PHASE I AND II ENVIRONMENTAL AUDITS AND SOIL REMEDIATION CUROCO STEEL SYSTEMS 536 CLEVELAND AVENUE ALBANY, CALIFORNIA

prepared for

Alameda County Health Care Services Agency Oakland, California

and

California Regional Water Quality Control Board - San Francisco Bay Region Oakland, California

prepared by

ENVIRON Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

April 14, 1992

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Mr. Ron Mayo, President Curoco Management Corporation 2775 Goodrick Avenue Richmond, CA 94801

Re: Phase I and II Environmental Audits and Soil Remediation Curoco Steel Systems 536 Cleveland Avenue, Albany, California ENVIRON Contract No. 03-1332D

Dear Ron:

ENVIRON is herewith providing its final report on the subsurface investigation we conducted and the soil remediation which was performed at the Albany Facility of Curoco Steel Systems. Upon Curoco's authorization, we will submit this report to the Alameda County Health Care Services Agency, Department of Environmental Health to request site closure with respect to the soils containing paint residue and underground storage tank which were formerly at the site.

This letter certifies that the subject report has been prepared by ENVIRON Corporation under the professional supervision of the undersigned California Certified Engineering Geologist. The findings, recommendations, specifications, or professional opinions are presented after being prepared in accordance with generally accepted professional geologic and engineering practice. There is no other warranty, either expressed or implied.

ENVIRON appreciates the opportunity to have been of service on this project. If you have any questions, please call.

Very truly yours,

Andrew E. Seutter

Certified Engineering Geologist

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AES:RAE:PLF Enclosure

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1.0 EXECUTIVE SUMMARY

ENVIRON conducted environmental assessments and investigations and provided oversight to contractors who remediated soils containing paint residues at the Curoco Steel Systems site in Albany, California. ENVIRON also provided technical oversight to the removal of an underground storage tank at the facility. Based on confirmatory soil sampling and laboratory analysis, ENVIRON concludes that the investigation and activities performed on soils at the site have been sufficient and that remediation activities have been implemented according to an approved Remedial Action Plan. We conclude that no further work is necessary. This work can be summarized as follows:

Investigation and Remediation of Soils Containing Paint Residue

- Investigation to evaluate the extent of soils affected by paint residue completed by ENVIRON in April 1990.
- SITE successfully conducted bench-scale fixation of soluble metals on soil samples from Curoco site and submitted Remedial Action Plan in December 1990.
- 250 to 300 cubic yards of soil (approximate total) excavated from the rear
 of the site in January and February 1991.
- 163 cubic yards of soil (approximate total) was treated on-site by SITE to fix soluble metals and was disposed at Forward, Inc. Landfill in Stockton, California.
- 99 cubic yards of soil (approximate total) was stockpiled separately and was disposed at 2USPCI Class I landfill in Tooele County, Utah.
- Confirmatory soil samples from excavation base and sidewalls indicated no metals concentrations requiring further excavation.

• Excavation backfilled with imported crushed rock and class II aggregate base.

Underground Storage Tank Removal and Soil Excavation

- 550-gallon underground gasoline storage tank removed on May 25, 1990.
- Tank and liquid contents shipped to H&H Ship Service Co. in San Francisco for destruction.
- 30 cubic yards of soil (approximate total) removed in three excavation phases between May 1990 and February 1991; soil aerated and treated onsite.
- Confirmatory soil samples from excavation sidewalls indicated no detectable petroleum hydrocarbons except in one sidewall sample, which had a very low detection (16 mg/kg).
- Excavation backfilled with imported fill.
- · Treated soil disposed at Forward, Inc. Landfill in Stockton, California.

2.0 INTRODUCTION

2.1 Site Background and Previous Site Assessment Activities

The Curoco Steel Systems (Curoco) facility is located at 536 Cleveland Avenue in Albany, California. The site is nearly flat and is located at the base of Albany Hill (a local topographic high point). The site is just east of the San Francisco Bay, and is positioned between Interstate 80 on the east and Interstate 580 and the Southern Pacific Railroad tracks on the west. One building, which formerly housed sheet steel fabricating and painting operations and the company offices, occupies the majority of the property. A site location map is provided in Figure 1, and a site plan is provided in Figure 2.

As a result of a September 16, 1983 facility inspection by the former California Department of Health Services (DHS), Curoco was directed to remove soils that contained concentrations of chromium, lead and zinc above California Code of Regulations (CCR) Title 22 hazardous waste limit concentrations. The soil containing the metals had resulted from a previous operations practice of sweeping and discarding dried paint chips and other paint residues out the rear of the site building. These paint residues over time became a part of the soil.

On December 3, 1984, American Environmental Management Corporation (AEMC) submitted a Plan of Correction to DHS, which was approved in amended form on February 11, 1985. On February 22, 1985, soils were excavated to a depth of about one foot in a 10 foot by 50 foot area (a volume of about 8 cubic yards) on the southwest side of the property.

Post-excavation sampling indicated residual elevated levels of chromium, lead and zinc, and on June 13, 1985, DHS wrote to Curoco stating that the additional cleanup was inadequate. Curoco was ordered to delineate the extent of these metals to the east and north of the drain inlet adjacent to the railroad tracks, and to remove and dispose of the

soils once this extent was established. On July 19, 1985, AEMC submitted an amended Plan of Correction to obtain samples at seven locations and several depths for additional metals analyses. On August 16, 1985, DHS gave its approval to the Plan after increasing the number of sampling locations to 12 and requiring the California Assessment Manual Waste Extraction Test (CAM WET) on samples where chromium, lead or zinc concentrations were over 10 times their corresponding Soluble Threshold Limit Concentration (STLC). It is not certain whether any action was taken in implementing this Plan of Correction.

In December 1988, Blymer Engineers, Inc. (BEI) carried out a brief additional site assessment, which included a site occupation history and a visual inspection of the site. On January 12, 1989, BEI submitted its report to Curoco. BEI stated that the matter of whether the 1985 Plan of Correction had been implemented remained unresolved. They also stated that a 500-gallon underground fuel storage tank (UST), which apparently contained gasoline at one time, was still present at the facility, but its exact location was unknown. BEI recommended locating the UST.

On April 25 and May 10, 1989, Curoco contracted Bay Area Environmental, Inc. (BAE) to implement the sampling portion of the Plan of Correction approved by DHS in August 1985. At 12 locations, BAE took surface samples and a subset of samples at depths of 1 and 2 feet, for a total of 26 samples. In addition, one ground water sample was collected. In summer 1989, BAE issued their Preliminary Contamination Assessment Report. Laboratory analysis results showed that almost all soil samples were below the Total Threshold Limit Concentrations (TTLCs) for chromium, lead and zinc, and that concentrations of chromium and zinc rapidly attenuated with depth. However, many samples at 1 and 2 feet depth were still elevated in lead (greater than 10 x STLC). Two surface samples (locations 1 and 6) exceeded the TTLC for chromium, and three surface samples (locations 1, 6, and 7) exceeded the TTLC for zinc. None of the samples at 1 and 2 feet depth exceeded the TTLC for chromium, lead, or zinc. It was noted that lead concentrations were elevated in background soils. Several CAM WETs for lead were completed, and the results were higher than the STLC for lead. BAE recommended that chromium should be used as the indicator of "cleanup" and that soils

should be removed to 2.5 feet around sample sites 1, 2, 3, 5 and 6, and to 1 foot around other sampling sites. The 12 BAE sampling locations are shown on Figure 2.

2.2 Purpose and Scope of Recent Work

In December 1989, Curoco requested ENVIRON Corporation (ENVIRON) to review the technical information available from past site assessment activities as well as information contained in regulatory agency files for the subject site and for the adjacent Western Forge and Flange site. ENVIRON was then asked to recommend an approach for addressing elevated soil metals concentrations which could be implemented simultaneously with the sale of the facility. On January 26, 1990, ENVIRON proposed a course of action that included the following tasks:

Task 1

Collect soil samples from boring locations 4, 7, 8, 9, 10, 11 and 12, as well as two locations south of the property boundary and one north of the property boundary (see Figure 2)*. Samples to be collected at depths of 0, 1, 2, and 4 feet, as necessary to supplement existing data, in order to develop a vertical soil chemical profile at each sampling location. Analyze samples for total chromium, lead and zinc. If samples exceed 10 times the STLCs, then the CAM WET should be performed;

• Task 2

Submit an assessment of the vertical extent of metals in soils, recommendations for further work, and an estimate of costs for remediating soils in the areas of concern; and

^{*}This task was subsequently expanded to include additional sampling for locations 1, 2, 3, 5 and 6.

Task 3

Implement necessary remedial actions.

Task 1 was carried out in February and March 1990. Task 2 included additional investigation and was implemented in conjunction with Task 3. The Task 2 assessment and the results of Task 3 are the subject of this summary report. ENVIRON provided technical oversight to Task 3, which was implemented by contractors hired by Curoco both for the removal of the underground storage tank in May 1990, and for the excavation, treatment, and off-site disposal of soils containing paint residue in January through March 1991. During the excavation to remove soils containing paint residue, a corroded corrugated metal drain pipe containing residual oily material was encountered on the adjacent Southern Pacific Railroad property. This drain pipe and adjacent soils were independently removed by Southern Pacific.

The investigations and three separate remedial efforts (paint residue, corrugated pipe, and underground tank) were conducted nearly simultaneously and are discussed in Sections 2, 3, and 4, respectively.

2.3 Topographic Map and Aerial Photo Review

ENVIRON developed a site history by reviewing historical topographic maps published by the United States Geological Survey in 1899, 1915, 1942, and 1980, and by reviewing historical aerial photographs from Pacific Aerial Surveys taken in 1947, 1953, 1959, 1969, 1977, 1979, 1980, 1983, 1985 and 1988. A detailed description of this review is presented in Appendix A.

3.0 INVESTIGATION AND REMEDIATION OF SOILS CONTAINING PAINT RESIDUE

3.1 Initial Field Activities

The soil sampling program to investigate the extent of metals from paint residues in soil was carried out on February 9, 20, and 21, 1990. Soil samples were collected at boring locations 1 through 12 (corresponding with DHS's recommended locations), at two locations south of the property boundary (borings 14 and 15), and at one location north of the property boundary (boring 13; see Figure 3). Soil samples were obtained at depths of 1, 2, and 4 feet at boring locations 13, 14, and 15; at 2 and 4 feet at boring locations 4, 7, 8, 9, 10, and 12; and at 4 feet from borings 1, 2, 3, 4, 5, and 11. These sample depth intervals were chosen so that when combined with previous samples obtained by BAE, all of the borings would have soil samples collected from depths of 1, 2, and 4 feet. The 2-foot sample could not be obtained at boring location 11 due to the very gravelly soil encountered at this depth.

All borings were drilled by a two-man gas-powered auger with a 4-inch auger bit. Hand auguring was attempted at first, but was found to be unsuccessful at penetrating a cobble layer found at about 1-foot depth. Once the desired sample depth was reached, samples were collected using a hand-driven soil sampler lined with a 2-inch diameter aluminum sample tube. Samples were immediately labeled, capped with plastic end caps, sealed with tape, and placed in a cooler. Following the completion of sampling, the samples were delivered with chain-of-custody documentation to BC Analytical of Emeryville, California. The soils were analyzed for total chromium, zinc, and lead using EPA Test Method 6010. All of the soil samples were retained to run the California Assessment Manual Waste Extraction Test (CAM WET) if concentrations of these metals were beyond 10 times the soluble threshold limit concentration (STLC). Data are summarized in Figure 3, which provides a graphic summary of all pre-excavation metals

analyses. Laboratory reports, including copies of the chain-of-custody forms, are included in Appendix B.

During the drilling of borings 11, 11B, and 4, a layer of oily material with a strong odor resembling petroleum was observed floating on top of the ground water. This layer was found beginning at 8 inches below ground surface in boring 11. After observing this material it was concluded that ground water samples should be collected from borings 4, 5, 8, 10, 11, 12, 13, 14, 15, and 11B. Boring 11B was located approximately 5 feet to the east of boring 11. This boring was drilled only to the saturated-unsaturated interface so that a ground water sample could be obtained. Ground water samples were collected in 500 ml glass jars with TeflonTM-lined screw caps and immediately labeled and placed in a cooler. Following the collection of ground water samples, the samples were delivered with chain-of-custody-documentation to BC Analytical. Ground water samples were analyzed for quantification and identification of total petroleum hydrocarbons using EPA Test Method 8015 Modified. Analytical results of the hydrocarbon sampling are summarized in Table 1. Complete laboratory reports are included in Appendix B.

After soil and ground water sample collection was completed, the borings were backfilled with 3/8 inch bentonite chips and portland cement. The backfill material was thoroughly hydrated to form an adequate seal.

Two additional shallow soil borings were hand-drilled on April 12, 1990 to collect soil and ground water samples representative of background conditions. Boring BG-1, located 15 feet east of the railroad tracks and approximately 300 feet south of the Curoco property, was drilled to a total depth of 4½ feet. Boring BG-2, located 47 feet east of the railroad tracks and approximately 2,200 feet south of the Curoco property (near the junction of Interstates 80 and 580), was drilled to a total depth of 4½ feet. Four soil samples were collected from each boring with a hand-driven sampler lined with a six inch long brass tube. A sample of ground water (which was encountered at 2 feet depth) was collected from BG-1. No ground water was encountered in BG-2. The borings were backfilled with native materials because these were background sampling locations.

The background soil samples were placed in an iced cooler and transported under chain of custody to BC Analytical in Emeryville. The samples were analyzed for total chromium, zinc, and lead by EPA Test Method 6010. The ground water sample was analyzed for total petroleum hydrocarbons by EPA Test Method 8015 Modified. Analytical results of the background soil sampling are summarized in Table 2. The complete laboratory report, and a copy of the chain-of-custody form, are included in Appendix B.

Two surficial soil samples were collected on May 8, 1990 from the area immediately west of the Curoco building to assess treatability in preparation for evaluating remediation options. These samples were delivered to Sab International Technology Enterprises, Inc. (SITE) to perform a bench-scale test utilizing a proprietary soil fixation process.

3.2 Establishing Background Concentrations and Areas Requiring Remediation

ENVIRON utilized the average of the two background soil borings (BG-1 and BG-2) to determine the background concentration of total chromium, total lead, and total zinc at the four depths which were sampled. Table 2 lists the analytical results for background sampling and the average metal concentration calculated for each depth.

Upon examination of the background sampling results, it is apparent that total chromium concentrations are relatively consistent at the four depths sampled. Both lead and zinc concentrations, however, decrease with depth across the 4-foot interval sampled. It appears that local sources (industries, railroad, and highways) have contributed both lead and zinc to the area's surficial soils, but that no sources of total chromium exist near the site.

The local area's average background total chromium, lead, and zinc concentrations for each respective depth were subtracted from the metal concentrations found in samples collected at the same depth within the area containing paint residue. This resultant concentration was then utilized to delineate the areas and depths of soil requiring remediation. In general, areas where the concentration of a metal was greater than 10 times the STLC, but lower than the TTLC, were proposed for excavation, on-site

treatment, and appropriate off-site disposal. Areas where the concentration of a metal was greater than the TTLC were proposed for excavation and off-site treatment and disposal at a Class I facility.

The approach of subtracting the mean background concentrations worked well for total chromium and for zinc. Based on this method, however, different conclusions were made regarding lead. Samples containing elevated concentrations of total chromium and zinc were generally restricted to shallower soils. These total chromium and zinc concentrations were observed to decrease with depth, and were likely associated with Curoco's activities. Samples containing elevated concentrations of lead had a different distribution. In several borings (e.g., 2, 3, and 14) deeper samples (2 and 4 feet) had a higher total lead concentration than shallower samples (0 and 1 foot). ENVIRON concluded that the two depth distributions (shallow vs. deep) of elevated total lead were an artifact of the fill which had been placed at the rear of the site, as described below.

The soils at the site consisted both of native deposits and of older and younger generations of fill materials. These soils contained varying (elevated) concentrations of metals from background sources (primarily lead from leaded gasoline and the adjacent interstate highways) based on the length of time they were exposed and on when they were covered or buried by a younger fill. This burial created horizons of soil which contained lead from background sources, but which were not exposed to Curoco's activities. Curoco's activities caused some of the site's surficial soils to be affected by paint residues containing chromium, lead, and zinc. These metals commingled with some of the background lead which was near the surface, but did not reach some of the buried horizons of soil containing elevated concentrations of lead from background sources. Therefore, there are soils at the site containing elevated lead concentrations which are deeper than the soils affected by Curoco's activities, but which were not affected by Curoco's activities.

Based on the historical map and photograph review, ENVIRON could not definitively conclude when, and in how many episodes, the fill was placed at the rear of the site. However, based on correlating elevated lead concentrations in soil samples to elevated total chromium and zinc (which were reasonably inferred to be the result of

Curoco's activities), ENVIRON concluded that areas where deeper soil samples contained elevated lead without elevated total chromium and zinc had not been adversely affected by Curoco's activities. These were 2- and 4-foot intervals. Using this approach, it is also apparent that on the Curoco property, the calculated average lead concentration (even for surficial soils, where the calculated average equals 160 mg/kg) is significantly lower than some of the deeper concentrations which are likely attributed to background input on the original ground surface. The background surface soil sample containing the higher of the two lead concentrations (240 mg/kg) likely represents a more typical background surface (or pre-fill placement) lead concentration for this area.

The limits of the proposed excavation, the soil treatment process, and the site safety procedures to be followed were detailed in Remedial Action Plan For Soil Remediation at Curoco Steel Systems and Safety and Health Plan for Soil Remediation at Curoco Steel Systems, both dated December 26, 1990 by SITE, Inc. These documents were submitted to the Alameda County Health Care Services Agency (Alameda County) for review prior to beginning the excavation. The proposed sampling locations for confirming the effectiveness of the excavation and remediation were described in a letter to Mr. Ron Mayo entitled Post-Excavation Sampling and Analysis Plan, Curoco Steel Systems, 536 Cleveland Avenue, Albany, CA, 94710 dated January 16, 1991 by ENVIRON. This plan was also submitted to Alameda County for approval. Mr. Lawrence Seto, Senior Hazardous Materials Specialist with Alameda County, provided verbal approval of the project on February 1, 1991.

The proposed excavation had a four tier (depth) configuration (1, 2, 3, and 4 feet deep), with the deeper parts closer to the site building and the shallower part adjacent to the railroad tracks. It was anticipated that the dimensions of the excavation pit would be modified slightly during excavation based on visual observation of possible remaining paint residue, the analytical results of post-excavation soil samples, and the level of ground water.

3.3 Excavation and Post-Excavation Soil Sampling Activities

The remediation of soil containing metals from paint residue began the week of January 7, 1991. SITE, the remediation contractor, began excavation by removing approximately 6 inches of surficial soil (depicted on Figure 4 as likely greater than the TTLC) with a backhoe from the area immediately adjacent to the Curoco building. Five soil samples were collected on January 14, and one soil sample was collected on January 16, 1991 to confirm that the soil remaining after excavation of the surficial 6 inches was below the TTLC for total Cr, Zn, and Pb. These samples were delivered to Curtis & Tompkins, Ltd. in Berkeley, California under chain-of-custody. Figure 4 depicts the locations of soil samples #1 @ 6" through #6 @ 6".

Excavation proceeded simultaneously in other parts of the work area to remove and stockpile soils containing paint residues with metals concentrations likely below the TTLC but above ten times the STLC. The initial part of this excavation was completed on January 17, 1991. Additional excavation was still intended in the far southeast corner of the excavation area, but was delayed because of equipment access problems. Soil samples #7 through #19 were collected from the excavation bottom and sidewalls on January 18, 1991 to confirm removal of soil to background levels of total Cr, Zn, and Pb.

Concentrations of Cr, Zn, and/or Pb were above background in areas represented by five (#8 through #12) of these original thirteen confirmation soil samples. Additional excavation to remove these "hot spots" was conducted by SITE in the southwestern corner of the work area to extend the excavation both deeper and laterally to the south and to the west.

ENVIRON collected the last of the originally-proposed confirmation samples (#20) from the southeast corner of the excavation area on February 1, 1991. Three "resamples" (#1B, #2B, and #3B) were collected to verify that the additional excavation performed in the southwest corner of the work area had gone deep enough and that it had proceeded far enough to the south to remove soils affected by paint residues.

Additional lateral excavation to the west (up to the base of the rail tracks) was performed on February 26, 1991. ENVIRON collected the last two verification "resamples" (#4B and #5B) along the railroad tracks on February 27, 1991.

The actual base of the excavation was generally flat, with the topographic slope of the ground surface away from the building accounting for the tiered depths. The boundaries and depths of the actual excavation are depicted on Figure 4. Table 3 summarizes the analytical results of the post-excavation sampling. Complete laboratory reports and copies of the chain-of-custody forms are included in Appendix C.

3.4 Discussion of Post-Excavation Sampling Results

In summary, two initial phases of confirmation soil sampling, and one subsequent phase of resampling, were performed, first to confirm that the initial excavation had removed soils containing hazardous concentrations of metals, and then that additional excavation had removed the remainder of the soils affected by paint residues. Figure 4 depicts the locations of the soil samples that were collected.

The initial samples (soil samples #1 @ 6" through #6 @ 6") were collected after the surficial soil containing the highest (likely greater than the TTLC) metals concentrations was removed from the excavation area. Based on these results, the excavation proceeded deeper in the "likely greater than the TTLC" area to remove the soils containing paint residue with possible metal concentrations above 10 times STLC.

Samples numbered #7 through #20 were collected from the bottom and sidewalls of the excavation to demonstrate that the excavation process had removed sufficient soils containing paint residue. Analytical results from samples #7 and #13 through #20, representing the northern, central, eastern, and southeastern parts of the excavation, indicate that soils remaining in these areas contained background-adjusted metals concentrations below 10 times STLCs.

Bottom and sidewall soil sampling indicated that an area represented by samples #8 through #12 in the southwestern part of the excavation still contained soils containing paint residue. Therefore, the excavation was deepened and extended laterally to the south and west in the southwestern corner.

Resample #1B was collected to test the base of a new southerly extension of the excavation. Four resamples (#2B through #5B) were collected to retest the area where the five initial samples (#8 through #12) had contained the elevated total metals.

Results of the five resamples indicated total chromium, total lead, and total zinc were below concentrations proposed for remediation.

Based on visual observations made during the excavation and on the analytical results from soil samples, ENVIRON concluded that the excavation phase of the remediation had successfully removed soils containing paint residue.

3.5 On-Site Soil Treatment and Post-Treatment Soil Sampling

A proprietary process utilized for on-site soil treatment is described in *Remedial Action Plan for Soil Remediation* dated December 26, 1990 by SITE. The remedial action plan was verbally approved by Mr. Lawrence Seto of the Alameda County Health Care Services Agency and approval was confirmed in a site visit with Mr. Seto on January 11, 1991. On-site soil treatment was initiated on February 1, 1991 by SITE. SITE utilized their Ensol/LandtreatTM chemical fixation process consisting of the following steps:

- Soluble metals and sodium silicate were combined under alkaline conditions to produce metal hydroxide-silicate complexes;
- these complexes were then reacted with a chelating agent to form compounds of very low solubility; and
- the chelated metal hydroxide silicate complexes were further solidified by the addition of a highly adsorptive insoluble polysilicate to retain any excessive chelating agent.

Four samples of treated soil (K-526, K-527, K-528, and K-529) were collected by SITE on February 7, 1991 for bench-scale testing of the feasibility of the treatment process for on-site soils. The samples were submitted to Ensotech, Inc., a State-certified hazardous materials testing laboratory, for soluble metals analyses. Ensotech utilized the CAM WET procedure with a deionized water extraction (rather than sodium citrate) for determination of soluble silver, copper, lead, iron, chromium, nickel, cadmium, and zinc concentrations. Soluble levels of these metals were all well below the STLCs, in most cases below one-tenth the STLCs. Table 4 lists the post-treatment analytical results. Appendix D contains the analytical laboratory report for the post-treatment soil samples.

Based on the success of the bench-scale tests, approximately 150 cubic yards of soil was treated on-site by SITE to stabilize soluble metals. The treatment process was completed in late February 1991 and the treated soil was placed inside the on-site building for protection from rain and to await acceptance for off-site disposal.

3.6 Soil Segregation and Disposal

The upper six inches of soil which were removed from the hatched area shown on Figure 4 were likely to have had metals concentrations greater than the TTLC. This soil was placed in a plastic-covered stockpile on the asphalt-paved area near the northeast building corner. Soil removed from the southeast corner of the excavation area was also placed on this pile to be disposed off-site as hazardous waste at the U.S. Pollution Control, Inc. (USPCI) facility in Tooele County, Utah. Copies of the USPCI Waste Profile Sheet, the manifests which accompanied the waste upon transport, and the USPCI Certificates of Disposal are included in Appendix E.

The upper six inches of soil was also removed from perimeter areas outside of the area designated on Figure 4 as having metals concentrations likely greater than the TTLC. This soil was stockpiled separately on the asphalt-paved area west of the building near its northwest corner because various treatment and disposal options were being considered. This soil was eventually disposed at the USPCI facility in Utah along with the soil having metals concentrations likely greater than the TTLC. Copies of the USPCI Waste Profile Sheet, the manifests which accompanied the soil, and the USPCI Certificates of Disposal are included in Appendix E.

ENVIRON estimated the volume of stockpiled soil which was removed from the upper six inches of the central excavation area (metals concentrations likely greater than the TTLC) to be approximately 60 cubic yards. ENVIRON estimated the volume of stockpiled soil which was removed from the upper six inches of the perimeter excavation areas to be approximately 39 cubic yards. Based on shipment manifests, it appears that these soils were transported to USPCI in eight loads of an estimated 18 cubic yards each (total=144 cubic yards). The landfill received the soil and provided net weights of each load (on the Certificates of Disposal) which total 305,620 lbs (152.8 tons). Using a

conversion of 1.5 tons per cubic yard of soil and the net weight of the disposed soil, the total volume of soil disposed at USPCI is estimated at 102 cubic yards. This volume closely matches the sum of the estimates (99 cubic yards) ENVIRON made from the stockpiles. The discrepancy between these estimates and the 144 cubic yard estimate based on the shipment manifests is likely due to an overestimate of the quantity in each shipment load.

The majority of the soil removed from the excavation had metals concentrations likely greater than ten times the STLC, but below the TTLC. This soil was stockpiled on the asphalt-paved area along the northerly property boundary opposite the building office prior to on-site treatment by SITE. After treatment, this soil was disposed of off-site at the Forward, Inc. landfill in Stockton, California. Copies of the Forward, Inc. Waste Characterization and Soil Description Forms, the (non-hazardous) manifests which accompanied the waste upon transport, and the Forward, Inc. Landfill waste acceptance receipts are included in Appendix F.

The soil from the underground tank excavation which had been previously aerated, as well as that from the additional northerly extension of the underground tank excavation, was stockpiled on the northwest corner of the asphalt-paved parking area (see Section 4). This soil was treated by SITE and disposed of off-site with other soil treated for metals at the Forward, Inc. Landfill in Stockton, California. Copies of the Forward, Inc. Waste Characterization and Soil Description Forms, the (non-hazardous) manifests which accompanied the soil upon transport and the Forward, Inc. Landfill waste acceptance receipts are included in Appendix F.

ENVIRON estimated the volume of stockpiled soil which was treated on-site for metals by SITE to be approximately 163 cubic yards. ENVIRON estimated the total volume of soil removed from the underground tank excavation (including the tank contents) which was aerated and treated by SITE to be approximately 30 cubic yards. Thus, the total volume sent to Forward was estimated to be 193 cubic yards. Based on shipment receipts, these soils were transported to Forward in 17 loads of an estimated 20 cubic yards each (total=340 cubic yards). No weights were recorded for the transported

soil. Discrepancies in these quantities are likely due to underestimates of the actual volume of stockpiled soils and overestimates of the actual quantities in shipment loads.

3.7 Excavation Backfill

Due to extremely soft and saturated soil conditions at the base of the excavation, approximately one to two feet of imported crushed rock was placed in the excavation prior to placement and compaction of the imported fill soil. The imported soil was placed in six to eight inch thick lifts and compacted by rolling with the backhoe. SITE placed a total of approximately 150 cubic yards of crushed rock in the excavation. An additional approximate 150 cubic yards of class II aggregate base was imported and placed as compacted fill in the excavation area between August 26 and 28, 1991. Because the fill thickness was generally less than three feet and because this was a non-structural area, no density testing was performed on the fill. Finished grade very closely matched the original grade, with slight sloping to enhance runoff away from the site.

4.0 CORRUGATED PIPE EXCAVATION

On January 17 and 24, 1991, during excavation for the soils containing paint residue remediation, a corrugated metal drain pipe (culvert) was partially exposed parallel and adjacent to the Southern Pacific Transportation Company (SPTCo) railroad tracks. This drain pipe was on SPTCo property. Several small, deeper areas of the excavation adjacent to the pipe contained ground water and a black viscous oil floating on top. Furthermore, the oil was observed to be slowly seeping out of corroded holes and seams of the metal pipe. SPTCo was notified of the presence of the metal drain pipe and floating oil because of the oil's unknown origin and because the pipe was located on railroad property.

Overnight rain on February 1 and 4, 1991 nearly filled the excavation between the building and the railroad tracks. Black oil, which had been concentrated in several small puddles, because of wind, was collecting along the northerly perimeter of the excavation. ENVIRON collected a sample of this oil on the evening of February 4, 1991 and submitted it to Curtis & Tompkins, Ltd. for overnight analysis by EPA Test Method 8080 for PCBs. Aroclor 1254 (a PCB) was detected at a concentration of 2.0 mg/kg in the floating oil sample. This result immediately was reported to SPTCo.

SPTCo, in conjunction with SP Environmental Systems, Inc., and SITE (contracted separately by SPTCo) initiated their own separate removal of surface water, soil, and the metal drain pipe. Activities associated with this removal were detailed in Southern Pacific Transportation Company Adjacent to Curoco Property, 536 Cleveland Street, Albany, California dated March 28, 1991 by SP Environmental Systems, Inc. Approximately 36 cubic yards of soil and pipe debris were removed from the site and disposed at the Chemical Waste Management, Inc. facility at Kettleman Hills, California.

ENVIRON concluded that the corrugated metal pipe had been the source of the floating hydrocarbons which were observed and sampled in the shallow boreholes during the initial field investigation at the site. These hydrocarbons had previously been identified as heavy hydrocarbons.

5.0 UNDERGROUND STORAGE TANK REMOVAL AND SOIL EXCAVATION

5.1 Underground Tank Removal and Initial Sampling

On May 25, 1990, a 550 gallon underground tank formerly used to store gasoline was excavated and removed from the Curoco facility. Tank excavation and removal were performed by R.S. Eagan & Co., who utilized H & H Ship Service Co. to haul away the tank, its liquid contents, and to destroy the tank and dispose of the liquid contents. A Case 580K backhoe was used to excavate and remove the tank. Figure 5 depicts the former tank location as well as soil and ground water sampling locations, excavation limits, stockpile locations, and various other site features.

ENVIRON staff and Mr. Dennis Rivers, Lieutenant with the Albany Fire Department, observed the excavation to expose the tank. Upon initial excavation in the area where the tank was believed to be located, a 2.5-inch diameter plastic sewer line was ruptured at a depth of 2 feet, and the job was temporarily shut down until the spilled sewage was cleaned up and pipe repaired. Additional excavation approximately 10 feet to the north located and exposed the storage tank.

The tank was of steel construction and its upper surface was approximately 4 feet below the surface. A 1.75-inch diameter steel product line and smaller diameter vent line were removed and the top of the tank was cut open to allow access to the tank's contents. An H & H Ship Service Co. vacuum truck was used to remove the liquid contents from the opened tank. A copy of the manifest which accompanied the approximately 200 gallons of liquid waste to H & H Ship Service Co. for recycling is included in Appendix G.

After chaining the tank to the backhoe bucket, the tank was lifted out of the excavation at 12:00 p.m. and placed on a visqueen-covered paved area nearby. Its

contents, consisting of approximately 1.4 cubic yards of wet fill sand, were emptied onto the visqueen pending sampling and analysis.

ENVIRON observed that the tank was originally oriented with its long dimension running east-west and that it measured 6 feet 8 inches long by 3 feet 9 inches in diameter. Upon removal from the excavation, two large holes (approximately 3 inches in diameter) and approximately ten smaller holes (up to 1/4 inch diameter) resulting from corrosion were noted in the tank's bottom. In addition, the tank's midseam had apparently split along the bottom due to corrosion. A distinct hydrocarbon odor was noted in the work area and a slight hydrocarbon sheen was observed on ground water which seeped into the approximately 7.75-foot deep excavation. The tank was inerted with dry ice and was placed on a flat bed truck for transport to H & H Ship Service Co. for destruction. A copy of the manifest which accompanied the tank is provided in Appendix G.

An organic vapor analyzer (OVA) and a photoionization detector (PID) were utilized to screen samples from the sand which had been in the tank, the spoils removed from above and around the tank during excavation, and the soil from the excavation sidewall. The field instrument results are reported in Table 5.

At approximately 1:45 p.m. on May 25, 1990, Mr. Lawrence Seto of Alameda County Health Care Services Agency arrived to inspect the tank and the excavation, and to observe the soil and ground water sampling. Ground water which had seeped into the excavation stood at a depth of approximately 5 feet below the ground surface at the time of sampling (beginning at 1:55 PM). Samples intended for volatile organics analysis and aromatic hydrocarbons were collected by entering the excavation, submerging a capped 1-liter amber bottle below the surface, removing the cap to allow water from below the surface to fill the bottle, then recapping the bottle, lifting it above the water's surface, and transferring to the 40 milliliter sample bottles. The samples intended for extractable hydrocarbon analysis were collected from below the water surface in the 1 liter bottles. The samples were labeled and placed in an iced cooler for transport to the laboratory.

Two soil samples were collected from the tank excavation sidewalls and one soil sample was collected from beneath the product pipe running between the tank and the

building, as required by the Regional Water Quality Control Board and Alameda Health Care Services Agency. Additionally, ENVIRON collected a sample of the fill sand contained in the tank and a soil sample from approximately 2 feet west of the tank excavation at 3 feet depth. The soil samples were collected by exposing fresh soil on the excavation sidewalls or under the pipeline, hand driving a sampler containing a 2-inch diameter by 6-inch long brass sample tube into the soil, then removing the sampler and brass tube containing the soil, sealing with TeflonTM film, plastic cap, and adhesiveness silicon tape. The samples were labeled and placed into an iced cooler for transport to the laboratory under strict chain-of-custody.

After analytical sampling, workers from R.S. Eagan & Co. barricaded the excavation, delineated it with plastic flagging, and covered the spoils pile and tank content piles with visqueen. ENVIRON estimated the volume of stockpiled spoils to be approximately 14.5 cubic yards and the volume of fill sand contained within the tank to be approximately 1.4 cubic yards. The excavation was left open pending laboratory results. The product pipeline was left in place and it was agreed with Mr. Seto that it would be cut off where exposed and washed with water prior to backfilling the excavation.

Laboratory analysis was performed by BC Analytical in Emeryville, California, a State-certified hazardous materials testing laboratory. The analytical program consisted of analysis of all soil, sand, and water samples for purgeable aromatics (benzene, toluene, ethylbenzene, and xylenes) by EPA Test Method 8020, analysis of four soil samples for total petroleum hydrocarbons by EPA Test Method 418.1, analysis of the soil sample from the north pit wall for total lead and organic lead by EPA Test Method 6010 and the LUFT Field Manual method, respectively, and analysis of the pit water and tank contents (sand) samples for total volatile hydrocarbons (as gasoline) and total extractable hydrocarbons (as diesel), both by EPA Test Method 8015 Modified. Analytical results are displayed in Table 6. Complete laboratory reports and copies of the chain-of-custody forms are provided in Appendix H.

5.2 Soil Aeration

Stockpiled soils from the tank excavation and the tank contents were spread on the asphalt-paved area behind the on-site building (see Figure 5) for aeration of petroleum hydrocarbons. These soils were periodically turned with a rubber-tired loader to expose fresh soil. On July 23, 1990, ENVIRON collected three aerated soil samples (A, B, and C; see Figure 5) for laboratory analysis of total petroleum hydrocarbons by EPA Test Method 8015. Analytical results are summarized in Table 6. Because of detectable heavier hydrocarbon fractions in the samples (especially in a sample collected from the former tank contents), additional aeration was performed.

The aerated soil was resampled on August 17, 1990. Two samples (D and E; see Figure 5) were collected from the aeration pile near where previous samples (A, B, and C) had laboratory-detected petroleum hydrocarbons. These samples were analyzed by EPA Test Method 8015 modified for volatile and extractable hydrocarbons. Analytical results are also included in Table 6 and the laboratory reports are provided in Appendix H.

5.3 Excavation Extension

Because the soil sample from the north wall of the original excavation contained detectable hydrocarbons, additional excavation to the north was recommended. On August 17, 1990, ENVIRON staff observed additional soil excavation on the north side of the original tank excavation. Excavation with a backhoe continued an additional 3 feet northward. Soils were stockpiled in the northwest corner of the paved area pending laboratory analysis results. ENVIRON estimated the volume of soil removed during this excavation extension to be approximately 6.5 cubic yards. An organic vapor monitor (OVM) was used to monitor soil vapors from samples collected at specific footages of additional lateral excavation. The field instrument results are reported in Table 5.

A confirmatory laboratory soil sample (F; see Figure 5) was collected after completing the 3 feet of excavation extension. Table 6 lists the analytical results, and the laboratory report is included in Appendix H.

Total petroleum hydrocarbons and aromatic hydrocarbons were not detected in any of the initial soil samples from the south and west excavation sidewall.

5.4 Hand Auger Borings and Soil Samples

Laboratory analysis of soil sample F indicated that the northerly limits of hydrocarbons in soils had not been reached, so additional soil samples were recommended. On August 30, 1990, ENVIRON drilled three hand auger borings at distances of 5, 10, and 15 feet north of the existing edge of the tank excavation. One soil sample was collected from a depth of two feet in each boring (G-2, H-2, and I-2; see Figure 5). Sample G-2 was analyzed by EPA Test Method 418.1 for total petroleum hydrocarbons. The other two samples were held at the laboratory for analysis only if hydrocarbons were detected in the first sample. Analytical results are listed in Table 6 and the laboratory report is included in Appendix H.

5.5 Additional Excavation and Backfill, Soil Treatment, and Disposal

Petroleum hydrocarbons were not detected above 50 mg/kg (the detection limit) in soil sample G-2, collected from the hand auger boring. A proposal to excavate laterally northward up to this sample location was included in SITE's Remedial Action Plan for Soil Remediation, which was approved by Alameda County. Additional excavation, as depicted by the hatched area north of the sample F location on Figure 5, was performed to enlarge the tank excavation northward to the location of soil sample G-2. The additional excavation was approximately 4.5 feet deep. ENVIRON estimated the volume of soil removed during this additional excavation to be approximately 7.5 cubic yards. The excavated soil was placed on the asphalt pavement for later on-site treatment for petroleum hydrocarbons. The excavation was then backfilled with imported fill. On February 26, 1991, a portion of the new backfill was removed to expose the northerly face of the enlarged excavation. ENVIRON collected one soil sample from the northerly sidewall (N-extra @ 2½') for analysis of total petroleum hydrocarbons by EPA Test Method 418.1.

The stockpiled soil which had previously been aerated and the soil which had been removed during the two phases of additional northerly excavation was treated by SITE for petroleum hydrocarbons along with that treated for metals beginning on February 1, 1991. The estimated total volume of this soil was approximately 30 cubic yards. After treatment, this soil was stockpiled and then disposed off-site at the Forward, Inc. Landfill in Stockton, California. Copies of the (non-hazardous) manifests which accompanied the soil upon transport and the Forward, Inc. Landfill waste acceptance receipts are included in Appendix F.

5.6 Discussion of Results - Underground Storage Tank Removal

Soil samples were collected from the south, the north, and 2 feet into the west sidewalls of the initial excavation to remove the underground storage tank. A soil sample was also collected beneath the product pipeline. Petroleum hydrocarbons were detected at 50 mg/kg in the soil sample from the north excavation sidewall, but were less than 50 mg/kg (not detected) in the other samples. Aromatic hydrocarbons (benzene, toluene, ethylbenzene, or xylenes [BTEX]) were not detected above the laboratory detection limit of 0.1 mg/kg in any soil sample from the excavation sidewalls or from beneath the product pipeline. After two series of additional excavations and sampling on the north sidewall, residual petroleum hydrocarbons remaining were at a concentration of 16 mg/kg in sample N-extra @ 2½.

Samples of ground water which entered the excavation after tank removal contained 3.5 mg/l of C-4 to C-12 petroleum hydrocarbons and 6.5 mg/l of C-13 to C-25 petroleum hydrocarbons. These hydrocarbon ranges typically correspond to gasoline. No heavier hydrocarbons (typical of diesel fuel) or aromatic hydrocarbons (BTEX) were detected in the excavation ground water sample.

Total lead was measured at 10 mg/kg in the soil sample from the north wall of the excavation. As established from sampling for remediation of the soils containing paint residue, this concentration is in the range of concentrations typical of background conditions.

Due to the nearby industrial activity and interstate highways, the shallow ground water in this area very likely contains dissolved lead and petroleum hydrocarbons. The ground water is also likely to be slightly saline and have limited beneficial use because of the site's proximity to the bay." Soil and ground water sampling have confirmed that no aromatic hydrocarbons are present in soil or ground water at the former tank location. The site's clayey soils will act to inhibit the spread of residual hydrocarbons which might be present in or near the tank pit. ENVIRON therefore does not recommend conducting any further investigation or remediation.

^{**}This conclusion was substantiated by the Regional Water Quality Control Board in a January 15, 1986 letter (File No. 2199.9227[PCM]) to Western Forge and Flange, the facility adjacent to the Curoco facility: "The shallow ground water does contain dissolved metals, including lead, above established drinking water action levels. Oil and grease have also been detected in the groundwater. However, the shallow groundwater in this area is slightly saline, is high in Total Dissolved Solids and is therefore of limited beneficial use. Furthermore, the aquifer is situated in low permeability clayey soils which limit the spread of the pollutants in question in the groundwater. Based on these considerations, Regional Board staff do not believe that a costly groundwater cleanup program is warranted for this site."

TABLE 1 Total Petroleum Hydrocarbon Analytical Results, Ground Water Samples Collected from Shallow Boreholes
Curoco Steel Systems
Albany, California

Sample Number	Date	Sample Type	Total Fuel Hydrocarbons ¹ (mg/l)	Fuel Characterization (Qualitative)
CS11FP	2/20/90	petroleum ²	50% ² 50% ²	Diesel Oil
CS4AFP	2/21/90	aqueous	5	Diesel
CS5AFP	2/21/90	aqueous	21	Stoddard
CS8AFP	2/21/90	aqueous	<1	-
CS10AFP	2/21/90	aqueous	<1	-
CS11BFP	2/21/90	aqueous	49	Jet Fuel
CS12AFP	2/21/90	aqueous	<1	-
CS13AFP	2/21/90	aqueous	<1	-
CS14AFP	2/21/90	aqueous	<1	-
CS15AFP	2/21/90	aqueous	<1	-
BG-1	4/12/90	aqueous	<1	-

¹EPA Test Method 8015 Modified used for analysis.
²Quantification of this petroleum sample reported in percent of total.

TABLE 2

Background Metals Concentrations Curoco Steel Systems Albany, California

		Metal Concentration (mg/kg)				
Sample Number	Date	Total Chromium	Lead	Zinc		
BG-1 @ 0'	4-12-90	29	240	250		
BG-2 @ 0'	4-12-90	46	80	120		
Average Ba Ground S	ckground at urface (0')	37	160	185		

01		Metal Concentration (mg/kg)				
Sample Number	Date	Total Chromium	Lead	Zinc		
BG-1 @ 1' 4-12-90		30	15	270		
BG-2 @ 1' 4-12-90		32	67	97		
Average Ba 1 Foo	ckground at t Depth	31	41	183.5		

		Metal Concentration (mg/kg)				
Sample Number	Date	Total Chromium	Lead	Zinc		
BG-1 @ 2' 4-12-90		22 17		36		
BG-2 @ 2'	4-12-90	37	45	79		
Average Ba 2 Feet	ckground at Depth	29.5	31	57.5		

	_	Metal Concentration (mg/kg)				
Sample Number	Date	Total Chromium	Lead	Zinc		
BG-1 @ 4'	4-12-90	27	< 6 ¹	24		
BG-2 @ 4'	4-12-90	28	18	42		
Average Ba 4 Feet	ckground at Depth	27.5	12	33		

¹Laboratory detection limit was used in calculation of average.

TABLE 3

Post-Excavation Soil Sample Anaytical Results Curoco Steel Systems Albany, California

		Total Metal Cor	centration (mg	Note	
Sample Number	Date	Chromium	Lead	Zinc	7
#1 @ 6"	1/14/91	12	3.9	44	Confirm hazardous soil removal
#2 @ 6"	1/14/91	41	57(4)	120	Confirm hazardous soil removal
#3 @ 6"	1/14/91	12	31	67	Confirm hazardous soil removal
#4 @ 6"	1/14/91	17	51(4)	96	Confirm hazardous soil removal
#5 @ 6"	1/14/91	13	41	76	Confirm hazardous soil removal
#6 @ 6"	1/16/91	26	32	77	Confirm hazardous soil removal
#7	1/18/91	49	44	200	S sidewall sample
#8	1/18/91	1,700	650(4)	3,900(4)	SW sidewall sample
#9	1/18/91	590	330(4)	1,600	SW bottom sample
#10	1/18/91	810	14,000(3,4)	4,000(4)	SW bottom sample
#11	1/18/91	210	150(4)	740	W sidewall sample
#12	1/18/91	480	280(4)	1,200	W sidewall sample
#13	1/18/91	12	49	42	E bottom sample
#14	1/18/91	8	82(4)	150	Central bottom sample
#15	1/18/91	40	71(4)	200	Central bottom sample
#16	1/18/91	32	82(4)	180	W sidewall sample
#17	1/18/91	12	62(4)	110	N bottom sample
#18	1/18/91	22	86(4)	340	N bottom sample
#19	1/18/91	11	68(4)	180	N bottom sample
#20	1/18/91	200	23	120	SE bottom sample
#1B	2/1/91	24	62(4)	67	Test additional S excavation
#2B	2/1/91	38	10	70	Retest #8
#3B	2/1/91	57	85(4)	200	Retest #9, #10
#4B	2/27/91	47	29	110	Retest #11
#5B	2/27/91	37	43	98	Retest #12
TTLC (1)		2,500	1,000	5,000	
STLC (2)		560	5	250	

⁽¹⁾ Total Threshold Limit Concentration (mg/kg)

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⁽²⁾ Soluble Threshold Limit Concentration (mg/l)

⁽³⁾ Exceeds TTLC

⁽⁴⁾ Exceeds 10 x STLC

TABLE 4

Post-Treatment Soil Sample Analytical Results Curoco Steel Systems Albany, California

Sample ¹ Number	Soluble Metal Concentration (mg/l)								
	Date	Silver	Соррег	Lead	Iron	Chromium	Nickel	Cadmium	Zinc
K-526	2/7/91	< 0.03	< 0.002	< 0.04	29	0.22	0.006	< 0.002	1.84
K-527	2/7/91	< 0.03	0.03	0.05	29	0.33	< 0.005	< 0.002	3.84
K-528	2/7/91	< 0.03	>0.002	< 0.04	21	0.15	< 0.005	< 0.002	1.37
K-529	2/7/91	< 0.03	< 0.002	< 0.04	22	0.15	< 0.005	< 0.002	1.38
STLC ²		5,0	25	5.0	NL	560	20	1.0	250

Samples collected by SITE
 Soluble Threshold Limit Concentration (mg/l)
 NL-No level promulgated in California regulations.

TABLE 5

Results of Field Instrument Monitoring of Soil Sample Vapors During Underground Storage Tank Removal and Additional Soil Excavation Curoco Steel Systems Albany, California

SAMPLE TYPE AND ORIGIN	DATE	OVA ¹ (ppm)	PID² (ppm)	OVM³ (ppm⁴)
sand from tank contents	5/22/90	75	220	
spoils from tank excavation	5/22/90	20	25	
spoils from tank excavation	5/22/90	60	20	
soil from north sidewall @ 2 ft depth	5/22/90	30	5.9	
soil from 1.5 ft northward excavation	8/17/90			100
soil from 2.0 ft northward excavation	8/17/90			40
soil from 2.5-3.0 ft northward excavation	8/17/90			70

¹OVA - Organic Vapor Analyzer (flame ionization).

²PID - Photo Ionization Detector (photo ionization).

³OVM - Organic Vapor Monitor (photo ionization).

⁴ppm - parts per million.

TABLE 6

Soil and Ground Water Sample Analytical Results, Underground Storage Tank Removal Curoco Steel Systems Albany, California

Sample Number	Sample	TPH by	TPH by G	C ² -Volatile and	Semivolatile	Benzene	Ethylbenzene	Toluene	Xylenes	Total	Organic		
	Date	IR ⁵ mg/kg)	C4 to C12 (mg/kg)	C12 to C25 (mg/kg)	C25 to C35 (mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Lead (mg/kg)	Lead (mg/kg)		
South Wall @ 3'	5/25/90	<50				< 0.1	< 0.1	<0.1	<0.1				
North Wall @ 2'	5/25/90	50				< 0.1	< 0.1	<0.1	< 0.1	10	<0.5		
Pipeline @ 1½'	5/25/90	< 50				< 0.1	< 0.1	< 0.1	< 0.1				
2' West @ 3'	5/25/90	< 50				< 0.1	< 0.1	< 0.1	< 0.1				
Pit Water #1	5/25/90		3.5 ¹	6.5 ¹	< 5.0 ¹	< 0.003 ¹	< 0.003 ¹	< 0.00351	< 0.012 ¹				
Tank Contents	7/23/90		250	500	<100	<1	<1	<1	1.1				
A: Tank Contents	7/23/90		1.1	80 ³									
B: Stockpile	7/23/90		0.1	< 5 ³									
C: Stockpile	7/23/90		< 0.1	<5 ³									
D: (Stockpile)	8/17/90		< 0.1	<	:5								
E: (Tank Contents)	8/17/90	,	0.4	1004									
F (North Wall @ 2')	8/17/90	230				< 0.005	< 0.005	< 0.005	< 0.005				
G-2	8/30/90	<50											
H-2	8/30/90		sample held without analysis										
I-2	8/30/90				sa	mple held with	out analysis						
N-extra @ 21/2'	2/26/91	16											

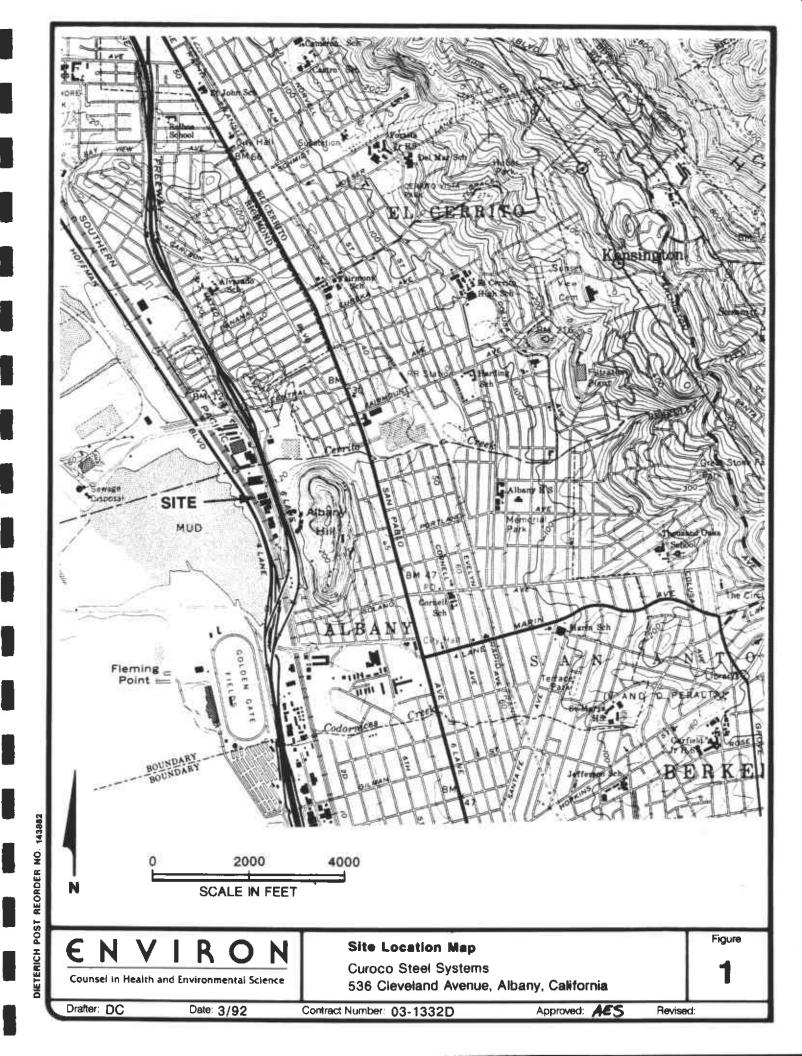
¹Concentrations in mg/l (water sample).

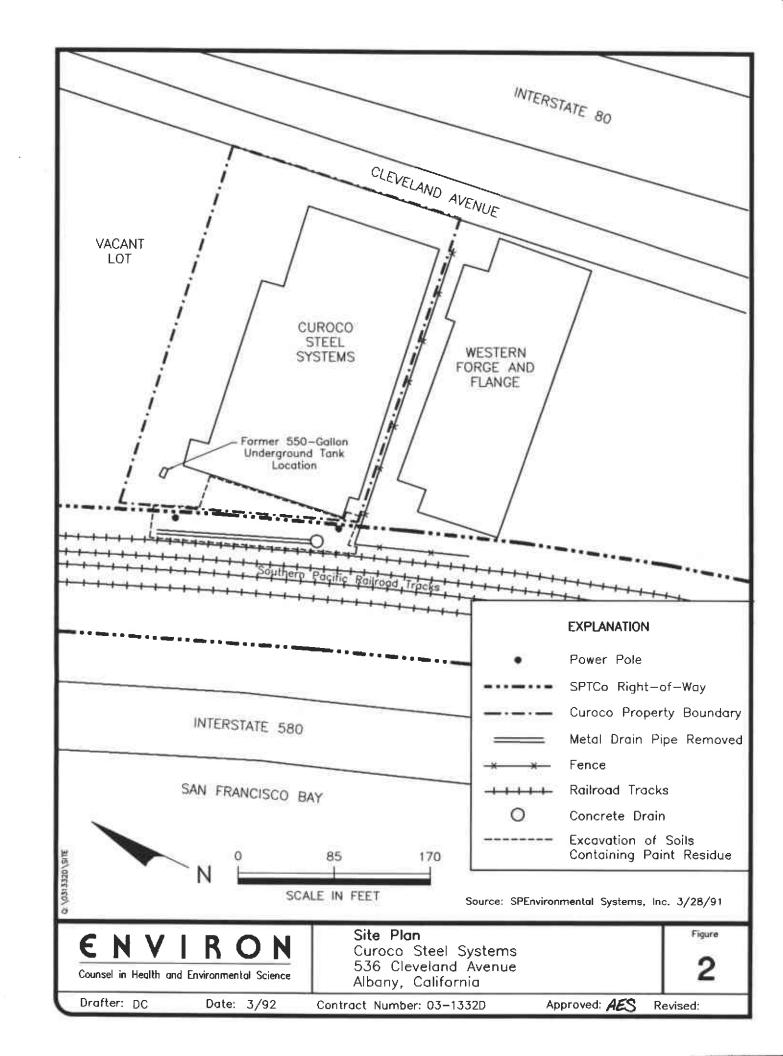
²Total Petroleum Hydrocarbons by Gas Chromatograph

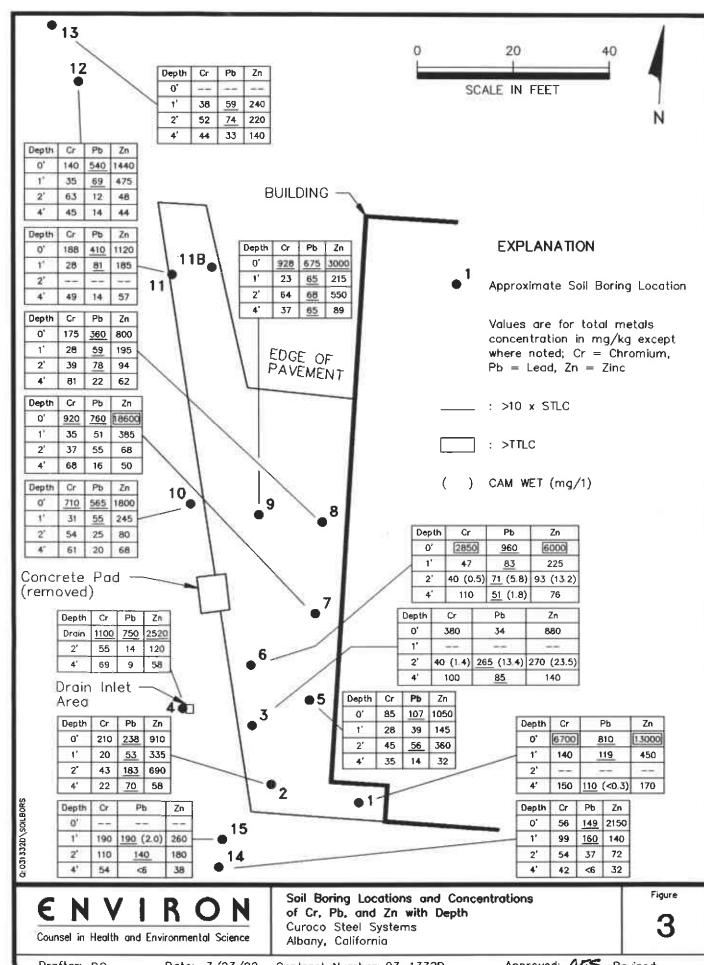
³C12 to C16 compounds

⁴C12 to C18 compounds

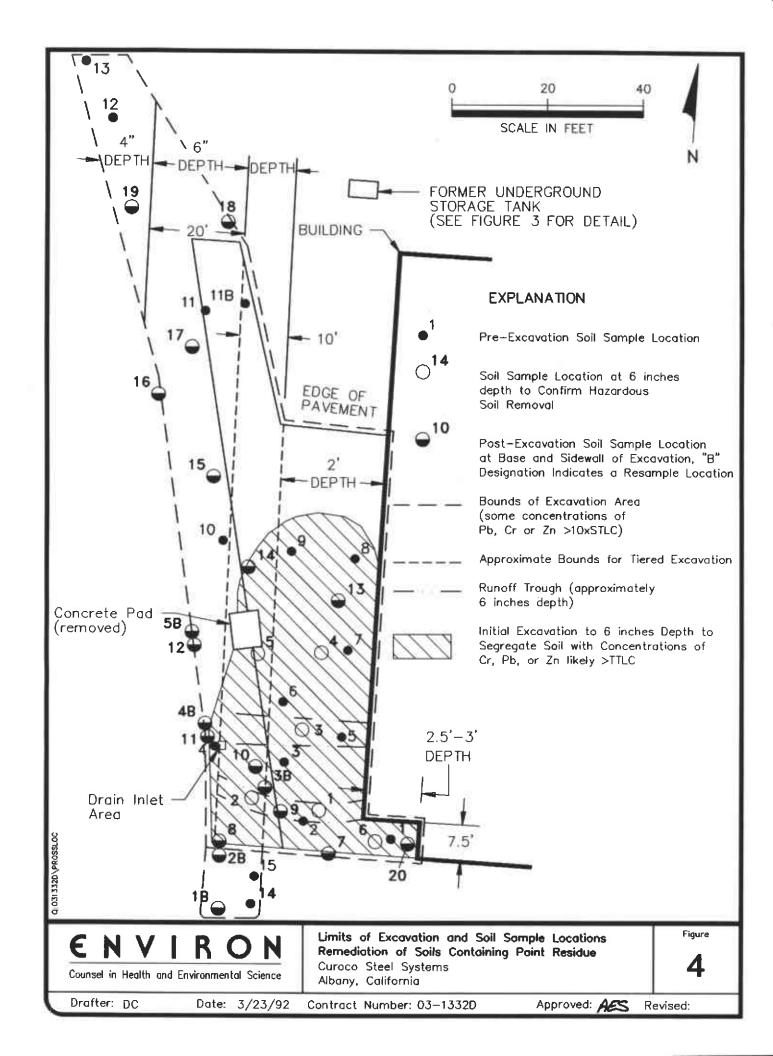
⁵Total Petroleum Hydrocarbons by Infrared Spectrometry

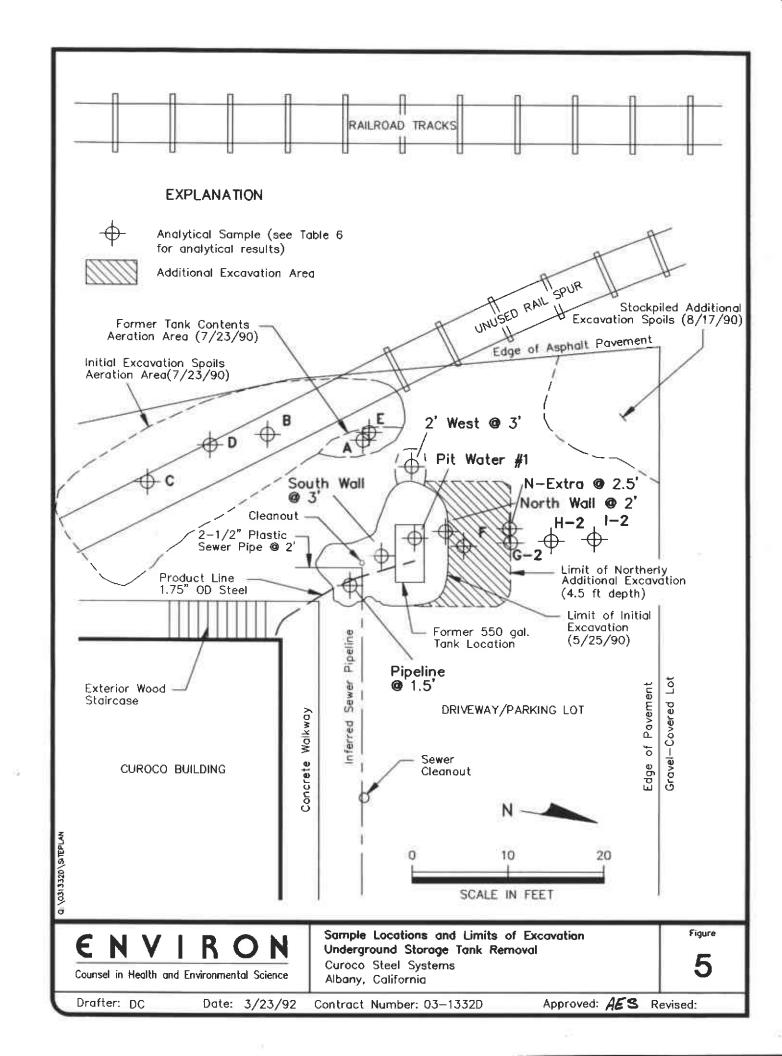






Drafter: DC Date: 3/23/92 Contract Number: 03-1332D Approved: AES Revised:





APPENDIX A Site History From Map and Photo Review

APPENDIX A

From ENVIRON's historical map and aerial photo review, the site originally appeared to be an undeveloped low-lying area adjacent to and south of a small marsh formed at the mouth of Cerrito Creek. The earliest map, published in 1899 (survey data from 1892-1894), depicts the Southern Pacific Railroad tracks in their present day position west of the site. It is presumed that artificial road-base fill was imported during railroad construction, but it cannot be established when or if fill was placed on the site. No site development is inferred from maps published in 1915 (surveyed 1892-1894, revised 1914) or 1942 (aerial photography 1939, 1941), or from the earliest aerial photograph we inspected dated March, 1947.

The East Shore Highway (present day Cleveland Avenue) is first depicted on the 1942 map and the 1947 photograph. Hoffman Boulevard (present day Interstate 580) is not shown on the 1942 map, but is shown on the 1947 photograph. No development of either the north or south adjacent properties is shown in the 1947 photograph. In 1947 the site consisted of a grass-covered vacant lot with a single-lane unpaved driveway traversing the eastern part of the site. A small (± 25 ft by 40 ft) building is located in the center of the eastern half of the site in the 1953 photograph. The 1953 photograph also depicts construction of a building addition on the west side of two contiguous buildings on the property now occupied by Western Forge and Flange south of the subject site. In the 1959 photograph, the western two-thirds of the building currently occupied by Curoco is in place and the area immediately to the east might be in the initial phases of building construction as evidenced by possible footing excavations. Unidentifiable materials appear to be stored on the ground in the area between the building and the railroad tracks. New construction of present day Interstate 80 is shown in 1959, thereby rerouting traffic off Cleveland Avenue.

The photograph from 1969 shows the site, surrounding properties, and major roads much as they are today. A small square building or shed measuring approximately 25 feet by 25 feet is located in the area between the main building and railroad tracks. This shed

might have been used for materials testing in salt air (Ron Mayo, Telephone Communication, May 3, 1990). Unidentified materials and an apparent power boat are stored on the ground between the building and the railroad tracks. No evidence of soil staining in this area was observed on the photograph. Steam emissions from Western Forge and Flange are being carried northerly, over the Curoco site, in the 1969 photograph.

The photograph from 1977 continues to depict the small building near the railroad tracks, but the building is not present in the photograph from 1979. Aside from the miscellaneous material on the ground, no distinctive staining is visible on the soil behind the Curoco building in the 1977 and 1979 photographs. On the 1977 photograph, discolored soil (darkened) or perhaps ponded water is evident on soil between the Western Forge and Flange building and the railroad tracks, approximately 150 feet south of the Curoco property.

The photographs from 1980, 1983, 1985, and 1988 show the subject site and adjacent properties in their general present day conditions. Ponded water or soil staining is evident on the northwest corner of the Western Forge and Flange property, adjacent to Curoco, in the 1983 photograph. The 1985 photograph depicts several unidentifiable white objects on the ground adjacent to the west side of the Curoco building, and the 1988 photograph shows an area of lighter nonvegetated soil immediately adjacent to the railroad tracks which may be related to recent fill placement.

APPENDIX B

Laboratory Analytical Reports and Chain-of-Custody Documentation for Soil Samples Collected During Initial Investigation of Metals-Affected Soil

LOG NO: E90-02-602

Received: 20 FEB 90 Reported: 07 MAR 90

Mr. Todd Stein Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332A

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESC	CRIPTION,	SOIL	SAMPLES	3		DA	ATE SAMPLED
02-602-1 02-602-2 02-602-3 02-602-4 02-602-5	CS6A4 CS7A4 CS8A4 CS9A4 CS12A4							20 FEB 90 20 FEB 90 20 FEB 90 20 FEB 90 20 FEB 90
PARAMETER			02-6	502-1	02-602-2	02-602-3	02-602-4	02-602-5
Chromium, m Lead, mg/kg Zinc, mg/kg Nitric Acid	-	Date	02.2	110 51 76 23.90	68 16 50 02.23.90	81 22 62 02.23.90	37 65 89 02.23.90	45 14 44 02.23.90



LOG NO: E90-02-602

Received: 20 FEB 90 Reported: 07 MAR 90

Mr. Todd Stein Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332A

REPORT OF ANALYTICAL RESULTS

Page 2

LOG NO	SAMPLE DESCRIPTION,	SOIL S	SAMPLES			D/	TE SAMPLED
02-602-7 02-602-8 02-602-9	CS7A2 CS8A2 CS9A2 CS12A2 CS11A4						20 FEB 90 20 FEB 90 20 FEB 90 20 FEB 90 20 FEB 90
PARAMETER		02-60	02-6	02-602-7	02-602-8	02-602-9	02-602-10
Chromium, mg Lead, mg/kg Zinc, mg/kg Nitric Acid	/kg Digestion, Date	02.23	37 55 68 3.90	39 78 94 02.23.90	64 68 550 02.23.90	63 12 48 02.23.90	49 14 57 02.23.90

Sim D. Lessley, Ph.D., Laboratory Director



LOG NO: E90-02-608

Received: 20 FEB 90 Reported: 23 FEB 90

Mr. Phil Fitzwater Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1132A

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION,			DATE SAMPLED
02-608-1				20 FEB 90
PARAMETER			02-608-1	
TPH - Modif Date Analy Dilution F Total Fuel Fuel Chara			02.20.90 1 50/50 DIESEL/OIL	

Verbal results were reported to you on 02.22.90. T. Blake

This Fuel characterization is a qualitative identification based upon a visual comparison of sample chromatograms with those from authentic standards.

Sim D. Lessley, Ph.D., Laboratory Director



$\overline{\epsilon}$	N	V	1	R	0	N
COL	insel in l	Health a	nd Er	MINONIM	ental Sci	ence

Relinquished by:

CHAIN-of-CUSTODY FORM

5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

Time:

Date:

	PROJECT NAME: Curco Steel CASE NO.: 03-1332A ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	/	1 1 SES.	7	//		//	//		COMMENTS
-1_	CSGAH	येय	14	50.1										
- 2	CS 7A4	zlzo	TLS	50.1		1								
- <u>3</u>	CSBAY	2/20	TLS	Soil	1	1								
- 4	CS 9 A4	2/20	715	Soil	1	}								<u> </u>
-5	CS 12A4	2/20	TLS	So:1	1	1								
۔د_	CS7AZ	2/20	TLS	Sail	1	1							 	
7	C58A2	zlzo	125	Soil	1	1				<u> </u>				
- 8	CS9AZ	zlzo	,725	Soil	1	(<u></u>	<u></u>					,
-0	CS1ZAZ	420	,125	Soil		1								
•	TOTAL	\times	\mathbb{X}	\times	9	9								

						
1 ru & Steen	2/20/90		John Co	BC4	2/20	1830

Received by:

Time:

Date:

100 # 900602

Company:

$\overline{\epsilon}$	N	V	1	R	0	N
Cou	nsel in l	Health ar	nd En	MIRONIN	ental Sci	ence

Relinquished by:

~ 11

CHAIN-of-CUSTODY FORM

Sheet LOf L

5820 Shellmound St, Suite 200 Emeryville, California 94608 (415) 655-7400

PROJECT NAME:	COLLECTION DATE	COLLECTED BY (Initials)	MATRIX	TOTAL NO. OF CONTAINERS	14W.			/ ₹	13 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				COMMENTS
CSIIFP	2/20	TLS	Water	1	\$		l						* Please have
			product	E									Tony Blake
CSILAY	zho	725	Sai	1		1							call Phil
	Ì		,										Fitzwater
													Re: expedited
											:		analysis
													an this free
													product Sample
TOTAL	\times	\mathbb{X}	\times	1	1	1							

1 odd 2. Stew 2/20 1930 / CC 184 2/20 1030

Received by:

Date:

Time:

2014 9002602

Date:

Time:

Company:

LOG NO: E90-02-642

Received: 21 FEB 90 Reported: 07 MAR 90

Mr. Todd Stein Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332A

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION,	SOIL	SAMPLI	ß		DA	TE SAMPLED
02-642-1 02-642-2 02-642-3 02-642-4 02-642-5	CS1A4 CS2A4 CS3A4 CS4A2 CS4A4						21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90
PARAMETER		02-	642-1	02-642-2	02-642-3	02-642-4	02-642-5
Chromium, mand Lead, mg/kg Zinc, mg/kg Nitric Acid		03.	150 110 170 01.90	22 70 58 03.01.90	100 85 140 03.01.90	55 14 120 03.01.90	69 9 58 03.01.90



LOG NO: E90-02-642

Received: 21 FEB 90 Reported: 07 MAR 90

Mr. Todd Stein Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332A

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION,	SOIL	SAMPLES	\$		DA	TE SAMPLED
02-642-7 02-642-8 02-642-9	CS5A4 CS10A2 CS10A4 CS13A2 CS13A4						21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90
PARAMETER		02-6	42-6	02-642-7	02-642-8	02-642-9	02-642-10
Chromium, mg Lead, mg/kg Zinc, mg/kg Nitric Acid	/kg Digestion, Date	03.0	35 14 32 1.90	54 25 80 03.01.90	61 20 68 03.01.90	52 74 220 02.28.90	44 33 140 02.28.90



LOG NO: E90-02-642

Received: 21 FEB 90 Reported: 07 MAR 90

Mr. Todd Stein Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332A

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION	, SOIL SAMP	LES		DA	TE SAMPLED
02-642-11 02-642-12 02-642-13 02-642-14 02-642-15	CS14A1 CS14A2 CS14A4 CS15A1 CS15A2					21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90
PARAMETER		02-642-11	02-642-12	02-642-13	02-642-14	02-642-15
Chromium, maghed Lead, mg/kg Zinc, mg/kg	-	99 160 140 02.28.90	54 37 72 02.28.90	42 <6 32 02.28.90	190 190 260 02.28.90	110 140 180 02.28.90



LOG NO: E90-02-642

Received: 21 FEB 90 Reported: 07 MAR 90

Mr. Todd Stein Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332A

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES		DA	ATE SAMPLED
02-642-16 02-642-17	CS15A4 CS13A1			21 FEB 90 21 FEB 90
PARAMETER		02-642-16	02-642-17	
Chromium, m Lead, mg/kg Zinc, mg/kg Nitric Acid		54 <6 38 02.28.90	38 59 240 02.28.90	



LOG NO: B90-02-642

Received: 21 FEB 90 Reported: 07 MAR 90

Mr. Todd Stein Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332A

REPORT OF ANALYTICAL RESULTS

Page 5

LOG NO	SAMPLE DESCRIPTION,	AQUEOUS S	SAMPLES		DA	TE SAMPLED
02-642-19 02-642-20 02-642-21	CS4AFP CS5AFP CS8AFP CS10AFP CS11BFP					21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90
PARAMETER		02-642-18	3 02-642-19	02-642-20	02-642-21	02-642-22
Fuel Charact	ed	02.24.90 1 5 DIESEI	l 1 5 21	02.24.90	02.24.90 1 <1 	02.24.90 1 49 JET FUEL

This Fuel characterization is a qualitative identification based upon a visual comparison of sample chromatograms with those from authentic standards.



LOG NO: E90-02-642

Received: 21 FEB 90 Reported: 07 MAR 90

Mr. Todd Stein Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332A

REPORT OF ANALYTICAL RESULTS

Page 6

LOG NO SAMPLE DESCRIPTION	, AQUEOUS SAMPLES		Da	ATE SAMPLED
02-642-23 CS12AFP 02-642-24 CS13AFP 02-642-25 CS14AFP 02-642-26 CS15AFP				21 FEB 90 21 FEB 90 21 FEB 90 21 FEB 90
PARAMETER	02-642-23	02-642-24	02-642-25	02-642-26
TPH - Modified 8015 Date Analyzed Dilution Factor, Times Total Fuel Hydrocarbons, mg/L Other TPH - Modified 8015	02.24.90 1 <1	02.24.90	02.24.90	02.24.90

Sim D. Lessley, Ph.D., Laboratory Director



E	N	V	1	R	0	N
Cou	nsel in l	Health a	nd En	MIONIN	ental Sci	ence

CHAIN-of-CUSTODY FORM

Sheet Of 5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

	PROJECT NAME: UTOLO TEE CASE NO.: 03-1332A ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	- A.	14 18 18 18 18 18 18 18 18 18 18 18 18 18		//			<u> </u>			COMMENTS
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-ع _	LS 3A4				ſ	_						i	!		
-4_	CS 4AZ				1										
.s_	CS 4 A 4				1	1		 <u> </u>							
_ ي	C55A4				1										
7	CSIDAZ				1										
~ E	C510 A4		ļ			1					<u> </u>				
-9			V		<u> </u>	1									
_	TOTAL	\times	\propto	\times]9	9									

Relinquished by:	Date:	Time:	Received by:	Company:	Date:	Time:	
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-	ENVIRON Coursel in Health and Environmental Science		CHAIN-of-CUSTODY FORM									Sheet Of 5820 Shellmound St, Suite 7 Emeryville, California 94608 (415) 655-7400							
,	PROJECT NAME: CONTROL CASE NO.: 03-1332A ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	AM.	12 1 1 SES.							//	//		CON	1MENTS	S
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	6 CS15A4			1								j							
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4	TOTAL	\times	\bigcirc	\searrow															
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Relinquished by:	Date:	Time:	Received by:	Company:	Date:	Time:
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_			CHA	IN OF CUST	TODY RECORD		y		, –					В	C Log Ni	umber	92
Client na	+	NUIR	ON			Project or PO#	3-13	32A			\overline{Z}	7 /	An	alyses re	equired		
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City, Sta	E vic	مصناك	a CA	94608	Report attention						/ ,	/ /		/ ,	/ /		
Lab Sample	Date	Time	Type* See key	Sampled by	1. STE.	<i>7N</i>		Number of	/	45/			/ /	' /	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Remarks	
number	sampled	sampled	below		Sample des	cription		containers		<u> </u>					[\$\disp[/ Remarks	;
-10	2/2/190				(CS4AP			1						4	x Please	specific
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-22						SILAFP		<u> </u>	(
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Relinqu	shed by																
Receive	d by Laborator	Y A			KATH	" FLORE	رگ		BO	7			•			2/2//90	2100

BROWN AND CALDWELL LABORATORIES

1255 Powell Street, Emeryville, CA 94608 (415) 428-2300

☐ 373 South Fair Oaks Avenue, Pasadena, CA 91105 (818) 795-7553

1200 Pacifico Avenue, Anaheim, CA 92805

Note

Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

*KEY: AQ-Aqueous NA-Nonaqueous SL-Sludge GW-Groundwater SO-Soit OT-Other PE-Petroleum



LOG NO: E90-04-343

Received: 12 APR 90 Reported: 24 APR 90

Mr. Robert Elgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332C

REPORT OF ANALYTICAL RESULTS

LOG NO SAMPLE DESCRIPTION	, SOIL SAMPLI	ES		Da	ATE SAMPLED
04-343-1 BG-1 @ 0' 04-343-2 BG-1 @ 1' 04-343-3 BG-1 @ 2' 04-343-4 BG-1 @ 4' 04-343-5 BG-2 @ 0'					12 APR 90 12 APR 90 12 APR 90 12 APR 90 12 APR 90
PARAMETER	04-343-1	04-343-2	04-343-3	04-343-4	04-343-5
Chromium, mg/kg Lead, mg/kg Zinc, mg/kg Nitric Acid Digestion, Date	28 240 250 04.18.90	30 15 270 04.18.90	22 17 36 04.18.90	27 <6 24 04.18.90	120



LOG NO: E90-04-343

Received: 12 APR 90 Reported: 24 APR 90

Mr. Robert Elgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332C

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES		DA	TE SAMPLED
04-343-6 04-343-7 04-343-8	BG-2 @ 1' BG-2 @ 2' BG-2 @ 4'			12 APR 90 12 APR 90 12 APR 90
PARAMETER		04-343-6	04-343-7	04-343-8
Chromium, Lead, mg/k Zinc, mg/k Nitric Aci	g	32 67 97 04.18.90	37 45 79 04.18.90	28 18 42 04.18.90



LOG NO: E90-04-343

Received: 12 APR 90 Reported: 24 APR 90

Mr. Robert Elgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332C

REPORT OF ANALYTICAL RESULTS

Page 3

LOG NO	SAMPLE DESCRIPTION,	GROUND	WATER	SAMPLES		DA	TE SAMPLED
04-343-9 04-343-10	BG-1 BG-1						12 APR 90 12 APR 90
PARAMETER					04-343-9	04-343-10	
Sample Held	, Not Analyzed					HELD	
Date Analy					04.18.90		
-	actor, Times				1		
	Hydrocarbons, mg/L				<1		
	- Modified 8015						

Sim D. Lessley, Ph.D., Laboratory Director



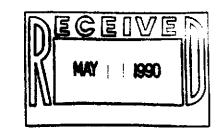
ENVIRON

Counsel in Health and Environmental Science

CHAIN-of-CUSTODY FORM

Sheet | Of | 5820 Shellmound St, Suite 700 | Emeryville, California 94608 | (415) 655-7400

PROJECT NAME: CULOCO CASE NO.: 03-1332C ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	P8 _ 444.	2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 /	10/5/ Jan 10/00/00 10/00/00 10/00/00 10/00/00 10/00/00 10/00	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	*/	//	//			/		//	COMMENTS
BG-100'	4/12	L BY	soil	1	×												
BG-1@1'		'کِل		'	×												
BG-1@Z'		$\parallel \perp'$			X												
BG-1@41		1			X												
BG-Z@O'		\prod'		1	X												
BG-201'					×												
BG-2@2'		\prod_{i}		1	X												* use same 1.0 l bottle
BG-Z@4'			V	ţ	X												
BG-1	J	V	water	6		Χ	X										for CAM Wet of other samples that you use for this Pb
TOTAL	\geq	\boxtimes	> <	14													(may be composited
Relinquished by:			Date: 4/12/90	<u>)</u> (Time	e: ! Zpm	Rec	eive	d by	/: 	<u> </u>		Co ——		iny:		Zormore (iters) Date: Time:



LOG NO: E90-04-512

Received: 18 APR 90 Reported: 03 MAY 90

Dr. Robert Ellgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION, CALIF WAS	TE EXTRACT	SAMPLES	DA	TE SAMPLED
04-512-1 04-512-2 04-512-3 04-512-4	CS1A4 Relog of E9002642-1 CS6A4 Relog of E9002602-1 CS15A-1 Relog of E9002642-14 WET Solution Relog of E900334	3-10			21 FEB 90 20 FEB 90 21 FEB 90
PARAMETER		04-512-1	04-512-2	04-512-3	04-512-4
Lead, mg/L CAM WET Ext Date Filter	raction, Date ed	<0.3 04.30.90	1.8 04.30.90	2.0 04.30.90	<0.3 04.30.90

Sim D. Lessley, Ph.D., Laboratory Director



APPENDIX C

Laboratory Analytical Reports and Chain-of-Custody Documentation for Post-Excavation Soil Samples



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 9471O, Phone (415) 486-0900

DATE RECEIVED: 01/14/91 DATE REPORTED: 01/15/91

LAB NUMBER: 102735

DECEUVE

CLIENT: ENVIRON

REPORT ON: 5 SOIL SAMPLES

PROJECT #: 03-1332D LOCATION: CUROCO

RESULTS: SEE ATTACHED

QA/QC Approva

Wilmington

Los Angeles



CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #1 @ 6"

DATE RECEIVED: 01/14/91 DATE ANALYZED: 01/15/91

DATE REPORTED: 01/15/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMI UM	1 2	mg/Kg	2.5	EPA 7190
LEAD	3.9	mg/Kg	2.5	EPA 7420
ZINC	44	mg/Kg	2.5	EPA 7950

	RPD, %	RECOVERY,	%				
Chromium		6 83					
Lead		3 82					
Zinc	•	9 90					
222222222222222222222222222222222222222							



CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #2 @ 6"

DATE RECEIVED: 01/14/91 DATE ANALYZED: 01/15/91

DATE REPORTED: 01/15/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMI UM	41	mg/Kg	2.5	EPA 7190
LEAD	57	mg/Kg	2.5	EPA 7420
ZINC	120	mg/Kg	2.5	EPA 7950

	=====	====	=======	
	RPD,	%	RECOVERY,	%
Chromium		6	83	
Lead		3	8 2	
Zinc		9	90	



CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #3 @ 6"

DATE RECEIVED: 01/14/91 DATE ANALYZED: 01/15/91

DATE REPORTED: 01/15/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMI UM	1 2	mg/Kg	2.5	EPA 7190
LEAD	31	mg/Kg	2.5	EPA 7420
ZINC	67	mg / Kg	2.5	EPA 7950

	====	====		=======================================
	RPD,	%	RECOVERY,	%
Chromium	·	6	83	
Lead		3	8 2	
Zinc		9	90	_
=======================================	====	====		



CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #4 @ 6"

DATE RECEIVED: 01/14/91 DATE ANALYZED: 01/15/91

DATE REPORTED: 01/15/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMI UM	17	mg / Kg	2.5	EPA 7190
LEAD	51	mg / Kg	2.5	EPA 7420
ZINC	96	mg/Kg	2.5	EPA 7950

	====	====					
	RPD,	%	RECOVERY, %				
Chromium		6	83				
Lead		3	8 2				
Zinc		9	90				



LABORATORY NUMBER: 102735-5

CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #5 @ 6"

DATE RECEIVED: 01/14/91

DATE ANALYZED: 01/15/91

DATE REPORTED: 01/15/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMI UM	13	mg/Kg	2.5	EPA 7190
LEAD	41	mg/Kg	2.5	EPA 7420
ZINC	76	mg/Kg	2.5	EPA 7950

*======================================	======	=======	
	RPD, %	RECOVERY,	%
Chromium	6	83	
Lead	3	8 2	
Zinc	9	90	

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Counsel in Health and Environmental Science											

CHAIN-of-CUSTODY FORM

5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

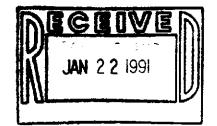
PROJECT NAME: Curoco CASE NO.: 03-1332D ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF	701 AM.	18/2/18/8		/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /				please eport obert	Send Ho Ellga
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#Z@6"																	2	24 l	nour	
#3@6"																		urna	rou	nd
#4@6"																		plea	رج سے	
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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 01/16/91 DATE REPORTED: 01/17/91



LAB NUMBER: 102759

CLIENT: ENVIRON

REPORT ON: 1 SOIL SAMPLE

PROJECT #: 03-1332D LOCATION: CUROCO

RESULTS: SEE ATTACHED

QA/QC Approval

Berkeley Wilmington

Los Angeles



CLIENT: ENVIRON

PROJECT ID: 03-1332D LOCATION: CUROCO

SAMPLE ID: #6 @ 6"

DATE RECEIVED: 01/16/91

DATE ANALYZED: 01/17/91

DATE REPORTED: 01/17/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMI UM	26	mg / Kg	0.5	EPA 6010
LEAD	3 2	mg/Kg	2.5	EPA 7420
ZINC	77	mg/Kg	0.5	EPA 6010

=======================================		=======================================						
	RPD, %	RECOVERY, %						
CHROMIUM	3	116						
LEAD	5	104						
ZINC	4	120						

$\overline{\epsilon}$	N	V	I	R	0	N
Cou	nsel in l	tealth a	nd Er	MIDNI	ental Sci	ence

CHAIN-of-CUSTODY FORM

Sheet / Of / 5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

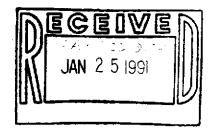
PROJECT NAME:	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF	N. C.	1/368.			/ /		/ /	/ _/	/ /	/ /	/ /	/ /	please mp. 1 In Jults to Robert Elligas ENVIRON COMMENTS
#606"	1/16	DS	Soil	1	\geq												24-hour
		 		 				_			ļ	-					turnaround
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TOTAL	\times	\times	\times	1	ĺ												
Relinquished by:			Date: /-/6-7	<u> </u>	Tim <u>/:5.</u>	e: 	Rec	elve	d by	<i>y</i>			Co	mpa (C)	ny:	arti v	Date: Time:



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 9471O, Phone (415) 486-0900

DATE RECEIVED: 01/18/91 DATE REQUESTED: 01/21/91 DATE REPORTED: 01/22/91



LAB NUMBER: 102791

CLIENT: ENVIRON

REPORT ON: 13 SOIL SAMPLES

PROJECT ID: 03-1332D LOCATION: CUROCO

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approval

Berkeley

Wilmington

Los Angeles



CLIENT: ENVIRON

PROJECT ID: 03-1332D

LOCATION: CUROCO

DATE RECEIVED: 01/18/91

DATE REQUESTED: 01/21/91

DATE ANALYZED: 01/21/91 DATE REPORTED: 01/22/91

ANALYSIS: CHROMIUM

ANALYSIS METHOD: EPA 7190

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
102791-1 102791-2	# 7	49	mg/Kg	2.5
102791-2	#8 #9	1,700 590	mg / Kg mg / Kg	25 2.5
102791-4 102791-5	#10 #11	810 210	mg/Kg	2.5
102791-6	#12	480	mg / Kg mg / Kg	2.5 2.5
102791-7 102791-8	#13 #14	12 8.0	mg / Kg mg / Kg	2.5 2.5
102791-9 102791-10	#15 #16	4 0 3 2	mg/Kg	2.5
102791-11	#17	1 2	mg / Kg mg / Kg	$ \begin{array}{c} 2.5 \\ 2.5 \end{array} $
102791-12 102791-13		2 2 1 1	mg / Kg mg / Kg	2.5 2.5

QA/QC SUMMARY



CLIENT: ENVIRON

PROJECT ID: 03-1332D

LOCATION: CUROCO

DATE RECEIVED: 01/18/91
DATE REQUESTED: 01/21/91
DATE ANALYZED: 01/21/91
DATE REPORTED: 01/22/91

ANALYSIS: LEAD

ANALYSIS METHOD: EPA 7420

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
102791-1	#7	44	mg/Kg	2.5
102791-2	#8	650	mg/Kg	2.5
102791-3	#9	330	mg/Kg	2.5
102791-4	#10	14,000	mg / Kg	250
102791-5	#11	150	mg / Kg	2.5
102791-6	#12	280	mg / Kg	2.5
102791-7	#13	49	mg/Kg	2.5
102791-8	#14	8 2	mg/Kg	2.5
102791-9	#15	7 1	mg/Kg	2.5
102791-10	#16	8 2	mg / Kg	2.5
102791-11	#17	62	mg/Kg	2.5
102791-12	#18	86	mg / Kg	2.5
102791-13	#19	68	mg/Kg	2.5

QA/QC SUMMARY



CLIENT: ENVIRON

PROJECT ID: 03-1332D

LOCATION: CUROCO

DATE RECEIVED: 01/18/91

DATE REQUESTED: 01/21/91

DATE ANALYZED: 01/21/91 DATE REPORTED: 01/22/91

ANALYSIS: ZINC

ANALYSIS METHOD: EPA 7950

LAB ID	SAMPLE ID	RESULT	UNITS	REPORTING LIMIT
102791-1	#7	200	mg / Kg	2.5
102791-2	#8	3,900	mg/Kg	25
102791-3	#9	1,600	mg/Kg	2.5
102791-4	#10	4,000	mg/Kg	25
102791-5	#11	740	mg / Kg	2.5
102791-6	#12	1,200	mg/Kg	2.5
102791-7	#13	4 2	mg/Kg	2.5
102791-8	#14	150	mg/Kg	2,5
102791-9	#15	200	mg/Kg	2.5
102791-10	#16	180	mg/Kg	2.5
102791-11	#17	110	mg/Kg	2.5
102791-12	#18	340	mg/Kg	2.5
102791-13		180	mg/Kg	2.5

QA/QC SUMMARY

RPD, %
RECOVERY, %
85

Coursel in Health and Environmental Science

Logn# 102771 CHAIN-of-CUSTODY FORM

5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

PROJECT Curso CASE NO.:	03-1332D	COLLECTION DATE	COLLECTED BY	MATRIX	TOTAL NO. OF	_ /	(\$4\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<i>//</i>	<i>/////////////////////////////////////</i>	/ //	/ //	/ //	<i>//</i>	/ //		(415) 655 7465
	eryssii tota 1654	1/	1.0	, 1	1	/	<u>'</u>			/	/		_			\leftarrow	COMMENTS
<u>#7</u>		1/18	24	soil	1	X					<u> </u>		<u> </u>				please hold until
#8		\supset			\Box	\times											notification of
3 #9						X											turnaround time
# 10		7				X											(week max)
5 # 11						\times											
6 #12						X											
7 # 13						X											
8 # 14		\prod	\prod		\prod	X											
9 #15		K	V	1	V	X											
	TOTAL	\times	\mathbb{X}	\times	9	9											
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Relinquished by: New Sentty	Date: <u>1- 8-91</u>	Time: 2:20	Received by: Mary Fruitum	Company: Date: Lutist Longhus 1/18/91	Time: (2:10)
					
					

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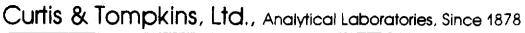
Counsel in Health and Environmental Science

CHAIN-of-CUSTODY FORM

Sheet Of 5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

	PROJECT NAME: Curded CASE NO.:03-1332b ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF	*. AM.	18 (C) 18 SEG.		 	<i> </i>	<i> </i>	/ /		/ /	//	<i> </i>	/ /	COMMENTS
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14 <u>.</u> [[#17		7		7	X												notification of
12						X												turnaround time
· 3		$\sqrt{}$	1	7	4	X												(max I week)
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-	TOTAL	\times	\boxtimes	\times	4	4												
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*** *** ******************************						



2323 Fifth Street, Berkeley, CA 9471O, Phone (415) 486-0900



DATE RECEIVED: 02/01/91 DATE REPORTED: 02/04/91

LAB NUMBER: 102899

CLIENT: ENVIRON

REPORT ON: 4 SOIL SAMPLES

PROJECT ID: 03-1332D LOCATION: CUROCO

RESULTS: SEE ATTACHED

QA/QE Approva

Wilmington

Los Angeles



CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #20

DATE RECEIVED: 02/01/91

DATE ANALYZED: 02/04/91

DATE REPORTED: 02/04/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
Chromium	200	mg / Kg	0.5	EPA 6010
Lead	23	mg / Kg	2.5	EPA 7420
Zinc	120	mg/Kg	0.5	EPA 6010

	RPD, %	RECOVERY, %			
Chromium	3	109			
Lead	15	111			
Zinc	<1	112			
##====#####======#####################					



CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #1B

DATE RECEIVED: 02/01/91
DATE ANALYZED: 02/04/91

DATE REPORTED: 02/04/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
Chromium	2 4	mg/Kg	0.5	EPA 6010
Lead	62	mg/Kg	2.5	EPA 6010
Zinc	67	mg/Kg	0.5	EPA 6010

	RPD, %	RECOVERY, %			
Chromium	3	109			
Lead	15	111			
Zinc	<1	112			



CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #2B

DATE RECEIVED: 02/01/91

DATE ANALYZED: 02/04/91

DATE REPORTED: 02/04/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
Chromium	38	mg/Kg	0.5	EPA 6010
Lead	10	mg/Kg	2.5	EPA 7420
Zinc	7 0	mg/Kg	0.5	EPA 6010

	RPD, %	RECOVERY, %				
Chromium	3	109				
Lead	15	111				
Zinc	<1	112				



CLIENT: ENVIRON

PROJECT ID: 03-1332D - CUROCO

SAMPLE ID: #3B

DATE RECEIVED: 02/01/91

DATE ANALYZED: 02/04/91

DATE REPORTED: 02/04/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
Chromium	57	mg/Kg	0.5	EPA 6010
Lead	8.5	mg/Kg	2.5	EPA 6010
Zinc	200	mg/Kg	0.5	EPA 6010

	RPD, %	RECOVERY, %				
Chromium	3	109				
Lead	15	111				
Zinc	<1	112				

$\overline{\epsilon}$	N	V	1	R	0	N
Cou	nsel in l	tealth ar	nd En	wronm	ental Sci	ence

CHAIN-of-CUSTODY FORM

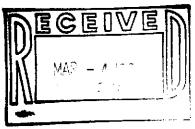
Sheet Of (5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

PROJECT NAME: CASE NO.: ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	X/ AN.	1 / C / Seg.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				<u> </u>	/	/ /	<u> </u>	//				are se Its to I Elle INTS	~d > 3~5
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TOTAL	\times	\propto	\times	4	4															
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2323 Fifth Street, Berkeley, CA 9471O, Phone (415) 486-0900



DATE RECEIVED: 02/27/91 DATE REPORTED: 02/28/91

LAB NUMBER: 103089

CLIENT: ENVIRON

REPORT ON: 2 SOIL SAMPLES

PROJECT ID: 03-1332D LOCATION: CUROCO

RESULTS: SEE ATTACHED

QA/QC Approval

Fipal Approv



CLIENT: ENVIRON

PROJECT ID: 03-1332D

SAMPLE ID: #4 B

DATE RECEIVED: 02/27/91

DATE ANALYZED: 02/28/91

DATE REPORTED: 02/28/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMI UM	47	mg/Kg	0.5	EPA 6010
LEAD	2 9	mg / Kg	2.5	EPA 7420
ZINC	110	mg/Kg	0.5	EPA 6010

2	=============	:======================================
	RPD, %	Recovery, %
CHROMI UM	<1	100
LEAD	1 2	8 4
ZINC	1	9 5
=======================================		



CLIENT: ENVIRON

PROJECT ID: 03-1332D

SAMPLE ID: #5 B

DATE RECEIVED: 02/27/91

DATE ANALYZED: 02/28/91

DATE REPORTED: 02/28/91

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
CHROMI UM	37	mg/Kg	0.5	EPA 6010
LEAD	43	mg/Kg	2.5	EPA 7420
ZINC	98	mg / Kg	0.5	EPA 6010

	.=========	
	RPD, %	Recovery, %
CHROMI UM	<1	100
LEAD	1 2	8 4
ZINC	1	95
=======================================		

Coursel in Health and Environmental Science

CHAIN-of-CUSTODY FORM 103087

5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

PROJECT NAME: Curses CASE NO.: 03-1332 B ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF	. /		:/\c/ 	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ / /	COMMENTS
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V #5B		05	soil	1,	×												around please
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TOTAL	\geq	$\stackrel{\downarrow}{\times}$															
Relinquished by:	·· <u>·</u>		Date:			ie: Zapo				Z.		be	_C(any:		Date: Time: 2:00

APPENDIX D Laboratory Analytical Report for Post-Treatment Soil Samples

TO

P.02 6559517

Analytical Report

State Approved Hezerdous Waste Testing Laboratory - Cartificate #16

Date Analyzed 02-11-91 Date Sampled 02-07-91 Lab. No. K-526, K-529 Date Submitted 02-07-91

CLIENT :

SITE INC.

Burlingame, CA 94010

1240 Bayshore Highway, Suite # 305

SITE! CUROCCO STEEL

Albany, California

SAMPLE 1

Sample #K-526 F# FC1, treated soil samples after using Ensol/landtreat Sample #K-527 F# FC2, treated soil samples after using Ensol/landtreat Sample #K-528 F# FC3 treated soil samples after using Ensol/landtreat Sample #K-829 Pf FC4, treated soil samples after using Ensol/landtreat

STLC (mg/L) (After Treatment)

Samplet	уд	Çu	Pb	Fe	Cr	בא ב	cd	zn
K=526	<0.03	<0.002	<0.04	29	0.22	0.006	<0.002	1.84
K-527	<0.03	0.03	0.05	29	0.33	<0.005	<0.002	3.84
X-528	<0.03	<0.002	<0.04	21	0.15	<0.005	<0.002	1.37
K-529	<0.03	<0.002	<0.04	22	0.15	<0.005	<0.002	1.38
		5	TLC 5.0		STLC 560			STLC 250

Standard STI/ Procedure was used, except that deionized water instead of sedium Citrate buffer, for extraction.

Ernest D. VLyklasa, Ph. D. Laboratory Director

S. K. Lamba

APPENDIX E

USPCI Waste Profile Sheet, Hazardous Waste Manifests, and USPCI Certificates of Disposal

Carrier Contract of Contract o	USPCI	62613 Waste Profile Shee
· Walter State Committee C	Abundany of Lean Paul Consessor Purchase Onter Number Contract Number	WP91-1940 Waste Profile Shed
		41191-098
- transcer of establishing	Customer Information Customer Name: (4 (2 L 2) +cc /	Technical Contact 5 have 5 half - 1 mg-1
	Service For 536 Clear trad Aug	115 -345 -53.5 AT 377-7571
a ne l'instanti		General Cornect
	711h-ng, (4474)	Phone FAX
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	Rochmand, Ca. 444.	Prone PAK
	BAITO SETE - FOI 10, P305	
A STATE OF THE STA	B4111122 0 - 6. 14-14	CHUROUSTEL
arte in service	II. Waste Generation Information	
	Metals InstrumA	led Sel
11 JA 157 6 7	Description of process producing the wasis	
	Sile Kinel	et en
	Guardity of waste Drums Gallions -	lbsCu.Yd. ☐ Per Year ☐ One Time Or
į.	Tons Drums Gallons -	- Wishington - Wishington
¥.	Physical State	Weste Composition Range
∯ox	Gloud phrange Dis Dis BS8 D8-12 D212.5	7
1	Physical Parameters furning acids absorpants	65
(b) **	strong odor asbestos Normality=	·¢
	☐ infectious ☐ oxidizers Specific ☐ PCB ☐ radioactive Gravity Vev. r	S Total must equal at least 100% 1
18	Complete for Thermal Destruction	mine to _%
	Heat Value (BTU/lb)	
	Ash (%)to Total Flux	
	Vapor Pressure (mmHG) @ STP Total lode	
	Viscosity (cps) @ F Total Suff IV. EPA Waste Codes and Land Disposal Restriction	
(4)	Land Disposal Restriction standards: (check one)	meets standards for
	does not meet any applicable standards I thallium > 130 mg/ terand to meet all applicable standards I nickel > 134 mg/ meets at sandards without maintenant	Guranown by customer Ging treatment standards apply
	teated to meet all applicable standards nickel > 134 mg/l meets as standards without treatment HOC> 1000 mg/l ten flaguaged Waste Non Hatterdous under RCRA or State Regulations Cor	
	meets at standards nickel > 134 mg/l meets at standards without treatment	maknown by customer on to treatment standards apply additionally Exempt Small Quantity Generator 100-1000 kg/mo generation ange D013 Lindane 20 4 mg/l
	meets at standards	mge D013 Lindane D014 Methoxychlor D014 Methoxychlor
	meets at standards nickel > 134 mg/l meets at standards without treatment +HOC> 1000 mg/l HoC> 1000 mg/l	nge D013 Lindane x0 4 mg/l D015 Toxaphene x0.5 mg/l D016 24 D 100 mg/l D016 24 D 100 mg/l
	meets at sensors without maintenant nickel > 134 mg/l meets at sensors without maintenant HOC> 1000 mg/l HOC> 1000 mg/l Non Hatterdous under RCRA or State Regulations Cor D001 Ignitable (I p. <140° F) High TOC (>10%) NWW Low TOC (<10%) NWW Ignitable houlds Ignitable reactives	mge D013 Lindane 10 mg/mg Toxaphene 24 5 mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/m
	meets at standards	mge D013 Lindane 10.5 mgl D015 Toxaphene 10.5 mgl D016 24.0 D017 24.5 TP Sirvex 10.0 mgl D019 Carbon teiracnioride
	meets at the meet all applicable standards mickel > 134 mgri meets at standards without maintend mockel > 100 mgri mockel > 100 mgri meets at standards without maintend mockel > 100 mgri moc	D013 Lindane D015 Toxaphene D016 24 D D017 24 5-TP Silvex D019 Carbon tetrachloride D020 Chlordane D021 Chlorobenzene D021 Chlorobenzene D021 Chlorobenzene D021 Chlorobenzene D022 Chlorobenzene D023 mgs D021 Chlorobenzene D023 mgs D024 Chlorobenzene D024 Chlorobenzene D025 Chlorobenzene D026 Chlorobenzene D026 Chlorobenzene D027 Chlorobenzene
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f	meets at sendards without maintenant mickel > 134 mg/l	D013 Lindane D014 Methoxychlor D015 Toxaphene D016 24 D D017 24 5-TP Sirvex D018 Benzene D019 Carbon tetrachloride D020 Chlordane D020 Chlordane D020 Chlordane D021 Chlorobenzene D022 Chlorobenzene D022 Chlorobenzene D023 or-Cresol D024 m-Cresol D025 Chesol D020 D026 Chesol D020 D021 D022 Chlorobenzene D023 or-Cresol D024 m-Cresol D020 D026 Chesol D020 D020 D020 D020 D020 D020 D020 D020
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	meets at sendards mickel > 134 mg/l meets at sendards without maintent Non-Hatterdous under RCRA or State Required. Meight TOC (>10%) NWW Low TOC (<10%) NWW Low TOC (<10%) NWW lightable (i.p. <140 ° F) NWW lightable reactives lightable reactive	mge D013 Lindane 100-1000 kg/mg generator 100-
	meets at la applicable standards mickel > 134 mg/l meets at standards without maintent mickel > 134 mg/l meets at standards without maintent mickel > 134 mg/l mickel > 134	D013 Lindane D014 Methoxychlor D015 Toxaphene D016 24 D D017 24 5 TP Sirvex D019 Generator D01
	meets at standards mickel > 134 mg/l meets at standards without maintent meets at standards meets at stan	mge D013 Lindane 20 4 mg/l D014 Methoxychlor 10 0 mg/l D015 Toxaphene 20 4 mg/l D015 Toxaphene 20 5 mg/l D017 2 4 5 TP Sirvex 21 0 mg/l D019 Carbon tetrachloride 20 5 mg/l D020 Chlordane 20 0 mg/l D020 Chlordane 20 0 mg/l D020 Chlordorm 20 0 0 mg/l D020 Chlordorm 20 0 0 mg/l D020 Chlordormane 20 0 mg/l D020 Chlordormane 20 0 mg/l D020 2 4 Chlordordormione 20 1 mg/l D020 0 0 0 mg/l D020 2 4 Chlordordormione 20 1 mg/l D020 2 4 Chlo
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1.5	Generator's Name and Mailing Address	K141010181	2 الهالها الواد	A. Sta	te Manifest Docum	nent Num	
ا ا	Curoco Steel 36 Cleveland Ave			B. Sta	898 te Generator's ID	69	357
	Generalist Phone (2470)	110 504 17 11				1.1.	111
5.	Transporter I Company Name 6.	01918111511	0		te Transporter's I	110	300-
7.	. Transporter 2 Company Name a	US EPA ID Num		_	te Transporter's II	CLA	-0.1.1-
9	Designated Exciling Name and Site Address 19	/ AS EDA ID No.			naporter's Phone		
	Designated Facility Name and Site Address LISPOL GROSSY MOURTH OF KINGIS SITE EAST, TIME NORTH OF KINGIS	Ty L	ioer	G. Sta	la Pacility a ID	1.1	1 1 1 1
,	SIN EAST, 'I'M! NORTH OF KINNS			1000	ility's Phone		-
1	EXIT 41 ITAL SHATHING WIT	0191911310	12. Cont	_	13. Total	390	0
11	US DOT Description (Including Proper Shipping Name, Hazard Class.	, and ID Number)	No.	Туре	Quantity	Unit Wt/Vol	Waste
a.	NON-RURA HAZARDOUS WASTE	Solud					State
			DIOI	DCT	OIOICH R	y	EPA/Other
b.	8			111	CHOICH R.		State
			2.2	24	n same a		EPA/Other
C.						1	State
			W 12		or resource w		EPA/Other
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15	5. Special Handling Instructions and Additional Information	4488	30	_	73	1	
					P =		795
h	4 HOUR SITURGENCY # 405-3	2011-407	~		NVT I	J50_	4
16	Francis Congress # 405	DA TOL					
	GENERATOR'S CERTIFICATION: I hereby declare that the content and are classified, packed, marked, and labeled, and are in all resp.	ta of this consignment acts in proper condit	nt are fully and action for transport I	curately by highw	described above	by prope	er shipping nam international i
	national government regulations. If I am a large quantity generator, I certify that I have a program in p	lace to reduce the v	olume and toxicity	ol was	te generated to th	ne degree	e i have detern
	to be economically practicable and that I have selected the practical present and future threat to human health and the environment; OR, generation and select the best waste management method that is a	if I am a small quant	tity generator. I h				
Pr	rinted/Typed Name	Signature) /	17			Month Da
17	7. Transporter 1 Acknowledgement of Receipt of Materials	1 1	: 11	1	'/ '/	_	1016121
-	rinted/Typed Name RICK ARNOLO	Signature	Feel!	for	grace		Month Da
325	B. Transporter 2 Acknowledgement of Receipt of Materials			14	C. Sandania	=	1016121
255	rinted/Typed Name	Signature			- /		Month Da
18							$I \perp I \perp I$
1E Pr	Discrepancy Indication Space						
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1E Pr	9. Discrepancy indication Space						
18 Pr	Discrepancy Indication Space Facility Owner or Operator Certification of receipt of hazardous materinted/Typed Name	priala covered by thi	e manifest excep	t as note	ed in Jegin 19.	9)	6- 87

EPA 8700—22 (Rev. 9-88) Previous editions are obsolete.

141711191911131011171418

12. Containers

No.

Type

010111011010101118

13. Total

Quantity

K. Handling Codes for Wastee Listed Above b.

Unit

Wt/Vol

Waste No.

611

EPA/Other

EPA/Other

EPA/Other

State EPA/Other

뿚 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and SPILL national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste EMERGENCY generation and select the beat waste management method that is available to me and that I can afford. Day Year Printed/Typed Name Signature 17. Transporter 1 Acknowledgement/of Receipt of Materials Printed/Typed Name Year Signature 1/2 18/Transporter 2 Acknowledgement of Receipt of Materials CASE Printed/Typed Name Signature Month Day Year 19. Discrepancy Indication Space 20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest expect as noted in Items. Printed/Typed Ngr Do Not Write Below This Line EPA 8700-22 (Rev. 9-88) Previous editions are obsolete.

Clive Litah

J. Additional Descriptions for Materials Listed Above

15. Special Handling Instructions and Additional Information

G

NER b.

d.

-800-424-8802:

CENTER

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)

NON-RORA HAZARDOUS Watte Solid

19. Discrepancy Indication Space AC-20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest expanding Printed/Typed. Signature Do Not Write Below This Line

DHS 8022 A (1/88) EPA 8700-22

Please print or type. (Form designed for use on elite (12-pitch typewriter). 1. Generator's US EPA ID No. Manifest 2. Page 1 UNIFORM HAZARDOUS Information in the shaded areas WASTE MANIFEST is not required by Federal law. SIGIO PIGIBIRI SIGIO ISI ot i Cololola 3. Generator's Name and Mailing Address A. State Mani Curoco Steel 536 Cleveland Ave B. State Generato AGENCIAN SPHONER 94701 5. Transporter 1 Company Name 1-800-852-7550 US EPA ID Number C. State Transporter's ID 6 D. Transporter's Phone ISPUT 10KD918115114141719 7. Transporter 2 Company Name US EPA ID Number E. State Transporter's ID F. Transporter's Phone 9. Designated Facility Name and Site Address US EPA ID Number G. State Facility's ID USPCI Grassy Mountian
301 East, 7 mi North Of Knows:
Exit 41, 1-80 CALL H. Facility's Phone WITHIN CALIFORNIA 801-595 74 - WITWA 1911131011 171418 12 Containers 13. Total Unit 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) Quantity Waste No. Type No. Wt/Vo NON-RCRA HAZAZDOUS WASTE SOLID GENERAT CENTER 1-800-424-8802; EPA/Other State EPA/Other d. State EPA/Other RESPONSE NATIONAL 15. Special Handling Instructions and Additional Information 里 NVTPCBOST GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shapping name OR SPILL, and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste EMERGENCY generation and select the best waste management method that is available to me and that I can afford. Printed / Typed Name Day Signature Signatur 17. Transporter 1 Acknowledgement of Receipt of Materials ¥ Printed/Typed Name Dav Year P 18. Transporter 2 Acknow CASE Printed/Typed Name Day Signature 19. Discrepancy Indication Space A 20. Facility Owner or Operator Certification of regeipt of hazardous materials covered by this manifest excess Printed/Typed Na Do Not Write Below This Line

DHS 8022 A (1/88)

EPA 8700-22 (Rev. 9-88) Previous editions are obsolete.

17. Transporter 1 Acknowledgement of Receipt of Material		
Printed/Typed Name DANIKE T. DECOM	Signature / Thirties	Month Day Year
18. Transporter 2 Acknowledgement of Receipt of Material		
Printed/Typed Name	Signature	Month Day Year
19 Discrepancy Indication Space		

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest expert as noted in item/19. 9/6-59/3
Printed/Types Name / Signature

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07/01/191

	UNIFORM HAZARDOUS WASTE MANIFEST		Do	Manifest ocument No.	-	704.54		he shaded areas by Federal law.
1	WASTE MANIFEST 3. Generator's Name and Mailing Address		10 8 10 10 16 16 16 16 16 16 16 16 16 16 16 16 16	0018		of is not r		
ľ	Caroco SteeL				A. Sta			365
l	536 Claveland Ave	Albany, C	A 94701		B. Sta	te Generator's ID	-WW.	
	4. Generator's Phone (415) 223	3221	- 6-6					
ľ	5. Transporter 1 Company Name	. °	KD ON EXTORMON	8 791	1000	te Transporter's IC naporter's Phone		17 25
ŀ	7. Transporter 2 Company Name	-) 6.	US EPA ID Numbe	didila		te Transporter's IC	$\alpha u \alpha$	8.141.0
	(V) of the second secon	i		1 1 1 1 1	F. Trai	nsporter's Phone		
Г	Designated Facility Name and Site Add I S	ireas 10.	US EPA ID Numbe	,	G. Sta	te Facility's ID	50 51 7	V W PS W P
ŀ	USPCT GRACE A FROM SM SAFE TOWN DOUGH EAST MIN TERES	H OF KNOLES			H. Fac	ility's Phone		шш
П	Chive II-am Tube		7 0 9 9 9 1 3 0	1 14 1 41 7	i teterane I	301-595	- 20	inn
Γ				12. Conti	ainera	13. Total Quantity	14. Unit	Waste ?
L	11. US DOT Description (Including Proper	r Snipping Name, Hazard C	Jiass, and IO Number)	No.	Туре	Guantity	Wt/Vol	
ľ	Al Dans						ľ .	State (61)
ı	Now-RULA HAZA	aridue wa	STE Sold	OINL	DIT	CHOIL19	Y	EPA/Other LOM
t	b.			DiOI.	ULI	Orgion	<u> </u>	State
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ľ								9540309
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ŀ	J. Additional Descriptions for Materials Lie	stad Ahous		\perp	K He	ndling Codes for V	Ventee I	inted Above
	CW# 213083 3	SOIL 99%/ PAINT 619			e.	.	b.	17
	37819 L	PAINT 219	4			4.	b.	
	# 9709¢	PAINT 219	4			t•	b.	(A ² = 3
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	37819 L 15. Special Handling Instructions and Add	PATAT & 19	איזר צסי			t•	d.	- 9479
	37819 15. Special Handling Instructions and Add 24 Hour Er H 44 16. GENERATOR'S CERTIFICATION: 1	PATAT C19 DIT # 1 Sitional Information	OO Ontents of this consignment is		c.	Proje	d.	- 9479 054 er shipping name
	37819 15. Special Handling Instructions and Add 37819 16. GENERATOR'S CERTIFICATION: I and are classified, packed, marked, anational government regulations.	PATAT & 19 Sitional Information 15-3-11-11-11 hereby declare that the co	ontents of this consignment or respects in proper condition	for transport t	c. curately by highw	Project NVTs of described above way according to a	b d d	+ 9479 054 er shipping name s international ar
	37819 15. Special Handling Instructions and Add ALL House Enter House 16. GENERATOR'S CERTIFICATION: I and are classified, packed, marked, is	PATAT 219 Sitional information 15-311-43 hereby declare that the cound labeled, and are in all eritify that I have a program hat I have selected the praisable in the environment;	ontents of this consignment is respects in proper condition in in place to reduce the volus ecticable method of treatmen; OR, if I am a small quantity	n for transport i ime end toxicity nt, storage, or i r generator, i h	curately by highway of was dispose	Proje NVT) described above vey according to a site generated to the	by proper pplicable degree to me.	er shipping name international are
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IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-6802; WITHIN CALIFORNIA CALL 1-800-852-7550

Printed/Typed Name	Signature // /// /	Month Day Year
17. Transporter 1 Acknowledgement of Receipt of Mat	teriale	
Printed/Typed Name - RRY / M950 18. Transporter/2 Acknowledgement of Receipt of Mat	Signature Signature Master.	Month Day Year 0 6 2 8 9 1
State (1) Congression Constitution and Constitution Const	NO.	
Printed/Typed Name	Signature 3/	Month Day Year
19 Discrepancy Indication Space		

2		
20. Facility Owner or Operator Certification of receipt of hazard	ous materials covered by this magifest except as noted in Item 19.	9/1- 92
Printed/Types/Name	Signature	Month Day

DHS 8022 A (1/88)

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Department of Health Services
Toxic Substances Control Division

WASTE MANIFEST CADI 981214121410108	Document No.	1	100		he shaded areas by Federal law.
Generator's Name and Mailing Address			A. State Manifest Document Number		
536 Cleveland AVE			898	69	367
Generator's Prone (415) 232-3331		B. Stat	te Generator's ID	0	
and the same of the plantage of the state of			1111		
Transporter 1 Company Name 6. US EPA ID Num	ber		te Transporter's il		20075
	14141714	D. Trai	saporter's Phone	800-	800.24
Transporter 2 Company Name 8. US EPA ID Num	ber	12.50	te Transporter's il	5	
	LIII		naporter's Phone		
I. Designated Facility Name and Site Address 10. US EPA ID Num	ber	G. Sta	te Facility's ID		
USPCI Grassy Mourtian 3 m. Eart of Milliam					
EXIT YE I-80	8 2	416111560	ility's Phone		6
This Uran 140742 1117 17919111310			101-595	-390	
1. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Cont	ainers	13. Total Quantity	Unit	Waste No.
	No.	Туре	V=000000000	Wt/Vol	REVERSELECT
NON-RORA HAZARDOUS WASTE SOL. d					State Coll
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Additional Descriptions for Materials Listed Above	\bot	1	ndling Codes for V		
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5. Special Handling Instructions and Additional Information	2n o	I .	Pn	786 1780	B05 4
344x EMEZAEACU 7 405-324-4	200		PO	78C	B05 4
5. Special Handling Instructions and Additional Information 2444 EMEZAEROU 77 405-324-4 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment	et are fully and a	ccurately	described above	by prope	BOS 9
34HX EMERGERCU 7 405-324-4	et are fully and a	ccurately by highw	described above	by prope	BOS 4
5. Special Handling Instructions and Additional Information 24 # EMERICATION: I hereby declare that the contents of this consignment and are classified, packed, marked, and labeled, and are in all respects in proper conditional government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the visions.	et are fully and action for transport	by highw y of wasi	described above ay according to a	by proper pplicable ne degree	er shipping name international and
5. Special Handling Instructions and Additional Information 24 H. EMEZIERA 405 - 324 - 4 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment and are classified, packed, marked, and labeled, and are in all respects in proper conditional government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the viole economically practicable and that I have selected the practicable method of treatmer present and future threat to human health and the environment; OR, if I am a small quantity	at are fully and action for transport plume and toxicit nent, storage, or ity generator, I had a second control of the control	by highw y of was disposal	described above ay according to a	by proper policable as degrees to me w	BOS 9 er shipping name binternational and at I have determined which minimizes the
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GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment and are classified, packed, marked, and labeled, and are in all respects in proper conditional government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the victor be economically practicable and that I have selected the practicable method of treatmarked and future threat to human health and the environment; OR, if I am a small quantity generation and select the best waste management method that is available to me and the trinted Typed Name 7. Transporter 1 Acknowledgement of Receipt of Materials Finted Typed Name Signature Signature Receipt of Materials	at are fully and action for transport plume and toxicit nent, storage, or ity generator, I had a second control of the control	by highw y of was disposal	described above ay according to a te generated to the currently available.	by proper policable as degrees to me w	or shipping name international and at I have determined which minimizes the himize my waste
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CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

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CERTIFICATE OF DISPOSAL

U.S.Pollution Control, Inc. (USPCI), an Oklahoma corporation duly permitted and operating under the approval of the Utah State Department of Health does hereby certify that the controlled industrial waste of

CURDCO STEEL

MANIFEST # 00001

WITH THE FOLLOWING WASTE CODES

has been disposed of at the Grassy Mountain Controlled Industrial Waste Surface Disposal Site, located in Tooele County, Utah, and that such treatment, neutralization and disposal has been accomplished in accordance with all applicable rules and regulations of the State of Utah and the U.S. EPA.

WASTE ID QUANTITY

39.860 LBS DISPOSAL DATE

LDAD NUMBER --- 08708

U.S. POLLUTION CONTROL, INC.

DISPOSAL SITE PERMIT NO.

UP#1991301748

RECORDS ADMINISTRATOR

P. <u>0</u>



CERTIFICATE OF DISPOSAL

U.S.Pollution Control,Inc.(USPCI),an Oklahoma corporation duly permitted and operating under the approval of the Utah State Department of Health does hereby certify that the controlled industrial waste of

CUROCO STEEL

MANIFEST # 00002

WITH THE FOLLOWING WASTE CODES

has been disposed of at the Grassy Mountain Controlled Industrial Waste Surface Disposal Site, located in Topele County, Utah, and that such treatment, neutralization and disposal has been accomplished in accordance with all applicable rules and regulations of the State of Utah and the U.S. EPA.

WASTE ID ---- GM91-0988 QUANTITY --- 18 Y

44,880 LBS
DISPOSAL DATE --- 06/26/91

LOAD NUMBER ---- 08712

U.S. POLLUTION CONTROL, INC. DISPOSAL SITE PERMIT NO. 177991301748

FACELITY HAVAGER

RECORDS ADMINISTRATO



CERTIFICATE OF DISPOSAL

U.S.Pollution Control,Inc.(USPCI),an Oklahoma corporation duly permitted and operating under the approval of the Utah State Department of Health does hereby certify that the controlled industrial waste of

CUROCO STEEL

MANIFEST # 00003

WITH THE FOLLOWING WASTE CODES

has been disposed of at the Grassy Mountain Controlled Industrial Waste Surface Disposal Site, located in Tooele County, Utah, and that such treatment, neutralization and disposal has been accomplished in accordance with all applicable rules and regulations of the State of Utah and the U.S. EPA.

WASTE ID --- GM91-D988 QUANTITY --- 18 Y

37,500 LBS
DISPOSAL DATE --- 06/26/91

LOAD NUMBER --- 08710

U.S. POLLUTION CONTROL, INC.
DISPOSAL SITE PERMIT NO. UP7991301748

FACILITY MANAGER

BECORDS ADMINISTRATO

U.S.Pollution Control, Inc. (USPCI), an Oklahoma corporation duly permitted and operating under the approval of the Utah State Department of Health does hereby certify that the controlled industrial waste of

CUROCO STEEL

MANIFEST # 00084

F. 26

SHCCCC SUICT

WITH THE FOLLOWING WASTE CODES

has been disposed of at the Grassy Mountain Controlled Industrial Waste Surface Disposal Site, located in Touele County, Utah, and that such treatment, neutralization and disposal has been accomplished in accordance with all applicable rules and regulations of the State of Utah and the U.S. EPA.

WASTE ID GM91-0988 QUANTITY 18 Y

42,580 LBS DISPOSAL DATE ---- 06/26/91

LOAD NUMBER --- 08709

U.S. POLILUTION CONTROL, INC. DISPOSAL SITE PERMIT NO. UP0991301748



U.S.Pollution Control, Inc. (USPCI), an Oklahoma corporation duly permitted and operating under the approval of the Utah State Department of Health does hereby certify that the controlled industrial waste of

CURDOD STEEL

MANIFEST # 00005

WITH THE FOLLOWING WASTE CODES

has been disposed of at the Grassy Mountain Controlled Industrial Waste Surface Disposal Site, located in Tooele County, Utah, and that such treatment, neutralization and disposal has been accomplished in accordance with all applicable rules and regulations of the State of Utah and the U.S. EPA.

WASTE ID GM91-0988 DUANTITY

39,980 LBS DISPOSAL DATE --- 07/01/91

LOAD NUMBER --- 08978

U.S. POLLUTION CONTROL, INC. H77991301748

DISPOSAL SITE PERMIT NO.



U.S.Pollution Control, Inc. (USPCI), an Oklahoma corporation duly permitted and operating under the approval of the Utah State Department of Health does hereby certify that the controlled industrial waste of

CUROCO STEEL

MANIFEST # 00008

WITH THE FOLLOWING WASTE CODES

has been disposed of at the Grassy Mountain Controlled Industrial Waste Surface Disposal Site, located in Tooele County, Utah, and that such treatment, neutralization and disposal has been accomplished in accordance with all applicable rules and regulations of the State of Utah and the U.S. EPA.

WASTE ID ---- GM91-0988 QUANTITY --- 18 Y

36,580 LBS DISPOSAL DATE --- 07/02/91

LOAD NUMBER --- 09021

U.S. POLLUTION CONTROL, INC. DISPOSAL SITE PERMIT NO. UPD991301748

san Kun 7

STORMAN PILISION

RECORDS ALMINISTRATE



U.S.Pollution Control, Inc. (USPCI), an Oklahoma corporation duly permitted and operating under the approval of the Utah State Department of Health does hereby certify that the controlled industrial waste of

CUROCO STEEL

MANIFEST # 00006

WITH THE FOLLOWING WASTE CODES

has been disposed of at the Grassy Mountain Controlled Industrial Waste Surface Disposal Site, located in Tooele County, Utah, and that such treatment, neutralization and disposal has been accomplished in accordance with all applicable rules and regulations of the State of Utah and the U.S. EPA.

WASTE ID ---- GM91-0988 QUANTITY ---- 18 Y

27,600 LBS DISPOSAL DATE --- 07/03/91

LUAD NUMBER ---- 09146

U.S. POLLUTION CONTROL, INC. DISPOSAL SITE PERMIT NO. UP991301748

FACEL LTE HANAGER

RECORDS ADMINISTRATOR



U.S.Pollution Control, Inc. (USPCI), an Oklahoma corporation duly permitted and operating under the approval of the Utah State Department of Health does hereby certify that the controlled industrial waste of

CUROCO STEEL

MANIFEST # 00007

WITH THE FOLLOWING WASTE CODES

has been disposed of at the Grassy Mountain Controlled Industrial Waste Surface Disposal Site, located in Tooele County, Utah, and that such treatment, neutralization and disposal has been accomplished in accordance with all applicable rules and regulations of the State of Utah and the U.S. EPA.

WASTE ID ---- GM91-0988 QUANTITY ---- 18 Y

36,640 LBS DISPOSAL DATE --- 07/05/91

LOAD NUMBER ---- 09221

U.S. POLLUTION CONTROL, INC. DISPOSAL SITE PERMIT NO. U7991301748

D. V 1

FACILITY MANAGER

RECORDS ADMINISTRATOR

APPENDIX F

Forward, Inc. Waste Characterization and Soil Description Forms,

(Non-Hazardous) Transportation Manifests, and Forward,

Inc. Landfill Waste Acceptance Receipts

FORWARD INC.

WASTE CHARACTERIZATION FORM

RETURN TO FORWARD INC. ATTN: Environmental Compliance Of P.O. Box 6336 Stockton, California 95206	llicer So	olid Waste Co	oordinator	
SECTION A: GENERATOR/TRANSPORTI	ER INFORM	ATION /	54.0	al Sustema
Waste Generator, Company Name:				el Systems
Contact Pomon	Ro	n Mayo	F	thone: <u>415-233-322</u> /
Generating Facility: Address:	<u> </u>	6 Cleve las	rd Ave	
Clty:	AIL	7414	Sto	ote: <u>Ca</u> Zip: <u>7470</u> /
Transporter: Company Name:	Envir	unmental	Chemica	ate: <u>Carp.</u> (<u>Carp.</u>
Contact Person: 54	e Fis	400		Mane 415 -347-1555
Consultant: Company Name:	SI1	E Inc	Envira	(-10
Contact Person: 5 h	14411	Sabharwa	F	hone: 415-348-55
SECTION B: WASTE STREAM IDENTIFIC. General description of waste: Process generating waste: SECTION C: PHYSICAL CHARACTERIS	P	Treated Painting o		1 . of Corrugaled St
Color. Bra. Physical State: OF Soi		ld 🗆 Siurry 🗅 Past	e 🗆 Powder	Free Liquids: D Yes Z No
pH: Odor: 3 Strong 5 Mi				
SECTION D: WASTE COMPOSITION (s) (Include range of concentrations for multiple	see \$ECTiO samples)	N E for asbestos)		
Total Petroleum Hydrocarbons: as gasoilne	ppm	Metals	Total (me/ka)	Soluble (Cal. WET)
as diesei		Antimony		
as motor oil		Arsenic		
other:		Barlum		
Aromatic Hydrocarbons:	• •	Beryillum		
Benzene	ppm	•		
Toluene				
Xylenes (total)		Chrom. VI		.15 ^ . 33
Ethylbenzene	ppm	Cobalt		
	- ,	Copper		
Other Components (list):		Lead		
	ppm	Mercury		
	ppm	Manganese		· .
	ppm	Molybdenum		
	ppm	Nickel		
	ppm	Selenium		
	ppm	Silver		
	ppm	Strontium		
	ppm	Thallium		
	ppm	Vanadium		
	ppm	Zinc		1.38 - 1.84
		Others (ilst):		
	ppm			
	ppm			
(attach or submit additional sheets if necess	· · · · · · · · · · · · · · · · · · ·			

SECTION E: ASBESTOS
Indicate containment for asbestos: □ bags □ cartons □ drums □ wrapping □ óther:
NOTE: All asbestos must be prepared for transportation to and disposal at the Forward Landfill in accordance with all applicable regulatory requirements.
SECTION F. SHIPPING INFORMATION
Method: Bulk Liquid Bulk Setid Containerized (type): Quantity: 300 Bulk Cubic yards agailons per month pear one time only ather
NOTE: All shipments must be approved by the Forward, inc. Environmental Compliance Officer prior to delivery.
SECTION G: CERTIFICATION/INDEMNIFICATION STATEMENT
THE BELOW-NAME COMPANY WARRANTS THAT THE ABOVE AND ANY ATTACHED OR SUBMITTED WASTE CHARACTERIZATION IS COMPLETE AND ACCURATE AND THAT BASED UPON TESTING AND ANALYSIS PERFORMED ON THE WASTE MATERIALS, NONE OF THE WASTE MATERIALS ARE HAZARDOUS AS DEFINED BY 40 CFR PART 261 AND THE CALIFORNIA CODE OF REGULATIONS. TITLE 22, WITH THE EXCEPTION OF ASSESTOS WHICH IS PROPERLY DESCRIBED IN SECTIONS E AND FABOVE, IN THE EVENT THAT ANY PORTION OF THE WASTE MATERIALS (OTHER THAN ASSESTOS PROPERLY DESCRIBED IN SECTIONS E AND FABOVE) IS DETERMINED TO BE HAZARDOUS ("HAZARDOUS MATERIALS") ACCORDING TO ANY OF THE ABOVE MENTIONED REGULATIONS, EACH PARTY SHALL NOTIFY THE OTHER IN WRITING IMMEDIATELY UPON LEARNING OF SUCH DETERMINATION, THE SELOW-NAMED COMPANY SHALL WITHIN TEN (10) DAYS AFTER RECEIVING SUCH WRITTEN NOTIFICATION REGARDING A HAZARDOUS DETERMINATION, AND AT THE BELOW-NAMED COMPANY'S SOLE EXPENSE, REMOVE THE HAZARDOUS MATERIALS FROM THE FORWARD LANDFILL AND PROPERLY DISPOSE OF THEM ELSEWHERE. THE BELOW-NAMED COMPANY WARRANTS THAT ANY ASSESTOS DELIVERED TO THE FORWARD LANDFILL HAS BEEN PROPERLY DESCRIBED IN SECTIONS E AND FABOVE AND HAS BEEN PREPARED FOR TRANSPORTATION TO AND DISPOSAL AT THE FORWARD LANDFILL IN FULL COMPLIANCE WITH APPLICABLE REGULATORY REQUIREMENTS. THE BELOW-NAMED COMPANY SHALL DEFEND, INDEMNIFY AND SAVE HARMLESS FORWARD, INC., ITS AFFILIATES, THEIR DESCRIBED DESCRIBED TO THE BELOW-NAMED COMPANY SHALL DEFEND, INDEMNIFY AND SAVE HARMLESS FORWARD, INC., ITS AFFILIATES, THEIR DESCRIPE AND THEIR SHOOLS.
THEIR OFFICERS, DIRECTORS, AGENTS, REPRESENTATIVES AND EMPLOYEES AND THEIR SUCCESSORS AND ASSIGNS FROM ANY LIABILITY, CLAIMS, LOSSES, DAMAGES, COSTS, LIENS, JUDGMENTS, ORDERS, GOVERNMENT DIRECTIVES, OR EXPENSES OF ANY KIND IN CONNECTION WITH THE HAZARDOUS MATERIALS AND IN CONNECTION WITH ANY BREACH OF THE BELOW-NAMED COMPANY'S WARRANTIES GIVEN OR THE BELOW-NAMED COMPANY'S OBLIGATIONS UNDERTAKEN HEREIN.
THE BELOW-NAMED COMPANY AGREES THAT, IN THE EVENT THAT IT LEARNS THAT THE WASTE CONSTITUENTS VARY FROM THOSE SET FORTH ABOVE OR ON ANY ATTACHED OR SUBMITTED DOCUMENTS, IT WILL IMMEDIATELY SUBMIT A CORRECTED WASTE CHARACTERIZATION FORM.
BY: (print name): Shawa Sabharva/ ITTLE: V: Le-Presiden SIGNATURE: DATE 8/12/91
SIGNATURE 1.1 1.1 DATE 8/12/9/

FORWARD INC

CONTAMINATED SOIL DESCRIPTION FORM

COMPANY NAME
CONTAMINATED SOIL SOURCE(S) SITE LOCATION CHIOLO Steel Systemy ADDRESS 536 Cleveland Ave, Albin, Ca ENVIRONMENTAL CONSULTANT SITE fac. CONTACT PERSON Shawn Solland TEL. 415-347-556.
B: SOIL TYPE: PHYSICAL: SOLID_SLURRY_PASTE_POWDER % SAND_%SILT%CLAY CHEMICAL: PH_7
C: HISTORICAL CHEMICALS USED: CHEMICAL TYPE OF BUSINESS SOURCE OF INFORMATION Rea Rayo Corrysted Steel

D: PREVIOUS SOIL INVESTIGATIONS

ANY SITE / SOIL INVESTIGATIONS?

YES_	✓NO

See	attache.
Enu	ir in Repor

		FIRST REPORT			SECOND !	REPORT	
REF	PORT TITLES						
DAT	re ·						
_					10000		
PRI	EPARED BY:	-).		
					(
: CH		NALYSES COM		_		,	
_	ANALYSES	METHODS	YES	NO	LabName	Lab No.	WAY E
i.	TPH						
		¥8015		_			
		418.1		<u> </u>			
		413.1					
		*FUEL TYPE					
а	POLLUTANT N	voc's					
***	CLOTAIT	8010		\vdash			
		8020					
		8240					
	Oth	ers		Ŀ			
ill.	EXTRACTABL	ES			100		
		8080					
		8100					
		8270		-		-	-
	Oth	ers					
iv	METALS		Γ	T		Τ	T
		CAM METAL		1			
		7000 SERIES			1		
		ICP-6010					
		WET TEST					
	Ot	hers					
V.	OTHERS					1	
		SULFIDES					
		CYANIDES					
		BIO-ASSAY			2.50		
		TREATABILITY				-	_
	Ot	hers					

F. SOIL SAMPLING DATA

		 1/14	Spots	Samp. Y/N	No.of Samples per Composite
		2000			
	×				

^{* &}quot;Hot Spots" are defined as portions of soils containing elevated concentrations of contaminants greater than five (5) times the average concentration of soils that will be received at the landfill.

G: CHEMICAL RESULTS SUMMARY

ANALYSIS METHOD	CHEMICALS	MODAL	AVERAGE CONC	HIGHEST	VOL OF	%VOL OF WASTE
DI - water	Pb		.04	.05	<10 165	1%
DI-Water	4		.21	.33	<1045	1.1.
Of-Water	Zn		2.1	3.84	<10163	1%
-						
-						

TOTAL SOIL VOL-	
_ 300	Cubic yard.

H٠	CF	RTI	FIC	ΔΤ	O	V
A D.			4 1 2	—		

REGISTERED	GEOLOGIST/ENGINEER:
LICOIO I PII ED	000000000000000000000000000000000000000

THE SIGNATURE AND PROFESSIONAL SEAL OF THE ABOVE LINE CERTIFIES THAT THE DATA REPORTED IN THIS FORM ARE COMPLETE AND ACCURATE SUMMARIES OF THE REPRESENTATIVE CHEMICAL COMPOSITION OF THE WASTE TO BE RECEIVED BY FORWARD INC. LANDFILL, SAN JOAQUIN COUNTY.

FEB-13-1991 10:59 FROM

TO

6559517 P.22

Analytical Report



State Approved Hazardous Weste Testing Laboratory - Cartificate # 145

Date Sampled 02-07-91 Date Analysed 02-11-91 Date Submitted 02-07-91 Lab. No. K-526, K-529

CLIENT :

SITE INC.

1240 Bayshore Highway, Suite # 305

SITE: CUROCCO STEEL

Albany, California

Burlingame, CA 94010

SAMPLE :

Sample #K-526 F# FC1, treated soil samples after using Ensol/landtreat Sample #K-527 F# FC2, treated soil samples after using Ensol/landtreat Sample #K-528 F# FC3 treated soil samples after using Ensol/landtreat Sample #K-529 Pf FC4, treated soil samples after using Ensol/landtreat

*	STLC	(mg/L)	(After	Treatment
---	------	--------	--------	-----------

Sample#	λg	Gu	Pb	Fe	Cr	NI	cd	Zn
K-526	E0.0>	<0.002	<0.04	29	0.33	0.006	<0.002	1.84
X-527	<0.03	0.03	0.05	29	0.33	<0.005	<0.002	3.84
X-528	<0.03	<0.002	<0.04	21	0.15	<0.005	<0.002	1.37
K-529	<0.03	<0.002	<0.04	22	0.15	<0.005	<0.002	1.38
		S.	TL 5.0	lş	STLC 560			STLC 250

Standard STIC Procedure was used, except that deionized water instead of sedium Citrate buffer, for extraction.

Ernest D. Vlyklasa, Ph. D. Laboratory Director

S. K. Lamba

All analyses are performed in accordance with EPA and DHS approved methods. Any reproduction of this report without authorization is prohibited.

15/13/4-10			
· _ <u> </u>	DAST	†	
TRANSPOR	- - -	FREIGHT	CALT 125842
INC.	P.O. BOX		37338
, , , , , , , , , , , , , , , , , , , ,	ALAMO, (PHONE: (CA 94507 415) 449-8211 PATE 2 /	1 1 1
SHIPPER ()	- X	1 CON93NGE	1-91 1/2
STREET CO CO		FORWAR	D DUMP
	<u> </u>	STREET DA BOX	
OTY .		CUA	
Clearland 80,	Albany	Austin & Marie	rosa Stockton
WILES -08-19 / 1/8	OD AREA DELIVERY ZOME	7451in 4 Marip	FOR OFFICE USE ONLY
DISTANCE SETWEEN	20 000 20	Set of Box	lucy
ARLES AXLES	CAPACITY	-	
EQUIP: DBL BOTTOM	SEMI BOTTOM SEMI	CTY	
$\underline{D} I R$		ORIGIN OUT	DESTRIATION OUT
1777712	WEIGHT	6:30 7:00	9:00 9215
201370			
3.		11:00 11:15	1.15 1.21
4.		11:00 /1.75	(1/3 /136
5.		-	***************************************

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		7 19 NG B	Lasa
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10.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
4. LAST THE	3. THE	TOTAL LBS.	TOTAL 8.5
STARTING TIME	2. THE LAST THE	· / / 1008	RATE 5/105
5. OVER-ALL	6 TRAVEL	-/- 	\$
5. TIME (4-1)	6. TAME (3-2)	STO. BY NAME :	
7. TOTAL TIME (5+6)	8.5		6 501.93
8. LESS: MEAL & DOWNTIN	IE	A FOR OFF	ICE WEE ONLY
	_ Ja	HerStinnett	TVKNG.
9. (7-8)	[Q.5] /	11.0+ Sand College	4 14
C_{11}	EN	THE PROPERTY	mall
	TRALER E1)6	ON ALL BACT DUT ASSESSED	
~	<u> </u>	ON ALL PAST DUE ACCOUNTS THE CHARGE OF 11/2% PER MONTH W DEBTOR AGREES TO PAY LEGAL F	HICH IS 18% ANNUALLY.
U DECEMENT OF		INCURRED IN THE COLLECTION OF DE	LINGUENT ACCOUNTS.
RECEIVED IN GO EXCEPT A	S NOTED	FUEL	-
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6	A 0.5	•		<u>^</u>	e second
MID CO.	ast .	•	FREIC	HT BILL	
TRANSPORTA	TION P.O. B	OV 74 -	_		CALT 125842
INC.		OA 74 O, CA 9450	7	•	37666
	PHON	E: (415) 44	9-8211 PATE C	7 //	91
SHIPPER SITE	rust	CONSIGNI		<u></u>	
STREET		STREET	2) / E (CONSI	
CIEVIANO		A CITY			<u> </u>
ORIGIN)	LIPOCO, SK	el	HOVINOV	d C	
Albany C	lev land	15/1	011110	(Jum)	1
91-110	REA DELIVERY ZONE	<u>) / (</u>	Julio 1	# FOR OF	FICE USE ONLY
NO. DISTANCE BETWEEN AVIES	CUMC 20	STATE OF	Tite L	ردم	<u>) </u>
TYPE 010 WHEELER	TRUNGFER A-SER	, Tan-			· —
COMMODITY	SEM BOTTOM SING				
TAG NO.		iN	ORIGIN	DEST	MATION OUT
1.	20 yards	5 6:	30 7:20	9.25	9:30
2.	7	7/3	3 11:50	1.55	1:00
3.		4:00	7		
4.	***************************************		•••••••••••••••••••••••••••••••••••••••		-
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6.	*	•		**************	
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9.					
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A FRISH DUMPING	O DUMPSITE ARRIVAL	<u> </u>			
4. LAST TRP 200	3. TIME	35	TOTAL LBS	TOTAL	85
1. FRST TRUE 6 30	2. JOBSITE DEPARTURE	1150	1045	- PATE	5905
5. OVERALL (1/2	& TRAVEL 2	1 / 6		s_ <u>5</u>	27.93
3. THE (4-1) 8/2	(3-2)	<i>.</i>	870. BY	·····•	
7. TOTAL TIME (5+6)	٠۶			s_50	7.93
8. LESS: MEAL & DOWNTIME	P	\mathcal{A}_{n}	/ FOR	OFFICE USE C	DNLY
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9. (7-8)	18:51		Jon yo	7	
TRUCK 1357 F		14.6	DANVEN	11.	
61//6					
X	\sim		AST DUE ACCOUNTS OF 114% PER MONT		
The same of the sa			GREES TO PAY LEG IN THE COLLECTION O		
PECEIVED IN GOOD EXCEPT AS NO	CONDITION OTED		UEL		
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[2] B	* 1.75.24 SANASA	•
MID COAST	FREIGHT BILL CALT 125842	
TRANSPORTATION P.O. BOX	74 37996	
, , , , , , , , , , , , , , , , , , , ,	A 94507 115) 449-8211 PATEY//_9/	
August 1	CONSIGNES	
There start	STREET ON BOX	
636 Clerkand ann	on 1-4-1-4	
ORIGINA	DESTRUTION	
allany	Hackton V FOR OFFICE USE ONLY	
91-1110	Buto (tite Inc.)	
NO. DISTANCE CUBIC NO. BETWEEN YARD AXLES ALLES CAPACITY	STREET OAROX	
TYPE 000 WEELER OFFICER SEM	CITY	
COMMODITY	ORIGIN DESTINATION N OUT N OUT	
TAG NO.	1000 1050 1205 110	
1 0733 / -30 900		
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6.		
7.	(4/4 fee alead)	
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4. FINSH DUMPHIS 3. DUMPHITE ARRIVAL 7	2 45 TOTAL TOTAL 4, 3	
1. STARTING TIME 2. JOBSITE DEPARTURE 2. TIME LAST THIS	TONS RATE 550	2
E OVERALL DIA G TRAVEL	5 5TD BY	
5. THE (4-1) 31 6. THE (3-2)	752 07	
7. TOTAL TIME (5+6) 5.03	♣ FOR OFFICE USE ONLY	
8. LESS: MEAL & DOWNTIME	TIC M STATE USE ONLY	
NET HRS. CHARGEABLE	UNDERLYNIG CAPPRER	•
9. (7-8)) We assu	
TRUCK 36 TRANER 367		4
	ON ALL PAST DUE ACCOUNTS THERE WILL BE A FINANCE CHARGE OF 11/2% PER MONTH WHICH IS 18% ANNUALLY. DEBTOR: AGREES TO PAY LEGAL FEES AND COURT COSTS	
BYCONSIGNEE	INCURRED IN THE COLLECTION OF DELINQUENT ACCOUNTS.	
RECEIVED IN GOOD CONDITION EXCEPT AS NOTED	> FUEL	1
EXCEPT AS NOTED Q Q	<u> ነ</u> ር	ું

731	Company of the Compan	
MID CO	AST	FREIGHT BILL
TRANSPORT	ATION	CALT 125842*
INC-	P.O. BOX	
		(415) 449-8211 OATE/
- 1 Jane		consigning to a part of the pa
STREET	V57.	STREEDOR NOX L
536 CIFIL	LANG-BR.	Justin RD.
HLBBNG	1 Can	Stackton
ALBANG	* Calturor	Office Kton
GI-INO	DO APEA DELIVERY ZONE	TO TO THE TOTAL OF THE BOOK OF
NO. DISPANSE	42 3 20	STREET ON BOX
TYPE = rio wheelen	TRANSFER ZENS	CITY
COMMODITY	SEMI SOTTOM SEND	CRIGIN DESTINATION
		N OUT N OUT
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007331	20405.	1010 1030 12:00/215
3.		2:30
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6.	***************************************	4/14 dra a load
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A FIRSH DUMPING	3. DUMPSITE APRIVAL	
ST TRP		TOTAL TOTAL 0,0
STARTING TIME	2. THE LAST THE	\$ 501.93
5. TAME (4-1) -	6. TRAVEL (3-2)	STD. BY
		501.93
7. TOTAL TIME (5+6)		A FOR OFFICE USE ONLY
8. LESS: MEAL & DOWNT		
9. (7-8)	LE 8/2	VID CU
mux 22	TRALER . 5	CRIVER
1	2	ON ALL PAST DUE ACCOUNTS THERE WILL BE A FINANCE CHARGE OF 19% PER MONTH WHICH IS 18% ANNUALLY.
" // "	MONEY.	DESTOR AGREES TO PAY LEGAL FEES AND COURT COSTS INCURRED IN THE COLLECTION OF DELINQUENT ACCOUNTS.
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EXCEPT	AS NOTED 200	SX FUEL

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	AST	•	FREIGH	T BILL	ALT 125842
TRANSPORT	ATION P.O. BOX	· · · · · · · · · · · · · · · · · · ·			
INC.	ALAMO;	CA 94507	DATE		38018
SHIPPER	PHONE:	(415) 449-82	11 7 9	-11-9	
_\$57E (PONET	CONSIGNEE FOR	WARD	LAND !	FILL
SINEE!		STREET OR BOX	-		<u> </u>
спу		CITY			· · · · · · · · · · · · · · · · · · ·
CUROCO SAFEL	ALBANY	DESTRUCTION ALL ST	v Ro	MANTE	CA ECE USE ONLY
182 91-11/0	D. AREA DELIVERY ZONE	ML 10	C-4-2 .	FOR OF	DE USE ONLY
NO. S BETWEEN	CUBIC YARD CAPACITY	STREET OF BOX	re,	ye	
TYPE PTO WHEELER	TRANSFER	City .			
COLMODITY	SEM BOTTOM SENO		PRIGIN	06879	MATION
TAGINO.	WEIGHT	IN .	OUT	N .	OUT
1 07314	<u> </u>	5.40	6:00	7:45	8:00
2. 321	***************************************	9:50	10:10	11:52	12:00
		1:35	1:55	3:20	3.50
4.					
5. 6.				ļ	
7.		/////		0	2)
8.	•	7-14		مصدر	
9.				-	
10.		***************************************		•	
4. FRISH DUMPING 3:50	3. TIME		OTAL.	TOTAL	18
1. FIRST TRUE 5:40	A JOBSITE DEPARTURE	40	39	HRS	9.05
CIVERALL &		:55		s_7	55.84
5. TANE (4-1) /0:3	6. THE (3-2)	:45 "	TD. 8Y	NIN & =	
7. TOTAL TIME (5+6)	12:15	-	**	s_7	55.84
8. LESS: MEAL & DOWNTIM	E 0	L_	▲ FOR	OFFICE USE	ONLY -
			<u> </u>		
9. (7-8)	12.3	,	UNDERLYING C		,
HUCK O'SO	RALER EX-S		DAIVER	1	
	10.8	ON ALL PAS	T DUE ACCOUNT	S THERE WILL B	E A FINANCE
	And the second	DESTOR .AGE	HEES TO PAY LET THE COLLECTION	BAL FEES AND C	OURT COSTS
RECEIVED IN GO					<u></u>
EXCEPT A	SNOTED STORES	+	EL	_	

D734	
MID COAST	FREIGHT BILL CALT 125842-
TRANSPORTATION P.O. BOY	(74 2020 75
PHONE:	CA 94507 30024 (415) 449-8211
STREET CONST.	Forward Landfill
Curoco Steel	STREET OF TOX
Closuloady Coate	Manteca
MLES DELVIONA CENTRAL MILES DELVERY ZONE	S. AUSTIN POR OFFICE USE ONLY
NO. DETANCE CUBIC AND AXLES AXLES CAPACITY	street on sox
TYPE OIL WHELEN TRANSPER	CITY
COMMODITY Dirt	ORIGIN DESTMATION N OUT N OUT
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² 0/336 // // 3	1015 1115 105 120
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A FINSH DUMPING / CO O O O	ASI Diverns moding
1. STARTING TIME / O 2. JOBSTE CEPARTURE //	7/5 TONE NATE 57.05
5. THE (4-1) 7. 3 6. TRAVEL /. 8	\$_ <u>501.93</u>
7. TOTAL TIME (5+6)	50197
8. LESS: MEAL & DOWNTIME	▲ FOR OFFICE USE ONLY
NET HRS. CHARGEABLE 9	- MOSEL THIS CHANGE /
3. (7-8)	B While HMX
TRUCK 30 TRUCK EG 7	ON ALL PAST DUE ACCOUNTS THERE WILL BE A FRANCE
CONSIGNEE	CHARGE OF 19/8 PER MONTH WHICH IS 19/8 ANNUALLY. DESTOR AGREES TO PAY LEGAL FEES AND COURT COSTS INCURRED IN THE COLLECTION OF DELINQUENT ACCOUNTS.
RECEIVED IN GOOD CONDITION EXCEPT AS NOTED	FUEL_//5.0

	AST		FREIGH	IT BILL	CALT 125842
TRANSPORT	P.O. BC		· · .	7	38393
		, CA 94507 : (415) 449-	8211 DATE 6	7-11-	91
C Wloco	Stell Spite	CONSIGNE	Torwa	2 Pen	Still
Cle	vland ave	streation	tockton	Calit	
allang.	Colif.	DESTRATION	 :		•
MILES JOB NO PRO	ID. AREA DELIVERY ZOME			▼ FOR OF	FICE-LISE ONLY
MO. SO BETWEEN	CUBIC 2	O STREET-	Sito	, Qu	e.
Type	TRANSFER CAPACITY				 _
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2 07338	2098	11:1		2/50	145
3.					ļ
4.		141	4 hs) La	
5. 6.		$\left(\left \frac{T}{T} \right \right)$	7-200	2),00	1)
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8.					<u> </u>
9. 10.	 			•	
4. PHISH DEMPHIS 1/2	15 3. DUMPOTE ADDIVAL		TOTAL	TOTAL	P. June
1. STARTING TIME	A CHARTE OFFICE		TOH8	wr	9.05
5. TIME (4-1) 2'4	75 6. TRAVEL (3-2)		\$110. BY	<u>. </u>	01.95
	7,8	<u> </u>	·	.50	103
7. TOTAL TIME (5+6)			▲ FOR	OFFICE USE	ONLY
		M, C.	, I re		
9. (7-8)	<u> </u>	Kly	0	<u></u>	
TRUCK &	TRALER &D 10	- <u> </u>	DAM		
NO				ITS THERE WILL	RE A SHAMOS S

MID CO	AST	e	FREIGH	IT BILL	• 7
TRANSPORTA	ATION 4	ζ·	-	II OILL	CALT 12584
INC.	P.O. BOX ALAMO, (74 34 94507	•	3633	3
	RHONE: (415) 449-82°	11 DATE		
THEPER C	```	CONSIGNEE		1/2:	41_
STREET	5/1	STREET OF BOX	ware	In	<u>c</u>
CICUCIONO	Auc	Aus	STIN B	ful,	
OPIGEN Albany	. /	DESTRUCTION	C10/	,	
- Cunio Ste	el/Albany	DESTINATION			
91-114		OAL TO		¥ FUH OF	FICE USE ONLY
	40 CAPACITY ZO	STREET OR BOX	-	· ···· ···	
TYPE #10 WHEELER EQUIP. DEL BOTTOM	TRANSPER SEMI SEMI SEMI SEMI SOTTOM	CITY		<u> </u>	
4/2 Per Loc		OR	ISIN .	DEST	PATION
TAG NO.	EIGHT 2 -		OUT	N	OUT
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7.	***************************************	4/4	he	el	al
8.	***************************************		*************		******************************
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4. LAST TRIP	3. DUMPSITE ARRIVAL	TOTA		TOTAL	4.3
1. STARTING TIME	2. JOBSITE DEPARTURE TIME LAST TRUP	TORE		MTE	9.05
5. OVER-ALL	- Thurs			\$	
5. THE (4-1)	6. Time (3-2) 2	310 (···	**	
7. TOTAL TIME (5+6)	· 	- ا المسر		(5.2.	53.92
8. LESS: MEAL & DOWNTIME	9	. •	▲ FOR O	FFICE USE	M.Y
9. (7-B)		COTT A	C/	men /	•
nox /3 max	ED-9	manifest de la constitución de l	DAVEN		14-1-5
,		ON ALL PAST D	UE ACCOUNTS	THERE WILL BE	A FINANCE
CONSIGNES		CHARGE OF 1W DESTOR AGREES INCURRED IN THE	TO PAY LEGA	WHICH IS 189	AMNUALLY,
RECEIVED IN GOOD	CONDITION		70		
EXCEPT AS N	OTED	FUEL	/5/	· _ <-	•

RESOURCE RECOVERY LANDFILL TRUCK NO. TRAILER NO. BILL TO: H. C. CALT TRAILER NO. DATE DATE DATE DATE 19 91 BILL TO: H. C. CALT TRAILER NO. DESCRIPTION SPER YD. SAMOUNT DATE DATE DATE DO THER TOTAL > S IN			MANTECA, CA 95336 • P -5192 LANDFILL: (209) 982	OST OFFICE BOX			AX: (209) 982-1009
SOUTH AUSTIN ROAD, MANTECA, CA 95336 POST OFFICE BOX 6336, STOCKTON, CA 95206 MAIN OFFICE: (209) 466-5192 LANDFILL (209) 982-4298 RESOURCE RECOVERY: (209) 982-1009 RESOURCE RECOVERY LANDFILL TRUCK NO. DATE OUANTITY SIZE YDS. DESCRIPTION S PER VO. S AMOUNT OUT SPEN OUT SAMINATED SOIL OUT SIGNED OUT SIGN		TRUCK NO.	OVERY	ORINE.	VAF	20	19 <u>Q</u> (
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TRAILER NO DATE Q-11		SOUTH AUSTIN ROAD MAIN OFFICE: (209) 46	, MANTECA, CA 95336 . 6-5192 LANDFILL: (209) 98	POST OFFICE BO	X 6336, STOCKTO	N, CA 95206 209) 982-4936	FAX: (209) 982-1009
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APPENDIX G

Manifests for Transport of 550-Gallon
Underground Storage Tank and Liquid Contents

DHS 8022 A (1/88)

EPA 8700—22 (Rev. 9-88) Previous editions are obsolete.

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Do Not Write Below This Line

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DHS 8022 A (1/88) EPA 8700-22

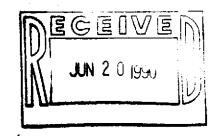
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APPENDIX H

Laboratory Analytical Reports and Chain-of-Custody Documentation for Soil and Ground Water Samples Collected During Underground Storage Tank Removal and Additional Soil Excavation

Analytical Report



LOG NO: E90-05-792

Received: 25 MAY 90 Reported: 12 JUN 90

Dr. Robert Elgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332C

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION, SOIL SA	MPLES	DA	TE SAMPLED
05-792-1 05-792-2 05-792-3	South Wall @ 3' Pipeline @ 1.5' 2' West @ 3'			25 MAY 90 25 MAY 90 25 MAY 90
PARAMETER		05-792-1	05-792-2	05-792-3
Petroleum H Aromatic Hy	ydrocarbons by IR, mg/kg drocarbons	<50	<50	<50
Date Analy		05.30.90	05.30.90	05.30.90
	actor, Times	1	<0.1	<0.1
Benzene, m		<0.1 <0.1	<0.1	<0.1
Ethylbenze Toluene, m	ne, mg/kg	<0.1	<0.1	
•	ne Isomers, mg/kg	<0.1	<0.1	<0.1



Analytical Report

LOG NO: E90-05-792

Received: 25 MAY 90 Reported: 12 JUN 90

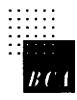
Dr. Robert Elgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332C

REPORT OF ANALYTICAL RESULTS

Page 2

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES		DATE SAMPLED
05-792-4	North Wall @ 2'		25 MAY 90
PARAMETER		05-792-4	
Lead, mg/k Organic Le Nitric Aci Aromatic H Date Anal Dilution Benzene, Ethylbenz Toluene,	ad, mg/kg d Digestion, Date ydrocarbons yzed Factor, Times mg/kg ene, mg/kg	50 10 <0.5 05.29.90 06.04.90 1 <0.1 <0.1 <0.1 <0.1	



Analytical Report

LOG NO: E90-05-792

Received: 25 MAY 90 Reported: 12 JUN 90

Dr. Robert Elgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332C

REPORT	ΟF	ANALYTICAL	RESULTS
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Page 3

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLE	S	DATE SAMPLED
05-792-5	Tank Contents		25 MAY 90
PARAMETER		05-792-5	
Date Analy: Dilution Fa C12 to C25 C12-C25 Fue C25 to C35 Other TPH TPH-Volatile Date Analy: Dilution Fa Benzene, mg Ethylbenzee Toluene, mg Total Xylee C4 to C12 I	platile Hydrocarbons zed actor, Times Hydrocarbons, mg/kg el characterization, Hydrocarbons, mg/kg - Semivolatile Hydrocarbons e Hydrocarbons/BTEX zed actor, Times g/kg ne, mg/kg	06.07.90 10 500 <100 06.01.90 10 <1.0 <1.0 <1.0 <1.0 	



LOG NO: E90-05-792

Received: 25 MAY 90 Reported: 12 JUN 90

Dr. Robert Elgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332C

REPORT OF	ANALYTICAL	RESULTS
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Page 4

PARAMETER 05-792-6 TPH - Semivolatile Hydrocarbons Date Analyzed 05.30.90 Dilution Factor, Times 10 C12 to C25 Hydrocarbons, ug/L 6500 C12-C25 Fuel characterization, 5000 C12-C25 Hydrocarbons, ug/L 5000 Other TPH - Semivolatile Hydrocarbons 57PH-Volatile Hydrocarbons/BTEX Date Analyzed 05.31.90 Dilution Factor, Times 10	SAMPLE DESCRIPTION, GROUND WATE	DATE SAMPLED
PARAMETER 05-792-6 TPH - Semivolatile Hydrocarbons Date Analyzed 05.30.90 Dilution Factor, Times 10 C12 to C25 Hydrocarbons, ug/L 6500 C12-C25 Fuel characterization, C25 to C35 Hydrocarbons, ug/L (5000 Other TPH - Semivolatile Hydrocarbons TPH-Volatile Hydrocarbons/BTEX Date Analyzed 05.31.90		25 MAY 90
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Sim D. Lessley, Ph.D., Laboratory Director

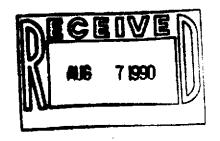


ENVIRON Counsel in Health and Environmental Science

CHAIN-of-CUSTODY FORM

Sheet Of 5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

PROJECT NAME: Curco CASE NO.: 03-1332C ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	7. AM.	7/4 6/26.	15/00/44 10/10/40	1/6/2/2/2/4/4/4/4/4/4/4/4/4/4/4/4/4/4/4/4			(34,1,634)	//	/	/ /		COI	MMEN'	rs
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Pit Water #1	7'	7	Water	6	X	X	×								4			
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LOG NO: E90-07-525

Received: 23 JUL 90 Reported: 02 AUG 90

Dr. Robert Ellgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332C

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES		DA	TE SAMPLED
07-525-2	A: Tank Contents B: Stockpile C: Stockpile		•	23 JUL 90 23 JUL 90 23 JUL 90
PARAMETER			07-525-2	07-525-3
Carbon Ran Total Fuel Fuel Chara Other TPH	ied 8015 zed actor, Times		07.25.90 1 <5 	07.25.90 1 <5
Date Analy Dilution F C4 to C12		07.31.90 1 1.1	07.31.90 1 0.1	07.31.90 1 <0.1

Sim D. Lessley, Ph.D., Laboratory Director



Client nar	ne ENV	'IRON	Corn	oratio.		Project or PO# 03 - 133	20			-	//		Ar	nalyses	required		
Address	5820	Shellm	ound	St	Saite 700	Phone # 655 - 74	00			/5	/*\	/*	Ι,	Ζ.	/ ,	/ / 😹 /	
City, State	i, Zip	ville,	CA	14608	Report attention	Project or PO# 03-133 Phone # 655-74 ert Ellga	5		/	\mathcal{N}_{i}		X/ X/				A Barnarka	
Lab Sample	Date	Time	Type* See key	Sampled by). Souther	~	Number of	/	4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		<u> </u>	//	//	//			
number	sampled	sampled	below		Sample descrip	ion (ID)	containers	/ 4	4 A	%	<u>Z</u>		_	_	2.0° 5.5°	Remarks	1
		10:50	So	A: 1	bank conter	·ts	1	X	×	×						lweek	
	7-27	10:50	50	B: 5	tock pile	·* ·	(×	×	×						turn arou	ind
	7-23	10:50	50	<u>C:5</u>	tock pile tock pile		1	×	\times	×				,		turn arou	please
				 .												<u> </u>	
			 												,	* Cancelled	
					=											Bused on 1	1 exbal
																w Robert E	ut
													_			w Robert E	lyus
																07.23.90	
											\dashv	\dashv					
		-															
		Signature			Pi	int Name	<u> </u>	<u> </u>			Compan					Date	Time
Relinquis	hed by	`	1	*=	Drew So	outler	ϵ	NU	IRO		•	<u>-</u>			·	7/23/90	12:02
Received	by XX	flex of	Lilen)	r: THON		*	3CA	•		,					7/23/90	
Relinquis																	
Receive	l by																
Relinqui	shed by																
Receive	t by Laborator	у	<u> </u>			·····											
RCAN	AIVTICA				Note: Samples are disc	arded 30 days after results a	re recorted un	less othe	er arrane	aements	s are ma	de	'KE	Y: AO-	Agueg	us NANonagueous S	St.—Sludge

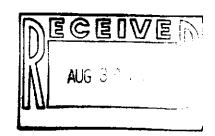
1255 Powell Street, Emeryville, CA 94608 (415) 428-2300

☐ 801 Western Avenue, Giendale, CA 91201 (818) 247-5737 1200 Pacifico Avenue, Anaheim, CA 92805 (714) 978-0113

Hazardous samples will be returned to client or disposed of at client's expense.

Disposal arrangements: _

GW-Groundwater SO-Soil OT-Other PE-Petroleum



LOG NO: B90-08-410

Received: 17 AUG 90 Reported: 27 AUG 90

Dr. Robert Ellgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332D

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLE	S	Da	ATE SAMPLED
08-410-1 08-410-2	D E			17 AUG 90 17 AUG 90
PARAMETER		08-410-1	08-410-2	
Carbon Ran Total Fuel Other TPH TPH - Volat Date Analy Dilution F C4 to C12	zed actor, Times ge, . Hydrocarbons, mg/kg - Modified 8015 ile Hydrocarbons	08.22.90 1 <5 08.22.90 1 <0.1	1 C12-C18 100	



LOG NO: E90-08-410

Received: 17 AUG 90 Reported: 27 AUG 90

Dr. Robert Ellgas Environ Corporation 5820 Shellmound Street, Suite 700 Emeryville, California 94608

Project: 03-1332D

REPORT OF ANALYTICAL RESULTS

Page 2

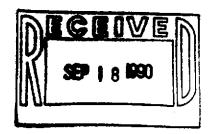
LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLE	3S	DATE SAMPLED
08-410-3	F		17 AUG 90
PARAMETER		08-410-3	
Aromatic Hyd Date Analyz Dilution Fa Benzene, mg Ethylbenzer Toluene, mg	zed actor, Times g/kg ne, mg/kg	230 08.19.90 1 <0.005 <0.005 <0.005 <0.005	

Samples were analyzed by BC Analytical's Anaheim laboratory. Rush results were transmitted by facsimile to Dr. Robert Ellgas on 08.27.90. T. Blake 08.27.90

Sim D. LessTey, Ph.D., Laboratory Director



ENVIRON Counsel in Health and Environmental Science				CH	IAI	N-d	of-	CU	92	AP.	Y v F	FOF	RM				5820 Shell Emeryville	mound St, S , California S 655-74	Suite 70 94608
PROJECT NAME: Curo(o) CASE NO.: 03-1332D ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	414.	PE / 1/3ES.			17	7	\$/ //		<i> </i>	/ /			СОМ	MENTS	
D	817	115	SOIL	1			X	X											
E		715	SOLL	1			X	X								Ź	SPORT	7.	
F	8/17	TLS	SOK	1	χ	X											Risin	To Fly	t Lyn:
												<u> </u>					·		
	_	-			ļ	<u> </u>		ļ	_			_	_						
	╂	-		 	ļ					-				-					
			-																
TOTAL	\geq	\boxtimes	\times	3	1	1	2	2											
Relinquished by:	····		Date:		Tim	e: —	Rec	eive	d by	y: ——			Co	mpa	ıny:	_ C	ate:	Time	e:
Todd & St	ev	<u>=</u>	8/191	190	<u> </u>	<u>-</u>	<u></u>		>	<u> </u>	/			w A			elala	1115	-



LOG NO: E90-08-699

Received: 30 AUG 90 Reported: 11 SEP 90

Dr. Robert Ellgas
Environ Corporation
5820 Shellmound Street, Suite 700
Emeryville, California 94608

Project: 03-1332D

REPORT OF ANALYTICAL RESULTS

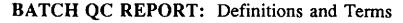
Page 1

LOG NO	SAMPLE DESCRIPTION,	SOIL	SAMPLES			DA	TE SAMPLED
08-699-1 08-699-2 08-699-3	G-2 H-2 I-2						30 AUG 90 30 AUG 90 30 AUG 90
PARAMETER				08	3-699-1	08-699-2	08-699-3
	, Not Analyzed ydrocarbons (418.1),	mg/kg			<50	HELD	HELD

Results were reported to Dr. Robert Ellgas by voice mail on 09.07.90. M. Janney 09.07.90

Sim D. Lessley, Phy.D., Laboratory Director





The ability of a procedure to determine the "true" concentration of an analyte Accuracy

Precision The reproducibility of a procedure demonstrated by the agreement between

analyses performed on either duplicates of the same sample or a pair of

duplicate spikes

Batch A group of samples analyzed sequentially using the same calibration curve.

reagents, and instrument

Laboratory Laboratory reagent water spiked with known compounds and subjected to the Control Standard (LCS)

same procedures as the samples. The LCS thus indicates the accuracy of the analytical method and, because it is prepared from a different source than the

standard used to calibrate the instrument, it also serves to double-check the

calibration

Matrix QC Quality control tests performed on actual client samples. For most inorganic

analyses, the laboratory uses a pair of duplicate samples and a spiked sample.

For most organic analyses, the laboratory uses a pair of spiked samples

(duplicate spikes)

LC Result Laboratory result of an LCS analysis

LT Result Expected result, or true value, of the LCS analysis

R1, R2 Result: Result of the analysis of replicate aliquots of a sample, with R1 indicating the

first analysis of the sample and R2 its corresponding duplicate; used to

determine precision

S1, S2 Result Result of the analysis of replicate spiked aliquots, with S1 indicating one

spike of the sample and S2 the second spike; used to determine precision and

accuracy

R Bar Result The average of replicate analysis results

S Bar Result: The average of spike analysis results

True value The theoretical, or expected, result of a spike sample analysis

Percent The percentage of analyte recovered.

Recovery For LCS, the percent recovery calculation is: LC + LT x 100

For spike recoveries, the percent recovery calculation is:

(S Bar - Sample Concentration) x 100

Spike Amount

Relative Percent

Calculated using one of the following:

Difference (RPD) $(R1 - R2) \times 100$

 $(R1 + R2) \div 2$

Blank Result The result of the analysis of a method blank, which is reagent water that is

analysed using the same reagents, instruments and procedures as the samples

in a batch; used to determine laboratory contamination

Reporting Detec-BCA-assigned limit based on—but not the same as—method detection limits tion Limit (RDL) (MDLs) determined using EPA guidelines

ORDER PLACED FOR CLIENT: Environ Corporation 9008699:

SAMPLES... SAMPLE DESCRIPTION.. DETERM CODE.... DATE.... METHOD...... EQUIP. BATCH ID.NO ANALYZED

 9008699*1
 G-2
 IR.PETROHC
 09.07.90 418.1
 513-03
 84 7453

 9008699*2
 H-2
 HOLD
 09.05.90
 6926

 9008699*3
 I-2
 HOLD
 09.05.90
 6926

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

BATCH QC REPORT ORDER: E9008699

DATE REPORTED : 09/12/90

Page 1

LABORATORY CONTROL STANDARDS

DATE BATCH LC LT PERCENT

PARAMETER ANALYZED NUMBER RESULT RESULT UNIT RECOVERY

Petroleum Hydrocarbons (418.1) 09.07.90 84 300 300 mg/kg 100

BATCH QC REPORT ORDER: E9008699

DATE REPORTED : 09/12/90

Page 1

MATRIX QC PRECISION (DUPLICATES)

DATE BATCH R1 R2 RELATIVE ANALYZED NUMBER RESULT RESULT UNIT %DIFF 09.07.90 84 <50 <50 mg/kg NA

PARAMETER Petroleum Hydrocarbons (418.1)

B(t) Analytical

BATCH QC REPORT ORDER: E9008699

DATE REPORTED: 09/12/90

Petroleum Hydrocarbons (418.1)

PARAMETER

Page 1

MATRIX QC ACCURACY (SPIKES)

	ВАТСН		TRUE	RBAR	1337B	PERCENT
ANALYZED	NUMBER	RESULT	RESULT	RESULT	UNIT	RECOVERY
09.07.90	84	240	300	<50	mg/kg	80

B.C. Smalymous

BATCH QC REPORT ORDER: E9008699

DATE REPORTED : 09/12/90

Page 1

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)

PARAMETER
Petroleum Hydrocarbons (418.1)

DATE BATCH BLANK
ANALYZED NUMBER RESULT RDL UNIT
09.07.90 84 0 50 mg/kg

ENVIRON

Counsel in Health and Environmental Science

CHAIN-of-CUSTODY FORM

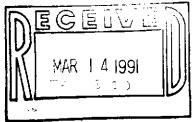
Sheet Of 5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

PROJECT NAME: CINOCO CASE NO.: 03-1332P ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY (initials)	MATRIX	TOTAL NO. OF CONTAINERS	**************************************			<u> </u>			//		//	/ /			COMMENTS
6-2	8/30	SWA	Soil		$\sqrt{1}$												one week turn groups
H-2	T	$\overline{1}$	ı	1	1												Hold H-2+I-2
I-2	V	V	V	1	1												until results are
																	determined.
		<u> </u>		1													
						<u> </u>							<u> </u>				
					 			ļ	 				<u> </u>			<u> </u>	
		 		-	 		 		 	-		<u> </u>	\vdash	-		 	
TOTAL	\times	\times	><	3	3												
Relinquished by:			Date: <u>8/10/90</u>	<u>)</u>	Tim	e: 〈	Red	eive &c.	d by	/:	_		Co	mpa <u>B</u> C	iny:	<u> </u>	Date: Time: 8-30 90 4:00pm



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 9471O, Phone (415) 486-0900



DATE RECEIVED: 02/26/91 DATE REPORTED: 03/12/91

LAB NUMBER: 103088

CLIENT: ENVIRON

REPORT ON: ONE SOIL SAMPLE

PROJECT ID: 03-1332D LOCATION: CUROCO

RESULTS: SEE ATTACHED

QA/QC Approval

Final Approva



LABORATORY NUMBER: 103088

CLIENT: ENVIRON
JOB #: 03-1332D
LOCATION: CUROCO

DATE RECEIVED: 02/26/91 DATE ANALYZED: 03/08/91 DATE REPORTED: 03/12/91

EPA 418.1: Total Recoverable Petroleum Hydrocarbons by IR Extraction Method: EPA 3550

LAB ID CLIENT ID RESULT REPORTING (mg/Kg) LIMIT (mg/Kg)

103088-1 N-extra@2.5' 16 10

QA/QC SUMMARY

RPD, %
RECOVERY, %
108

ENVIRON

Counsel in Health and Environmental Science

CHAIN-of-CUSTODY FORM 103088

Sheet Of (5820 Shellmound St, Suite 700 Emeryville, California 94608 (415) 655-7400

PROJECT NAME: Curaco CASE NO.: 03-1332 D ENVIRON SAMPLE ID.	COLLECTION DATE	COLLECTED BY	MATRIX	TOTAL NO. OF	7 41.	Sy/\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				/ /	/ /	/ /	//			COMMENTS
N- extra @ 21/	2/	Ds	Soil	Ī	×										Í	Normal turn
				•												around time
																please
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1)			:										
(0)												,				send report
X		i	X	100												to Dr. Robert
		T.		7												Ellgas Dease
	1/2	}	110													
	7															
TOTAL	\times	\boxtimes	\boxtimes		1											
Relinquished by			Date:	9 <u>(</u>	Tim 5:"	e: 10pm	Rec	d by		A.	Co	mpa Rús	iny:	MPKI	<u>r</u>	Date: Time: