREXPOSURE: FOR PRODUCT: Eyes: can cause severe irritation, redness, tearing, blurred vision. Skin: prolonged or repeated contact can cause moderate irritation, defatting, dermatitis. Breathing: excessive inhalation of vapors can cause nasal and respiratory irritation, central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness and even death. Swallowing: can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. FIRST AID: If on skin, thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use. If in eyes: flush with large amounts of water, lifting upper and lower lids occasionally. get medical attention. If swallowed: do not induce vomiting. Immediately drink two glasses of water. Never give anything by mouth to an unconscious person. If breathed: If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped give artificial respiration. Keep person warm, quiet and get medical attention. Do not give stimulants. Epinephrine or ephedrine may adversely affect the heart with fatal results. PRIMARY ROUTE(S) OF ENTRY: Inhalation, skin contact.
EFFECTS OF CHRONIC OVEREXPOSURE: FOR PRODUCT: Perchloroethylene is listed as a potential carcinogen (2B) by IARC. Perchloroethylene has been shown to increase the rate of spontaneously occurring malignant tumors in certain laboratory rats and mice. Other long-term inhalation studies in rats failed to show a tumorigenic response. Epidemiology studies are limited and have not established an association between perchloroethylene exposure and cancer. Perchloroethylene is not believed to pose a measurable cancer risk to man when handled as recommended. Overexposure to this material (or its components) has apparently been found to cause the following effects in laboratory animals: liver abnormalities. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans:, liver abnormalities, kidney damage, lung damage, spleen damage, brain damage.

SECTION VI - REACTIVITY DATA

HAZARDOUS POLYMERIZATION: Cannot Occur	STABILITY: Stable	INCOMPATIBILITY: N. Applicable

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Small Spill: absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to hood. Large Spill: persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source; dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.
WASTE DISPOSAL METHOD: Small Spill: dispose of in accordance with all local, state and federal regulations. Large Spill: dispose of in accordance with all local, state and federal regulations.

SECTION VIII - OCCUPATIONAL PROTECTIVE MEASURES

RESPIRATORY PROTECTION: If workplace exposure limit(s) of product or any component is exceeded (see section III), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering or administrative controls should be implemented to reduce exposure. VENTILATION: provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s). PROTECTIVE GLOVES: wear resistant gloves such as: polyvinyl alcohol. EYE PROTECTION: chemical splash goggles in compliance with OSHA regulations are advised, however, OSHA regulations also permit other type safety glasses. (Consult your safety equipment supplier). OTHER PROTECTIVE EQUIPMENT: to prevent repeated or prolonged skin contact, wear impervious clothing and boots.

SECTION IX - SPECIAL PRECAUTIONS

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in this datasheet must be observed. The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

SECTION X - TRANSPORTATION

APPLICABLE REGULATIONS: X 49 CFR	IMCO	TARIFF 6D	IATA	MILITARY AIR (AFR 71-4)	SHIPPING NAME: Tetrachloroethylene	ID NUMBER: UN1897

REPORT QTY: 1 lb	HAZARD CLASS: ORM-A	LABELS: None	UNIT CONTAINERS: 55 gal metal drum

DOT SPSC CONTAINER: None	DOT EXEMPT DOD CCN: None	LIMITED QTY.: No	AEROSOL PROPELLANTS: N/A	NET EXPL WT.: N/A

Oil Petroleum, W.O.S. (Whitestar NA121

VCI

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
THE CROMWELL PAPER COMPANY 8030-80-H00-8555	(312) 523-0337

ADDRESS (Number, Street, City, State, and ZIP Code): 4801 S. WHIPPLE ST. CHICAGO, ILLINOIS 60632

CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS
VCI	TERRO PAK B VCI SOLUTION

CHEMICAL FAMILY	FORMULA
ORGANIC SALTS OF AMINE, PARAFFINIC OIL	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
AMINE SALTS	5.38	N.D.
ISOPROPYL ALCOHOL	4.61	400
NO INGREDIENT IS A KNOWN CARCINOGEN AS DEFINED BY 29 CFR 1910.1200		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N.D.	SPECIFIC GRAVITY (H_2O=1)	N.D.
VAPOR PRESSURE (mm Hg.)	N.D.	PERCENT, VOLATILE BY VOLUME (%)	15.0%
VAPOR DENSITY (AIR=1)	N.D.	EVAPORATION RATE (_____=1)	
SOLUBILITY IN WATER	5.5%		
APPEARANCE AND ODOR	OIL BASE VCI - AMINE ODOR		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	100° F.	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA				
SPECIAL FIRE FIGHTING PROCEDURES	FOAM, WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL			
UNUSUAL FIRE AND EXPLOSION HAZARDS	EMITS TOXIC GASES WHEN BURNING			

SECTION V - HEALTH HAZARD DATA

.SHOLD LIMIT VALUE

E OF OVEREXPOSURE MAY IRRITATE SKIN AND EYES. INHALATION OF VAPORS MAY IRRITATE UPPER RESPIRATORY TRACT.

:RGENCY AND FIRST AID PROCEDURES FLUSH WITH LARGE QUANTITIES OF WATER.

SECTION VI - REACTIVITY DATA

\BILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

O:.PATABILITY *(Materials to avoid)*

ZARDOUS DECOMPOSITION PRODUCTS

ZARDOUS _YMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

:PS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

.BSORB OR SCRAPE UP

.STE DISPOSAL METHOD IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

SPIRATORY PROTECTION *(Specify type)*

NTILATION	LOCAL EXHAUST		SPECIAL
	MECHANICAL *(General)*	ACCEPTABLE	OTHER

OTECTIVE GLOVES	RUBBER	EYE PROTECTION	CHEMICAL GOGGLES

HER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

ECAUTIONS TO BE TAKEN IN HANDLING AND STORING

STORE IN COOL DRY AREA - LOW FLASH POINT MATERIAL.

THER PRECAUTIONS

GPO 934-190

SOD

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List) EPA 6720-207
SMCP MALATHION ULV CONC.

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name SOUTHERN MILL CREEK PRODUCTS CO., INC.	Emergency Telephone Number CHEM-TREC 1-800-242-9300
Address (Number, Street, City, State, and ZIP Code) 5414 N. 56th St. Tampa, FL 33610	Telephone Number for Information (813) 626-2111 Date Prepared April 15, 1987 Signature of Preparer (optional) Lloyd Roach

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Malathion - 0,0-dimethyl phosphorothioate of diethylmercapto-succinate				95%
CAS # 121-75-5	OSHA PEL: 15 mg/m^3	TLV 10 mg/m^3 TWA 8 hrs.		
CAS # 121-75-5	OSHA PEL: 15 mg/m^3 (skin)	ACGIH-80 (skin) 10.0 mg/m^3		
Inert Ingredients:				5%

Section III — Physical/Chemical Characteristics

Boiling Point 312.8°F 156°C @ 0.7 mm Hg		Specific Gravity (H_2O = 1)	1.23 @ 25°
Vapor Pressure (mm Hg.) @ 30°C	0.00004mm	Melting Point	37.13°F/2.
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	Negligible

Solubility in Water
145 ppm @ 25°C

Appearance and Odor
Clear, brown to colorless liquid; characteristic mercaptan odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
	>325°F (TOC)	N/A	N/A

Extinguishing Media
Water, foam, carbon dioxide or dry chemical

Special Fire Fighting Procedures
Wear self-contained, positive pressure breathing apparatus & full fire fi
ing protective clothing. Alert medical personnel to be ready to treat ex
individuals.

Unusual Fire and Explosion Hazards
Decontaminate emergency personnel when leaving fire area. Fight fire upwi
Dike area of fire to prevent pesticide runoff. Use as little water as po
Hot containers may explode; use water to keep containers cool.

Section V — Reactivity Data

Stability: Unstable @ > 48.8°C — X. Stable @ 25°C — X.

Conditions to Avoid: Storage at 50-115°C leads to non-hazardous decomposition. Heating @ > 150°C causes rapid decomposition.

Incompatibility (Materials to Avoid): Strong alkalies & strong oxidizers. Reactivity with strong base may generate excessive heat. Unstable @ pH 12.

Hazardous Decomposition or Byproducts: Thermal decomposition may produce hydrogen sulfide, methyl mercaptan, dimethyl sulfide & oxides of carbon, phosphorus & sul

Hazardous Polymerization: May Occur — ; Will Not Occur — X. Conditions to Avoid:

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

Oral LD_{50}-male rats=2,800mg/kg; female rats 1,000. Slightly toxic by ingestion in single doses.

Health Hazards (Acute and Chronic): Dermal LD_{50}= rabbits 4,100 mg/kg

More than slightly irritating by single skin applications.

Inhalation exposure is not likely to produce any significant effects due to t low vapor pressure of the product.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Suspected animal or human mutagen. > 20mg/m^3

Malathion ULV is a parasympathomimetic agent. Erythrocyte cholinesterase activity should be measured.

Signs and Symptoms of Exposure: Headache, lightheadedness, mioses w/ loss of accommodation, nausea, vomiting hyperhidrosis, muscle fasciulations, sphincter failure, coma & death.

Medical Conditions Generally Aggravated by Exposure: If symptoms or signs are present, give Atropine, 4 mg, I.V. Repeat every 10 min. until atropinized (at least 48 hrs).

A minimum amount of organophosphate must be absorbed to depress blood cholinerase activities, but activities are lowered by dosage

Emergency and First Aid Procedures: considerably less than are required to cause symptomatic poisoning. ATROPINE SULFATE is antidotal. Syrup of Ipecac followed by 1-2 glasses of If vomit has not occurred in 15 min. proceed to intubate stomach.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled: Wear rubber boots, gloves & splash goggles. Absorb spilled material w/ clay or soda ash. Sweep up and place in closed container. Treat contaminated area w/ full-strength liquid chlorine bleach; let stand for 15 minutes and repeat procedure. Flush area w/ water.

Waste Disposal Method: Dispose in accordance w/ local, state & federal regulations.

Precautions to Be Taken in Handling and Storing: Because of this material's flash point, areas containing this material should conform to codes governing Class III Combustible Liquids. Segregate from incompatible materials listed in Reactivity Data Section.

Other Precautions: Do not contaminate water, food or feed by storage or disposal.

Section VIII — Control Measures

Respiratory Protection (Specify Type): If concentration exceeds TLV, wear a respirator approved by USDA for organophosphate pesticides.

Ventilation: Local Exhaust — Preferable; Special — None. Mechanical (General) — Acceptable; Other — None.

Protective Gloves: Rubber gloves. Eye Protection: Splash-proof goggles.

Other Protective Clothing or Equipment: Long sleeve shirt & full length pants (or coveralls). Eyewash fountain

Work/Hygienic Practices: Apron & boots are recommended. Launder clothing prior to reuse. Wash hands after handling product.

* USGPO 1986-491-529/45775

P-D-680
March 27, 1963

SUPERSEDING
Int. Fed. Spec. P-S-00661c(GSA-FSS)
June 12, 1952 and
Fed. Spec. P-S-661b
April 6, 1953

FEDERAL SPECIFICATION

DRY CLEANING SOLVENT

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers two types of petroleum distillates employed for dry cleaning of textile materials, and referred to industrially as "Stoddard Solvent" and as "140° F. Solvent".

1.2 Classification.

1.2.1 *Types.* Dry-cleaning solvent shall be of the following types, as specified:

Type I.—100°F. Solvent (Stoddard Solvent).

Type II.—140°F. Solvent.

2. APPLICABLE SPECIFICATIONS, STANDARDS, AND OTHER PUBLICATIONS

2.1 Specifications and Standards. The following specifications and standards, of the issues in effect on date of invitation for bids, form a part of this specification:

Federal Standards:

Fed. Std. No. 102—Preservation, Packaging, and Packing Levels.
Fed. Std. No. 123—Marking for Domestic Shipment (Civilian Agencies).
Fed. Test Method Std. No. 791—Lubricants, Liquid Fuels, and Related Products; Methods of Testing.

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications, Standards, and Handbooks and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

(Single copies of this specification and other product specifications required by activities outside the Federal Government for bidding purposes are available without charge at the General Services Administration Regional Offices in Boston, New York, Washington, D. C., Atlanta, Chicago, Kans City, Mo., Dallas, Denver, San Francisco, Auburn, Wash.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications, Standards, and Handbooks from established distribution points in their agencies.)

Military Standards:

MIL-STD-105—Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129—Marking for Shipment and Storage.
MIL-STD-290—Packaging, Packing and Marking of Petroleum and Related Products.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

Mil Spec: C-15074C

Primary; Petroleum oil solvent, detergents and organic amines to remove rust.

Minimum flash point: 100° F, (at 100° F, would need a spark to ignite).

Flammable; use as you would kerosene.

Terms of Handling: Relatively safe if spilled on skin, treated same as kerosene.

GLC016 M 8 * * * HAZARDOUS ITEM BASIC PUBLICATION * * *

NSN	FSCM	MGR	F P IND	PN IND	PART NUMBER/TRADE NAME	ACT CD	DATE	PAGE NR
9150-00-189-6729	81355	N		A	VALVOLINE ALL-FLEET MOTOR OIL 30		81020	1

* * * * GENERAL INFORMATION * * * *

PROPRIETARY	MANUFACTURER	EMERGENCY TELE NO
YES	ASHLAND OIL, INC	606-324-1133

ITEM NAME	UI	UI CONTAINER QTY	TYPE OF CONT	NET UNIT WT	MAG/MILGAUS	EXEMPTION NO
AEROSOL PROPELLANT						

SPECIFICATION
MIL-L-2104

RADIOACTIVITY	FORM	TR CD	NRC LIC NUMBER	CHEMICAL NAME	CHEMICAL FAMILY	FORMULA
			NA	NOT A SINGLE CHEM	LUBRICATING OIL	

* * * * * HAZARDOUS COMPONENTS * * * * *

NIOSH NO	CHEMICAL NAME	PCT	T L V
10007255	SOLVENT REFINED 100 NEUTRAL, 10-30%. TLV GIVEN FOR OIL MIST.		5MG/CUM, MFG
10007263	SOLVENT REFINED 330 NEUTRAL, 30-60%. TLV GIVEN FOR OIL MIST.		5MG/CUM, MFG
1000727L	LUBRIZOL 4851, 10-30%. TLV GIVEN FOR OIL MIST.		5MG/CUM, MFG
1000728E	EXXON ECA 7172, 10-30%. TLV GIVEN FOR OIL MIST.		5MG/CUM, MFG

* * * * * * TRANSPORTATION DATA * * * * * *

DOT SHIPPING NAME: N/A

CLASS: LABEL: NOS: ID NO: RQ:

WATER SHIPPING NAME: N/A

CLASS: LABEL: UN NO: UN CLASS: COM CD: DOT: IMCO

TARIFF 6-D SHIPPING: N/A

CLASS: LABEL:

IATA SHIPPING NAME: N/A

CLASS: LABEL: IATA ARTICLE NO:

AFR 71-4 SHIPPING NAME: N/A

CLASS: LABEL: MMAC:

* * * * * * ADDITIONAL DATA * * * * * *

NOT REGULATED FOR SHIPPING

N S N

N B

ACT CD DATE PAGE NR

9150-00-189-6729 * * * * HEALTH AND PHYSICAL PROPERTY DATA * * * * 81299 2

BOILING POINT >600F IBP | VAP DEN/AIR=1/ | SOL IN H2O | FLASH POINT >200F | VAP PRESS/MM HG/70 F/ | TLV-MIXTURE | STORAGE CODE

APPEARANCE AND ODOR | LEL/PCT/ | UEL/PCT/ | SP GR | PCT VOLT BY VOL | EVAP RATE PER REFERENCE SLOWER THAN ETHER

EFFECTS OF OVEREXPOSURE

EYES: IRRIT.SKIN: PROLONGED/REPEATED CONTACT, IRRIT. INGEST: GI IRRIT, NAUSEA, VOMIT, DIARRHEA.

NET PROP WT-AMMO: NA | NEW LB

STABLE: YES

CONDITIONS TO AVOID

MATERIALS TO AVOID: AVOID CONTACT W/STRONG OXIDIZING AGENTS

HAZ POLYMERIZATION OCCUR: NO

CONDITIONS TO AVOID

AUTO IGN TEMP | VISCOSITY | CG AMMO CL

HAZARDOUS DECOMPOSITION PRODUCTS

CO, CO*2, VARIOUS HYDROCARBONS, ETC

* * * * SAFETY STORAGE HANDLING AND FIRE FIGHTING PROCEDURES * * * *

EXTINGUISHING MEDIA

DRY CHEM, CO*2. WATER MAY BE INEFFECTIVE

SPECIAL FIRE FIGHTING PROCEDURES

USE SELF-CONT BRTHNG APPAR W/FULL FACEPIECE/POS PRESS MODE.

UNUSUAL FIRE / EXPLOSION HAZARDS

PROTECTIVE GLOVES: BUNA-N, NEOPRN

EMERGENCY FIRST AID PROCEDURES

EYES: FLUSH THOROUGHLY W/LG AMT WATER. INH: REMOVE TO FRESH AIR. RESTORE BRTHNG. KEEP WARM, QUIET. GET MD. SKIN: WASH W/SOAP & WATER. REMOVE CONTAM CLOTHING, WASH BEFORE REUSE. INGEST: GIVE 2 GLASSES WATER. INDUCE VOMITING. CALL MD.

TYPE OF RESPIRATORY PROTECTION

NIOSH/MSHA APPRVD RESP DEVICE FOR PARTICULAR EXPOSURE OF CONCERN

VENTILATION

SUFFICIENT MECH & LOCAL EXHAUST TO KEEP BELOW TLV

EYE PROTECTION

CHEM SPLASH GOGGLES

OTHER PROTECTIVE EQUIPMENT

WEAR IMPERVIOUS CLOTHING & BOOTS TO PREVENT SKIN CONTACT

HANDLING / STORAGE PRECAUTIONS

* * * * SPILL AND LEAK PROCEDURES * * * *

SPILL AND LEAK CONTROL

SM SPILL: ABSORB LIQ ON VERMICULITE, PAPER OR OTHER ABSORBENT & TRANSFER TO HOOD. LG SPILL: STOP SPILL AT SOURCE, DIKE AREA. PUMP LIQ TO SALVAGE TANK. REMOVE REMAINING LIQ W/SAND, CLAY, OR OTHER ABSORBENT & SHOVEL INTO CONTAINER. WEAR PROT CLOTHING.

WASTE ELIMINATION

MFG RECM: SM SPILL, INCINERATION. LG SPILL, LIQ INCINERATION W/OFF-GAS SCRUBBER. DISPOSAL METHODS MUST BE IAW FED, STATE, LOCAL REGULATIONS.

OTHER PRECAUTIONS

CONTAINERS OF THIS MATL MAY BE HAZ WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PROD RESIDUE, VAPOR, LIQ, &/OR SOLID, ALL HAZ PRECAUTIONS GIVEN IN DATA SHEET MUST BE OBSERVED.

SUPPLEMENTAL DATA

BOIL PT IS GIVEN FOR A SINGLE COMPONENT WHICH IS >60% OF THE TOTAL PRODUCT. SPEC GRAV: LESS THAN WATER. VAPOR DENS: HEAVIER THAN AIR

MATERIAL SAFETY DATA SHEET

The Coastal Corporation

Coastal Oil New York, Inc.
Coastal Oil New England, Inc.
Coastal Fuels Marketing, Inc.
Coastal Mobile Refining Company
Coastal Derby Refining Company
Coastal Eagle Point Oil Company
Coastal Mart, Inc.
Coastal Refining & Marketing, Inc.
Coastal States Crude Gathering Co.
Coastal States Trading, Inc.
Coastal Unilube, Inc.
Coscol Marine Corporation
Coscol Petroleum Corporation
Pacific Refining Company
Western Fuel Oil Company
Coastal Fuel Terminals, Inc.

Address: 9 Greenway Plaza
Houston, TX 77046

Info Phone: (713) 877-1400
Emergency Phone: (713) 877-1400

PRODUCT IDENTIFICATION

Trade Name: Diesel Fuel No. 2 Date Revised: 02-07-90

Synonyms: Petroleum Distillate, Diesel
Chemical Name and/or Family Description: A complex mixture of paraffinic, olefinic, naphthenic and aromatic hydrocarbons. A distillate of low sulfur content.
DOT Hazard Class: Combustible liquid; NA 1993.

COMPOSITION

			Occupational Exposure Limits*			
Product	CAS Number	Wt%	PEL	TLV	Other	Units
Diesel Fuel No. 2	68476-34-6	100	5	5	10 STEL	mg/m³**

* = 8-Hr. TWA unless otherwise specified.
** = As oil mist.
STEL = Short Term Exposure Limit; 15 minutes.

PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point 760 mmHg:	300-675°F	Melting Point:	N.A.
Vapor Pressure mmHg @ 20C:	1.6	Vapor Density (Air=1):	8
Solubility in H2O %:	Insoluble	pH:	N.A.
Specific Gravity 60/60F:	0.87	Evaporation Rate:	0.01
% Volatile by Volume @ 20C:	N.A.	Odor:	Mild petroleum odor
Viscosity (method, temp.):	1.9-4.1 @40C cSt		
Appearance:	Clear to light amber liquid		

N.A. = Not Available

FIRE AND EXPLOSION DATA

Flash Point: 125° F (PM)
Flammable Limits in Air % by Vol. Lower: 0.6 Upper: 7.5
Autoignition Temperature: 495 °F
Extinguishing Media: Dry chemical, carbon dioxide, foam, and water spray.

Special Fire Fighting Procedure: Use a water spray to cool fire-exposed containers. Use a smothering technique for extinguishing fire of this combustible liquid. Do not use a forced water stream directly on oil fires as this will scatter the fire. Firefighters should wear self-contained breathing apparatus and full protective clothing.

Unusual Fire or Explosion Hazard: Flowing oil can be ignited by self-generated static electricity.

REACTIVITY DATA

Stability: Stable
Hazardous Polymerization: Will not occur
Conditions to Avoid/Incompatibility: Strong oxidizing agents, heat, spark, flame and build-up of static electricity.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, sulfur dioxide, and hydrocarbons.

HEALTH HAZARD DATA

Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulated: No

Occupational Exposure Limits: See Composition section

Effects of Overexposure

Acute:

Eyes: Slight to moderate eye irritation.

Skin: Moderately to extremely irritating; causing redness, drying to burns or blistering of skin.

Inhalation: Irritating to mucous membranes and respiratory tract. Will produce symptoms of intoxication such as headache, dizziness nausea, vomiting and loss of coordination.

Ingestion: Stomach irritation, gastritis, mild excitation, loss of conciousness, convulsions, cyanosis, congestion and capillary hemorrhaging of the lung and internal organs. Aspiration hazard if vomiting occurs.

Chronic: Prolonged or repeated skin contact may cause dermatitis.

Additional Medical and Toxicological Information: May aggravate pre-existing dermatitis. Middle distillates have caused skin cancer and kidney damage in laboratory animals. The National Institute for Occupational Safety and Health (NIOSH), based on findings of carcinogenic and tumorigenic responses of mice and rats exposed to whole diesel exhaust, recommends that whole diesel exhaust be regarded as a "potential occupational carcinogen".

EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush thoroughly with water for at least 15 minutes. Get medical attention.

Skin Contact: Cool the exposed area immediately. Remove contaminated clothing. Immediately wash affected areas with soap and water.

Inhalation: Remove to fresh air. Apply artificial respiration if not breathing. Get medical attention.

Ingestion: Do not induce vomiting. If spontaneous vomiting occurs, hold the victim's head lower than hips to prevent aspiration.

SPECIAL PROTECTION INFORMATION

Eye Protection: Remove contact lenses and wear chemical safety glasses or goggles where contact with liquid or mist may occur.

Skin Protection: Wear impervious gloves when contact with skin may occur.

Inhalation: Use approved respiratory protective equipment for cleaning large spills or entry into large tanks, vessels or other confined spaces.

Ventilation: Provide adequate ventilation: (1) to meet occupational exposure limits, (2) to prevent the formation of explosive atmospheres and (3) to prevent oxygen deficient atmospheres, especially in confined spaces.

SPILL OR LEAK AND DISPOSAL PROCEDURES

Spill Procedures: Remove sources of heat or ignition including internal combustion engines and power tools. Clean-up spill, but do not flush to sewer or surface water. Ventilate area and avoid breathing vapors or mists.

Waste Disposal: Dispose through a licensed waste disposal company. Follow federal, state and local regulations.

SPECIAL PRECAUTIONS AND COMMENTS

Storage Requirements: Store in tightly closed containers in a dry cool place, away from sources of heat or ignition. Ground and bond all transfer and storage equipment to prevent static sparks and equip with self closing valves, pressure vacuum bungs and flame arrestors. Empty containers may contain residue (liquid/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death.

SARA TITLE III INFORMATION

Section 311/312 Hazard Categorization

Acute	Chronic	Fire	Pressure	Reactive
X	X	X		

SARA Hazardous Substances

Ingredient	CAS No.	%, wt	Sec 313	Sec 302	RQ, lb	TPQ, lb

None Identified

Key: Sec 313 = Toxic Chemicals, Section 313
Sec 302 = Extremely Hazardous Substances (EHS), Section 302
RQ = Reportable Quantity of EHS
TPQ = Threshold Planning Quantity of EHS

CALIFORNIA PROPOSITION 65 WARNING

Chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm may be found in crude oil and petroleum products. Although it is possible to sufficiently refine a crude oil or its end products to remove the potential for cancer, we are advising that one or more of the listed chemicals may be present in some detectable quantities. Read and follow directions and use care when handling crude oil and petroleum products.

Industrial Hygiene Review: Delno D. Malzahn, CIH
Date Prepared: 10/07/85

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

OMB No. 44-R1387

6850-00-N00-0134

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: Heatbath Corporation	EMERGENCY TELEPHONE NO.: 413-543-3381
ADDRESS (Number, Street, City, State, and ZIP Code): 107 Front Street, Indian Orchard, Mass. 01051	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS: Nickel Pentrate
CHEMICAL FAMILY: Blackening Salts	FORMULA: Caustic, Nitrate, Nitrite

SECTION II HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Sodium Hydroxide Mg/M^3	83	2.0

SECTION III PHYSICAL DATA

BOILING POINT (°F.)	None	SPECIFIC GRAVITY (H_2O=1) Density	2.14
VAPOR PRESSURE (mm Hg.)	None	PERCENT VOLATILE BY VOLUME (%)	None
VAPOR DENSITY (AIR=1)	None	EVAPORATION RATE (_____=1)	None
SOLUBILITY IN WATER	complete		
APPEARANCE AND ODOR	Light green powder. No odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): None	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES: Great as sodium hydroxide.			
UNUSUAL FIRE AND EXPLOSION HAZARDS: Moderate. A strong oxidizing agent. In contact with organic material will ignite by friction.			

(Continued on reverse side)

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE

EMERGENCY AND FIRST AID PROCEDURES

External - Flush with large amounts of water. See physician.

Internal - Do not induce vomiting. Follow alkali procedure.

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Overheating in excess of 1,000° F

INCOMPATABILITY *(Materials to avoid)* Cyanide

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Sweep up and dispose with alkali cleaner materials.

WASTE DISPOSAL METHOD

Neutralization to pH 8.0 - 8.5.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL *(General)* Yes	OTHER

PROTECTIVE GLOVES Rubber

EYE PROTECTION Glasses or face shield

OTHER PROTECTIVE EQUIPMENT Apron, boots, etc.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Treat as strong oxidizing agent. Keep dry. Store in cool place.

OTHER PRECAUTIONS

Form OSHA-20
Rev. April 72

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List) EPA 6720-207
SMCP MALATHION ULV CONC.

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name SOUTHERN MILL CREEK PRODUCTS CO., INC.	Emergency Telephone Number CHEM-TREC 1-800-242-9300
Address (Number, Street, City, State, and ZIP Code) 5414 N. 56th St.	Telephone Number for Information (813) 626-2111
Tampa, FL 33610	Date Prepared April 15, 1987
	Signature of Preparer (optional) Lloyd Leach

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Malathion - 0,0-dimethyl phosphorothioate of diethylmercapto-succinate				95%
CAS # 121-75-5	OSHA PEL: 15 mg/m^3	TLV 10 mg/m^3 TWA 8 hrs.		
CAS # 121-75-5	OSHA PEL: 15 mg/m^3 (skin)			
		ACGIH-80 (skin) 10.0 mg/m^3		
Inert Ingredients:				5%

Section III — Physical/Chemical Characteristics

Boiling Point 312.8°F 156°C @ 0.7 mm Hg		Specific Gravity (H_2O = 1)	1.23 @ 25°
Vapor Pressure (mm Hg.) @ 30°C	0.00004mm	Melting Point	37.13°F/2.
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	Negligible

Solubility in Water
145 ppm @ 25°C

Appearance and Odor
Clear, brown to colorless liquid; characteristic mercaptan odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
	>325°F (TOC)	N/A	N/A

Extinguishing Media
Water, foam, carbon dioxide or dry chemical

Special Fire Fighting Procedures
Wear self-contained, positive pressure breathing apparatus & full fire fi
ing protective clothing. Alert medical personnel to be ready to treat ex
individuals.

Unusual Fire and Explosion Hazards
Decontaminate emergency personnel when leaving fire area. Fight fire upwi
Dike area of fire to prevent pesticide runoff. Use as little water as po
Hot containers may explode; use water to keep containers cool.

Section V — Reactivity Data

Stability			Conditions to Avoid
	Unstable @ > 48.8°C	X	Storage at 50-115°C leads to non-hazardous decomposition. Heating @ > 150°C causes rapid decomposition.
	Stable @ 25°C	X	

Incompatibility (Materials to Avoid): Reactivity with strong base may generate excessive heat. Strong alkalies & strong oxidizers. Unstable @ pH 12.

Hazardous Decomposition or Byproducts: Thermal decomposition may produce hydrogen sulfide, methyl mercaptan, dimethyl sulfide & oxides of carbon, phosphorus & sulfur.

Hazardous Polymerization			Conditions to Avoid
	May Occur		
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

Health Hazards (Acute and Chronic): Oral LD_{50}-male rats=2,800mg/kg;female rats 1,000 Slightly toxic by ingestion in single doses. Dermal LD_{50}= rabbits 4,100 mg/kg

More than slightly irritating by single skin applications.

Inhalation exposure is not likely to produce any significant effects due to the low vapor pressure of the product.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Suspected animal or human mutagen. > 20mg/m^3

Signs and Symptoms of Exposure: Malathion ULV is a parasympathomimetic agent. Erythrocyte cholinesterase activity should be measured. Headache, lightheadedness, mioses w/ loss of accommodation, nausea, vomiting hyperhidrosis, muscle fasciulations, sphincter failure, coma & death.

Medical Conditions Generally Aggravated by Exposure: If symptoms or signs are present, give Atropine, 4 mg, I.V. Repeat every 10 min. until atropinized (at least 48 hrs). A minimum amount of organophosphate must be absorbed to depress blood cholinesterase activities, but activities are lowered by dosage considerably less than are required to cause symptomatic poisoning.

Emergency and First Aid Procedures: ATROPINE SULFATE is antidotal. Syrup of Ipecac followed by 1-2 glasses of

Section VII — Precautions for Safe Handling and Use

If vomit has not occurred in 15 min. proceed to intubate stomach.

Steps to Be Taken in Case Material is Released or Spilled: Wear rubber boots, gloves & splash goggles. Absorb spilled material w/ clay or soda ash. Sweep up and place in closed container. Treat contaminated area w/ full-strength liquid chlorine bleach, let stand for 15 minutes and repeat procedure. Flush area w/ water.

Waste Disposal Method: Dispose in accordance w/ local, state & federal regulations

Precautions to Be Taken in Handling and Storing: Because of this material's flash point, areas containing this material should conform to codes governing Class III Combustible Liquids. Segregate from incompatible materials listed in Reactivity Data Section.

Other Precautions: Do not contaminate water, food or feed by storage or disposal.

Section VIII — Control Measures

Respiratory Protection (Specify Type): If concentration exceeds TLV, wear a respirator approved by USDA for organophosphate pesticides.

Ventilation			
	Local Exhaust: Preferable	Special: None	
	Mechanical (General): Acceptable	Other: None	

Protective Gloves: Rubber gloves

Eye Protection: Splash-proof goggles.

Other Protective Clothing or Equipment: Long sleeve shirt & full length pants (or coveralls), eyewash fountain

Work/Hygienic Practices: Apron & boots are recommended. Launder clothing prior to reuse. Wash hands after handling product.

MATERIAL SAFETY DATA SHEET

The Coastal Corporation

Coastal Oil New York, Inc.
Coastal Oil New England, Inc.
Coastal Fuels Marketing, Inc.
Coastal Mobile Refining Company
Coastal Derby Refining Company
Coastal Eagle Point Oil Company
Coastal Mart, Inc.
Coastal Refining & Marketing, Inc.
Coastal States Crude Gathering
Coastal States Trading, Inc.
Coastal Unilube, Inc.
Coscol Marine Corporation
Coscol Petroleum Corporation
Pacific Refining Company
Western Fuel Oil Company
Coastal Fuel Terminals, Inc.

Address: 9 Greenway Plaza
Houston, TX 77046

Info Phone: (713) 877-1400
Emergency Phone: (713) 877-1400

PRODUCT IDENTIFICATION

Trade Name: Regular Gasoline Date Revised: 03-28-90

Synonyms: Leaded Gasoline, Petro, Motor Spirits
Chemical Name and/or Family Description: A volatile blend of paraffinic, olefinic, and aromatic hydrocarbons for automotive fuel.
DOT Hazard Class: Flammable liquid; UN 1203.

COMPOSITION

			Occupational Exposure Limits*			
			OSHA	ACGIH		
Product	CAS Number	%, Wt	PEL	TLV	Other	Units
Gasoline,Regular	Mixture	100	300	300	500 STEL	ppm
Ingredient(s):						
Benzene	71-43-2	0-5.0	1	10	5 STEL	ppm
Toluene	108-88-3	0-25.0	100	100	150 STEL	ppm
Xylene	1330-20-7	0-25.0	100	100	150 STEL	ppm
Ethylbenzene	100-41-4	0-5.0	100	100	125 STEL	ppm
n-Hexane	110-54-3	0-3.0	50	50		ppm
Hexane (other isomers)	N.A.	<8.5	500	500	1000 STEL	ppm
1,2,4-Trimethyl Benzene	95-63-6	0-5.0	25	25		ppm
Cumene	98-82-8	1.0	50	50	SKIN	ppm
Cyclohexane	110-82-7	1.0	300	300		ppm
Butane	106-97-8	<9.0	800	800		ppm
Pentane	109-66-0	<5.0	600	600	750 STEL	ppm
t-Butyl Alcohol	75-65-0	0-10.0	100	100	150 STEL	ppm
Tetraethyl Lead &			0.075	0.1	SKIN	mg/m^3
Tetramethyl Lead	Mixture	<0.0038	0.075	0.15	SKIN	mg/m^3
Methyl t-butyl Ether (MTBE)	1634-04-4	0-15.0	N.A.	N.A.		

* = 8-Hr. TWA unless otherwise specified. SKIN = May be skin absorbed.
STEL = Short Term Exposure Limit; 15 minutes. N.A. = Not Available.

PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point 760 mmHg:	80-430°F	Melting Point:	Variable
Vapor Pressure mmHg @ 20C:	325-525	Vapor Density (Air=1):	3-4
Solubility in H2O %:	Negligible	pH:	N.A.
Specific Gravity 60/60F:	0.7-0.77	Evaporation Rate	N.A.
% Volatile by Volume:	100	Odor: Aromatic odor	
Viscosity (method, temp.):	1.4 @40C cSt	Appearance: Bronze Fluid	

FIRE AND EXPLOSION DATA

Flash Point: -45°F (TCC)
Flammable Limits in Air % by Vol. Lower: 1.4 Upper: 7.6
Autoignition Temperature: 495-850°F
Extinguishing Media: Dry chemical, foam, or carbon dioxide.
Special Fire Fighting Procedure: Use a smothering technique for extinguishing fire of this flammable liquid. Do not use a forced water stream directly on gasoline fires as this will scatter the fire. Use a water spray to cool fire-exposed containers. Firefighters should wear self-contained breathing apparatus and full protective clothing.
Unusual Fire or Explosion Hazard: Flowing gasoline can be ignited by self-generated static electricity; containers should be grounded and bonded. Runoff to sewer may create fire or explosion hazard well downstream from the source.

REACTIVITY DATA

Stability: Stable
Hazardous Polymerization: Will not occur.
Conditions to Avoid/Incompatibility: Strong oxidizing agents, heat, spark, flame and build-up of static electricity, halogens, strong acids and alkalies.
Hazardous Decomposition Products: CO, CO_2, hydrocarbons and lead oxides.

HEALTH HAZARD DATA

Note: This product has not been tested by Coastal Corporation to determine its specific health hazards. Therefore, the information provided in this section includes health hazard information on the product components.

Carcinogenicity:	NTP:	IARC Monographs:	OSHA Regulated:
Regular Gasoline	No	No	No
Benzene	Yes	Yes	Yes

Occupational Exposure Limits: See COMPOSITION section.

Effects of Overexposure:
Acute:
Eyes: Slight to moderate eye irritation.
Skin: Moderately irritating; causing redness, drying of skin.
Inhalation: Irritating to mucous membranes and respiratory tract. Can act as a simple asphyxiant. Overexposure to vapors may lead to headache, nausea, drowsiness, fatigue, pneumonitis, pulmonary edema, central nervous system depression, coma and respiratory arrest.

Ingestion: Possible effects are stomach irritation, gastritis. headache, nausea, drowsiness, loss of consciousness, convulsions, cyanosis, pneumonitis, pulmonary edema, central nervous system depression, and capillary hemorrhaging of the lung and internal organs. Aspiration hazard if vomiting occurs.

Chronic: Skin and eye irritation. May affect the respiratory and central nervous system. Recent studies indicate kidney damage and kidney cancer in rats and liver cancer in mice.

Additional Medical and Toxicological Information: Contact with full strength or even dilute formulations of this product or exposure above and/or below the TLV may aggravate pre-existing dermatitis or respiratory disorders in certain individuals. There is sufficient evidence for the carcinogenicity of benzene in humans. Benzene may cause degeneration in blood forming organs leading to anemia which may further degrade to leukemia.

EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush thoroughly with water for at least 15 minutes, including under the eyelids. Contact a physician immediately, preferably an Ophthalmologist. Speed and thoroughness in rinsing eyes are important to avoid permanent injury.

Skin Contact: Remove contaminated clothing and shoes. Wash affected areas with soap and flush with large amounts of water for 15 to 20 minutes. Get immediate medical attention.

Inhalation: Remove to fresh air. If breathing has stopped, apply artificial respiration. Get immediate medical attention.

Ingestion: Do not induce vomiting. If spontaneous vomiting occurs hold the victim's head lower than hips to prevent aspiration.

SPECIAL PROTECTION INFORMATION

Eye Protection: Remove contact lenses and wear chemical safety glasses or goggles where contact with liquid or mist may occur.

Skin Protection: Wear impervious gloves when contact with skin may occur. Wear protective clothing to avoid skin contact.

Inhalation: Use approved respiratory protective equipment for cleaning large spills or upon entry into large tanks, vessels, and other designated confined spaces or in any situations where airborne concentrations may exceed occupational exposure limits.

Ventilation: Provide adequate general and local ventilation (1) to keep mist or vapors below allowable exposure levels, (2) to prevent formation of explosive atmosphere and (3) to prevent oxygen deficient atmospheres, especially in confined spaces.

SPILL OR LEAK AND DISPOSAL PROCEDURES

Spill Procedures: Remove sources of heat or ignition including internal combustion engines and power tools. Clean-up spill, bu do not flush to sewer or surface water. Ventilate area and avoid breathing vapors or mists.

Waste Disposal: Dispose through a licensed waste disposal company. Follow federal, state and local regulations.

SPECIAL PRECAUTIONS AND COMMENTS

Storage Requirements: Store in tightly closed containers in a dry cool place, away from incompatible materials or sources of heat and ignition. Ground and bond all transfer and storage equipment to prevent static sparks and equip with self closing valves, pressure vacuum bungs and flame arrestors. Empty containers may contain residue (liquid/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death.

Other: Gasoline is to be used as motor fuel only. Never use as a cleaning solvent or degreaser. Use explosion-proof electrical equipment. No smoking should be allowed in area of use.

EPA SARA TITLE III INFORMATION

Section 311/312 Hazard Categorization

Acute	Chronic	Fire	Pressure	Reactive
X	X	X		

SARA Hazardous Substances

Ingredient	CAS No.	%, wt	Sec 313	Sec 302	RQ, lb	TPQ, lb
Benzene	71-43-2	0-5.0	X			
Toluene	108-88-3	0-25.0	X			
Xylene	1330-20-7	0-25.0	X			
Ethylbenzene	100-41-4	0-5.0	X			
Cumene	98-82-8	1.0	X			
Cyclohexane	110-82-7	1.0	X			
t-Butyl Alcohol	75-65-0	0-10.0	X			
Tetramethyl Lead	75-74-1	<0.0038		X	1	100
Tetraethyl Lead	78-00-2	<0.0038		X	10	100
Methyl t-Butyl Ether (MTBE)	1634-04-4	0-15.0	X			

Key: Sec 313 = Toxic Chemicals, Section 313
Sec 302 = Extremely Hazardous Substances (EHS), Section 302
RQ = Reportable Quantity of EHS
TPQ = Threshold Planning Quantity of EHS

CALIFORNIA PROPOSITION 65 WARNING

Chemicals known to the State of California to cause cancer, birth defects or other reproductive harm may be found in crude oil and petroleum products. Although it is possible to sufficiently refine a crude oil or its end products to remove the potential for cancer, we are advising that one or more of the listed chemicals may be present in some detectable quantities. Read and follow directions and use care when handling crude oil and petroleum products.

Industrial Hygiene Review: Delno D. Malzahn, CIH
Date Prepared: 10/05/85

Material Safety Data Sheet

Product MARC 60

Section I - GENERAL INFORMATION

Company:	Mid-American Research Chemical Corporation	Telephone Number:	(402) 564-7104
Address:	Box 927 Columbus, NE 68601		
Product Name:	Veg-A-Kill Plus 2,4-D	Date:	4/8/88
Product Type:	Herbicide	Formula:	Proprietary

Section II - HAZARDOUS INGREDIENTS

Principal Hazardous Components	Percent	Threshold Limit Value (units)
Petroleum Solvent	95.83	550 ppm
Bromacil (5-bromo-3-sec-butyl-6-		
methyluracil)	0.98	N/A
2,4-Dichlorophenoxyacetic acid,		
isooctyl ester	1.09	N/A

Section III - PHYSICAL DATA

Boiling Point (°F):	350-500	Specific Gravity (H_2O = 1):	0.85-0.9
Vapor Pressure (mm Hg):	0.3	Percent Volatile by Weight (%):	N/A
Vapor Density (Air = 1):	over 1	Evaporation Rate: (water = 1)	under 1
Solubility in Water: Negligible			
Appearance and Odor: tan to brown liquid with petroleum odor			

Section IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	150°F (TCC)
Extinguishing Media:	CO_2, foam, dry chemical, water fog
Specific Fire Fighting Procedures:	Cool exposed containers with water. Use self-contained breathing apparatus.
Unusual Fire Fighting Hazards:	Vapors heavier than air - may cause flashback. Hot containers may rupture or explode.

N/A = Not Applicable
N/D = Not Determined

Format Based on OSHA Form 20

(Continued on Reverse Side)

Section V - HEALTH HAZARD DATA

Threshold Limit Value
See Section II

Effects of Overexposure
Harmful if swallowed-causes skin and eye irritation.
Inhalation may cause dizziness, nausea, vomiting.

Emergency First Aid Procedures:
Eyes-flush with water for 15 minutes-see physician if irritation persists. Skin-wash with plenty of water. Ingestion-do not induce vomiting-call a physician immediately. Inhalation-get fresh air.

Section VI - REACTIVITY DATA

Stability	Unstable		Conditions to Avoid:
	Stable	X	

Incompatability (Materials to Avoid):
Strong oxidizing agents, acids, bases

Hazardous Decomposition Products:
Carbon monoxide/dioxide, hydrogen chloride upon thermal decomposition.

Hazardous Polymerization	May Occur		Conditions to Avoid:
	Will Not Occur	X	

Section VII - SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:
Soak up on solid absorbent. Remove ignition sources.

Waste Disposal Method:
Dispose of in accordance with government regulations. Do not discharge into any body of water. Toxic to wildlife and fish.

Section VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type):

Ventilation	Local Exhaust: X (fresh air)	Special:
	Mechnical (General):	Other:

Protective Gloves: rubber	Eye Protection: goggles, if splashing expected

Other Protective Equipment:
Impervious clothing if splashing expected.

Section IX - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing:
DO NOT TAKE INTERNALLY. Avoid eye and skin contact. Do not reuse container. Destroy when empty. Keep away from ignition sources.

Other Precautions:
KEEP OUT OF REACH OF CHILDREN! CAREFULLY READ ENTIRE LABEL BEFORE USE!
Do not store near fertilizers, feed, grain, insecticides or food. Wash contaminated clothes before reuse.

While the information contained herein is believed to be correct, no warranties are made with respect thereto, and all liability from reliance thereon is disclaimed.

HAZARDOUS AND SOLID WASTE DIVISION
P.O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711-3087 TELEPHONE: (512) 463-8175

ANNUAL WASTE SUMMARY

TSD Facility Permit # 50020 01 Report for: 12 19 91

FOR DATA YEAR: 1991

Page 1 of 2

CAMP STANLEY STORAGE ACTIVITY
~~JERRY STARNES~~ OSCAR L. MAJOR
P.O. BOX 690627
SAN ANTONIO, TX 78269-0627
221
(512) ~~224~~-7416

Your EPA ID # TX2210020739

TAXPAYER IDENTIFICATION NUMBER

The disclosure of your Taxpayer Identification Number, solicited in accordance with Section 7(b) of the Privacy Act of 1974 is voluntary. Your assistance in our efforts to improve our service by providing your Taxpayer Identification Number is appreciated.

__ - __ - _____ - __

TEXAS WASTE CODE: 990001 | EPA WASTE CODE: D001 | D001 CHARACTERISTIC OF IGNITABILITY

TOTAL QUANTITY GENERATED: 4385 | UNITS *: K

QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	OUT OF STATE EPA ID #	COMMENTS
4028	K	65124	STS02		
357	K	69048	S02		

TEXAS WASTE CODE: 990002 | EPA WASTE CODE: D002 | D002 CHARACTERISTIC OF CORROSIVITY

TOTAL QUANTITY GENERATED: 0 | UNITS *: K

QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	OUT OF STATE EPA ID #	COMMENTS

TEXAS WASTE CODE: 993210 | EPA WASTE CODE: U210 | U210 ETHENE, 1,1,2,2-TETRACHLORO- OR TETRACHLOROETHYLENE

TOTAL QUANTITY GENERATED: 2212 | UNITS *: K

QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	OUT OF STATE EPA ID #	COMMENTS
737	K	65124	S01		
1475	K	65124	STS02		

* Enter one letter: G = gallons, L = liters, P = pounds, T = tons (2000 lb), Y = cubic yards, K = kilograms, M = metric tons (1000 Kg), N = cubic meters

** Only applicable for Hazardous and Class I Industrial Waste.

COST ESTIMATES TO BE COMPLETED BY OWNER/OPERATOR OF HAZARDOUS WASTE MANAGEMENT FACILITIES

A. Cost estimate for facility closure: $ ___, ___, ___

B. Cost estimate for post closure monitoring and maintenance. (Disposal facilities only): $ ___, ___, ___

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

PAUL B. OLIVER	OSCAR L. MAJOR, LTC, QM, CDR	Feb 3, 1992
Prepared By	Signature of Authorized Agent	Date

☐ I certify that I am not required to submit an annual waste summary because I meet all the conditions in 31 TAC 335.9 (a)(3).

Signature _____ Date _____

LPS Form DW85S (Rev. 09-23-91) was TWC-0436A (Rev. 12-04-87)

ESSMENT SECTION
LID WASTE DIVISION
APITOL STATION
78711-3087 TELEPHONE: (512) 463-8175

CAMP STANLEY STORAGE ACTIVITY
~~JERRY STARNES~~ OSCAR L. MAJOR
P.O. BOX 690627
SAN ANTONIO,TX 78269-0627
221
(512) ~~222~~-7416

FOR DATA YEAR: 1991

Page 2 of 2

Your EPA ID # TX2210020739

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__ - __ - _____ - _

TEXAS WASTE CODE	EPA WASTE CODE		TOTAL QUANTITY GENERATED	UNITS *	QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	OUT OF STATE EPA ID #	COMMENTS
99,303,6	U036	CHLORDANE	76	K	76	K	50225	S01		
		ASBESTOS	7	Y	7	Y	H0066	D81		COMAL COUNTY LANDFILL

* Enter one letter: G = gallons, L = liters, P = pounds, T = tons (2000 lb), Y = cubic yards, K = kilograms, M = metric tons (1000 Kg), N = cubic meters

** Only applicable for Hazardous and Class I Industrial Waste

COST ESTIMATES TO BE COMPLETED BY OWNER/OPERATOR OF HAZARDOUS WASTE MANAGEMENT FACILITIES

A. Cost estimate for facility closure $___,___,___ (93)

B. Cost estimate for post closure monitoring and maintenance. (Disposal facilities only) $___,___,___ (102)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete.

Prepared By	Signature	ed Agent	Date
PAUL B. OLIVER	OSCAR L. MA...	LTC, QM, CDR	Feb 3, 1992

☐ I certify that I am not required to submit an annual waste summary beca... I meet all the conditions in 31 TAC 335.9 (a)(3).

Signature Date

TEXAS WATER COMMISSION
INFORMATION & TECHNICAL SERVICES SECTION
HAZARDOUS AND SOLID WASTE DIVISION
P.O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711-3087 TELEPHONE: (512) 463-7764

ANNUAL WASTE SUMMARY

Your TWC ID # or TSD Facility Permit # 69026 G1 Report for: 12 19 90

FOR DATA YEAR: 1990

Page 1 of 2

CAMP STANLEY STORAGE ACTIVITY
JERRY STARNES
P.O. BOX 690627
SAN ANTONIO, TX 78269-0627

(512) 224-7416

Your EPA ID # TX2210020739

TAXPAYER IDENTIFICATION NUMBER

The disclosure of your Taxpayer Identification Number, solicited in accordance with Section 7(b) of the Privacy Act of 1974 is voluntary. Your assistance in our efforts to improve our service by providing your Taxpayer Identification Number is appreciated.

* Enter one letter: G = gallons, L = liters, P = pounds, T = tons (2000 lb), Y = cubic yards, K = kilograms, M = metric tons (1000 Kg), N = cubic meters
** Only applicable for Hazardous and Class I Industrial Waste.

Texas Waste Code	Description	Total Quantity Generated	Units
990001	D001 CHARACTERISTIC OF IGNITABILITY	3403	P
990002	D002 CHARACTERISTIC OF CORROSIVITY	0	G
993210	U210 ETHENE, 1,1,2,2-TETRACHLORO- OR TETRACHLOROETHYLENE	220	G

Texas Waste Code	Quantity Handled	Units	Facility Number	Handling Code	Comments
990001	3403	P	69048	S02	WASTE PETROLEUM NAPHTHA
990002	0	G			NICKEL NITRATE
993210	220	G	69026	S01	

COST ESTIMATES TO BE COMPLETED BY OWNER/OPERATOR OF HAZARDOUS WASTE MANAGEMENT FACILITIES

A. Cost estimate for facility closure $ ___ , ___ , ___

B. Cost estimate for post closure monitoring and maintenance. (Disposal facilities only) $ ___ , ___ , ___

...er penalty of law that I have personally examined and am familiar with the information submitted in this and all ...uments and that based on my inquiry of those individuals immediately responsible for obtaining the information, I ...he submitted information is true, accurate, and complete.

B. Oliver C JERRY R. STARNES, LTC, OMC, CDR Jan 31, 1991
Date

☐ I certify that I am not required to submit an annual waste summary becau... I meet all the conditions in 31 TAC 335.9 (a)(3).

Signature Date

TEXAS WATER COMMISSION
INFORMATION & TECHNICAL SERVICES SECTION
HAZARDOUS AND SOLID WASTE DIVISION
P.O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711-3087 TELEPHONE: (512) 463-7784

ANNUAL WASTE SUMMARY

FOR DATA YEAR: 1990

Page 2 of 2

Your TWC ID # or TSD Facility Permit # 69026 G1 (1–8) Report for: L (8)

CAMP STANLEY STORAGE ACTIVITY
JERRY STARNES
P.O. BOX 690627
SAN ANTONIO,TX 78269-0627

(512) 224-7416

Your EPA ID # TX2210020739

TAXPAYER IDENTIFICATION NUM

The disclosure of your Taxpayer Identification Number, ac
accordance with Section 7(b) of the Privacy Act of 1974 is vo
Your assistance is our efforts to improve our service by pro
your Taxpayer Identification Number is appreciated.

[ ] - [ ] - [ ] - [ ]

TEXAS WASTE CODE		TOTAL QUANTITY GENERATED	UNITS *	QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	COMMENTS
990001	D001 CHARACTERISTIC OF IGNITABILITY	1334	K	1124	K	Z00020	T66	POLYCHLORINATED BIPHENALS
				210	K	Z00020	T29	POLYCHLORINATED BIPHENALS
990001	D001 CHARACTERISTIC OF IGNITABILITY	770	G	770	G	69026	S01	OIL PETROLEUM NOS

* Enter one letter: G = gallons, L = liters, P = pounds, T = tons (2000 lb), Y = cubic yards, K = kilograms, M = metric tons (1000 Kg), N = cubic meters
** Only applicable for Hazardous and Class I Industrial Waste.

COST ESTIMATES TO BE COMPLETED BY OWNER/OPERATOR OF HAZARDOUS WASTE MANAGEMENT FACILITIES

A. Cost estimate for facility closure $[ ], [ ], [ ] (80)

B. Cost estimate for post closure monitoring and maintenance. (Disposal facilities only) $[ ], [ ], [ ] (102)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Paul B. Oliver — JERRY R. STARNES, LTC, OMC, CDR — Jan 31, 1991
Signature — Date

☐ I certify that I am not required to submit an annual waste summary because I meet all the conditions in 31 TAC 335.9 (a)(3).

Signature — Date

TEXAS WATER COMMISSION
INFORMATION & TECHNICAL SERVICES SECTION
HAZARDOUS AND SOLID WASTE DIVISION
P.O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711-3087 TELEPHONE: (512) 463-7764

ANNUAL WASTE SUMMARY

FOR DATA YEAR 1989

TSD Facility Permit # 69026 | G | 1 Report for: 12 19 89

CAMP STANLEY STORAGE ACTIVITY
JERRY STARNES
P.O. BOX 690627
SAN ANTONIO,TX 78269-0627

(512) 224-7416

Your EPA ID # TX2210020739

TAXPAYER IDENTIFICATION NUMBER

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- N/A -

* Enter one letter: G = gallons, L = liters, P = pounds, T = tons (2000 lb), Y = cubic yards, K = kilograms, M = metric tons (1000 Kg), N = cubic meters
** Only applicable for Hazardous and Class I Industrial Waste.

TEXAS WASTE CODE	TOTAL QUANTITY GENERATED	UNITS *
990001 D001 CHARACTERISTIC OF IGNITABILITY	110	G

QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	COMMENTS
110	G	34690	S01	OIL PETROLEUM NOS
0	G			SOLVENT NOS

TEXAS WASTE CODE	TOTAL QUANTITY GENERATED	UNITS *
990002 D002 CHARACTERISTIC OF CORROSIVITY	55	G

QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	COMMENTS
55	G	34690	S01	NICKLE NITRATE

TEXAS WASTE CODE	TOTAL QUANTITY GENERATED	UNITS *
993210 U210 ETHENE, 1,1,2,2-TETRACHLORO- OR TETRACHLOROETHYLENE	330	G

QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	COMMENTS
330	G	34690	S01	

COST ESTIMATES TO BE COMPLETED BY OWNER/OPERATOR OF HAZARDOUS WASTE MANAGEMENT FACILITIES

A. Cost estimate for facility closure $, ,

B. Cost estimate for post closure monitoring and maintenance. (Disposal facilities only) $, ,

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

PAUL B. OLIVER (Prepared By) JERRY R. STARNES, LTC, QMC, CDR (Signature of Authorized Agent) Jan 24, 1990 (Date)

☐ I certify that I am not required to submit an annual waste summary because I meet all the conditions in 31 TAC 335.9 (a)(3).

Signature Date

TEXAS WATER COMMISSION
INFORMATION & TECHNICAL SERVICES SECTION
HAZARDOUS AND SOLID WASTE DIVISION
P O BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711-3087 TELEPHONE: (512) 463-7784

ANNUAL WASTE SUMMARY

FOR DATA YEAR 1989

Your TWC ID # or TSD Facility Permit # 69026 | G | 1 Report for: 12 19

CAMP STANLEY STORAGE ACTIVITY
JERRY STARNES
P.O. BOX 690627
SAN ANTONIO,TX 78269-0627

(512) 224-7416

Your EPA ID # TX2210020739

TAXPAYER IDENTIFICATION NUMBER

The disclosure of your Taxpayer Identification Number, solicited accordance with Section 7(b) of the Privacy Act of 1974 is volunta Your assistance in our efforts to improve our service by provid your Taxpayer Identification Number is appreciated.

N/A

TEXAS WASTE CODE		TOTAL QUANTITY GENERATED	UNITS *	QUANTITY HANDLED	UNITS *	FACILITY NUMBER	HANDLING CODE **	COMMENTS
99.000.1	POLYCHLORINATED BIPHENALS	4942	P	4942	P	Z0020	S05	TRANSFORMERS - ONE TIME TRANSACTION

* Enter one letter: G – gallons, L – liters, P – pounds, T – tons (2000 lb), Y – cubic yards, K – kilograms, M – metric tons (1000 Kg), N – cubic meters

** Only applicable for Hazardous and Class I Industrial Wa

COST ESTIMATES TO BE COMPLETED BY OWNER/OPERATOR OF HAZARDOUS WASTE MANAGEMENT FACILITIES

A. Cost estimate for facility closure $, ,

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PAUL B. OLIVER — Prepared By

JERRY R. STARNES, LTC, OMC, CDR — Signature of Authorized Agent

Jan 24, 1990 — Date

☐ I certify that I am not required to submit an annual waste summary bec I meet all the conditions in 31 TAC 335.9 (a)(3).

Signature Date

TEXAS WATER COMMISSION
WASTE MANAGEMENT REPORTS UNIT
HAZARDOUS AND SOLID WASTE DIVISION
P.O. BOX 13087, CAPITOL STATION
AUSTIN, TEXAS 78711

ANNUAL WASTE SUMMARY

DW0500

TWC Registration No. or TSD Facility Permit No.: 69026

EPA ID. NO.: TX2210020739

G1

Report For: 12 19 88

To be completed ANNUALLY by all persons who conduct on-site accumulation, storage, processing, or disposal of Hazardous Waste or Class I Industrial Waste. This report is also to include manifested waste shipped to off-site storage, processing, or disposal facilities. The report is to be submitted to the TWC by the 25th of each January for the prior calendar year. (See the reverse side for instructions.)

NAME: CAMP STANLEY STORAGE ACTIVITIES (RRAD) PHONE: (512) 221-7416

ADDRESS: P.O. BOX 69067, SAN ANTONIO, TX. ZIP: 78269-0627

PART I. ON-SITE RECORDS FOR ALL HAZARDOUS WASTE, CLASS I INDUSTRIAL WASTE AND OFF-SITE RECORDS OF MANIFESTED WASTE.

1 TEXAS WASTE CODE (12–17)	2 QUANTITY GENERATED (18–26)	3 * (27)	4 QUANTITY HANDLED (28–36)	5 * (37)	6 FACILITY COMPONENT NUMBER (38–42)	7** HANDLING CODES (43–45)	8. COMMENTS (46–92)
990001	000000700	G	000000700	G	34690	S01	
990002	000000150	G	000000150	G	34690	S01	
992210	000000250	G	000000250	G	34690	S01	
990001	000000450	G	000000450	G	04037	S01	

* Units: ... P=pounds, T=tons (2000 lb), Y=cubic yards, K=kilogram, M=metric tons (1000Kg), N=cubic meters

PART II. COST ESTIMATES TO BE COMPLETED BY OWNER/OPERATOR OF HAZARDOUS WASTE MANAGEMENT FACILITIES

A. Cost Estimate for facility closure

B. Cost Estimate for post closure monitoring and maintenance. (Disposal facilities only)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

[signature] [signature] 2/13/89

TRANSFORMER OIL SAMPLE PCB TESTING - INDEX

MANUFACTURER	SERIAL NUMBER	CLASS & TYPE	SIZE KVA	Concentration (ppm)	SAMPLE # and PAGE #	
Westinghouse	2831796	OA/S	25	Less-1	1	
General Electric	E116010-604	OA/HS	15	Less-1	2	
General Electric	E116009-604	OA/HS	15	Less-1	3	
General Electric	E103903-604	OA/HS	15	Less-1	4	
General Electric	6364099	OA/HS	25	6.7	5	
Westinghouse	60AJ1923	OA/S	75	Less-1	6	
Westinghouse	5147176	OA/S	15	31	7	
General Electric	7097206	OA/HS	10	202	8	Contractor
General Electric	7097227	OA/HS	10	214	9	Contractor
General Electric	7097241	OA/HS	10	243	10	Contractor
General Electric	70957	OA/UD	15	4.7	11	
ISCO	10919606	OA	25	2.3	12	
ALAS-CHARMERS	2602634	ABS	15	Less-1	13	
General Electric	6576269	OA/HS	25	258	14	Contractor
R.E. Uptegraff Mfg.	W60816	UD/OA	15	Less-1	15	
R.E. Uptegraff Mfg.	W60814	UD/OA	15	Less-1	16	
R.E. Uptegraff Mfg.	W60815	UD/OA	15	Less-1	17	
Central Transformer	5321-26	AOD	37.5	Less-1	18	
ALAS-CHARMERS	2783879	CBS	15	Less-1	19	
ALAS-CHARMERS	2783880	CBS	15	Less-1	20	
General Electric	6958057	OA/HS	15	62	21	Contractor
Westinghouse	68AH64	OA	10	Less-1	22	Keep For stock
ALAS-CHARMERS	3339217	OA	50	Less-1	23	
ALAS-CHARMERS	3339243	OA	50	Less-1	24	
ALAS-CHARMERS	2527522	OA/ABS	37.5	3.0	25	
ATSCO	K138101	OA	25	Less-1	26	Keep For stock
Hill Transformer	149112	DO2/SW1	75	Less-1	27	
Hill Transformer	149114	DO2/SW1	75	Less-1	28	
General Electric	6571849	OA/HS	25	99	29	Contractor
Westinghouse	78A034962	OA/	37.5	Less-1	30	used AT BldG 78
Hill Transformer	49113	DO2/SW1	75	13	31	
CTC	3096-3	AOD	50	15	32	
ALAS-CHARMERS	3339234	OA	50	Less-1	33	
ALAS-CHARMERS	2662558	OA/ABS	37.5	Less-1	34	
Westinghouse	59AL1404	OA/	75	Less-1	35	
Westinghouse	2765581	OA/S	15	3.6	36	
Westinghouse	2835770	OA/S	15	6.1	37	
Westinghouse	60AJ1926	OA/S	75	Less-1	38	
ESCO	8918382	OA/W	15	2.7	39	
ESCO	8918383	OA/W	15	3.0	40	
ESCO	8918381	OA/W	15	2.8	41	

TRANSFORMER OIL SAMPLE PCB TESTING - INDEX

MANUFACTURER	SERIAL NUMBER	CLASS & TYPE	SIZE KVA	Concentration (ppm)	SAMPLE # and PAGE #
General Electric	6575887	OA/HS	25	98	42 Contractor
Westinghouse	78A092007	OA	37.5	Less-1	43 Used AT B-dG 78
Westinghouse	78A083801	OA		Less-1	44 Used AT B1dG 78
General Electric	B746418	OA/HS	50	111	45 Contractor
ESCO	6811989	OA/OISC	25	Less-1	46
ESCO	8813168	OA/OISC	25	2.9	47
SESCO	733N14029	OA	37.5	Less-1	48
ESCO	4916426	OA/OISC	25	2.5	49
Moloney	713670	OA/KL	37.5	19	50
ESCO	6022896	OA	15	3.0	51
Westinghouse	2831805	OA/S	25	Less-1	52
CTS	4D25-U	OA/AOD	15	Less-1	53
CTS	4024-1[illegible]4	OA/AOD	15	Less-1	54
Harrison	~~5359-A~~ 62064	OA/OISC	37.5	2.2	55
General Electric	7098099	OA/HS	10	277	56 Contractor
Harrison	62062	OA/OISC	37.5	1.9	57
SESCO	733N14031	OA	37.5	Less-1	58
General Electric	6964324	OA/HS	25	110	59 contractor
General Electric	NA	OA/HSB	100	Less-1	60 Keep For stock
Westinghouse	0288301R	OA	100	5.4	61 Keep For stock
General Electric	K184271Y71AA	OA/HSB	100	Less-1	62 Keep For stock

OTHER SAMPLES:

MacMillan Petroleum Corp. 5 Gallon Container Insulating Oil Electrical				Less-1	63
MacMillan Petroleum Corp. 5 Gallon Container Insulating Oil Electrical				Less-1	64
MacMillan Petroleum Corp. 5 Gallon Container Insulating Oil Electrical				Less-1	65
MacMillan Petroleum Corp. 5 Gallon Container Insulating Oil Electrical				Less-1	66
MacMillan Petroleum Corp. 5 Gallon Container Insulating Oil Electrical				Less-1	67
MacMillan Petroleum Corp. 5 Gallon Container Insulating Oil Electrical				Less-1	68
MacMillan Petroleum Corp. 5 Gallon Container Insulating Oil Electrical				Less-1	69
MacMillan Petroleum Corp. 5 Gallon Container Insulating Oil Electrical				Less-1	70

TRANSFORMER OIL SAMPLE PCB TESTING - INDEX

MANUFACTURER	SERIAL NUMBER	CLASS & TYPE	SIZE KVA	Concentration (ppm)	SAMPLE # and PAGE #
General Electric	B598831	OA/HS	15	4	71
Westinghouse	27766953	OA/S	25	1	72
General Electric	6956963	OA/HS	15	71	73 contractor

Appendix C

Background Soil Boring Logs

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B1
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: NORTHWEST OF FENCE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 2-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 0948 9/9/92
TOTAL DEPTH (FT. BGL): 10.2	END DRILLING: 1050 9/9/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
5			0	LIMESTONE: 10 YR 8/3 (very pale brown), sporatic stains - 10 YR 6/8 (brownish yellow), oolitic fossils, 1 pectin fossil about 0.25 inches diameter at 3.5 ft., moist.	5	All recovery intervals are approximate.
						Sample ID: B1-2.5'. Hard - 3 blows required to crush core for sampling.
			0	Color change to 2.5 Y 7/2 (light gray), sporatic stains - 2.5 Y 7/6 (yellow).		
10				Hard limestone, 2.5 Y 5/0 (gray) with thin laminae.	10	Sample ID: B1-9.0'. Very hard - 20 blows used to crush core.
				Total depth = 10.2 feet.		
15					15	

File: F14-B1.LOG

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B2
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: CENTER NORTH OF FENCE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 2-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 1257 9/9/92
TOTAL DEPTH (FT. BGL): 10.0	END DRILLING: 1404 9/9/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
0				LIMESTONE: 10 YR 7/2 (light gray), hard, sporatic stains - 10 YR 7/8 (yellow), marl at 2.1-2.3 ft and at 4.1-4.4 ft., 10 YR 7/8 (yellow), oolitic at 3.4-4.0 ft, damp.		Approximate recovery intervals.
			0			Sample ID: B2-1.0'.
5				Color change to 2.5 Y 7/3 (pale yellow), hard, occasional fossils (pelecypods).	5	
			0			Sample ID: B2-9.0'. Very hard as indicated by blows with hand-held hammer.
10				*Total depth = 10.0 feet.*	10	
15					15	

File: F14-B2.LOG

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B3
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: EAST OF GATE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 2-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 1415 9/9/92
TOTAL DEPTH (FT. BGL): 10.0	END DRILLING: 1503 9/9/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
0				LIMESTONE: 2.5 Y 7/3 (pale yellow), brittle, sporatic stains - 10 YR 6/6 (brownish yellow), marl at 1.2-1.8 ft, oolite fossils at 3.5-4.2 ft underlain by clay lens, damp.		Approximate recovery intervals.
			0			Sample ID: B3-1.0'.
5				Color change to 2.5 Y 7/4 (pale yellow), very hard, marl at 5.4-5.6 ft, damp.		
			0			Sample ID: B3-8.0'.
10				*Total depth = 10.0 feet.*		
15						

File: F14-B3.LOG

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B4
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: SOUTHEAST CORNER OF SITE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 2-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 1524 9/9/92
TOTAL DEPTH (FT. BGL): 10.0	END DRILLING: 1610 9/9/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
0				LIMESTONE: 2.5 Y 7/3 (pale yellow), very hard, sporatic stains 10 YR 7/4 (very pale brown), trace of clay lens from 3.8 to 4.7 ft - 5 Y 6/2 (light olive gray).		Approximate recovery intervals.
			0			Sample ID: B4-2.0'. Very hard - 10 blows with hand-held hammer required to crush rock core.
5				Color change to 2.5 Y 7/3 (pale yellow), very hard, marl from 8.2 to 8.4 ft - 2.5 Y 7/6 (yellow).	5	
			0			Sample ID: B4-9.0'.
10				*Total depth = 10.0 feet.*	10	
15					15	

File: F14-B4.LOG

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B5
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: NORTHEAST CORNER OF SITE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 2-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 1622 9/9/92
TOTAL DEPTH (FT. BGL): 10.0	END DRILLING: 1658 9/9/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
0			0	LIMESTONE: 2.5 Y 7/2 (light gray), hard, occasional marl from 1.2 to 2.8 ft - 10 YR 6/6 (brownish yellow), clay lens at 4.3 ft - 5 Y 7/3 (pale yellow), dry.		Approximate recovery intervals. Sample ID: B5-1.0'. Hard - 5 blows with hand-held hammer required to crush rock core.
5			0	Color is 2.5 Y 7/2 (light gray), marl from 5 to 5.6 ft and from 6.1 to 6.25 ft - 2.5 Y 6/3 (light yellowish brown).		Sample ID: B5-9.0'. Hard: 5-10 blows with hand hammer.
10				*Total depth = 10.0 feet.*		
15						

File: F14-B5.LOG

SOIL BORING LOG

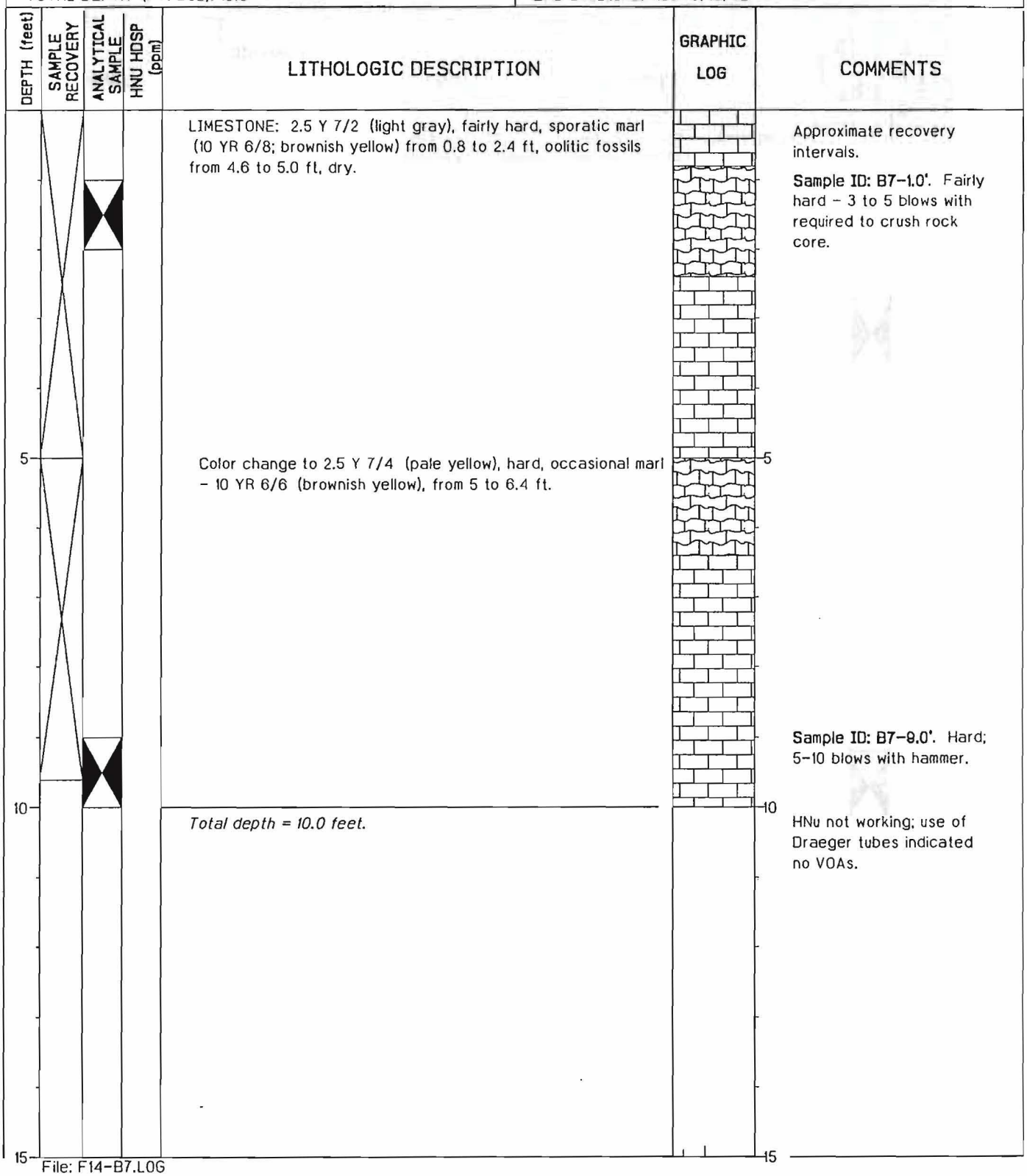
CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B6
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: CENTER OF SITE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 5-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 0901 9/10/92
TOTAL DEPTH (FT. BGL): 20.0	END DRILLING: 1025 9/10/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
				LIMESTONE: 2.5 Y 7/2 (light gray), fairly hard, occasional marl (10 YR 7/8; yellow) and clay lenses (2.5 Y 7/6; yellow) between 1.6 and 2.3 ft, dry.		Approximate recovery intervals. Sample ID: B6-1.5'. Fairly hard - 3 to 5 blows with required to crush rock core.
5				Color change to 10 YR 8/1 (white), very hard, marly - 10 YR 7/6 (yellow) from 5 to 6.7 ft, clay lens with thin laminae from 8 to 8.5 ft.	5	Hard; 5-10 blows with hand hammer.
10				Color change to 10 YR 7/3 (very pale brown)	10	
				Color change to 7.5 YR 5/0 (gray)		
15				Color change to 2.5 Y 7/3 (pale yellow), occasional clay lens 2.5 Y 6/3 (light yellowish brown)	15	Sample ID: B6-17.7'. HNu not working; use of Draeger tubes indicated no VOAs.
20				*Total depth = 20.0 feet.*	20	
25					25	

File: F14-B6.LOG

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B7
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: NORTHWEST CORNER OF SITE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 5-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 1125 9/10/92
TOTAL DEPTH (FT. BGL): 10.0	END DRILLING: 1150 9/10/92



File: F14-B7.LOG

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B8
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: WEST CENTER OF SITE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 5-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 1307 9/10/92
TOTAL DEPTH (FT. BGL): 10.0	END DRILLING: 1335 9/10/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
				LIMESTONE: 2.5 Y 7/3 (pale yellow), sporatic marl from 2.7 to 3.4 ft – 10 YR 6/6 (brownish yellow), clay lenses from 4.2 to 4.9 ft – 2.5 Y 6/3 (light brownish yellow), dry.		Approximate recovery intervals.
						Sample ID: B8-2.5'.
5				Color change to 2.5 Y 7/3 (pale yellow).	5	
				Occasional marly layers from 8.7 to 9.8 ft – 10 YR 6/6 (brownish yellow).		Sample ID: B8-9.0'.
10				*Total depth = 10.0 feet.*	10	HNu not working; use of Draeger tubes indicated no VOAs.
15					15	

File: F14-B8.LOG

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B9
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: SOUTHWEST CORNER OF SITE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 5-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 1352 9/10/92
TOTAL DEPTH (FT. BGL): 10.0	END DRILLING: 1412 9/10/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
				LIMESTONE: 2.5 Y 7/3 (pale yellow), hard, sporatic marl from 2.9 to 3.6 ft – 2.5 Y 6/4 (light brownish yellow), oolitic from 4.4 to 5.0 ft, dry.		Approximate recovery intervals. HNu not working; use of Draeger tubes indicated no VOAs during drilling.
						Sample ID: B9-2.9'.
5				Occasional marl from 5 to 6.8 ft – 2.5 Y 6.4 (light brownish yellow).	5	
						Sample ID: B9-9.0'.
10				*Total depth = 10.0 feet.*	10	
15					15	

File: F14-B9.LOG

SOIL BORING LOG

CLIENT: ARMSTRONG LABORATORY/OEB	BORING NUMBER: F14-B10
SITE: CAMP STANLEY STORAGE ACTIVITY	BORING LOCATION: SOUTH CENTER OF SITE
PROJECT: F14 ACCUMULATION POINT ASSESSMENT	DRILLING CONTRACTOR: JONES ENVIRON. DRILLING, INC.
LOGGED BY: JEFF DAVIS	DRILLER: RIC JONES
BOREHOLE DIAMETER: 3.025 IN.	DRILLING RIG: MOBILE B-61
BOREHOLE ELEVATION: APPROX. 1230 FT. MSL	SAMPLING METHOD: 5-FT CORE BARREL
WATER FOUND (FT. BGL): NO	NO./TYPE OF SAMPLES: (2) SOIL SAMPLES
BORING COMPLETION: GROUTED TO SURFACE; TAGGED	BEGIN DRILLING: 1435 9/10/92
TOTAL DEPTH (FT. BGL): 10.0	END DRILLING: 1457 9/10/92

DEPTH (feet)	SAMPLE RECOVERY	ANALYTICAL SAMPLE	HNU HDSP (ppm)	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COMMENTS
0				LIMESTONE: 2.5 Y 7/2 (light gray), fairly hard, sporatic stains – 2.5 Y 6/6 (olive yellow), occasional marl from 1.4 to 2.4 ft – 2.5 Y 6/4 (light yellowish brown), dry.		Approximate recovery intervals.
						Sample ID: B10-1.5'.
5						
				Color change to 10 YR 6/1 (light gray), very hard, fossils – pelecypods and shell fragments.		
						Sample ID: B10-9.0'.
10				*Total depth = 10.0 feet.*		HNu not working; use of Draeger tubes indicated no VOAs.
15						

File: F14-B10.LOG

...and original copy by certified mail to: **Texas Water Commission, P.O. Box 13087, Austin, Texas 78711** *Please use black ink.*

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

State of Texas WELL REPORT

Engineering Science

Texas Water Well Drillers Board
P.O. Box 13087
Austin, Texas 78711

OWNER Camp Stanley (Name) **ADDRESS** 25800 Ralph Fair Rd., (Street or RFD) Boerne, (City) Tx. (State) 78006 (Zip)

2) LOCATION OF WELL:
County Bexar , _____ miles in _____ (NE, SW, etc.) direction from _____ (Town)

Driller **must** complete the legal description below with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ **LEGAL DESCRIPTION:**
Section No. _____ Block No. _____ Township _____ Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey lines _____

☒ **SEE ATTACHED MAP**

3) TYPE OF WORK (Check):
☐ New Well ☐ Deepening ☐ Reconditioning ☐ Plugging

4) PROPOSED USE (Check): BORING
☐ Domestic ☐ Industrial ☐ Monitor ☐ Public Supply ☐ Irrigation ☐ Test Well ☐ Injection ☐ De-Watering

5) DRILLING METHOD (Check):
☐ Driven ☐ Mud Rotary ☐ Air Hammer ☐ Jetted ☐ Bored ☒ Air Rotary ☐ Cable Tool ☐ Other _____

6) WELL LOG: B#6
Date Drilling: Started 9-9 19 92 Completed 9-10 19 92

DIAMETER OF HOLE

Dia. (in.)	From (ft.)	To (ft.)
3.025	Surface	20

7) BOREHOLE COMPLETION:
☐ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☒ Other GROUT
If Gravel Packed give Interval . . . from 0 ft. to 20 ft.

From (ft.)	To (ft.)	Description and color of formation material
0	20	Glen Rose Limestone

(Use reverse side if necessary)

8) CASING, BLANK PIPE, AND WELL SCREEN DATA:

Dia. (in.)	New or Used	Steel, Plastic, etc. Perf., Slotted, etc. Screen Mfg., if commercial	Setting (ft.) From	Setting (ft.) To	Gage Casting Screen

9) CEMENTING DATA [Rule 287.44(1)]
Cemented from 0 ft. to 20 ft. No. of Sacks Used 1
_____ ft. to _____ ft. No. of Sacks Used _____
Method used _____
Cemented by _____

10) SURFACE COMPLETION
☐ Specified Surface Slab Installed [Rule 287.44(2)(A)]
☐ Specified Steel Sleeve Installed [Rule 287.44(3)(A)]
☐ Pitless Adapter Used [Rule 287.44(3)(B)]
☐ Approved Alternative Procedure Used [Rule 287.71]

11) WATER LEVEL:
Static level dry ft. below land surface Date 9-10-92
Artesian flow _____ gpm. Date _____

12) PACKERS: Type Depth

13) TYPE PUMP:
☐ Turbine ☐ Jet ☐ Submersible ☐ Cylinder ☐ Other _____
Depth to pump bowls, cylinder, jet, etc., _____ ft.

14) WELL TESTS:
Type Test: ☐ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: _____ gpm with _____ ft. drawdown after _____ hrs.

15) WATER QUALITY:
Did you knowingly penetrate any strata which contained undesirable constituents?
☐ Yes ☒ No If yes, submit "REPORT OF UNDESIRABLE WATER"
Type of water? _____ Depth of strata _____
Was a chemical analysis made? ☐ Yes ☒ No

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 15 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME JEDI (Type or print) **WELL DRILLER'S LICENSE NO.** 2799M

ADDRESS P.O. BOX 18580, (Street or RFD) C.C., (City) TX. (State) 78480 (Zip)

(Signed) _____ (Licensed Well Driller) (Signed) _____ (Registered Driller Trainee)

Please attach electric log, chemical analysis, and other pertinent information, if available.

For TWC use only: Well No. _____ Located on map _____

WWD-012 (Rev. 05-18-90)

WELL OWNER'S COPY

Send original copy by certified mail to: **Texas Water Commission, P.O. Box 13087, Austin, Texas 78711** *Please use black ink.*

ATTENTION OWNER: *Confidentiality Privilege Notice on Reverse Side*

State of Texas WELL REPORT

Engineering Science

Texas Water Well Drillers Board
P.O. Box 13087
Austin, Texas 78711

1) **OWNER** Camp Stanley (Name) **ADDRESS** 25800 Ralph Fair Rd., Boerne, TX. 78((Street or RFD) (City) (State) (Zip)

2) **LOCATION OF WELL:**
County Bexar _____ miles in _____ (NE, SW, etc.) direction from _____ (Town)

Driller **must** complete the legal description below with distance and direction from two intersecting section or survey lines, or he must locate and identify the well on an official Quarter- or Half-Scale Texas County General Highway Map and attach the map to this form.

☐ **LEGAL DESCRIPTION:**
Section No. _____ Block No. _____ Township _____ Abstract No. _____ Survey Name _____
Distance and direction from two intersecting section or survey lines _____

☒ **SEE ATTACHED MAP**

3) **TYPE OF WORK (Check):**
☐ New Well ☐ Deepening
☐ Reconditioning ☐ Plugging

4) **PROPOSED USE (Check):** BORING
☐ Domestic ☐ Industrial ☐ Monitor ☐ Public Supply
☐ Irrigation ☐ Test Well ☐ Injection ☐ De-Watering

5) **DRILLING METHOD (Check):** ☐ Driven
☐ Mud Rotary ☐ Air Hammer ☐ Jetted ☐ Bored
☒ Air Rotary ☐ Cable Tool ☐ Other _____

6) **WELL LOG:** B#1,2,3,4
Date Drilling: 5,7,8,9,10
Started 9-9 1992
Completed 9-10 1992

DIAMETER OF HOLE		
Dia. (in.)	From (ft.)	To (ft.)
3.025	Surface	10

7) **BOREHOLE COMPLETION:**
☐ Open Hole ☐ Straight Wall ☐ Underreamed
☐ Gravel Packed ☒ Other GROUTED
If Gravel Packed give Interval . . . from 0 ft. to 10 ft.

From (ft.)	To (ft.)	Description and color of formation material
0	10	Glen Rose Limestone

(Use reverse side if necessary)

8) **CASING, BLANK PIPE, AND WELL SCREEN DATA:**

Dia. (in.)	New or Used	Steel, Plastic, etc. Perf., Slotted, etc. Screen Mfg., if commercial	Setting (ft.) From	Setting (ft.) To	Gage Casting Screen

9) **CEMENTING DATA** [Rule 287.44(1)]
Cemented from 0 ft. to 10 ft. No. of Sacks Used 4
_____ ft. to _____ ft. No. of Sacks Used _____
Method used _____
Cemented by _____

10) **SURFACE COMPLETION**
☐ Specified Surface Slab Installed [Rule 287.44(2)(A)]
☐ Specified Steel Sleeve Installed [Rule 287.44(3)(A)]
☐ Pitless Adapter Used [Rule 287.44(3)(B)]
☐ Approved Alternative Procedure Used [Rule 287.71]

11) **WATER LEVEL:**
Static level dry ft. below land surface Date 9-10-92
Artesian flow _____ gpm. Date _____

12) **PACKERS:** Type Depth

13) **TYPE PUMP:**
☐ Turbine ☐ Jet ☐ Submersible ☐ Cylinder
☐ Other _____
Depth to pump bowls, cylinder, jet, etc., _____ ft.

14) **WELL TESTS:**
Type Test: ☐ Pump ☐ Bailer ☐ Jetted ☐ Estimated
Yield: _____ gpm with _____ ft. drawdown after _____ hrs.

15) **WATER QUALITY:**
Did you knowingly penetrate any strata which contained undesirable constituents?
☐ Yes ☒ No If yes, submit "REPORT OF UNDESIRABLE WATER"
Type of water? _____ Depth of strata _____
Was a chemical analysis made? ☐ Yes ☒ No

I hereby certify that this well was drilled by me (or under my supervision) and that each and all of the statements herein are true to the best of my knowledge and belief. I understand that failure to complete items 1 thru 15 will result in the log(s) being returned for completion and resubmittal.

COMPANY NAME JEDI (Type or print) **WELL DRILLER'S LICENSE NO.** 2799M

ADDRESS P.O. BOX 18580, (Street or RFD) C.C., TX. (City) 78480 (State) (Zip)

(Signed) _____ (Licensed Well Driller) (Signed) _____ (Registered Driller Trainee)

Please attach electric log, chemical analysis, and other pertinent information, if available.

For TWC use only: Well No. _____ Located on map _____

WWD-012 (Rev. 05-18-90)

WELL OWNER'S COPY

Appendix D

Laboratory Reports and Chain-of-Custody Documents

Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, Texas 78757
512/467-6200 FAX 512/467-7044

CHAIN OF CUSTODY RECORD

PROJECT NO.: AU344.01

PROJECT NAME: CSSA T-14

SAMPLERS (Signatures): [signature] - SUSAN ROBERTS

Analysis Required

DATE	TIME	MATRIX	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	SW 8080 - PCB/pesticide										REMARKS
9/2/92	0810	ROCK	FLOOR - 1	1	X										Preserved on ice
9/2/92	~~0850~~ 0830	ROCK	FLOOR - 2	1	X										Preserved on ice
9/2/92	0850	ROCK	FLOOR - 3	1	X										Preserved on ice

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]	9/2/92	1015	[signature]				
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

White: laboratory returns with data, **yellow**: laboratory copy, **pink**: sampler copy

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/06/92
Chemron Sample #: 19715
Sample Matrix: Soil
Client's Job #: AU344.01
COC #:

Sample Description:
CSSA F-14
Floor - 1

Date Received:
09/02/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<.007	MG/KG	09/04/92	8080
Alpha-BHC	<.007	MG/KG	09/04/92	8080
Beta-BHC	<.007	MG/KG	09/04/92	8080
Delta-BHC	<.007	MG/KG	09/04/92	8080
Gamma-BHC	<.007	MG/KG	09/04/92	8080
Chlordane	<.7	MG/KG	09/04/92	8080
4,4'-DDD	<.007	MG/KG	09/04/92	80
4,4'-DDE	<.007	MG/KG	09/04/92	808
4,4'-DDT	<.007	MG/KG	09/04/92	8080
Dieldrin	<.007	MG/KG	09/04/92	8080
Endosulfan I	<.007	MG/KG	09/04/92	8080
Endosulfan II	<.007	MG/KG	09/04/92	8080
Endosulfan Sulfate	<.007	MG/KG	09/04/92	8080
Endrin	<.007	MG/KG	09/04/92	8080
Endrin Aldehyde	<.007	MG/KG	09/04/92	8080
Heptachlor	<.007	MG/KG	09/04/92	8080
Heptachlor Epoxide	<.007	MG/KG	09/04/92	8080
Methoxychlor	<.007	MG/KG	09/04/92	8080
Toxaphene	<.7	MG/KG	09/04/92	8080

Approved By: R. Oldham

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/06/92
Chemron Sample #: 19716
Sample Matrix: Soil
Client's Job #: AU344.01
COC #:

Sample Description:
CSSA F-14
Floor - 2

Date Received:
09/02/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<.006	MG/KG	09/04/92	8080
Alpha-BHC	<.006	MG/KG	09/04/92	8080
Beta-BHC	<.006	MG/KG	09/04/92	8080
Delta-BHC	<.006	MG/KG	09/04/92	8080
Gamma-BHC	<.006	MG/KG	09/04/92	8080
Chlordane	<.6	MG/KG	09/04/92	8080
4,4'-DDD	<.006	MG/KG	09/04/92	8080
4,4'-DDE	<.006	MG/KG	09/04/92	8080
4,4'-DDT	<.006	MG/KG	09/04/92	8080
Dieldrin	<.006	MG/KG	09/04/92	8080
Endosulfan I	<.006	MG/KG	09/04/92	8080
Endosulfan II	<.006	MG/KG	09/04/92	8080
Endosulfan Sulfate	<.006	MG/KG	09/04/92	8080
Endrin	<.006	MG/KG	09/04/92	8080
Endrin Aldehyde	<.006	MG/KG	09/04/92	8080
Heptachlor	<.006	MG/KG	09/04/92	8080
Heptachlor Epoxide	<.006	MG/KG	09/04/92	8080
Methoxychlor	<.006	MG/KG	09/04/92	8080
Toxaphene	<.6	MG/KG	09/04/92	8080

Approved By: R. Oldham

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81[illegible]

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/06/92
Chemron Sample #: 19717
Sample Matrix: Soil
Client's Job #: AU344.01
COC #:

Sample Description:
CSSA F-14
Floor - 3

Date Received:
09/02/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<.006	MG/KG	09/04/92	8080
Alpha-BHC	<.006	MG/KG	09/04/92	8080
Beta-BHC	<.006	MG/KG	09/04/92	8080
Delta-BHC	<.006	MG/KG	09/04/92	8080
Gamma-BHC	<.006	MG/KG	09/04/92	8080
Chlordane	<.6	MG/KG	09/04/92	8080
4,4'-DDD	<.006	MG/KG	09/04/92	80[illegible]
4,4'-DDE	<.006	MG/KG	09/04/92	8080
4,4'-DDT	<.006	MG/KG	09/04/92	8080
Dieldrin	<.006	MG/KG	09/04/92	8080
Endosulfan I	<.006	MG/KG	09/04/92	8080
Endosulfan II	<.006	MG/KG	09/04/92	8080
Endosulfan Sulfate	<.006	MG/KG	09/04/92	8080
Endrin	<.006	MG/KG	09/04/92	8080
Endrin Aldehyde	<.006	MG/KG	09/04/92	8080
Heptachlor	<.006	MG/KG	09/04/92	8080
Heptachlor Epoxide	<.006	MG/KG	09/04/92	8080
Methoxychlor	<.006	MG/KG	09/04/92	8080
Toxaphene	<.6	MG/KG	09/04/92	8080

Approved By: R. Oldmann

Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, Texas 78757
512/467-6200 FAX 512/467-7044

CHAIN OF CUSTODY RECORD

PROJECT NO. AU 334.01

PROJECT NAME CSSA F14 Assessment

SAMPLERS (Signatures) Jeff Davis, Susan Roberts

	DATE	TIME	MATRIX	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	418.1	8240	8080	7520	8270	8150	8140			REMARKS
Cilmadost 20043	9-9-92	1030	Soil	B1-2.5	2	X	X	X	X	X	~~X~~				Preserved on ice.
20044	↓	1050	↓	B1-9.0	↓	↓	↓	↓	↓	↓	↓				↓
20045		1327		B2-1.0							X				RUN THIS SAMPLE ONLY FOR 8140
20046		1404		B2-9.0											
20047		1448		B3-1.0											
20048		1503		B3-8.0											
20049		1550		B4-2.0											
20050		1610		B4-9.0											
20051		1637		B5-1.0											
20052	↓	1658	↓	B5-9.0	↓	↓	↓	↓	↓	↓	↓				↓

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Susan Roberts	9/11/92	1800	[signature] 8/11/92 18:00				
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

White: laboratory returns with data, **yellow:** laboratory copy, **pink:** sampler copy

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Client's Job #: AU334.01
COC #:
Report Date: 09/16/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/09/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	Date Analyzed	TPH (PPM)
20043	CSSA F14 Assessment B1-2.5	Soil	09/15/92	49.
20044	CSSA F14 Assessment B1-9.0	Soil	09/15/92	68.
20045	CSSA F14 Assessment B2-1.0	Soil	09/15/92	< 10.
20046	CSSA F14 Assessment B2-9.0	Soil	09/15/92	30.
20047	CSSA F14 Assessment B3-1.0	Soil	09/15/92	36.
20048	CSSA F14 Assessment B3-8.0	Soil	09/15/92	53.
20049	CSSA F14 Assessment B4-2.0	Soil	09/15/92	20.
20050	CSSA F14 Assessment B4-9.0	Soil	09/15/92	63.
20051	CSSA F14 Assessment B5-1.0	Soil	09/15/92	14.
20052	CSSA F14 Assessment B5-9.0	Soil	09/15/92	37.

Approved By: R. Eidman

Analytical Methods: TPH in Soil - 3540/418.1 or 3550/418.1, TPH in Water - 418.1

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/28/92
Chemron Sample #: 20043
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B1-2.5

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.3	mg/kg	9/17/92	8260
Acrylonitrile	<1.3	mg/kg	9/17/92	8260
Benzene	<0.3	mg/kg	9/17/92	8260
Bromodichloromethane	<0.3	mg/kg	9/17/92	8260
Bromoform	<0.3	mg/kg	9/17/92	8260
Bromomethane	<0.5	mg/kg	9/17/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/17/92	8260
Chlorobenzene	<0.3	mg/kg	9/17/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/17/92	8260
Chloroethane	<0.7	mg/kg	9/17/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/17/92	8260
Chloroform	<0.4	mg/kg	9/17/92	8260
Chloromethane	<0.7	mg/kg	9/17/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/17/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
Dichlorodifluoromethane	<0.7	mg/kg	9/17/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/17/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/17/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/17/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
Ethylbenzene	<0.3	mg/kg	9/17/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/17/92	8260
Methylene Chloride	<1.9	mg/kg	9/17/92	8260
MEK	<3.3	mg/kg	9/17/92	8260
Styrene	<0.3	mg/kg	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
Tetrachloroethene	<0.3	mg/kg	9/17/92	8260
Toluene	<0.3	mg/kg	9/17/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/17/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/17/92	8260
Trichloroethene	<0.3	mg/kg	9/17/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/17/92	8260
Trichloropropane	<0.3	mg/kg	9/17/92	8260
m/p Xylene	<0.6	mg/kg	9/17/92	8260
o Xylene	<0.3	mg/kg	9/17/92	8260
Vinyl Chloride	<0.7	mg/kg	9/17/92	8260

Approved by: R. Oldham

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/28/92
Chemron Sample #: 20044
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B1-9.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.4	mg/kg	9/17/92	8260
Acrylonitrile	<1.4	mg/kg	9/17/92	8260
Benzene	<0.3	mg/kg	9/17/92	8260
Bromodichloromethane	<0.3	mg/kg	9/17/92	8260
Bromoform	<0.3	mg/kg	9/17/92	8260
Bromomethane	<0.5	mg/kg	9/17/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/17/92	8260
Chlorobenzene	<0.3	mg/kg	9/17/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/17/92	8260
Chloroethane	<0.8	mg/kg	9/17/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/17/92	8260
Chloroform	<0.4	mg/kg	9/17/92	8260
Chloromethane	<0.8	mg/kg	9/17/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/17/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/17/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/17/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/17/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/17/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
Ethylbenzene	<0.3	mg/kg	9/17/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/17/92	8260
Methylene Chloride	<1.9	mg/kg	9/17/92	8260
MEK	<3.4	mg/kg	9/17/92	8260
Styrene	<0.3	mg/kg	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
Tetrachloroethene	<0.3	mg/kg	9/17/92	8260
Toluene	<0.3	mg/kg	9/17/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/17/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/17/92	8260
Trichloroethene	<0.3	mg/kg	9/17/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/17/92	8260
Trichloropropane	<0.3	mg/kg	9/17/92	8260
m/p Xylene	<0.6	mg/kg	9/17/92	8260
o Xylene	<0.3	mg/kg	9/17/92	8260
Vinyl Chloride	<0.8	mg/kg	9/17/92	8260

Approved by: R. Eldman

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/28/92
Chemron Sample #: 20045
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B2-1.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.3	mg/kg	9/17/92	8260
Acrylonitrile	<1.3	mg/kg	9/17/92	8260
Benzene	<0.3	mg/kg	9/17/92	8260
Bromodichloromethane	<0.3	mg/kg	9/17/92	8260
Bromoform	<0.3	mg/kg	9/17/92	8260
Bromomethane	<0.5	mg/kg	9/17/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/17/92	8260
Chlorobenzene	<0.3	mg/kg	9/17/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/17/92	8260
Chloroethane	<0.7	mg/kg	9/17/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/17/92	8260
Chloroform	<0.4	mg/kg	9/17/92	8260
Chloromethane	<0.7	mg/kg	9/17/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/17/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
Dichlorodifluoromethane	<0.7	mg/kg	9/17/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/17/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/17/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/17/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
Ethylbenzene	<0.3	mg/kg	9/17/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/17/92	8260
Methylene Chloride	<1.8	mg/kg	9/17/92	8260
MEK	<3.3	mg/kg	9/17/92	8260
Styrene	<0.3	mg/kg	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
Tetrachloroethene	<0.3	mg/kg	9/17/92	8260
Toluene	<0.3	mg/kg	9/17/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/17/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/17/92	8260
Trichloroethene	<0.3	mg/kg	9/17/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/17/92	8260
Trichloropropane	<0.3	mg/kg	9/17/92	8260
m/p Xylene	<0.6	mg/kg	9/17/92	8260
o Xylene	<0.3	mg/kg	9/17/92	8260
Vinyl Chloride	<0.7	mg/kg	9/17/92	8260

Approved by: R. Alcaraz

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-817

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/28/92
Chemron Sample #: 20046
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B2-9.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.4	mg/kg	9/17/92	8260
Acrylonitrile	<1.4	mg/kg	9/17/92	8260
Benzene	<0.3	mg/kg	9/17/92	8260
Bromodichloromethane	<0.3	mg/kg	9/17/92	8260
Bromoform	<0.3	mg/kg	9/17/92	8260
Bromomethane	<0.5	mg/kg	9/17/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/17/92	8260
Chlorobenzene	<0.3	mg/kg	9/17/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/17/92	8260
Chloroethane	<0.8	mg/kg	9/17/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/17/92	8260
Chloroform	<0.4	mg/kg	9/17/92	8260
Chloromethane	<0.8	mg/kg	9/17/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/17/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/17/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/17/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/17/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/17/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
Ethylbenzene	<0.3	mg/kg	9/17/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/17/92	8260
Methylene Chloride	<1.9	mg/kg	9/17/92	8260
MEK	<3.4	mg/kg	9/17/92	8260
Styrene	<0.3	mg/kg	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
Tetrachloroethene	<0.3	mg/kg	9/17/92	8260
Toluene	<0.3	mg/kg	9/17/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/17/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/17/92	8260
Trichloroethene	<0.3	mg/kg	9/17/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/17/92	8260
Trichloropropane	<0.3	mg/kg	9/17/92	8260
m/p Xylene	<0.6	mg/kg	9/17/92	8260
o Xylene	<0.3	mg/kg	9/17/92	8260
Vinyl Chloride	<0.8	mg/kg	9/17/92	8260

Approved by: R. Altman

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/28/92
Chemron Sample #: 20047
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B3-1.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.3	mg/kg	9/17/92	8260
Acrylonitrile	<1.3	mg/kg	9/17/92	8260
Benzene	<0.3	mg/kg	9/17/92	8260
Bromodichloromethane	<0.3	mg/kg	9/17/92	8260
Bromoform	<0.3	mg/kg	9/17/92	8260
Bromomethane	<0.5	mg/kg	9/17/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/17/92	8260
Chlorobenzene	<0.3	mg/kg	9/17/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/17/92	8260
Chloroethane	<0.7	mg/kg	9/17/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/17/92	8260
Chloroform	<0.4	mg/kg	9/17/92	8260
Chloromethane	<0.7	mg/kg	9/17/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/17/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
Dichlorodifluoromethane	<0.7	mg/kg	9/17/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/17/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/17/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/17/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
Ethylbenzene	<0.3	mg/kg	9/17/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/17/92	8260
Methylene Chloride	<1.8	mg/kg	9/17/92	8260
MEK	<3.3	mg/kg	9/17/92	8260
Styrene	<0.3	mg/kg	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
Tetrachloroethene	<0.3	mg/kg	9/17/92	8260
Toluene	<0.3	mg/kg	9/17/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/17/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/17/92	8260
Trichloroethene	<0.3	mg/kg	9/17/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/17/92	8260
Trichloropropane	<0.3	mg/kg	9/17/92	8260
m/p Xylene	<0.6	mg/kg	9/17/92	8260
o Xylene	<0.3	mg/kg	9/17/92	8260
Vinyl Chloride	<0.7	mg/kg	9/17/92	8260

Approved by: R. Al Chacon

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/28/92
Chemron Sample #: 20048
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B3-8.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.3	mg/kg	9/17/92	8260
Acrylonitrile	<1.3	mg/kg	9/17/92	8260
Benzene	<0.3	mg/kg	9/17/92	8260
Bromodichloromethane	<0.3	mg/kg	9/17/92	8260
Bromoform	<0.3	mg/kg	9/17/92	8260
Bromomethane	<0.5	mg/kg	9/17/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/17/92	8260
Chlorobenzene	<0.3	mg/kg	9/17/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/17/92	8260
Chloroethane	<0.7	mg/kg	9/17/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/17/92	8260
Chloroform	<0.4	mg/kg	9/17/92	8260
Chloromethane	<0.7	mg/kg	9/17/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/17/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
Dichlorodifluoromethane	<0.7	mg/kg	9/17/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/17/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/17/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/17/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
Ethylbenzene	<0.3	mg/kg	9/17/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/17/92	8260
Methylene Chloride	<1.8	mg/kg	9/17/92	8260
MEK	<3.3	mg/kg	9/17/92	8260
Styrene	<0.3	mg/kg	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
Tetrachloroethene	<0.3	mg/kg	9/17/92	8260
Toluene	<0.3	mg/kg	9/17/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/17/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/17/92	8260
Trichloroethene	<0.3	mg/kg	9/17/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/17/92	8260
Trichloropropane	<0.3	mg/kg	9/17/92	8260
m/p Xylene	<0.6	mg/kg	9/17/92	8260
o Xylene	<0.3	mg/kg	9/17/92	8260
Vinyl Chloride	<0.7	mg/kg	9/17/92	8260

Approved by: R. Adcock

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20049
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B4-2.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.4	mg/kg	9/17/92	8260
Acrylonitrile	<1.4	mg/kg	9/17/92	8260
Benzene	<0.3	mg/kg	9/17/92	8260
Bromodichloromethane	<0.3	mg/kg	9/17/92	8260
Bromoform	<0.3	mg/kg	9/17/92	8260
Bromomethane	<0.5	mg/kg	9/17/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/17/92	8260
Chlorobenzene	<0.3	mg/kg	9/17/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/17/92	8260
Chloroethane	<0.8	mg/kg	9/17/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/17/92	8260
Chloroform	<0.4	mg/kg	9/17/92	8260
Chloromethane	<0.8	mg/kg	9/17/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/17/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/17/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/17/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/17/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/17/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
Ethylbenzene	<0.3	mg/kg	9/17/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/17/92	8260
Methylene Chloride	<1.9	mg/kg	9/17/92	8260
MEK	<3.4	mg/kg	9/17/92	8260
Styrene	<0.3	mg/kg	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
Tetrachloroethene	<0.3	mg/kg	9/17/92	8260
Toluene	<0.3	mg/kg	9/17/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/17/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/17/92	8260
Trichloroethene	<0.3	mg/kg	9/17/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/17/92	8260
Trichloropropane	<0.3	mg/kg	9/17/92	8260
m/p Xylene	<0.6	mg/kg	9/17/92	8260
o Xylene	<0.3	mg/kg	9/17/92	8260
Vinyl Chloride	<0.8	mg/kg	9/17/92	8260

Approved by: R. Richmann

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-812

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/28/92
Chemron Sample #: 20050
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B4-9.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.4	mg/kg	9/17/92	8260
Acrylonitrile	<1.4	mg/kg	9/17/92	8260
Benzene	<0.3	mg/kg	9/17/92	8260
Bromodichloromethane	<0.3	mg/kg	9/17/92	8260
Bromoform	<0.3	mg/kg	9/17/92	8260
Bromomethane	<0.5	mg/kg	9/17/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/17/92	8260
Chlorobenzene	<0.3	mg/kg	9/17/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/17/92	8260
Chloroethane	<0.8	mg/kg	9/17/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/17/92	8260
Chloroform	<0.4	mg/kg	9/17/92	8260
Chloromethane	<0.8	mg/kg	9/17/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/17/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/17/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/17/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/17/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/17/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/17/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/17/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/17/92	8260
Ethylbenzene	<0.3	mg/kg	9/17/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/17/92	8260
Methylene Chloride	<1.9	mg/kg	9/17/92	8260
MEK	<3.4	mg/kg	9/17/92	8260
Styrene	<0.3	mg/kg	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/17/92	8260
Tetrachloroethene	<0.3	mg/kg	9/17/92	8260
Toluene	<0.3	mg/kg	9/17/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/17/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/17/92	8260
Trichloroethene	<0.3	mg/kg	9/17/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/17/92	8260
Trichloropropane	<0.3	mg/kg	9/17/92	8260
m/p Xylene	<0.6	mg/kg	9/17/92	8260
o Xylene	<0.3	mg/kg	9/17/92	8260
Vinyl Chloride	<0.8	mg/kg	9/17/92	8260

Approved by: R. Adcock

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20051
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B5-1.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.4	mg/kg	9/23/92	8260
Acrylonitrile	<1.4	mg/kg	9/23/92	8260
Benzene	<0.3	mg/kg	9/23/92	8260
Bromodichloromethane	<0.3	mg/kg	9/23/92	8260
Styrene	<0.3	mg/kg	9/23/92	8260
Bromomethane	<0.5	mg/kg	9/23/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/23/92	8260
Chlorobenzene	<0.3	mg/kg	9/23/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/23/92	8260
Chloroethane	<0.8	mg/kg	9/23/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/23/92	8260
Chloroform	<0.4	mg/kg	9/23/92	8260
Chloromethane	<0.8	mg/kg	9/23/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/23/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/23/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/23/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/23/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/23/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/23/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/23/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
Ethylbenzene	<0.3	mg/kg	9/23/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/23/92	8260
Methylene Chloride	<1.9	mg/kg	9/23/92	8260
MEK	<3.4	mg/kg	9/23/92	8260
Bromoform	<0.3	mg/kg	9/23/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
Tetrachloroethene	<0.3	mg/kg	9/23/92	8260
Toluene	<0.3	mg/kg	9/23/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/23/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/23/92	8260
Trichloroethene	<0.3	mg/kg	9/23/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/23/92	8260
Trichloropropane	<0.3	mg/kg	9/23/92	8260
m/p Xylene	<0.6	mg/kg	9/23/92	8260
o Xylene	<0.3	mg/kg	9/23/92	8260
Vinyl Chloride	<0.8	mg/kg	9/23/92	8260

Approved by: R. Alcaraz

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20052
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/9/92

Sample Description:
CSSA F14 Assessment
B5-9.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.2	mg/kg	9/23/92	8260
Acrylonitrile	<1.2	mg/kg	9/23/92	8260
Benzene	<0.3	mg/kg	9/23/92	8260
Bromodichloromethane	<0.3	mg/kg	9/23/92	8260
Styrene	<0.3	mg/kg	9/23/92	8260
Bromomethane	<0.5	mg/kg	9/23/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/23/92	8260
Chlorobenzene	<0.3	mg/kg	9/23/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/23/92	8260
Chloroethane	<0.7	mg/kg	9/23/92	8260
2-Chloroethyl vinyl ether	<0.3	mg/kg	9/23/92	8260
Chloroform	<0.3	mg/kg	9/23/92	8260
Chloromethane	<0.7	mg/kg	9/23/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/23/92	8260
1.3 Dichlorobenzene	<0.3	mg/kg	9/23/92	8260
1,4 Dichlorobenzene	<0.3	mg/kg	9/23/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/23/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/23/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/23/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/23/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
Ethylbenzene	<0.3	mg/kg	9/23/92	8260
Ethylene-di-bromide	<0.3	mg/kg	9/23/92	8260
Methylene Chloride	<1.7	mg/kg	9/23/92	8260
MEK	<3.1	mg/kg	9/23/92	8260
Bromoform	<0.3	mg/kg	9/23/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
Tetrachloroethene	<0.3	mg/kg	9/23/92	8260
Toluene	<0.3	mg/kg	9/23/92	8260
1,1,1 Trichloroethane	<0.3	mg/kg	9/23/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/23/92	8260
Trichloroethene	<0.3	mg/kg	9/23/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/23/92	8260
Trichloropropane	<0.3	mg/kg	9/23/92	8260
m/p Xylene	<0.5	mg/kg	9/23/92	8260
o Xylene	<0.3	mg/kg	9/23/92	8260
Vinyl Chloride	<0.7	mg/kg	9/23/92	8260

Approved by: R. Al Ahmar

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20043
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B1-2.5

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
C[illegible]ordane	<4.7	UG/KG	09/30/92	8080
[illegible]'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: N. Elaman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-812

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20044
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B1-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	8080
4,4'-DDD	<3.7	UG/KG	09/30/92	808
4,4'-DDE	<1.3	UG/KG	09/30/92	808
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Claman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20045
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B2-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
C[illegible]ordane	<4.7	UG/KG	09/30/92	8080
4 -DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: N. Eldridge

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20046
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B2-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	808
4,4'-DDD	<3.7	UG/KG	09/30/92	80
4,4'-DDE	<1.3	UG/KG	09/30/92	808
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Oldham

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20047
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B3-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
C[illegible]ordane	<4.7	UG/KG	09/30/92	8080
[illegible]'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Ellman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20048
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B3-8.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	808
4,4'-DDD	<3.7	UG/KG	09/30/92	80
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Eckman

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20049
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B4-2.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
`ordane	<4.7	UG/KG	09/30/92	8080
,'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Adams

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20050
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B4-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	8080
4,4'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Adams

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20051
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B5-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
[illegible]ordane	<4.7	UG/KG	09/30/92	8080
[illegible]'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Clarcum

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20052
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B5-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	8080
4,4'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Alcaraz

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

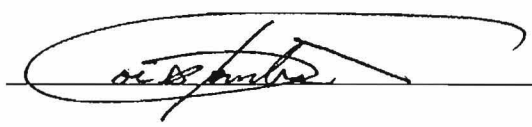
Client's Job #: AU334.01
COC #:
Report Date: 10/15/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/09/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Date Analyzed	Total Nickel (PPM)
20043	CSSA F14 Assessment B1-2.5	09/22/92	6.5
20044	CSSA F14 Assessment B1-9.0	09/22/92	< 1.0
45	CSSA F14 Assessment B2-1.0	09/22/92	< 1.5
20046	CSSA F14 Assessment B2-9.0	09/22/92	2.0
20047	CSSA F14 Assessment B3-1.0	09/22/92	4.8
20048	CSSA F14 Assessment B3-8.0	09/22/92	1.3
20049	CSSA F14 Assessment B4-2.0	09/22/92	4.8
20050	CSSA F14 Assessment B4-9.0	09/22/92	12.
20051	CSSA F14 Assessment B5-1.0	09/22/92	8.3
20052	CSSA F14 Assessment B5-9.0	09/22/92	10.

Approved By: 

Analytical Methods: Solids/Soils - 3050/7520; Water - 3005/7520

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20043
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B1-2.5

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	827[illegible]
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	82
Benzidine	<200.	UG/KG	10/12/92	827[illegible]
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R. Oldham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20043
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B1-2.5

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
[illegible]achlorobutadiene	<100.	UG/KG	10/12/92	8270
[illegible]achloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Claman

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20044
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B1-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	827
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	82
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R. Eldridge

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20044
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B1-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
achlorobutadiene	<100.	UG/KG	10/12/92	8270
achloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Oldham

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20045
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B2-1.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: N. Oldham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20045
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B2-1.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Ellman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20046
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B2-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	82
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	82
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R. Adman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20046
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B2-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
achlorobutadiene	<100.	UG/KG	10/12/92	8270
achloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Adams

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20047
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B3-1.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	827
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	82
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R. Oldham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20047
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B3-1.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
achlorobutadiene	<100.	UG/KG	10/12/92	8270
xachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Oldham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20048
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B3-8.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R. Adam

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20048
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B3-8.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
achlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Adams

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20049
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B4-2.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R. Oldham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20049
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B4-2.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
achlorobutadiene	<100.	UG/KG	10/12/92	8270
achloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Adam

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INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20050
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B4-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R. Aldham

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INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20050
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B4-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
·achlorobutadiene	<100.	UG/KG	10/12/92	8270
.achloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Aldman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20051
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B5-1.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	827
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	82
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R. Aldman

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20051
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B5-1.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Adams

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20052
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B5-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	82
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	82
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: R Adcock

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20052
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/09/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B5-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
[illegible]achlorobutadiene	<100.	UG/KG	10/12/92	8270
[illegible]achloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Al Ahmad

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Client's Job #: AU334.01
COC #:
Report Date: 09/16/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/09/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	Date Analyzed	TPH (PPM)
20043	CSSA F14 Assessment B1-2.5	Soil	09/15/92	49
20044	CSSA F14 Assessment B1-9.0	Soil	09/15/92	68.
20045	CSSA F14 Assessment B2-1.0	Soil	09/15/92	< 10.
20046	CSSA F14 Assessment B2-9.0	Soil	09/15/92	30.
20047	CSSA F14 Assessment B3-1.0	Soil	09/15/92	36.
20048	CSSA F14 Assessment B3-8.0	Soil	09/15/92	53.
20049	CSSA F14 Assessment B4-2.0	Soil	09/15/92	20.
20050	CSSA F14 Assessment B4-9.0	Soil	09/15/92	63.
20051	CSSA F14 Assessment B5-1.0	Soil	09/15/92	14.
20052	CSSA F14 Assessment B5-9.0	Soil	09/15/92	37.

Approved By: R. Oldham

Analytical Methods: TPH in Soil - 3540/418.1 or 3550/418.1, TPH in Water - 418.1

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20043
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B1-2.5

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
[illegible],5-T	<70.	UG/KG	10/05/92	8150
[illegible]-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Graham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20044
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B1-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	81
Dinoseb	<23.	UG/KG	10/05/92	815

Approved By: N. Abraham

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20045
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B2-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	MG/KG	10/05/92	8150
Dicamba	<90.	MG/KG	10/05/92	8150
Dichloroprop	<220.	MG/KG	10/05/92	8150
2,4-D	<400.	MG/KG	10/05/92	8150
Silvex	<60.	MG/KG	10/05/92	8150
[illegible],5-T	<70.	MG/KG	10/05/92	8150
[illegible]-DB	<300.	MG/KG	10/05/92	8150
Dinoseb	<23.	MG/KG	10/05/92	8150

Approved By: R. Williams

CHEMRON
INCORPORATED

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20046
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B2-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	81
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Adkins

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20047
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B3-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Richman

CHEMRON
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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20048
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B3-8.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	81
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Adams

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20049
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B4-2.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
? ',5-T	<70.	UG/KG	10/05/92	8150
. -DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Oldham

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-812

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20050
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B4-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: N. Adman

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20051
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B5-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
' ',5-T	<70.	UG/KG	10/05/92	8150
. .-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Adams

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20052
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B5-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	81
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Adams

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/05/92
Chemron Sample #: 20045
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B2-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Azinophos methyl	<.10	UG/KG	09/22/92	8140
Bolstar (Sulprofos)	<.07	UG/KG	09/22/92	8140
Chlorpyrifos	<.07	UG/KG	09/22/92	8140
Coumaphos	<.20	UG/KG	09/22/92	8140
Demeton, O, S	<.12	UG/KG	09/22/92	8140
[illegible]zinon	<.20	UG/KG	09/22/92	8140
[illegible]hlorvos	<.80	UG/KG	09/22/92	8140
Dimethoate	<.26	UG/KG	09/22/92	8140
Disulfoton	<.07	UG/KG	09/22/92	8140
EPN	<.04	UG/KG	09/22/92	8140
Ethoprop	<.20	UG/KG	09/22/92	8140
Fensulfothion	<.08	UG/KG	09/22/92	8140
Fenthion	<.08	UG/KG	09/22/92	8140
Malathion	<.11	UG/KG	09/22/92	8140
Merphos	<.20	UG/KG	09/22/92	8140
Mevinphos	<.50	UG/KG	09/22/92	8140
Naled	<.50	UG/KG	09/22/92	8140
Parathion - ethyl	<.06	UG/KG	09/22/92	8140
Parathion - methyl	<.12	UG/KG	09/22/92	8140
Phorate	<.04	UG/KG	09/22/92	8140
Ronnel	<.07	UG/KG	09/22/92	8140
Sulfotep	<.07	UG/KG	09/22/92	8140
TEPP	<.80	UG/KG	09/22/92	8140
Tetrachlorovinphos	<.80	UG/KG	09/22/92	8140
Tokuthion (Protothiofos)	<.07	UG/KG	09/22/92	8140
Trichloronate	<.80	UG/KG	09/22/92	8140

Approved By: R. Oldham

Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, Texas 78757
512/467-6200 FAX 512/467-7044

CHAIN OF CUSTODY RECORD

PROJECT NO. AU344.01

PROJECT NAME CSSA F14 Assessment

SAMPLERS (Signatures) Susan Roberts

DATE	TIME	MATRIX	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	418.1	8240	8080	7520	8270	8150	8140	REMARKS	CHRON
9/10/92	0912	soil	B6 - 1.5	2	X	X	X	X	X	X		Preserved on ice	20053
	1030		B6 - 17.7	2									20054
	1145		B7 - 1.0	2									20055
	1145		B7 - 9.0	2									20056
	1320		B8 - 2.5	2									20057
	1341		B8 - 9.0	2									20058
	~~1405~~ 1401		B9 - 2.9	2									20059
	1420		B9 - 9.0	2									20060
	1445		B10 - 1.5	2									20061
	1505		B10 - 9.0	2									20062
	1620		Cuttings 1	2							X		20063
	1630		Berm 1	2							X		20064

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Susan Roberts	9/11/92	1800	[signature] 9/11/92 18:00				
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

White: laboratory returns with data, **yellow**: laboratory copy, **pink**: sampler copy

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Client's Job #: AU334.01
COC #:
Report Date: 09/16/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/10/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	Date Analyzed	TPH (PPM)
053	CSSA F14 Assessment B6-1.5	Soil	09/16/92	26.
20054	CSSA F14 Assessment B6-17.7	Soil	09/16/92	67.
20055	CSSA F14 Assessment B7-1.0	Soil	09/16/92	< 10.
20056	CSSA F14 Assessment B7-9.0	Soil	09/16/92	43.
20057	CSSA F14 Assessment B8-2.5	Soil	09/16/92	49.
20058	CSSA F14 Assessment B8-9.0	Soil	09/16/92	18.
20059	CSSA F14 Assessment B9-2.9	Soil	09/16/92	27.
20060	CSSA F14 Assessment B9-9.0	Soil	09/16/92	13.
20061	CSSA F14 Assessment B10-1.5	Soil	09/16/92	30.
20062	CSSA F14 Assessment B10-9.0	Soil	09/16/92	14.

Approved By: R. Oldmann

Analytical Methods: TPH in Soil - 3540/418.1 or 3550/418.1, TPH in Water - 418.1

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Client's Job #: AU334.01
COC #:
Report Date: 09/16/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/10/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	Date Analyzed	TPH (PPM)
20063	CSSA F14 Assessment Cuttings 1	Soil	09/16/92	< 10.
20064	CSSA F14 Assessment Berm 1	Soil	09/16/92	30.

Approved By: R. Adams

Analytical Methods: TPH in Soil - 3540/418.1 or 3550/418.1, TPH in Water - 418.1

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Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/28/92
Chemron Sample #: 20053
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B6-1.5

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.3	mg/kg	9/18/92	8260
Acrylonitrile	<1.3	mg/kg	9/18/92	8260
Benzene	<0.3	mg/kg	9/18/92	8260
Bromodichloromethane	<0.3	mg/kg	9/18/92	8260
Bromoform	<0.3	mg/kg	9/18/92	8260
Bromomethane	<0.5	mg/kg	9/18/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/18/92	8260
Chlorobenzene	<0.3	mg/kg	9/18/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/18/92	8260
Chloroethane	<0.7	mg/kg	9/18/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/18/92	8260
Chloroform	<0.4	mg/kg	9/18/92	8260
Chloromethane	<0.7	mg/kg	9/18/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/18/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/18/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/18/92	8260
Dichlorodifluoromethane	<0.7	mg/kg	9/18/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/18/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/18/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/18/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/18/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/18/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/18/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/18/92	8260
Ethylbenzene	<0.3	mg/kg	9/18/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/18/92	8260
Methylene Chloride	<1.9	mg/kg	9/18/92	8260
MEK	<3.4	mg/kg	9/18/92	8260
Styrene	<0.3	mg/kg	9/18/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/18/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/18/92	8260
Tetrachloroethene	<0.3	mg/kg	9/18/92	8260
Toluene	<0.3	mg/kg	9/18/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/18/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/18/92	8260
Trichloroethene	<0.3	mg/kg	9/18/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/18/92	8260
Trichloropropane	<0.3	mg/kg	9/18/92	8260
m/p Xylene	<0.6	mg/kg	9/18/92	8260
o Xylene	<0.3	mg/kg	9/18/92	8260
Vinyl Chloride	<0.7	mg/kg	9/18/92	8260

Approved by: R. Adams

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Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20054
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B6-17.7

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.3	mg/kg	9/18/92	8260
Acrylonitrile	<1.3	mg/kg	9/18/92	8260
Benzene	<0.3	mg/kg	9/18/92	8260
Bromodichloromethane	<0.3	mg/kg	9/18/92	8260
Bromoform	<0.3	mg/kg	9/18/92	8260
Bromomethane	<0.5	mg/kg	9/18/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/18/92	8260
Chlorobenzene	<0.3	mg/kg	9/18/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/18/92	8260
Chloroethane	<0.7	mg/kg	9/18/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/18/92	8260
Chloroform	<0.4	mg/kg	9/18/92	8260
Chloromethane	<0.7	mg/kg	9/18/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/18/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/18/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/18/92	8260
Dichlorodifluoromethane	<0.7	mg/kg	9/18/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/18/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/18/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/18/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/18/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/18/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/18/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/18/92	8260
Ethylbenzene	<0.3	mg/kg	9/18/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/18/92	8260
Methylene Chloride	<1.9	mg/kg	9/18/92	8260
MEK	<3.4	mg/kg	9/18/92	8260
Styrene	<0.3	mg/kg	9/18/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/18/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/18/92	8260
Tetrachloroethene	<0.3	mg/kg	9/18/92	8260
Toluene	<0.3	mg/kg	9/18/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/18/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/18/92	8260
Trichloroethene	<0.3	mg/kg	9/18/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/18/92	8260
Trichloropropane	<0.3	mg/kg	9/18/92	8260
m/p Xylene	<0.6	mg/kg	9/18/92	8260
o Xylene	<0.3	mg/kg	9/18/92	8260
Vinyl Chloride	<0.7	mg/kg	9/18/92	8260

Approved by: R. Adcock

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Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20055
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B7-1.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.3	mg/kg	9/23/92	8260
Acrylonitrile	<1.3	mg/kg	9/23/92	8260
Benzene	<0.3	mg/kg	9/23/92	8260
Bromodichloromethane	<0.3	mg/kg	9/23/92	8260
Styrene	<0.3	mg/kg	9/23/92	8260
Bromomethane	<0.5	mg/kg	9/23/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/23/92	8260
Chlorobenzene	<0.3	mg/kg	9/23/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/23/92	8260
Chloroethane	<0.7	mg/kg	9/23/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/23/92	8260
Chloroform	<0.4	mg/kg	9/23/92	8260
Chloromethane	<0.7	mg/kg	9/23/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/23/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/23/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/23/92	8260
Dichlorodifluoromethane	<0.7	mg/kg	9/23/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/23/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/23/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/23/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
Ethylbenzene	<0.3	mg/kg	9/23/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/23/92	8260
Methylene Chloride	<1.8	mg/kg	9/23/92	8260
MEK	<3.2	mg/kg	9/23/92	8260
Bromoform	<0.3	mg/kg	9/23/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
Tetrachloroethene	<0.3	mg/kg	9/23/92	8260
Toluene	<0.3	mg/kg	9/23/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/23/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/23/92	8260
Trichloroethene	<0.3	mg/kg	9/23/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/23/92	8260
Trichloropropane	<0.3	mg/kg	9/23/92	8260
m/p Xylene	<0.6	mg/kg	9/23/92	8260
o Xylene	<0.3	mg/kg	9/23/92	8260
Vinyl Chloride	<0.7	mg/kg	9/23/92	8260

Approved by: R. Adam

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Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20056
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B7-9.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.4	mg/kg	9/23/92	8260
Acrylonitrile	<1.4	mg/kg	9/23/92	8260
Benzene	<0.3	mg/kg	9/23/92	8260
Bromodichloromethane	<0.3	mg/kg	9/23/92	8260
Styrene	<0.3	mg/kg	9/23/92	8260
Bromomethane	<0.5	mg/kg	9/23/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/23/92	8260
Chlorobenzene	<0.3	mg/kg	9/23/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/23/92	8260
Chloroethane	<0.8	mg/kg	9/23/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/23/92	8260
Chloroform	<0.4	mg/kg	9/23/92	8260
Chloromethane	<0.8	mg/kg	9/23/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	9/23/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/23/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/23/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/23/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/23/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/23/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/23/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
Ethylbenzene	<0.3	mg/kg	9/23/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/23/92	8260
Methylene Chloride	<1.9	mg/kg	9/23/92	8260
MEK	<3.5	mg/kg	9/23/92	8260
Bromoform	<0.3	mg/kg	9/23/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
Tetrachloroethene	<0.3	mg/kg	9/23/92	8260
Toluene	<0.3	mg/kg	9/23/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/23/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/23/92	8260
Trichloroethene	<0.3	mg/kg	9/23/92	8260
Trichlorofluoromethane	<0.5	mg/kg	9/23/92	8260
Trichloropropane	<0.3	mg/kg	9/23/92	8260
m/p Xylene	<0.6	mg/kg	9/23/92	8260
o Xylene	<0.3	mg/kg	9/23/92	8260
Vinyl Chloride	<0.8	mg/kg	9/23/92	8260

Approved by: R. Adams

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Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20057
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B8-2.5

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.5	mg/kg	9/23/92	8260
Acrylonitrile	<1.5	mg/kg	9/23/92	8260
Benzene	<0.3	mg/kg	9/23/92	8260
Bromodichloromethane	<0.3	mg/kg	9/23/92	8260
Styrene	<0.3	mg/kg	9/23/92	8260
Bromomethane	<0.6	mg/kg	9/23/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/23/92	8260
Chlorobenzene	<0.3	mg/kg	9/23/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/23/92	8260
Chloroethane	<0.8	mg/kg	9/23/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/23/92	8260
Chloroform	<0.4	mg/kg	9/23/92	8260
Chloromethane	<0.8	mg/kg	9/23/92	8260
1,2 Dichlorobenzene	<0.6	mg/kg	9/23/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/23/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/23/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/23/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/23/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/23/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/23/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/23/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/23/92	8260
Ethylbenzene	<0.3	mg/kg	9/23/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/23/92	8260
Methylene Chloride	<2.1	mg/kg	9/23/92	8260
MEK	<3.7	mg/kg	9/23/92	8260
Bromoform	<0.3	mg/kg	9/23/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/23/92	8260
Tetrachloroethene	<0.3	mg/kg	9/23/92	8260
Toluene	<0.3	mg/kg	9/23/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/23/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/23/92	8260
Trichloroethene	<0.3	mg/kg	9/23/92	8260
Trichlorofluoromethane	<0.6	mg/kg	9/23/92	8260
Trichloropropane	<0.3	mg/kg	9/23/92	8260
m/p Xylene	<0.7	mg/kg	9/23/92	8260
o Xylene	<0.3	mg/kg	9/23/92	8260
Vinyl Chloride	<0.8	mg/kg	9/23/92	8260

Approved by: R. Adkins

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20058
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B8-9.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.7	mg/kg	9/26/92	8260
Acrylonitrile	<1.7	mg/kg	9/26/92	8260
Benzene	<0.4	mg/kg	9/26/92	8260
Bromodichloromethane	<0.4	mg/kg	9/26/92	8260
Bromoform	<0.4	mg/kg	9/26/92	8260
Bromomethane	<0.6	mg/kg	9/26/92	8260
Carbon tetrachloride	<0.4	mg/kg	9/26/92	8260
Chlorobenzene	<0.4	mg/kg	9/26/92	8260
Chlorodibromomethane	<0.4	mg/kg	9/26/92	8260
Chloroethane	<0.9	mg/kg	9/26/92	8260
2-Chloroethyl vinyl ether	<0.5	mg/kg	9/26/92	8260
Chloroform	<0.5	mg/kg	9/26/92	8260
Chloromethane	<0.9	mg/kg	9/26/92	8260
1,2 Dichlorobenzene	<0.6	mg/kg	9/26/92	8260
1.3 Dichlorobenzene	<0.5	mg/kg	9/26/92	8260
1,4 Dichlorobenzene	<0.5	mg/kg	9/26/92	8260
Dichlorodifluoromethane	<0.9	mg/kg	9/26/92	8260
1,1 Dichloroethane	<0.4	mg/kg	9/26/92	8260
1,2 Dichloroethane	<0.4	mg/kg	9/26/92	8260
1,1 Dichloroethene	<0.4	mg/kg	9/26/92	8260
trans 1,2 Dichloroethene	<0.4	mg/kg	9/26/92	8260
1,2 Dichloropropane	<0.4	mg/kg	9/26/92	8260
cis 1,3 Dichloropropene	<0.4	mg/kg	9/26/92	8260
trans 1,3 Dichloropropene	<0.4	mg/kg	9/26/92	8260
Ethylbenzene	<0.4	mg/kg	9/26/92	8260
Ethylene-di-bromide	<0.5	mg/kg	9/26/92	8260
Methylene Chloride	<2.3	mg/kg	9/26/92	8260
MEK	<4.1	mg/kg	9/26/92	8260
Styrene	<0.4	mg/kg	9/26/92	8260
1,1,1,2 Tetrachloroethane	<0.4	mg/kg	9/26/92	8260
1,1,2,2 Tetrachloroethane	<0.4	mg/kg	9/26/92	8260
Tetrachloroethene	<0.4	mg/kg	9/26/92	8260
Toluene	<0.4	mg/kg	9/26/92	8260
1,1,1 Trichloroethane	<0.5	mg/kg	9/26/92	8260
1,1,2 Trichloroethane	<0.4	mg/kg	9/26/92	8260
Trichloroethene	<0.4	mg/kg	9/26/92	8260
Trichlorofluoromethane	<0.6	mg/kg	9/26/92	8260
Trichloropropane	<0.4	mg/kg	9/26/92	8260
m/p Xylene	<0.7	mg/kg	9/26/92	8260
o Xylene	<0.4	mg/kg	9/26/92	8260
Vinyl Chloride	<0.9	mg/kg	9/26/92	8260

Approved by: R. Adamson

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 9/29/92
Chemron Sample #: 20059
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B9-2.9

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.5	mg/kg	9/26/92	8260
Acrylonitrile	<1.5	mg/kg	9/26/92	8260
Benzene	<0.3	mg/kg	9/26/92	8260
Bromodichloromethane	<0.3	mg/kg	9/26/92	8260
Bromoform	<0.3	mg/kg	9/26/92	8260
Bromomethane	<0.6	mg/kg	9/26/92	8260
Carbon tetrachloride	<0.3	mg/kg	9/26/92	8260
Chlorobenzene	<0.3	mg/kg	9/26/92	8260
Chlorodibromomethane	<0.3	mg/kg	9/26/92	8260
Chloroethane	<0.8	mg/kg	9/26/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	9/26/92	8260
Chloroform	<0.4	mg/kg	9/26/92	8260
Chloromethane	<0.8	mg/kg	9/26/92	8260
1,2 Dichlorobenzene	<0.6	mg/kg	9/26/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	9/26/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	9/26/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	9/26/92	8260
1,1 Dichloroethane	<0.3	mg/kg	9/26/92	8260
1,2 Dichloroethane	<0.3	mg/kg	9/26/92	8260
1,1 Dichloroethene	<0.3	mg/kg	9/26/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	9/26/92	8260
1,2 Dichloropropane	<0.3	mg/kg	9/26/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	9/26/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	9/26/92	8260
Ethylbenzene	<0.3	mg/kg	9/26/92	8260
Ethylene-di-bromide	<0.4	mg/kg	9/26/92	8260
Methylene Chloride	<1.9	mg/kg	9/26/92	8260
MEK	<3.7	mg/kg	9/26/92	8260
Styrene	<0.3	mg/kg	9/26/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	9/26/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	9/26/92	8260
Tetrachloroethene	<0.3	mg/kg	9/26/92	8260
Toluene	<0.3	mg/kg	9/26/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	9/26/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	9/26/92	8260
Trichloroethene	<0.3	mg/kg	9/26/92	8260
Trichlorofluoromethane	<0.6	mg/kg	9/26/92	8260
Trichloropropane	<0.3	mg/kg	9/26/92	8260
m/p Xylene	<0.7	mg/kg	9/26/92	8260
o Xylene	<0.3	mg/kg	9/26/92	8260
Vinyl Chloride	<0.8	mg/kg	9/26/92	8260

Approved by: R Aldaman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/1/92
Chemron Sample #: 20060
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B9-9.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.4	mg/kg	10/1/92	8260
Acrylonitrile	<1.4	mg/kg	10/1/92	8260
Benzene	<0.3	mg/kg	10/1/92	8260
Bromodichloromethane	<0.3	mg/kg	10/1/92	8260
Styrene	<0.3	mg/kg	10/1/92	8260
Bromomethane	<0.5	mg/kg	10/1/92	8260
Carbon tetrachloride	<0.3	mg/kg	10/1/92	8260
Chlorobenzene	<0.3	mg/kg	10/1/92	8260
Chlorodibromomethane	<0.3	mg/kg	10/1/92	8260
Chloroethane	<0.8	mg/kg	10/1/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	10/1/92	8260
Chloroform	<0.4	mg/kg	10/1/92	8260
Chloromethane	<0.8	mg/kg	10/1/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	10/1/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	10/1/92	8260
1,1 Dichloroethane	<0.3	mg/kg	10/1/92	8260
1,2 Dichloroethane	<0.3	mg/kg	10/1/92	8260
1,1 Dichloroethene	<0.3	mg/kg	10/1/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	10/1/92	8260
1,2 Dichloropropane	<0.3	mg/kg	10/1/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	10/1/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	10/1/92	8260
Ethylbenzene	<0.3	mg/kg	10/1/92	8260
Ethylene-di-bromide	<0.4	mg/kg	10/1/92	8260
Methylene Chloride	<2.0	mg/kg	10/1/92	8260
MEK	<3.5	mg/kg	10/1/92	8260
Bromoform	<0.3	mg/kg	10/1/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	10/1/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	10/1/92	8260
Tetrachloroethene	<0.3	mg/kg	10/1/92	8260
Toluene	<0.3	mg/kg	10/1/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	10/1/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	10/1/92	8260
Trichloroethene	<0.3	mg/kg	10/1/92	8260
Trichlorofluoromethane	<0.5	mg/kg	10/1/92	8260
Trichloropropane	<0.3	mg/kg	10/1/92	8260
m/p Xylene	<0.6	mg/kg	10/1/92	8260
o Xylene	<0.3	mg/kg	10/1/92	8260
Vinyl Chloride	<0.8	mg/kg	10/1/92	8260

Approved by: R. Adkins

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/1/92
Chemron Sample #: 20061
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B10-1.5

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.5	mg/kg	10/1/92	8260
Acrylonitrile	<1.5	mg/kg	10/1/92	8260
Benzene	<0.3	mg/kg	10/1/92	8260
Bromodichloromethane	<0.3	mg/kg	10/1/92	8260
Styrene	<0.3	mg/kg	10/1/92	8260
Bromomethane	<0.6	mg/kg	10/1/92	8260
Carbon tetrachloride	<0.3	mg/kg	10/1/92	8260
Chlorobenzene	<0.3	mg/kg	10/1/92	8260
Chlorodibromomethane	<0.3	mg/kg	10/1/92	8260
Chloroethane	<0.8	mg/kg	10/1/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	10/1/92	8260
Chloroform	<0.4	mg/kg	10/1/92	8260
Chloromethane	<0.8	mg/kg	10/1/92	8260
1,2 Dichlorobenzene	<0.6	mg/kg	10/1/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	10/1/92	8260
1,1 Dichloroethane	<0.3	mg/kg	10/1/92	8260
1,2 Dichloroethane	<0.3	mg/kg	10/1/92	8260
1,1 Dichloroethene	<0.3	mg/kg	10/1/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	10/1/92	8260
1,2 Dichloropropane	<0.3	mg/kg	10/1/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	10/1/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	10/1/92	8260
Ethylbenzene	<0.3	mg/kg	10/1/92	8260
Ethylene-di-bromide	<0.4	mg/kg	10/1/92	8260
Methylene Chloride	<2.0	mg/kg	10/1/92	8260
MEK	<3.6	mg/kg	10/1/92	8260
Bromoform	<0.3	mg/kg	10/1/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	10/1/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	10/1/92	8260
Tetrachloroethene	<0.3	mg/kg	10/1/92	8260
Toluene	<0.3	mg/kg	10/1/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	10/1/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	10/1/92	8260
Trichloroethene	<0.3	mg/kg	10/1/92	8260
Trichlorofluoromethane	<0.6	mg/kg	10/1/92	8260
Trichloropropane	<0.3	mg/kg	10/1/92	8260
m/p Xylene	<0.6	mg/kg	10/1/92	8260
o Xylene	<0.3	mg/kg	10/1/92	8260
Vinyl Chloride	<0.8	mg/kg	10/1/92	8260

Approved by: R. Adamson

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/1/92
Chemron Sample #: 20062
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
B10-9.0

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.4	mg/kg	10/1/92	8260
Acrylonitrile	<1.4	mg/kg	10/1/92	8260
Benzene	<0.3	mg/kg	10/1/92	8260
Bromodichloromethane	<0.3	mg/kg	10/1/92	8260
Styrene	<0.3	mg/kg	10/1/92	8260
Bromomethane	<0.5	mg/kg	10/1/92	8260
Carbon tetrachloride	<0.3	mg/kg	10/1/92	8260
Chlorobenzene	<0.3	mg/kg	10/1/92	8260
Chlorodibromomethane	<0.3	mg/kg	10/1/92	8260
Chloroethane	<0.8	mg/kg	10/1/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	10/1/92	8260
Chloroform	<0.4	mg/kg	10/1/92	8260
Chloromethane	<0.8	mg/kg	10/1/92	8260
1,2 Dichlorobenzene	<0.5	mg/kg	10/1/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	10/1/92	8260
1,1 Dichloroethane	<0.3	mg/kg	10/1/92	8260
1,2 Dichloroethane	<0.3	mg/kg	10/1/92	8260
1,1 Dichloroethene	<0.3	mg/kg	10/1/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	10/1/92	8260
1,2 Dichloropropane	<0.3	mg/kg	10/1/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	10/1/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	10/1/92	8260
Ethylbenzene	<0.3	mg/kg	10/1/92	8260
Ethylene-di-bromide	<0.4	mg/kg	10/1/92	8260
Methylene Chloride	<1.9	mg/kg	10/1/92	8260
MEK	<3.4	mg/kg	10/1/92	8260
Bromoform	<0.3	mg/kg	10/1/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	10/1/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	10/1/92	8260
Tetrachloroethene	<0.3	mg/kg	10/1/92	8260
Toluene	<0.3	mg/kg	10/1/92	8260
1,1,1 Trichloroethane	<0.4	mg/kg	10/1/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	10/1/92	8260
Trichloroethene	<0.3	mg/kg	10/1/92	8260
Trichlorofluoromethane	<0.6	mg/kg	10/1/92	8260
Trichloropropane	<0.3	mg/kg	10/1/92	8260
m/p Xylene	<0.6	mg/kg	10/1/92	8260
o Xylene	<0.3	mg/kg	10/1/92	8260
Vinyl Chloride	<0.8	mg/kg	10/1/92	8260

Approved by: R. Allman

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/1/92
Chemron Sample #: 20063
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
Cuttings 1

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.5	mg/kg	10/1/92	8260
Acrylonitrile	<1.5	mg/kg	10/1/92	8260
Benzene	<0.3	mg/kg	10/1/92	8260
Bromodichloromethane	<0.3	mg/kg	10/1/92	8260
Styrene	<0.3	mg/kg	10/1/92	8260
Bromomethane	<0.6	mg/kg	10/1/92	8260
Carbon tetrachloride	<0.3	mg/kg	10/1/92	8260
Chlorobenzene	<0.3	mg/kg	10/1/92	8260
Chlorodibromomethane	<0.3	mg/kg	10/1/92	8260
Chloroethane	<0.8	mg/kg	10/1/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	10/1/92	8260
Chloroform	<0.4	mg/kg	10/1/92	8260
Chloromethane	<0.8	mg/kg	10/1/92	8260
1,2 Dichlorobenzene	<0.6	mg/kg	10/1/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
Dichlorodifluoromethane	<0.8	mg/kg	10/1/92	8260
1,1 Dichloroethane	<0.3	mg/kg	10/1/92	8260
1,2 Dichloroethane	<0.3	mg/kg	10/1/92	8260
1,1 Dichloroethene	<0.3	mg/kg	10/1/92	8260
trans 1,2 Dichloroethene	<0.3	mg/kg	10/1/92	8260
1,2 Dichloropropane	<0.3	mg/kg	10/1/92	8260
cis 1,3 Dichloropropene	<0.3	mg/kg	10/1/92	8260
trans 1,3 Dichloropropene	<0.3	mg/kg	10/1/92	8260
Ethylbenzene	<0.3	mg/kg	10/1/92	8260
Ethylene-di-bromide	<0.4	mg/kg	10/1/92	8260
Methylene Chloride	<2.1	mg/kg	10/1/92	8260
MEK	<3.8	mg/kg	10/1/92	8260
Bromoform	<0.3	mg/kg	10/1/92	8260
1,1,1,2 Tetrachloroethane	<0.3	mg/kg	10/1/92	8260
1,1,2,2 Tetrachloroethane	<0.3	mg/kg	10/1/92	8260
Tetrachloroethene	<0.3	mg/kg	10/1/92	8260
Toluene	<0.3	mg/kg	10/1/92	8260
1,1,1 Trichloroethane	0.507	mg/kg	10/1/92	8260
1,1,2 Trichloroethane	<0.3	mg/kg	10/1/92	8260
Trichloroethene	<0.3	mg/kg	10/1/92	8260
Trichlorofluoromethane	<0.6	mg/kg	10/1/92	8260
Trichloropropane	<0.3	mg/kg	10/1/92	8260
m/p Xylene	<0.7	mg/kg	10/1/92	8260
o Xylene	<0.3	mg/kg	10/1/92	8260
Vinyl Chloride	<0.8	mg/kg	10/1/92	8260

Approved by: N. Adams

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/1/92
Chemron Sample #: 20064
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 9/10/92

Sample Description:
CSSA F14 Assessment
Berm 1

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<1.6	mg/kg	10/1/92	8260
Acrylonitrile	<1.6	mg/kg	10/1/92	8260
Benzene	<0.4	mg/kg	10/1/92	8260
Bromodichloromethane	<0.4	mg/kg	10/1/92	8260
Styrene	<0.4	mg/kg	10/1/92	8260
Bromomethane	<0.6	mg/kg	10/1/92	8260
Carbon tetrachloride	<0.4	mg/kg	10/1/92	8260
Chlorobenzene	<0.4	mg/kg	10/1/92	8260
Chlorodibromomethane	<0.4	mg/kg	10/1/92	8260
Chloroethane	<0.9	mg/kg	10/1/92	8260
2-Chloroethyl vinyl ether	<0.4	mg/kg	10/1/92	8260
Chloroform	<0.4	mg/kg	10/1/92	8260
Chloromethane	<0.9	mg/kg	10/1/92	8260
1,2 Dichlorobenzene	<0.6	mg/kg	10/1/92	8260
1.3 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
1,4 Dichlorobenzene	<0.4	mg/kg	10/1/92	8260
Dichlorodifluoromethane	<0.9	mg/kg	10/1/92	8260
1,1 Dichloroethane	<0.4	mg/kg	10/1/92	8260
1,2 Dichloroethane	<0.4	mg/kg	10/1/92	8260
1,1 Dichloroethene	<0.4	mg/kg	10/1/92	8260
trans 1,2 Dichloroethene	<0.4	mg/kg	10/1/92	8260
1,2 Dichloropropane	<0.4	mg/kg	10/1/92	8260
cis 1,3 Dichloropropene	<0.4	mg/kg	10/1/92	8260
trans 1,3 Dichloropropene	<0.4	mg/kg	10/1/92	8260
Ethylbenzene	<0.4	mg/kg	10/1/92	8260
Ethylene-di-bromide	<0.4	mg/kg	10/1/92	8260
Methylene Chloride	<2.2	mg/kg	10/1/92	8260
MEK	<4.0	mg/kg	10/1/92	8260
Bromoform	<0.4	mg/kg	10/1/92	8260
1,1,1,2 Tetrachloroethane	<0.4	mg/kg	10/1/92	8260
1,1,2,2 Tetrachloroethane	<0.4	mg/kg	10/1/92	8260
Tetrachloroethene	<0.4	mg/kg	10/1/92	8260
Toluene	<0.4	mg/kg	10/1/92	8260
1,1,1 Trichloroethane	0.486	mg/kg	10/1/92	8260
1,1,2 Trichloroethane	<0.4	mg/kg	10/1/92	8260
Trichloroethene	<0.4	mg/kg	10/1/92	8260
Trichlorofluoromethane	<0.6	mg/kg	10/1/92	8260
Trichloropropane	<0.4	mg/kg	10/1/92	8260
m/p Xylene	<0.7	mg/kg	10/1/92	8260
o Xylene	<0.4	mg/kg	10/1/92	8260
Vinyl Chloride	<0.9	mg/kg	10/1/92	8260

Approved by: R. Abraham

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20053
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B6-1.5

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	8080
4,4'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Ackmann

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20054
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B6-17.7

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	808
4,4'-DDD	<3.7	UG/KG	09/30/92	80
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R Clausen

CHEMRON
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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20055
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B7-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
ordane	<4.7	UG/KG	09/30/92	8080
,4'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Aldaman

CHEMRON
INCORPORATED

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20056
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B7-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	808
4,4'-DDD	<3.7	UG/KG	09/30/92	80
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Al Chaar

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20057
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B8-2.5

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
lordane	<4.7	UG/KG	09/30/92	8080
,4'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Ellman

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20058
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B8-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	8080
4,4'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Ackman

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20059
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B9-2.9

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
.ordane	<4.7	UG/KG	09/30/92	8080
4,4'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Alcaraz

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20060
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B9-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	80
4,4'-DDD	<3.7	UG/KG	09/30/92	80
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Duncan

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20061
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B10-1.5

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
[illegible]ordane	<4.7	UG/KG	09/30/92	8080
[illegible]'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Allgaier

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20062
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B10-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	808
4,4'-DDD	<3.7	UG/KG	09/30/92	80
4,4'-DDE	<1.3	UG/KG	09/30/92	808
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Richman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20063
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
Cuttings 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
ordane	<4.7	UG/KG	09/30/92	8080
'-DDD	<3.7	UG/KG	09/30/92	8080
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Adam

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20064
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
Berm 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<1.3	UG/KG	09/30/92	8080
Alpha-BHC	<1.0	UG/KG	09/30/92	8080
Beta-BHC	<2.0	UG/KG	09/30/92	8080
Delta-BHC	<3.0	UG/KG	09/30/92	8080
Gamma-BHC	<1.3	UG/KG	09/30/92	8080
Chlordane	<4.7	UG/KG	09/30/92	808
4,4'-DDD	<3.7	UG/KG	09/30/92	80
4,4'-DDE	<1.3	UG/KG	09/30/92	8080
4,4'-DDT	<4.0	UG/KG	09/30/92	8080
Dieldrin	<.7	UG/KG	09/30/92	8080
Endosulfan I	<4.7	UG/KG	09/30/92	8080
Endosulfan II	<1.3	UG/KG	09/30/92	8080
Endosulfan Sulfate	<22.	UG/KG	09/30/92	8080
Endrin	<2.0	UG/KG	09/30/92	8080
Endrin Aldehyde	<7.7	UG/KG	09/30/92	8080
Heptachlor	<1.0	UG/KG	09/30/92	8080
Heptachlor Epoxide	<28.	UG/KG	09/30/92	8080
Methoxychlor	<59.	UG/KG	09/30/92	8080
Toxaphene	<80.	UG/KG	09/30/92	8080
PCB - 1016	<22.	UG/KG	09/30/92	8080
PCB - 1221	<22.	UG/KG	09/30/92	8080
PCB - 1232	<22.	UG/KG	09/30/92	8080
PCB - 1242	<22.	UG/KG	09/30/92	8080
PCB - 1248	<22.	UG/KG	09/30/92	8080
PCB - 1254	<22.	UG/KG	09/30/92	8080
PCB - 1260	<22.	UG/KG	09/30/92	8080

Approved By: R. Claman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Client's Job #: AU334.01
COC #:
Report Date: 09/23/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/10/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Date Analyzed	Total Nickel (PPM)
20053	CSSA F14 Assessment B6-1.5	09/22/92	4.3
20054	CSSA F14 Assessment B6-17.7	09/22/92	< 2.0
055	CSSA F14 Assessment B7-1.0	09/22/92	2.0
20056	CSSA F14 Assessment B7-9.0	09/22/92	< 2.0
20057	CSSA F14 Assessment B8-2.5	09/22/92	7.
20058	CSSA F14 Assessment B8-9.0	09/22/92	6.8
20059	CSSA F14 Assessment B9-2.9	09/22/92	1.6
20060	CSSA F14 Assessment B9-9.0	09/22/92	1.8
20061	CSSA F14 Assessment B10-1.5	09/22/92	1.6
20062	CSSA F14 Assessment B10-9.0	09/22/92	< 1.2

Approved By: R. Adams

Analytical Methods: Solids/Soils - 3050/7520; Water - 3005/7520

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Client's Job #: AU334.01
COC #:
Report Date: 09/23/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/10/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Date Analyzed	Total Nickel (PPM)
20063	CSSA F14 Assessment Cuttings 1	09/22/92	7.7
20064	CSSA F14 Assessment Berm 1	09/22/92	2.8

Approved By: R. Ellman

Analytical Methods: Solids/Soils - 3050/7520; Water - 3005/7520

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20053
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B6-1.5

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
·nzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
nzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

Approved By: N. Oldham

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20053
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B6-1.5

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	827^
Hexachloroethane	<100.	UG/KG	10/12/92	82
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Aldman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20054
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B6-17.7

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
ızo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
ızo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

ɔroved By: R. Adhan

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20054
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B6-17.7

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Aldman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20055
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B7-1.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
[illegible]zo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
[illegible]zo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

roved By: R. Abram

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20055
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B7-1.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: N. Arman

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20056
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B7-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
nzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
nzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

proved By: R. Adams

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20056
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B7-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Adkins

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20057
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B8-2.5

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
Benzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

roved By: N. Adhaan

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20057
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B8-2.5

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Oldham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20058
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B8-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
ızo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
ızo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

ɔroved By: R. Adam

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20058
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B8-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Adams

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20059
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B9-2.9

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
ızo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
ızo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

proved By: R. Aldman

CHEMRON INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20059
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B9-2.9

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	827[illegible]
Hexachloroethane	<100.	UG/KG	10/12/92	82[illegible]
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Alacam

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20060
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B9-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
·nzo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
.nzo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

·proved By: R. Adams

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20060
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B9-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Abman

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20061
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B10-1.5

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
ızo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
.ızo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

ɔroved By: R Oldham

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20061
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92

Sample Description:
CSSA F14 Assessment
B10-1.5

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	827
Hexachloroethane	<100.	UG/KG	10/12/92	82
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Adcock

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20062
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
B10-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
[illegible]zo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
[illegible]zo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

[illegible]roved By: R. Adams

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20062
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
B10-9.0

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Oldham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20063
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
Cuttings 1

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
ızo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
·ızo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	<100.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

proved By: R. Adman

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20063
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
Cuttings 1

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	82
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: R. Adams

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20064
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 1

Sample Description:
CSSA F14 Assessment
Berm 1

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<100.	UG/KG	10/12/92	8270
Acenaphthylene	<100.	UG/KG	10/12/92	8270
Anthracene	<100.	UG/KG	10/12/92	8270
Benzo(a)anthracene	<100.	UG/KG	10/12/92	8270
zo(b)fluoranthene	<100.	UG/KG	10/12/92	8270
zo(k)fluoranthene	<100.	UG/KG	10/12/92	8270
Benzo(a)pyrene	<100.	UG/KG	10/12/92	8270
Benzo(g,h,i)perylene	<150.	UG/KG	10/12/92	8270
Benzidine	<200.	UG/KG	10/12/92	8270
Bis(2-chloroethyl) ether	<100.	UG/KG	10/12/92	8270
Bis(2-chloroethoxy) methane	<100.	UG/KG	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<100.	UG/KG	10/12/92	8270
Bis(2-chloroisopropyl) ether	<100.	UG/KG	10/12/92	8270
4-Bromophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Butyl benzyl phthalate	110.	UG/KG	10/12/92	8270
2-Chloronaphthalene	<100.	UG/KG	10/12/92	8270
4-Chlorophenyl phenyl ether	<100.	UG/KG	10/12/92	8270
Chrysene	<100.	UG/KG	10/12/92	8270
Dibenzo(a,h)anthracene	<100.	UG/KG	10/12/92	8270
Di-n-butyl phthalate	<100.	UG/KG	10/12/92	8270
3,3-Dichlorobenzidine	<150.	UG/KG	10/12/92	8270
Diethyl phthalate	<100.	UG/KG	10/12/92	8270
Dimethyl phthalate	<100.	UG/KG	10/12/92	8270
2,4,Dinitrotoluene	<100.	UG/KG	10/12/92	8270
2,6-Dinitrotoluene	<100.	UG/KG	10/12/92	8270
Diocytl phthalate	<100.	UG/KG	10/12/92	8270
1,2-Diphenylhydrazine	<100.	UG/KG	10/12/92	8270

roved By: N. Adam

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/14/92
Chemron Sample #: 20064
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:
Date Sampled: 09/10/92
Page # : 2

Sample Description:
CSSA F14 Assessment
Berm 1

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<100.	UG/KG	10/12/92	8270
Fluorene	<100.	UG/KG	10/12/92	8270
Hexachlorobenzene	<100.	UG/KG	10/12/92	8270
Hexachlorobutadiene	<100.	UG/KG	10/12/92	8270
Hexachloroethane	<100.	UG/KG	10/12/92	8270
Hexachlorocyclopentadiene	<100.	UG/KG	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<100.	UG/KG	10/12/92	8270
Isophorone	<100.	UG/KG	10/12/92	8270
Naphthalene	<100.	UG/KG	10/12/92	8270
Nitrobenzene	<100.	UG/KG	10/12/92	8270
N-Nitrosodimethylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodi-n-propylamine	<100.	UG/KG	10/12/92	8270
N-Nitrosodiphenylamine	<100.	UG/KG	10/12/92	8270
Phenanthrene	<100.	UG/KG	10/12/92	8270
Pyrene	<100.	UG/KG	10/12/92	8270
1,2,4-Trichlorobenzene	<100.	UG/KG	10/12/92	8270
4-Chloro-3-methylphenol	<100.	UG/KG	10/12/92	8270
2-Chlorophenol	<150.	UG/KG	10/12/92	8270
2,4-Dichlorophenol	<150.	UG/KG	10/12/92	8270
2,4,-Dimethylphenol	<150.	UG/KG	10/12/92	8270
2,4-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<250.	UG/KG	10/12/92	8270
2-Nitrophenol	<150.	UG/KG	10/12/92	8270
4-Nitrophenol	<150.	UG/KG	10/12/92	8270
Pentachlorophenol	<150.	UG/KG	10/12/92	8270
Phenol	<150.	UG/KG	10/12/92	8270
2,4,6-Trichlorophenol	<150.	UG/KG	10/12/92	8270

Approved By: N. Oldham

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20053
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B6-1.5

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Adkins

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20054
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B6-17.7

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	81
Dinoseb	<23.	UG/KG	10/05/92	815

Approved By: R. Richard

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20055
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B7-1.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
,5-T	<70.	UG/KG	10/05/92	8150
-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Oldham

CHEMRON
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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20056
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B7-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	81
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Adams

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20057
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B8-2.5

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Richman

CHEMRON
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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20058
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B8-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Aldrich

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20059
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B9-2.9

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
4,5-T	<70.	UG/KG	10/05/92	8150
4-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Aldrich

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20060
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B9-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Williams

CHEMRON
INCORPORATED

431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20061
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B10-1.5

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
,5-T	<70.	UG/KG	10/05/92	8150
-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Richman

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20062
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
B10-9.0

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	81
Dinoseb	<23.	UG/KG	10/05/92	815

Approved By: R. Richman

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20063
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
Cuttings 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
[illegible],5-T	<70.	UG/KG	10/05/92	8150
[illegible]4-DB	<300.	UG/KG	10/05/92	8150
Dinoseb	<23.	UG/KG	10/05/92	8150

Approved By: R. Richman

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20064
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
Berm 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<1900	UG/KG	10/05/92	8150
Dicamba	<90.	UG/KG	10/05/92	8150
Dichloroprop	<220.	UG/KG	10/05/92	8150
2,4-D	<400.	UG/KG	10/05/92	8150
Silvex	<60.	UG/KG	10/05/92	8150
2,4,5-T	<70.	UG/KG	10/05/92	8150
2,4-DB	<300.	UG/KG	10/05/92	81
Dinoseb	<23.	UG/KG	10/05/92	815

Approved By: N. Abraham

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/05/92
Chemron Sample #: 20063
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
Cuttings 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Azinophos methyl	<.10	UG/KG	09/22/92	8140
Bolstar (Sulprofos)	<.07	UG/KG	09/22/92	8140
Chlorpyrifos	<.07	UG/KG	09/22/92	8140
Coumaphos	<.20	UG/KG	09/22/92	8140
Demeton, O, S	<.12	UG/KG	09/22/92	8140
[illegible] zinon	<.20	UG/KG	09/22/92	8140
[illegible]hlorvos	<.80	UG/KG	09/22/92	8140
Dimethoate	<.26	UG/KG	09/22/92	8140
Disulfoton	<.07	UG/KG	09/22/92	8140
EPN	<.04	UG/KG	09/22/92	8140
Ethoprop	<.20	UG/KG	09/22/92	8140
Fensulfothion	<.08	UG/KG	09/22/92	8140
Fenthion	<.08	UG/KG	09/22/92	8140
Malathion	<.11	UG/KG	09/22/92	8140
Merphos	<.20	UG/KG	09/22/92	8140
Mevinphos	<.50	UG/KG	09/22/92	8140
Naled	<.50	UG/KG	09/22/92	8140
Parathion - ethyl	<.06	UG/KG	09/22/92	8140
Parathion - methyl	<.12	UG/KG	09/22/92	8140
Phorate	<.04	UG/KG	09/22/92	8140
Ronnel	<.07	UG/KG	09/22/92	8140
Sulfotep	<.07	UG/KG	09/22/92	8140
TEPP	<.80	UG/KG	09/22/92	8140
Tetrachlorovinphos	<.80	UG/KG	09/22/92	8140
Tokuthion (Protothiofos)	<.07	UG/KG	09/22/92	8140
Trichloronate	<.80	UG/KG	09/22/92	8140

Approved By: R. Adams

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/05/92
Chemron Sample #: 20064
Sample Matrix: Soil
Client's Job #: AU334.01
COC #:

Sample Description:
CSSA F14 Assessment
Berm 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Azinophos methyl	<.10	UG/KG	09/22/92	8140
Bolstar (Sulprofos)	<.07	UG/KG	09/22/92	8140
Chlorpyrifos	<.07	UG/KG	09/22/92	8140
Coumaphos	<.20	UG/KG	09/22/92	8140
Demeton, O, S	<.12	UG/KG	09/22/92	8140
Diazinon	<.20	UG/KG	09/22/92	814
Dichlorvos	<.80	UG/KG	09/22/92	81
Dimethoate	<.26	UG/KG	09/22/92	8140
Disulfoton	<.07	UG/KG	09/22/92	8140
EPN	<.04	UG/KG	09/22/92	8140
Ethoprop	<.20	UG/KG	09/22/92	8140
Fensulfothion	<.08	UG/KG	09/22/92	8140
Fenthion	<.08	UG/KG	09/22/92	8140
Malathion	<.11	UG/KG	09/22/92	8140
Merphos	<.20	UG/KG	09/22/92	8140
Mevinphos	<.50	UG/KG	09/22/92	8140
Naled	<.50	UG/KG	09/22/92	8140
Parathion - ethyl	<.06	UG/KG	09/22/92	8140
Parathion - methyl	<.12	UG/KG	09/22/92	8140
Phorate	<.04	UG/KG	09/22/92	8140
Ronnel	<.07	UG/KG	09/22/92	8140
Sulfotep	<.07	UG/KG	09/22/92	8140
TEPP	<.80	UG/KG	09/22/92	8140
Tetrachlorovinphos	<.80	UG/KG	09/22/92	8140
Tokuthion (Protothiofos)	<.07	UG/KG	09/22/92	8140
Trichloronate	<.80	UG/KG	09/22/92	8140

Approved By: R. Oldham

Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, Texas 78757
512/467-6200 FAX 512/467-7044

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	NO. OF CONTAINERS	Analysis Required									REMARKS
AU 344.01	CSSA F14 Assessment		418.1	8240	8080	7520	8270	8150	8140			
SAMPLERS (Signatures) Susan Roberts												
DATE / TIME / MATRIX / SAMPLE IDENTIFICATION												
9/11/92 1505 water Decon water 1		5	X	X	X	X	X	X	X			Preserved on ice. Chempest 20034 203

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Susan Roberts	9/11/92	1800	9/11/92 18:00				
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

White: laboratory returns with data, **yellow**: laboratory copy, **pink**: sampler copy

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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-81

Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Client's Job #: AU344.01
COC #:
Report Date: 09/16/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/11/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Sample Matrix	Date Analyzed	TPH (PPM)
20034	CSSA F14 Assessment Decon Water 1	Water	09/15/92	1.7

Approved By: _____

Analytical Methods: TPH in Soil - 3540/418.1 or 3550/418.1, TPH in Water - 418.1

CHEMRON
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431 Isom Road • Suite 135 • San Antonio, Texas 78216-5141 • (512) 340-8121

Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/2/92
Chemron Sample #: 20034
Sample Matrix: Water
Client's Job #: AU344.01
COC #:
Date Sampled: 9/11/92

Sample Description:
CSSA F14 Assessment
Decon Water 1

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<0.018	mg/l	9/17/92	8260
Acrylonitrile	<0.018	mg/l	9/17/92	8260
Benzene	<0.004	mg/l	9/17/92	8260
Bromodichloromethane	<0.004	mg/l	9/17/92	8260
Styrene	<0.004	mg/l	9/17/92	8260
Bromomethane	<0.007	mg/l	9/17/92	8260
Carbon tetrachloride	<0.004	mg/l	9/17/92	8260
Chlorobenzene	<0.004	mg/l	9/17/92	8260
Chlorodibromomethane	<0.004	mg/l	9/17/92	8260
Chloroethane	<0.010	mg/l	9/17/92	8260
2-Chloroethyl vinyl ether	<0.005	mg/l	9/17/92	8260
Chloroform	<0.005	mg/l	9/17/92	8260
Chloromethane	<0.010	mg/l	9/17/92	8260
1,2 Dichlorobenzene	<0.007	mg/l	9/17/92	8260
1.3 Dichlorobenzene	<0.005	mg/l	9/17/92	8260
1,4 Dichlorobenzene	<0.005	mg/l	9/17/92	8260
Dichlorodifluoromethane	<0.010	mg/l	9/17/92	8260
1,1 Dichloroethane	<0.004	mg/l	9/17/92	8260
1,2 Dichloroethane	<0.004	mg/l	9/17/92	8260
1,1 Dichloroethene	<0.004	mg/l	9/17/92	8260
trans 1,2 Dichloroethene	<0.004	mg/l	9/17/92	8260
1,2 Dichloropropane	<0.004	mg/l	9/17/92	8260
cis 1,3 Dichloropropene	<0.004	mg/l	9/17/92	8260
trans 1,3 Dichloropropene	<0.004	mg/l	9/17/92	8260
Ethylbenzene	<0.004	mg/l	9/17/92	8260
Ethylene-di-bromide	<0.005	mg/l	9/17/92	8260
Methylene Chloride	<0.025	mg/l	9/17/92	8260
MEK	<0.045	mg/l	9/17/92	8260
Bromoform	<0.004	mg/l	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.004	mg/l	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.004	mg/l	9/17/92	8260
Tetrachloroethene	<0.004	mg/l	9/17/92	8260
Toluene	<0.004	mg/l	9/17/92	8260
1,1,1 Trichloroethane	<0.005	mg/l	9/17/92	8260
1,1,2 Trichloroethane	<0.004	mg/l	9/17/92	8260
Trichloroethene	<0.004	mg/l	9/17/92	8260
Trichlorofluoromethane	<0.007	mg/l	9/17/92	8260
Trichloropropane	<0.004	mg/l	9/17/92	8260
m/p Xylene	<0.008	mg/l	9/17/92	8260
o Xylene	<0.004	mg/l	9/17/92	8260
Vinyl Chloride	<0.010	mg/l	9/17/92	8260

Approved by: R. Eidman

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/03/92
Chemron Sample #: 20034
Sample Matrix: Water
Client's Job #: AU344.01
COC #:

Sample Description:
CSSA F14 Assessment
Decon Water 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Aldrin	<.004	UG/L	09/30/92	8080
Alpha-BHC	<.003	UG/L	09/30/92	8080
Beta-BHC	<.006	UG/L	09/30/92	8080
Delta-BHC	<.009	UG/L	09/30/92	8080
Gamma-BHC	<.004	UG/L	09/30/92	8080
Chlordane	<.014	UG/L	09/30/92	8080
4,4'-DDD	<.011	UG/L	09/30/92	80
4,4'-DDE	<.004	UG/L	09/30/92	8080
4,4'-DDT	<.012	UG/L	09/30/92	8080
Dieldrin	<.002	UG/L	09/30/92	8080
Endosulfan I	<.014	UG/L	09/30/92	8080
Endosulfan II	<.004	UG/L	09/30/92	8080
Endosulfan Sulfate	<.066	UG/L	09/30/92	8080
Endrin	<.006	UG/L	09/30/92	8080
Endrin Aldehyde	<.023	UG/L	09/30/92	8080
Heptachlor	<.003	UG/L	09/30/92	8080
Heptachlor Epoxide	<.083	UG/L	09/30/92	8080
Methoxychlor	<.17	UG/L	09/30/92	8080
Toxaphene	<.18	UG/L	09/30/92	8080
PCB - 1016	<.065	UG/L	09/30/92	8080
PCB - 1221	<.065	UG/L	09/30/92	8080
PCB - 1232	<.065	UG/L	09/30/92	8080
PCB - 1242	<.065	UG/L	09/30/92	8080
PCB - 1248	<.065	UG/L	09/30/92	8080
PCB - 1254	<.065	UG/L	09/30/92	8080
PCB - 1260	<.065	UG/L	09/30/92	8080

Approved By: R. Oldham

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Client's Job #: AU344.01
COC #:
Report Date: 09/23/92

Date & Time Received:
09/11/92, 18:00

Date Sampled:
09/11/92

CHEMICAL ANALYSIS REPORT

Chemron #	Sample Description	Date Analyzed	Total Nickel (PPM)
20034	CSSA F14 Assessment Decon Water 1	09/22/92	< .02

Approved By: R. Oldham

Analytical Methods: Solids/Soils - 3050/7520; Water - 3005/7520

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/12/92
Chemron Sample #: 20034
Sample Matrix: Water
Client's Job #: AU344.01
COC #:
Date Sampled: 09/11/92
Page # : 1

Sample Description:
CSSA F14 Assessment
Decon Water 1

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Acenaphthene	<5.	UG/L	10/12/92	8270
Acenaphthylene	<5.	UG/L	10/12/92	8270
Anthracene	<5.	UG/L	10/12/92	8270
Benzo(a)anthracene	<5.	UG/L	10/12/92	8270
Benzo(b)fluoranthene	<5.	UG/L	10/12/92	8270
Benzo(k)fluoranthene	<5.	UG/L	10/12/92	82
Benzo(a)pyrene	<5.	UG/L	10/12/92	82?0
Benzo(g,h,i)perylene	<5.	UG/L	10/12/92	8270
Benzidine	<10.	UG/L	10/12/92	8270
Bis(2-chloroethyl) ether	<5.	UG/L	10/12/92	8270
Bis(2-chloroethoxy) methane	<5.	UG/L	10/12/92	8270
Bis(2-ethylhexyl) phthalate	<5.	UG/L	10/12/92	8270
Bis(2-chloroisopropyl) ether	<5.	UG/L	10/12/92	8270
4-Bromophenyl phenyl ether	<5.	UG/L	10/12/92	8270
Butyl benzyl phthalate	<5.	UG/L	10/12/92	8270
2-Chloronaphthalene	<5.	UG/L	10/12/92	8270
4-Chlorophenyl phenyl ether	<5.	UG/L	10/12/92	8270
Chrysene	<5.	UG/L	10/12/92	8270
Dibenzo(a,h)anthracene	<5.	UG/L	10/12/92	8270
Di-n-butyl phthalate	<5.	UG/L	10/12/92	8270
3,3-Dichlorobenzidine	<10.	UG/L	10/12/92	8270
Diethyl phthalate	<5.	UG/L	10/12/92	8270
Dimethyl phthalate	<5.	UG/L	10/12/92	8270
2,4,Dinitrotoluene	<5.	UG/L	10/12/92	8270
2,6-Dinitrotoluene	<5.	UG/L	10/12/92	8270
Diocytl phthalate	<5.	UG/L	10/12/92	8270
1,2-Diphenylhydrazine	<5.	UG/L	10/12/92	8270

Approved By: R. Oldham

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/12/92
Chemron Sample #: 20034
Sample Matrix: Water
Client's Job #: AU344.01
COC #:
Date Sampled: 09/11/92
Page # : 2

Sample Description:
CSSA F14 Assessment
Decon Water 1

Date & Time Received:
09/11/92, 18:00

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Fluoranthene	<5.	UG/L	10/12/92	8270
Fluorene	<5.	UG/L	10/12/92	8270
Hexachlorobenzene	<5.	UG/L	10/12/92	8270
Hexachlorobutadiene	<5.	UG/L	10/12/92	8270
Hexachloroethane	<5.	UG/L	10/12/92	8270
Hexachlorocyclopentadiene	<5.	UG/L	10/12/92	8270
Indeno(1,2,3-cd)pyrene	<5.	UG/L	10/12/92	8270
Isophorone	<5.	UG/L	10/12/92	8270
Naphthalene	<5.	UG/L	10/12/92	8270
Nitrobenzene	<5.	UG/L	10/12/92	8270
N-Nitrosodimethylamine	<5.	UG/L	10/12/92	8270
N-Nitrosodi-n-propylamine	<5.	UG/L	10/12/92	8270
N-Nitrosodiphenylamine	<5.	UG/L	10/12/92	8270
Phenanthrene	<5.	UG/L	10/12/92	8270
Pyrene	<5.	UG/L	10/12/92	8270
1,2,4-Trichlorobenzene	<5.	UG/L	10/12/92	8270
4-Chloro-3-methylphenol	<10.	UG/L	10/12/92	8270
2-Chlorophenol	<10.	UG/L	10/12/92	8270
2,4-Dichlorophenol	<10.	UG/L	10/12/92	8270
2,4,-Dimethylphenol	<10.	UG/L	10/12/92	8270
2,4-Dinitrophenol	<25.	UG/L	10/12/92	8270
2-Methyl-4,6-Dinitrophenol	<25.	UG/L	10/12/92	8270
2-Nitrophenol	<10.	UG/L	10/12/92	8270
4-Nitrophenol	<10.	UG/L	10/12/92	8270
Pentachlorophenol	<10.	UG/L	10/12/92	8270
Phenol	<10.	UG/L	10/12/92	8270
2,4,6-Trichlorophenol	<10.	UG/L	10/12/92	8270

Approved By: R. Oldham

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/11/92
Chemron Sample #: 20034
Sample Matrix: Water
Client's Job #: AU344.01
COC #:

Sample Description:
CSSA F14 Assessment
Decon Water 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Dalapon	<6.	UG/L	10/05/92	8150
Dicamba	<.3	UG/L	10/05/92	8150
Dichloroprop	<.7	UG/L	10/05/92	8150
2,4-D	<2.	UG/L	10/05/92	8150
Silvex	<.2	UG/L	10/05/92	8150
2,4,5-T	<.2	UG/L	10/05/92	8150
2,4-DB	<1.	UG/L	10/05/92	81
Dinoseb	<.07	UG/L	10/05/92	8150

Approved By: R. Eldridge

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/05/92
Chemron Sample #: 20034
Sample Matrix: Water
Client's Job #: AU344.01
COC #:

Sample Description:
CSSA F14 Assessment
Decon Water 1

Date Received:
09/11/92

CHEMICAL ANALYSIS REPORT

Parameter	Value	Units	Date Analyzed	Test Method
Azinophos methyl	<.10	UG/L	09/22/92	8140
Bolstar (Sulprofos)	<.07	UG/L	09/22/92	8140
Chlorpyrifos	<.07	UG/L	09/22/92	8140
Coumaphos	<.20	UG/L	09/22/92	8140
Demeton, O, S	<.12	UG/L	09/22/92	8140
[illegible]azinon	<.20	UG/L	09/22/92	8140
[illegible]hlorvos	<.80	UG/L	09/22/92	8140
Dimethoate	<.26	UG/L	09/22/92	8140
Disulfoton	<.07	UG/L	09/22/92	8140
EPN	<.04	UG/L	09/22/92	8140
Ethoprop	<.20	UG/L	09/22/92	8140
Fensulfothion	<.08	UG/L	09/22/92	8140
Fenthion	<.08	UG/L	09/22/92	8140
Malathion	<.11	UG/L	09/22/92	8140
Merphos	<.20	UG/L	09/22/92	8140
Mevinphos	<.50	UG/L	09/22/92	8140
Naled	<.50	UG/L	09/22/92	8140
Parathion - ethyl	<.06	UG/L	09/22/92	8140
Parathion - methyl	<.12	UG/L	09/22/92	8140
Phorate	<.04	UG/L	09/22/92	8140
Ronnel	<.07	UG/L	09/22/92	8140
Sulfotep	<.07	UG/L	09/22/92	8140
TEPP	<.80	UG/L	09/22/92	8140
Tetrachlorovinphos	<.80	UG/L	09/22/92	8140
Tokuthion (Protothiofos)	<.07	UG/L	09/22/92	8140
Trichloronate	<.80	UG/L	09/22/92	8140

Approved By: N. Oldham

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Date: 10/15/92
Client's Job #: AU334.01
COC #:

The Results From the Quality Control Samples That Were Analyzed in the Sample Lot That Included Your Samples Are Summarized Below.

QUALITY CONTROL ANALYSIS REPORT

Analytical Parameter	Matrix	Analysis Date	Precision	Recovery
TPH	Soil	09/15/92	17%	116%
TPH	Soil	09/15/92	4%	98%
TPH	Water	09/15/92	-	87

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Date: 10/03/92
Client's Job #: AU334.01
COC #:

The Results From the Quality Control Samples That Were Analyzed in the Sample Lot That Included Your Samples Are Summarized Below.

QUALITY CONTROL ANALYSIS REPORT

Analytical Parameter	Matrix	Analysis Date	Precision	Recovery
Lindane	Soil	09/30/92	3%	69%
Heptachlor	Soil	09/30/92	5%	61%
drin	Soil	09/30/92	19%	73%
Dieldrin	Soil	09/30/92	7%	76%
Endrin	Soil	09/30/92	10%	93%
4,4'-DDT	Soil	09/30/92	3%	74%
Lindane	Soil	09/30/92	9%	80%
Heptachlor	Soil	09/30/92	11%	74%
Aldrin	Soil	09/30/92	15%	101%
Dieldrin	Soil	09/30/92	18%	73%
Endrin	Soil	09/30/92	18%	87%
4,4'-DDT	Soil	09/30/92	5%	65%

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Date: 10/15/92
Client's Job #: AU334.01
COC #:

The Results From the Quality Control Samples That Were Analyzed in the Sample Lot That Included Your Samples Are Summarized Below.

QUALITY CONTROL ANALYSIS REPORT

Analytical Parameter	Matrix	Analysis Date	Precision	Recovery
Nickel	Soil	09/22/92	-	108%

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
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Date: 10/15/92
Client's Job #: AU334.01
COC #:

The Results From the Quality Control Samples That Were Analyzed in the Sample Lot That Included Your Samples Are Summarized Below.

QUALITY CONTROL ANALYSIS REPORT

Analytical Parameter	Matrix	Analysis Date	Precision	Recovery
1,4-Dichlorobenzene	Soil	10/12/92	-	104%
2,4-Dinitrotoluene	Soil	10/12/92	-	120%
Nitrosodi-n-propylam	Soil	10/12/92	-	36%
Pyrene	Soil	10/12/92	-	80%
1,2,4-Trichlorobenzene	Soil	10/12/92	-	92%
4-Nitrophenol	Soil	10/12/92	-	76%
Pentachlorophenol	Soil	10/12/92	-	76%
Phenol	Soil	10/12/92	-	64%
1,4-Dichlorobenzene	Soil	10/12/92	-	36%
2,4-Dinitrotoluene	Soil	10/12/92	-	80%
N-Nitrosodi-n-propylam	Soil	10/12/92	-	48%
Pyrene	Soil	10/12/92	-	56%
1,2,4-Trichlorobenzene	Soil	10/12/92	-	64%
4-Nitrophenol	Soil	10/12/92	-	64%
Pentachlorophenol	Soil	10/12/92	-	44%
Phenol	Soil	10/12/92	-	120%

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Date: 10/11/92
Client's Job #: AU344.01
COC #:

The Results From the Quality Control Samples That Were Analyzed in the Sample Lot That Included Your Samples Are Summarized Below.

QUALITY CONTROL ANALYSIS REPORT

Analytical Parameter	Matrix	Analysis Date	Precision	Recovery
Dicamba	Soil	10/05/92	11%	79%
Silvex	Soil	10/05/92	22%	118%
2,4,5-T	Soil	10/05/92	22%	81
Dicamba	Soil	10/05/92	-	100%
Silvex	Soil	10/05/92	-	75%
2,4,5-T	Soil	10/05/92	-	51%

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Client: Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Date: 10/05/92
Client's Job #: AU334.01
COC #:

The Results From the Quality Control Samples That Were Analyzed in the Sample Lot That Included Your Samples Are Summarized Below.

QUALITY CONTROL ANALYSIS REPORT

Analytical Parameter	Matrix	Analysis Date	Precision	Recovery
Azinophos methyl	Soil	09/22/92	-	51%
Chlorpyrifos	Soil	09/22/92	-	84%
maphos	Soil	09/22/92	-	113%
Demeton, O, S	Soil	09/22/92	-	70%
Diazinon	Soil	09/22/92	-	78%
Dichlorvos	Soil	09/22/92	-	73%
Disulfoton	Soil	09/22/92	-	72%
Ethoprop	Soil	09/22/92	-	69%
Fenthion	Soil	09/22/92	-	84%
Merphos	Soil	09/22/92	-	97%
Naled	Soil	09/22/92	-	66%
Parathion - methyl	Soil	09/22/92	-	104%
Phorate	Soil	09/22/92	-	81%
Ronnel	Soil	09/22/92	-	67%
Trichloronate	Soil	09/22/92	-	65%

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Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/2/92
Chemron Sample #: 20034pk
Sample Matrix: Water
Client's Job #: AU344.01
COC #:
Date Sampled: 9/11/92

Sample Description:
CSSA F14 Assessment
Decon Water 1
0.025 mg/l volatile matrix spike

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	%Rec	Analysis Date	Method
Acrolein	<0.018	mg/l		9/17/92	8260
Acrylonitrile	<0.018	mg/l		9/17/92	8260
Benzene	0.0238	mg/l	95%	9/17/92	8260
Bromodichloromethane	<0.004	mg/l		9/17/92	8260
Styrene	<0.004	mg/l		9/17/92	8260
Bromomethane	<0.007	mg/l		9/17/92	8260
Carbon tetrachloride	<0.004	mg/l		9/17/92	8260
Chlorobenzene	0.0302	mg/l	121%	9/17/92	8260
Chlorodibromomethane	<0.004	mg/l		9/17/92	8260
Chloroethane	<0.010	mg/l		9/17/92	8260
2-Chloroethyl vinyl ether	<0.005	mg/l		9/17/92	8260
Chloroform	<0.005	mg/l		9/17/92	8260
Chloromethane	<0.010	mg/l		9/17/92	8260
1,2 Dichlorobenzene	<0.007	mg/l		9/17/92	8260
1.3 Dichlorobenzene	<0.005	mg/l		9/17/92	8260
1,4 Dichlorobenzene	<0.005	mg/l		9/17/92	8260
Dichlorodifluoromethane	<0.010	mg/l		9/17/92	8260
1,1 Dichloroethane	<0.004	mg/l		9/17/92	8260
1,2 Dichloroethane	<0.004	mg/l		9/17/92	8260
1,1 Dichloroethene	0.0222	mg/l	89%	9/17/92	8260
trans 1,2 Dichloroethene	<0.004	mg/l		9/17/92	8260
1,2 Dichloropropane	<0.004	mg/l		9/17/92	8260
cis 1,3 Dichloropropene	<0.004	mg/l		9/17/92	8260
trans 1,3 Dichloropropene	<0.004	mg/l		9/17/92	8260
Ethylbenzene	<0.004	mg/l		9/17/92	8260
Ethylene-di-bromide	<0.005	mg/l		9/17/92	8260
Methylene Chloride	<0.025	mg/l		9/17/92	8260
MEK	<0.045	mg/l		9/17/92	8260
Bromoform	<0.004	mg/l		9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.004	mg/l		9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.004	mg/l		9/17/92	8260
Tetrachloroethene	<0.004	mg/l		9/17/92	8260
Toluene	0.0284	mg/l	114%	9/17/92	8260
1,1,1 Trichloroethane	<0.005	mg/l		9/17/92	8260
1,1,2 Trichloroethane	<0.004	mg/l		9/17/92	8260
Trichloroethene	0.0276	mg/l	110%	9/17/92	8260
Trichlorofluoromethane	<0.007	mg/l		9/17/92	8260
Trichloropropane	<0.004	mg/l		9/17/92	8260
m/p Xylene	<0.008	mg/l		9/17/92	8260
o Xylene	<0.004	mg/l		9/17/92	8260
Vinyl Chloride	<0.010	mg/l		9/17/92	8260

Approved by: _____

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Client:
Engineering-Science Inc.
7800 Shoal Creek Blvd, Suite 222W
Austin, TX 78757

Report Date: 10/2/92
Chemron Sample #: 20034d
Sample Matrix: Water
Client's Job #: AU344.01
COC #:
Date Sampled: 9/11/92

Sample Description:
CSSA F14 Assessment
Decon Water 1

Date & Time Received:
9/11/92 18:00

Parameter	Value	Units	Analysis Date	Method
Acrolein	<0.018	mg/l	9/17/92	8260
Acrylonitrile	<0.018	mg/l	9/17/92	8260
Benzene	<0.004	mg/l	9/17/92	8260
Bromodichloromethane	<0.004	mg/l	9/17/92	8260
Styrene	<0.004	mg/l	9/17/92	8260
Bromomethane	<0.007	mg/l	9/17/92	8260
Carbon tetrachloride	<0.004	mg/l	9/17/92	8260
Chlorobenzene	<0.004	mg/l	9/17/92	8260
Chlorodibromomethane	<0.004	mg/l	9/17/92	8260
Chloroethane	<0.010	mg/l	9/17/92	8260
2-Chloroethyl vinyl ether	<0.005	mg/l	9/17/92	8260
Chloroform	<0.005	mg/l	9/17/92	8260
Chloromethane	<0.010	mg/l	9/17/92	8260
1,2 Dichlorobenzene	<0.007	mg/l	9/17/92	8260
1.3 Dichlorobenzene	<0.005	mg/l	9/17/92	8260
1,4 Dichlorobenzene	<0.005	mg/l	9/17/92	8260
Dichlorodifluoromethane	<0.010	mg/l	9/17/92	8260
1,1 Dichloroethane	<0.004	mg/l	9/17/92	8260
1,2 Dichloroethane	<0.004	mg/l	9/17/92	8260
1,1 Dichloroethene	<0.004	mg/l	9/17/92	8260
trans 1,2 Dichloroethene	<0.004	mg/l	9/17/92	8260
1,2 Dichloropropane	<0.004	mg/l	9/17/92	8260
cis 1,3 Dichloropropene	<0.004	mg/l	9/17/92	8260
trans 1,3 Dichloropropene	<0.004	mg/l	9/17/92	8260
Ethylbenzene	<0.004	mg/l	9/17/92	8260
Ethylene-di-bromide	<0.005	mg/l	9/17/92	8260
Methylene Chloride	<0.025	mg/l	9/17/92	8260
MEK	<0.045	mg/l	9/17/92	8260
Bromoform	<0.004	mg/l	9/17/92	8260
1,1,1,2 Tetrachloroethane	<0.004	mg/l	9/17/92	8260
1,1,2,2 Tetrachloroethane	<0.004	mg/l	9/17/92	8260
Tetrachloroethene	<0.004	mg/l	9/17/92	8260
Toluene	<0.004	mg/l	9/17/92	8260
1,1,1 Trichloroethane	<0.005	mg/l	9/17/92	8260
1,1,2 Trichloroethane	<0.004	mg/l	9/17/92	8260
Trichloroethene	<0.004	mg/l	9/17/92	8260
Trichlorofluoromethane	<0.007	mg/l	9/17/92	8260
Trichloropropane	<0.004	mg/l	9/17/92	8260
m/p Xylene	<0.008	mg/l	9/17/92	8260
o Xylene	<0.004	mg/l	9/17/92	8260
Vinyl Chloride	<0.010	mg/l	9/17/92	8260

Approved by: