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CONSTRUCTION COMPLETION REPORT FOR INTERIM REMEDIATION ACTIVITIES SOIL
AND FREE PRODUCT REMOVAL NORTH FUEL FARM NAS CECIL FIELD FL
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BECHTEL ENVIRONMENTAL INC

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CONSTRUCTION COMPLETION REPORT

FOR

INTERIM REMEDIATION ACTIVITIES
SOIL AND FREE PRODUCT REMOVAL
NORTH FUEL FARM

NAVAL AIR STATION CECIL FIELD, FLORIDA

Prepared for
DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND

Under Contract No. N62467-93-D-0936



Prepared by

BECHTEL ENVIRONMENTAL, INC.
OAK RIDGE, TENNESSEE

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EXECUTIVE SUMMARY

The United States Department of the Navy, Southern Division, Naval Facilities Engineering Command (Navy), conducted interim remedial actions (IRA) at the North Fuel Farm (NFF), Naval Air Station (NAS) Cecil Field, Florida. Bechtel Environmental, Inc. (Bechtel), the Navy's Remedial Action Contractor (RAC) under prime contract Number N62467-93-D-0936, performed the first phase of the IRA between October 1995 and May 1996. Bechtel excavated JP-5 contaminated soil in two areas adjacent to the tank mound at NFF, backfilled the excavations with clean soil, constructed two interceptor trenches with collector sumps for the recovery of free product, and performed the installation, start-up, operation and maintenance of a bioslurper system to recover free product from the soil and groundwater surface in the tank mound. Bechtel expanded and modified the bioslurper system between May and July 1997 during the second phase of the IRA.

The NFF is located in the north-central part of NAS Cecil Field at the northeast corner of A Avenue and Loop Road. The NFF site is a flat, grass-vegetated terrain bounded on the north and east by wooded areas along drainage ditch tributaries to Sal Taylor Creek. The central portion of the site is occupied by the bermed fuel tank farm consisting of six 550,000-gallon capacity (approximate) storage tanks. The six tanks are enclosed by an earth mound rising approximately 17 feet above natural grade in the area. Portions of the fuel transfer piping and electrical systems are also contained within the tank mound.

In April of 1995, the Navy and the Florida Department of Environmental Protection (FDEP) reached a consensus on the approach to contaminated soil cleanup and free product recovery at the NFF. In general, soil excavation with subsequent thermal treatment at the Site 3 Thermal Treatment Staging Area, also located at NAS Cecil Field, was the selected remedy for remediation of excessively contaminated soil west of the tank mound toward A Avenue. It was also decided that recovery of free product would be performed outside the tank mound during the excavation and within the tank mound utilizing a bioslurper system (Bechtel 1995a).

During the preconstruction phase, the Navy provided several changes to the scope of work. The following modifications to the implementation of NFF interim remedial actions were based upon discussions during the August 9, 1995, Navy/Bechtel preconstruction meeting and ensuing working sessions between the Navy and Bechtel on August 10, October 11, and October 25, 1995:

- Based upon previous headspace measurements on local soil, the definition of excessively contaminated soils for site cleanup was revised from 50 parts per million (ppm) to 1000 ppm. This revision was implemented so that available resources could be utilized to focus on the areas of the most severe soil contamination.
- The IRA included excavation of excessively contaminated soil and the open excavation recovery of free product in the JP-5 spill area located northeast of the tank mound.

- Excavation limits were defined prior to commencing excavation and were not controlled by soil sampling and OVA headspace analyses performed concurrently with the excavation.

Technical direction regarding the changes in scope for interim soil remediation were confirmed by the Navy in a letter dated August 29, 1995, and provided in Appendix A.

The IRA, including the excavation of excessively contaminated soil and the recovery of free product, was performed under the general provisions of Rule 62-770.300 Florida Administrative Code (FAC). Because of the volume of soil involved, FDEP approval of an Alternate Procedure Request (APR) was required. The APR was submitted by the Navy in December 1994, and FDEP approval was obtained in January 1995.

The excessively contaminated soil removed from the NFF was thermally treated by a low temperature thermal desorption unit at Site 3. Thermal treatment was conducted in accordance with Chapter 62-775 FAC. Because both the NFF and Site 3 are within NAS Cecil Field boundaries, compliance with the requirements of Rule 62-775.710 FAC concerning the operation of the mobile thermal treatment unit at the site with confirmed contaminated soil was satisfied.

The second phase of work, performed in 1997, included the expansion of the bioslurper extraction well system, installation of additional collector and header piping required to tie the new extraction wells into the system, installation of a catalytic oxidizer (Cat-Ox) system for off-gas treatment, modifications to the bioslurper system to accommodate the addition of the Cat-Ox system, start-up of the bioslurper system following Cat-Ox system installation, and continued sampling and operation and maintenance of the bioslurper system.

Lessons learned during the interim remediation effort include:

- Potential accumulation of excessive amounts of petroleum contact water during remedial soil excavation is effectively controlled by coordinating a "just in time" backfill supply and placement operation as part of the effort.
- While the movement and distribution of product in the ground is largely controlled by site specific hydrogeologic conditions, they may also be influenced by man-made features or modifications of local conditions. Planning of soil removal and product recovery operations should recognize the potential influence of such identified additions or modifications with regard to anticipated conditions.
- Start-up and initial operation of the treatment system demonstrated the importance of vendor-supplied procedural documents and trouble shooting guides.

1.0 PROBLEM STATEMENT

Petroleum contamination addressed by the IRA was caused by releases during routine operation of the facility and a large, single-event spill that occurred in February 1991. These releases resulted in excessively contaminated soils both within the tank mound and in adjacent areas west and northeast of the mound. Characterization of the site identified an accumulation of free product on the groundwater beneath the southern two-thirds of the mound and extending a limited distance west of the mound. The characterization also identified a limited amount of free product on the groundwater in the area located immediately northeast of the mound. The purpose of the IRA effort was to recover free product from the impacted areas identified during the characterization and to excavate and treat the most severe soil contamination found in the areas adjacent to the mound.

2.0 SCOPE OF WORK

Interim remediation of excessively contaminated soil and free product on the groundwater at the NFF commenced in the field October 30, 1995, following mobilization of equipment and materials. The work began in the soil remediation target area located northeast of the tank mound, progressed to the target area west of the tank mound, and culminated with the installation and startup of the bioslurper system on the tank mound. Interim soil remediation was complete, and daily operation of the bioslurper system had commenced by June 3, 1996. The following sections summarize the interim remedial activities. Technical direction documents addressing the evolution of scope subsequent to approval of the original work plan are included in Appendix A. Appendix B provides a selection of representative photographs of the project, and Appendix C provides the project design drawings incorporating the modifications to scope. Appendix D provides documentation of the abandonment of the monitoring wells that was performed in conjunction with the excavations. Appendix E provides surveyed drawings of the site and the excavations that were performed.

2.1 DEMOLITION AND ABANDONMENTS

2.1.1 Demolition and Pipe Removals

Demolition or removal of existing site features included the following:

- Demolition and removal of a concrete valve box.
- Demolition and removal of two eight-inch diameter jet fuel lines which had been replaced by the supply line realignment completed in 1994. The two lines totaled approximately 505 linear feet of pipe and extended from the southwest toe of the mound to Buildings 69 and 70 (per technical direction from the Navy, March 25, 1996, Appendix A).

2.1.2 Monitoring Well Abandonments

Excavation of soil for interim remediation necessitated the abandonment of nine shallow aquifer monitoring wells located within the limits of excavation, as described in Section 2.3.1 below. Locations of abandoned wells are shown on Drawing 227-DD000-001, Appendix C. The wells were all constructed of nominal two-inch diameter Schedule 40 PVC and ranged from 5.5 to 15 feet deep. Because most of the nine monitoring wells were less than 12 feet deep, it was proposed that all wells be abandoned by total excavation and removal of the screen, riser, and filter sand column. This approach was discussed with the Water Quality Division, Jacksonville Department of Regulatory and Environmental Services, the regulatory authority for these shallow monitoring wells. Total excavation and removal was accepted with the conditions that the appropriate record of abandonment be prepared for each well and that any casing left in the ground would require grouting by a licensed drilling contractor. Excavation of the wells by the excavation contractor during the progress of soil removal was acceptable under these conditions. Removal of all wells was accomplished in this manner. A backhoe locally excavated the well casing and filter pack, and this excavation was immediately backfilled to the nominal local grade of the surrounding soil remediation excavation. All abandonments were documented, and the forms are included in Appendix D. All other wells within the limits of excavation were protected and maintained in operational condition during excavation, backfill, and regrading.

2.2 FREE PRODUCT RECOVERY TRENCHES

The approved interim remediation work plan (Bechtel 1995a) included a provision for a vertical barrier wall to be placed along the western toe of the mound. This vertical barrier was intended to isolate the area to be excavated and backfilled (between the mound and Avenue A) from the contamination source area in the tank mound itself. Between approval of the original work plan and initiation of site work in October, 1995, the proposed scope of work underwent further review and modification by the Navy. The barrier wall approach was revised by introduction of a gravel-filled collector trench upstream, that is, on the mound side, of and immediately adjacent to the barrier; the trench design included an invert drain line and collector sump. This created an interceptor trench to product moving outward from the mound. In accordance with the objectives discussed in Section 2.3 below, recovery trenches were installed along portions of both the western and eastern sides of the tank mound. The locations of the two recovery trenches and their respective collector sumps are provided on Drawing 227-DD000-002, Appendix C. Trench invert depths are also provided on Drawing 227-DD000-002. Both east and west trenches were constructed to provide an approximately 0.5% downslope along the invert drainage pipe toward the collector sump located at the north end of each trench. A typical trench cross-section and a typical sump detail are provided on Drawing 227-DD000-006, Appendix C.

All soil excavated for construction of the recovery trenches was transported to Site 3, NAS Cecil Field, for stockpiling and treatment in the low temperature thermal desorption (LTTD) unit operated by Dustcoating, Inc., of Maple Plain, Minnesota. The operation of this unit is discussed in Section 2.4 below.

2.2.1 Trench Excavation

Excavation of the east recovery trench began on October 30, 1995. Trench excavation and installation of the high density polyethylene (HDPE) barrier, gravel backfill, drain line and collector sump were completed by November 6, 1995. As shown on Drawing 227-DD000-002, the position of the northern end of the east collector trench was configured to avoid demolition of monitoring well CEF-076-33D which is utilized as part of the long term groundwater monitoring program for the NFF.

Prior to excavating the recovery trench on the west side of the tank mound, it was necessary to remove abandoned eight-inch diameter jet fuel pipelines which had carried fuel to the tank mound prior to relocation of the supply line in 1994. The locations of these lines are shown on Drawing 227-DD000-001 of Appendix C; their locations were essentially coincidental with the planned west recovery trench location. Removal of those segments of the pipelines within the defined area of excavation, as shown on Drawing 227-DD000-002, Appendix C, began on January 3, 1996, and was completed on January 10, 1996. The pipe sections were temporarily stockpiled onsite for demolition, removal, and cleaning at a later date. Excavation of the recovery trench and installation of the barrier, gravel pack, and drain line commenced on January 11. Three of the monitoring wells on the west side of the tank mound that were designated for abandonment were excavated during construction of the recovery trench. The recovery trench and sump installation were completed by January 29, 1996, when excavation and backfill of the balance of the soil remediation area west of the tank mound began.

2.2.2 Gradient Enhancement by Groundwater Pumping

Free product is recovered by skimmer pumps located in the sumps at the north end of each recovery trench. Recovered product is pumped to containment drums located adjacent to the sumps for future disposal. The original intent was that the free product recovery system of trenches and sumps be a passive system operating under the natural gradient of the near-surface groundwater. In the course of constructing the trench and sump system along the northeast side of the tank mound, it was discovered that the natural gradient was not steep enough for adequate recovery of free product to occur. It was determined that a limited local depression of groundwater within the sump, created by sustained pumping of groundwater from the sump, would increase flow and enhance the free product recovery capacity of the trench and sump system. Chapter 62-770.300(2) FAC prohibits the extraction of groundwater which causes a depression of the groundwater table unless approved by an Alternate Procedure Request (APR) pursuant to Rule 62-770.890 FAC. Consequently, an APR calling for approval of extraction of groundwater up to 10 gallons per minute (gpm) per proposed sump was submitted by the Navy and approved by FDEP prior to implementation of groundwater recovery from the sumps. Extraction of shallow groundwater, even at such limited production rates, necessitated issuance of a Consumptive Use permit by the St. Johns River Water Management District (SJRWMD) under the rules in place at that time. The permit application was submitted by the Navy in December 1995 and approved by the SJRWMD in January 1996.

Subsequent to the permit acquisition, Grundfos Redi-Flo4 5E groundwater extraction pumps were installed in the trench sumps. The effluent water piping from the sump pumps was routed to the oil/water separator at the bioslurper system. Interlocks were installed between the sump pumps and the bioslurper system so that the sump pumps would shut down when an alarm condition (e.g., high level in the oil/water separator) occurred at the bioslurper system.

2.3 SOIL EXCAVATION AND BACKFILL

Interim remedial activities at the NFF included excavation of contaminated soil in the areas west and northeast of the tank mound. The approved interim remediation work plan (Bechtel 1995a) originally addressed removal of excessively contaminated soils (i.e., greater than 50 ppm by headspace measurement), limited to an upgradient area west of the tank mound between the mound and A Avenue. Between approval of the original work plan in July 1995 and initiation of site work in November 1995, the proposed scope of work underwent further review and modification by the Navy. The basis for this process was the need to maximize the application of available resources to accomplish the overall goals of the interim remedial action in an additional target area located northeast of the tank mound, usually referred to as the "JP-5 spill area." The underlying remedial goals, which were to remove and treat excessively contaminated soils and to begin free product recovery at the tank farm, remained unchanged.

2.3.1 Lateral Limits and Depths of Excavations

The modified scope of interim remedial action soil excavation addressed removal of excessively contaminated soils in areas northeast and west of the tank mound. The objectives were to remove significant quantities of soil acting as a source of contamination and, to the extent possible, recover free product. For the interim soil removal program, excessively contaminated soils were defined by the Navy in the preconstruction meeting of August 9, 1995 as those soils exceeding 1,000 ppm as determined by OVA analyses of headspace. Excavation limits, based on graphical depictions of the 1,000 ppm OVA isoconcentration contour (which was constructed from previous data), were established and corner turning points were staked during a Bechtel/Navy working session on August 10, 1995. It was recognized at the time that some areas exceeding 1,000 ppm may remain outside the excavation limits. Some adjustment of the staked excavation limits east of the tank mound relative to the 1,000 ppm isocontour were made to avoid removal of trees. The staked turning points were surveyed, and the resulting survey map identified as Drawing No. B95-31 is provided in Appendix E. The survey stakes generally provided the actual control on excavation in the field. As described in Section 2.3.2 below, conditions encountered during the excavation west of the tank mound necessitated limited, local over-excavation of soil beyond the staked limits.

The guidelines for excavation depths were based on the distribution of contamination in the soil and the March 1994 data on free product distribution and groundwater levels. Within the estimated free product plume on the western side of the tank mound, the soil was excavated to a depth of five feet below ground surface. Elsewhere within the western excavation limits, the excavation depth was three feet below ground surface. On the northeast side of the tank mound,

the entire excavation was performed to a depth of three feet below ground surface (Bechtel 1995b).

Several general guidelines were followed during the excavation operation:

- Excavation limits in the JP-5 spill area encroached no closer than 15 feet from the existing timber stands located adjacent to the cleared zone.
- Excavation limits in both target areas encroached no closer than three feet from the existing chain-link security fence around the tank mound.
- Excavation limits were adjusted to avoid the retention pond located immediately northeast of Building 69 and the adjacent stormwater runoff control ditches. Excavation limits within the restricted JP-5 spill area did not encroach within 12 feet of the nearby drainage channel.

During initial planning, the program called for the relocation of segments of the chain-link security fence in place along the toe of the tank mound. Engineering controls allowed the work to be accomplished without relocation of any portion of the security fence.

2.3.2 Soil Excavation, Removal, and Backfill

The interim soil remediation effort in both target areas began with the excavation and installation of the recovery trenches. Once these collector systems were installed, excavation and backfill of the targeted soils within the staked limits could begin.

All excessively contaminated soil removed from the excavations was transported to a lined area at Site 3, NAS Cecil Field, for stockpiling and treatment in the LTTD unit operated by Dustcoating, Inc., discussed in Section 2.4 below.

It was determined during pre-construction planning that the control and disposition of precipitation and runoff that could potentially accumulate in an open excavation and consequently be in contact with excessively contaminated soils was an issue to be addressed. From lessons learned at Site 17, the most effective means to minimize this potential problem was to excavate only a limited area of the planned excavation at one time and then backfill immediately upon completion of removal of soil to the target depth. Thus, there would be minimal opportunity for water to accumulate. The original intent of the work plan was to return treated soils to the excavation as backfill. However, since backfilling was being performed immediately following the excavations, it was initially necessary to utilize imported material until there was sufficient output of thermally treated soil to use as backfill.

Soil excavation and backfill northeast of the tank mound (i.e., the JP-5 spill area) began November 11, 1995, and proceeded from south to north in the designated area. Three shallow monitoring wells within the excavation limits were abandoned during the excavation, utilizing the procedures described in Section 2.1.2. Equipment operations were conducted such that an intermediate depth monitoring well and a deep monitoring well within the excavation limits were left intact. The backfill for the entire northeast excavation was composed of imported material.

Excavation and backfill of the northeast target area were completed by November 30, 1995. Final regrading and shaping of the surface were performed the following week.

Soil excavation and backfill west of the tank mound began January 29, 1996, and was completed on March 28, 1996. Treated soil from Site 3 was used to backfill the west excavation. It was necessary to suspend excavation during the month of February to allow the thermal treatment unit to process a sufficient stockpile for backfill to avoid a standing open excavation. It was also necessary to reshape and stabilize the pre-treatment stockpile at Site 3 during this time.

Excavation west of the tank mound necessitated the removal of a storm drain with grate and catchment. The drain was oriented north-south and discharged to a retention pond immediately northeast of Building 69. The drain line had been placed in a gravel bedding, and a significant quantity of free product had accumulated within the gravel layer. The free product was removed from the excavation by vacuum truck, and the drain material was over-excavated through the staked excavation area northward toward the retention pond.

During the excavation phase of the IRA, a total of approximately 200 gallons of JP-5 was recovered and approximately 17,400 tons of JP-5 contaminated soil were excavated and treated.

2.3.3 Soil Excavation Lessons Learned

Several observations made during soil excavation which are listed below may be applicable to future soil excavations:

- The employment of "just in time" supply and placement of backfill was confirmed as an effective means of controlling the accumulation of excessive amounts of petroleum contact water during soil remedial excavation.
- The distribution of free product in the ground was strongly influenced by the presence of a man-made feature (storm drain) which had allowed migration outside the originally targeted plume. Effective response to this condition required some modification of the work scope. In this instance, the additional effort was limited to some further excavation and backfill and use of a vacuum truck.

2.4 CONTAMINATED SOIL THERMAL TREATMENT

The following sections summarize the soil thermal treatment operations performed in support of the IRA at the NFF. Under the provisions of Chapter 62-775 FAC for mobile thermal treatment units, Dustcoating, Inc. of Maple Farm, Minnesota, operated a LTTD unit for the treatment of petroleum contaminated soil from the NFF between November 1995 and May 1996. A copy of the cover page of the Dustcoating permit to operate issued by the Air Quality Division, Jacksonville Regulatory and Environmental Services Department, is provided in Appendix F. This LTTD unit had been originally permitted at the same location for treatment of Site 17 soil.

2.4.1 Contaminated Soil Stockpile

Soil excavated from the free product recovery trenches and main excavations at the NFF was transported to the LTTD unit stockpile at Site 3. All soil transport operations were conducted in a manner to prevent the loss of contaminated soil from the haul trucks during transportation from the NFF to the treatment site. Bechtel periodically performed street cleaning along the haul route to remove the soil and dust carried by the truck tires from the staging areas at NFF. The transported NFF soil was placed in a segregated stockpile at Site 3. The stockpile was maintained on a daily basis throughout treatment operations. This included periodic shaping of the stockpile to ensure the safe operation of earthmoving equipment and the daily recovering of the soil with plastic sheeting to control the detrimental effects of inclement weather and high winds.

2.4.2 Pre-Thermal Treatment Sample Analysis

Twenty-three soil samples for pre-thermal treatment analysis were composited from locations within the staked limits prior to excavation. The pre-treatment samples were analyzed by ENCO Laboratories of Jacksonville, Florida, in accordance with the requirements of Rule 62-775.410(3) FAC. The analytical reports provided by ENCO are included as Appendix G to this report.

2.4.3 Thermal Treatment Operations

On November 27, 1995, Dustcoating, Inc., began reactivating the thermal treatment unit at Site 3, where the unit had been maintained after completion of an earlier remedial action. Thermal treatment of soil (from the northeast excavation at NFF) was initiated on December 5, 1995. Treatment of excessively contaminated soil from NFF continued through May 5, 1996. Approximately 17,400 tons of soil from the NFF were processed by the LTTD unit during this time.

During the first month of operation, the treatment production rate averaged from 14 to 16 tons of soil per hour, or about 126 tons per shift. This production rate improved to approximately 16 to 18 tons per hour, or about 136 tons of soil per shift over the course of the remedial action. Optimum treatment temperature was maintained at 800° C.

2.4.4 Post-Thermal Treatment Sample Analysis

Performance monitoring of the LTTD unit was the responsibility of RUST, Inc., who maintained an onsite presence to recover post-thermal treatment soil samples for analysis. Post-treatment analyses as specified by Rule 62-775.410(5) were performed by ENCO on a total of 142 treatment batches of soil. Analytical reports by batch number are provided in Appendix H.

2.5 BIOSLURPER RECOVERY AND TREATMENT SYSTEM

The bioslurper recovery and treatment system components are described in the interim remediation work plan (Bechtel 1995a). Design drawings are provided in Appendix C to this report. The following sections summarize system installation.

2.5.1 Bioslurper Recovery and Collector System

The initial phase of the bioslurper recovery well system included two four-inch diameter recovery wells and five two-inch diameter piezometers. The drilling locations were staked and reviewed during a Bechtel/ABB Environmental Services, Inc. walkover on November 14, 1995. Partridge Well Drilling Co. of Orange Park, Florida, mobilized to the site and began installation of the wells on February 12, 1996. Installation was completed on February 16, 1996. The two-inch temporary piezometers are currently being utilized as extraction wells, as well as monitoring points, during system operation. The four-inch diameter recovery wells were completed in accordance with Section 3.2.3 of the work plan.

2.5.2 Bioslurper Treatment Unit

The bioslurper treatment system was fabricated and delivered to the NFF as a modular unit by Marion Environmental, Inc. of Chattanooga, Tennessee. The treatment system process and instrumentation diagram is provided as Drawing 227-DD000-004, Appendix C. The unit was placed on a concrete pad, centrally located to the original bioslurper recovery well system on the upper surface of the tank mound. Routing of the power supply and discharge pipe from the bioslurper oil/water separator to the nearest sewer lift station is shown on Drawing 227-DD000-003, Appendix C.

All major equipment components, including the vacuum pump, moisture separator, oil/water separator, and carbon adsorption units for emissions control, were initially placed on a single pad. Electrical control panels are mounted on a separate, adjacent pad.

The bioslurper treatment system was installed and connected with the recovery trenches and wells and power supply by April 18, 1996, and system startup and operational testing began on this date. The first full day of operation of the bioslurper treatment unit was June 3, 1996.

Bioslurper system operational and maintenance information has been assembled and is presented in the *Bioslurper Maintenance Manual, Volumes 1 and 2* (Bechtel 1996).

2.5.3 Bioslurper System Expansion

During the period of May through July 1997, the bioslurper system was expanded. An operational plan was prepared and used as guidance for the expansion (Bechtel 1997).

In May 1997, 15 additional wells were installed within the tank mound at the locations shown in the topographic survey Diagram D-97-246 provided in Appendix E. The wells were to be utilized for extraction and/or monitoring of the free product plume located within the tank mound and to attempt to enhance or test potential vapor extraction in other areas of the tank mound. The additional wells were completed as nominal two-inch diameter Schedule 40 PVC temporary piezometers and are screened in the interval 15 to 25 feet below ground surface, as stated in the operational plan (Bechtel 1997).

The original bioslurper system was modified to tie in the newly installed extraction wells and the original temporary piezometer wells. The additional wells were connected to the bioslurper system utilizing well head slurp tube assemblies and additional buried Schedule 80 PVC collector piping with quick-connect headers located at each well head. The installation of the 15 additional wells and the added collector piping has made it possible for a total of 25 wells to be potentially utilized for extraction purposes. Due to the limitations of the bioslurper system, a maximum of 12 extraction wells will be active at one time. The locations of the active extraction wells will be determined by the evaluation of system performance monitoring parameters such as free product measurements in the wells and pretreatment OVA readings at the bioslurper. The extraction system is constructed such that locations of the wells being utilized for extraction may be continually adjusted based upon field data. The wells that are not being used for extraction will be utilized for monitoring of the free product plume and measuring radius of influence of the extraction wells.

The surveyed layout of the bioslurper extraction wells and underground piping is provided on Drawing D-97-246 included in Appendix E. This drawing also shows the relative approximate location of soil excavations and product recovery trenches adjacent to the tank mound and bioslurper system.

With the installation of the additional extraction wells and the associated increase in process air flow volume, the granular activated carbon (GAC) usage necessary for the treatment of the vapor discharge from the bioslurper system became economically infeasible. Consequently, the original GAC units were removed from the bioslurper treatment pad and replaced with a model CAT-VAC 50 catalytic oxidizer (Cat-Ox), manufactured by Therm Tech, Inc., of Kingwood, Texas. The Cat-Ox unit is located on a slab constructed west of the tank mound and approximately 150 feet north of Building. 285. The location of the unit relative to the bioslurper collection system and treatment pad is shown on Drawing D-97-246, provided in Appendix E. The Cat-Ox unit is connected to the discharge outlet of the moisture separator on the treatment pad via a partly buried, partly above-ground pipeline. The unit is tied into the bioslurper operation with system electrical interlocks. The Cat-Ox unit is supplied with supplemental natural gas by a valved and metered feeder line from the main gas service pipeline located along A Avenue.

Bioslurper system start-up operations with the Cat-Ox unit in place began on July 21, 1997. After several components on the main natural gas line were replaced, continuous operation of the bioslurper and Cat-Ox unit commenced on August 1, 1997.

The air sampling plan requirements stated in the operational plan were modified due to a lack of regulatory basis for 14 consecutive days of sampling, followed by monthly sampling. It was determined that the air sampling program would follow the standard air sampling frequency found in work plans for similar Navy sites, which is weekly discharge sampling for the first month after start-up, followed by monthly discharge sampling for the first quarter, then quarterly for the first year. Air samples were collected from the bioslurper air discharge and Cat-Ox unit discharge on August 7, 1997 for EPA Method TO-14 analyses. Cat-Ox unit air discharge

samples were collected weekly for the remainder of August. Analytical results from the air sampling events are provided in Appendix I.

2.5.4 Bioslurper System Lessons Learned

Startup and initial operation of the treatment system demonstrated the importance of vendor-supplied procedural documents and trouble-shooting guides. These documents should be reasonably detailed and should clearly describe ranges of operating tolerances and the significance of potential system behavior. This is especially important where system controls interact with, and respond to, ambient conditions.

3.0 REFERENCES

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APPENDIX A
TECHNICAL DIRECTIONS



DEPARTMENT OF THE NAVY
OFFICER IN CHARGE OF CONSTRUCTION
RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
NAVAL FACILITIES ENGINEERING COMMAND CONTRACTS
JACKSONVILLE AREA
P. O. BOX 139
NAVAL AIR STATION
JACKSONVILLE, FLORIDA 32212-0139

R13
N62467-93-D-0936
August 29, 1995

From: Resident Officer in Charge of Construction, Jacksonville Area
To: Bechtel

Subj: CONTRACT N62467-93-D-0936, North Tank Fuel Farm, NAS, Cecil Field, FL

1. This letter confirms technical changes to your work plan for the above site, as discussed and agreed during the August 10, 1995 preconstruction meeting. In particular, the following major revisions will be made:

Area of work and limits of excavation will be changed. Remedial work on the west side of the tank mound will be reduced, and work will be performed on the east side of the tank mound. Contractor will remove all contaminated soil within the limits established by the Navy.

Contractor will remove the UST at bldg. 70, but not the building itself.

Security fence location will be changed.

The order of contract work will be changed.

2. Please prepare a revision memo to your previous work plan to incorporate these changes in fuller detail. Approval will be by Mr. Bryan Kizer and myself. As always, Mr. Inman or myself will be available to assist you in implementing this work.

2. This memo is technical direction only. If you feel that this work schedule adversely affects your budgeted allowance, please contact your NAVFAC Contracting Officer for formal authority before proceeding.

W. L. Oehlman
Navy Technical Representative
By direction

cc:

B. Meddick, Code 023200
M. Herron, Code 1801
B. Kizer, Code 1842
S. Wilson, Code 18B9
M. Davidson, Code 1879
E. Ball, Code 0232EB
B. Woodard, Code 0513

MEMORANDUM

DATE: October 20, 1995

FROM: Bryan Kizer
Code 1842

TO: Mike Deliz
Ursala Klimas
Herman Bauer
Steve Wilson
Dave Kruzicki
Rao Angara
Duke Inman
Herb Fraser

SUBJ: NORTH FUEL FARM REMEDIATION, NAS CECIL FIELD, JACKSONVILLE, FL

1. On 19 October 1995 Ursala Klimas called and expressed concerns that site conditions at the North Fuel Farm may have changed. Her concerns are based upon the three excavations used to collect groundwater samples at the site during the week of 16 October. On the east side it was observed that the water table was at four feet and our current plan is to excavate only to three feet in this area. On the west side soil was excavated in the area we believed to be the free product area and only a sheen was found on the water table. Soil was as excavated on the west side in an area we believed to have no free product. In this excavation a quarter of an inch of free product was observed in the excavation. At this point in the process we would like to continue with the work already planned and implement the "observational approach."
2. In order to address the activities concerns a meeting will be held on 25 October 1995 at 10:00 at the BCT Office, NAS Cecil Field. This meeting will be to discuss "what if" scenarios that could possible occur and hopefully eliminate any concerns the activity may have.
3. To insure that site conditions have not changed additional excavations will be performed on the east and west sides of the tank mound and site observations will be recorded. In addition, OVA head space analysis will be taken during this procedure. All results will be reported at the 25 October meeting.
4. Mike Goldston visited the site on 19 October to address the waste water issue for the North Fuel Farm and meeting minutes will be distributed during the 25 October meeting.
5. It is important to note that the free product discovered on the west side was found in the vicinity of the storm drain line that runs to the Containment Pond at the north end of the site. Typically storm drain lines are backfilled with rock or other pervious material. This would indeed create a collection area for any freeproduct in the area and may be serving as a collection area along the entire length of the line. If this is the case then we are only dealing with a localized area and we should be able to address the issue with no difficulty. It is also important to note that under the existing scope most of this line is to be removed.
6. If there are any questions please feel free to contact me at (803) 743-0896.

OPTIONAL FORM NO (7-90)

FAX TRANSMITTAL

of pages

TO	HERMANN BAUER	From	Bryan Kizer
Dept/Agency		Phone #	
Fax #	904 779 8999	Fax #	

NSN 7540-01-217-7366 5099-101 GENERAL SERVICES ADMINISTRATION


Bryan Kizer

RECEIVED
OCT 20 1995

V. HERMANN BAUER



DEPARTMENT OF THE NAVY
OFFICER IN CHARGE OF CONSTRUCTION
RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
NAVAL FACILITIES ENGINEERING COMMAND CONTRACTS
JACKSONVILLE AREA
P. O. BOX 139
NAVAL AIR STATION
JACKSONVILLE, FLORIDA 32212-0139

014370

R13
N62467-93-D-0936
March 25, 1996

From: Resident Officer in Charge of Construction, Jacksonville Area
To: Bechtel

Subj: CONTRACT N62467-93-D-0936, North Tank Fuel Farm (D.O. #22), NAS, Cecil Field, FL

1. This letter confirms your technical direction for excavation and removal of the soil drain line north to its end, and the 8" abandoned pipe to Bldg. 70. Remove to storage tanks any accumulation of fuel and /or water, and backfill when seepage is negligible. As always, Mr. Inman or myself will be available to assist you in completing these changes.
2. This memo is technical direction only. Per discussions with E. Ball on 22 March, this work is eligible for fee, as it is past the original work limits in the work plan. Details of formally adding this work to your delivery order should be addressed to the Contracting Officer.

W. L. Oehlman
Navy Technical Representative
By direction

cc:
B. Meddick, Code 023200
M. Herron, Code 1801
S. Wilson, Code 18B9
B. Kizer, Code 1842
E. Ball, Code 0232EB
B. Woodard, Code 0513
U. Klimas, CF

RECEIVED

APR 2 1996

V. HERMANN SAUER

NTFF Free Product Recovery and Soil Remediation



1	10/31/95	Preparing HDPE liner prior to excavating recovery trench; drainline pipe stockpiled adjacent to fence; view south.	NTFF East Side, NAS Cecil Field, Florida
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2	10/31/95	Initiating excavation of recovery trench at northeast border of tank mound; view west.	NTFF East Side, NAS Cecil Field, Florida
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**NTFF Free Product Recovery
and Soil Remediation
Photograph Log**

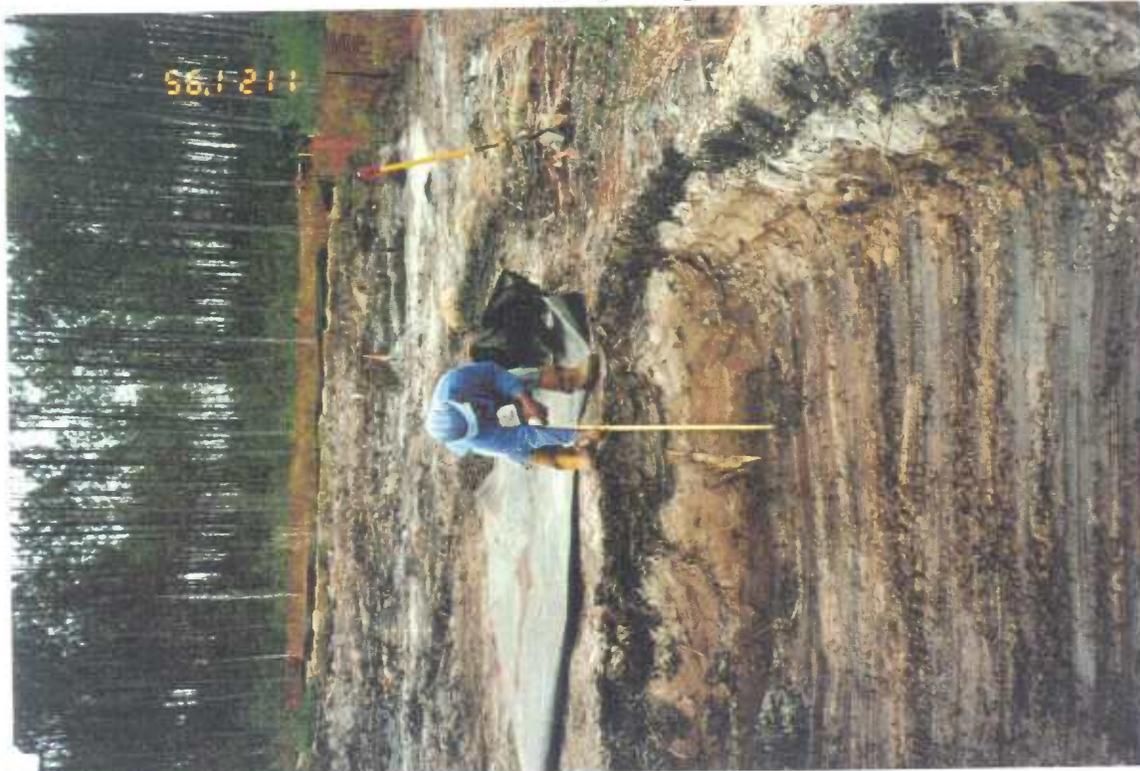


3	11/16/95	Local deeper excavation for removal of groundwater monitoring well within soil removal area; view northwest.	NTFF East Side, NAS Cecil Field, Florida
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4	11/16/95	Excavating soil beyond limits of freshly-placed backfill; view north.	NTFF East Side, NAS Cecil Field, Florida
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**NTFF Free Product Recovery
and Soil Remediation
Photograph Log**



5	11/21/95	Measuring excavation depth. Excavation limit stake located immediately behind laborer, view north.	NTFF East Side, NAS Cecil Field, Florida
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6	1/17/96	Excavating product recovery trench and initial soil lift; view north.	NTFF West Side, NAS Cecil Field, Florida
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NTFF Free Product Recovery
and Soil Remediation
Photograph Log



7	1/17/96	Excavating product recovery trench and initial soil lift; view south.	NTFF West Side, NAS Cecil Field, Florida
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8	1/18/96	Placing drainline and filter gravel in recovery trench.	NTFF West Side, NAS Cecil Field, Florida
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NTFF Free Product Recovery
and Soil Remediation
Photograph Log



9	1/18/96	Placing recovery trench liner and gravel, view northeast.	NTFF West Side, NAS Cecil Field, Florida
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10	3/13/96	Excavating soil and fuel line in vicinity of Bldg. 70, view northwest.	NTFF West Side, NAS Cecil Field, Florida
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NTFF Free Product Recovery
and Soil Remediation
Photograph Log



11	3/13/96	View of 10" fuel line during removal from NTFF West Side.	NTFF West Side, NAS Cecil Field, Florida
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PROJECT DATA SHEET*NAVFAC South Div.*

Project: NFF Free Product Recovery
and Soil Remediation
Location: NAS Cecil Field, Florida

Navy Contact: Bryan Kizer
Phone: (803) 820-5896

Bechtel Contact: Hermann Bauer
Phone: (904) 779-8900

**Project Description:**

For the first phase of an interim remedial action, Bechtel excavated JP-5 contaminated soil in two areas adjacent to the tank mound at the North Fuel Farm (NFF), backfilled with clean soil, constructed two interceptor trenches with collector sumps for the recovery of free product, and performed the installation, start-up, operation, and maintenance of a bioslurper system to recover free product in the tank mound. Bechtel expanded and modified the bioslurper system during the second phase of the interim remedial action.

Project Innovations and Cost Savings:

- Revised definition of contaminated soils to maximize use of limited resources and to focus on the most severe soil contamination areas
- Minimized amount of petroleum contact water by excavating limited areas and backfilling immediately
- Replaced activated carbon adsorbers with a catalytic oxidizer system to reduce operation and maintenance costs for the bioslurper system

Scheduled Completion: April 1996 (1st phase)
July 1997 (2nd phase)

Actual Completion: April 1996 (1st phase)
July 1997 (2nd phase)

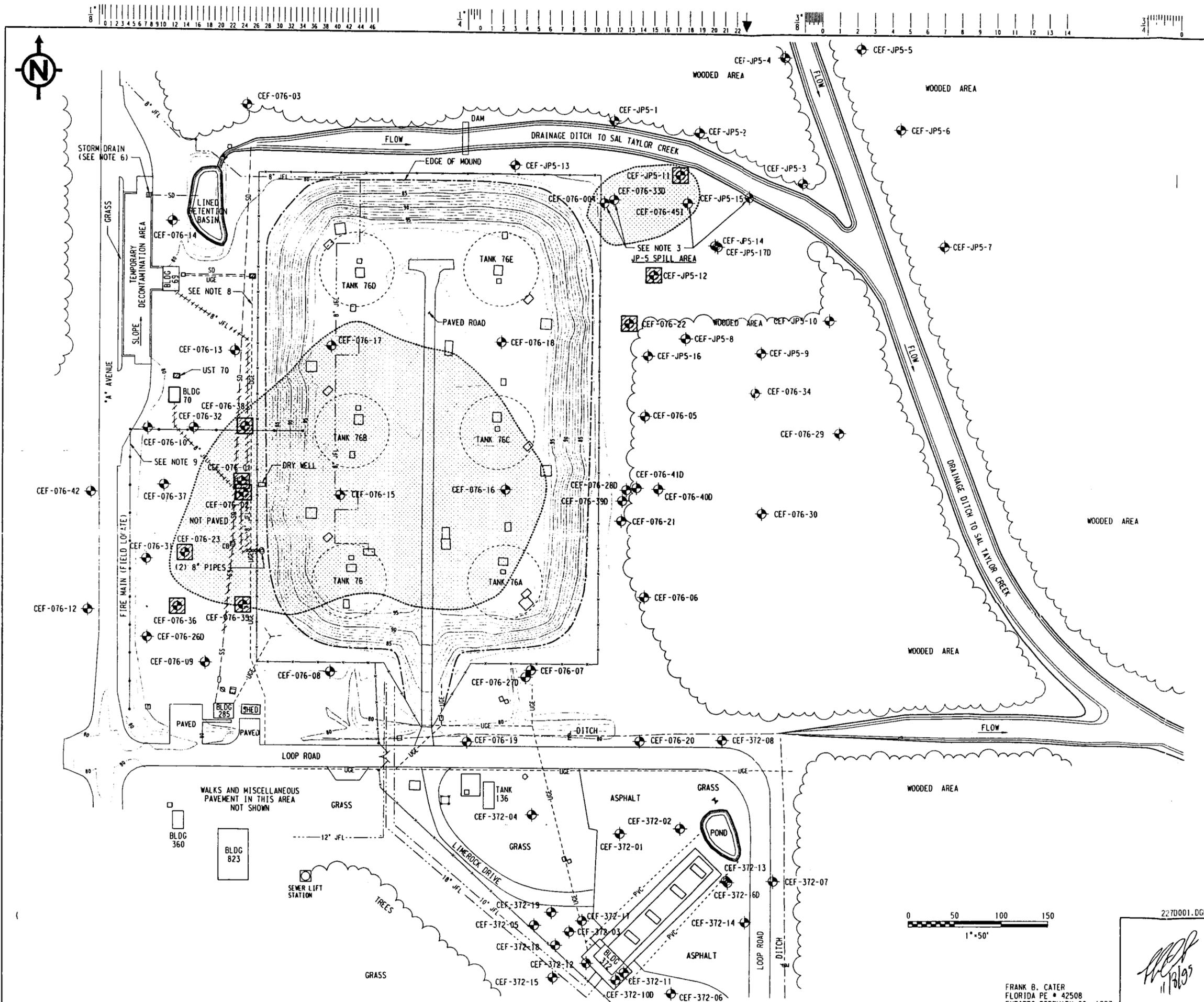
Budget: \$1,896,846 (1st phase)
167,456 (2nd phase)
\$2,064,302

Cost: \$1,882,327 (1st phase)
145,525 (2nd phase)
\$2,027,852

Scope Additions:

APPENDIX B
PHOTOGRAPHS

APPENDIX C
DRAWINGS AND SKETCHES



- NOTES**
- DEMOLITION SHALL BE PERFORMED IN ACCORDANCE WITH TECHNICAL SPECIFICATION 22567-001-SP000-017, AND TECHNICAL SPECIFICATION 22567-001-SP000-005, UNLESS NOTED OTHERWISE.
 - MONITORING WELL ABANDONMENT SHALL BE PERFORMED IN ACCORDANCE WITH TECHNICAL SPECIFICATION 22567-001-SP000-022, UNLESS NOTED OTHERWISE. (SEE WORK PLAN)
 - MONITORING WELLS THAT ARE INDICATED TO REMAIN, BUT FALL WITHIN LIMITS OF EXCAVATION WILL BE PROTECTED FROM DAMAGE. DO NOT EXCAVATE WITHIN 5 FEET IN ANY DIRECTION OF NOTED MONITORING WELLS.
 - SITE INFORMATION WAS PROVIDED TO BECHTEL BY THE NAVY.
 - SEE "INTERIM REMEDIATION WORK PLAN, SOIL AND FREE PRODUCT REMOVAL, NORTH FUEL FARM, NAS CECIL FIELD, JACKSONVILLE, FL" FOR ADDITIONAL INFORMATION. SEE ALSO MEETING MINUTES AND SCOPE REVISION DOCUMENT BASED ON AUGUST MEETING.
 - IF EXISTING TRUCK STAND AREA IS USED AS DECONTAMINATION PAD, STORM DRAIN WILL BE RENDERED INOPERABLE DURING DECONTAMINATION ACTIVITIES.
 - COORDINATE ALL DEMOLITION WITH THE NAVY IN THE FIELD.
 - COORDINATE REMOVAL/REROUTE OF UGE WITH THE NAVY IF REQUIRED FOR THIS LINE.
 - COORDINATE ANY RE-ROUTE OR SERVICE INTERRUPTION WITH RDICC AND FIRE DEPARTMENT.

TECHNICAL SPECIFICATIONS

DEMOLITION OF STRUCTURES	22567-001-SP000-017
EXCAVATION OF CONTAMINATED SOIL AND MISCELLANEOUS DEMOLITION	22567-001-SP000-005
MONITORING WELL INSTALLATION AND ABANDONMENT	22567-001-SP000-022

REFERENCE DRAWINGS

EXCAVATION PLAN	227-DD000-002,
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LEGEND

	MONITORING WELL TO BE ABANDONED
	EXISTING MONITORING WELL
	STRUCTURE TO BE DEMOLISHED
	APPROXIMATE AREA OF FREE PRODUCT PLUME
	EXISTING FENCE
	EXISTING STORM DRAIN (4")
	EXISTING STORM DRAIN (4") TO BE REMOVED
	EXISTING SANITARY SEWER (4") TO BE REMOVED
	EXISTING UNDERGROUND ELECTRIC
	EXISTING UNDERGROUND FIRE MAIN (WATER)
	EXISTING JET FUEL LINE
	EXISTING JET FUEL LINE TO BE REMOVED
	EXISTING TELEPHONE
	EXISTING CATCH BASIN
	JP-5 STORAGE TANK (UNDERGROUND)
	POWER POLE
	ABOVE GROUND ELECTRIC TRANSFORMER

1	1/1/95	REVISED SCOPE PER NAVY DIRECTION	JED	BEH	JRM	ME
0	1/31/95	ISSUED FOR CONSTRUCTION	JED	RTJ	FBC	JRM
NO.	DATE	REVISIONS	BY	CHKD	DESIGN	ENGR
SCALE 1"=50'						

BECHTEL ENVIRONMENTAL INC.
OAK RIDGE, TENNESSEE

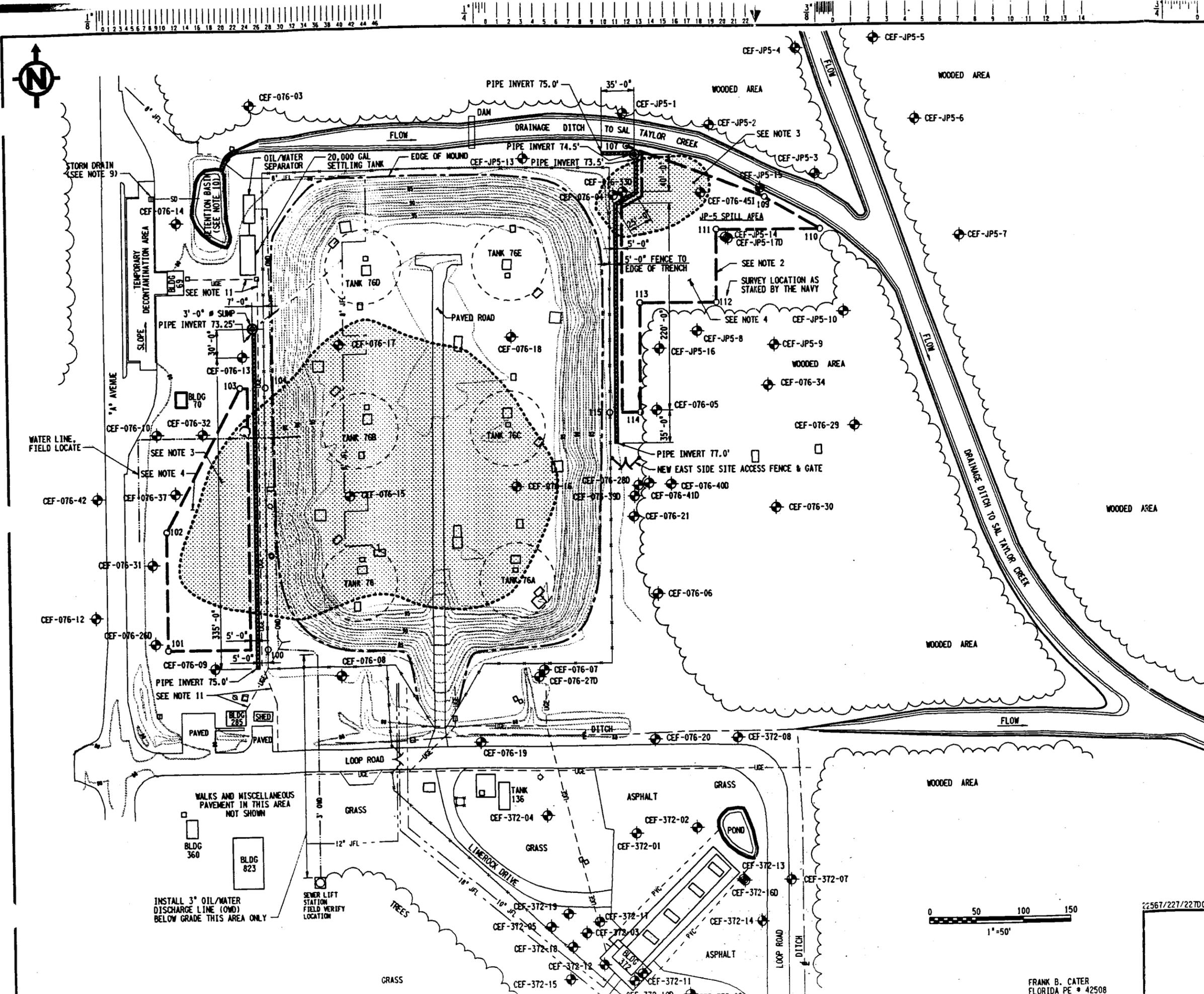
DEPARTMENT OF THE NAVY
SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SOUTH CAROLINA

NAS CECIL FIELD
NORTH FUEL FARM
DEMOLITION PLAN

JOB NO.	DRAWING NO.	REV
22567	227-DD000-001	1

FRANK B. CATER
FLORIDA PE # 42508
EXPIRES FEBRUARY 28, 1997

2270001.DGN
11/10/95
SEAL



- NOTES**
- EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH TECHNICAL SPECIFICATION 22567-001-SP000-005, UNLESS NOTED OTHERWISE.
 - EXCAVATION LIMITS BASE ON NAVY DIRECTION AND FIELD MARKED AREA. LIMITS BASED UPON ASSUMED 1000 ppm TRPH LINE NO NO EXCAVATION IS TO BE PERFORMED BEYOND LIMITS NOTED WITHOUT EXPRESS WRITTEN PERMISSION FROM THE NAVY.
 - EXCAVATION WITHIN THE FREE PRODUCT PLUME AS INDICATED ON THIS DRAWING SHALL BE TO 5' DEPTH (WEST SIDE) AND 3' DEPTH (EAST SIDE). USE SKIMMER PUMP OR ADSORBENT PADS TO RECOVER FREE PRODUCT.
 - EXCAVATION OUTSIDE THE FREE PRODUCT PLUME SHALL BE TO 3' BELOW GROUND ELEVATION, TYPICAL.
 - EXCAVATED MATERIAL WILL BE LOADED AND TRANSPORTED TO SITE 3.
 - MAINTAIN MINIMUM 2v:1h SLOPE ON EXCAVATION SIDEWALL.
 - COORDINATE ANY SECURITY FENCE REQUIREMENTS WITH THE NAVY. OPEN EXCAVATIONS SHALL BE MARKED WITH A MINIMUM OF ORANGE CONSTRUCTION FENCING.
 - SITE INFORMATION WAS PROVIDED TO BECTEL BY THE NAVY.
 - IF EXISTING TRUCK STAND AREA IS USED AS DECONTAMINATION PAD, STORM DRAIN WILL BE RENDERED INOPERABLE DURING DECONTAMINATION ACTIVITIES.
 - SEE "INTERIM REMEDIATION WORK PLAN SOIL AND FREE PRODUCT REMOVAL - NORTH FUEL FARM, NAS CECIL FIELD, JACKSONVILLE, FL" FOR ADDITIONAL INFORMATION. SEE ALSO MEETING MINUTES AND SCOPE REVISION DOCUMENT BASED ON AUGUST MEETING.
 - COORDINATE REMOVAL/ROUTE OF ALL UTILITIES WITH THE NAVY.

TECHNICAL SPECIFICATIONS

EXCAVATION OF CONTAMINATED SOIL AND MISCELLANEOUS DEMOLITION	22567-001-SP000-005
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REFERENCE DRAWINGS

DEMOLITION PLAN	227-DD000-001
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LEGEND

	EXISTING MONITORING WELL
	NEW 3'-0" DIAMETER SUMP (SEE DRAWING 227-DD000-006)
	NEW RECOVERY TRENCH (SEE DRAWING 227-DD000-006)
	APPROXIMATE AREA OF FREE PRODUCT PLUME
	EXCAVATION LIMIT STAKED LOCATION (SURVEYED)
	EXCAVATION LIMITS
	EXISTING FENCE
	EXISTING STORM DRAIN (4")
	EXISTING SANITARY SEWER (4")
	EXISTING JET FUEL LINE
	EXISTING UNDERGROUND ELECTRIC
	NEW OIL/WATER DISCHARGE LINE
	EXISTING CATCH BASIN
	JP-5 STORAGE TANK (UNDERGROUND)
	ABOVE GROUND ELECTRIC TRANSFORMER

NO.	DATE	REVISIONS	BY	CHKD	ENGR	PROJ. ENGR	REV.
11/2/95		REVISED SCOPE PER NAVY DIRECTION	JED	REH	JRM	FBC	FBC
7/31/95		ISSUED FOR CONSTRUCTION	JED	RTJ	FBC	FBC	JRM

SCALE 1"=50'

BECTEL ENVIRONMENTAL INC
OAK RIDGE, TENNESSEE

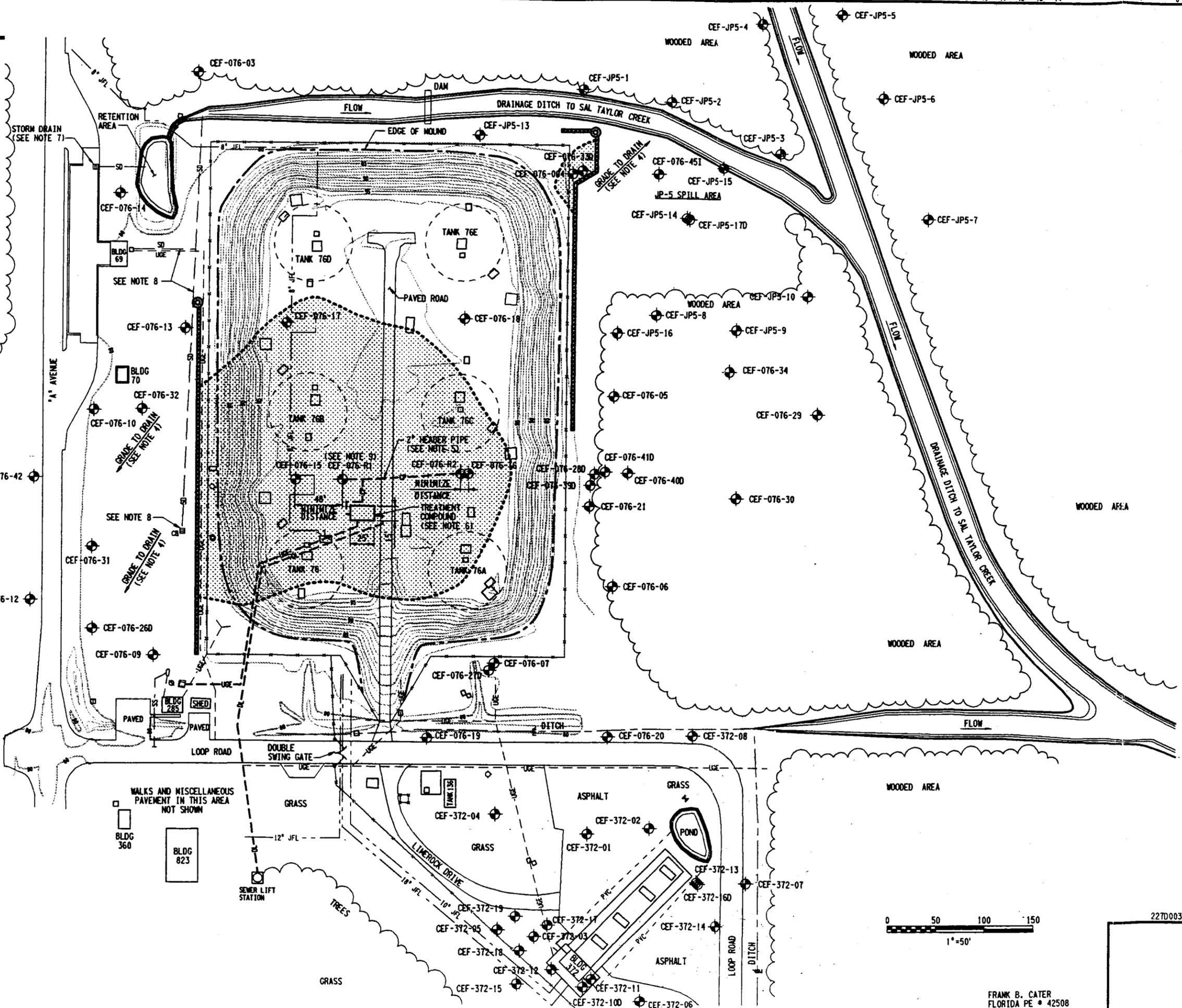
DEPARTMENT OF THE NAVY
SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SOUTH CAROLINA

NAS CECIL FIELD
NORTH FUEL FARM
EXCAVATION PLAN - SOIL REMOVAL

JOB NO.	DRAWING NO.	REV
22567	227-DD000-002	1

FRANK B. CATER
FLORIDA PE # 42508
REGISTERED FEBRUARY 28 1997

22567/227/227D002.DGN



NOTES

1. BACKFILL SHALL BE PERFORMED IN ACCORDANCE TECHNICAL SPECIFICATION 22567-001-SP000-006, UNLESS NOTED OTHERWISE.
2. SITE INFORMATION WAS PROVIDED TO BECTEL BY THE NAVY.
3. BACKFILL SHALL BE COMPACTED TO 85% MAXIMUM DENSITY UNLESS OTHERWISE DIRECTED BY THE NAVY.
4. MATCH EXISTING GRADE IN BACKFILLED AREA. SLOPE TO DRAIN AS INDICATED.
5. TREATMENT SYSTEM PIPING WILL BE PLACED 18" BELOW GRADE, UNLESS ABOVE GROUND PIPING IS APPROVED BY MAS CECIL FIELD PERSONNEL.
6. FINAL TREATMENT COMPOUND LOCATION IS TO BE COORDINATED IN THE FIELD (SEE DRAWING 227-DD0000-005 FOR COMPOUND LAYOUT). PROVIDE 6" 3000psi 6x6 6/6 WWF REINFORCED PAD WITH THICKENED EDGE FOOTER.
7. AT COMPLETION OF DECONTAMINATION ACTIVITIES, RESTORE STORM DRAIN.
8. PROVIDE NEW CATCH BASIN AND STORM DRAIN TO MATCH EXISTING BASIN AND DRAIN REMOVED DURING EXCAVATION, IF DIRECTED BY THE NAVY.
9. NEW RECOVERY WELL LOCATIONS ARE DEPENDENT UPON FIELD CONDITIONS. LOCATE NEW WELLS AS CLOSE TO EXISTING WELLS 15 AND 16 AS POSSIBLE.
10. PROVIDE 480v/60hz/3 PHASE POWER TO COMPOUND AREA. POWER HOOK UP, CABLES, AND TRENCHING WILL BE IN ACCORDANCE WITH LOCAL CODES AND PROVIDED BY A LICENSED ELECTRICIAN.

TECHNICAL SPECIFICATIONS

UNCONTAMINATED EARTHWORK	22567-001-SP000-006
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REFERENCE DRAWINGS

DEMOLITION PLAN	227-DD0000-001
EXCAVATION PLAN	227-DD0000-002

LEGEND

- EXISTING MONITORING WELL
- NEW RECOVERY WELL
- NEW 3'-0" DIAMETER SUMP
- NEW RECOVERY TRENCH
- APPROXIMATE AREA OF FREE PRODUCT PLUME
- EXISTING FENCE
- EXISTING STORM DRAIN (4")
- EXISTING SANITARY SEWER (4")
- EXISTING JET FUEL LINE
- EXISTING UNDERGROUND ELECTRIC
- NEW UNDERGROUND ELECTRIC
- NEW TREATMENT SYSTEM CONVEYANCE PIPE
- NEW TREATMENT SYSTEM DISCHARGE LINE
- EXISTING CATCH BASIN
- JP-5 STORAGE TANK (UNDERGROUND)
- ABOVE GROUND ELECTRIC TRANSFORMER

NO.	DATE	REVISIONS	BY	CHKD	APP'D	DATE
1	11/2/95	REVISED SCOPE PER NAVY DIRECTION	JED	REH	JRM	FBC
2	1/31/96	ISSUED FOR CONSTRUCTION	DLL	RTJ	FBC	FBC
SCALE 1"=50'						

BECTEL ENVIRONMENTAL INC.
OAK RIDGE, TENNESSEE

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SOUTH CAROLINA

**NAS CECIL FIELD
NORTH FUEL FARM - SITE RESTORATION PLAN
AND BIO SLURPING REMEDIATION LAYOUT**

JOB NO.	DRAWING NO.	REV
22567	227-DD000-003	1

FRANK B. CATER
FLORIDA PE # 42508
EXPIRES FEBRUARY 28, 1997

SEAL

B01 - LIQUID RING PUMP
 TYPE: LIQUID RING PUMP
 POWER: 10 HP, 460/3/60
 CAPACITY: 125 CFM @ 22" Hg VACUUM

P05 - GROUNDWATER EXTRACTION PUMP
 TYPE: GRUNDFOS REDI-FLO4 SE5
 POWER: 1/3 HP, 230/1/60
 CAPACITY: 1-7 GPM @ 50 FT HEAD

T10 - DISCHARGE SEPARATOR
 CAPACITY: 300 GAL (MIN)
B02 - FAN
 TYPE: CENTRIFUGAL
 POWER: 0.5 HP, 460/3/60
 CAPACITY: 50 CFM

P01 - OIL TRANSFER PUMP
 TYPE: DIAPHRAGM, ELECTRIC
 POWER: HP DETERMINED BY MFG.
 460/3/60
 CAPACITY: 20 GPM
P02 - LIQUID SEAL PUMP
 TYPE: CENTRIFUGAL
 POWER: HP DETERMINED BY MFG.
 460/3/60
 CAPACITY: DETERMINED BY MFG.

P06 - GROUNDWATER EXTRACTION PUMP
 TYPE: GRUNDFOS REDI-FLO4 SE5
 POWER: 1/3 HP, 230/1/60
 CAPACITY: 1-7 GPM @ 50 FT HEAD

T30 - MOISTURE SEPARATOR
 CAPACITY: 40 GAL

GAC1 - GRANULAR ACTIVATED CARBON
 CAPACITY: 1800 LBS. (MIN)
 TYPE: VAPOR PHASE

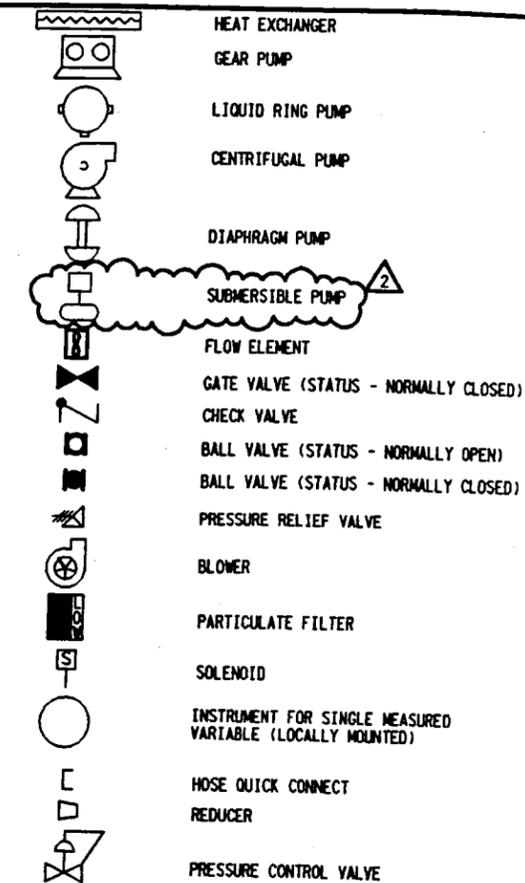
T20 - OIL/WATER SEPARATOR
 CAPACITY: 1-25 GPM
 INLET TEMP=140 °F (MAX)
 COALESCING SURFACE AREA= 1088 FT2 (MIN)
 SLUDGE CHAMBER CAPACITY=28 GAL (MIN)
 OIL CAPACITY=39 GAL (MIN)
 OIL DROPLET REMOVAL RATE=10mg/l OF OIL DROPLETS > 20 MICRONS

P03 - OIL TRANSFER PUMP
 TYPE: DIAPHRAGM, ELECTRIC
 CAPACITY: 20 GPM
 POWER: 1 HP, 460/3/60
P04 - LIQUID TRANSFER PUMP
 TYPE: DIAPHRAGM, ELECTRIC
 CAPACITY: 20 GPM
 POWER: 1 HP, 460/3/60

GAC2 - GRANULAR ACTIVATED CARBON
 CAPACITY: 1800 LBS. (MIN)
 TYPE: VAPOR PHASE

T50 - FREE PRODUCT TANK
 CAPACITY: DETERMINED IN FIELD

LEGEND



- PT - PRESSURE TRANSMITTER
- CV - CHECK VALVE
- FX - PARTICULATE FILTER/SILENCER
- F - FLEXIBLE HOSE
- PSV - PRESSURE SAFETY VALVE
- GAC - GRANULAR ACTIVATED CARBON
- FI - FLOW INDICATOR
- FQI - TOTALIZING FLOW METER
- TI - TEMPERATURE INDICATOR
- PI - PRESSURE INDICATOR
- TX - TANK
- BX - BLOWER
- HS - HAND CONTROL SWITCH
- V - VALVE
- PCV - PRESSURE CONTROL VALVE
- HE - HEAT EXCHANGER
- LA - LOCAL ALARM
- M - MOTOR
- DSO - DENSITY SWITCH, OIL
- DSW - DENSITY SWITCH, WATER

- NOTES:
 1. ALL LINES AND FITTINGS ARE 4" SCH 40 PVC EXCEPT WHERE NOTED.
 2. ALL VALVES ARE 4" PVC EXCEPT WHERE NOTED.

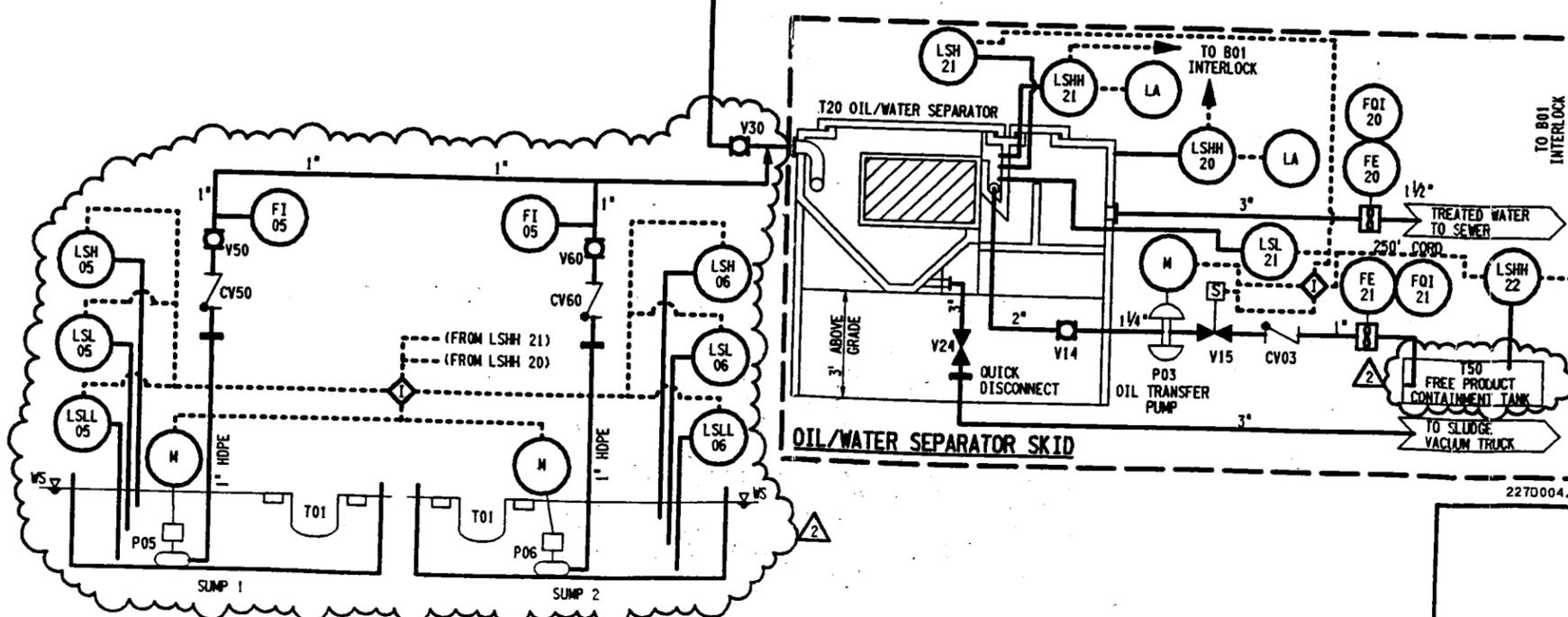
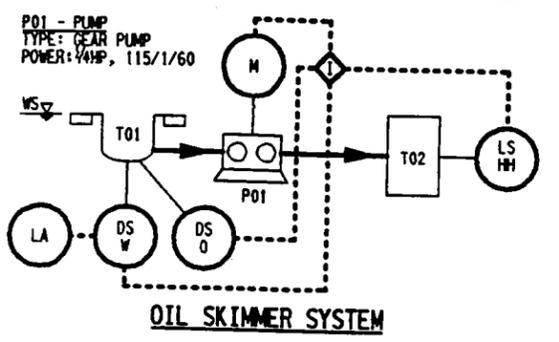
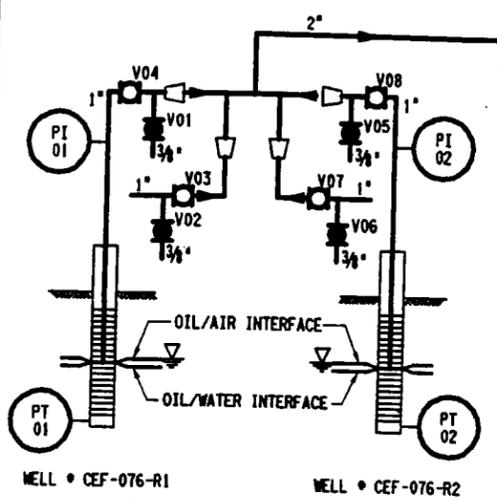
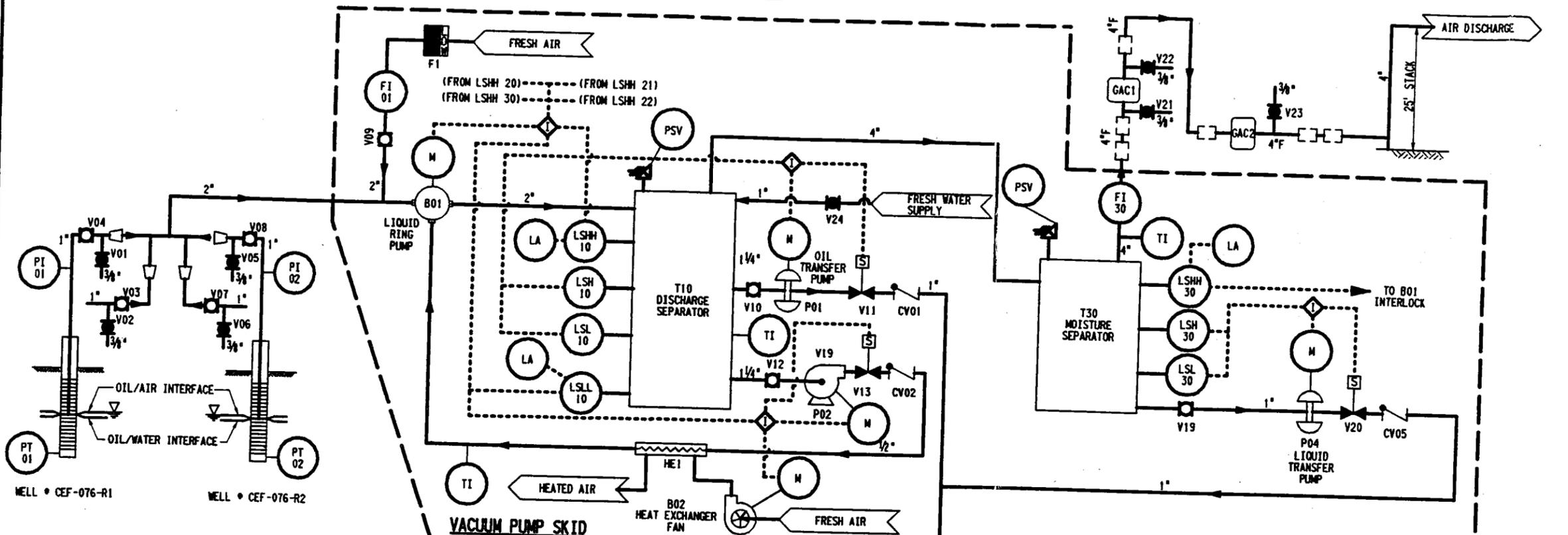
NO.	DATE	REVISIONS	BY	CHKD	ENGR	PROJ	INSTR	FLD
1	11/28/95	ADDED SUMP PUMPS	KCL	WRZ	JRM	FBC	FBC	
2	11/29/95	ADDED FREE PRODUCT TANK CONTROLS AND CHANGED LINE SIZES	DLI	WRZ	JRM	FBC	FBC	
3	8/1/95	ISSUE FOR CONSTRUCTION	RGB	ABJ	FBC	WRZ	JRM	

BECHTEL ENVIRONMENTAL INC.
 OAK RIDGE, TENNESSEE

DEPARTMENT OF THE NAVY
 SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND
 CHARLESTON, SOUTH CAROLINA

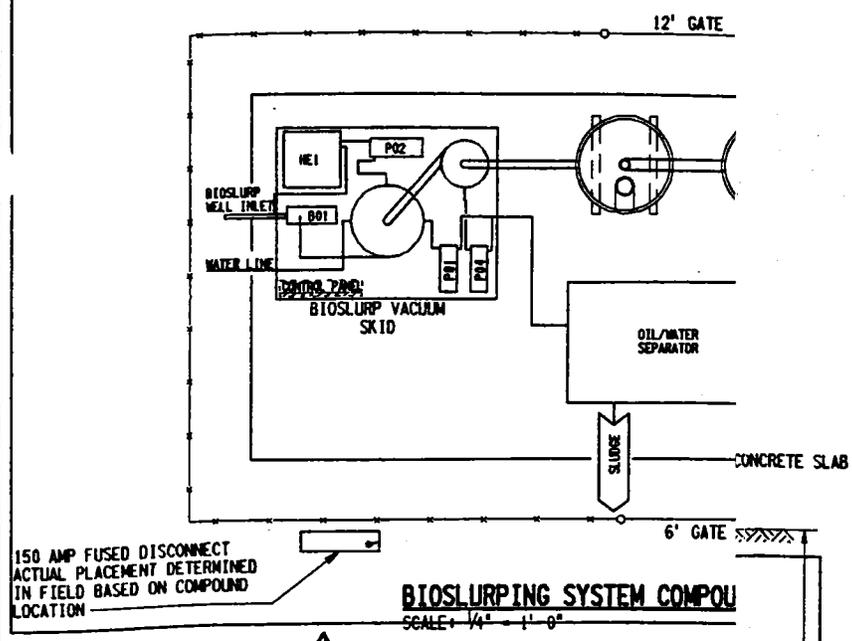
PROCESS AND INSTRUMENTATION
 DIAGRAM FOR BIOSLURPER SYSTEM
 AND OIL SKIMMER SYSTEM

JOB NO.	DRAWING NO.	REV
22567	227-DD000-004	2

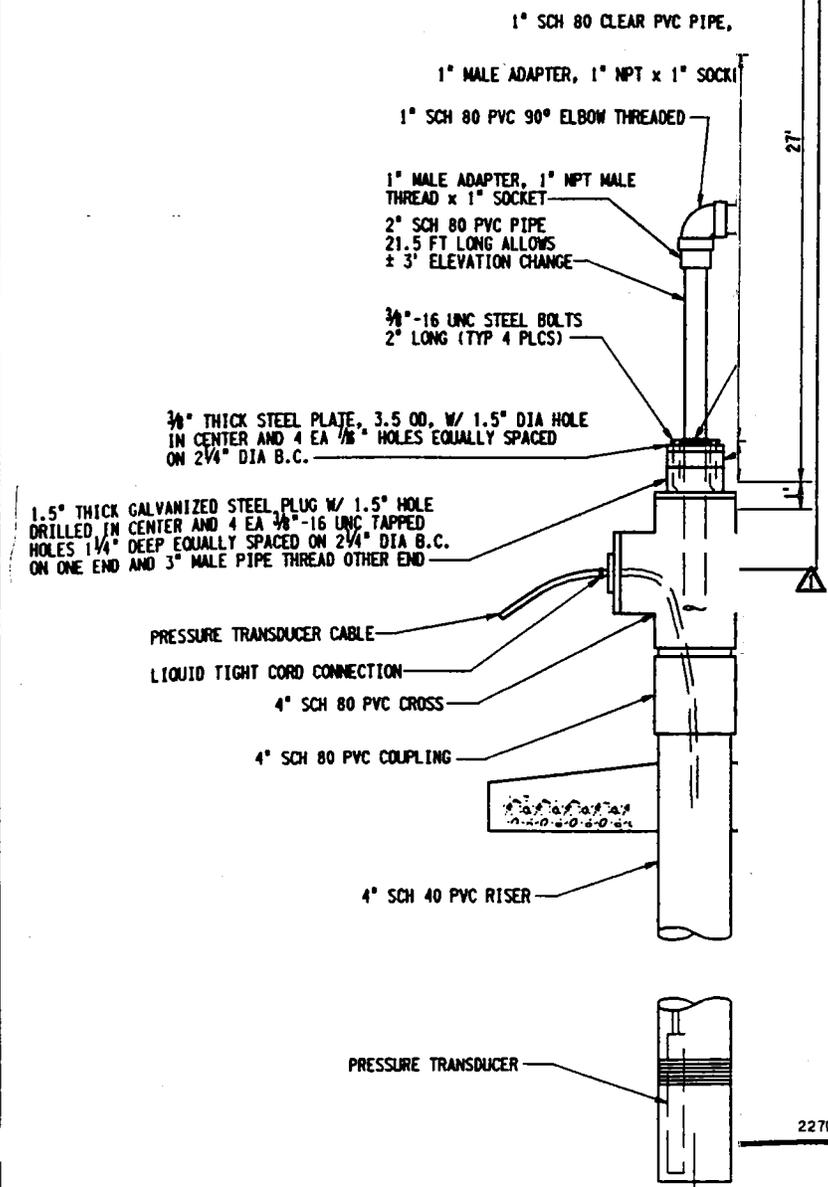


NOTES

1. TYPICAL BIOSLURPER WELL INSTALLATION:
- FILTER PACK (10/20 SAND) PLACED TO APPROXIMATELY 2' ABOVE TOP OF WELL SCREEN.
 - 2' THICK BENTONITE SEAL (3/8"-1/4" PELLET) PLACED ABOVE FILTER PACK.
 - PORTLAND CEMENT (TYPE 1 TYPICAL) GROUT PLACED IN REMAINING ANNULAR SPACE TO GRADE.



BIOSLURPING SYSTEM COMPOUND
SCALE: 1/4" = 1'-0"



△									
△									
△									
1	11/2/95	REVISE BIOSLURPER WELL AND TREATMENT COMPOUND	DLL	WRZ	FBC	FBC	FBC		
△	7/31/95	ISSUED FOR CONSTRUCTION	RGB	ABJ	FBC	WRZ	JRM		
NO.	DATE	REVISIONS	BY	CHKD	DESIGN	ENGR	PROJ. MGR	FLTR.	

BECHTEL ENVIRONMENTAL INC.
OAK RIDGE, TENNESSEE

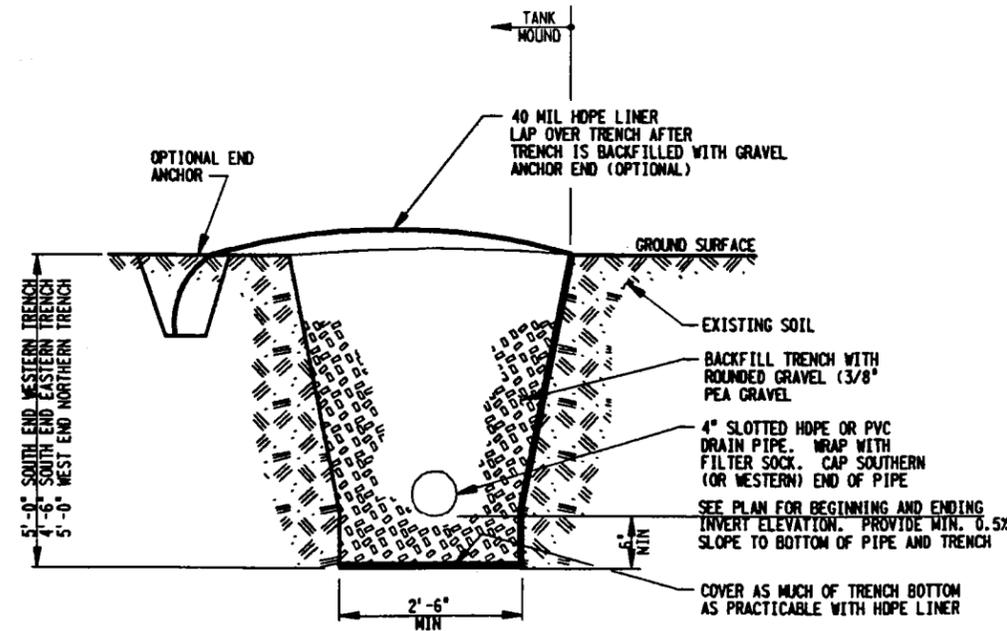
DEPARTMENT OF THE NAVY
SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SOUTH CAROLINA

BIOSLURPER SYSTEM DETAILS

	JOB NO.	DRAWING NO.	REV.
	22567	227-DD000-005	1

227D005.DGN

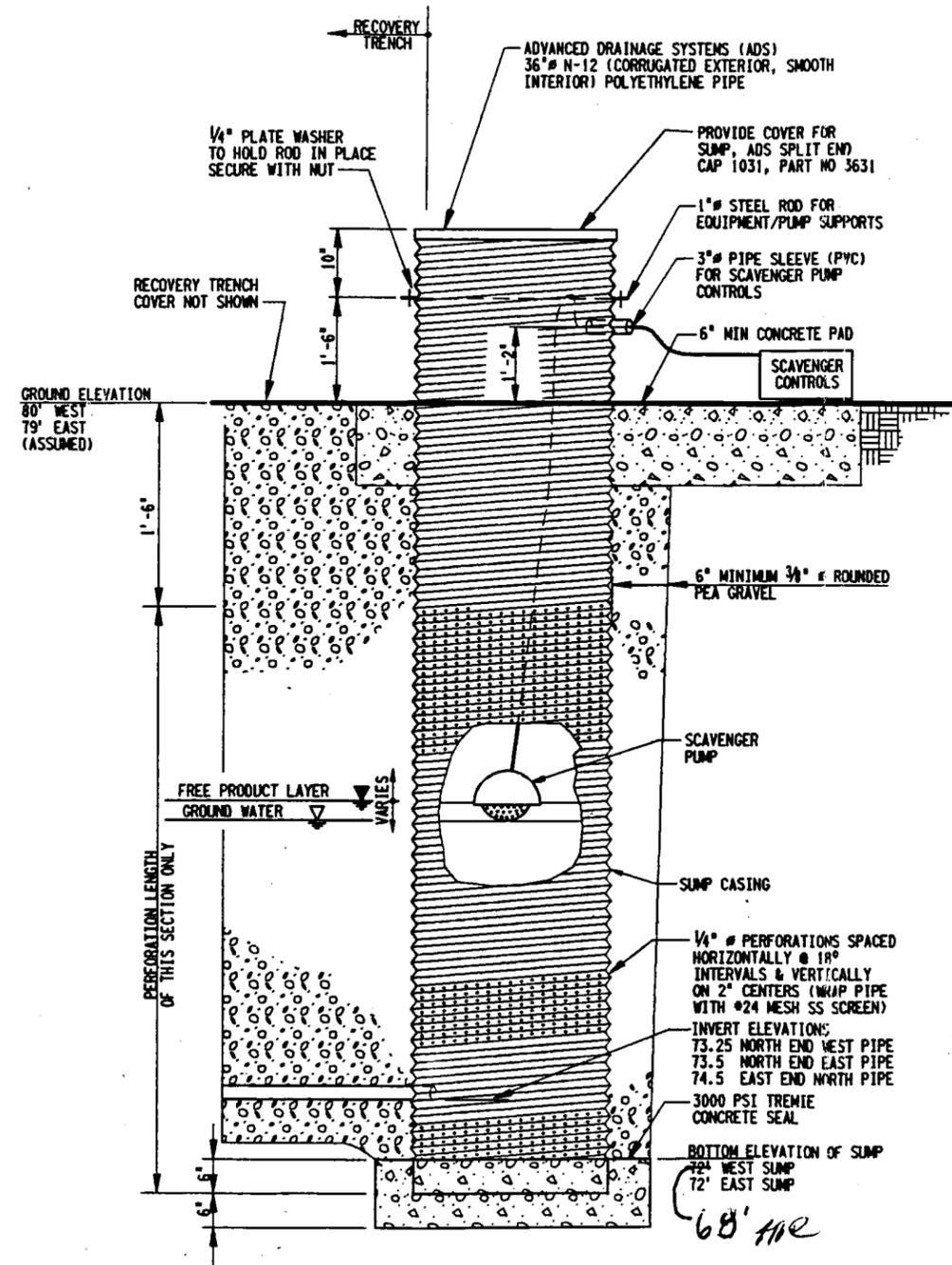
SEAL



NOTE:

1. CUT SIDE SLOPE OF TRENCH AS NECESSARY TO KEEP TRENCH OPEN DURING EXCAVATION.
2. UNDER NO CIRCUMSTANCES IS ANY WORKMAN TO ENTER THE TRENCH EXCAVATION UNLESS ALL CONDITIONS SET FORTH BY 29 CFR PART 1926 SUBPART P ARE MET.

TYPICAL TRENCH CROSS-SECTION
NTS



TYPICAL SUMP DETAIL

NTS

22567 227 227D006.DGN

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△									
△									
△									
△	11/2/95	ORIGINAL ISSUE							
△		REVISIONS	BY	CHKD	DESIGN	ENGR	PROJ	INSTR	FL

BECHTEL ENVIRONMENTAL INC.
OAK RIDGE, TENNESSEE

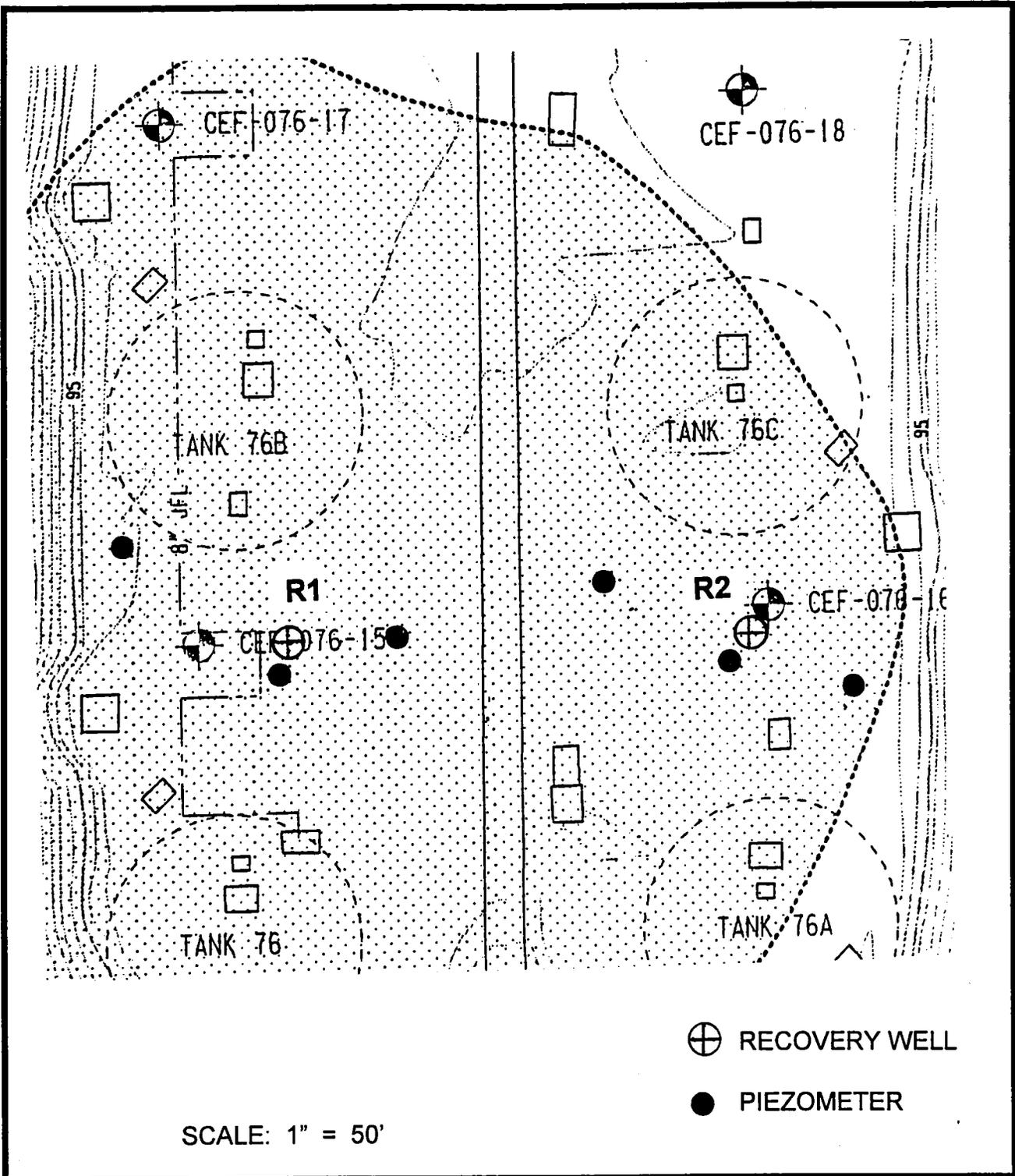
DEPARTMENT OF THE NAVY
SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SOUTH CAROLINA

OIL RECOVERY TRENCH AND OIL RECOVERY SUMP DETAILS

JOB NO.	DRAWING NO.	REV
22567	227-DD000-006	0

FRANK B. CATER
FLORIDA PE # 42508
EXPIRES FEBRUARY 28, 1997

SEAL



SKETCH 1
BIOSLURPER WELLS
AS-BUILT LOCATION MAP

014349

APPENDIX D
MONITORING WELL ABANDONMENT FORMS

Bechtel

Quarters E, G Avenue
 P. O. Box 171
 Jacksonville, Florida 32215
 Telephone: (904) 779-8900
 Facsimile: (904) 779-8999

January 14, 1997

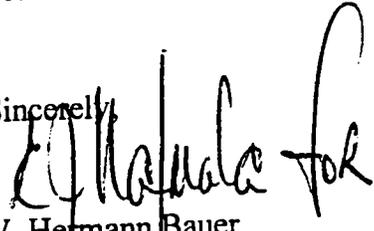
Mr. Dave Kruzicki
 Staff Civil Engineering
 Building 1
 NAS Cecil Field, FL 32215

SUBJECT: Bechtel Job No. 22567
 Department of the Navy Contract No. N62467-93-D-0936
**DO 22, TASK A: ABANDONMENT OF MONITORING WELLS DURING EXCAVATION
 NAS CECIL FIELD, FLORIDA**
 Subject Code: 5320

Dear Mr. Kruzicki:

During the removal of excessively contaminated soils for the North Fuel Farm site during the period of January 1996 through March 1996, 9 monitoring wells were abandoned. The abandonment was accomplished by excavation of the monitoring wells. It was our understanding that this was an acceptable method of abandonment to St. Johns River Water Management District and the Jacksonville Environmental Protection Board (Mr. Don Summerfield), who requested copies of the abandonment log. We are transmitting this information to you and it should be forwarded to Mr. Summerfield at the Jacksonville Environmental Protection Board. If you have any questions, please contact Frank Cater or myself at (904) 779-8900.

Sincerely,


 V. Hermann Bauer
 Project Manager

VHB/cmr

Encl.: As Stated.

cc: D. Inman w/o
 W. Oehlman w/o



Bechtel Environmental, Inc.



BOREHOLE/WELL ABANDONMENT RECORD

Borehole/Well Identification No. CEF-076-01

Facility: NAS Cecil Field Site: North Fuel Farm Job No: 22567-227

Recorded By: RHTalmege Date: 1-4-96/1-10-96 Checked By: -

Borehole/Well Abandonment Permit No: NA - Well less than 25' deep

Permitting Agency: Tax Env. Protection Board Contact: Don Summerfield Phone #: 904-650-3420

Condition of Borehole/Well at Ground Surface Prior to Abandonment: Water Quality Division
Flush mount surface completion - well functional. Well is in ar-
to be excavated. Area is open field; no obstructions at
surface.

Maximum Depth Sounded in Borehole/Well: 11.32' Datum: TOC

Original Borehole/Wellbore Depth: _____

Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it: _____

Depth (ft) to Water Prior to Borehole/Well Abandonment: 2.74' (E175.99') Datum: TOC (78.68')

Date of water level measurement: 1-4-96 0905

Any Indications of Borehole/Well Contamination? Yes No

If yes, describe field evidence suggesting borehole/ well contamination: _____

Date of cessation of abandonment activities and notification of enforcing agency:
1-10-96 As above _____
Stop Date Enforcing Agency Contact Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): Local excavation of well
casing and completion materials
Removal completed 1645 1-10-96 RHT

Sealing Material Used for Abandonment and Corresponding Depth Intervals:

	From	To	# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal. Water
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

Backfill Materials (describe): NA From: _____ To: _____

Area to be excavated and backfilled with clean soil per plan.



BOREHOLE/WELL ABANDONMENT RECORD

Borehole/Well Identification No. CEF-876-02

Facility: NAS Cecil Field Site: North Fuel Farm Job No: 22567-227
 Recorded By: RH Talmage Date: 1-4-96 / 1-10-96 Checked By: _____

Borehole/Well Abandonment Permit No: NA - Well less than 25' deep.
 Permitting Agency: Tox Env. Protection Board Contact: Don Summerfield Phone #: 904-670-3420

Condition of Borehole/Well at Ground Surface Prior to Abandonment: Water Quality Division
Flush against surface completion - well is functional.
Well in an area to be excavated - open field - no surface
obstructions

Maximum Depth Sounded in Borehole/Well: 12.4' Datum: TOC

Original Borehole/Wellbore Depth: _____
 Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it:

Depth (ft) to Water Prior to Borehole/Well Abandonment: 2.88' (E176') Datum: TOC (78.88')

Date of water level measurement: 1-4-96 0911

* No indication of product in well; water accumulated w/in surface completion has sheen and odor

Any Indications of Borehole/Well Contamination? Yes No

If yes, describe field evidence suggesting borehole/ well contamination:

Date of cessation of abandonment activities and notification of enforcing agency:

1-10-96 As above _____
 Stop Date Enforcing Agency Contact Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): Local excavation of shallow
well casing and completion materials
Removal completed 1/6/96 - 1-10-96

Sealing Material Used for Abandonment and Corresponding Depth Intervals:

	From	To	# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal. Water
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

Backfill Materials (describe): NA From: _____ To: _____

Area to be excavated and backfilled with clean soil
per work plan



BOREHOLE/WELL ABANDONMENT RECORD

Borehole/Well Identification No. CEF-JPS-11

Facility: <u>NAS Cecil Field</u>	Site: <u>North Fuel Farm</u>	Job No: <u>22567-227</u>
Recorded By: <u>[Signature]</u>	Date: <u>11-21-95</u>	Checked By:

Borehole/Well Abandonment Permit No: NA - Well is less than 25' deep.
 Permitting Agency: Tax Env. Protection Board Contact: Don Gummerfeld Phone #: 904-630-3420

Condition of Borehole/Well at Ground Surface Prior to Abandonment: Water Quality Division
Above ground completion; well is functional. Surface graded for soil excavation

Maximum Depth Sounded in Borehole/Well: 5.65' Datum: TOC Elev 79.25
 Original Borehole/Wellbore Depth: 5.5' per Table 1-1 CAP 7/94
 Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it:
NA

Depth (ft) to Water Prior to Borehole/Well Abandonment: 3.90' * Datum: TOC Elev 79.25
 Date of water level measurement: 11-21-95 1327

Any Indications of Borehole/Well Contamination? Yes No * Product @ 3.89' 0.01' thick
 If yes, describe field evidence suggesting borehole/well contamination:

Date of cessation of abandonment activities and notification of enforcing agency:
11-21-95 As above
 Stop Date Enforcing Agency Contact Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): Local excavation of well casing and construction materials - Removal completed 1340 P

Sealing Material Used for Abandonment and Corresponding Depth Intervals:

	From	To	# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal. Water
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

Backfill Materials (describe): Excavated area backfilled w/ clean soil per workplan From: _____ To: _____

91870 =



BOREHOLE/WELL ABANDONMENT RECORD

Borehole/Well Identification No. CEF-JPS-12

Facility: NAS Cecil Field Site: North Fuel Farm Job No: 22567-227

Recorded By: [Signature] Date: 11-15-95 Checked By: _____

Borehole/Well Abandonment Permit No: NA - Well less than 25' deep

Permitting Agency: Tax Env. Protection Board Contact: Don Summerfield Phone #: 904-630-3420

Condition of Borehole/Well at Ground Surface Prior to Abandonment: Water Quality Division Above ground completion in place; well functional Well is located in area to be excavated; area is cleared and graded for operations

Maximum Depth Sounded in Borehole/Well: 12.85' Datum: TOC Elev 79.97'

Original Borehole/Wellbore Depth: _____

Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it:
NA

Depth (ft) to Water Prior to Borehole/Well Abandonment: 3.18' Datum: TOC Elev 79.97'

Date of water level measurement: 11-15-95 0820

Any Indications of Borehole/Well Contamination? Yes No * Well in area of soil removal; no indication of product by interface probe.

If yes, describe field evidence suggesting borehole/ well contamination: _____

Date of cessation of abandonment activities and notification of enforcing agency: _____

11-15-95 See Above _____
Stop Date Enforcing Agency Contact Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): Local excavation of well casing and construction materials - Removal completed 0911p

Sealing Material Used for Abandonment and Corresponding Depth Intervals: See below

	From	To	# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal. Water
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

Backfill Materials (describe): Excavated area backfilled with clean soil as part of general work plan From: _____ To: _____



BOREHOLE/WELL ABANDONMENT RECORD

Borehole/Well Identification No. CEF - 076 - 22

Facility: NAS Cecil Field Site: North Fuel Farm Job No: 22567-227

Recorded By: [Signature] Date: 11-9-95 Checked By:

Borehole/Well Abandonment Permit No: NA - Well less than 25' deep

Permitting Agency: Tax Env Protection Board Contact: Don Summerfield Phone #: 904-630-3420

Condition of Borehole/Well at Ground Surface Prior to Abandonment: Water Quality Division
Flush mount; functional Well is located in area to be
excavated; area is cleared and graded for operations

Maximum Depth Sounded in Borehole/Well: 11.63' Datum: TOC Elev 78.74'

Original Borehole/Wellbore Depth: Reported as 11.5'

Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it:
NA

Depth (ft) to Water Prior to Borehole/Well Abandonment: 1.0' Datum: TOC Elev 78.74'

Date of water level measurement: 11-9-95 1045 * Well in area of soil
removal - no indication
of product by interface
probe

Any Indications of Borehole/Well Contamination? Yes No

If yes, describe field evidence suggesting borehole/ well contamination:

Date of cessation of abandonment activities and notification of enforcing agency:
11-9-95 See above Notification after completion
Stop Date Enforcing Agency Contact Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): Well casing and materials removed
by local excavation - Removal completed 1430 11-9-95

Sealing Material Used for Abandonment and Corresponding Depth Intervals: See below

	From	To	# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal. Water
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

Backfill Materials (describe): Excavated area backfilled with clean soil
NOTE - Record photos taken [Signature]



BOREHOLE/WELL ABANDONMENT RECORD

11870-

Borehole/Well Identification No. CEP-076-136

Facility: NAS CECIL FIELD

Site: NORTH TANK FUEL FARM

Job No: 22567-227

Recorded By: GEORGE CRAWFORD

Date: 3-7-96

Checked By:

Borehole/Well Abandonment Permit No:

Permitting Agency: JACKSONVILLE ENVIRONMENTAL PROTECTION BOARD

Contact: Don Summerfield

Phone #: 904-630-3420
WATER QUALITY DISTRICT

Condition of Borehole/Well at Ground Surface Prior to Abandonment:
Well is flush mount. Well is obstructed by bentonite. Well is in area to be excavated.

Maximum Depth Sounded in Borehole/Well: 0' Datum: TOC

Original Borehole/Wellbore Depth: 11.0 ft (length of casing measured after removal)

Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it:
Well was filled with bentonite to 6.75 ft below TOC. Previous damage to well surface casing may have prompted action of filling with bentonite to prevent spread of contamination down the well.

Depth (ft) to Water Prior to Borehole/Well Abandonment: 4.90' Datum: LAND SURFACE
(measured after removal of casing).

Date of water level measurement: 3-7-96

Any Indications of Borehole/Well Contamination? Yes No

If yes, describe field evidence suggesting borehole/well contamination: SMELL AND PREVIOUS ANALYTICAL

Date of cessation of abandonment activities and notification of enforcing agency:

3-6-96 Stop Date See above Enforcing Agency See above Contact _____ Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): Local excavation of well casing and completion materials. Removal completed at 0800 on 3/7/96

	Sealing Material Used for Abandonment and Corresponding Depth Intervals:		# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal. Water
	From	To					
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

Backfill Materials (describe): N/A From: _____ To: _____

AREA TO BE EXCAVATED AND BACKFILLED WITH CLEAN SOIL PER WORK PLAN



BOREHOLE/WELL ABANDONMENT RECORD

Borehole/Well Identification No. CEE-076-35

Facility: NAS Cecil Field Site: North Fuel Farm Job No: 22567-227
 Recorded By: [Signature] Date: 1-11-96 Checked By: _____

Borehole/Well Abandonment Permit No: NA - Well less than 25' deep

Permitting Agency: Env Protection Bd Contact: Don Summerfield Phone #: 904-630-3420

Condition of Borehole/Well at Ground Surface Prior to Abandonment: Water Quality Division
Flush mount surface completion - well functional - surface
is open field

Maximum Depth Sounded in Borehole/Well: 12.17' Datum: TOC

Original Borehole/Wellbore Depth: _____

Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it: _____

Depth (ft) to Water Prior to Borehole/Well Abandonment: 2.93' Datum: TOC

Date of water level measurement: 1-11-96 1035 } 77.1' EL } 80.03' EL

Any Indications of Borehole/Well Contamination? Yes No

If yes, describe field evidence suggesting borehole/ well contamination: _____

Date of cessation of abandonment activities and notification of enforcing agency:
1-11-96 As above _____
 Stop Date Enforcing Agency Contact Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): Casing and completion
materials removed by local excavation - completed 1103

Sealing Material Used for Abandonment and Corresponding Depth Intervals: 1-11-96

	From	To	# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal Water
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

Backfill Materials (describe): NA From: _____ To: _____
 Area subject to partial excavation and backfill with
clean soil per work plan.



BOREHOLE/WELL ABANDONMENT RECORD

Borehole/Well Identification No. CEF-076-36

Facility: NAS Cecil Field Site: NORTH FUEL FARM Job No: 22567-227

Recorded By: FRANK CAIRN Date: 2-29-96 Checked By:

Borehole/Well Abandonment Permit No: NA WELL < 25' DEEP

Permitting Agency: JACKSONVILLE ENVIRONMENTAL PROTECTION BOARD Contact: Don Summerfield Phone #: 904 630-3420
WATER QUALITY DISTRICT

Condition of Borehole/Well at Ground Surface Prior to Abandonment:
WELL IS FLUSH MOUNT. EXCAVATION OF CONTAMINATED DIRT IS WITH 3 FEET AT TIME OF ABANDONMENT. EXCAVATION WILL BE COMPLETED WELL IN NEAR FUTURE

Maximum Depth Sounded in Borehole/Well: 12' - 2" Datum: TOC

Original Borehole/Wellbore Depth: UNK

Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it:

Depth (ft) to Water Prior to Borehole/Well Abandonment: 4' - 2 1/2" Datum: TOC

Date of water level measurement: 2-29-96

Any Indications of Borehole/Well Contamination? Yes No

If yes, describe field evidence suggesting borehole/well contamination: SMELL AND PREVIOUS ANALYTICAL

Date of cessation of abandonment activities and notification of enforcing agency:
2-29-96 Stop Date see above Enforcing Agency see above Contact _____ Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): EXCAVATION TO BOTTOM

Sealing Material Used for Abandonment and Corresponding Depth Intervals:

	From	To	# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal. Water
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

Backfill Materials (describe): WELL DUG OUT From: _____ To: _____
WHOLE AREA WILL BE EXCAVATED AND CLEAN BACKFILL PLACED PER THE INTERIM REMEDIATION WORK PLAN



BOREHOLE/WELL ABANDONMENT RECORD

Borehole/Well Identification No. CFE-076-38

Facility: NAS Cecil Field Site: North Fuel Farm Job No: 22567-227

Recorded By: PH Talmage Date: 1-11-96 Checked By: _____

Borehole/Well Abandonment Permit No: NA - Well < 25' deep

Permitting Agency: Texas Env. Protection Bd Contact: Don Summerhield Phone #: 904-630-5420
Water Quality Div.

Condition of Borehole/Well at Ground Surface Prior to Abandonment:
Flush upon surface completion - well is adjacent to
Tot Fuel line pipe trench excavation. No fluid from
trench was allowed into excavation.

Maximum Depth Sounded in Borehole/Well: 12.4' Datum: TOC

Original Borehole/Wellbore Depth: _____

Downhole Obstruction Indicated? Yes No

If yes, describe the method(s) used to assess the nature of the obstruction and/or methods to remove it: _____

Depth (ft) to Water Prior to Borehole/Well Abandonment: 2.40' Datum: TOC El. 79.89'

Date of water level measurement: 1-11-96 1107 77.49' El

Any Indications of Borehole/Well Contamination? Yes No

If yes, describe field evidence suggesting borehole/well contamination: _____

Date of cessation of abandonment activities and notification of enforcing agency: _____

1-11-96 As above _____
Stop Date Enforcing Agency Contact Date of Contact

Describe Method(s) of Casing Removal/Disposition (if applicable): Wall casing excavated. by FT

Removal completed 1124 1-11-96

Sealing Material Used for Abandonment and Corresponding Depth Intervals: See below Plaly

	From	To	# Sacks Cement	# Sacks Sand	# Sacks Bentonite	# Sacks Aggregate	# Gal. Water
Neat cement grout	_____	_____	_____	_____	_____	_____	_____
Sand-cement grout	_____	_____	_____	_____	_____	_____	_____
Cement/bentonite	_____	_____	_____	_____	_____	_____	_____
Bentonite	_____	_____	_____	_____	_____	_____	_____
Concrete	_____	_____	_____	_____	_____	_____	_____
Other (describe):	_____	_____	_____	_____	_____	_____	_____

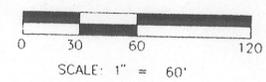
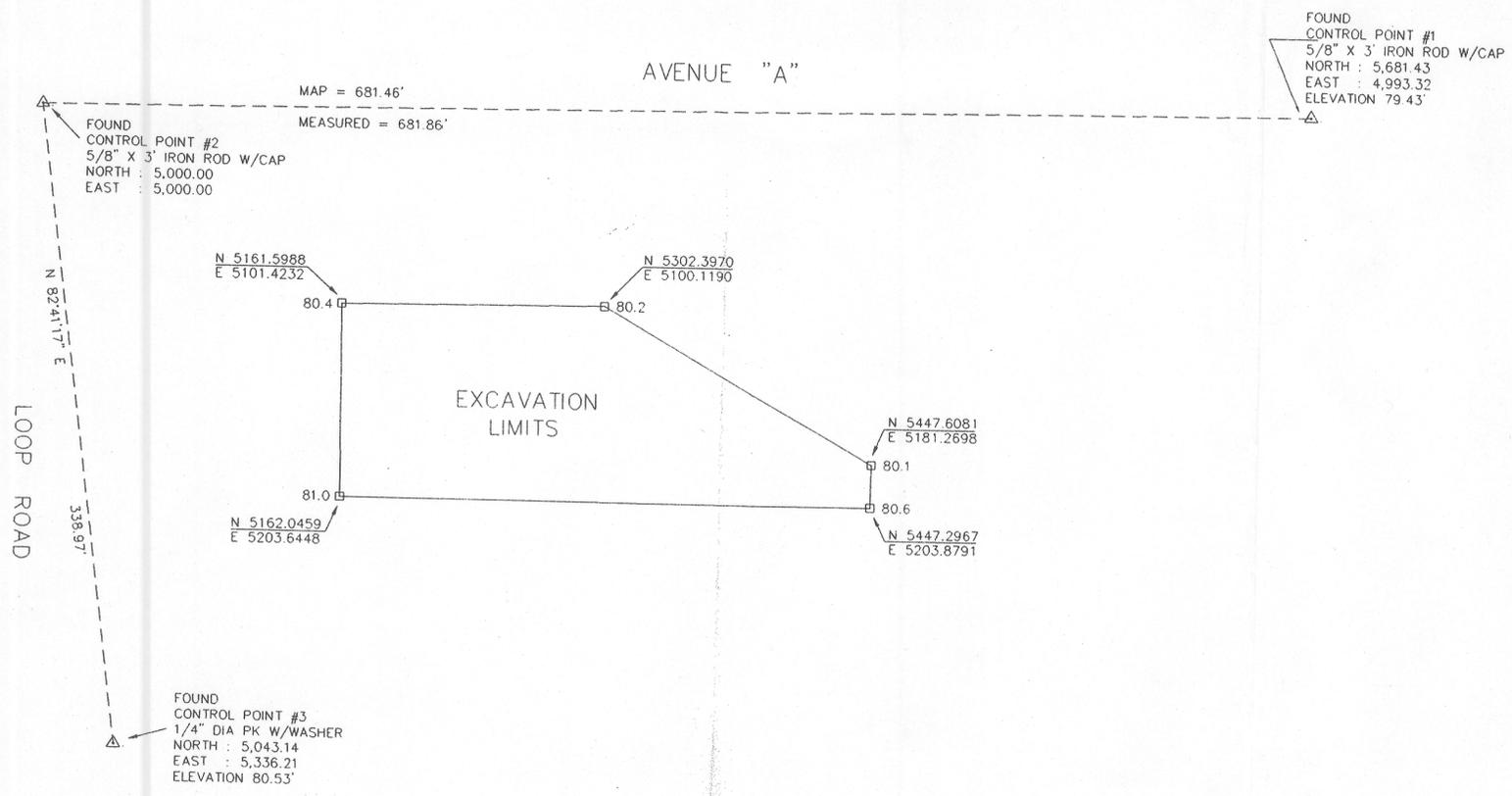
Backfill Materials (describe): NA From: _____ To: _____

Area subject to additional excavation and backfill
with clean soil per work plan.

APPENDIX E
EXCAVATION AND BIOSLURPER SYSTEM
SURVEY DATA

MAP SHOWING SPECIFIC PURPOSE SURVEY OF:

EXCAVATION LIMITS
CECIL FIELD, DUVAL COUNTY, FLORIDA.

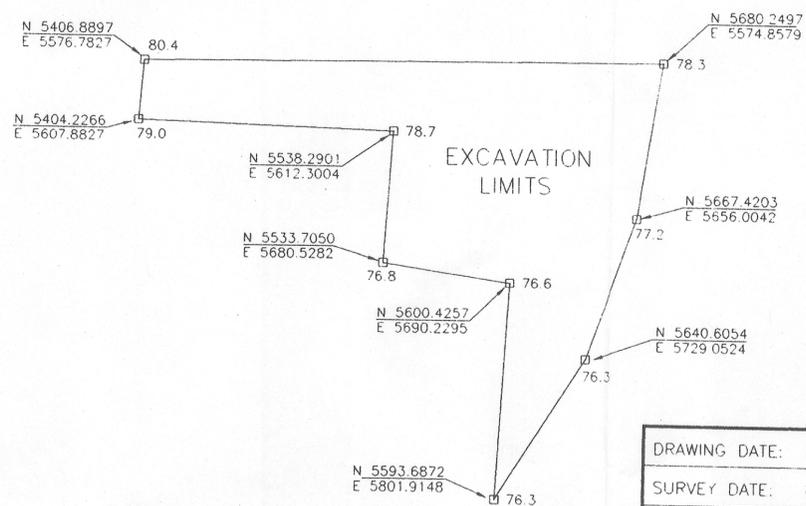


NOTES:

- 1.) COORDINATES AND ELEVATION REFER TO A PLAN BY ENTERPRISE ENGINEERING, INC. SHEET NO. C-1 & M; DRAWING PLOTTED 12-06-94.
- 2.) THE TABULAR LIST OF COORDINATE VALUES FOR CONTROL POINTS #1 & #2 DO NOT COINCIDE WITH THE VALUES ADJACENT TO THE CONTROL POINTS, PER PLANS BY ENTERPRISE ENGINEERING INC.
- 3.) REFERENCE BENCH MARKS USED ARE THE FOUND 5/8" X 3' IRON ROD W/CAP KNOW AS CONTROL POINT NO. 1 AND FOUND 1/4" DIA. PK NAIL W/WASHER KNOW AS CONTROL POINT NO. 3.
- 4.) ALL ELEVATIONS SHOWN HEREON ARE BASED ON AN ASSUMED DATUM.

LEGEND

□ - FOUND WIRE FLAG CORNER OF EXCAVATION LIMITS



CERTIFICATION

I HEREBY CERTIFY THAT THE ABOVE LAND WAS SURVEYED UNDER MY RESPONSIBLE SUPERVISION AND DIRECTION, THAT THIS SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 61G17-6 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027, FLORIDA STATUTES, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Arnold J. Johns
ARNOLD J. JOHNS
FLORIDA REG. CERT. NO. 4422

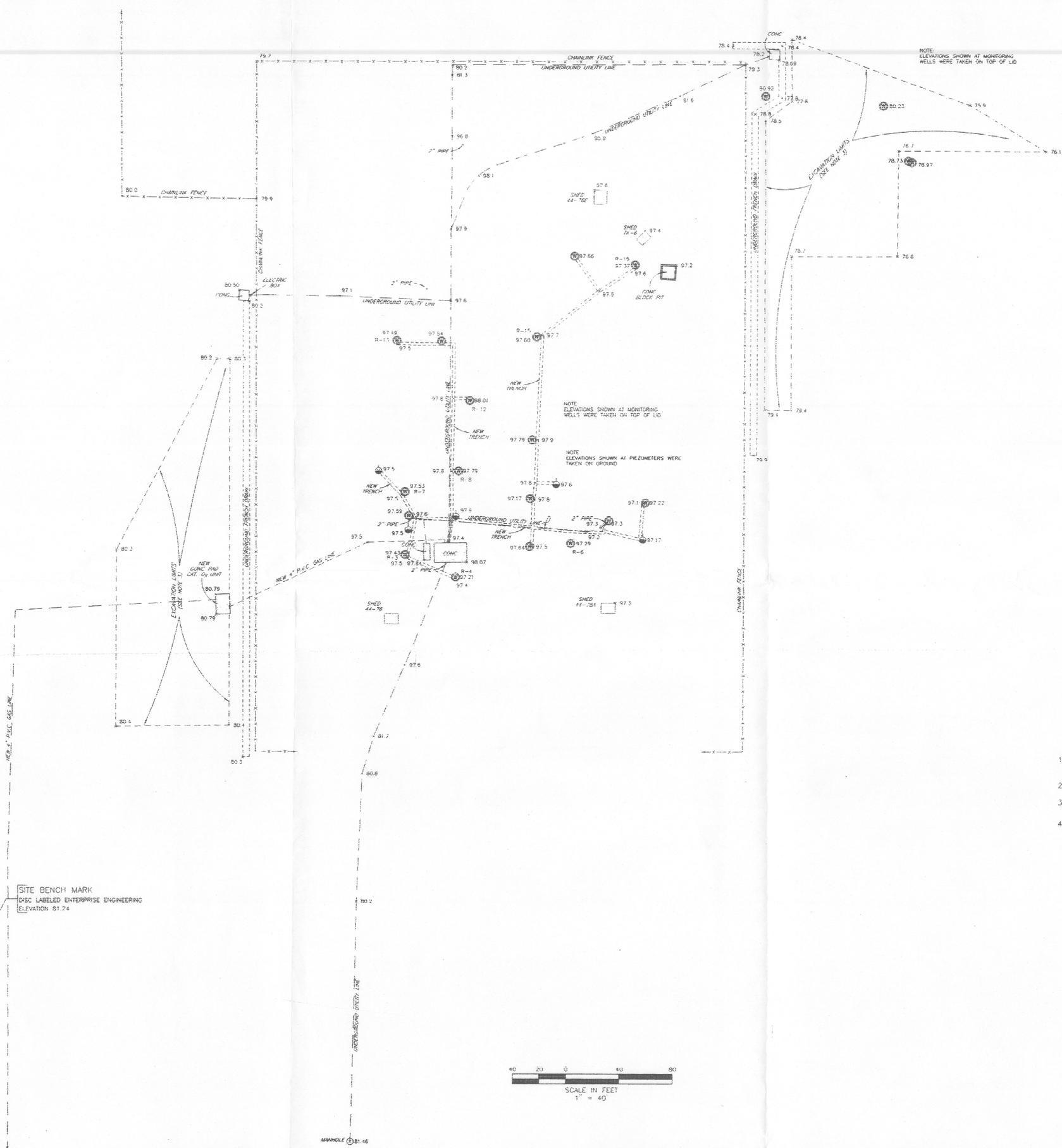
SURVEY NOT VALID WITHOUT EMBOSSED SEAL.

DRAWING DATE: 8/21/95	DRAFTED BY: BRADLEY
SURVEY DATE: 8/11/95	CHECKED BY: JOHNS
F.B. & PG.: 95-06/21-23	CAD FILE: 941205CS.DWG
JOB NO.: 94-12-05	DRAWING NO.: B95-31

ARC SURVEYING & MAPPING, INC.
5202 SAN JUAN AVENUE
JACKSONVILLE, FLORIDA 32210
PHONE: (904) 384-8377 FAX: (904) 384-8388



A TOPOGRAPHIC SURVEY OF
NORTH TANK FUEL FARM
 NAS CECIL FIELD
 JACKSONVILLE, FLORIDA
 TASK No. 6 & TASK No. 23

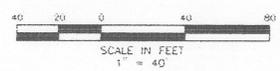


- LEGEND -
- DENOTES MONITORING WELL
 - DENOTES PIEZOMETER
 - 97.7 DENOTES ELEVATION
 - × 97.2 DENOTES GROUND SHOT
 - × 97.26 DENOTES HARD SURFACE SHOT

- 1) THE INFORMATION SHOWN HEREON REPRESENTS CONDITIONS AS THEY EXISTED ON THE DATE OF SURVEY AND CAN ONLY BE CONSIDERED INDICATIVE OF CONDITIONS AT THAT TIME.
- 2) THIS IS A SURFACE SURVEY ONLY. UNDERGROUND FEATURES SHOWN HEREON WERE OBTAINED BY SURFACE EVIDENCE OR TESTIMONY FROM ONSITE PERSONEL.
- 3) THE EXCAVATION SITES SHOWN HEREON WERE SCALED FROM MAPS PROVIDED BY BECHTEL PERSONNEL. NO EVIDENCE WAS FOUND ON THE GROUND OF THESE SITES.
- 4) ELEVATIONS SHOWN HEREON REFER TO A PIPELINE RELOCATION COORDINATION & LAYOUT PLAN PREPARED BY ENTERPRISE ENGINEERING, INC. FOR THE DEPARTMENT OF THE NAVY, NAVAL FACILITIES ENGINEERING COMMAND, UNDATED AND DATUM NOT STATED.

REVISION NOTE:
 THIS MAP WAS REVISED 8/21/1997 TO CONSOLIDATE IMPROVEMENTS TO THE SITE MADE SINCE FEBRUARY 5, 1997

SITE BENCH MARK
 DISC LABELED ENTERPRISE ENGINEERING
 ELEVATION: 81.24



Arnold J. Johns
 ARNOLD J. JOHNS
 FLORIDA REGISTERED LAND SURVEYOR NO. 4422
UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR, THIS DRAWING, SKETCH, PLAN OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID

L.D. BRADLEY LAND SURVEYOR
 5274 RAMONA BOULEVARD, JACKSONVILLE, FLORIDA 32205
 (904) 786-6400 OFFICE (904) 786-1479 FAX No.

APPENDIX F
THERMAL TREATMENT UNIT PERMIT

**REGULATORY & ENVIRONMENTAL
SERVICES DEPARTMENT**
Air Quality Division



Permittee:
Dustcoating, Inc.
6925 D'Chene Lane
Maple Plain, MN 55359

Permit Number:
Expiration Date:
County:
Project:

031-0345-001-AO
August 31, 2000
Duval
Mobile Soil Remediation Unit

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-209, 62-210, 62-212, 62-272, 62-275, 62-296, 62-297 and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Regulatory and Environmental Services Department, Air Quality Division (Department) and made a part hereof and specifically described as follows:

For the operation of a mobile soil thermal treatment unit. A 60" x 20' rotary dryer with burner, primary collector baghouse, after burner, system mounted on two (2) trailers will be operated to treat soil contaminated with petroleum products. The 25 tons per hour unit will be fired with propane (LPG).

Emission Unit(s) (EU) and Control Equipment shall be as follows:

<u>EU No.</u>	<u>EU Description</u>	<u>Control Equipment</u>
01	Thermal Treatment Unit	Gencor Baghouse and Afterburner in Series

For operation at Naval Air Station Jacksonville and Naval Air Station Cecil Field, Jacksonville, FL.

Supporting documents shall be as follows:

- (1) Permit AC16-261563
- (2) Permit application received August 23, 1995
- (3) AQD letter dated September 8, 1995



APPENDIX G

PRE-TREATMENT SOIL ANALYTICAL DATA

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
804 / 296-3007
Fax 904 / 295-6210



Laboratories

DHRS Certification No. E82277, E2417

CLIENT : Bechtel Environmental, Inc.
ADDRESS: P.O. Box 171
Qtrs E Ave G, NAS Cecil
Jacksonville, FL 32215

REPORT # : JR9812
DATE SUBMITTED: October 13, 1995
DATE REPORTED : October 20, 1995

PAGE 1 OF 14

ATTENTION: Donald Xiques

SAMPLE IDENTIFICATION

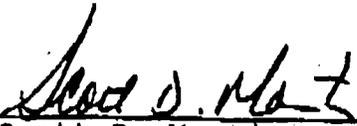
Samples submitted and
identified by client as:

Cecil Field

10/10/95

#1	- NTFFW1A-D	10/10/95 @ 16:09
#2	- NTFFW2A-D	10/10/95 @ 16:20
#3	- NTFFW3A-D	10/10/95 @ 16:45
#4	- NTFFW4A-D	10/12/95
#5	- NTFFW5A-D	10/12/95
#6	- NTFFW6A-D	10/12/95
#7	- NTFFW7A-D	10/12/95
#8	- NTFFW8A-D	10/12/95
#9	- NTFFW9A-D	10/12/95
#10	- NTFFW10A-D	10/12/95
#11	- NTFF4D	10/12/95

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR9812

DATE REPORTED: October 20, 1995

PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>EPA METHOD 8010A - VOLATILE HALOCARBONS</u>	<u>NTFFW1A-D</u>	<u>NTFFW2A-D</u>	<u>NTFFW3A-D</u>	<u>Units</u>
Dichlorodifluoromethane	125 U	125 U	125 U	µg/Kg
Chloromethane	250 U	250 U	250 U	µg/Kg
Vinyl Chloride	125 U	125 U	125 U	µg/Kg
Bromomethane	125 U	125 U	125 U	µg/Kg
Chloroethane	250 U	250 U	250 U	µg/Kg
Trichlorofluoromethane	625 U	625 U	625 U	µg/Kg
1,1-Dichloroethene	125 U	125 U	125 U	µg/Kg
Methylene Chloride	250 U	250 U	250 U	µg/Kg
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/Kg
1,1-Dichloroethane	125 U	125 U	125 U	µg/Kg
Chloroform	125 U	125 U	125 U	µg/Kg
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/Kg
Carbon Tetrachloride	125 U	125 U	125 U	µg/Kg
1,2-Dichloroethane	125 U	125 U	125 U	µg/Kg
Trichloroethene	125 U	125 U	125 U	µg/Kg
1,2-Dichloropropane	125 U	125 U	125 U	µg/Kg
Bromodichloromethane	125 U	125 U	125 U	µg/Kg
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/Kg
Tetrachloroethene	125 U	125 U	125 U	µg/Kg
Dibromochloromethane	125 U	125 U	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Bromoform	125 U	125 U	125 U	µg/Kg
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMIT</u>
Bromofluorobenzene (surr)	86	76	88	25-15
Date Analyzed	10/17/95	10/17/95	10/17/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9812
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

	<u>NTFFW1A-D</u>	<u>NTFFW2A-D</u>	<u>NTFFW3A-D</u>	<u>Units</u>
Methyl tert-butyl ether	250 U	250 U	250 U	µg/Kg
Benzene	125 U	125 U	125 U	µg/Kg
Toluene	375	375	875	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Ethylbenzene	125 U	125 U	125 U	µg/Kg
m-Xylene & p-Xylene	500	875	875	µg/Kg
o-Xylene	300 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
Total Xylenes	500	875	875	µg/Kg
Surrogate:	% RECOV	% RECOV	% RECOV	LIMITS
Bromofluorobenzene (surr)	74	106	70	44-127
Date Analyzed	10/17/95	10/17/95	10/17/95	

EPA METHOD 9073 -

TOTAL PETROLEUM HYDROCARBONS	<u>NTFFW1A-D</u>	<u>NTFFW2A-D</u>	<u>NTFFW3A-D</u>	<u>Units</u>
Total Petroleum Hydrocarbons	631	3530	2680	mg/Kg
Date Analyzed	10/15/95	10/15/95	10/15/95	

= Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9812
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFW1A-D</u>	<u>NTFFW2A-D</u>	<u>NTFFW3A-D</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg
Barium Date Analyzed	6010	20 U 10/16/95	20 U 10/16/95	20 U 10/16/95	mg/Kg
Cadmium Date Analyzed	6010	1 U 10/16/95	1 U 10/16/95	1 U 10/16/95	mg/Kg
Chromium Date Analyzed	6010	2.5 10/16/95	1.1 10/16/95	1.5 10/16/95	mg/Kg
Lead Date Analyzed	6010	1.0 10/16/95	2.65 10/16/95	1 U 10/16/95	mg/Kg
Mercury Date Analyzed	7471	0.0075 10/16/95	0.0067 10/16/95	0.0099 10/16/95	mg/Kg
Selenium Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg
Silver Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg

U = Compound was analyzed for but not detected

ENCO LABORATORIES

REPORT # : JR9812

DATE REPORTED: October 20, 1995

PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

EPA METHOD 8010A -
VOLATILE HALOCARBONS

	<u>NTEFW4A-D</u>	<u>NTEFW5A-D</u>	<u>NTEFW6A-D</u>	<u>Units</u>
Dichlorodifluoromethane	125 U	125 U	125 U	µg/Kg
Chloromethane	250 U	250 U	250 U	µg/Kg
Vinyl Chloride	125 U	125 U	125 U	µg/Kg
Bromomethane	125 U	125 U	125 U	µg/Kg
Chloroethane	250 U	250 U	250 U	µg/Kg
Trichlorofluoromethane	625 U	625 U	625 U	µg/Kg
1,1-Dichloroethene	125 U	125 U	125 U	µg/Kg
Methylene Chloride	250 U	250 U	250 U	µg/Kg
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/Kg
1,1-Dichloroethane	125 U	125 U	125 U	µg/Kg
Chloroform	125 U	125 U	125 U	µg/Kg
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/Kg
Carbon Tetrachloride	125 U	125 U	125 U	µg/Kg
1,2-Dichloroethane	125 U	125 U	125 U	µg/Kg
Trichloroethene	125 U	125 U	125 U	µg/Kg
1,2-Dichloropropane	125 U	125 U	125 U	µg/Kg
Bromodichloromethane	125 U	125 U	125 U	µg/Kg
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/Kg
Tetrachloroethene	125 U	125 U	125 U	µg/Kg
Dibromochloromethane	125 U	125 U	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Bromoform	125 U	125 U	125 U	µg/Kg
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMIT</u>
Bromofluorobenzene (surr)	76	84	80	25-150
Date Analyzed	10/17/95	10/17/95	10/17/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9812
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

	<u>NTFFW4A-D</u>	<u>NTFFW5A-D</u>	<u>NTFFW6A-D</u>	<u>Units</u>
Methyl tert-butyl ether	250 U	250 U	250 U	µg/Kg
Benzene	125 U	125 U	125 U	µg/Kg
Toluene	500	1300	1000	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Ethylbenzene	125 U	125 U	125 U	µg/Kg
m-Xylene & p-Xylene	1500	11000	1500	µg/Kg
o-Xylene	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
Total Xylenes	1500	11000	1500	µg/Kg
Surrogate:	% RECOV	% RECOV	% RECOV	LIMIT
Bromofluorobenzene (surr)	*	*	*	44-11
Date Analyzed	10/17/95	10/17/95	10/17/95	

EPA METHOD 9073 -

TOTAL PETROLEUM HYDROCARBONS	<u>NTFFW4A-D</u>	<u>NTFFW5A-D</u>	<u>NTFFW6A-D</u>	<u>Units</u>
Total Petroleum Hydrocarbons	4860	5780	5040	mg/Kg
Date Analyzed	10/15/95	10/15/95	10/15/95	

* = Surrogate recovery unavailable due to matrix interference
 U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9812
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFW4A-D</u>	<u>NTFFW5A-D</u>	<u>NTFFW6A-D</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg
Barium Date Analyzed	6010	20 U 10/16/95	20 U 10/16/95	20 U 10/16/95	mg/Kg
Cadmium Date Analyzed	6010	1 U 10/16/95	1 U 10/16/95	1 U 10/16/95	mg/Kg
Chromium Date Analyzed	6010	1.4 10/16/95	1.6 10/16/95	1.3 10/16/95	mg/Kg
Lead Date Analyzed	6010	1 U 10/16/95	1.6 10/16/95	1 U 10/16/95	mg/Kg
Mercury Date Analyzed	7471	0.0094 10/16/95	0.0115 10/16/95	0.0191 10/16/95	mg/Kg
Selenium Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg
Silver Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg

J = Compound was analyzed for but not detected

ENCO LABORATORIES

REPORT # : JR9812

DATE REPORTED: October 20, 1995

PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>EPA METHOD 8010A - VOLATILE HALOCARBONS</u>	<u>NTFFW7A-D</u>	<u>NTFFW8A-D</u>	<u>NTFFW9A-D</u>	<u>Units</u>
Dichlorodifluoromethane	125 U	125 U	125 U	µg/Kg
Chloromethane	250 U	250 U	250 U	µg/Kg
Vinyl Chloride	125 U	125 U	125 U	µg/Kg
Bromomethane	125 U	125 U	125 U	µg/Kg
Chloroethane	250 U	625 U	250 U	µg/Kg
Trichlorofluoromethane	625 U	250 U	625 U	µg/Kg
1,1-Dichloroethene	125 U	125 U	125 U	µg/Kg
Methylene Chloride	250 U	250 U	250 U	µg/Kg
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/Kg
1,1-Dichloroethane	125 U	125 U	125 U	µg/Kg
Chloroform	125 U	125 U	125 U	µg
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/Kg
Carbon Tetrachloride	125 U	125 U	125 U	µg/Kg
1,2-Dichloroethane	125 U	125 U	125 U	µg/Kg
Trichloroethene	125 U	125 U	125 U	µg/Kg
1,2-Dichloropropane	125 U	125 U	125 U	µg/Kg
Bromodichloromethane	125 U	125 U	125 U	µg/Kg
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/Kg
Tetrachloroethene	125 U	125 U	125 U	µg/Kg
Dibromochloromethane	125 U	125 U	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Bromoform	125 U	125 U	125 U	µg/Kg
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	84	80	78	25-150
Date Analyzed	10/17/95	10/17/95	10/17/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JK9812
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTEFW7A-D</u>	<u>NTEFW8A-D</u>	<u>NTEFW9A-D</u>	<u>Units</u>
Methyl tert-butyl ether	250 U	250 U	250 U	µg/Kg
Benzene	125 U	125 U	125 U	µg/Kg
Toluene	500	4000	500	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Ethylbenzene	125 U	29000 D1000	125 U	µg/Kg
m-Xylene & p-Xylene	2900	71000 D1000	750	µg/Kg
o-Xylene	125 U	26000 D1000	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
Total Xylenes	2900	97000	750	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMIT</u>
Bromofluorobenzene (surr)	124	*	72	44-12
Date Analyzed	10/17/95	10/17/95	10/17/95	

<u>EPA METHOD 9073 - TOTAL PETROLEUM HYDROCARBONS</u>	<u>NTEFW7A-D</u>	<u>NTEFW8A-D</u>	<u>NTEFW9A-D</u>	<u>Units</u>
Total Petroleum Hydrocarbons	3110	1620	3930	mg/Kg
Date Analyzed	10/15/95	10/15/95	10/15/95	

- * = Surrogate recovery unavailable due to matrix interference
- D1000 = Analyzed @ 1:1000 dilution
- U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9812
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFW7A-D</u>	<u>NTFFW8A-D</u>	<u>NTFFW9A-D</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	5.2 10/16/95	2 U 10/16/95	mg/Kg
Barium Date Analyzed	6010	20 U 10/16/95	20 U 10/16/95	20 U 10/16/95	mg/Kg
Cadmium Date Analyzed	6010	1 U 10/16/95	1 U 10/16/95	1 U 10/16/95	mg/Kg
Chromium Date Analyzed	6010	2.6 10/16/95	12.6 10/16/95	1.5 10/16/95	mg/K
Lead Date Analyzed	6010	1.4 10/16/95	3.7 10/16/95	1 U 10/16/95	mg/Kg
Mercury Date Analyzed	7471	0.0126 10/16/95	0.0128 10/16/95	0.0092 10/16/95	mg/Kg
Selenium Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg
Silver Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg

U - Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9812
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>EPA METHOD 8010A - VOLATILE HALOCARBONS</u>	<u>NTEFW10A-D</u>	<u>NTEF4D</u>	<u>LAB BLANK</u>	<u>Units</u>
Dichlorodifluoromethane	125 U	125 U	125 U	µg/Kg
Chloromethane	250 U	250 U	250 U	µg/Kg
Vinyl Chloride	125 U	125 U	125 U	µg/Kg
Bromomethane	125 U	125 U	125 U	µg/Kg
Chloroethane	250 U	250 U	250 U	µg/Kg
Trichlorofluoromethane	625 U	625 U	625 U	µg/Kg
1,1-Dichloroethene	125 U	125 U	125 U	µg/Kg
Methylene Chloride	250 U	250 U	250 U	µg/Kg
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/Kg
1,1-Dichloroethane	125 U	125 U	125 U	µg/Kg
Chloroform	125 U	125 U	125 U	µg/Kg
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/Kg
Carbon Tetrachloride	125 U	125 U	125 U	µg/Kg
1,2-Dichloroethane	125 U	125 U	125 U	µg/Kg
Trichloroethene	125 U	125 U	125 U	µg/Kg
1,2-Dichloropropane	125 U	125 U	125 U	µg/Kg
Bromodichloromethane	125 U	125 U	125 U	µg/Kg
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/Kg
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/Kg
Tetrachloroethene	125 U	125 U	125 U	µg/Kg
Dibromochloromethane	125 U	125 U	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Bromoform	125 U	125 U	125 U	µg/Kg
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMIT</u>
Bromofluorobenzene (surr)	96	88	80	25-15
Date Analyzed	10/17/95	10/17/95	10/16/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES

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RESULTS OF ANALYSIS

**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTFFW10A-D</u>	<u>NTFF4D</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	250 U	250 U	250 U	µg/Kg
Benzene	125 U	125 U	125 U	µg/Kg
Toluene	500	500	125 U	µg/Kg
Chlorobenzene	125 U	125 U	125 U	µg/Kg
Ethylbenzene	125 U	125 U	125 U	µg/Kg
m-Xylene & p-Xylene	625	1250	125 U	µg/Kg
o-Xylene	125 U	125 U	125 U	µg/Kg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/Kg
Total Xylenes	625	1250	250 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMIT</u>
Bromofluorobenzene (surr)	74	*	122	44-12
Date Analyzed	10/17/95	10/17/95	10/16/95	

EPA METHOD 9073 -

TOTAL PETROLEUM HYDROCARBONS

	<u>NTFFW10A-D</u>	<u>NTFF4D</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petroleum Hydrocarbons	1680	1060	5 U	mg/Kg
Date Analyzed	10/15/95	10/15/95	10/15/95	

* = Surrogate recovery unavailable due to matrix interference
 U = Compound was analyzed for but not detected

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFW10A-D</u>	<u>NTFF4D</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg
Barium Date Analyzed	6010	20 U 10/16/95	20 U 10/16/95	20 U 10/16/95	mg/Kg
Cadmium Date Analyzed	6010	1 U 10/16/95	1 U 10/16/95	1 U 10/16/95	mg/Kg
Chromium Date Analyzed	6010	1.6 10/16/95	1.7 10/16/95	1 U 10/16/95	mg/Kg
Lead Date Analyzed	6010	1 10/16/95	1 U 10/16/95	1 U 10/16/95	mg/Kg
Mercury Date Analyzed	7471	0.0123 10/16/95	0.0115 10/16/95	0.01 U 10/16/95	mg/Kg
Selenium Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg
Silver Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/Kg

U = Compound was analyzed for but not detected

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QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8010A</u>				
Methylene Chloride	106/106/110	25-162	<1	28
Chloroform	96/100/ 98	49-133	4	15
Carbon Tetrachloride	100/106/104	43-143	6	16
Trichloroethene	74/ 76/ 78	35-146	3	20
Tetrachloroethene	92/102/100	47-160	10	19
Chlorobenzene	98/ 99/101	50-145	1	21
<u>EPA Method 8020A</u>				
Benzene	96/ 96/ 92	53-152	<1	20
Toluene	96/ 94/ 92	50-145	2	14
Ethylbenzene	94/ 94/ 88	46-135	<1	14
m-Xylene & p-Xylene	93/ 92/ 86	62-132	1	1
<u>EPA Method 2073</u>				
Total Petroleum Hydrocarbons	79/ 86/ 92	59-134	8	23
<u>Total Metals</u>				
Arsenic, 6010	93/ 92/ 92	69-118	1	13
Barium, 6010	97/ 96/101	68-121	1	18
Cadmium, 6010	93/ 91/ 98	67-118	2	14
Chromium, 6010	99/ 97/105	73-122	2	21
Lead, 6010	95/ 93/102	55-133	2	34
Mercury, 7471	126/114/126	69-135	10	13
Selenium, 6010	90/ 88/ 91	56-122	2	14
Silver, 6010	94/ 92/ 94	71-114	2	11

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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CHAIN OF CUSTODY RECORD



Site Name: CECIL FIELD, NAM PAC, NTF PRE-BURN SOIL SAMPLING
 Delivery Order No.: _____
 Cooler/Crate No.: _____

SEIR No.: _____
 COC Number: _____
 Lab: ENCO
 Field Logbook No.: _____
 Logbook Pg. No.: _____

Sampled by: DONALD XONES _____
 Print Sign Print Sign

Legend		SAMPLE TYPE				MATRIX				QC LEVELS			
PSB	Preservative Blank	BLS	Blind Spike	AIR	Air	SBS	Subsurface Soil	PTW	Potable Water	S	Sample Results and CC		
FDP	Field Duplicate	BLB	Blank Blank	FLO	Flora	SED	Sediment	SEP	Seeps	C	Reported		
ENV	Environmental	PTS	Point Source	FAU	Fauna	SFS	Surface Soil	SOL	Solic	D	Sample results, QC and raw data reported		
FDB	Field Blank	FRP	Field Replicate	GWT	Groundwater	SPW	Surface Water	WWT	Waste Water	E	Sample results, blanks, and calibration reported		
GEO	Geotechnical Sample	RSB	Rinsate Blank	LCH	Leachate	SLG	Sludge	SLW	Solic Waste	S	Screening level analysis		
MXD	Matrix Spike Duplicate	SPL	Split	OIL	Oil	SST	Surface Water Storm Event						
MXS	Matrix Spike	TRP	Trip Blank										

Station ID	BEI Sample #	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
NTFFW	NTFFW1A-D	ENV	SBS	10/10/95 / 1609	CF2210801	COOL 4°C	NA	8010/8020		
	↓			1/1609	CF2210802			TPH/8 RCPA		
	↓			1/1620	CF2210901			8010/8020		
	↓			1/1620	CF2210902			TPH/8 RCPA		
	↓			1/1645	CF2211001			8010/8020		
	↓			1/1645	CF2211002			TPH/8 RCPA		

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER	COMMENTS/INSTRUCTIONS
		10-13-95	0850	TRX TO LAB	JL9812

CONTAMINATION	YES	NO
Radiological		X
Chemical	X	

Shipper: BECHTEL ENVIRONMENTAL, INC.
 Ship to: ENCO LABS

Airbill No. _____ Traffic Report No. _____

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material. Limited quantity, n.e.s., UN2910.

CHAIN OF CUSTODY RECORD (Continued)

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Level
NTFF W 1A-D	CF22111	ENV	SBS	10/12/96	01	9°C	NA	8010/8020	2 DAY	E
	1				02			TRPH/8 RCLA		
NTFF W 5A-D	CF22112				01			8010/8020		
	1				02			TRPH/8 RCLA		
NTFF W 6A-D	CF22113				01			8010/8020		
	1				02			TRPH/8 RCLA		
NTFF W 8A-D	CF22114				01			8010/8020		
	1				02			TRPH/8 RCLA		
NTFF W 8A-D	CF22115				01			8010/8020		
	1				02			TRPH/8 RCLA		
NTFF W 8A-D	CF22116				01			8010/8020		
	1				02			TRPH/8 RCLA		
NTFF W 9A-D	CF22117				01			8010/8020		
	1				02			TRPH/8 RCLA		
NTFF W 10A-D	CF22118				01			8010/8020		
	1				02			TRPH/8 RCLA		
NTFF 4D	CF22112	DUP			01			8010/8020		
	1	DUP			02			TRPH/8 RCLA		

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



DHRS Certification No. E82277. 82417

CLIENT : Bechtel Environmental, Inc.
ADDRESS: P.O. Box 171
Qtrs E Ave G, NAS Cecil
Jacksonville, FL 32215

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ATTENTION: Donald Xiques

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

Cecil Field

10/10/95

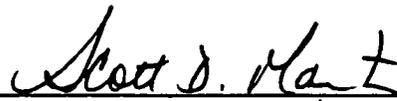
#1	-	NTFFE6A-D	@	13:22
#2	-	NTFFE8A-D	@	15:45
#3	-	NTFFE10D	@	14:40
#4	-	NTFFE4A-D	@	10:20
#5	-	NTFFE11A-D	@	14:15
#6	-	NTFFE10A-D	@	14:40
#7	-	NTFFE3A-D	@	10:59
#8	-	NTFFE7A-D	@	13:30
#9	-	NTFFE1A-D	@	10:15
#10	-	NTFFE9A-D	@	15:28
#11	-	NTFFE5A-D	@	11:50
#12	-	NTFFE2A-D	@	10:45

REC

OCT 25 1995

V. HERMANN BAUER

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES

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RESULTS OF ANALYSIS

EPA METHOD 8010A -
VOLATILE HALOCARBONS

	<u>NTFFE6A-D</u>	<u>NTFFE8A-D</u>	<u>NTFFE10D</u>	<u>Unit</u>
Dichlorodifluoromethane	125 U	125 U	125 U	µg/F
Chloromethane	250 U	250 U	250 U	µg/F
Vinyl Chloride	125 U	125 U	125 U	µg/F
Bromomethane	125 U	125 U	125 U	µg/F
Chloroethane	250 U	250 U	250 U	µg/F
Trichlorofluoromethane	625 U	625 U	625 U	µg/F
1,1-Dichloroethene	125 U	125 U	125 U	µg/F
Methylene Chloride	250 U	250 U	250 U	µg/F
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/F
1,1-Dichloroethane	125 U	125 U	125 U	µg/F
Chloroform	125 U	125 U	125 U	µg/F
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/F
Carbon Tetrachloride	125 U	125 U	125 U	µg/F
1,2-Dichloroethane	125 U	125 U	125 U	µg/F
Trichloroethene	125 U	125 U	125 U	µg/F
1,2-Dichloropropane	125 U	125 U	125 U	µg/F
Bromodichloromethane	125 U	125 U	125 U	µg/F
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/F
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/F
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/F
Tetrachloroethene	125 U	125 U	125 U	µg/F
Dibromochloromethane	125 U	125 U	125 U	µg/F
Chlorobenzene	125 U	125 U	125 U	µg/F
Bromoform	125 U	125 U	125 U	µg/F
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/F
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/F
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/F
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/F
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMI</u>
Bromofluorobenzene (surr)	88	80	86	25-1
Date Analyzed	10/17/95	10/17/95	10/17/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
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RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFE6A-D</u>	<u>NTFFE8A-D</u>	<u>NTFFE10D</u>	<u>Un</u>
Methyl tert-butyl ether	250 U	250 U	250 U	µg
Benzene	125 U	125 U	125 U	µg
Toluene	2500	1100	1900	µg
Chlorobenzene	125 U	125 U	125 U	µg
Ethylbenzene	125 U	125 U	125 U	µg
m-Xylene & p-Xylene	5000	2800	2200	µg
o-Xylene	125 U	125 U	125 U	µg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg
Total Xylenes	5000	2800	2200	µg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LI</u>
Bromofluorobenzene (surr)	*	*	66	44
Date Analyzed	10/17/95	10/17/95	10/17/95	

<u>EPA METHOD 9073 - TOTAL PETROLEUM HYDROCARBONS</u>	<u>NTFFE6A-D</u>	<u>NTFFE8A-D</u>	<u>NTFFE10D</u>	<u>Un</u>
Total Petroleum Hydrocarbons	3920	4900	3070	mg
Date Analyzed	10/15/95	10/15/95	10/15/95	

* = Surrogate recovery unavailable due to matrix interference
 U = Compound was analyzed for but not detected

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFE6A-D</u>	<u>NTFFE8A-D</u>	<u>NTFFE10D</u>	<u>Unit</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/K
Barium Date Analyzed	6010	20 U 10/16/95	20 U 10/16/95	20 U 10/16/95	mg/K
Cadmium Date Analyzed	6010	1 U 10/16/95	1 U 10/16/95	1 U 10/16/95	mg/K
Chromium Date Analyzed	6010	3.2 10/16/95	2.5 10/16/95	1.8 10/16/95	mg/K
Lead Date Analyzed	6010	2.7 10/16/95	1.8 10/16/95	1.8 10/16/95	mg/K
Mercury Date Analyzed	7471	0.0430 10/16/95	0.0254 10/16/95	0.01 U 10/17/95	mg/K
Selenium Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/K
Silver Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/K

U = Compound was analyzed for but not detected

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RESULTS OF ANALYSIS

<u>EPA METHOD 8010A - VOLATILE HALOCARBONS</u>	<u>NTFFE4A-D</u>	<u>NTFFE11A-D</u>	<u>NTFFE10A-D</u>	<u>Unit</u>
Dichlorodifluoromethane	125 U	125 U	125 U	µg/
Chloromethane	250 U	250 U	250 U	µg/
Vinyl Chloride	125 U	125 U	125 U	µg/
Bromomethane	125 U	125 U	125 U	µg/
Chloroethane	250 U	250 U	250 U	µg/
Trichlorofluoromethane	625 U	625 U	625 U	µg/
1,1-Dichloroethene	125 U	125 U	125 U	µg/
Methylene Chloride	250 U	250 U	250 U	µg/
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/
1,1-Dichloroethane	125 U	125 U	125 U	µg/
Chloroform	125 U	125 U	125 U	µg/
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/
Carbon Tetrachloride	125 U	125 U	125 U	µg/
1,2-Dichloroethane	125 U	125 U	125 U	µg/
Trichloroethene	125 U	125 U	125 U	µg/
1,2-Dichloropropane	125 U	125 U	125 U	µg/
Bromodichloromethane	125 U	125 U	125 U	µg/
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/
Tetrachloroethene	125 U	125 U	125 U	µg/
Dibromochloromethane	125 U	125 U	125 U	µg/
Chlorobenzene	125 U	125 U	125 U	µg/
Bromoform	125 U	125 U	125 U	µg/
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIM</u>
Bromofluorobenzene (surr)	84	82	80	25-
Date Analyzed	10/17/95	10/18/95	10/18/95	

U = Compound was analyzed for but not detected

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RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFE4A-D</u>	<u>NTFFE11A-D</u>	<u>NTFFE10A-D</u>	<u>Unit</u>
Methyl tert-butyl ether	250 U	250 U	250 U	µg/K
Benzene	125 U	125 U	125 U	µg/K
Toluene	875	375	375	µg/K
Chlorobenzene	125 U	125 U	125 U	µg/K
Ethylbenzene	125 U	125 U	125 U	µg/K
m-Xylene & p-Xylene	2500	1400	1375	µg/K
o-Xylene	125 U	125 U	125 U	µg/K
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/K
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/K
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/K
Total Xylenes	2500	1400	4250	µg/K
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMI</u>
Bromofluorobenzene (surr)	*	*	*	44-1
Date Analyzed	10/17/95	10/18/95	10/18/95	

<u>EPA METHOD 9073 - TOTAL PETROLEUM HYDROCARBONS</u>	<u>NTFFE4A-D</u>	<u>NTFFE11A-D</u>	<u>NTFFE10A-D</u>	<u>Unit</u>
Total Petroleum Hydrocarbons	5750	3010	2610	mg/K
Date Analyzed	10/15/95	10/15/95	10/15/95	

* = Surrogate recovery unavailable due to matrix interference
 U = Compound was analyzed for but not detected

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFE4A-D</u>	<u>NTFFE11A-D</u>	<u>NTFFE10A-D</u>	<u>Un:</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg
Barium Date Analyzed	6010	20 U 10/16/95	20 U 10/16/95	20 U 10/16/95	mg
Cadmium Date Analyzed	6010	1 U 10/16/95	1 U 10/16/95	1 U 10/16/95	mg
Chromium Date Analyzed	6010	3.4 10/16/95	3.4 10/16/95	1.8 10/16/95	mg
Lead Date Analyzed	6010	2.8 10/16/95	3.0 10/16/95	1.4 10/16/95	mg
Mercury Date Analyzed	7471	0.0101 10/17/95	0.01 U 10/17/95	0.01 U 10/17/95	mg
Selenium Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg
Silver Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg

U = Compound was analyzed for but not detected

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RESULTS OF ANALYSIS

<u>EPA METHOD 8010A - VOLATILE HALOCARBONS</u>	<u>NTFFE3A-D</u>	<u>NTFFE7A-D</u>	<u>NTFFE1A-D</u>	<u>Uni</u>
Dichlorodifluoromethane	125 U	125 U	125 U	µg/
Chloromethane	250 U	250 U	250 U	µg/
Vinyl Chloride	125 U	125 U	125 U	µg/
Bromomethane	125 U	125 U	125 U	µg/
Chloroethane	250 U	250 U	250 U	µg/
Trichlorofluoromethane	625 U	625 U	625 U	µg/
1,1-Dichloroethene	125 U	125 U	125 U	µg/
Methylene Chloride	250 U	250 U	250 U	µg/
t-1,2-Dichloroethene	125 U	125 U	125 U	µg/
1,1-Dichloroethane	125 U	125 U	125 U	µg/
Chloroform	125 U	125 U	125 U	µg/
1,1,1-Trichloroethane	125 U	125 U	125 U	µg/
Carbon Tetrachloride	125 U	125 U	125 U	µg/
1,2-Dichloroethane	125 U	125 U	125 U	µg/
Trichloroethene	125 U	125 U	125 U	µg/
1,2-Dichloropropane	125 U	125 U	125 U	µg/
Bromodichloromethane	125 U	125 U	125 U	µg/
c-1,3-Dichloropropene	125 U	125 U	125 U	µg/
t-1,3-Dichloropropene	125 U	125 U	125 U	µg/
1,1,2-Trichloroethane	125 U	125 U	125 U	µg/
Tetrachloroethene	125 U	125 U	125 U	µg/
Dibromochloromethane	125 U	125 U	125 U	µg/
Chlorobenzene	125 U	125 U	125 U	µg/
Bromoform	125 U	125 U	125 U	µg/
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg/
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIM</u>
Bromofluorobenzene (surr)	84	74	80	25-
Date Analyzed	10/18/95	10/18/95	10/18/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9813
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFE3A-D</u>	<u>NTFFE7A-D</u>	<u>NTFFE1A-D</u>	<u>Uni</u>
Methyl tert-butyl ether	250 U	250 U	250 U	µg/
Benzene	125 U	125 U	125 U	µg/
Toluene	1000	625	1600	µg/
Chlorobenzene	125 U	125 U	125 U	µg/
Ethylbenzene	125 U	125 U	3700	µg/
m-Xylene & p-Xylene	1750	4100	7500	µg/
o-Xylene	125 U	9200	125 U	µg/
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/
Total Xylenes	1750	13300	7500	µg/
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIM</u>
Bromofluorobenzene (surr)	*	*	116	44-
Date Analyzed	10/18/95	10/18/95	10/18/95	

<u>EPA METHOD 9073 - TOTAL PETROLEUM HYDROCARBONS</u>	<u>NTFFE3A-D</u>	<u>NTFFE7A-D</u>	<u>NTFFE1A-D</u>	<u>Uni</u>
Total Petroleum Hydrocarbons	5820	1738	2960	mg/
Date Analyzed	10/15/95	10/18/95	10/15/95	

* = Surrogate recovery unavailable due to matrix interference
 U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9813
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFE3A-D</u>	<u>NTFFE7A-D</u>	<u>NTFFE1A-D</u>	<u>Unit</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/l
Barium Date Analyzed	6010	20 U 10/16/95	20 U 10/16/95	20 U 10/16/95	mg/l
Cadmium Date Analyzed	6010	1 U 10/16/95	1 U 10/16/95	1 U 10/16/95	mg/l
Chromium Date Analyzed	6010	2.3 10/16/95	1.4 10/16/95	2.3 10/16/95	mg/l
Mercury Date Analyzed	7471	0.0371 10/16/95	0.0226 10/16/95	0.0182 10/16/95	mg/l
Selenium Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/l
Silver Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/l

U = Compound was analyzed for but not detected

ENCO LABORATORIES

REPORT # : JR9813

DATE REPORTED: October 20, 1995

PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

EPA METHOD 8010A -
VOLATILE HALOCARBONS

	<u>NTFFE9A-D</u>	<u>NTFFE5A-D</u>	<u>NTFFE2A-D</u>	<u>Un:</u>
Dichlorodifluoromethane	125 U	125 U	125 U	µg
Chloromethane	250 U	250 U	250 U	µg
Vinyl Chloride	125 U	125 U	125 U	µg
Bromomethane	125 U	125 U	125 U	µg
Chloroethane	250 U	250 U	250 U	µg
Trichlorofluoromethane	625 U	625 U	625 U	µg
1,1-Dichloroethene	125 U	125 U	125 U	µg
Methylene Chloride	250 U	250 U	250 U	µg
t-1,2-Dichloroethene	125 U	125 U	125 U	µg
1,1-Dichloroethane	125 U	125 U	125 U	µg
Chloroform	125 U	125 U	125 U	µg
1,1,1-Trichloroethane	125 U	125 U	125 U	µg
Carbon Tetrachloride	125 U	125 U	125 U	µg
1,2-Dichloroethane	125 U	125 U	125 U	µg
Trichloroethene	125 U	125 U	125 U	µg
1,2-Dichloropropane	125 U	125 U	125 U	µg
Bromodichloromethane	125 U	125 U	125 U	µg
c-1,3-Dichloropropene	125 U	125 U	125 U	µg
t-1,3-Dichloropropene	125 U	125 U	125 U	µg
1,1,2-Trichloroethane	125 U	125 U	125 U	µg
Tetrachloroethene	125 U	125 U	125 U	µg
Dibromochloromethane	125 U	125 U	125 U	µg
Chlorobenzene	125 U	125 U	125 U	µg
Bromoform	125 U	125 U	125 U	µg
1,1,2,2-Tetrachloroethane	125 U	125 U	125 U	µg
1,3-Dichlorobenzene	125 U	125 U	125 U	µg
1,4-Dichlorobenzene	125 U	125 U	125 U	µg
1,2-Dichlorobenzene	125 U	125 U	125 U	µg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LI</u>
Bromofluorobenzene (surr)	78	84	80	25
Date Analyzed	10/18/95	10/18/95	10/18/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9813
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFE9A-D</u>	<u>NTFFE5A-D</u>	<u>NTFFE2A-D</u>	<u>Unit</u>
Methyl tert-butyl ether	250 U	250 U	250 U	µg/l
Benzene	125 U	125 U	125 U	µg/l
Toluene	500	375	250	µg/l
Chlorobenzene	125 U	125 U	125 U	µg/l
Ethylbenzene	125 U	125 U	125 U	µg/l
m-Xylene & p-Xylene	1125	1375	500	µg/l
o-Xylene	125 U	125 U	125 U	µg/l
1,3-Dichlorobenzene	125 U	125 U	125 U	µg/l
1,4-Dichlorobenzene	125 U	125 U	125 U	µg/l
1,2-Dichlorobenzene	125 U	125 U	125 U	µg/l
Total Xylenes	1125	1375	500	
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMIT</u>
Bromofluorobenzene (surr)	*	*	*	44-
Date Analyzed	10/18/95	10/18/95	10/18/95	

<u>EPA METHOD 9073 - TOTAL PETROLEUM HYDROCARBONS</u>	<u>NTFFE9A-D</u>	<u>NTFFE5A-D</u>	<u>NTFFE2A-D</u>	<u>Unit</u>
Total Petroleum Hydrocarbons	430	585	181	mg/l
Date Analyzed	10/18/95	10/18/95	10/18/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9813
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFE9A-D</u>	<u>NTFFE5A-D</u>	<u>NTFFE2A-D</u>	<u>Uni</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/
Barium Date Analyzed	6010	20 U 10/16/95	20 U 10/16/95	20 U 10/16/95	mg/
Cadmium Date Analyzed	6010	1 U 10/16/95	1 U 10/16/95	1 U 10/16/95	mg/
Chromium Date Analyzed	6010	1.6 10/16/95	1.6 10/16/95	1.1 10/16/95	mg/
Lead Date Analyzed	6010	2.1 10/16/95	1.6 10/16/95	1.2 10/16/95	mg/
Mercury Date Analyzed	7471	0.0203 10/16/95	0.0215 10/16/95	0.0144 10/16/95	mg/
Selenium Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/
Silver Date Analyzed	6010	2 U 10/16/95	2 U 10/16/95	2 U 10/16/95	mg/

U = Compound was analyzed for but not detected

RESULTS OF ANALYSIS

<u>EPA METHOD 8010A - VOLATILE HALOCARBONS</u>	<u>LAB BLANK</u>	<u>Unit</u>
Dichlorodifluoromethane	125 U	µg/l
Chloromethane	250 U	µg/l
Vinyl Chloride	125 U	µg/l
Bromomethane	625 U	µg/l
Chloroethane	250 U	µg/l
Trichlorofluoromethane	250 U	µg/l
1,1-Dichloroethene	125 U	µg/l
Methylene Chloride	250 U	µg/l
t-1,2-Dichloroethene	125 U	µg/l
1,1-Dichloroethane	125 U	µg/l
Chloroform	125 U	µg/l
1,1,1-Trichloroethane	125 U	µg/l
Carbon Tetrachloride	125 U	µg/l
1,2-Dichloroethane	125 U	µg/l
Trichloroethene	125 U	µg/l
1,2-Dichloropropane	125 U	µg/l
Bromodichloromethane	125 U	µg/l
c-1,3-Dichloropropene	125 U	µg/l
t-1,3-Dichloropropene	125 U	µg/l
1,1,2-Trichloroethane	125 U	µg/l
Tetrachloroethene	125 U	µg/l
Dibromochloromethane	125 U	µg/l
Chlorobenzene	125 U	µg/l
Bromoform	125 U	µg/l
1,1,2,2-Tetrachloroethane	125 U	µg/l
1,3-Dichlorobenzene	125 U	µg/l
1,4-Dichlorobenzene	125 U	µg/l
1,2-Dichlorobenzene	125 U	µg/l
<u>Surrogate:</u>	<u>% RECOV</u>	<u>LIM:</u>
Bromofluorobenzene (surr)	72	25-
Date Analyzed	10/18/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9813
 DATE REPORTED: October 20, 1995
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RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>LAB BLANK</u>	<u>Uni</u>
Methyl tert-butyl ether	250 U	ug
Benzene	125 U	ug
Toluene	125 U	ug
Chlorobenzene	125 U	ug
Ethylbenzene	125 U	ug
m-Xylene & p-Xylene	125 U	ug
o-Xylene	125 U	ug
1,3-Dichlorobenzene	125 U	ug
1,4-Dichlorobenzene	125 U	ug
1,2-Dichlorobenzene	125 U	ug
Total Xylenes	250 U	ug
<u>Surrogate:</u>	<u>% RECOV</u>	<u>LIM</u>
Bromofluorobenzene (surr)	72	ug
Date Analyzed	10/18/95	

EPA METHOD 9073 -

TOTAL PETROLEUM HYDROCARBONS

	<u>LAB BLANK</u>	<u>Uni</u>
Total Petroleum Hydrocarbons	5 U	ug
Date Analyzed	10/18/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR9813
 DATE REPORTED: October 20, 1995
 PROJECT NAME : Cecil Field

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Unit</u>
Arsenic Date Analyzed	6010	2 U 10/16/95	mg/l
Barium Date Analyzed	6010	20 U 10/16/95	mg/l
Cadmium Date Analyzed	6010	1 U 10/16/95	mg/l
Chromium Date Analyzed	6010	1 U 10/16/95	mg/l
Lead Date Analyzed	6010	1 U 10/16/95	mg/l
Mercury Date Analyzed	7471	0.01 U 10/16/95	mg/l
Selenium Date Analyzed	6010	2 U 10/16/95	mg/l
Silver Date Analyzed	6010	2 U 10/16/95	mg/l

U = Compound was analyzed for but not detected

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8010A</u>				
Methylene Chloride	106/106/110	25-162	<1	28
Chloroform	96/100/ 98	49-133	4	15
Carbon Tetrachloride	100/106/104	43-143	6	16
Trichloroethene	74/ 76/ 78	35-146	3	20
Tetrachloroethene	92/102/100	47-160	10	18
Chlorobenzene	98/ 99/101	50-145	1	21
<u>EPA Method 8010A</u>				
Methylene Chloride	114/104/110	25-162	9	28
Chloroform	100/ 94/ 96	49-133	6	15
Carbon Tetrachloride	100/ 90/ 96	43-143	10	16
Trichloroethene	78/ 68/ 74	35-146	14	20
Tetrachloroethene	96/ 86/100	47-160	11	18
Chlorobenzene	101/ 99/ 99	50-145	2	21
<u>EPA Method 8020A</u>				
Benzene	96/ 96/ 92	53-152	<1	25
Toluene	96/ 94/ 92	50-145	2	14
Ethylbenzene	94/ 94/ 88	46-135	<1	14
m-Xylene & p-Xylene	93/ 92/ 86	62-132	1	10
<u>EPA Method 8020A</u>				
Benzene	82/ 84/ 80	53-152	2	20
Toluene	74/ 82/ 72	50-145	10	14
Ethylbenzene	78/ 86/ 74	46-135	10	14
m-Xylene & p-Xylene	76/ 85/ 73	62-132	*11	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- * =
- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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ENCO LABORATORIES
 REPORT # : JR9813
 DATE REPORTED: October 20, 19
 PROJECT NAME : Cecil Field

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QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 9073</u>				
Total Petroleum Hydrocarbon	79/ 86/ 92	59-134	8	23
<u>EPA Method 9073 (7A-D, 9A-D, 5A-D, 2A-D)</u>				
Total Petroleum Hydrocarbon	114/110/ 81	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	93/ 92/ 92	69-118	1	13
Barium, 6010	97/ 96/101	68-121	1	18
Cadmium, 6010	93/ 91/ 98	67-118	2	
Chromium, 6010	99/ 97/105	73-122	2	
Lead, 6010	95/ 93/102	55-133	2	34
Mercury, 7471	94/ 95/ 92	69-135	1	13
Selenium, 6010	90/ 88/ 91	56-122	2	14
Silver, 6010	94/ 92/ 94	71-114	2	11

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

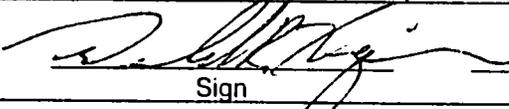
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CHAIN OF CUSTODY RECORD



Site Name: TECHNICAL MARIJUANA CULTIVATION FACILITY
 Delivery Order No.: 10-13-95
 Cooler/Crate No.: _____

SEIR No.: _____
 COC Number: _____
 Lab: 21170
 Field Logbook No.: _____
 Logbook Pg. No.: _____

Sampled by: Donato Xiques 
 Print Sign Print Sign

Legend		SAMPLE TYPE				MATRIX				QC LEVELS	
PSB	Preservative Blank	BLS	Blind Spike	AIR	Air	SBS	Subsurface Soil	PTW	Potable Water	S	Sample Results and QC
FDP	Field Duplicate	BLB	Blink Blank	FLO	Flora	SED	Sediment	SEP	Seeps	C	Reported
ENV	Environmental	PTS	Point Source	FAU	Fauna	SFS	Surface Soil	SOL	Solid	D	Sample results, QC and raw data reported
FDB	Field Blank	FRP	Field Replicate	GWT	Groundwater	SPW	Surface Water	WWT	Waste Water	E	Sample results, blanks, and calibration reported
GEO	Geotechnical Sample	RSB	Rinsate Blank	LCH	Leachate	SLG	Sludge	SLW	Solid Waste	S	Screening level analysis
MXD	Matrix Spike Duplicate	SPL	Split	OIL	Oil	SST	Surface Water Storm Event				
MXS	Matrix Spike	TRP	Trip Blank								

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
10-13-95	10-13-95-601	ENV	SBS	10-13-95 0950	TECH101	✓	NA	SO2/SO	7 DAY	C
	↓	↓		↓	TECH101			TECH101		
	↓	↓		↓	TECH101			TECH101		
	↓	↓		↓	TECH101			TECH101		
	↓	↓		↓	TECH101			TECH101		
✓	↓	ENV/SEP	✓	✓	TECH101	✓	✓	TECH101		

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER	COMMENTS/INSTRUCTIONS
	<u>K. R. H.</u>	10-13-95	0950	TRANSFER TO LAB	PICK UP BY BENCH

CONTAMINATION	YES	NO
Radiological		
Chemical		

Shipper: TECHNICAL MARIJUANA CULTIVATION FACILITY
 Ship to: 21170

Airbill No. 1/6 Traffic Report No. 1/3

CHAIN OF CUSTODY RECORD (Continued)

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Level
11111	NT1FE4A-D	ENV	SBS	10/03/2000	CF2207701	COPI-4/6	NA	8010/8020	7 Day	C
	↓			1/020	CF2207702			TTA/8/10RA		
	NT1FE11A-D			1/140	CF2210401			8010/8020		
	↓			1/145	CF2210402			TTA/8/10RA		
	NT1FE10A-D			1/140	CF2210501			8010/8020		
	↓			1/149	CF2210502			TTA/8/10RA		
	NT1FE3A-D			1/059	CF2207801			8010/8020		
	↓			1/059	CF2207802			TTA/8/10RA		
	NT1FE7A-D			1/130	CF2210701			8010/8020		
	↓			1/130	CF2210702			TTA/8/10RA		
	NT1FE1A-D			1/015	CF2207601			8010/8020		
	↓			1/015	CF2207602			TTA/8/10RA		
	NT1FE9A-D			1/155	CF2210701			8010/8020		
	↓			1/155	CF2210702			TTA/8/10RA		
	NT1FE5A-D			1/150	CF2210001			8010/8020		
	↓			1/150	CF2210002			TTA/8/10RA		
	NT1FE2A-D			1/1045	CF2207702			8010/8020		
✓	↓	✓	✓	✓	1/1045	CF2207701	✓	TTA/8/10RA		+

APPENDIX H
POST-TREATMENT SOIL ANALYTICAL DATA

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DMHS Certification No. ES2277, B2417

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1201
DATE SUBMITTED: December 5, 1995
DATE REPORTED : December 6, 1995

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ATTENTION: Mr. Everett Harwood

SAMPLE IDENTIFICATION

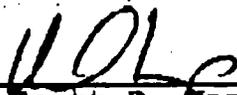
Sample submitted and
identified by client as:

NTFFT 001

12/05/95

#1 - NTFFT 001 @ 15:10

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1201
 DATE REPORTED: December 6, 1995
 PROJECT NAME : NTFFT 001

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

	<u>NTFFT 001</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tart-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg

<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	50	84	44-127
Date Analyzed	12/05/95	12/05/95	

**EPA METHOD 9073 - TOTAL
 PETROLEUM HYDROCARBON**

	<u>NTFFT 001</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petroleum Hydrocarbon	5 U	5 U	mg/Kg
Date Analyzed	12/06/95	12/06/95	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR1201
 DATE REPORTED: December 6, 1995
 PROJECT NAME : NTFFT 001

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT 001</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 12/06/95	2 U 12/06/95	mg/Kg
Barium Date Analyzed	6010	20 U 12/06/95	20 U 12/06/95	mg/Kg
Cadmium Date Analyzed	6010	1 U 12/06/95	1 U 12/06/95	mg/Kg
Chromium Date Analyzed	6010	2.4 12/06/95	1 U 12/06/95	mg/Kg
Lead Date Analyzed	6010	8.0 12/06/95	1 U 12/06/95	mg/Kg
Mercury Date Analyzed	7471	0.01 U 12/06/95	0.01 U 12/06/95	mg/Kg
Selenium Date Analyzed	6010	2 U 12/06/95	2 U 12/06/95	mg/Kg
Silver Date Analyzed	6010	2 U 12/06/95	2 U 12/06/95	mg/Kg

U = Compound was analyzed for but not detected

ENCO LABORATORIES

REPORT # : JR1201

DATE REPORTED: December 6, 1995

PROJECT NAME : NTFPT 001

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QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
<u>EPA Method 8020A</u>				
Benzene	98/ 98/100	53-152	<1	20
Toluene	92/ 88/ 94	50-145	4	14
Ethylbenzene	78/ 78/ 82	46-135	<1	14
m-Xylene & p-Xylene	111/109/117	62-132	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbon	99/ 91/105	59-134	8	23
<u>Total Metals</u>				
Arsenic, 6010	95/ 92/ 91	69-118	3	13
Barium, 6010	100/ 97/ 96	68-121	3	18
Cadmium, 6010	96/ 93/ 93	67-118	3	14
Chromium, 6010	97/ 95/ 94	73-122	2	21
Lead, 6010	99/ 95/ 94	55-133	4	34
Mercury, 7471	111/109/108	69-135	2	13
Selenium, 6010	98/ 95/ 95	56-122	3	14
Silver, 6010	95/ 93/ 92	71-114	2	11

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216 8060
904 / 296-3007
Fax 904 / 296-6210



DHRS Certification No. FA2777, 82417

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1519
DATE SUBMITTED: January 15, 1996
DATE REPORTED : January 18, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

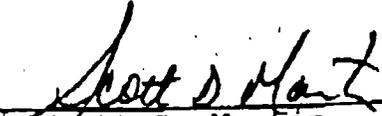
Sample submitted and
identified by client as:

NAS Cecil Field

01/15/96

#1 - NTFFT-021 @ 15:32

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1519
 DATE REPORTED: January 18, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020A -
 VOLATILE AROMATICS

	<u>NTFFT-021</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>1 RECOV</u>	<u>1 RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	80	88	44-127
Date Analyzed	01/16/96	01/15/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-021</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/18/96	01/18/96	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR1519
 DATE REPORTED: January 18, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>MTFFT-021</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/17/96	2 U 01/17/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/17/96	20 U 01/17/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/17/96	1 U 01/17/96	mg/Kg
Chromium Date Analyzed	6010	2.27 01/17/96	1 U 01/17/96	mg/Kg
Lead Date Analyzed	6010	2.42 01/17/96	1 U 01/17/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/18/96	0.01 U 01/18/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/17/96	2 U 01/17/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/17/96	2 U 01/17/96	mg/Kg

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR1519
 DATE REPORTED: January 18, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	90/ 92/ 96	53-152	2	20
Toluene	86/ 92/ 92	50-145	7	14
Ethylbenzene	82/ 88/ 86	46-135	7	14
m-Xylene & p-Xylene	90/ 98/103	62-132	8	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	93/ 89/ 94	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	93/ 92/ 96	69-118	1	13
Barium, 6010	95/ 94/ 96	68-121	1	18
Cadmium, 6010	96/ 93/ 97	67-118	3	14
Chromium, 6010	101/ 99/101	73-122	2	21
Lead, 6010	95/ 94/ 96	55-133	1	34
Mercury, 7471	104/107/101	69-135	3	13
Selenium, 6010	98/100/100	56-122	2	14
Silver, 6010	98/ 96/113	71-114	2	11

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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904 / 296-3007
Fax 904 / 296-6210

DUPLICATE



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1522
DATE SUBMITTED: January 16, 1996
DATE REPORTED : January 19, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

NAS Cecil Field

01/16/96

#1 - NTFFT-022 @ 15:19

PROJECT MANAGER

A handwritten signature in cursive script that reads "Scott D. Martin".

Scott D. Martin

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR1522

DATE REPORTED: January 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTFFT-022</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	µg/Kg
total Xylenes	10 U	10 U	µg/Kg

Surrogate:Bromofluorobenzene (surr)
Date Analyzed% RECOV
72
01/18/96% RECOV
92
01/18/96LIMITS
44-127**EPA METHOD 9073 -****TOTAL PETR. HYDROCARBONS**

	<u>NTFFT-022</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/18/96	01/18/96	

u = Compound was analyzed for but not detected

DUPLICATE

ENCO LABORATORIES
REPORT # : JR1522
DATE REPORTED: January 19, 1996
PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-022</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/17/96	2 U 01/17/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/17/96	20 U 01/17/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/17/96	1 U 01/17/96	mg/Kg
Chromium Date Analyzed	6010	2.48 01/17/96	1 U 01/17/96	mg/Kg
Lead Date Analyzed	6010	4.06 01/17/96	1 U 01/17/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/18/96	0.01 U 01/18/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/17/96	2 U 01/17/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/17/96	2 U 01/17/96	mg/Kg

U = Compound was analyzed for but not detected

DUPLICATE

ENCO LABORATORIES

REPORT # : JR1522

DATE REPORTED: January 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 96/ 92	53-152	<1	20
Toluene	80/ 80/ 78	50-145	<1	14
Ethylbenzene	74/ 74/ 72	46-135	<1	14
m-Xylene & p-Xylene	89/ 89/ 87	62-132	<1	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	93/ 89/ 94	59-134	4	23
<u>Total Metals</u>				
Asenic, 6010	93/ 92/ 96	69-118	1	13
Barium, 6010	95/ 94/ 96	68-121	1	18
Cadmium, 6010	96/ 93/ 97	67-118	3	14
Chromium, 6010	101/ 99/101	73-122	2	21
Lead, 6010	95/ 94/ 96	55-133	1	34
Mercury, 7471	104/107/101	69-135	3	13
Selenium, 6010	98/100/100	56-122	2	14
Silver, 6010	98/ 96/113	71-114	2	11

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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Laboratories

DHRS Certification No. FA2277, R2A17

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1538
DATE SUBMITTED: January 17, 1996
DATE REPORTED : January 19, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

NAS Cecil Field

01/17/96

#1 - NTFET-023 @ 15:04

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
REPORT # : JR1538
DATE REPORTED: January 19, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

NTFFT-023

LAB BLANK

Units

Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg

Surrogate:

% RECOV

% RECOV

LIMITS

Bromofluorobenzene (surr)	70	92	44-127
Date Analyzed	01/18/96	01/18/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

NTFFT-023

LAB BLANK

Units

Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/18/96	01/18/96	

U = Compound was analyzed for but not detected

ENCO LABORATORIES

REPORT # : JR1538

DATE REPORTED: January 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-023</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/18/96	2 U 01/18/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/18/96	20 U 01/18/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/18/96	1 U 01/18/96	mg/Kg
Chromium Date Analyzed	6010	3.28 01/18/96	1 U 01/18/96	mg/Kg
Lead Date Analyzed	6010	6.97 01/18/96	1 U 01/18/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/18/96	0.01 U 01/18/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/18/96	2 U 01/18/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/18/96	2 U 01/18/96	mg/Kg

" = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR1538
 DATE REPORTED: January 19, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 96/ 92	53-152	<1	20
Toluene	80/ 80/ 78	50-145	<1	14
Ethylbenzene	74/ 74/ 72	46-135	<1	14
m-Xylene & p-Xylene	89/ 89/ 87	62-132	<1	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	93/ 89/ 94	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	97/ 97/ 96	69-118	<1	13
Barium, 6010	101/100/101	68-121	<1	18
Cadmium, 6010	99/100/100	67-118	1	14
Chromium, 6010	101/100/101	73-122	<1	21
Lead, 6010	98/ 98/ 98	55-133	<1	34
Mercury, 7471	104/107/101	69-135	3	13
Selenium, 6010	95/ 94/ 91	56-122	1	14
Silver, 6010	104/111/112	71-114	6	11

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. FR2277, R2417

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1550
DATE SUBMITTED: January 18, 1996
DATE REPORTED : January 23, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

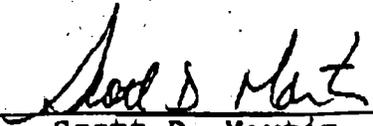
Sample submitted and
identified by client as:

NAS Cecil Field

01/18/96

#1 - NTFFT-024 @ 15:00

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1550

DATE REPORTED: January 23, 1996

PROJECT NAME ; NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-024</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	2 U	10 U	µg/Kg
Benzene	1 U	5 U	µg/Kg
Toluene	1 U	5 U	µg/Kg
Chlorobenzene	1 U	5 U	µg/Kg
Ethylbenzene	1 U	5 U	µg/Kg
m-Xylene & p-Xylene	1 U	5 U	µg/Kg
o-Xylene	1 U	5 U	µg/Kg
1,3-Dichlorobenzene	1 U	5 U	µg/Kg
1,4-Dichlorobenzene	1 U	5 U	µg/Kg
1,2-Dichlorobenzene	1 U	5 U	µg/Kg
Total Xylenes	2 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	64	92	39-125
Date Analyzed	01/19/96	01/18/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-024</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/21/96	01/21/96	

= Compound was analyzed for but not detected.

ENCO LABORATORIES
 REPORT # : JR1550
 DATE REPORTED: January 23, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-024</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/19/96	2 U 01/18/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/19/96	20 U 01/18/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/19/96	1 U 01/18/96	mg/Kg
Chromium Date Analyzed	6010	3.1 01/19/96	1 U 01/18/96	mg/Kg
Lead Date Analyzed	6010	3.571 01/19/96	1 U 01/18/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/22/96	0.01 U 01/22/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/19/96	2 U 01/18/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/19/96	2 U 01/18/96	mg/Kg

- Compound was analyzed for but not detected.

ENCO LABORATORIES

REPORT # : JR1550

DATE REPORTED: January 23, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 96/ 92	53-152	<1	20
Toluene	80/ 80/ 78	50-145	<1	14
Ethylbenzene	74/ 74/ 72	46-135	<1	14
m-Xylene & p-Xylene	89/ 89/ 87	62-132	<1	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/100/ 99	59-134	6	23
<u>Total Metals</u>				
Arsenic, 6010	97/ 97/ 96	69-118	<1	13
Barium, 6010	101/100/101	68-121	<1	18
Cadmium, 6010	99/100/100	67-110	1	14
Chromium, 6010	101/100/101	73-122	<1	21
Lead, 6010	98/ 98/ 98	55-133	<1	34
Mercury, 7471	105/105/105	70-138	<1	12
Selenium, 6010	95/ 94/ 91	56-122	1	14
Silver, 6010	104/111/112	71-114	6	11

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. 612277, 824

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1570
DATE SUBMITTED: January 19, 19
DATE REPORTED : January 24, 19

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

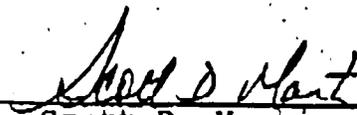
Sample submitted and
identified by client as:

NAS Cecil Field

01/19/96

#1 - NTFFT-025 @ 15:29

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1570

DATE REPORTED: January 24, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020A - <u>VOLATILE AROMATICS</u>	<u>NTFFT-025</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	20 D5	10 U	µg/Kg
Benzene	10 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	72	90	39-125
Date Analyzed	01/24/96	01/23/96	
EPA METHOD 9073 - <u>TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-025</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/21/96	01/21/96	

-- = Analyte value determined from a 1:5 dilution.

* Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1570
 DATE REPORTED: January 24, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-025</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/22/96	2 U 01/22/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/22/96	20 U 01/22/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/22/96	1 U 01/22/96	mg/Kg
Chromium Date Analyzed	6010	8.7 01/22/96	1 U 01/22/96	mg/Kg
Lead Date Analyzed	6010	41.584 01/22/96	1 U 01/22/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/22/96	0.01 U 01/22/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/22/96	2 U 01/22/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/22/96	2 U 01/22/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1570

DATE REPORTED: January 24, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 92/ 92	49-149	4	20
Toluene	80/ 76/ 76	43-144	5	14
m-Xylbenzene	74/ 70/ 72	40-135	6	14
p-Xylene & p-Xylene	78/ 74/ 76	23-167	5	89
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/100/ 99	59-134	6	23
<u>Total Metals</u>				
Arsenic, 6010	94/ 94/ 96	70-118	<1	12
Barium, 6010	97/ 98/ 98	69-120	1	17
Cadmium, 6010	98/ 99/100	69-117	1	14
Chromium, 6010	100/101/101	75-120	<1	20
Lead, 6010	98/ 99/ 98	60-130	1	31
Mercury, 7471	105/105/105	70-138	<1	12
Silver, 6010	104/104/105	69-116	<1	10
Selenium, 6010	104/101/102	58-122	3	14

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

USARF # _____

4810 Executive Park Court, Suite 211
 Jacksonville, Florida 32216-6069
 Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFT CECIL FIELD		PROJECT NO.	P.O. NUMBER	MATRIX TYPE		REQUIRED ANALYSIS		PAGE 1	OF 1					
PROJECT LOC. (State) FL	SAMPLER(S) NAME CHERI L. PARSONS		PHONE	SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLIDIFICATION NONAQUEOUS LIQUID (oil, organic, etc.) AIR SLUDGE OTHER		8020 20ml 1073 TPH 250ml NUMBER PCBs METALS 250ml NUMBER		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)						
CLIENT NAME DUST COATINGS		CLIENT PROJECT MANAGER TERRY BAIRD								FAX				
CLIENT ADDRESS (CITY, STATE, ZIP)				DATE Due: _____										
SAMPLE				SAMPLE IDENTIFICATION										
DATE	TIME	LAB	TESTS	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLIDIFICATION	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER	ANALYSIS	REMARKS
NTFT-025	01/19/92	1529	X				X						1 1 1	
SAMPLE KIT PREPARED BY: ORLANDO				DATE	TIME	RELINQUISHED BY: (SIGNATURE) <i>Cheri L. Parsons</i>		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	
RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	
RECEIVED FOR LABORATORY BY: (SIGNATURE)				DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS						

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6068
904 / 298-3007
Fax 904 / 298-6210



Laboratories

DHRS Certification No. E82277, 82477

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E - Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1577
DATE SUBMITTED: January 20, 1996
DATE REPORTED : January 24, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

NAS Cecil Field

01/20/96

#1 - NTFPT-026 @ 15:24

PROJECT MANAGER

A handwritten signature in cursive script, appearing to read "Scott D. Martin", written over a horizontal line.
Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1577
 DATE REPORTED: January 24, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-026</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	20 D5	10 U	µg/Kg
Benzene	10 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogates:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	68	90	39-125
Date Analyzed	01/24/96	01/23/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-026</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/21/96	01/21/96	

5 = Analyte value determined from a 1:5 dilution.
 U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1577

DATE REPORTED: January 24, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-026</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/22/96	2 U 01/22/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/22/96	20 U 01/22/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/22/96	1 U 01/22/96	mg/Kg
Chromium Date Analyzed	6010	2.87 01/22/96	1 U 01/22/96	mg/Kg
Lead Date Analyzed	6010	3.903 01/22/96	1 U 01/22/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/22/96	0.01 U 01/22/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/22/96	2 U 01/22/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/22/96	2 U 01/22/96	mg/Kg

* Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1577

DATE REPORTED: January 24, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 92/ 92	49-149	4	20
Toluene	80/ 76/ 76	43-144	5	14
Ethylbenzene	74/ 70/ 72	40-135	6	14
m-Xylene & p-Xylene	78/ 74/ 76	23-167	5	89
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/100/ 99	59-134	6	23
<u>Total Metals</u>				
Arsenic, 6010	94/ 94/ 96	70-118	<1	12
Barium, 6010	97/ 98/ 98	69-120	1	17
Cadmium, 6010	98/ 99/100	69-117	1	14
Chromium, 6010	100/101/101	75-120	<1	20
Lead, 6010	98/ 99/ 98	60-130	1	31
Mercury, 7471	105/105/105	70-138	<1	12
Selenium, 6010	104/101/102	58-122	3	14
Silver, 6010	104/104/105	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. E02277. 82417

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1586
DATE SUBMITTED: January 22, 1996
DATE REPORTED : January 25, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

01/22/96

#1 - NTFFT-027 @ 15:16

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1586

DATE REPORTED: January 25, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-027</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	68	90	39-125
Date Analyzed	01/24/96	01/23/96	

<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-027</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/25/96	01/25/96	

* = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1586
 DATE REPORTED: January 25, 1996
 PROJECT NAME : NAG Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-027</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/24/96	2 U 01/24/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/24/96	20 U 01/24/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/24/96	1 U 01/24/96	mg/Kg
Chromium Date Analyzed	6010	2.4 01/24/96	1 U 01/24/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/25/96	0.01 U 01/25/96	mg/Kg
Lead Date Analyzed	6010	3.3 01/24/96	1 U 01/24/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/24/96	2 U 01/24/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/24/96	2 U 01/24/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # ; JR1586
 DATE REPORTED: January 25, 1996
 PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 92/ 92	49-149	4	20
Toluene	80/ 76/ 76	43-144	5	14
Ethylbenzene	74/ 70/ 72	40-135	6	14
m-Xylene & p-Xylene	78/ 74/ 76	23-167	5	89
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/100/ 91	59-134	6	23
<u>Total Metals</u>				
Silver, 6010	104/104/103	69-116	<1	10
Arsenic, 6010	89/ 88/ 88	70-118	1	12
Barium, 6010	93/ 93/ 92	69-120	<1	17
Cadmium, 6010	94/ 95/ 94	69-117	1	14
Chromium, 6010	100/ 95/ 98	75-120	5	20
Mercury, 7471	111/104/102	70-138	6	12
Lead, 6010	94/ 95/ 93	60-130	1	31
Selenium, 6010	100/ 98/ 98	58-122	2	14

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. E82377, 82417

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1599
DATE SUBMITTED: January 23, 1996
DATE REPORTED : January 26, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

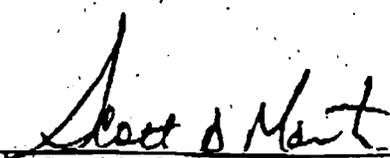
Sample submitted and
identified by client as:

NAS Cecil Field

01/23/96

#1 - NTFET-028 @ 14:55

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1599

DATE REPORTED: January 26, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8030A -
VOLATILE AROMATICS

	<u>NTPFT-028</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	15	10 U	
Benzene	10	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	80	92	39-125
Date Analyzed	01/24/96	01/23/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTPFT-028</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/25/96	01/25/96	

" - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1599
 DATE REPORTED: January 26, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-028</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/25/96	2 U 01/25/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/25/96	20 U 01/25/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/25/96	1 U 01/25/96	mg/Kg
Chromium Date Analyzed	6010	3.4 01/25/96	1 U 01/25/96	mg/Kg
Lead Date Analyzed	6010	3.64 01/25/96	1 U 01/25/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/25/96	0.01 U 01/25/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/25/96	2 U 01/25/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/25/96	2 U 01/25/96	mg/Kg

" = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1599
 DATE REPORTED: January 26, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 92/ 92	49-149	4	20
Toluene	80/ 76/ 76	43-144	5	14
Ethylbenzene	74/ 70/ 72	40-135	6	14
m-Xylene & p-Xylene	78/ 74/ 76	23-167	5	89
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/100/ 99	59-134	6	23
<u>Total Metals</u>				
Arsenic, 6010	93/ 95/ 92	70-118	2	12
Barium, 6010	98/ 98/ 98	69-120	<1	17
Cadmium, 6010	97/ 98/ 98	69-117	1	14
Chromium, 6010	97/ 96/ 97	75-120	1	20
Lead, 6010	101/100/ 97	60-130	<1	31
Mercury, 7471	111/104/102	70-138	6	12
Selenium, 6010	90/ 92/ 88	58-122	2	14
Silver, 6010	105/104/104	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-8089
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. ER2277, 82417

CLIENT : DUSTCOATING Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1613
DATE SUBMITTED: January 24, 1996
DATE REPORTED : January 26, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

NAS Cecil Field

01/24/96

#1 - NTFFT-029 @ 15:21

PROJECT MANAGER

A handwritten signature in cursive script that reads "Scott D. Martin".

Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1613

DATE REPORTED: January 26, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-029</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene (surr)	82	92	39-125
Date Analyzed	01/26/96	01/25/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-029</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/25/96	01/25/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1613
 DATE REPORTED: January 26, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-029</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/26/96	2 U 01/25/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/26/96	20 U 01/25/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/26/96	1 U 01/25/96	mg/Kg
Chromium Date Analyzed	6010	3.38 01/26/96	1 U 01/25/96	mg/Kg
Lead Date Analyzed	6010	3.12 01/26/96	1 U 01/25/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/25/96	0.01 U 01/25/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/26/96	2 U 01/25/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/26/96	2 U 01/25/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1613

DATE REPORTED: January 26, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 92/ 92	49-149	4	20
Toluene	80/ 76/ 76	43-144	5	14
Ethylbenzene	74/ 70/ 72	40-135	6	14
m-Xylene & p-Xylene	78/ 74/ 76	23-167	5	89
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/100/ 99	59-134	6	23
<u>Total Metals</u>				
Arsenic, 6010	93/ 95/ 92	70-118	2	12
Barium, 6010	98/ 98/ 98	69-120	<1	17
Cadmium, 6010	97/ 98/ 98	69-117	1	14
Chromium, 6010	97/ 96/ 97	75-120	1	20
Lead, 6010	101/100/ 97	60-130	<1	31
Mercury, 7471	111/104/102	70-138	6	12
Selenium, 6010	90/ 92/ 88	58-122	2	14
Silver, 6010	105/104/104	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



DHRS Certification No. E22277, 02417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1620
DATE SUBMITTED: January 25, 1996
DATE REPORTED : January 31, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

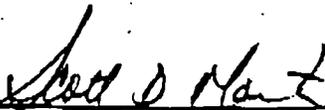
PROJECT #: NTFFT-30

NAS Cecil Field

01/25/96

#1 - NTFFT-30 @ 14:50

OBJECT MANAGER



Scott D. Martin

EMCO LABORATORIES
REPORT # : JR1620
DATE REPORTED: January 31, 1996
REFERENCE : NTFPT-30
PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTFPT-30</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	20 D5	10 U	µg/Kg
Benzene	15 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	80	92	39-125
Date Analyzed	01/26/96	01/25/96	

**EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS**

	<u>NTFPT-30</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/30/96	01/30/96	

D5 = Analyte value determined from a 1:5 dilution.
 U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1620
 DATE REPORTED: January 31, 1996
 REFERENCE : NTFFT-30
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-30</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/29/96	20 U 01/29/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/29/96	1 U 01/29/96	mg/Kg
Chromium Date Analyzed	6010	3.92 01/29/96	1 U 01/29/96	mg/Kg
Lead Date Analyzed	6010	4.08 01/29/96	1 U 01/29/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/30/96	0.01 U 01/30/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg

U - Compound was analyzed for but not detected to the level shown.

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
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Fax 904 / 296-6210



Laboratories

DHRS Certification No. EB2277, 62417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1628
DATE SUBMITTED: January 26, 1996
DATE REPORTED : January 31, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

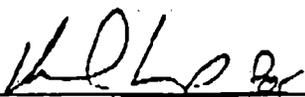
Sample submitted and
identified by client as:

NAS Cecil Field

01/26/96

#1 - NTFFT-31 @ 14:50

OBJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1628
 DATE REPORTED: January 31, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>BPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTEFT-31</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	20	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	5 U	10 U	µg/Kg
<u>Surrogates:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	54	90	39-125
Date Analyzed	01/31/96	01/31/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTEFT-31</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/30/96	01/30/96	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR1628
 DATE REPORTED: January 31, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-31</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/29/96	20 U 01/29/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/29/96	1 U 01/29/96	mg/Kg
Chromium Date Analyzed	6010	5.45 01/29/96	1 U 01/29/96	mg/Kg
Lead Date Analyzed	6010	4.05 01/29/96	1 U 01/29/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/30/96	0.01 U 01/30/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1628
 DATE REPORTED: January 31, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	84/ 80/ 88	49-149	2	20
Toluene	72/ 68/ 76	43-144	6	14
Ethylbenzene	68/ 64/ 72	40-135	6	14
m-Xylene & p-Xylene	76/ 71/ 77	23-167	7	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	102/100/ 98	70-118	2	12
Barium, 6010	98/ 98/ 98	69-120	<1	17
Cadmium, 6010	100/100/101	69-117	<1	14
Chromium, 6010	100/100/ 98	75-120	<1	20
Lead, 6010	103/103/101	60-130	<1	31
Mercury, 7471	119/119/115	70-138	<1	12
Selenium, 6010	100/100/ 97	58-122	<1	14
Silver, 6010	110/111/112	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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QSARF # _____

4810 Executive Park Court, Suite 211
 Jacksonville, Florida 32216-6069
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10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT-31					PROJECT NO.		P.O. NUMBER		MATRIX TYPE		REQUIRED ANALYSIS				PAGE	OF		
PROJECT LOC. (State) FL.		SAMPLER(S) NAME WG-HEDGER			PHONE 3639999		FAX		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOL/SOL OR SEDIMENT NON-AQUEOUS LIQUID (oil, organic, etc.) AIR SLUDGE OTHER		8020		TPH 9073		RCRA METALS		<input type="checkbox"/> STANDARD REPORT DELIVERY	
CLIENT NAME DUST COATINGS					CLIENT PROJECT MANAGER TERRY BAIRD		<input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)											
CLIENT ADDRESS (CITY, STATE, ZIP)					Date Due: _____													
SAMPLE					REMARKS													
STEP	DATE	TIME	INITIALS	REMARKS	SAMPLE IDENTIFICATION													
NTFFT-31	1-26-96	1450		<input checked="" type="checkbox"/>	NTFFT-31													
SAMPLE KIT PREPARED BY: JACKSONVILLE ORLANDO					DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME
RECEIVED BY: (SIGNATURE)					DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE)					DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
1-26-96 1529					CUSTODY INTACT		ENCO LOG NO		REMARKS									

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



DHRS Certification No. ER2277, 92117

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1635
DATE SUBMITTED: January 27, 1996
DATE REPORTED : January 31, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

PROJECT #: NTFFT-32

NAS Cecil Field

01/27/96

#1 - NTFFT-32 @ 13:20

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1635
 DATE REPORTED: January 31, 1996
 REFERENCE : NTFFT-32
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020A -
 VOLATILE AROMATICS

	<u>NTFFT-32</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	23	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	23 U	10 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	78	90	39-125
Date Analyzed	01/31/96	01/31/96	

EPA METHOD 9073 -
 TOTAL PETR. HYDROCARBONS

	<u>NTFFT-32</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/30/96	01/30/96	

U = Compound was analyzed for but not detected

ENCO LABORATORIES
 REPORT # : JR1635
 DATE REPORTED: January 31, 1996
 REFERENCE : NTFFT-32
 PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-32</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/29/96	20 U 01/29/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/29/96	1 U 01/29/96	mg/Kg
Chromium Date Analyzed	6010	2.75 01/29/96	1 U 01/29/96	mg/Kg
Lead Date Analyzed	6010	4.83 01/29/96	1 U 01/29/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/30/96	0.01 U 01/30/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/29/96	2 U 01/29/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1635
 DATE REPORTED: January 31, 1996
 REFERENCE : NTFFT-32
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	84/ 80/ 88	49-149	2	20
Toluene	72/ 68/ 76	43-144	6	14
Ethylbenzene	68/ 64/ 72	40-135	6	14
m-Xylene & p-Xylene	76/ 71/ 77	23-167	7	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	94/ 93/ 95	70-118	1	12
Barium, 6010	101/101/102	69-120	<1	17
Cadmium, 6010	102/102/104	69-117	<1	14
Chromium, 6010	102/ 96/ 98	75-120	6	20
Lead, 6010	103/105/105	60-130	2	31
Mercury, 7471	119/119/115	70-138	<1	12
Selenium, 6010	97/ 96/ 98	58-122	1	14
Silver, 6010	106/105/108	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-5945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT-32		PROJECT NO. NTFFT-32	P.O. NUMBER	MATRIX TYPE										REQUIRED ANALYSIS										PAGE	OF		
PROJECT LOC. (State) FL	SAMPLE NAME W/2 Hedy		PHONE 363 2999	SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (oil, grease, etc.) AIR SLOPES OTHER										8030 TPH 2013 PCPA METALS										<input type="checkbox"/> STANDARD REPORT DELIVERY* <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)		Date Due: _____	
CLIENT NAME DUST COATINGS		CLIENT PROJECT MANAGER TERRY BAIRD																						FAX		PRESERVATIVE	
CLIENT ADDRESS (CITY, STATE, ZIP)				SAMPLE		SAMPLE IDENTIFICATION																					
PROJECT	DATE	TIME	RECD	DATE	TIME	SAMPLE IDENTIFICATION																					
NTFFT-32	1-27-94	1320		✓		NTFFT-32																					
SAMPLE KIT PREPARED BY: C JACKSONVILLE C ORLANDO				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME										
RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME										
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME										
RECEIVED FOR LABORATORY BY: (SIGNATURE)				DATE	TIME	CUSTODY INTACT		ENCO LOG NO.		REMARKS																	

585



CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1638
DATE SUBMITTED: January 29, 1996
DATE REPORTED : February 1, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

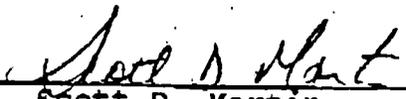
Sample submitted and
identified by client as:

NAS Cecil Field

01/29/96

#1 - NTFFT-33 @ 15:20

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1638

DATE REPORTED: February 1, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-33</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	15	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogates:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	80	90	39-125
Date Analyzed	01/31/96	01/30/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-33</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	01/30/96	01/30/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1638
 DATE REPORTED: February 1, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-33</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/30/96	2 U 01/29/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/30/96	20 U 01/29/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/30/96	1 U 01/29/96	mg/Kg
Chromium Date Analyzed	6010	2.88 01/30/96	1 U 01/29/96	mg/Kg
Lead Date Analyzed	6010	3.56 01/30/96	1 U 01/29/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/30/96	0.01 U 01/30/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/30/96	2 U 01/29/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/30/96	2 U 01/29/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1G38
 DATE REPORTED: February 1, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	84/ 80/ 88	49-149	5	20
Toluene	72/ 68/ 76	43-144	6	14
Ethylbenzene	68/ 64/ 72	40-135	6	14
m-Xylene & p-Xylene	76/ 71/ 77	23-167	7	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	94/ 93/ 95	70-118	1	12
Barium, 6010	101/101/102	69-120	<1	17
Cadmium, 6010	102/102/104	69-117	<1	14
Chromium, 6010	102/ 96/ 98	75-120	6	20
Lead, 6010	103/105/105	60-130	2	31
Mercury, 7471	119/119/115	70-138	<1	12
Selenium, 6010	97/ 96/ 98	58-122	1	14
Silver, 6010	106/105/108	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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 Orlando, Florida 32824
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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT-33		PROJECT NO. NTFFT-33		P.O. NUMBER		MATERIAL TYPE		REQUIRED ANALYSIS		PAGE		OF	
PROJECT LOC. (State) FL		SAMPLER(S) NAME W.G. HEDGER		PHONE 363 9999		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NON-AQUEOUS LIQUID (e.g., oil, grease, etc.) AIR SLUDGE OTHER		8020 TPH 8073 RCRA METALS		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)		Extra Due: _____ REMARKS	
CLIENT NAME DUST COATINGS		CLIENT PROJECT MANAGER TERRY BAIRD		FAX									
CLIENT ADDRESS (CITY, STATE, ZIP)													
SAMPLE		DATE		TIME		SAMPLE IDENTIFICATION		PRESERVATIVE		REMARKS			
NTFFT-33	1-29-96	1520	<input checked="" type="checkbox"/>	NTFFT-33									
SAMPLE KIT PREPARED BY: JACKSONVILLE ORLANDO		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME		
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME		
RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE) <i>W.G. Hedger</i>		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME		
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>Scott D. Mart</i>		DATE 1/29/96	TIME 1600	CUSTODY INTACT	ENCO LOG NO.	REMARKS							



CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1649
DATE SUBMITTED: January 30, 1996
DATE REPORTED : February 2, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

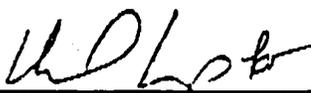
PROJECT #: NTFFT-34

NAS Cecil Field

01/30/96

#1 - NTFFT-34 @ 14:50

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1649
 DATE REPORTED: February 2, 1996
 REFERENCE : NTFET-34
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFET-34</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	84	90	39-125
Date Analyzed	02/01/96	01/30/96	

<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFET-34</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/02/96	02/02/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1649
 DATE REPORTED: February 2, 1996
 REFERENCE : NTFFT-34
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-34</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 01/31/96	2 U 01/31/96	mg/Kg
Barium Date Analyzed	6010	20 U 01/31/96	20 U 01/31/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 01/31/96	1 U 01/31/96	mg/Kg
Chromium Date Analyzed	6010	2.65 01/31/96	1 U 01/31/96	mg/Kg
Lead Date Analyzed	6010	3.78 01/31/96	1 U 01/31/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 01/31/96	0.01 U 01/31/96	mg/Kg
Selenium Date Analyzed	6010	2 U 01/31/96	2 U 01/31/96	mg/Kg
Silver Date Analyzed	6010	2 U 01/31/96	2 U 01/31/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1649
 DATE REPORTED: February 2, 1996
 REFERENCE : NTFFT-34
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	84/ 80/ 88	49-149	5	20
Toluene	72/ 68/ 76	43-144	6	14
Ethylbenzene	68/ 64/ 72	40-135	6	14
m-Xylene & p-Xylene	76/ 71/ 77	23-167	7	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	109/ 95/100	70-118	*14	12
Barium, 6010	109/ 92/107	69-120	17	17
Cadmium, 6010	100/102/105	69-117	2	14
Chromium, 6010	95/ 98/100	75-120	3	20
Lead, 6010	94/ 98/ 94	60-130	4	31
Mercury, 7471	102/103/105	70-138	<1	12
Selenium, 6010	92/ 93/ 96	58-122	1	14
Silver, 6010	104/109/108	69-116	5	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- * - Associated value did not meet associated value for precision
- < - Less Than
- MS - Matrix Spike
- MSD - Matrix Spike Duplicate
- LCS - Laboratory Control Standard
- RPD - Relative Percent Difference

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ENCO LABORATORIES
REPORT # : JR1660

ENCO LABORATORIES

REPORT # : JR1660

DATE REPORTED: February 5, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-035</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	80	90	39-125
Date Analyzed	02/01/96	01/31/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-035</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/02/96	02/02/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR1660
DATE REPORTED: February 5, 1996
PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFPT-035</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/04/96	2 U 02/04/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/04/96	20 U 02/04/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/04/96	1 U 02/04/96	mg/Kg
Chromium Date Analyzed	6010	3.36 02/04/96	1 U 02/04/96	mg/Kg
Lead Date Analyzed	6010	4.066 02/04/96	1 U 02/04/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/01/96	0.01 U 02/01/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/04/96	2 U 02/04/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/04/96	2 U 02/04/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1660

DATE REPORTED: February 5, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	84/ 80/ 88	49-149	5	20
Toluene	72/ 68/ 76	43-144	6	14
Ethylbenzene	68/ 64/ 72	40-135	6	14
m-Xylene & p-Xylene	76/ 71/ 77	23-167	7	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	103/ 99/102	70-118	4	12
Barium, 6010	99/ 99/ 99	69-120	<1	17
Cadmium, 6010	99/100/100	69-117	1	14
Chromium, 6010	102/103/103	75-120	<1	20
Lead, 6010	99/100/100	60-130	1	31
Mercury, 7471	120/119/119	70-138	<1	12
Selenium, 6010	97/ 98/ 98	58-122	1	14
Silver, 6010	111/111/107	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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 Orlando, Florida 32824
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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT-35		PROJECT NO. NTFFT-35		P.O. NUMBER		MATRIX TYPE		REQUIRED ANALYSIS		PAGE		OF	
PROJECT LOC. (State) FL.		SAMPLER(S) NAME WG-Hedger		PHONE 363 9989		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (and vapors, etc.) AIR SLUDGE OTHER		8020 TPH 9073 PCRA METALS		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)		Date Due: _____ REMARKS	
CLIENT NAME DUST COATINGS		CLIENT PROJECT MANAGER TERRY BAIRD		FAX									
CLIENT ADDRESS (CITY, STATE, ZIP)													
SAMPLE					SAMP LE IDENTIFICATION								
STATION	DATE	TITLE	GRAB	COMB									
NTFFT-35	1-31-96	1446		✓	NTFFT-35								
SAMPLE KIT PREPARED BY: JACKSONVILLE ORLANDO		DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)			
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)			
RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE) WG Hedger				DATE	TIME	RECEIVED BY: (SIGNATURE)			
RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE	TIME	CUSTODY INTACT		ENCO LOG NO.		REMARKS					

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

CHRS Certification No. FA2277, A2417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1671
DATE SUBMITTED: February 1, 1996
DATE REPORTED : February 6, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

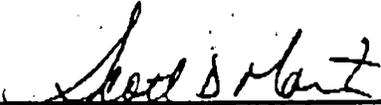
PROJECT #: NTFFT-36

NAS Cecil Field

02/01/96

#1 - NTFFT-36 @ 15:00

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1671
 DATE REPORTED: February 6, 1996
 REFERENCE : NTFPT-36
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFPT-36</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	15 D5	10 U	µg/Kg
Benzene	10 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	68	84	39-125
Date Analyzed	02/02/96	02/02/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFPT-36</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/02/96	02/02/96	

D5 = Analyte value determined from a 1:5 dilution.
 U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1671
 DATE REPORTED: February 6, 1996
 REFERENCE : NTFFT-36
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-36</u>	<u>LAE BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/05/96	2 U 02/05/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/05/96	20 U 02/04/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/05/96	1 U 02/04/96	mg/Kg
Chromium Date Analyzed	6010	3.71 02/05/96	1 U 02/04/96	mg/Kg
Lead Date Analyzed	6010	4.915 02/05/96	1 U 02/04/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/01/96	0.01 U 02/01/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/05/96	2 U 02/04/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/05/96	2 U 02/04/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1671
DATE REPORTED: February 6, 1996
REFERENCE : NTFFT-36
PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	92/ 78/ 86	49-149	16	20
Toluene	74/ 68/ 70	43-144	8	14
Ethylbenzene	68/ 62/ 66	40-135	9	14
m-Xylenc & p-Xylene	82/ 69/ 70	23-167	*17	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	103/ 99/102	70-118	4	12
Barium, 6010	99/ 99/ 99	69-120	<1	17
Cadmium, 6010	99/100/100	69-117	1	14
Chromium, 6010	102/103/103	75-120	<1	20
Lead, 6010	99/100/100	60-130	1	31
Mercury, 7471	120/119/119	70-138	<1	12
Selenium, 6010	97/ 98/ 98	58-122	1	14
Silver, 6010	111/111/107	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- * = Associated value failed to meet established criteria for precision
- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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THUR.



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Orlando, Florida 32824
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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT-36		PROJECT NO. NTFFT-36	PO. NUMBER	MATRIX TYPE		REQUIRED ANALYSIS		PAGE	OF		
PROJECT LOC. (State) FL.	SAMPLER(S) NAME W.G. HEDGER		PHONE 363 9999	SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (e.g. OIL/WATER, etc.) AIR SLUDGE OTHER		8020 TPH 2013 PCDD METALS		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)			
CLIENT NAME GUST COATINGS		CLIENT PROJECT MANAGER TERRY BAIRD									
CLIENT ADDRESS (CITY, STATE, ZIP)				DATE		PRESERVATIVE		REMARKS			
SAMPLE				SAMPLE IDENTIFICATION							
DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME		
NTFFT-36	2-1-96	1500	<input checked="" type="checkbox"/>	NTFFT-36	<input checked="" type="checkbox"/>	1	1				
SAMPLE NO. PREPARED BY: JACKSONVILLE ORLANDO				DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)	
RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)	
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)	
RECEIVED FOR LABORATORY BY: (SIGNATURE)				DATE	TIME	CUSTODY INTACT		ENCO LOG NO.	REMARKS		

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Jacksonville, Florida 32216-6069
904 / 296-3007
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Laboratories

DIME Certification No. E02277, 62417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1679
DATE SUBMITTED: February 2, 1996
DATE REPORTED : February 6, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

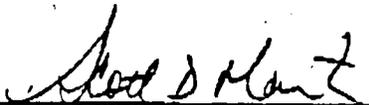
PROJECT #: NTFFT-37

NAS Cecil Field

02/02/96

#1 - NTFFT-37 @ 15:20

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1679
DATE REPORTED: February 6, 1996
REFERENCE : NTFFT-37
PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020A - VOLATILE AROMATICS	NTFFT-37	LAB BLANK	Units
Methyl tert-butyl ether	20 D5	10 U	µg/Kg
Benzene	10 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	68	88	39-125
Date Analyzed	02/05/96	02/05/96	
EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	NTFFT-37	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/06/96	02/06/96	

D5 = Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1679
 DATE REPORTED: February 6, 1996
 REFERENCE : NTFEFT-37
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFEFT-37</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/06/96	2 U 02/06/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/06/96	20 U 02/06/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/06/96	1 U 02/06/96	mg/Kg
Chromium Date Analyzed	6010	2.545 02/06/96	1 U 02/06/96	mg/Kg
Lead Date Analyzed	6010	4.33 02/06/96	1 U 02/06/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/06/96	0.01 U 02/06/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/06/96	2 U 02/06/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/06/96	2 U 02/06/96	mg/Kg

* Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1679
 DATE REPORTED: February 6, 1996
 REFERENCE : NTFRT-37
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	86/ 88/ 86	49-149	2	20
Toluene	72/ 74/ 72	43-144	3	14
Ethylbenzene	66/ 68/ 68	40-135	3	14
m-Xylene & p-Xylene	78/ 80/ 78	23-167	2	10
<u>EPA Method 9071</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	105/ 97/107	70-118	8	12
Barium, 6010	111/102/111	69-120	8	17
Cadmium, 6010	108/100/110	69-117	8	14
Chromium, 6010	109/101/110	75-120	8	20
Lead, 6010	112/104/112	60-130	7	31
Mercury, 7471	139/143/133	70-138	3	12
Selenium, 6010	104/ 98/107	58-122	6	14
Silver, 6010	110/112/115	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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 Orlando, Florida 32824
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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFF-37		PROJECT NO. NTFF-37		P.O. NUMBER		<table border="1"> <tr> <td colspan="10">MATRIX TYPE</td> <td colspan="10">REQUIRED ANALYSIS</td> </tr> <tr> <td colspan="10" rowspan="3"> SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOILS/SOLID/SEDIMENT MONOQUEOUS LIQUID (w/ solvent, etc) AIR SLUDGE OTHER </td> <td colspan="10" rowspan="3"> 8020 TPH 9013 PCRA METALS </td> </tr> <tr> <td colspan="10">PRESERVATIVE</td> <td colspan="10"></td> </tr> <tr> <td colspan="10"></td> <td colspan="10"></td> </tr> </table>										MATRIX TYPE										REQUIRED ANALYSIS										SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOILS/SOLID/SEDIMENT MONOQUEOUS LIQUID (w/ solvent, etc) AIR SLUDGE OTHER										8020 TPH 9013 PCRA METALS										PRESERVATIVE																																								PAGE		OF	
MATRIX TYPE																REQUIRED ANALYSIS																																																																																			
SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOILS/SOLID/SEDIMENT MONOQUEOUS LIQUID (w/ solvent, etc) AIR SLUDGE OTHER																8020 TPH 9013 PCRA METALS																																																																																			
																										PRESERVATIVE																																																																									
PROJECT LOC. (State) FL		SAMPLER(S) NAME WG HEDGER				PHONE 363 9927		FAX		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due _____ REMARKS _____																																																																																									
CLIENT NAME DUST COATINGS				CLIENT PROJECT MANAGER TERRY BAIRD																																																																																															
CLIENT ADDRESS (CITY, STATE, ZIP)																																																																																																			
SAMPLE						SAMP LE IDENTIFICATION																																																																																													
DATE	TIME	GRAS	COMP	SAMP LE IDENTIFICATION																																																																																															
NTFF-37	2:296	1520		✓	NTFF-37																																																																																														
SAMPLE NOT PREPARED BY:						DATE		TIME		RELINQUISHED BY: (SIGNATURE)				DATE		TIME		RECEIVED BY: (SIGNATURE)				DATE		TIME																																																																											
<input type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO																																																																																																			
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<input type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO						DATE		TIME		CUSTODY INTACT				ENCO LOG NO.		REMARKS				DATE		TIME																																																																													
<input checked="" type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO						2-2-96		1511K						401120																																																																																					

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6059
904 / 296-3607
Fax 904 / 296-6210



Laboratories

DHFS Certification No. E32277-52417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1683
DATE SUBMITTED: February 3, 1996
DATE REPORTED : February 6, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

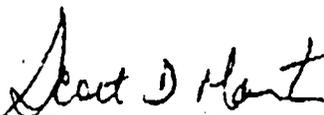
PROJECT #: NTFFT-38

NAS Cecil Field

02/03/96

#1 - NTFFT-38 @ 13:45

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1688
DATE REPORTED: February 6, 1996
REFERENCE : NTFFT-38
PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

	<u>NTFFT-38</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	25 D5	10 U	µg/Kg
Benzene	15 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	68	88	39-125
Date Analyzed	02/06/96	02/05/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-38</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/06/96	02/06/96	

D5 = Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1688
 DATE REPORTED: February 6, 1996
 REFERENCE : NTFFT-38
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-38</u>	<u>LAB BLANK</u>	<u>Unit:</u>
Arsenic Date Analyzed	6010	2 U 02/06/96	2 U 02/06/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/06/96	20 U 02/06/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/06/96	1 U 02/06/96	mg/Kg
Chromium Date Analyzed	6010	3.285 02/06/96	1 U 02/06/96	mg/Kg
Lead Date Analyzed	6010	4.125 02/06/96	1 U 02/06/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/06/96	0.01 U 02/06/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/06/96	2 U 02/06/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/05/96	2 U 02/06/96	mg/Kg

" - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1688
 DATE REPORTED: February 6, 1996
 REFERENCE : NITFT-38
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCE</u> <u>LIMIT</u>
<u>EPA Method 8020A</u>				
Benzene	86/ 88/ 86	49-149	2	20
Toluene	72/ 74/ 72	43-144	3	14
Ethylbenzene	66/ 68/ 68	40-135	3	14
m-Xylene & p-Xylene	78/ 80/ 78	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	105/ 97/107	70-118	8	12
Barium, 6010	111/102/111	69-120	8	17
Cadmium, 6010	108/100/110	69-117	8	14
Chromium, 6010	109/101/110	75-120	8	20
Lead, 6010	112/104/112	60-130	7	31
Mercury, 7471	139/143/133	70-138	3	12
Selenium, 6010	104/ 98/107	58-122	6	14
Silver, 6010	110/112/115	69-116	2	10

Environmental Conservation Laboratories Comprehensive OA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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CLIENT : Dustcoating Inc.
ADDRESS: Quarters E - Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1694
DATE SUBMITTED: February 5, 1996
DATE REPORTED : February 8, 1996

PAGE 1 OF 7

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

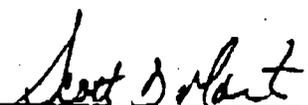
Samples submitted and
identified by client as:

NAS Cecil Field

02/05/96

#1 - NTFFT-39 @ 16:25

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1694
 DATE REPORTED: February 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 7

RESULTS OF ANALYSIS

<u>EPA METHOD 8010A - VOLATILE HALOCARBONS</u>	<u>NTPYT-39</u>	<u>LAB BLANK</u>	<u>Units</u>
Dichlorodifluoromethane	5 U	5 U	µg/Kg
Chloromethane	10 U	10 U	µg/Kg
Vinyl Chloride	5 U	5 U	µg/Kg
Bromomethane	5 U	5 U	µg/Kg
Chloroethane	10 U	10 U	µg/Kg
Trichlorofluoromethane	10 U	10 U	µg/Kg
1,1-Dichloroethene	10 D5	5 U	µg/Kg
Methylene Chloride	10 U	10 U	µg/Kg
t-1,2-Dichloroethene	5 U	5 U	µg/Kg
1,1-Dichloroethane	5 U	5 U	µg/Kg
Chloroform	5 U	5 U	µg/Kg
1,1,1-Trichloroethane	5 U	5 U	µg/Kg
Carbon Tetrachloride	5 U	5 U	µg/Kg
1,2-Dichloroethane	5 U	5 U	µg/Kg
Trichloroethene	5 U	5 U	µg/Kg
1,2-Dichloropropane	5 U	5 U	µg/Kg
Bromodichloromethane	5 U	5 U	µg/Kg
c-1,3-Dichloropropene	5 U	5 U	µg/Kg
t-1,3-Dichloropropene	5 U	5 U	µg/Kg
1,1,2-Trichloroethane	5 U	5 U	µg/Kg
Tetrachloroethene	5 U	5 U	µg/Kg
Dibromochloromethane	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Bromoform	5 U	5 U	µg/Kg
1,1,2,2-Tetrachloroethane	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	96	96	30-153
Date Analyzed	02/06/96	02/05/96	

D5 = Analyte value determined from a 1:5 dilution.
 U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1694
 DATE REPORTED: February 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 7

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTTFT-39</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	76	88	39-125
Date Analyzed	02/06/96	02/05/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTTFT-39</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	22	5 U	mg/Kg
Date Analyzed	02/06/96	02/06/96	

U - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1624
 DATE REPORTED: February 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 7

RESULTS OF ANALYSIS

<u>EPA METHOD 8100 - POLY AROMATIC HYDROCARBONS</u>	<u>NTTFT-39</u>	<u>LAB BLANK</u>	<u>Units</u>
Naphthalene	330 U	330 U	µg/Kg
2-Methylnaphthalene	330 U	330 U	µg/Kg
1-Methylnaphthalene	330 U	330 U	µg/Kg
Acenaphthylene	330 U	330 U	µg/Kg
Acenaphthene	330 U	330 U	µg/Kg
Fluorene	330 U	330 U	µg/Kg
Phenanthrene	330 U	330 U	µg/Kg
Anthracene	330 U	330 U	µg/Kg
Fluoranthene	330 U	330 U	µg/Kg
Pyrene	330 U	330 U	µg/Kg
Chrysene	330 U	330 U	µg/Kg
Benzo(a)anthracene	330 U	330 U	µg/Kg
Benzo(b,k)fluoranthene	330 U	330 U	µg/Kg
Benzo(a)pyrene	330 U	330 U	µg/Kg
Indeno(1,2,3-cd)pyrene	330 U	330 U	µg/Kg
Dibenzo(a,h)anthracene	330 U	330 U	µg/Kg
Benzo(g,h,i)perylene	330 U	330 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
2-Fluorobiphenyl	78	67	30-129
Date Extracted	02/07/96	02/07/96	
Date Analyzed	02/07/96	02/07/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES**REPORT # : JR1694****DATE REPORTED: February 8, 1996****PROJECT NAME : NAS Cecil Field****PAGE 5 OF 7****RESULTS OF ANALYSIS**

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTTFT-32</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/06/96	2 U 02/06/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/06/96	20 U 02/06/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/06/96	1 U 02/06/96	mg/Kg
Chromium Date Analyzed	6010	4.42 02/06/96	1 U 02/06/96	mg/Kg
Lead Date Analyzed	6010	4.06 02/06/96	1 U 02/06/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/06/96	0.01 U 02/06/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/06/96	2 U 02/06/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/06/96	2 U 02/06/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1694

DATE REPORTED: February 8, 1996

PROJECT NAME : NAS Cecil Field

PAGE 6 OF 7

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8010A</u>				
Methylene Chloride	88/ 86/ 84	13-191	2	27
Chloroform	98/ 98/ 96	46-152	<1	18
Carbon Tetrachloride	90/ 90/ 86	53-151	<1	20
Trichloroethene	88/ 94/ 86	28-164	6	25
Tetrachloroethene	86/ 86/ 84	55-145	<1	20
Chlorobenzene	89/ 90/ 84	60-137	1	20
<u>EPA Method 8020A</u>				
Benzene	86/ 88/ 86	49-149	2	20
Toluene	72/ 74/ 72	43-144	3	14
Ethylbenzene	66/ 68/ 68	40-135	3	14
m-Xylene & p-Xylene	78/ 80/ 78	23-167	2	10
<u>EPA Method 8100</u>				
2-Methylnaphthalene	82/ 84/ 90	26-132	2	23
1-Methylnaphthalene	78/ 80/ 85	21-140	2	22
Acenaphthylene	75/ 76/ 84	18-154	1	17
Fluorene	82/ 84/ 97	21-160	2	14
Pyrene	80/ 82/ 97	21-173	2	16

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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ENCO LABORATORIES
REPORT # : JR1694
DATE REPORTED: February 8, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	105/ 97/107	70-118	8	12
Barium, 6010	111/102/111	69-120	8	17
Cadmium, 6010	108/100/110	69-117	8	14
Chromium, 6010	109/101/110	75-120	8	20
Lead, 6010	112/104/112	60-130	7	31
Mercury, 7471	*139/143/133	70-138	3	12
Selenium, 6010	104/ 98/107	58-122	6	14
Silver, 6010	110/112/115	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- * - Associated value failed to meet established criteria for accuracy
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

QSARF # _____

4810 Executive Park Cour, Suite 211
 Jacksonville, Florida 32216-6069
 Ph. (904) 296-3007 - Fax (904) 296-8210

10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 - Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFF-39		PROJECT NO. NTFF-39		P.O. NUMBER		MATRIX TYPE		REQUIRED ANALYSIS		PAGE		OF	
SAMPLER(S) NAME WG HEDGER		PHONE		FAX		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOIL SEDIMENT NONAQUEOUS LIQUID (LNAPL) AIR SLUDGE OTHER		8020 TPH 2073 PCRA METAL		PRESERVATIVE		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____	
CLIENT PROJECT MANAGER TERRY BAIRD		CLIENT ADDRESS (CITY, STATE, ZIP)		CLIENT NAME 1ST COATINGS								REMARKS	
SAMPLE		DATE		TIME		SAMPLE IDENTIFICATION							
NTFF-39	2:5:96	1625		<input checked="" type="checkbox"/>	NTFF-39								
E KIT PREPARED BY:		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME		
LABORATORY BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME		
LABORATORY BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME		
LABORATORY BY: (SIGNATURE) W.S. Hedger		DATE 2/5/96	TIME 17:18	CUSTODY INTACT		ENCO LOG NO. JE 1694	REMARKS		DATE 2:5:96	TIME	DATE	TIME	
LABORATORY BY: (SIGNATURE) W.S. Hedger		DATE	TIME	CUSTODY INTACT		ENCO LOG NO.	REMARKS		DATE	TIME	DATE	TIME	

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

DUPLICATE



DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1699
DATE SUBMITTED: February 6, 1996
DATE REPORTED : February 7, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

02/06/96

#1 - NTFFT-40 @ 15:20

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR1699

DATE REPORTED: February 7, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTEFT-40</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10 D5	5 U	µg/Kg
Toluene	10 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	µg/Kg
total Xylenes	10 U	10 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	62	84	39-125
Date Analyzed	02/07/96	02/07/96	

**EPA METHOD 9073 - TOTAL
PETROLEUM HYDROCARBONS**

	<u>NTEFT-40</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Recoverable Petroleum Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/07/96	02/07/96	

= Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR1699
DATE REPORTED: February 7, 1996
PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-40</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/07/96	2 U 02/07/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/07/96	20 U 02/07/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/07/96	1 U 02/07/96	mg/Kg
Chromium Date Analyzed	6010	3.053 02/07/96	1 U 02/07/96	mg/Kg
Lead Date Analyzed	6010	3.734 02/07/96	1 U 02/07/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/07/96	0.01 U 02/07/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/07/96	2 U 02/07/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/07/96	2 U 02/07/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1699

DATE REPORTED: February 7, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	86/ 88/ 80	49-149	2	20
Toluene	72/ 74/ 74	43-144	3	14
Ethylbenzene	66/ 68/ 72	40-135	3	14
m-Xylene & p-Xylene	78/ 80/ 76	23-167	2	10
<u>EPA Method 9073</u>				
Total Recoverable Petroleum Hydrocarbons	97/101/ 92	63-128	4	23
<u>tal Metals</u>				
Arsenic, 6010	95/ 96/ 94	70-118	1	12
Barium, 6010	98/ 98/100	69-120	<1	17
Cadmium, 6010	97/ 97/ 99	69-117	<1	14
Chromium, 6010	98/ 98/ 99	75-120	<1	20
Lead, 6010	97/ 97/ 99	60-130	<1	31
Mercury, 7471	126/128/121	70-138	2	12
Selenium, 6010	90/ 90/ 90	58-122	<1	14
Silver, 6010	115/117/117	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. E82277 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1708
DATE SUBMITTED: February 7, 1996
DATE REPORTED : February 8, 1996

PAGE 1 OF 5

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

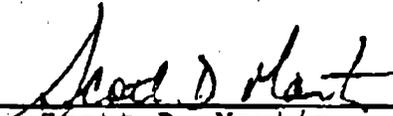
PROJECT #: NTFFT-041

NAS Cecil Field

02/07/96

#1 - NTFFT-041 @ 15:59

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1708
DATE REPORTED: February 8, 1996
REFERENCE : NTFPT-041
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8010A - VOLATILE HALOCARBONS	NTFPT-041	LAB BLANK	Units
Dichlorodifluoromethane	5 U	5 U	µg/Kg
Chloromethane	10 U	10 U	µg/Kg
Vinyl Chloride	5 U	5 U	µg/Kg
Bromomethane	5 U	5 U	µg/Kg
Chloroethane	10 U	10 U	µg/Kg
Trichlorofluoromethane	10 U	10 U	µg/Kg
1,1-Dichloroethene	5 U	5 U	µg/Kg
Methylene Chloride	10 U	10 U	µg/Kg
t-1,2-Dichloroethene	5 U	5 U	µg/Kg
1,1-Dichloroethane	5 U	5 U	µg/Kg
Chloroform	5 U	5 U	µg/Kg
1,1,1-Trichloroethane	5 U	5 U	µg/Kg
Carbon Tetrachloride	5 U	5 U	µg/Kg
1,2-Dichloroethane	5 U	5 U	µg/Kg
Trichloroethene	5 U	5 U	µg/Kg
1,2-Dichloropropane	5 U	5 U	µg/Kg
Bromodichloromethane	5 U	5 U	µg/Kg
c-1,3-Dichloropropene	5 U	5 U	µg/Kg
t-1,3-Dichloropropene	5 U	5 U	µg/Kg
1,1,2-Trichloroethane	5 U	5 U	µg/Kg
Tetrachloroethene	5 U	5 U	µg/Kg
Dibromochloromethane	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Bromoform	5 U	5 U	µg/Kg
1,1,2,2-Tetrachloroethane	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Surrogates:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	92	98	30-153
Date Analyzed	02/08/96	02/07/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1708
 DATE REPORTED: February 8, 1996
 REFERENCE : NTFFT-041
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 5

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-041</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>1 RECOV</u>	<u>1 RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	76	84	39-125
Date Analyzed	02/08/96	02/07/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-041</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/08/96	02/08/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1708
DATE REPORTED: February 8, 1996
REFERENCE : NTFFT-041
PROJECT NAME : NAS Cecil Field

PAGE 4 OF 5

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-041</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic	7062	2.5 U	2.5 U	mg/Kg
Date Analyzed		02/08/96	02/08/96	
Barium	7080	25 U	25 U	mg/Kg
Date Analyzed		02/08/96	02/08/96	
Cadmium	7130	5 U	5 U	mg/Kg
Date Analyzed		02/08/96	02/08/96	
Chromium	7190	5 U	5 U	mg/Kg
Date Analyzed		02/08/96	02/08/96	
Lead	7420	5 U	5 U	mg/Kg
Date Analyzed		02/08/96	02/08/96	
Mercury	7471	0.05 U	0.05 U	mg/Kg
Date Analyzed		02/08/96	02/08/96	
Selenium	7742	1 U	1 U	mg/Kg
Date Analyzed		02/08/96	02/08/96	
Silver	7760	1 U	1 U	mg/Kg
Date Analyzed		02/08/96	02/08/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1708
 DATE REPORTED: February 8, 1996
 REFERENCE : NTFFT-041
 PROJECT NAME : NAS Cecil Field

PAGE 5 OF 5

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8010A</u>				
Methylene Chloride	88/ 86/112	13-191	2	27
Chloroform	98/ 98/102	46-152	<1	18
Carbon Tetrachloride	90/ 90/118	53-151	<1	20
Trichloroethene	88/ 94/118	28-164	6	25
Tetrachloroethene	86/ 86/116	55-145	<1	20
Chlorobenzene	89/ 90/103	60-137	1	20
<u>EPA Method 8020A</u>				
Benzene	86/ 88/ 86	49-149	2	20
Toluene	72/ 74/ 72	43-144	3	14
Ethylbenzene	66/ 68/ 68	40-135	3	14
m-Xylene & p-Xylene	76/ 80/ 78	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	97/101/ 92	59-134	4	23
<u>Total Metals</u>				
Arsenic, 7062	76/ 79/ 79	38-148	4	34
Barium, 7080	94/ 93/ 81	44-123	1	16
Cadmium, 7130	94/ 92/ 94	84-112	2	8
Chromium, 7190	102/103/102	80-124	<1	12
Lead, 7420	99/ 94/ 98	60-129	5	23
Mercury, 7471	112/112/105	70-138	<1	12
Selenium, 7742	76/ 82/ 74	20-142	8	64
Silver, 7760	95/ 94/ 95	79-112	1	7

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Cour., Suite 21
 Jacksonville, Florida 32216-6069
 Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: **TEFT** PROJECT NO. _____ P.O. NUMBER _____
 SUBJECT LOC. (a) **FL** SAMPLE NAME: **NAS Cecil Field** MATRIX TYPE _____ REQUIRED ANALYSIS _____
 ENT NAME: **FL** CLIENT PROJECT MANAGER: **CHERIE L. PARSONS** PHONE _____ FAX _____
 ENT ADDRESS (CITY, STATE, ZIP): **15 COATINGS** CLIENT PROJECT MANAGER: **TERRY BAIRD**

STANDARD REPORT DELIVERY
 EXPEDITED REPORT DELIVERY (surcharge)
 Date Due: _____

SAMPLE					SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTE WATER	DRINKING WATER	SOIL/SOLID SEDIMENT	NONAQUEOUS LIQUID (as per spec.)	AIR	SLUDGE	OTHER	PRESERVATIVE	REMARKS
DATE	TIME	QTY	UNIT													
041	2/7/96	1559		X	NTFT-041											

SAMPLE KIT PREPARED BY: _____ DATE _____ TIME _____ RELINQUISHED BY: (SIGNATURE) _____ DATE _____ TIME _____ RECEIVED BY: (SIGNATURE) _____ DATE _____ TIME _____
 JACKSONVILLE ORLANDO
 RELINQUISHED BY: (SIGNATURE) _____ DATE _____ TIME _____ RECEIVED BY: (SIGNATURE) _____ DATE _____ TIME _____
 RECEIVED BY: (SIGNATURE) _____ DATE _____ TIME _____ RELINQUISHED BY: (SIGNATURE) _____ DATE _____ TIME _____
 RECEIVED BY: (SIGNATURE) _____ DATE _____ TIME _____ RECEIVED BY: (SIGNATURE) _____ DATE _____ TIME _____
 RECEIVED FOR LABORATORY BY: (SIGNATURE) _____ DATE _____ TIME _____ CUSTODY INTACT: YES NO ENCO LOG NO. **JR1708** REMARKS _____

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216 6068
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. EB2277 52417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1719
DATE SUBMITTED: February 9, 1996
DATE REPORTED : February 9, 1996

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

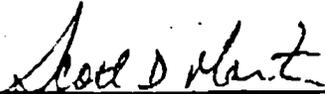
SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1	-	02/08/96	NTFFT-42 @ 15:10
#2	-	02/08/96	NTFFT-43 @ 22:40
#3	-	02/09/96	NTFFT-44 @ 09:59

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1719
 DATE REPORTED: February 9, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-42</u>	<u>NTFFT-43</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10	10	µg/Kg
Toluene	15	15	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	90	84	39-125
Date Analyzed	02/09/96	02/09/96	

<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-42</u>	<u>NTFFT-43</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/09/96	02/09/96	

U - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1719
 DATE REPORTED: February 9, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-42</u>	<u>NTFFT-43</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	mg/Kg
Date Analyzed		02/09/96	02/09/96	
Barium	6010	20 U	20 U	mg/Kg
Date Analyzed		02/09/96	02/09/96	
Cadmium	6010	1 U	1 U	mg/Kg
Date Analyzed		02/09/96	02/09/96	
Chromium	6010	3.014	3.049	mg/Kg
Date Analyzed		02/09/96	02/09/96	
Lead	6010	4.055	3.96	mg/Kg
Date Analyzed		02/09/96	02/09/96	
Mercury	7471	0.01 U	0.01 U	mg/Kg
Date Analyzed		02/09/96	02/09/96	
Selenium	6010	2 U	2 U	mg/Kg
Date Analyzed		02/09/96	02/09/96	
Silver	6010	2 U	2 U	mg/Kg
Date Analyzed		02/09/96	02/09/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1719
 DATE REPORTED: February 9, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NETFT-44</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogates:</u>	<u>1 RECOV</u>	<u>1 RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	84	88	39-125
Date Analyzed	02/09/96	02/08/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1719
 DATE REPORTED: February 9, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-44</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/09/96	2 U 02/09/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/09/96	20 U 02/09/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/09/96	1 U 02/09/96	mg/Kg
Chromium Date Analyzed	6010	2.655 02/09/96	1 U 02/09/96	mg/Kg
Lead Date Analyzed	6010	4.188 02/09/96	1 U 02/09/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/09/96	0.01 U 02/09/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/09/96	2 U 02/09/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/09/96	2 U 02/09/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	92/ 92/ 90	49-149	<1	20
Toluene	76/ 76/ 74	43-144	<1	14
Ethylbenzene	72/ 72/ 70	40-135	<1	14
m-Xylene & p-Xylene	78/ 78/ 76	23-167	<1	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 97/ 94	59-134	10	23
<u>Total Metals</u>				
Arsenic, 6010	100/ 93/ 99	70-118	7	12
Barium, 6010	104/101/104	69-120	3	17
Cadmium, 6010	103/100/103	69-117	3	14
Chromium, 6010	102/100/103	75-120	2	20
Lead, 6010	107/104/105	60-130	3	31
Mercury, 7471	106/138/104	70-138	*26	12
Selenium, 6010	96/ 93/ 97	58-122	3	14
Silver, 6010	107/ 99/ 83	69-116	8	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- * - Value exceeds established criteria for precision
- < - Less Than
- MS - Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS - Laboratory Control Standard
- RPD = Relative Percent Difference

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4810 Executive Park Court, Suite 211
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Laboratories

DHAS Certification No. E02277 02-96

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1739
DATE SUBMITTED: February 10, 1996
DATE REPORTED : February 13, 1996

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

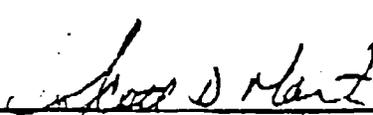
SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1 - NTFFT-045 @ 14:45 (02/09/96)
#2 - NTFFT-046 @ 22:45 (02/09/96)
#3 - NTFFT-047 @ 06:59 (02/10/96)

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1739
 DATE REPORTED: February 13, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
 VOLATILE AROMATICS

	<u>NTFFT-045</u>	<u>NTFFT-046</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10	15	µg/Kg
Toluene	15	20	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	48	64	39-125
Date Analyzed	02/10/96	02/10/96	

EPA METHOD 9073 -
 TOTAL PETR. HYDROCARBONS

	<u>NTFFT-045</u>	<u>NTFFT-046</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/12/96	02/12/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1739
 DATE REPORTED: February 13, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-045</u>	<u>NTFFT-046</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/12/96	20 U 02/12/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg
Chromium Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg
Lead Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/12/96	0.01 U 02/12/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1739

DATE REPORTED: February 13, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFT-047</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	15	5 U	µg/Kg
Toluene	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	70	96	39-125
Date Analyzed	02/10/96	02/10/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFT-047</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/12/96	02/12/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR1739
DATE REPORTED: February 13, 1996
PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-047</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/12/96	20 U 02/12/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg
Chromium Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg
Lead Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/12/96	0.01 U 02/12/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1739

DATE REPORTED: February 13, 1996

PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	96/ 96/ 86	49-149	<1	20
Toluene	78/ 78/ 70	43-144	<1	14
Ethylbenzene	74/ 74/ 66	40-135	<1	14
m-Xylene & p-Xylene	78/ 76/ 68	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	97/101/ 92	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	101/103/104	70-118	2	13
Barium, 6010	103/106/107	69-120	3	17
Cadmium, 6010	100/104/106	69-117	4	14
Chromium, 6010	100/103/105	75-120	3	20
Mercury, 7471	108/109/ 99	70-138	<1	12
Lead, 6010	104/106/107	60-130	2	31
Selenium, 6010	96/ 99/101	58-122	3	14
Silver, 6010	100/102/105	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32218-6069
904 / 296-3007
Fax 904 / 296-6210



DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1749
DATE SUBMITTED: February 11, 1996
DATE REPORTED : February 13, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

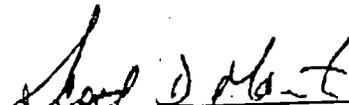
Samples submitted and
identified by client as:

NAS Cecil Field

02/10/96

- #1 - NTFFT-48 @ 14:45
- #2 - NTFFT-49 @ 22:45

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1749

DATE REPORTED: February 13, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT-48</u>	<u>NTFFT-49</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	14	12	5 U	µg/Kg
Toluene	18	16	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	10 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	78	80	96	39-125
Date Analyzed	02/12/96	02/12/96	02/12/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-48</u>	<u>NTFFT-49</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	02/12/96	02/12/96	02/12/96	

J = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR1749
DATE REPORTED: February 13, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-48</u>	<u>NTFFT-49</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	2 U 02/12/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/12/96	20 U 02/12/96	20 U 02/12/96	mg/Kg
Cadmium Date Analyzed	6010	0.5 U 02/12/96	0.5 U 02/12/96	0.5 U 02/12/96	mg/Kg
Chromium Date Analyzed	6010	3.09 02/12/96	2.715 02/12/96	1 U 02/12/96	mg/Kg
Lead Date Analyzed	6010	4.425 02/12/96	8.195 02/12/96	1 U 02/12/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/12/96	0.01 U 02/12/96	0.01 U 02/12/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	2 U 02/12/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	2 U 02/12/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1749
 DATE REPORTED: February 13, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	98/ 94/ 96	49-149	4	20
Toluene	80/ 78/ 80	43-144	2	14
Ethylbenzene	74/ 74/ 74	40-135	<1	14
m-Xylene & p-Xylene	77/ 79/ 75	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	97/101/ 92	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	101/103/104	70-118	2	12
Barium, 6010	103/106/107	69-120	3	17
Cadmium, 6010	100/104/106	69-117	4	14
Chromium, 6010	100/103/105	75-120	3	20
Lead, 6010	104/106/107	60-130	2	31
Mercury, 7471	108/109/ 99	70-138	<1	12
Selenium, 6010	96/ 99/101	58-122	3	14
Silver, 6010	100/102/105	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-5007
Fax 904 / 296-6210



DHRS Certification No. CB2277, 02417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1752
DATE SUBMITTED: February 12, 1996
DATE REPORTED : February 13, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: NTFFT050

NAS Cecil Field

02/12/96

#1 - NTFFT-050 @ 08:17

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1752
 DATE REPORTED: February 13, 1996
 REFERENCE : NTFFT050
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT-050</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	
Benzene	13	5 U	µg/Kg
Toluene	17	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-xylene	24	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Total Xylenes	10 U	10 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	74	96	39-125
Date Analyzed	02/12/96	02/12/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-050</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/12/96	02/12/96	

- Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1752
 DATE REPORTED: February 13, 1996
 REFERENCE : NIFFT050
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NIFFT-050</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/12/96	2 U 02/12/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/12/96	20 U 02/12/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg
Chromium Date Analyzed	6010	3.665 02/12/96	1 U 02/12/96	mg/Kg
Lead Date Analyzed	6010	4.56 02/12/96	1 U 02/12/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/12/96	0.01 U 02/12/96	mg/Kg
Selenium Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg
Silver Date Analyzed	6010	1 U 02/12/96	1 U 02/12/96	mg/Kg

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).
 U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1752
 DATE REPORTED: February 13, 1996
 REFERENCE : NTFPT050
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	98/ 94/ 96	49-149	4	20
Toluene	80/ 78/ 80	43-144	2	14
Ethylbenzene	74/ 74/ 74	40-135	<1	14
m-Xylene & p-Xylene	77/ 79/ 75	23-167	2	10
<u>EPA Method 2073</u>				
Total Petr. Hydrocarbons	97/101/ 89	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	101/103/104	70-118	2	12
Barium, 6010	103/106/107	69-120	3	17
Cadmium, 6010	100/104/106	69-117	4	14
Chromium, 6010	100/103/105	75-120	3	20
Lead, 6010	104/106/107	60-130	2	31
Mercury, 7471	108/109/ 99	70-138	<1	12
Selenium, 6010	96/ 99/101	58-122	3	14
Silver, 6010	100/102/105	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTEFT NAS Cecil		PROJECT NO.	P.O. NUMBER	MATRIX TYPE		REQUIRED ANALYSIS		PAGE () OF ()		
PROJECT LOC. (State) FL	SAMPLER(S) NAME C. PARSONS		PHONE	SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOILS/SOLIDSEDMT NONAQUEOUS LIQUID (for Volatile Org.) AIR SLUDGE OTHER		8020 (40ml) 9073 TPH (250ml AMBER) PCRA METALS (250ml AMBER)		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____		
CLIENT NAME DUSTCOATINGS		CLIENT PROJECT MANAGER TERRY BAIRD								
CLIENT ADDRESS (CITY, STATE, ZIP)										
SAMPLE		SAMPLE IDENTIFICATION								
REF ID	DATE	TRF	Q140	QF				REMARKS		
NTEFT-050	02/12/96	0817		X	NTEFT-050	X				
SAMPLE KIT PREPARED BY: Orlando		DATE	TIME	RELINQUISHED BY: (SIGNATURE) <i>Chris Parsons</i>		DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>R. Ash</i>		DATE	TIME	CUSTODY INTACT	ENCO LOG NO	REMARKS				
Orlando		2-12-96	0912	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	JR1752					

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Jacksonville, Florida 32216-6069
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Fax 904 / 296-0210



DHQS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1764
DATE SUBMITTED: February 13, 1996
DATE REPORTED : February 15, 1996

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - NTFFT-51 @ 16:15 02/12/96
- #2 - NTFFT-52 @ 24:15 02/12/96
- #3 - NTFFT-53 @ 08:24 02/13/96

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1764
 DATE REPORTED: February 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT-51</u>	<u>NTFFT-52</u>	<u>NTFFT-53</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	80	74	78	39-125
Date Analyzed	02/13/96	02/13/96	02/13/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-51</u>	<u>NTFFT-52</u>	<u>NTFFT-53</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	02/13/96	02/13/96	02/13/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1764
 DATE REPORTED: February 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-51</u>	<u>NTFFT-52</u>	<u>NTFFT-53</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/14/96	2 U 02/14/96	2 U 02/14/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/14/96	20 U 02/14/96	20 U 02/14/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/14/96	1 U 02/14/96	1 U 02/14/96	mg/Kg
Chromium Date Analyzed	6010	2.758 02/14/96	3.587 02/14/96	3.335 02/14/96	mg/Kg
Lead Date Analyzed	6010	2.932 02/14/96	2.756 02/14/96	3.16 02/14/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/13/96	0.01 U 02/13/96	0.01 U 02/13/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/14/96	2 U 02/14/96	2 U 02/14/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/14/96	2 U 02/14/96	2 U 02/14/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1764
 DATE REPORTED: February 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

LAB BLANK

Units

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene

98

39-125

Date Analyzed

02/13/96

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

LAB BLANK

Units

Total Petr. Hydrocarbons

5 U

mg/Kg

Date Analyzed

02/13/96

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1764

DATE REPORTED: February 15, 1996

PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/14/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/14/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/14/96	mg/Kg
Chromium Date Analyzed	6010	1 U 02/14/96	mg/Kg
Lead Date Analyzed	6010	1 U 02/14/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/13/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/14/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/14/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1764
 DATE REPORTED: February 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	98/ 94/ 96	49-149	4	20
Toluene	80/ 78/ 80	43-144	2	14
Ethylbenzene	74/ 74/ 74	40-135	<1	14
m-Xylene & p-Xylene	77/ 79/ 75	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	97/101/ 92	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	104/105/105	70-118	<1	12
Barium, 6010	110/110/104	69-120	<1	17
Cadmium, 6010	107/108/107	69-117	<1	14
Chromium, 6010	108/109/108	75-120	<1	20
Lead, 6010	108/108/105	60-130	<1	31
Mercury, 7471	124/121/122	70-138	2	12
Selenium, 6010	104/107/106	58-122	3	14
Silver, 6010	105/104/104	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT NAS Cecil Field		PROJECT NO.	P.O. NUMBER	MATRIX TYPE										REQUIRED ANALYSIS		PAGE 1 OF 1		
PROJECT LOC. (State) FL	SAMPLER(S) NAME C. WHITE, C. PARSONS, G. HEDGER		PHONE 363 9999	SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLIDIFICATION NONAQUEOUS LIQUID (for analysis only) AIR SLUDGE OTHER										<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)		Date Due:		
CLIENT NAME DUST COATINGS	CLIENT PROJECT MANAGER TERRY Baird		FAX															
CLIENT ADDRESS (CITY, STATE, ZIP)				8020 TP4 9073 PCRY METALS										PRESERVATIVE		REMARKS		
SAMPLE					SAMPLE IDENTIFICATION										NUMBER OF CONTAINERS SUBMITTED		REMARKS	
DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION														
NTFFT-51	2-12-96	1615	✓	NTFFT-51														
NTFFT-52	2-12-96	2415	✓	NTFFT-52														
NTFFT-53	2-13-96	0824	✓	NTFFT-53														
SAMPLE KIT PREPARED BY: JACKSONVILLE ORLANDO				DATE	TIME	RELINQUISHED BY: (SIGNATURE) <i>Chris L. Parsons</i>				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	
RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>[Signature]</i>				DATE	TIME	CUSTODY INTACT <input type="checkbox"/> YES <input type="checkbox"/> NO		ENCO LOG NO. TR 17A1		REMARKS								
<input checked="" type="checkbox"/> Jacksonville <input type="checkbox"/> Orlando				2-13-96 0936														

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



DHHS Certification No. E82277, 32417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1770
DATE SUBMITTED: February 14, 1996
DATE REPORTED : February 15, 1996

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

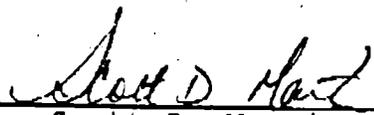
Samples submitted and
identified by client as:

NAS Cecil Field

02/13/96

#1 - NIFFT-54 @ 16:15
#2 - NIFFT-55 @ 00:15
#3 - NIFFT-56 @ 08:17

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1770
 DATE REPORTED: February 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-54</u>	<u>NTFFT-55</u>	<u>NTFFT-56</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	15	15	5 U	µg/Kg
Toluene	20	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	76	68	76	39-125
Date Analyzed	02/14/96	02/14/96	02/14/96	
 <u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	 <u>NTFFT-54</u>	 <u>NTFFT-55</u>	 <u>NTFFT-56</u>	 <u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	02/14/96	02/14/96	02/14/96	

= Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1770
 DATE REPORTED: February 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-54</u>	<u>NTFFT-55</u>	<u>NTFFT-56</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/14/96	2 U 02/14/96	2 U 02/14/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/14/96	20 U 02/14/96	20 U 02/14/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/14/96	1 U 02/14/96	1 U 02/14/96	mg/Kg
Chromium Date Analyzed	6010	3.597 02/14/96	3.42 02/14/96	4.108 02/14/96	mg/Kg
Lead Date Analyzed	6010	67.268 02/14/96	3.444 02/14/96	3.692 02/14/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/14/96	0.01 U 02/14/96	0.01 U 02/14/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/14/96	2 U 02/14/96	2 U 02/14/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/14/96	2 U 02/14/96	2 U 02/14/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR1770
DATE REPORTED: February 15, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

		<u>Units</u>
Methyl tert-butyl ether	10 U	
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Surrogate:

% RECOV

		<u>LIMITS</u>
Bromofluorobenzene	100	39-125
Date Analyzed	02/14/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

LAB BLANK

		<u>Units</u>
Total Petr. Hydrocarbons	5 U	
Date Analyzed	02/14/96	mg/Kg

1. Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1770
 DATE REPORTED: February 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/14/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/14/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/14/96	mg/Kg
Chromium Date Analyzed	6010	1 U 02/14/96	mg/Kg
Lead Date Analyzed	6010	1 U 02/14/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/14/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/14/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/14/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1770
 DATE REPORTED: February 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	92/ 92/ 96	49-149	<1	20
Toluene	76/ 76/ 80	43-144	<1	14
Ethylbenzene	80/ 78/ 86	40-135	2	14
m-Xylene & p-Xylene	64/ 63/ 68	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	65/ 67/ 97	59-134	3	23
<u>Total Metals</u>				
Arsenic, 6010	108/110/110	70-118	2	12
Barium, 6010	117/118/119	69-120	<1	17
Cadmium, 6010	114/116/116	69-117	2	14
Chromium, 6010	112/118/119	75-120	5	20
Lead, 6010	115/114/113	60-130	<1	31
Mercury, 7471	104/104/ 74	70-138	<1	12
Selenium, 6010	107/108/106	58-122	<1	14
Silver, 6010	120/116/118	69-116	3	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHHS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue C
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1779
DATE SUBMITTED: February 15, 19
DATE REPORTED : February 16, 19

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

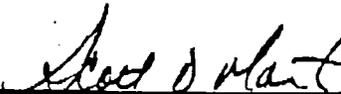
SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1	-	02/14/96	NTFFT-057 @	16:15
#2	-	02/15/96	NTFFT-058 @	00:16
#3	-	02/15/96	NTFFT-059 @	00:59

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1779

DATE REPORTED: February 16, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-057</u>	<u>NTFFT-058</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10 D5	15 D5	µg/Kg
Toluene	15 D5	15 D5	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
<u>Surrogate 1</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	82	82	30-125
Date Analyzed	02/15/96	02/15/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-057</u>	<u>NTFFT-058</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/15/96	02/15/96	

- Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1779
 DATE REPORTED: February 16, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-057</u>	<u>NTFFT-058</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/15/96	2 U 02/15/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/15/96	20 U 02/15/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/15/96	1 U 02/15/96	mg/Kg
Chromium Date Analyzed	6010	4.005 02/15/96	3.689 02/15/96	mg/Kg
Lead Date Analyzed	6010	3.513 02/15/96	4.071 02/15/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/15/96	0.01 U 02/15/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/15/96	2 U 02/15/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/15/96	2 U 02/15/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1779
 DATE REPORTED: February 16, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-059</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	80	100	39-125
Date Analyzed	02/15/96	02/14/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-059</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/15/96	02/15/96	

D5 = Analyte value determined from a 1:5 dilution.
 * Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1779

DATE REPORTED: February 16, 1996

PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-059</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/15/96	2 U 02/15/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/15/96	20 U 02/15/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/15/96	1 U 02/15/96	mg/Kg
Chromium Date Analyzed	6010	4.425 02/15/96	1 U 02/15/96	mg/Kg
Lead Date Analyzed	6010	3.343 02/15/96	1 U 02/15/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/15/96	0.01 U 02/15/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/15/96	2 U 02/15/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/15/96	2 U 02/15/96	mg/Kg

U - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1779

DATE REPORTED: February 16, 1996

PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMIT</u>
<u>EPA Method 8020A</u>				
Benzene	92/ 92/ 96	49-149	<1	20
Toluene	76/ 76/ 80	43-144	<1	14
Ethylbenzene	80/ 78/ 86	40-135	2	14
m-Xylene & p-Xylene	64/ 63/ 68	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	65/ 67/ 97	59-134	3	23
<u>Total Metals</u>				
Arsenic, 6010	102/103/104	70-118	<1	12
Barium, 6010	108/110/110	69-120	2	17
Cadmium, 6010	106/108/108	69-117	2	14
Chromium, 6010	106/109/110	75-120	3	20
Lead, 6010	105/109/106	60-130	4	31
Mercury, 7471	109/114/114	70-138	4	12
Selenium, 6010	100/ 99/ 99	58-122	1	14
Silver, 6010	108/110/110	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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Laboratories

DHRS Certification No. E82277 82417

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6089
904 / 296-3007
Fax 904 / 296-8210

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1788
DATE SUBMITTED: February 16, 1996
DATE REPORTED : February 19, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

02/15/96

#1 - NTFET-060 @ 16:15

PROJECT MANAGER

A handwritten signature in cursive script that reads "Scott D. Martin".

Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1788

DATE REPORTED: February 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTFFT-060</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	10 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	84	98	39-125
Date Analyzed	02/16/96	02/15/96	

EPA METHOD 9073 -**TOTAL PETR. HYDROCARBONS**

	<u>NTFFT-060</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/16/96	02/16/96	

5 = Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1788

DATE REPORTED: February 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-060</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/16/96	2 U 02/16/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/16/96	20 U 02/16/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/16/96	1 U 02/16/96	mg/Kg
Chromium Date Analyzed	6010	3.015 02/16/96	0.5 U 02/16/96	mg/Kg
Lead Date Analyzed	6010	4.155 02/16/96	1 U 02/16/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/16/96	0.01 U 02/16/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/16/96	2 U 02/16/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/16/96	2 U 02/16/96	mg/Kg

Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1788

DATE REPORTED: February 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	92/ 92/ 96	49-149	<1	20
Toluene	76/ 76/ 80	43-144	<1	14
Ethylbenzene	80/ 78/ 86	40-135	2	14
m-Xylene & p-Xylene	64/ 63/ 68	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	99/ 98/ 93	59-134	1	23
<u>Total Metals</u>				
Barium, 6010	107/106/104	70-118	<1	12
Barium, 6010	110/108/112	69-120	2	17
Cadmium, 6010	109/110/110	69-117	<1	14
Chromium, 6010	111/110/111	75-120	<1	20
Lead, 6010	* / * /107	60-130	*	*
Mercury, 7471	105/113/115	70-138	7	12
Selenium, 6010	105/106/ 99	58-122	<1	14
Silver, 6010	101/109/110	69-116	8	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

* = MS/MSD unavailable due to high level of analyte in original sample

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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Fax 904 / 296-5210



DHRS Certification No. E62277, 6241

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1832
DATE SUBMITTED: February 21, 1
DATE REPORTED : February 22, 1

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

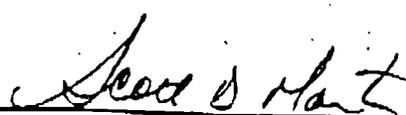
Samples submitted and
identified by client as:

NAS Cecil Field

02/20/96

#1 - NTFFT-061 @ 06:58

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1832

DATE REPORTED: February 22, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>		<u>NTFFT-061</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether		10 U	10 U	
Benzene		5 U	5 U	µg/Kg
Toluene		5 U	5 U	µg/Kg
Chlorobenzene		5 U	5 U	µg/Kg
Ethylbenzene		5 U	5 U	µg/Kg
m-Xylene & p-Xylene		5 U	5 U	µg/Kg
o-Xylene		5 U	5 U	µg/Kg
1,3-Dichlorobenzene		5 U	5 U	µg/Kg
1,4-Dichlorobenzene		5 U	5 U	µg/Kg
1,2-Dichlorobenzene		5 U	5 U	µg/Kg
<u>Surrogate:</u>		<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene		110	125	39-125
Date Analyzed		02/21/96	02/21/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>		<u>NTFFT-061</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons		5 U	5 U	mg/Kg
Date Analyzed		02/21/96	02/21/96	

U Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1832
 DATE REPORTED: February 22, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-061</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/21/96	2 U 02/21/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/21/96	20 U 02/21/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/21/96	1 U 02/21/96	mg/Kg
Chromium ate Analyzed	6010	3.351 02/21/96	1 U 02/21/96	mg/Kg
Lead Date Analyzed	6010	2.961 02/21/96	1 U 02/21/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/21/96	0.01 U 02/21/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/21/96	2 U 02/21/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/21/96	2 U 02/21/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1832

DATE REPORTED: February 22, 1996

PROJECT NAME : NAS Cecil field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	92/ 88/ 82	49-149	4	20
Toluene	70/ 72/ 71	43-144	3	14
Ethylbenzene	98/110/ 77	40-135	12	14
m-Xylene & p-Xylene	84/ 84/122	23-167	<1	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	99/ 98/ 93	59-134	1	23
<u>Total Metals</u>				
Arsenic, 6010	108/106/108	70-118	2	12
Barium, 6010	109/109/109	69-120	<1	17
Cadmium, 6010	110/110/112	69-117	<1	14
Chromium, 6010	108/110/109	75-120	2	20
Lead, 6010	112/111/110	60-130	<1	31
Mercury, 7471	105/104/107	70-138	<1	12
Selenium, 6010	108/103/118	58-122	3	14
Silver, 6010	109/108/110	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-8210



Laboratories

DHRS Certification No. FA2277, B2417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1863
DATE SUBMITTED: February 22, 1996
DATE REPORTED : February 26, 1996

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1	-	NTFFT-062	02/21/96	@	14:45
#2	-	NTFFT-063	02/21/96	@	22:45
#3	-	NTFFT-064	02/22/96	@	02:55

PROJECT MANAGER

A handwritten signature in cursive script, appearing to read "Scott D. Martin".

Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1863
 DATE REPORTED: February 26, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT-062</u>	<u>NTFFT-063</u>	<u>NTFFT-064</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	6	6	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	10 U	10 U	10 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
.,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	66	67	75	39-125
Date Analyzed	02/25/96	02/25/96	02/25/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

	<u>NTFFT-062</u>	<u>NTFFT-063</u>	<u>NTFFT-064</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	02/16/96	02/16/96	02/16/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1863

DATE REPORTED: February 26, 1996

PROJECT NAME : NAS Cecil field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-062</u>	<u>NTFFT-063</u>	<u>NTFFT-064</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		02/22/96	02/22/96	02/22/96	
Barium	6010	20 U	20 U	20 U	mg/Kg
Date Analyzed		02/22/96	02/22/96	02/22/96	
Cadmium	6010	1 U	1 U	1 U	mg/Kg
Date Analyzed		02/22/96	02/22/96	02/22/96	
Chromium	6010	3.465	4.047	3.268	mg/Kg
Date Analyzed		02/22/96	02/22/96	02/22/96	
Lead	6010	2.789	3.437	2.642	mg/Kg
Date Analyzed		02/22/96	02/22/96	02/22/96	
Mercury	7471	0.01 U	0.01 U	0.01 U	mg/Kg
Date Analyzed		02/22/96	02/22/96	02/22/96	
Selenium	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		02/22/96	02/22/96	02/22/96	
Silver	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		02/22/96	02/22/96	02/22/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1863

DATE REPORTED: February 26, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICSLAB BLANKUnits

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	10 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
2-Dichlorobenzene	5 U	µg/Kg

Surrogate:% RECOVLIMITS

Bromofluorobenzene

114

39-125

Date Analyzed

02/25/96

EPA METHOD 9073 -TOTAL PETR. HYDROCARBONSLAB BLANKUnits

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	02/16/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1863

DATE REPORTED: February 26, 1996

PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/22/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/22/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/22/96	mg/Kg
Chromium Date Analyzed	6010	1 U 02/22/96	mg/Kg
Lead Date Analyzed	6010	1 U 02/22/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/22/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/22/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/22/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1863
 DATE REPORTED: February 26, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
<u>EPA Method 8020A</u>				
Benzene	105/105/105	54-150	<1	26
Toluene	105/110/110	65-133	5	25
Ethylbenzene	115/115/120	60-169	<1	28
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	99/ 98/ 93	59-134	1	23
<u>Total Metals</u>				
Arsenic, 6010	102/ 92/ 99	70-118	10	12
Barium, 6010	109/100/110	69-120	9	17
Cadmium, 6010	105/ 96/107	69-117	9	14
Chromium, 6010	109/100/110	75-120	9	20
Lead, 6010	105/ 95/105	60-130	10	31
Mercury, 7471	110/110/110	70-138	<1	12
Selenium, 6010	91/ 82/ 88	58-122	10	14
Silver, 6010	107/104/108	69-116	3	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

RF # _____

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10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 - Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTEFT NAS Cecil		PROJECT NO.	P.O. NUMBER	MATRIX TYPE										REQUIRED ANALYSIS	PAGE	OF				
PROJECT LOC. (State) FL	SAMPLER(S) NAME C. WHITE		PHONE	SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (see notes pg. 2) AIR SLUDGE OTHER										8020 9073 PCRA METALS		PRESERVATIVE		<input type="checkbox"/> STANDARD REPORT DELIVERY		
CLIENT NAME C. PARSONS, G. HEDGER		FAX	CLIENT PROJECT MANAGER TERRY BAIRD															<input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)		
CLIENT ADDRESS (CITY, STATE, ZIP) DUST COATINGS																		Date Due: _____		
SAMPLE					SAMPLE IDENTIFICATION										REMARKS					
SYMBOL	DATE	TIME	STATE	COUNTY																
NTEFT-062	2/21/96	1445		X	NTEFT-062															
NTEFT-063	2/21/96	2245		X	NTEFT-063															
NTEFT-064	2/22/96	0245		X	NTEFT-064										ONLY 4 SUBSAMPLE IN THIS COMPOIT					
SAMPLE KIT PREPARED BY:					DATE	TIME	RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME			
JACKSONVILLE ORLANDO							<i>Chris L. Parsons</i>					2/21/96	12:16							
RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED BY: (SIGNATURE)					DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME			
RECEIVED BY: (SIGNATURE)					DATE	TIME	RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME			
<i>Scott J. Mont</i>					2/22/96	12:16														
RECEIVED FOR LABORATORY BY: (SIGNATURE)					DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS											
<i>Scott J. Mont</i>					2/22/96	12:16	<input type="checkbox"/> YES <input type="checkbox"/> NO													

892

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216 6060
904 / 296-3007
Fax 904 / 296-6210



DHHS Certification No. FA2777, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1885
DATE SUBMITTED: February 26, 1996
DATE REPORTED : February 28, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: NTFFT-065

NAS Cecil Field

02/26/96

#1 - NTFFT-065 @ 08:19

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1885
 DATE REPORTED: February 28, 1996
 REFERENCE : NTFFT-065
 PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT-065</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	10 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
<u>Surrogates:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	80	125	39-125
Date Analyzed	02/28/96	02/27/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

	<u>NTFFT-065</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	02/26/96	02/26/96	

5 = Analyte value determined from a 1:5 dilution.
 U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1885
 DATE REPORTED: February 28, 1996
 REFERENCE : NTFFT-065
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-065</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	mg/Kg
Date Analyzed		02/26/96	02/26/96	
Barium	6010	20 U	20 U	mg/Kg
Date Analyzed		02/26/96	02/26/96	
Cadmium	6010	1 U	1 U	mg/Kg
Date Analyzed		02/26/96	02/26/96	
Chromium	6010	2.74	1 U	mg/Kg
Date Analyzed		02/26/96	02/26/96	
Lead	6010	2.57	1 U	mg/Kg
Date Analyzed		02/26/96	02/26/96	
Mercury	7471	0.01 U	0.01 U	mg/Kg
Date Analyzed		02/27/96	02/27/96	
Selenium	6010	2 U	2 U	mg/Kg
Date Analyzed		02/26/96	02/26/96	
Silver	6010	2 U	2 U	mg/Kg
Date Analyzed		02/26/96	02/26/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1885
 DATE REPORTED: February 28, 1996
 REFERENCE : NTFFT-065
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	105/110/ 85	49-149	5	20
Toluene	85/ 90/ 70	43-144	6	14
Ethylbenzene	80/ 85/ 70	40-135	6	14
m-Xylene & p-Xylene	68/ 70/ 55	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	99/ 98/ 93	59-134	1	23
<u>Total Metals</u>				
Arsenic, 6010	92/ 94/ 95	70-118	2	12
Barium, 6010	94/ 95/100	69-120	1	17
Cadmium, 6010	96/100/104	69-117	4	14
Chromium, 6010	95/ 97/101	75-120	2	20
Lead, 6010	93/ 96/ 98	60-130	3	31
Mercury, 7471	105/106/110	70-138	<1	12
Selenium, 6010	89/ 91/ 85	58-122	2	14
Silver, 6010	99/102/108	69-116	3	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Laboratories

DHHS Certification No. FA2277, R0417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1900
DATE SUBMITTED: February 27, 1996
DATE REPORTED : February 28, 1996

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1	-	02/26/96	NTFFT-066 @ 16:15
#2	-	02/27/96	NTFFT-067 @ 00:15
#3	-	02/27/96	NTFFT-068 @ 03:23

PROJECT MANAGER



Scott D. Martin

ENCC LABORATORIES

REPORT # : JR1900

DATE REPORTED: February 28, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT-066</u>	<u>NTFFT-067</u>	<u>NTFFT-068</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	15 D5	5 U	µg/Kg
Toluene	20 D5	20 D5	15 D5	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	105	100	100	39-125
Date Analyzed	02/27/96	02/27/96	02/27/96	

EPA METHOD 9073 -TOTAL PETR. HYDROCARBONS

	<u>NTFFT-066</u>	<u>NTFFT-067</u>	<u>NTFFT-068</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	02/27/96	02/27/96	02/27/96	

D5 = Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1900
 DATE REPORTED: February 28, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-066</u>	<u>NTFFT-067</u>	<u>NTFFT-068</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/27/96	2 U 02/27/96	2 U 02/27/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/27/96	20 U 02/27/96	20 U 02/27/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/27/96	1 U 02/27/96	1 U 02/27/96	mg/Kg
Chromium Date Analyzed	6010	3.40 02/27/96	3.48 02/27/96	2.97 02/27/96	mg/Kg
Lead Date Analyzed	6010	3.44 02/27/96	3.16 02/27/96	3.43 02/27/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/27/96	0.01 U 02/27/96	0.01 U 02/27/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/27/96	2 U 02/27/96	2 U 02/27/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/27/96	2 U 02/27/96	2 U 02/27/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1900
 DATE REPORTED: February 28, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

Units

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Surrogates:

% RECOV

LIMITS

Bromofluorobenzene	125	39-125
Date Analyzed	02/27/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

LAB BLANK

Units

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	02/27/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR1900
DATE REPORTED: February 28, 1996
PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/27/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/27/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/27/96	mg/Kg
Chromium Date Analyzed	6010	1 U 02/27/96	mg/Kg
Lead Date Analyzed	6010	1 U 02/27/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/27/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/27/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/27/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1900
 DATE REPORTED: February 28, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	105/110/ 85	49-149	5	20
Toluene	85/ 90/ 70	43-144	6	14
Ethylbenzene	80/ 85/ 70	40-135	6	14
m-Xylene & p-Xylene	68/ 70/ 55	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	106/113/104	59-134	6	23
<u>Total Metals</u>				
Arsenic, 6010	94/ 94/ 90	70-118	<1	12
Barium, 6010	94/ 94/ 93	69-120	<1	17
Cadmium, 6010	99/100/ 97	69-117	1	14
Chromium, 6010	94/ 95/ 94	75-120	1	20
Lead, 6010	97/ 98/ 92	60-130	1	31
Mercury, 7471	116/120/119	70-138	3	12
Selenium, 6010	94/ 94/ 89	58-122	<1	14
Silver, 6010	105/103/100	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTEFT NAS CECIL FIELD		PROJECT NO.	P.O. NUMBER	MATRIX TYPE			REQUIRED ANALYSIS			PAGE 1 OF 1	
PROJECT LOC. (State) FL	SAMPLER(S) NAME C. WHITE, G. HEDGER, C. PARSONS		PHONE	SURFACE WATER GROUND WATER WASTE WATER DRINKING WATER SOIL/SOLID/SEDIMENT NON-AQUEOUS LIQUID (see Appendix 2) AIR SLUDGE OTHER			8020 9073 TPH RCRA METALS			<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____	
CLIENT NAME DUSTCOATINGS	CLIENT PROJECT MANAGER TERRY BAIRD		FAX								
CLIENT ADDRESS (CITY, STATE, ZIP)				SAMPLE			REMARKS				
				SAMPLE IDENTIFICATION			NUMBER OF CONTAINERS SUBMITTED				
NTEFT-066	02/26/96	1615	X	NTEFT-066							
NTEFT-067	02/29/96	0015	X	NTEFT-067							
NTEFT-068	02/27/96	0023	X	NTEFT-068							
SAMPLE KIT PREPARED BY <input type="checkbox"/> JACKSONVILLE <input checked="" type="checkbox"/> ORLANDO				DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RELINQUISHED BY: (SIGNATURE) <i>Cheri B. Parsons</i>				DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>[Signature]</i>				DATE	TIME	CUSTODY IN-CHARGE	ENCO LOG NO.	REMARKS			
							5R190x				

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

DUPLICATE



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1911
DATE SUBMITTED: February 28, 1996
DATE REPORTED : February 29, 1996

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

02/27/96

- #1 - NTFFT-069 02/27/96 @ 16:15
- #2 - NTFFT-070 02/28/96 @ 00:15
- #3 - NTFFT-071 02/28/96 @ 08:18

PROJECT MANAGER

Scott D. Martin

DUPLICATE

ENCO LABORATORIES
 REPORT # : JR1911
 DATE REPORTED: February 29, 1996
 PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-069</u>	<u>NTFFT-070</u>	<u>NTFFT-071</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	15	15	15	µg/Kg
Toluene	15	15	15	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
Surrogate:	% RECOV	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	70	65	60	39-125
Date Analyzed	02/28/96	02/28/96	02/28/96	

<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-069</u>	<u>NTFFT-070</u>	<u>NTFFT-071</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	02/28/96	02/28/96	02/28/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1911

DATE REPORTED: February 29, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-069</u>	<u>NTFFT-070</u>	<u>NTFFT-071</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/28/96	2 U 02/28/96	2 U 02/28/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/28/96	20 U 02/28/96	20 U 02/28/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/28/96	1 U 02/28/96	1 U 02/28/96	mg/Kg
Chromium Date Analyzed	6010	3.63 02/28/96	3.807 02/28/96	5.739 02/28/96	mg/Kg
Lead Date Analyzed	6010	4.128 02/28/96	3.953 02/28/96	3.666 02/28/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/28/96	0.01 U 02/28/96	0.01 U 02/28/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/28/96	2 U 02/28/96	2 U 02/28/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/28/96	2 U 02/28/96	2 U 02/28/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1911

DATE REPORTED: February 29, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 4 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
VOLATILE AROMATICS**

	LAB BLANK	Units
Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
2-Dichlorobenzene	5 U	µg/Kg

Surrogate:

	% RECOV	LIMITS
Bromofluorobenzene	90	39-125
Date Analyzed	02/27/96	

EPA METHOD 9073 -**TOTAL PETR. HYDROCARBONS**

	LAB BLANK	Units
Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	02/28/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1911

DATE REPORTED: February 29, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/28/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/28/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/28/96	mg/Kg
Chromium te Analyzed	6010	1 U 02/28/96	mg/Kg
Lead Date Analyzed	6010	1 U 02/28/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/28/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/28/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/28/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1911

DATE REPORTED: February 29, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	105/110/ 85	49-149	5	20
Toluene	85/ 90/ 70	43-144	6	14
Ethylbenzene	80/ 85/ 70	40-135	6	14
m-Xylene & p-Xylene	68/ 70/ 55	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	106/113/104	59-134	6	23
<u>tal Metals</u>				
Arsenic, 6010	91/ 90/101	70-118	1	12
Barium, 6010	90/ 89/103	69-120	1	17
Cadmium, 6010	95/ 94/109	69-117	1	14
Chromium, 6010	89/ 88/104	75-120	1	20
Lead, 6010	94/ 93/103	60-130	1	31
Mercury, 7471	98/100/ 97	70-138	2	12
Selenium, 6010	93/ 91/101	58-122	2	14
Silver, 6010	100/100/112	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
904 / 296-3007
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DUPLICATE



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1925
DATE SUBMITTED: February 29, 1996
DATE REPORTED : February 29, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - NTFFT-072 02/28/96 @ 16:15
- #2 - NTFFT-073 02/29/96 @ 00:27

OBJECT MANAGER

Scott D. Martin

Scott D. Martin

DUPLICATE

ENCO LABORATORIES

REPORT # : JR1925

DATE REPORTED: February 29, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTFFT-072</u>	<u>NTFFT-073</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	20 D5	15 D5	5 U	µg/Kg
Toluene	20 D5	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	95	95	130	39-125
Date Analyzed	03/01/96	03/01/96	03/01/96	

**EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS**

	<u>NTFFT-072</u>	<u>NTFFT-073</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	02/29/96	02/29/96	02/29/96	

= Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR1925

DATE REPORTED: February 29, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-072</u>	<u>NTFFT-073</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 02/29/96	2 U 02/29/96	2 U 02/29/96	mg/Kg
Barium Date Analyzed	6010	20 U 02/29/96	20 U 02/29/96	20 U 02/29/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 02/29/96	1 U 02/29/96	1 U 02/29/96	mg/Kg
Chromium te Analyzed	6010	2.995 02/29/96	3.565 02/29/96	1 U 02/29/96	mg/Kg
Lead Date Analyzed	6010	3.448 02/29/96	3.185 02/29/96	1 U 02/29/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 02/29/96	0.01 U 02/29/96	0.01 U 02/29/96	mg/Kg
Selenium Date Analyzed	6010	2 U 02/29/96	2 U 02/29/96	2 U 02/29/96	mg/Kg
Silver Date Analyzed	6010	2 U 02/29/96	2 U 02/29/96	2 U 02/29/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR1925

DATE REPORTED: February 29, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	110/110/105	49-149	<1	20
Toluene	90/ 90/ 85	43-144	<1	14
Ethylbenzene	90/ 85/ 85	40-135	6	14
m-Xylene & p-Xylene	70/ 70/ 68	23-167	<1	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	100/ 82/100	59-134	20	23
<u>Trace Metals</u>				
Arsenic, 6010	89/ 84/ 92	70-118	6	12
Barium, 6010	95/ 92/ 97	69-120	3	17
Cadmium, 6010	98/ 92/101	69-117	6	14
Chromium, 6010	94/ 89/ 96	75-120	5	20
Lead, 6010	96/ 90/ 96	60-130	6	31
Mercury, 7471	106/108/109	70-138	2	12
Selenium, 6010	88/ 82/ 94	58-122	7	14
Silver, 6010	100/ 92/102	69-116	8	10

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

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10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

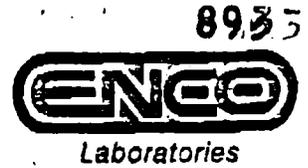


CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NFF NTEFT NAS CECIL FIELD				PROJECT NO.		P.O. NUMBER		MATRIX TYPE				REQUIRED ANALYSIS				PAGE	OF		
PROJECT LOC. (State) FL		SAMPLER(S) NAME C. WHITE, G. HEDGER, C. PARSONS				PHONE		FAX		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (oil solvent, etc.) AIR SLUDGE OTHER				8020 9073 TPH RCRA METALS				<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____	
CLIENT NAME DUSCO DATINGS				CLIENT PROJECT MANAGER TERRY BAIRD															
CLIENT ADDRESS (CITY, STATE, ZIP)																			
SAMPLE						MATRIX TYPE												Date Due: _____	
STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION													REMARKS	
NTEFT-072	2/28/96	1615		X	NTEFT-072														
NTEFT-073	2/29/96	0027		X	NTEFT-073														
SAMPLE KIT PREPARED BY:						DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
<input type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO																			
RELINQUISHED BY: (SIGNATURE)						DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME
						2/29/96	0938												
RECEIVED BY: (SIGNATURE)						DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
OR LABORATORY BY: (SIGNATURE)						DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS									
						2-29-96	0938	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Jr 25	NTEFT-074 STARTED @ 0330. 2/29/96 NOT COMPLETE AT TIME OF THIS DELIVERY.									

13333-C

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



DHRS Certification No. E62277. 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1944
DATE SUBMITTED: March 1, 1996
DATE REPORTED : March 4, 1996

PAGE 1 OF 6

ATTENTION: Mr. Terry Baird

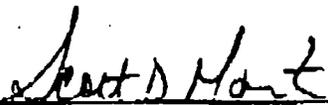
SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1	-	02/29/96	NTFFT-074	@	11:00
#2	-	02/29/96	NTFFT-075	@	19:30
#3	-	03/01/96	NTFFT-076	@	07:02
#4	-	03/01/96	NTFFT-077	@	07:30

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1944
 DATE REPORTED: March 4, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT-074</u>	<u>NTFFT-075</u>	<u>NTFFT-076</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	12 D5	5 U	5 U	µg/Kg
Toluene	15 D5	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	120	110	115	39-125
Date Analyzed	03/01/96	03/01/96	03/01/96	

EPA METHOD 9073 -

<u>TOTAL PETROLEUM HYDROCARBONS</u>	<u>NTFFT-074</u>	<u>NTFFT-075</u>	<u>NTFFT-076</u>	<u>Units</u>
Total Recoverable	5 U	5 U	5 U	mg/Kg
Petroleum Hydrocarbons				
Date Analyzed	03/04/96	03/04/96	03/04/96	

D5 - Analyte value determined from a 1:5 dilution.
 U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1944
 DATE REPORTED: March 4, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-074</u>	<u>NTFFT-075</u>	<u>NTFFT-076</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/01/96	2 U 03/01/96	2 U 03/01/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/01/96	20 U 03/01/96	20 U 03/01/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/01/96	1 U 03/01/96	1 U 03/01/96	mg/Kg
Chromium Date Analyzed	6010	3.467 03/01/96	3.91 03/01/96	4.946 03/01/96	mg/Kg
Lead Date Analyzed	6010	4.791 03/01/96	4.26 03/01/96	6.43 03/01/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/01/96	0.01 U 03/01/96	0.01 U 03/01/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/01/96	2 U 03/01/96	2 U 03/01/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/01/96	2 U 03/01/96	2 U 03/01/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1944

DATE REPORTED: March 4, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICSNTFFT-077LAB BLANKUnits

Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	15 D5	5 U	µg/Kg
Toluene	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg

Surrogate:% RECOV% RECOVLIMITS

Bromofluorobenzene
Date Analyzed

115
03/01/96

130
03/01/96

39-125

EPA METHOD 9073 -TOTAL PETROLEUM HYDROCARBONS NTFFT-077LAB BLANKUnits

Total Recoverable Petroleum Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	03/04/96	03/04/96	

U = Analyte value determined from a 1:5 dilution.
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1944
 DATE REPORTED: March 4, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-077</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/01/96	2 U 03/01/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/01/96	20 U 03/01/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/01/96	1 U 03/01/96	mg/Kg
Chromium Date Analyzed	6010	3.226 03/01/96	1 U 03/01/96	mg/Kg
Lead Date Analyzed	6010	4.543 03/01/96	1 U 03/01/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/01/96	0.01 U 03/01/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/01/96	2 U 03/01/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/01/96	2 U 03/01/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

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Laboratories

DHS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1961
DATE SUBMITTED: March 5, 1996
DATE REPORTED : March 8, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

03/04/96

#1 - NTFFT-078 @ 09:15
#2 - NTFFT-079 @ 17:05

PROJECT MANAGER

A handwritten signature in cursive script, appearing to read "Scott D. Martin".

Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1961
 DATE REPORTED: March 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-078</u>	<u>NTFFT-079</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	85	105	125	39-125
Date Analyzed	03/07/96	03/07/96	03/07/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-078</u>	<u>NTFFT-079</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/07/96	03/07/96	03/07/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1961

DATE REPORTED: March 8, 1996

PROJECT NAME : NAS Cecil field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-078</u>	<u>NTFFT-079</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/07/96	03/07/96	03/07/96	
Barium	6010	20 U	20 U	20 U	mg/Kg
Date Analyzed		03/07/96	03/07/96	03/07/96	
Cadmium	6010	1 U	1 U	1 U	mg/Kg
Date Analyzed		03/07/96	03/07/96	03/07/96	
Chromium	6010	3.204	3.446	1 U	mg/Kg
Date Analyzed		03/07/96	03/07/96	03/07/96	
Lead	6010	4.942	2.634	1 U	mg/Kg
Date Analyzed		03/07/96	03/07/96	03/07/96	
Mercury	7471	0.01 U	0.01 U	0.01 U	mg/Kg
Date Analyzed		03/07/96	03/07/96	03/07/96	
Selenium	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/07/96	03/07/96	03/07/96	
Silver	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/07/96	03/07/96	03/07/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1961
 DATE REPORTED: March 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	90/ 90/ 90	49-149	<1	20
Toluene	75/ 75/ 75	43-144	<1	14
Ethylbenzene	75/ 70/ 75	40-135	7	14
m-Xylene & p-Xylene	62/ 60/ 62	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/112/105	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	86/ 85/ 86	70-118	1	12
Barium, 6010	103/ 97/101	69-120	6	17
Cadmium, 6010	102/ 99/106	69-117	3	14
Chromium, 6010	100/ 95/103	75-120	5	20
Lead, 6010	100/ 97/104	60-130	3	31
Mercury, 7471	110/108/105	70-138	2	12
Selenium, 6010	96/ 94/ 99	58-122	2	14
Silver, 6010	97/ 90/101	69-116	7	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. 582277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1976
DATE SUBMITTED: March 6, 1996
DATE REPORTED : March 8, 1996

PAGE 1 OF 4

ATTENTION: Mr. Terry Baird

SAMPLE IDENTIFICATION

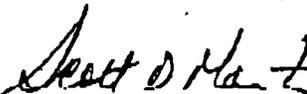
Samples submitted and
identified by client as:

NAS Cecil Field

03/05/96

#1 - NTFFT-80 @ 00:45
#2 - NTFFT-81 @ 10:40

PROJECT MANAGER


Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR1976
 DATE REPORTED: March 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-80</u>	<u>NTFFT-81</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	95	100	125	39-125
Date Analyzed	03/07/96	03/07/96	03/07/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-80</u>	<u>NTFFT-81</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/07/96	03/07/96	03/07/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1976
 DATE REPORTED: March 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-80</u>	<u>NTFFT-81</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/07/96	2 U 03/07/96	2 U 03/07/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/07/96	20 U 03/07/96	20 U 03/07/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/07/96	1 U 03/07/96	1 U 03/07/96	mg/Kg
Chromium Date Analyzed	6010	3.573 03/07/96	3.71 03/07/96	1 U 03/07/96	mg/Kg
Lead Date Analyzed	6010	3.035 03/07/96	4.966 03/07/96	1 U 03/07/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/07/96	0.01 U 03/07/96	0.01 U 03/07/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/07/96	2 U 03/07/96	2 U 03/07/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/07/96	2 U 03/07/96	2 U 03/07/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR1976
DATE REPORTED: March 8, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	90/ 90/ 90	49-149	<1	20
Toluene	75/ 75/ 75	43-144	<1	14
Ethylbenzene	75/ 70/ 75	40-135	7	14
m-Xylene & p-Xylene	62/ 60/ 62	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/112/105	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	86/ 85/ 86	70-118	1	12
Barium, 6010	103/ 97/101	69-120	6	17
Cadmium, 6010	102/ 99/106	69-117	3	14
Chromium, 6010	100/ 95/103	75-120	5	20
Lead, 6010	100/ 97/104	60-130	3	31
Mercury, 7471	110/108/105	70-138	2	12
Selenium, 6010	96/ 94/ 99	58-122	2	14
Silver, 6010	97/ 90/101	69-116	7	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
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- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

RF # _____

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10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 - Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE		PROJECT NO.	P.O. NUMBER	MATRIX TYPE		REQUIRED ANALYSIS		PAGE	OF		
NTFT Carl Field				SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NON-QUEOUS LIQUID (e.g. oil, paint, etc.) AIR SLUDGE OTHER		1020 9025 TPA RERA Metals		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due _____	REMARKS		
PROJECT LOC. (State)	SAMPLER(S) NAME	PHONE	PRESERVATIVE								
FL	CLIFF WHITE/haytaldger	FAX									
CLIENT NAME	CLIENT PROJECT MANAGER										
Dust Coatings											
CLIENT ADDRESS (CITY, STATE, ZIP)											
SAMPLE				SAMPLE IDENTIFICATION							
NTFT 80	3/5/96	0045									
NTFT 81	2/5/96	1040									
SAMPLE KIT PREPARED BY:				DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)	
<input type="checkbox"/> JACKSONVILLE <input checked="" type="checkbox"/> ORLANDO											
RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)	
				3/5/96	1500						
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)	
RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE	TIME	CUSTODY INTACT		ENCO LOG NO		REMARKS			
		3-6-96	0905	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	JR1976					

3056

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
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Fax 904 / 296-6210



DIRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1997
DATE SUBMITTED: March 8, 1996
DATE REPORTED : March 13, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - 03/05/96 NTFFT-082 @ 1820
- #2 - 03/06/96 NTFFT-083 @ 0220
- #3 - 03/06/96 NTFFT-084 @ 1020

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES

REPORT # : JR1997

DATE REPORTED: March 13, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-082</u>	<u>NTFFT-083</u>	<u>NTFFT-084</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	15 D5	5 U	µg/Kg
Toluene	5 U	15 D5	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	85	115	85	39-125
Date Analyzed	03/09/96	03/10/96	03/09/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-082</u>	<u>NTFFT-083</u>	<u>NTFFT-084</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/12/96	03/12/96	03/12/96	

U = Analyte value determined from a 1:5 dilution.
 U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1997
 DATE REPORTED: March 13, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-082</u>	<u>NTFFT-083</u>	<u>NTFFT-084</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/11/96	2 U 03/11/96	2 U 03/11/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/11/96	20 U 03/11/96	20 U 03/11/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/11/96	1 U 03/11/96	1 U 03/11/96	mg/Kg
Chromium Date Analyzed	6010	3.954 03/11/96	3.819 03/11/96	3.814 03/11/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/11/96	0.01 U 03/11/96	0.01 U 03/11/96	mg/Kg
Lead Date Analyzed	6010	4.845 03/11/96	2.077 03/11/96	4.412 03/11/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/11/96	2 U 03/11/96	2 U 03/11/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/11/96	2 U 03/11/96	2 U 03/11/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1997
 DATE REPORTED: March 13, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

LAB BLANK

		Units
Methyl tert-butyl ether	10 U	
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Surrogate:

Bromofluorobenzene
 Date Analyzed

% RECOV

125
 03/09/96

LIMITS
 39-125

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS**LAB BLANK**

Total Petr. Hydrocarbons
 Date Analyzed

5 U
 03/12/96

Units

mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1997

DATE REPORTED: March 13, 1996

PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/11/96	mg/Kg
Barium Date Analyzed	6010	10 U 03/11/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/11/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/11/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/11/96	mg/Kg
Lead Date Analyzed	6010	1 U 03/11/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/11/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/11/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR1997
 DATE REPORTED: March 13, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>* RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	95/105/100	49-149	10	20
Toluene	80/ 80/ 80	43-144	<1	14
Ethylbenzene	75/ 80/ 80	40-135	6	14
m-Xylene & p-Xylene	65/ 68/ 70	23-167	4	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/112/105	59-134	4	23
<u>Total Metals</u>				
Arsenic, 6010	102/106/ 91	70-118	4	12
Barium, 6010	106/109/100	69-120	3	17
Cadmium, 6010	111/106/105	69-117	5	14
Chromium, 6010	110/114/105	75-120	4	20
Mercury, 7471	109/110/119	70-138	<1	12
Lead, 6010	114/114/102	60-130	<1	31
Selenium, 6010	114/118/ 98	58-122	3	14
Silver, 6010	110/116/102	69-116	5	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

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- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
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905



ENVIRONMENTAL CONSERVATION LABORATORIES

QSARF # _____

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19207 General Drive
Orlando, Florida 32824
Ph. (407) 826-5314 - Fax (407) 850-6545

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT Cecil Field		PROJECT NO.		P.O. NUMBER		MATRIX TYPE		REQUIRED ANALYSIS		PAGE	OF
PROJECT LOC. (State) FL	SAMPLER(S) NAME CLIFF WHITE / GARY HEDGER			PHONE		SURFACE WATER		PRESERVATIVE		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____	
CLIENT NAME Dust Coatings	CLIENT PROJECT MANAGER			FAX		GROUND WATER		9020			
CLIENT ADDRESS (CITY, STATE, ZIP)		WASTEWATER		DRINKING WATER		9075 TPA		Reca meth			
SAMPLE		SAMPLE IDENTIFICATION		SOIL/SOLID/SEDIMENT		AIR					
SITE #	DATE	TIME	ANALYST	REMARKS	SLUDGE	OTHER					
NTFFT 082	3/5/96	1820		✓							
NTFFT 083	3/4/96	0220		✓							
NTFFT 084	3/4/96	1020		✓							
SAMPLE KIT PREPARED BY: CL JACKSONVILLE CD ORLANDO		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE 3/4/96	TIME 0700	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME
RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>[Signature]</i>		DATE 3/8/96	TIME 0900	CUSTODY INTACT <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	ENCOLOG NO. JAL95	REMARKS					

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

DUPLICATE



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR1990
DATE SUBMITTED: March 7, 1996
DATE REPORTED : March 12, 1996

PAGE 1 OF 6

ATTENTION: Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - 03/06/96 NTFFT-85 @ 18:20
- #2 - 03/07/96 NTFFT-86 @ 02:20
- #3 - 03/07/96 NTFFT-87 @ 10:25

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR1990

DATE REPORTED: March 12, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTFFT-85</u>	<u>NTFFT-86</u>	<u>NTFFT-87</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	20 D5	20 D5	µg/Kg
Benzene	15 D5	5 U	5 U	µg/Kg
Toluene	20 D5	5 U	20 D5	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	105	100	95	39-125
Date Analyzed	03/09/96	03/09/96	03/09/96	

EPA METHOD 9073 -**TOTAL PETR. HYDROCARBONS**

	<u>NTFFT-85</u>	<u>NTFFT-86</u>	<u>NTFFT-87</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/08/96	03/08/96	03/08/96	

5 = Analyte value determined from a 1:5 dilution.

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR1990

DATE REPORTED: March 12, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-85</u>	<u>NTFFT-86</u>	<u>NTFFT-87</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/11/96	2 U 03/11/96	2 U 03/11/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/11/96	20 U 03/11/96	20 U 03/11/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/11/96	1 U 03/11/96	1 U 03/11/96	mg/Kg
Chromium Date Analyzed	6010	3.876 03/11/96	4.286 03/11/96	3.593 03/11/96	mg/Kg
Lead Date Analyzed	6010	1.906 03/11/96	9.064 03/11/96	1.998 03/11/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/11/96	0.01 U 03/11/96	0.01 U 03/11/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/11/96	2 U 03/11/96	2 U 03/11/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/11/96	2 U 03/11/96	2 U 03/11/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR1990

DATE REPORTED: March 12, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS**EPA METHOD 8020A -
VOLATILE AROMATICS****LAB BLANK****Units**

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
2-Dichlorobenzene	5 U	µg/Kg

Surrogate:**% RECOV****LIMITS**

Bromofluorobenzene	125	39-125
Date Analyzed	03/09/96	

EPA METHOD 9073 -**TOTAL PETR. HYDROCARBONS****LAB BLANK****Units**

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	03/08/96	

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR1990

DATE REPORTED: March 12, 1996

PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/11/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/11/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/11/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/11/96	mg/Kg
Lead Date Analyzed	6010	1 U 03/11/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/11/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/11/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/11/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR1990

DATE REPORTED: March 12, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	95/105/100	49-149	10	20
Toluene	80/ 80/ 80	43-144	<1	14
Ethylbenzene	75/ 80/ 80	40-135	6	14
m-Xylene & p-Xylene	65/ 68/ 70	23-167	4	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/112/105	59-134	4	23
<u>Metals</u>				
Arsenic, 6010	102/106/ 91	70-118	4	12
Barium, 6010	106/109/100	69-120	3	17
Cadmium, 6010	111/106/105	69-117	5	14
Chromium, 6010	110/114/105	75-120	4	20
Lead, 6010	114/114/102	60-130	<1	31
Mercury, 7471	109/110/119	70-138	<1	12
Selenium, 6010	114/118/ 98	58-122	3	14
Silver, 6010	110/116/102	69-116	5	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

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- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

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 Jacksonville, Florida 32216-6069
 Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945



CHAIN OF CUSTODY RECORD

PROJECT REFERENCE <i>WTFIT Cecil Field</i>			PROJECT NO.		P.O. NUMBER		MATRIX TYPE			REQUIRED ANALYSIS				PAGE	OF								
PROJECT LOC. (State) <i>FL</i>		SAMPLER(S) NAME <i>Cliff Hedberg / Gary Hodges</i>			PHONE		GROUND WATER		WASTEWATER		DRINKING WATER		SOIL/SOLID/SEDIMENT		NONAQUEOUS LIQUID (oil, solvents, etc.)		AIR		SLUDGE		OTHER		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____
CLIENT NAME <i>D. H. Coaling</i>			CLIENT PROJECT MANAGER			FAX		SURFACE WATER		WASTEWATER		DRINKING WATER		SOIL/SOLID/SEDIMENT		NONAQUEOUS LIQUID (oil, solvents, etc.)		AIR		SLUDGE		OTHER	
CLIENT ADDRESS (CITY, STATE, ZIP)															PRESERVATIVE		REMARKS						
SAMPLE															NUMBER OF CONTAINERS SUBMITTED		REMARKS						
STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION																		
<i>25</i>	<i>3/6/96</i>	<i>1820</i>		<input checked="" type="checkbox"/>																			
<i>26</i>	<i>3/7/96</i>	<i>0220</i>		<input checked="" type="checkbox"/>																			
<i>27</i>	<i>3/7/96</i>	<i>1025</i>		<input checked="" type="checkbox"/>																			
DUPLICATE																							
SAMPLE KIT PREPARED BY: <input type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO			DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME							
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>			DATE <i>3/7/96</i>	TIME <i>1155</i>	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME							
RECEIVED BY: (SIGNATURE)			DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME							
FOR LABORATORY BY: (SIGNATURE) <i>[Signature]</i>			DATE <i>3-7-96</i>	TIME <i>1155</i>	CUSTODY INTACT <input type="checkbox"/> YES <input type="checkbox"/> NO	ENCO LOG NO. <i>51 70</i>	REMARKS																

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E - Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2016
DATE SUBMITTED: March 11, 1996
DATE REPORTED : March 13, 1996

PAGE 1 OF 8

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - 03/07/96 NTFFT-088 @1700
- #2 - 03/08/96 NTFFT-089 @2020
- #3 - 03/09/96 NTFFT-090 @0420
- #4 - 03/09/96 NTFFT-091 @1935
- #5 - 03/09/96 NTFFT-092 @1920
- #6 - 03/09/96 NTFFT-093 @2340

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2016
DATE REPORTED: March 13, 1996
PROJECT NAME : NAS Cecil Field

PAGE 2 OF 8

RESULTS OF ANALYSIS

EPA METHOD 8020A - <u>VOLATILE AROMATICS</u>	<u>NTFFT-088</u>	<u>NTFFT-089</u>	<u>NTFFT-090</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	100	100	100	39-125
Date Analyzed	03/11/96	03/11/96	03/12/96	

EPA METHOD 9073 - <u>TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-088</u>	<u>NTFFT-089</u>	<u>NTFFT-090</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/12/96	03/12/96	03/12/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JK2016
 DATE REPORTED: March 13, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 8

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-088</u>	<u>NTFFT-089</u>	<u>NTFFT-090</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/13/96	20 U 03/13/96	20 U 03/13/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/13/96	1 U 03/13/96	1 U 03/13/96	mg/Kg
Chromium Date Analyzed	6010	3.478 03/13/96	3.149 03/13/96	3.702 03/13/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/11/96	0.01 U 03/11/96	0.01 U 03/11/96	mg/Kg
Lead Date Analyzed	6010	2.954 03/13/96	2.505 03/13/96	3.208 03/13/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2016
DATE REPORTED: March 13, 1996
PROJECT NAME : NAS Cecil Field

PAGE 4 OF 8

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-091</u>	<u>NTFFT-092</u>	<u>NTFFT-093</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>				
Bromofluorobenzene	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Date Analyzed	105 03/12/96	70 03/12/96	95 03/12/96	39-125

<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-091</u>	<u>NTFFT-092</u>	<u>NTFFT-093</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/13/96	03/13/96	03/13/96	

U = Compound was analyzed for but not detected to the level shown.

7107

ENCO LABORATORIES
 REPORT # : JR2016
 DATE REPORTED: March 13, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 5 OF 8

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-091</u>	<u>NTFFT-092</u>	<u>NTFFT-093</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/13/96	20 U 03/13/96	20 U 03/13/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/13/96	1 U 03/13/96	1 U 03/13/96	mg/Kg
Chromium Date Analyzed	6010	2.625 03/13/96	3.425 03/13/96	3.789 03/13/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/11/96	0.01 U 03/11/96	0.01 U 03/11/96	mg/Kg
Lead Date Analyzed	6010	1.722 03/13/96	2.301 03/13/96	2.382 03/13/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2016
DATE REPORTED: March 13, 1996
PROJECT NAME : NAS Cecil Field

PAGE 5 OF 8

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

Units

Methyl tert-butyl ether	10 U	
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

surrogate:

% RECOV

LIMITS

Bromofluorobenzene	125	39-125
Date Analyzed	03/11/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

LAB BLANK

Units

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	03/12/96	

Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2016

DATE REPORTED: March 13, 1996

PROJECT NAME : NAS Cecil Field

PAGE 7 OF 8

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/13/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/13/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/13/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/13/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/11/96	mg/Kg
Lead Date Analyzed	6010	1 U 03/13/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/13/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/13/96	mg/Kg

* Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2016
 DATE REPORTED: March 13, 1996
 PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	92/ 98/ 95	49-149	6	20
Toluene	75/ 80/ 78	43-144	6	14
Ethylbenzene	74/ 78/ 79	40-135	5	14
m-Xylene & p-Xylene	83/ 86/ 88	23-167	4	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/112/105	59-134	4	23
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	99/ 97/ 92	59-134	2	23
<u>Total Metals</u>				
Barium, 6010	103/104/100	69-120	<1	17
Cadmium, 6010	104/106/104	69-117	2	14
Chromium, 6010	108/109/105	75-120	<1	20
Mercury, 7471	109/110/119	70-138	<1	12
Lead, 6010	104/106/104	60-130	2	31
Selenium, 6010	101/102/102	58-122	<1	14
Arsenic, 6010	91/ 92/ 87	70-118	1	12
Silver, 6010	101/103/102	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

DUPLICATE



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2020
DATE SUBMITTED: March 12, 1996
DATE REPORTED : March 14, 1996

PAGE 1 OF 4

ATTENTION: Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - 03/11/96 NTFFT-094 @ 18:20
- #2 - 03/12/96 NTFFT-095 @ 2:30

PROJECT MANAGER

Scott D. Martin

DUPLICATE

ENCO LABORATORIES
REPORT # : JR2020
DATE REPORTED: March 14, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTFFT-094</u>	<u>NTFFT-095</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg

<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	110	100	125	39-125
Date Analyzed	03/12/96	03/12/96	03/11/96	

**EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS**

	<u>NTFFT-094</u>	<u>NTFFT-095</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/14/96	03/14/96	03/14/96	

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2020

DATE REPORTED: March 14, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-094</u>	<u>NTFFT-095</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/13/96	20 U 03/13/96	20 U 03/13/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/13/96	1 U 03/13/96	1 U 03/13/96	mg/Kg
Chromium te Analyzed	6010	4.205 03/13/96	3.357 03/13/96	1 U 03/13/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/13/96	0.01 U 03/13/96	0.01 U 03/13/96	mg/Kg
Lead Date Analyzed	6010	2.954 03/13/96	2.496 03/13/96	1 U 03/13/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	1 U 03/13/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	1 U 03/13/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2020

DATE REPORTED: March 14, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	92/ 98/ 95	49-149	6	20
Toluene	75/ 80/ 78	43-144	6	14
Ethylbenzene	74/ 78/ 79	40-135	5	14
m-Xylene & p-Xylene	83/ 86/ 88	23-167	4	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	99/ 97/ 92	59-134	2	23
<u>tal Metals</u>				
Arsenic, 6010	88/ 90/ 88	70-118	2	12
Barium, 6010	99/ 99/103	69-120	<1	17
Cadmium, 6010	103/108/108	69-117	5	14
Chromium, 6010	104/104/107	75-120	<1	20
Mercury, 7471	111/112/119	70-138	<1	12
Lead, 6010	101/103/107	60-130	2	31
Selenium, 6010	104/103/101	58-122	<1	14
Silver, 6010	100/100/100	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

SARF # _____

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10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE <i>WFT Cecil Field</i>		PROJECT NO.		P.O. NUMBER		MATRIX TYPE										REQUIRED ANALYSIS										PAGE	OF					
PROJECT LOC. (State) <i>FL</i>		SAMPLER(S) NAME <i>C. White / C. Redger</i>				PHONE		FAX		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (oil, solvent, etc.) AIR SLUDGE OTHER										<i>7020</i> <i>7023 TPH</i> <i>RCA materials</i>										<input type="checkbox"/> STANDARD REPORT DELIVERY	<input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)	
CLIENT NAME <i>WFT Cecil Field</i>				CLIENT PROJECT MANAGER				Date Due: _____																								
CLIENT ADDRESS (CITY, STATE, ZIP)												PRESERVATIVE										NUMBER OF CONTAINERS SUBMITTED										REMARKS
STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION																											
<i>WFT 024</i>	<i>3/11/96</i>	<i>1720</i>		<input checked="" type="checkbox"/>																												
<i>WFT 025</i>	<i>3/12/96</i>	<i>0230</i>		<input checked="" type="checkbox"/>																												

DUPLICATE

SAMPLE KIT PREPARED BY: <input type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO		DATE		TIME		RELINQUISHED BY: (SIGNATURE)				DATE		TIME		RECEIVED BY: (SIGNATURE)				DATE		TIME	
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE <i>3/12/96</i>		TIME <i>0855</i>		RECEIVED BY: (SIGNATURE)				DATE		TIME		RECEIVED BY: (SIGNATURE)				DATE		TIME	
RELINQUISHED BY: (SIGNATURE)		DATE		TIME		RELINQUISHED BY: (SIGNATURE)				DATE		TIME		RECEIVED BY: (SIGNATURE)				DATE		TIME	
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>		DATE <i>3/12/96</i>		TIME <i>0855</i>		CUSTODY INTACT	ENCO LOG NO.	REMARKS													
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<i>TP 2020</i>																			

1300-100



CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue C
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2032
DATE SUBMITTED: March 13, 1996
DATE REPORTED : March 15, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

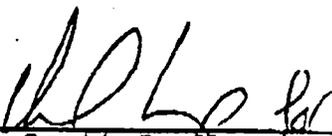
Samples submitted and
identified by client as:

NAS Cecil Field

03/12/96

#1 - NTFFT-096 @ 10:55
#2 - NTFFT-097 @ 18:25
#3 - NTFFT-098 @ 02:45

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2032
DATE REPORTED: March 15, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT--096</u>	<u>NTFFT--097</u>	<u>NTFFT--098</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg

<u> surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Chlorofluorobenzene	105	95	95	39-125
Date Analyzed	03/14/96	03/14/96	03/14/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

	<u>NTFFT--096</u>	<u>NTFFT--097</u>	<u>NTFFT--098</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/14/96	03/14/96	03/14/96	

U - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2032
 DATE REPORTED: March 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT--096</u>	<u>NTFFT--097</u>	<u>NTFFT--098</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/13/96	20 U 03/13/96	20 U 03/13/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/13/96	1 U 03/13/96	1 U 03/13/96	mg/Kg
Chromium Date Analyzed	6010	3.6 03/13/96	3.1 03/13/96	3.8 03/13/96	mg/Kg
Lead Date Analyzed	6010	4.0 03/13/96	2.1 03/13/96	3.4 03/13/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/13/96	0.01 U 03/13/96	0.01 U 03/13/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/13/96	2 U 03/13/96	2 U 03/13/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2032
 DATE REPORTED: March 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

		Units
Methyl tert-butyl ether	10 U	
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Surrogate:

% RECOV

Bromofluorobenzene
 Date Analyzed

120
 03/14/96

LIMITS
 39-125

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

LAB BLANK

Total Petr. Hydrocarbons
 Date Analyzed

5 U
 03/12/96

Units

mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2032
 DATE REPORTED: March 15, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/13/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/13/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/13/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/13/96	mg/Kg
Cobalt Date Analyzed	6010	1 U 03/13/96	mg/Kg
Mercury Date Analyzed	7471	0.0002 U 03/13/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/13/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/13/96	mg/Kg

U - Compound was analyzed for but not detected to the level shown.

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	100/ 90/100	49-149	10	20
Toluene	80/ 70/ 85	43-144	13	14
Ethylbenzene	75/ 65/ 80	40-135	14	14
m-Xylene & p-Xylene	55/ 50/ 68	23-167	10	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	99/ 97/ 92	59-134	2	23
<u>Total Metals</u>				
Arsenic, 6010	91/ 92/ 87	70-118	1	12
Barium, 6010	103/104/100	69-120	<1	17
Cadmium, 6010	104/109/104	69-117	5	14
Chromium, 6010	108/106/105	75-120	2	20
Lead, 6010	104/106/104	60-130	2	31
Mercury, 7471	111/112/119	70-138	<1	12
Selenium, 6010	102/102/102	58-122	<1	14
Silver, 6010	101/103/102	69-116	2	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Laboratories

DHRS Certification No E82277.82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2044
DATE SUBMITTED: March 14, 1996
DATE REPORTED : March 18, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

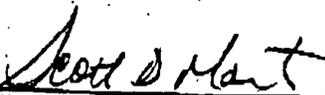
#1	-	03/13/96	NTFFT 99	@	10:35
#2	-	03/13/96	NTFFT 100	@	18:26
#3	-	03/14/96	NTFFT 101	@	02:30

RECEIVED

MAR 18 1996

V. HERMANN BAUER

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR2044
 DATE REPORTED: March 18, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

	<u>NTFFT 99</u>	<u>NTFFT 100</u>	<u>NTFFT 101</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg

surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	100	80	100	39-125
Date Analyzed	03/15/96	03/15/96	03/15/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT 99</u>	<u>NTFFT 100</u>	<u>NTFFT 101</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/15/96	03/15/96	03/15/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2044
 DATE REPORTED: March 18, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT 99</u>	<u>NTFFT 100</u>	<u>NTFFT 101</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/15/96	2 U 03/15/96	2 U 03/15/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/15/96	20 U 03/15/96	20 U 03/15/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/15/96	1 U 03/15/96	1 U 03/15/96	mg/Kg
Chromium Date Analyzed	6010	3.845 03/15/96	3.339 03/15/96	2.708 03/15/96	mg/Kg
Lead Date Analyzed	6010	2.476 03/15/96	2.198 03/15/96	2.212 03/15/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/15/96	0.01 U 03/15/96	0.01 U 03/15/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/15/96	2 U 03/15/96	2 U 03/15/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/15/96	2 U 03/15/96	2 U 03/15/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

		<u>Units</u>
Methyl tert-butyl ether	10 U	
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Progate:

% RECOV

LIMITS

Monofluorobenzene	120	39-125
Date Analyzed	03/14/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

LAB BLANK

Units

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	03/15/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2044
DATE REPORTED: March 18, 1996
PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/15/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/15/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/15/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/15/96	mg/Kg
Lead Date Analyzed	6010	1 U 03/15/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/15/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/15/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/15/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2044
 DATE REPORTED: March 18, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	100/ 90/100	49-149	10	20
Toluene	80/ 70/ 85	43-144	13	14
Ethylbenzene	75/ 65/ 80	40-135	14	14
m-Xylene & p-Xylene	55/ 50/ 68	23-167	10	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	98/ 82/ 95	59-134	18	23
<u>Total Metals</u>				
Arsenic, 6010	86/ 90/ 91	70-118	4	12
Barium, 6010	106/117/112	69-120	10	17
Cadmium, 6010	110/116/117	69-117	5	14
Chromium, 6010	106/112/112	75-120	6	20
Lead, 6010	109/114/116	60-130	4	31
Mercury, 7471	125/120/119	70-138	4	12
Selenium, 6010	98/100/111	58-122	2	14
Silver, 6010	94/ 98/103	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

QSARF # _____

4810 Executive Park Court, Suite 211
 Jacksonville, Florida 32216-6069
 Ph. (904) 296-3007 - Fax (904) 296-6210

10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 - Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE		PROJECT NO.	P.O. NUMBER	MATRIX TYPE		REQUIRED ANALYSIS		PAGE	OF																																																																																										
PROJECT LOC. (state)		SAMPLE NAME		PHONE		FAX																																																																																													
CLIENT NAME		CLIENT PROJECT MANAGER		SURFACE WATER		GROUND WATER		WASTEWATER																																																																																											
CLIENT ADDRESS (CITY, STATE, ZIP)				DRINKING WATER		SOLIDS/SOLIDIFICATION		NONAQUEOUS LIQUID (oil, grease, etc.)																																																																																											
				AIR		SLUDGE		OTHER																																																																																											
SAMPLE		SAMPLE IDENTIFICATION		0220		9073 174		PRESERVATIVE																																																																																											
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1788 101	3/1/92	0230	✓																																																																																																
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DIRECTOR FOR LABORATORY BY: (SIGNATURE)		DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS																																																																																													
A. J. ...		3/1/92	19:30	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	JL2094																																																																																														

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E - Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2056
DATE SUBMITTED: March 15, 1996
DATE REPORTED : March 19, 1996

PAGE 1 OF 6

ATTENTION: Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1	-	03/14/96	NTFFT-102 @ 10:35
#2	-	03/14/96	NTFFT-103 @ 18:25
#3	-	03/15/96	NTFFT-104 @ 02:45

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR2056
 DATE REPORTED: March 19, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A - VOLATILE AROMATICS	<u>NTFFT-102</u>	<u>NTFFT-103</u>	<u>NTFFT-104</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	85	90	85	39-125
Date Analyzed	03/17/96	03/17/96	03/17/96	
 EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS	 <u>NTFFT-102</u>	 <u>NTFFT-103</u>	 <u>NTFFT-104</u>	 <u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/18/96	03/18/96	03/18/96	

"U" = compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR205G

DATE REPORTED: March 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-102</u>	<u>NTFFT-103</u>	<u>NTFFT-104</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/15/96	2 U 03/15/96	2 U 03/15/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/15/96	20 U 03/15/96	20 U 03/15/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/15/96	1 U 03/15/96	1 U 03/15/96	mg/Kg
Chromium Date Analyzed	6010	3.518 03/15/96	3.855 03/15/96	3.053 03/15/96	mg/Kg
Lead Date Analyzed	6010	2.264 03/15/96	2.014 03/15/96	2.42 03/15/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/19/96	0.01 U 03/19/96	0.01 U 03/19/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/15/96	2 U 03/15/96	2 U 03/15/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/15/96	2 U 03/15/96	2 U 03/15/96	mg/Kg

* - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2056
 DATE REPORTED: March 19, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

		<u>Units</u>
Methyl tert-butyl ether	10 U	
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Surrogate:

% RECOV

		<u>LIMITS</u>
Bromofluorobenzene	125	39-125
Date Analyzed	03/17/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

LAB BLANK

		<u>Units</u>
Total Petr. Hydrocarbons	5 U	
Date Analyzed	03/18/96	mg/Kg

U - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2056
DATE REPORTED: March 19, 1996
PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/15/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/15/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/15/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/15/96	mg/Kg
Lead Date Analyzed	6010	1 U 03/15/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/19/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/15/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/15/96	mg/Kg

U - Compound was analyzed for but not detected to the level shown.

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	95/105/100	49-149	10	20
Toluene	75/ 85/ 80	43-144	12	14
Ethylbenzene	75/ 85/ 80	40-135	12	14
m-Xylene & p-Xylene	60/ 65/ 62	23-167	8	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	98/ 82/ 95	59-134	18	23
<u>Total Metals</u>				
Arsenic, 6010	86/ 90/ 91	70-118	4	12
Mercury, 6010	106/117/112	69-120	10	17
Cadmium, 6010	110/116/117	69-117	5	14
Chromium, 6010	106/112/112	75-120	6	20
Lead, 6010	109/114/116	60-130	4	31
Mercury, 7471	121/122/123	70-138	<1	12
Selenium, 6010	98/100/111	50-122	2	14
Silver, 6010	94/ 98/103	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. EB2277, 92417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E - Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2067
DATE SUBMITTED: March 16, 1996
DATE REPORTED : March 19, 1996

PAGE 1 OF 6

ATTENTION: Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

#1	-	03/15/96	NTFFT-105 @ 10:36
#2	-	03/15/96	NTFFT-106 @ 18:23
#3	-	03/16/96	NTFFT-107 @ 02:20

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR2067
 DATE REPORTED: March 19, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-105</u>	<u>NTFFT-106</u>	<u>NTFFT-107</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Progate 1</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	85	70	80	39-125
Date Analyzed	03/17/96	03/17/96	03/18/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-105</u>	<u>NTFFT-106</u>	<u>NTFFT-107</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/18/96	03/18/96	03/18/96	

U Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2067

DATE REPORTED: March 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-105</u>	<u>NTFFT-106</u>	<u>NTFFT-107</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/18/96	03/18/96	03/18/96	
Barium	6010	20 U	20 U	20 U	mg/Kg
Date Analyzed		03/18/96	03/18/96	03/18/96	
Cadmium	6010	1 U	1 U	1 U	mg/Kg
Date Analyzed		03/18/96	03/18/96	03/18/96	
Chromium	6010	3.202	3.404	3.14	mg/Kg
Date Analyzed		03/18/96	03/18/96	03/18/96	
Cobalt	6010	2.148	2.569	2.602	mg/Kg
Date Analyzed		03/18/96	03/18/96	03/18/96	
Mercury	7471	0.01 U	0.01 U	0.01 U	mg/Kg
Date Analyzed		03/19/96	03/19/96	03/19/96	
Selenium	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/18/96	03/18/96	03/18/96	
Silver	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/18/96	03/18/96	03/18/96	

U Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2067

DATE REPORTED: March 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICSLAB BLANKUnits

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

 surrogate:% RECOVLIMITS

Bromofluorobenzene	125	39-125
Date Analyzed	03/17/96	

EPA METHOD 9073 -TOTAL PETR. HYDROCARBONSLAB BLANKUnits

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	03/18/96	

Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2067
DATE REPORTED: March 19, 1996
PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/18/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/18/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/18/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/18/96	mg/Kg
Cobalt Date Analyzed	6010	1 U 03/18/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/19/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/18/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/18/96	mg/Kg

U - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2067

DATE REPORTED: March 19, 1996

PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	95/105/100	49-149	10	20
Toluene	75/ 85/ 80	43-144	12	14
Ethylbenzene	75/ 85/ 80	40-135	12	14
m-Xylene & p-Xylene	60/ 65/ 62	23-167	8	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	98/ 82/ 95	59-134	18	23
<u>Total Metals</u>				
Arsenic, 6010	70/ 71/ 80	70-118	1	12
Barium, 6010	84/ 85/ 97	69-120	1	17
Cadmium, 6010	82/ 85/ 92	69-117	4	14
Chromium, 6010	88/ 92/ 99	75-120	4	20
Lead, 6010	88/ 91/ 98	60-130	3	31
Mercury, 7471	121/122/123	70-138	<1	12
Selenium, 6010	79/ 83/ 91	58-122	5	14
Silver, 6010	86/ 90/ 98	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

QSARF # _____

4810 Executive Park Court, Suite 211
 Jacksonville, Florida 32216-6069
 Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT NAS Cecil Field				PROJECT NO.	PO NUMBER	MATRIX TYPE										REQUIRED ANALYSIS		PAGE 1	CF 1	
PROJECT LOC. (State) FL		SAMPLER(S) NAME C. BARKER, C. WHITE, G. KESLER			PHONE		SURFACE WATER GROUND WATER WASTE WATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (e.g. fuel, oil, etc.) AIR SLUDGE OTHER										PRESERVATIVE NONE OF THESE APPLIED		STANDARD REPORT DELIVERY <input type="checkbox"/>	
CLIENT NAME DUSTCOATING		CLIENT PROJECT MANAGER			FAX														EXPEDITED REPORT DELIVERY (surcharge) <input type="checkbox"/>	
CLIENT ADDRESS (CITY, STATE, ZIP)																				
DATE Recd: _____																				
REMARKS																				
SAMPLE					SAMPLE IDENTIFICATION															
SAMPLE NO.	DATE	TIME	YEAR	COMP																
NTFFT-105	15MAR96	1036		X	NTFFT-105															
NTFFT-106	15MAR96	1823		X	NTFFT-106															
NTFFT-107	16MAR96	0720		X	NTFFT-107															

SAMPLE KIT PREPARED BY: JACKSONVILLE ORLANDO		DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RELINQUISHED BY: (SIGNATURE) <i>C. White</i>		DATE 3/16/96	TIME 10:32	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>Osceola Jones</i> Jacksonville Orlando		DATE 3/16/96	TIME 10:32	CUSTODY INTACT <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	ENCO LOG NO.	REMARKS			

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32218-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. EB2277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E - Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2069
DATE SUBMITTED: March 17, 1996
DATE REPORTED : March 20, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

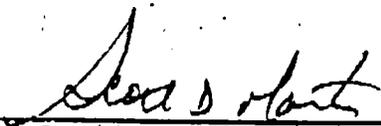
Samples submitted and
identified by client as:

NAS Cecil Field

03/16/96

#1 - NTFFT-108 @ 10:42
#2 - NTFFT-109 @ 18:24
#3 - NTFFT-110 @ 23:18

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2069
DATE REPORTED: March 20, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-108</u>	<u>NTFFT-109</u>	<u>NTFFT-110</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u> surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	85	80	80	39-125
Date Analyzed	03/18/96	03/18/96	03/18/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-108</u>	<u>NTFFT-109</u>	<u>NTFFT-110</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/19/96	03/19/96	03/19/96	

* = Compound was analyzed for but not detected to the level shown.

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ENCO LABORATORIES
 REPORT # : JR2069
 DATE REPORTED: March 20, 1996
 PROJECT NAME : NAS Cecil Field

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RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-108</u>	<u>NTFFT-109</u>	<u>NTFFT-110</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/18/96	2 U 03/18/96	2 U 03/18/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/18/96	20 U 03/18/96	20 U 03/18/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/18/96	1 U 03/18/96	1 U 03/18/96	mg/Kg
Chromium Date Analyzed	6010	2.539 03/18/96	4.021 03/18/96	4.262 03/18/96	mg/Kg
Lead Date Analyzed	6010	2.368 03/18/96	2.665 03/18/96	2.674 03/18/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/19/96	0.01 U 03/19/96	0.01 U 03/19/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/18/96	2 U 03/18/96	2 U 03/18/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/18/96	2 U 03/18/96	2 U 03/18/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2069
 DATE REPORTED: March 20, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

LAB BLANK

Units

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

surrogate:

REC

LIMITS

Chlorofluorobenzene	125	39-125
Date Analyzed	03/17/96	

**EPA METHOD 9073 -
 TOTAL PETR. HYDROCARBONS**

LAB BLANK

Units

Total Petr. Hydrocarbons	5 U	µg/Kg
Date Analyzed	03/19/96	

* = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2069
DATE REPORTED: March 20, 1996
PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/18/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/18/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/18/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/18/96	mg/Kg
Lead Date Analyzed	6010	1 U 03/18/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/19/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/18/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/18/96	mg/Kg

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).
= Compound was analyzed for but not detected to the level shown.

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	95/105/100	49-149	10	20
Toluene	75/ 85/ 80	43-144	12	14
Ethylbenzene	75/ 85/ 80	40-135	12	14
m-Xylene & p-Xylene	60/ 65/ 62	23-167	8	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	98/ 82/ 95	59-134	18	23
<u>Total Metals</u>				
Arsenic, 6010	70/ 71/ 80	70-118	1	12
Barium, 6010	84/ 85/ 97	69-120	1	17
Cadmium, 6010	82/ 85/ 92	69-117	4	14
Chromium, 6010	88/ 92/ 99	75-120	4	20
Lead, 6010	88/ 91/ 98	60-130	3	31
Mercury, 7471	121/122/123	70-138	<1	12
Selenium, 6010	79/ 83/ 91	58-122	5	14
Silver, 6010	86/ 90/ 98	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-5945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT MAS Cecil Field					PROJECT NO.	P.O. NUMBER	MATRIX TYPE					REQUIRED ANALYSIS					PAGE	OF		
PROJECT LOC. (State) FL		SAMPLER(S) NAME C. PARSONS, G. HEDGER			PHONE 363 9999		FAX		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOLID ID/SOLIDIFICATION NON-AQUEOUS LIQUID (e.g., fuel, oil) AIR SLUDGE OTHER 8020 STPH 9013 RCRA METALS					<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____					REMARKS	
CLIENT NAME DUST COATINGS				CLIENT PROJECT MANAGER TERRY DARR																
CLIENT ADDRESS (CITY, STATE, ZIP)																				
SAMPLE					SAMPLE IDENTIFICATION					PRESERVATIVE										
DATE	TIME	LAB	QAPP	QAPP																
NTFFT-108	3-16-96	1042		V	NTFFT-108															
NTFFT-109	3-16-96	1824		V	NTFFT-109															
NTFFT-110	3-16-96	2318		V	NTFFT-110															
SAMPLE KIT PREPARED BY: JACKSONVILLE ORLANDO					DATE	TIME	RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED BY: (SIGNATURE)					DATE	TIME
RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED BY: (SIGNATURE)					DATE	TIME	RELINQUISHED BY: (SIGNATURE)					DATE	TIME
RECEIVED BY: (SIGNATURE)					DATE	TIME	RELINQUISHED BY: (SIGNATURE) <i>W.B. Hedger</i>					DATE	TIME	RECEIVED BY: (SIGNATURE) <i>Jack W. ...</i>					DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>Debra ...</i>					DATE 3/17/96	TIME 13:00	CUSTODY INTACT		ENCO LOG NO.		REMARKS									

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2070
DATE SUBMITTED: March 18, 1996
DATE REPORTED : March 20, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

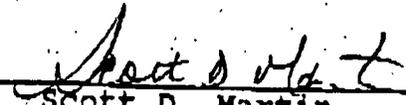
Samples submitted and
identified by client as:

NAS Cecil Field

03/18/96

#1 - NTEFFT-111 @ 08:44

PROJECT MANAGER



Scott D. Martin

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ENCO LABORATORIES
 REPORT # : JR2070
 DATE REPORTED: March 20, 1996
 PROJECT NAME : NAS Cecil field

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RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

	<u>NTFFPT-111</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	100	125	39-125
Date Analyzed	03/18/96	03/17/96	

**EPA METHOD 9073 -
 TOTAL PETR. HYDROCARBONS**

	<u>NTFFPT-111</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	03/19/96	03/19/96	

J = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2070

DATE REPORTED: March 20, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFFT-111</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/19/96	2 U 03/18/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/19/96	20 U 03/18/96	mg/Kg
Calcium Date Analyzed	6010	1 U 03/19/96	1 U 03/18/96	mg/Kg
Chromium Date Analyzed	6010	3.087 03/19/96	1 U 03/18/96	mg/Kg
Lead Date Analyzed	6010	3.965 03/19/96	1 U 03/18/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/19/96	0.01 U 03/19/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/19/96	2 U 03/18/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/19/96	2 U 03/18/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2070
DATE REPORTED: March 20, 1996
PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	95/105/100	49-149	10	20
Toluene	75/ 85/ 80	43-144	12	14
Ethylbenzene	75/ 85/ 80	40-135	12	14
m-Xylene & p-Xylene	60/ 65/ 62	23-167	8	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	98/ 82/ 95	59-134	18	23
<u>Total Metals</u>				
Arsenic, 6010	70/ 71/ 80	70-118	1	12
Barium, 6010	84/ 85/ 97	69-120	1	17
Cadmium, 6010	82/ 85/ 92	69-117	4	14
Chromium, 6010	88/ 92/ 99	75-120	4	20
Lead, 6010	88/ 91/ 90	60-130	3	31
Mercury, 7471	121/122/123	70-138	<1	12
Selenium, 6010	79/ 83/ 91	58-122	5	14
Silver, 6010	86/ 90/ 98	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
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Fax 904 / 296-6210



Laboratories

DHRS Certification No. EB2277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2091
DATE SUBMITTED: March 20, 1996
DATE REPORTED : March 22, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - 03/19/96 NTFFT-112 @ 15:53
- #2 - 03/19/96 NTFFT-113 @ 23:45
- #3 - 03/20/96 NTFFT-114 @ 07:50

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2091
DATE REPORTED: March 22, 1996
PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
VOLATILE AROMATICS**

	<u>NTFFT-112</u>	<u>NTFFT-113</u>	<u>NTFFT-114</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	105	100	100	30-125
Date Analyzed	03/21/96	03/21/96	03/21/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-112</u>	<u>NTFFT-113</u>	<u>NTFFT-114</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/21/96	03/21/96	03/21/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2091
DATE REPORTED: March 22, 1996
PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-112</u>	<u>NTFFT-113</u>	<u>NTFFT-114</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/21/96	2 U 03/21/96	2 U 03/21/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/21/96	20 U 03/21/96	20 U 03/21/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/21/96	1 U 03/21/96	1 U 03/21/96	mg/Kg
Chromium Date Analyzed	6010	3.729 03/21/96	5.409 03/21/96	3.596 03/21/96	mg/Kg
Lead Date Analyzed	6010	3.563 03/21/96	4.193 03/21/96	3.413 03/21/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/22/96	0.01 U 03/22/96	0.01 U 03/22/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/21/96	2 U 03/21/96	2 U 03/21/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/21/96	2 U 03/21/96	2 U 03/21/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2091
DATE REPORTED: March 22, 1996
PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

Units

Methyl tert-butyl ether	10 U	
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

surrogate

% RECOV

LIMITS

Bromofluorobenzene	125	39-125
Date Analyzed	03/21/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

LAB BLANK

Units

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	03/21/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2091
 DATE REPORTED: March 22, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 03/21/96	mg/Kg
Barium Date Analyzed	6010	20 U 03/21/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 03/21/96	mg/Kg
Chromium Date Analyzed	6010	1 U 03/21/96	mg/Kg
Lead Date Analyzed	6010	1 U 03/21/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/22/96	mg/Kg
Selenium Date Analyzed	6010	2 U 03/21/96	mg/Kg
Silver Date Analyzed	6010	2 U 03/21/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHHS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E - Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2098
DATE SUBMITTED: March 21, 1996
DATE REPORTED : March 26, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - 03/20/96 NTFFT-115 @ 15:58
- #2 - 03/21/96 NTFFT-116 @ 06:00

PROJECT MANAGER

MDL Per

Scott D. Martin

RECEIVED

MAR 26 1996

V. HERMANN BAUER

ENCO LABORATORIES
 REPORT # : JR2098
 DATE REPORTED: March 26, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT-115</u>	<u>NTFFT-116</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	95	80	125	39-125
Date Analyzed	03/21/96	03/21/96	03/21/96	

<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-115</u>	<u>NTFFT-116</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/21/96	03/21/96	03/21/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2098
DATE REPORTED: March 26, 1996
PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTPET-115</u>	<u>NTPET-116</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	7062	2.5 U 03/25/96	2.5 U 03/25/96	2.5 U 03/25/96	mg/Kg
Barium Date Analyzed	7080	10 U 03/26/96	10 U 03/26/96	10 U 03/26/96	mg/Kg
Cadmium Date Analyzed	7130	1 U 03/25/96	1 U 03/25/96	1 U 03/25/96	mg/Kg
Chromium Date Analyzed	7190	5.7 03/26/96	4.7 03/26/96	2 U 03/26/96	mg/Kg
Lead Date Analyzed	7420	4.8 03/26/96	4.8 03/26/96	2.5 U 03/26/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/22/96	0.01 U 03/22/96	0.01 U 03/22/96	mg/Kg
Selenium Date Analyzed	7742	2.5 U 03/25/96	2.5 U 03/25/96	2.5 U 03/25/96	mg/Kg
Silver Date Analyzed	7760	1 U 03/25/96	1 U 03/25/96	1 U 03/25/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2098
 DATE REPORTED: March 26, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	100/100/100	49-149	<1	20
Toluene	85/ 85/ 85	43-144	<1	14
Ethylbenzene	85/ 85/ 90	40-135	<1	14
m-Xylene & p-Xylene	68/ 70/ 70	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	102/103/ 84	59-134	<1	23
<u>Total Metals</u>				
Arsenic, 7062	83/ 80/ 70	38-148	4	34
Barium, 7080	118/124/ 92	44-123	5	16
Cadmium, 7130	89/ 87/ 84	84-112	2	8
Chromium, 7190	102/100/100	80-124	2	12
Lead, 7420	103/ 98/103	60-129	5	23
Mercury, 7471	111/110/109	70-138	<1	12
Selenium, 7742	67/ 60/ 47	20-142	11	64
Silver, 7760	94/100/ 97	79-112	6	7

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

< = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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ENVIRONMENTAL CONSERVATION LABORATORIES

QSARF # _____

4810 Executive Park Court, Suite 211
 Jacksonville, Florida 32216-6069
 Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE <i>HTFFT Cecil Field</i>		PROJECT NO.	P.O. NUMBER	MATRIX TYPE										REQUIRED ANALYSIS		PAGE	OF		
PROJECT LOC. (State) <i>FL</i>	SAMPLER(S) NAME <i>C. White / L. Parsons / G. Medger</i>		PHONE	SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID RESIDUUM NONAQUEOUS LIQUID (as solvent, etc.) AIR SLUDGE OTHER <i>8020</i> <i>9075 TPN</i> <i>REPA Metals</i>										<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge)		Date Due: _____	REMARKS		
CLIENT NAME <i>Dust Coatings</i>	CLIENT PROJECT MANAGER		FAX																
CLIENT ADDRESS (CITY, STATE, ZIP)				PRESERVATIVE															
SAMPLE				SAMPLE IDENTIFICATION															
<i>HTFFT 115</i>	<i>3/20/96</i>	<i>1558</i>	<input checked="" type="checkbox"/>																
<i>HTFFT 116</i>	<i>3/21/96</i>	<i>0600</i>	<input checked="" type="checkbox"/>																
SAMPLE KIT PREPARED BY: <i>CLACKSONVILLE ORLANDO</i>				DATE	TIME	RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED BY: (SIGNATURE)					DATE	TIME
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>				DATE <i>3/21/96</i>	TIME <i>5:55</i>	RECEIVED BY: (SIGNATURE)					DATE	TIME	RELINQUISHED BY: (SIGNATURE)					DATE	TIME
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED BY: (SIGNATURE)					DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>[Signature]</i>				DATE <i>3/21/96</i>	TIME	CUSTODY INTACT	ENCO LOG NO. <i>TR 0098</i>	REMARKS											
<input checked="" type="checkbox"/> Jacksonville <input type="checkbox"/> Orlando																			

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216 8069
904 / 296-3007
Fax 904 / 296-6210



Laboratories
DHRS Certification No. EB2277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2125
DATE SUBMITTED: March 25, 1996
DATE REPORTED : March 27, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - NTFFT-117 @ 14:06 (03/21/96)
- #2 - NTFFT-118 @ 21:50 (03/21/96)
- #3 - NTFFT-119 @ 06:00 (03/22/96)

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES

REPORT # : JR2125

DATE REPORTED: March 27, 1996

PROJECT NAME : NAS Cecil field

PAGE 2 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

	<u>NTFFT-117</u>	<u>NTFFT-118</u>	<u>NTFFT-119</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	80	100	105	39-125
Date Analyzed	03/25/96	03/25/96	03/25/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-117</u>	<u>NTFFT-118</u>	<u>NTFFT-119</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/25/96	03/25/96	03/25/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2125

DATE REPORTED: March 27, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-117</u>	<u>NTFFT-118</u>	<u>NTFFT-119</u>	<u>Units</u>
Arsenic Date Analyzed	7062	2.5 U 03/25/96	2.5 U 03/25/96	2.5 U 03/25/96	mg/Kg
Barium Date Analyzed	7080	10 U 03/26/96	12.5 03/26/96	10 U 03/26/96	mg/Kg
Cadmium Date Analyzed	7130	1 U 03/27/96	1 U 03/27/96	1 U 03/27/96	mg/Kg
Chromium Date Analyzed	7190	4.6 03/26/96	4.8 03/26/96	4.9 03/26/96	mg/Kg
Lead Date Analyzed	7420	1 U 03/26/96	2.5 03/26/96	1 U 03/26/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/26/96	0.01 U 03/26/96	0.01 U 03/26/96	mg/Kg
Selenium Date Analyzed	7742	2.5 U 03/25/96	2.5 U 03/25/96	2.5 U 03/25/96	mg/Kg
Silver Date Analyzed	7760	1 U 03/27/96	1 U 03/27/96	1 U 03/27/96	mg/Kg

U - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2125
DATE REPORTED: March 27, 1996
PROJECT NAME ; NAS Cecil Field

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

Units

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Surrogate:

% RECOV

LIMITS

Bromofluorobenzene	125	39-125
Date Analyzed	03/25/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

LAB BLANK

Units

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	03/25/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2125

DATE REPORTED: March 27, 1996

PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	7062	2.5 U 03/25/96	mg/Kg
Barium Date Analyzed	7080	10 U 03/26/96	mg/Kg
Cadmium Date Analyzed	7130	1 U 03/27/96	mg/Kg
Chromium Date Analyzed	7190	1 U 03/26/96	mg/Kg
Lead Date Analyzed	7420	1 U 03/26/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/26/96	mg/Kg
Selenium Date Analyzed	7742	2.5 U 03/25/96	mg/Kg
Silver Date Analyzed	7760	1 U 03/27/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2125
DATE REPORTED: March 27, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	105/100/110	49-149	5	20
Toluene	90/ 85/ 95	43-144	6	14
Ethylbenzene	95/ 90/100	40-135	5	14
m-Xylene & p-Xylene	72/ 70/ 78	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 85/ 96	59-134	23	23
<u>Total Metals</u>				
Arsenic, 7062	83/ 77/ 82	38-148	8	34
Barium, 7080	127/124/115	44-123	2	16
Cadmium, 7130	83/ 82/ 95	84-112	1	8
Chromium, 7190	96/ 95/105	80-124	1	12
Lead, 7420	99/ 92/101	60-129	7	23
Mercury, 7471	111/114/114	70-138	3	12
Selenium, 7742	36/ 40/ 62	20-142	10	64
Silver, 7760	88/ 85/ 93	79-112	3	7

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. E82277. 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2118
DATE SUBMITTED: March 23, 1996
DATE REPORTED : March 27, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - 03/22/96 NTFFT 120 @1407
- #2 - 03/22/96 NTFFT 121 @2150
- #3 - 03/23/96 NTFFT 122 @0700

PROJECT MANAGER

Scott D. Martin

ENCO LABORATORIES

REPORT # : JR2118

DATE REPORTED: March 27, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 6

RESULTS OF ANALYSIS

<u>EPA METHOD 8020A - VOLATILE AROMATICS</u>	<u>NTFFT 120</u>	<u>NTFFT 121</u>	<u>NTFFT 122</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	10 D5	15 D5	µg/Kg
Toluene	5 U	15 D5	15 D5	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	100	105	110	30-125
Date Analyzed	03/25/96	03/25/96	03/25/96	

<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT 120</u>	<u>NTFFT 121</u>	<u>NTFFT 122</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/24/96	03/24/96	03/24/96	

D5 = Analyte value determined from a 1:5 dilution.
 - Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2118
 DATE REPORTED: March 27, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT 120</u>	<u>NTFFT 121</u>	<u>NTFFT 122</u>	<u>Units</u>
Arsenic Date Analyzed	7062	2.5 U 03/25/96	2.5 U 03/25/96	2.5 U 03/25/96	mg/Kg
Barium Date Analyzed	7080	10 U 03/24/96	10 U 03/24/96	10 U 03/24/96	mg/Kg
Cadmium Date Analyzed	7130	1 U 03/26/96	1 U 03/26/96	1 U 03/26/96	mg/Kg
Chromium Date Analyzed	7190	6.45 03/24/96	3 U 03/24/96	3 U 03/24/96	mg/Kg
Lead Date Analyzed	7420	2.5 U 03/24/96	2.5 U 03/24/96	2.5 U 03/24/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/26/96	0.01 U 03/26/96	0.01 U 03/26/96	mg/Kg
Selenium Date Analyzed	7742	2.5 U 03/25/96	2.5 U 03/25/96	2.5 U 03/25/96	mg/Kg
Silver Date Analyzed	7760	1 U 03/25/96	1 U 03/25/96	1 U 03/25/96	mg/Kg

* Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2118
DATE REPORTED: March 27, 1996
PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

EPA METHOD 8020A -
VOLATILE AROMATICS

LAB BLANK

Units

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	µg/Kg

Progate:

% RECOV

LIMITS

Bromofluorobenzene	125	30-125
Date Analyzed	03/25/96	

EPA METHOD 9073 -
TOTAL PETR. HYDROCARBONS

LAB BLANK

Units

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	03/24/96	

Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2118
DATE REPORTED: March 27, 1996
PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	7062	2.5 U 03/25/96	mg/Kg
Barium Date Analyzed	7080	10 U 03/24/96	mg/Kg
Cadmium Date Analyzed	7130	1 U 03/26/96	mg/Kg
Chromium ate Analyzed	7190	2.5 U 03/24/96	mg/Kg
Lead Date Analyzed	7420	3 U 03/24/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/26/96	mg/Kg
Selenium Date Analyzed	7742	2.5 U 03/25/96	mg/Kg
Silver Date Analyzed	7760	1 U 03/25/96	mg/Kg

= compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2110
DATE REPORTED: March 27, 1996
PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	105/100/110	49-149	5	20
Toluene	90/ 85/ 95	43-144	6	14
Ethylbenzene	95/ 90/100	40-135	5	14
m-Xylene & p-Xylene	72/ 70/ 78	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	102/103/ 84	59-134	<1	23
<u>Total Metals</u>				
Arsenic, 7062	79/ 77/ 78	38-148	2	34
Barium, 7080	93/100/106	44-123	7	16
Cadmium, 7130	81/ 80/ 91	84-112	1	8
Chromium, 7190	77/ 86/102	80-124	11	12
Lead, 7420	98/104/101	60-129	6	23
Mercury, 7471	111/114/114	70-138	3	12
Selenium, 7742	47/ 54/ 59	20-142	14	64
Silver, 7760	90/ 89/102	79-112	1	7

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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10207 General Drive
 Orlando, Florida 32824
 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT Cecil Field		PROJECT NO.	P.O. NUMBER	MATRIX TYPE										REQUIRED ANALYSIS		PAGE	OF
PROJECT LOG (State) FL	SAMPLER(S) NAME C. White / C. Parsons / G. Redger		PHONE	SURFACE WATER GROUND WATER WASTE WATER DRINKING WATER SOLID / SOLIDIFICATION AQUEOUS LIQUID (see note on pg. 2) AIR SLUDGE OTHER												STANDARD REPORT DELIVERY <input type="checkbox"/>	EXPEDITED REPORT DELIVERY (surcharge) <input type="checkbox"/>
CLIENT NAME Dust Coating		CLIENT PROJECT MANAGER															
CLIENT ADDRESS (CITY, STATE, ZIP)				8020 9075774 PCB Metal										PRESERVATIVE		Date Recd:	
SAMPLE																SAMPLE IDENTIFICATION	
NTFFT 120	3/22/96	1407															
NTFFT 121	3/22/96	2150															
NTFFT 122	3/22/96	0700															
SAMPLE KIT PREPARED BY: CJACKSONVILLE DORLANDO		DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME		
RELINQUISHED BY: (SIGNATURE) <i>CJ White</i>		DATE 3-22-96	TIME 0900	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME		
RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME		
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>Cynthia Reed</i>		DATE 3-23-96	TIME 0900	CUSTODY INTACT	ENCO LOG NO.	REMARKS											
<input checked="" type="checkbox"/> Jacksonville <input type="checkbox"/> Orlando				<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	712118												

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

DUPLICATE



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2124
DATE SUBMITTED: March 24, 1996
DATE REPORTED : March 27, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

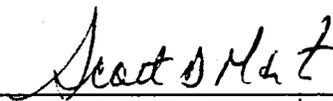
Samples submitted and
identified by client as:

NAS Cecil Field

03/23/96

#1 - NTFFT-123 @ 13:58

OBJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR2124
 DATE REPORTED: March 27, 1996
 PROJECT NAME : NAS Cecil Field

DUPLICATE

RESULTS OF ANALYSIS

**EPA METHOD 8020A -
 VOLATILE AROMATICS**

	<u>NTFFT-123</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	µg/Kg

<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	100	125	39-125
Date Analyzed	03/25/96	03/25/96	

EPA METHOD 9073 -

<u>TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-123</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	03/25/96	03/25/96	

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2124

DATE REPORTED: March 27, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-123</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	7062	2.5 U 03/25/96	2.5 U 03/25/96	mg/Kg
Barium Date Analyzed	7080	16 03/26/96	10 U 03/26/96	mg/Kg
Cadmium Date Analyzed	7130	1 U 03/27/96	1 U 03/27/96	mg/Kg
Chromium Date Analyzed	7190	5.2 03/26/96	1 U 03/26/96	mg/Kg
Lead Date Analyzed	7420	3.2 03/26/96	1 U 03/26/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 03/26/96	0.01 U 03/26/96	mg/Kg
Selenium Date Analyzed	7742	2.5 U 03/25/96	2.5 U 03/25/96	mg/Kg
Silver Date Analyzed	7760	1 U 03/27/96	1 U 03/27/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2124
DATE REPORTED: March 27, 1996
PROJECT NAME : NAS Cecil Field

DUPLICATE

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	105/100/110	49-149	5	20
Toluene	90/ 85/ 95	43-144	6	14
Ethylbenzene	95/ 90/100	40-135	5	14
m-Xylene & p-Xylene	72/ 70/ 78	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 85/ 96	59-134	23	23
<u>Trace Metals</u>				
Arsenic, 7062	83/ 77/ 82	38-148	8	34
Barium, 7080	127/124/115	44-123	2	16
Cadmium, 7130	83/ 82/ 95	84-112	1	8
Chromium, 7190	96/ 95/105	80-124	1	12
Lead, 7420	99/ 92/101	60-129	7	23
Mercury, 7471	111/114/114	70-138	3	12
Selenium, 7742	36/ 40/ 62	20-142	10	64
Silver, 7760	88/ 85/ 93	79-112	3	7

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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 10207 General Drive Orlando, Florida 32824 Ph. (407) 826-5314 · Fax (407) 850-6945



CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT NAS CECIL FIELD				PROJECT NO.		P.O. NUMBER		MATRIX TYPE				REQUIRED ANALYSIS				PAGE 1 OF 1	
PROJECT LOC. (State) FL		SAMPLER(S) NAME C. PARSONS				PHONE		FAX		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NON-AQUEOUS LIQUID (w/ solvent, etc.) AIR SLUDGE OTHER 8020 9073 TPH RCRA METALS				<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____			
CLIENT NAME DUST COATINGS				CLIENT PROJECT MANAGER													
CLIENT ADDRESS (CITY, STATE, ZIP)																	
SAMPLE																	
STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION			NUMBER OF CONTAINERS SUBMITTED				REMARKS					
NTFFT-123	23MAR96	1358		X	NTFFT-123												
DUPLICATE																	
SAMPLE KIT PREPARED BY: <input type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
RELINQUISHED BY: (SIGNATURE) <i>Chris L. Parsons</i>				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>Debra L. ...</i>				DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS									
<input checked="" type="checkbox"/> Jacksonville <input type="checkbox"/> Orlando				3/24/96	11:00	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	JR: 24										

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Jacksonville, Florida 32216-6069
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Laboratories

DHRS Certification No. E82277, 52417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2133
DATE SUBMITTED: March 25, 1996
DATE REPORTED : March 28, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

03/25/96

- #1 - NTFFT-124 @ 09:17
- #2 - NTFFT-125 @ 16:50

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR2133
 DATE REPORTED: March 28, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020A -
 VOLATILE AROMATICS

	NTFFT-124	NTFFT-125	LAB BLANK	Units
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	10	5 U	µg/Kg
Toluene	5 U	15	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	105	100	125	39-125
Date Analyzed	03/26/96	03/26/96	03/25/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-124</u>	<u>NTFFT-125</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	03/27/96	03/27/96	03/27/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2133

DATE REPORTED: March 28, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-124</u>	<u>NTFFT-125</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/28/96	03/28/96	03/28/96	
Barium	6010	20 U	20 U	20 U	mg/Kg
Date Analyzed		03/28/96	03/28/96	03/28/96	
Cadmium	6010	1 U	1 U	1 U	mg/Kg
Date Analyzed		03/28/96	03/28/96	03/28/96	
Chromium	6010	4.335	3.775	1 U	mg/Kg
Date Analyzed		03/28/96	03/28/96	03/28/96	
Lead	6010	2.76	3.45	1 U	mg/Kg
Date Analyzed		03/28/96	03/28/96	03/28/96	
Mercury	7471	0.01 U	0.01 U	0.01 U	mg/Kg
Date Analyzed		03/26/96	03/26/96	03/26/96	
Selenium	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/28/96	03/28/96	03/28/96	
Silver	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		03/28/96	03/28/96	03/28/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2133
 DATE REPORTED: March 28, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020A</u>				
Benzene	105/100/110	49-149	5	20
Toluene	90/ 85/ 95	43-144	6	14
Ethylbenzene	95/ 90/100	40-135	5	14
m-Xylene & p-Xylene	72/ 70/ 78	23-167	3	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	107/ 85/ 88	59-134	23	23
<u>Total Metals</u>				
Arsenic, 6010	92/ 84/ 77	70-118	9	12
Barium, 6010	90/ 84/ 77	69-120	7	17
Cadmium, 6010	80/ 76/ 73	69-117	5	14
Chromium, 6010	91/ 86/ 78	75-120	6	20
Lead, 6010	89/ 82/ 78	60-130	8	31
Mercury, 7471	111/114/114	70-138	3	12
Selenium, 6010	84/ 77/ 74	58-122	9	14
Silver, 6010	100/ 94/ 93	69-116	6	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Orlando, Florida 32824

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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE		PROJECT NO.	PO NUMBER	MATRIX TYPE		REQUIRED ANALYSIS		PAGE 1 OF 1							
PROJECT LOG (State)	SAMPLER(S) NAME	PHONE	FAX	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID SEDIMENT	NONAQUEOUS LIQUID (see Section 2.1)	AIR	SLUDGE	OTHER	PRESERVATIVE	STANDARD REPORT DELIVERY	EXPEDITED REPORT DELIVERY (surcharge)
CLIENT NAME	CLIENT PROJECT MANAGER														
NTFF NAS CECIL FIELD		363 9999													
FL C. PARSONS, G. HEDSER															
DUST COATINGS															
SAMPLE		SAMPLE IDENTIFICATION		REMARKS											
NTFF-124	3-25-96	0917	✓	NTFF-124											
NTFF-125	3-25-96	1650	✓	NTFF-125											
SAMPLE KIT PREPARED BY:		DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
JACKSONVILLE ORLANDO															
RE. INQUIRED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	RE. INQUIRED BY: (SIGNATURE)				DATE	TIME
RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
				W. Hedser				3-28-96	7:46 pm						
RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE	TIME	CUSTODY INTACT		ENCO LOG NO.		REMARKS							
J. S. Ogilvie		3/25/96	7:46 pm	YES NO		JR 2133									

16-596 INU 16:09 ENCO LABORATORIES-JAX 9042966210 P.06

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. EB2277. 62417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E- Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2397
DATE SUBMITTED: April 25, 1996
DATE REPORTED : April 30, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

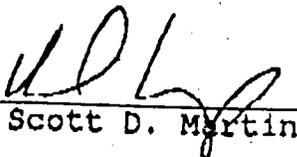
Samples submitted and
identified by client as:

NAS Cecil Field

04/25/96

#1 - NTFET 130 @ 14:45

PROJECT MANAGER


Scott D. Martin

RECEIVED

APR 30 1996

V. MEDICAL RAISS

ENCO LABORATORIES
 REPORT # : JR2397
 DATE REPORTED: April 30, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

<u>EPA METHOD 8020 - VOLATILE AROMATICS</u>	<u>NTFFT 130</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	7	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	6	5 U	µg/Kg
m-Xylene & p-Xylene	33	5 U	µg/Kg
o-Xylene	13	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	106	124	39-125
Date Analyzed	04/26/96	04/26/96	
<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT 130</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Extracted		04/26/96	
Date Analyzed	04/29/96	04/29/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2397
 DATE REPORTED: April 30, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT 130</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 04/29/96	2 U 04/29/96	mg/Kg
Barium Date Analyzed	6010	20 U 04/29/96	20 U 04/29/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 04/29/96	1 U 04/29/96	mg/Kg
Chromium Date Analyzed	6010	3.3 04/29/96	1 U 04/29/96	mg/Kg
Lead Date Analyzed	6010	4.2 04/29/96	1 U 04/29/96	mg/Kg
Selenium Date Analyzed	6010	2 U 04/29/96	2 U 04/29/96	mg/Kg
Silver Date Analyzed	6010	2 U 04/29/96	2 U 04/29/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2397

DATE REPORTED: April 30, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020</u>				
Benzene	99/100/109	49-149	1	20
Toluene	72/ 74/ 84	43-144	3	14
Ethylbenzene	65/ 65/ 78	40-135	<1	14
m-Xylene & p-Xylene	49/ 50/ 62	23-167	2	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	105/108/108	59-134	3	23
<u>Total Metals</u>				
Arsenic, 6010	84/ 85/ 89	70-118	1	12
Chromium, 6010	82/ 83/ 87	69-120	1	17
Cadmium, 6010	77/ 78/ 83	69-117	1	14
Chromium, 6010	82/ 84/ 88	75-120	2	20
Lead, 6010	84/ 85/ 83	60-130	1	31
Selenium, 6010	83/ 84/ 82	58-122	1	14
Silver, 6010	83/ 86/ 89	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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Environmental Conservation Laboratories

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Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

DUPLICATE

Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2412
DATE SUBMITTED: April 26, 1996
DATE REPORTED : May 1, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

04/26/96

#1 - NTFFT 131 @ 14:45

OBJECT MANAGER

A handwritten signature in cursive script, appearing to read "Scott D. Martin".

Scott D. Martin

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2412

DATE REPORTED: May 1, 1996

PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS**EPA METHOD 8020 -
VOLATILE AROMATICS**

	<u>NTFFT 131</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	17 D5	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 I	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	6 D5	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	105	123	39-125
Date Analyzed	04/29/96	04/29/96	

EPA METHOD 9073 -

<u>TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT 131</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	04/29/96	04/29/96	

D5 = Analyte value determined from a 1:5 dilution.

T = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2412

DATE REPORTED: May 1, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT 131</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Barium	6010	20 U	20 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Cadmium	6010	1 U	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Chromium	6010	3.7	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Lead	6010	4.2	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Mercury	7471	0.01 U	0.01 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	
Selenium	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Silver	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2412

DATE REPORTED: May 1, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020</u>				
Benzene	108/113/111	49-149	4	20
Toluene	81/ 87/ 93	43-144	7	14
Ethylbenzene	71/ 77/ 87	40-135	8	14
m-Xylene & p-Xylene	51/ 56/ 68	23-167	9	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	105/108/108	59-134	3	23
<u>Trace Metals</u>				
Arsenic, 6010	84/ 85/ 89	70-118	1	12
Barium, 6010	82/ 83/ 87	69-120	1	17
Cadmium, 6010	77/ 78/ 83	69-117	1	14
Chromium, 6010	82/ 84/ 88	75-120	2	20
Lead, 6010	84/ 85/ 83	60-130	1	31
Mercury, 7471	98/107/111	70-138	9	12
Selenium, 6010	83/ 84/ 82	58-122	1	14
Silver, 6010	83/ 86/ 89	69-116	4	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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199333-18



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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT Coal Field					PROJECT NO.		P.O. NUMBER		MATRIX TYPE										REQUIRED ANALYSIS					PAGE	OF		
PROJECT LOC. (State) FL		SAMPLER(S) NAME C. H. White			PHONE		FAX		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (oil, solvent, etc.) AIR SLUDGE OTHER 9020 9073 RUCK Metals										<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due:								
CLIENT NAME Dust Coatings					CLIENT PROJECT MANAGER																						
CLIENT ADDRESS (CITY, STATE, ZIP)																											
STATION					DATE		TIME		GRAB	COMP	SAMPLE IDENTIFICATION										PRESERVATIVE					REMARKS	
NTFFT 131					4/26/96		1445			✓																72hr turn	
NUMBER OF CONTAINERS SUBMITTED																											
SAMPLE KIT PREPARED BY:					DATE		TIME		RELINQUISHED BY: (SIGNATURE)					DATE		TIME		RECEIVED BY: (SIGNATURE)					DATE		TIME		
<input type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO									[Signature]					4/26/96		1337											
RELINQUISHED BY: (SIGNATURE)					DATE		TIME		RECEIVED BY: (SIGNATURE)					DATE		TIME		RELINQUISHED BY: (SIGNATURE)					DATE		TIME		
									[Signature]																		
RECEIVED BY (SIGNATURE)					DATE		TIME		RELINQUISHED BY: (SIGNATURE)					DATE		TIME		RECEIVED BY: (SIGNATURE)					DATE		TIME		
RECEIVED FOR LABORATORY BY: (SIGNATURE)					DATE		TIME		CUSTODY INTACT		ENCO LOG NO.		REMARKS														
[Signature] <input type="checkbox"/> Jacksonville <input type="checkbox"/> Orlando					4/26/96		13:37		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		JP-2412		J.R. 2														

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

DUPLICATE

Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2427
DATE SUBMITTED: April 27, 1996
DATE REPORTED : May 1, 1996

PAGE 1 OF 4

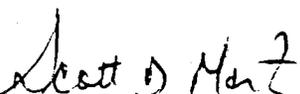
ATTENTION: Mr. Brian Francis**SAMPLE IDENTIFICATION**

Samples submitted and
identified by client as:

NAS Cecil Field

04/27/96

#1 - NTFFT-132 @ 14:47

OBJECT MANAGER

Scott D. Martin

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2427
 DATE REPORTED: May 1, 1996
 REFERENCE : NTFFT
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS**EPA METHOD 8020 -
VOLATILE AROMATICS**

	<u>NTFFT-132</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 D5	5 U	µg/Kg
Toluene	5 I	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	µg/Kg
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	95	123	39-125
Date Analyzed	04/29/96	04/29/96	

EPA METHOD 9073 -**TOTAL PETR. HYDROCARBONS**

	<u>NTFFT-132</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	04/29/96	04/29/96	

D5 = Analyte value determined from a 1:5 dilution.

† = Analyte detected; value is between the Method Detection Level (MDL)
 and the Practical Quantitation Level (PQL).

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2427

DATE REPORTED: May 1, 1996

REFERENCE : NTFFT

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-132</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Barium	6010	20 U	20 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Cadmium	6010	1 U	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Chromium	6010	4.2	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Lead	6010	4.6	1 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Mercury	7471	0.01 U	0.01 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	
Selenium	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	
Silver	6010	2 U	2 U	mg/Kg
Date Analyzed		04/29/96	04/29/96	

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2427

DATE REPORTED: May 1, 1996

REFERENCE : NTFFT

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020</u>				
Benzene	108/113/111	49-149	4	20
Toluene	81/ 87/ 93	43-144	7	14
Ethylbenzene	71/ 77/ 87	40-135	8	14
m-Xylene & p-Xylene	51/ 56/ 68	23-167	9	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	105/108/108	59-134	3	23
<u>Trace Metals</u>				
Arsenic, 6010	88/ 89/ 89	70-118	1	12
Barium, 6010	95/ 96/ 96	69-120	1	17
Cadmium, 6010	97/ 98/ 99	69-117	1	14
Chromium, 6010	90/ 91/ 92	75-120	1	20
Lead, 6010	97/ 98/ 99	60-130	1	31
Mercury, 7471	120/114/117	70-138	5	12
Selenium, 6010	91/ 91/ 89	58-122	<1	14
Silver, 6010	92/ 93/ 94	69-116	1	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT NAS CECIL FIELD		PROJECT NO.	P.O. NUMBER	MATRIX TYPE		REQUIRED ANALYSIS		PAGE	OF			
PROJECT LOC. (State) FL	SAMPLER(S) NAME CHERI PARSONS		PHONE	SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NONAQUEOUS LIQUID (incl. leachate, etc.) AIR SLUDGE OTHER		80% 90% TPH RCRA METALS		<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED SERVICE Date Due: _____				
CLIENT NAME		CLIENT PROJECT MANAGER										
CLIENT ADDRESS CITY, STATE, ZIP												
SAMPLE				REMARKS								
STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS SUBMITTED						
	27 APR 96	1447		X	NTFFT-132							
SAMPLE KIT PREPARED BY:				DATE	TIME	RELINQUISHED BY: (SIGNATURE)		DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
JACKSONVILLE <input type="checkbox"/> ORLANDO						<i>Cheri L. Parsons</i>		4/27/96	1539			
RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)		DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
LABORATORY BY: (SIGNATURE)				DATE	TIME	CUSTODY INTACT		ENCO LOG NO.	REMARKS			
<i>[Signature]</i>				4/27/96	15:40	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		JR2 .7				

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Jacksonville, Florida 32216-6069
904 / 296-3007
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DUPLICATE



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: Quarters E Avenue G
NAS Cecil Field
Jacksonville, FL 32215

REPORT # : JR2438
DATE SUBMITTED: April 30, 1996
DATE REPORTED : May 2, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - NTFFT-1330 4/29/96 08:48
- #2 - NTFFT-1340 4/29/96 16:50
- #3 - NTFFT-1350 4/30/96 11:15

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES

REPORT # : JR2438

DATE REPORTED: May 2, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 2 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020 -
VOLATILE AROMATICS**

	<u>NTFFT-133</u>	<u>NTFFT-134</u>	<u>NTFFT-135</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	6	5	7	µg/Kg
Toluene	5 I	5 I	8 I	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg

Surrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	94	100	108	39-125
Date Analyzed	05/01/96	05/01/96	05/01/96	

EPA METHOD 9073 -**TOTAL PETR. HYDROCARBONS**

	<u>NTFFT-133</u>	<u>NTFFT-134</u>	<u>NTFFT-135</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	05/01/96	05/01/96	05/01/96	

I = Analyte detected; value is between the Method Detection Level (MDL) and the Practical Quantitation Level (PQL).

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2438

DATE REPORTED: May 2, 1996

PROJECT NAME : NAS Cecil Field

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-133</u>	<u>NTFFT-134</u>	<u>NTFFT-135</u>	<u>Units</u>
Arsenic	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Barium	6010	20 U	20 U	20 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Cadmium	6010	1 U	1 U	1 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Chromium	6010	4.6	4.9	4.4 5	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Lead	6010	4.7	4.5	4.4	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Mercury	7471	0.01 U	0.01 U	0.01 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Selenium	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	
Silver	6010	2 U	2 U	2 U	mg/Kg
Date Analyzed		04/30/96	04/30/96	04/30/96	

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE

ENCO LABORATORIES
 REPORT # : JR2438
 DATE REPORTED: May 2, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020 -
 VOLATILE AROMATICS**

LAB BLANK**Units**

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
2-Dichlorobenzene	5 U	µg/Kg

Surrogate:**% RECOV****LIMITS**

Bromofluorobenzene	123	39-125
Date Analyzed	04/29/96	

EPA METHOD 9073 -**TOTAL PETR. HYDROCARBONS****LAB BLANK****Units**

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	04/30/96	

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2438

DATE REPORTED: May 2, 1996

PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 04/30/96	mg/Kg
Barium Date Analyzed	6010	20 U 04/30/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 04/30/96	mg/Kg
Chromium Date Analyzed	6010	1 U 04/30/96	mg/Kg
Lead Date Analyzed	6010	1 U 04/30/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 04/30/96	mg/Kg
Selenium Date Analyzed	6010	2 U 04/30/96	mg/Kg
Silver Date Analyzed	6010	2 U 04/30/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2438

DATE REPORTED: May 2, 1996

PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020</u>				
Benzene	108/113/111	49-149	4	20
Toluene	81/ 87/ 93	43-144	7	14
Ethylbenzene	71/ 77/ 87	40-135	8	14
m-Xylene & p-Xylene	51/ 56/ 68	23-167	9	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/ 80/ 89	59-134	16	23
<u>tal Metals</u>				
Arsenic, 6010	102/106/101	70-118	4	12
Barium, 6010	100/100/ 96	69-120	<1	17
Cadmium, 6010	104/106/102	69-117	2	14
Chromium, 6010	99/104/ 98	75-120	5	20
Lead, 6010	100/104/ 99	60-130	4	31
Mercury, 7471	89/104/108	70-138	16	12
Selenium, 6010	101/105/101	58-122	4	14
Silver, 6010	104/107/103	69-116	3	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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 10207 General Drive Orlando, Florida 32824 Ph. (407) 826-5314 • Fax (407) 850-6945

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE NTFFT NAS CECIL FIELD				PROJECT NO.		P.O. NUMBER		MATRIX TYPE				REQUIRED ANALYSIS				PAGE \	OF \
PROJECT LOC. (State) FL		SAMPLER(S) NAME C. WHITE, C. PARSONS				PHONE		FAX		SURFACE WATER GROUND WATER WASTEWATER DRINKING WATER SOIL/SOLID/SEDIMENT NON-AQUEOUS LIQUID (oil, solvent, etc.) AIR SLUDGE OTHER 8020 9073 TPH ACRA METALS				<input type="checkbox"/> STANDARD REPORT DELIVERY <input type="checkbox"/> EXPEDITED REPORT DELIVERY (surcharge) Date Due: _____			
CLIENT NAME DUST COATINGS				CLIENT PROJECT MANAGER													
CLIENT ADDRESS (CITY, STATE, ZIP)																	
SAMPLE								PRESERVATIVE				NUMBER OF CONTAINERS SUBMITTED				REMARKS	
STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION												
NTFFT-133	29 APR 96	0848		X	NTFFT-133												72hr turnaround
NTFFT-134	29 APR 96	1651		X	NTFFT-134												
NTFFT-135	30 APR 96	1115		X	NTFFT-135												
SAMPLE KIT PREPARED BY:		DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME		
<input type="checkbox"/> JACKSONVILLE <input type="checkbox"/> ORLANDO				<i>Cheri L. Parsons</i>				30 APR 96	12 21								
RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME
RECEIVED BY: (SIGNATURE)				DATE	TIME	RELINQUISHED BY: (SIGNATURE)				DATE	TIME	RECEIVED BY: (SIGNATURE)				DATE	TIME
RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE	TIME	CUSTODY INTACT		ENCO LOG NO.		REMARKS									
<i>[Signature]</i> <input type="checkbox"/> Jacksonville <input type="checkbox"/> Orlando		4-30-96	1221	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		JL2 38											

1333292

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

DUPLICATE



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: 7217 128th Street West
Savage, MN 55378

REPORT # : JR2456
DATE SUBMITTED: May 1, 1996
DATE REPORTED : May 3, 1996

PAGE 1 OF 6

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

- #1 - NTFFT 136 (04/30/96) @ 19:45
- #2 - NTFFT 137 (05/01/96) @ 03:45
- #3 - NTFFT 138 (05/01/96) @ 14:59

OBJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR2456
 DATE REPORTED: May 3, 1996
 PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 2 OF 6

RESULTS OF ANALYSIS

**EPA METHOD 8020 -
 VOLATILE AROMATICS**

	<u>NTFFT 136</u>	<u>NTFFT 137</u>	<u>NTFFT 138</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	µg/Kg
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg

<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	87	93	86	39-125
Date Analyzed	05/02/96	05/02/96	05/02/96	

EPA METHOD 9073 -

<u>TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT 136</u>	<u>NTFFT 137</u>	<u>NTFFT 138</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	5 U	mg/Kg
Date Analyzed	05/02/96	05/02/96	05/02/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JR2456

DATE REPORTED: May 3, 1996

PROJECT NAME : NAS Cecil Field

DUPLICATE

PAGE 3 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT 136</u>	<u>NTFFT 137</u>	<u>NTFFT 138</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 05/02/96	2 U 05/02/96	2 U 05/02/96	mg/Kg
Barium Date Analyzed	6010	20 U 05/02/96	20 U 05/02/96	20 U 05/02/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 05/02/96	1 U 05/02/96	1 U 05/02/96	mg/Kg
Chromium Date Analyzed	6010	4.1 05/02/96	4.6 05/02/96	5.2 05/02/96	mg/Kg
Lead Date Analyzed	6010	4.5 05/02/96	5.1 05/02/96	5.3 05/02/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 05/02/96	0.01 U 05/02/96	0.01 U 05/02/96	mg/Kg
Selenium Date Analyzed	6010	2 U 05/02/96	2 U 05/02/96	2 U 05/02/96	mg/Kg
Silver Date Analyzed	6010	2 U 05/02/96	2 U 05/02/96	2 U 05/02/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2456

DATE REPORTED: May 3, 1996

PROJECT NAME : NAS Cecil Field

PAGE 4 OF 6

RESULTS OF ANALYSIS**EPA METHOD 8020 -
VOLATILE AROMATICS****LAB BLANK****Units**

Methyl tert-butyl ether	10 U	µg/Kg
Benzene	5 U	µg/Kg
Toluene	5 U	µg/Kg
Chlorobenzene	5 U	µg/Kg
Ethylbenzene	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	µg/Kg
o-Xylene	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	µg/Kg
2-Dichlorobenzene	5 U	µg/Kg

Surrogate:**% RECOV****LIMITS**

Bromofluorobenzene	119	39-125
Date Analyzed	05/02/96	

EPA METHOD 9073 -**TOTAL PETR. HYDROCARBONS****LAB BLANK****Units**

Total Petr. Hydrocarbons	5 U	mg/Kg
Date Analyzed	05/02/96	

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE

ENCO LABORATORIES
 REPORT # : JR2456
 DATE REPORTED: May 3, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 5 OF 6

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 05/02/96	mg/Kg
Barium Date Analyzed	6010	20 U 05/02/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 05/02/96	mg/Kg
Chromium Date Analyzed	6010	1 U 05/02/96	mg/Kg
Lead Date Analyzed	6010	1 U 05/02/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 05/02/96	mg/Kg
Selenium Date Analyzed	6010	2 U 05/02/96	mg/Kg
Silver Date Analyzed	6010	2 U 05/02/96	mg/Kg

U = Compound was analyzed for but not detected to the level shown.

DUPLICATE**ENCO LABORATORIES**

REPORT # : JR2456

DATE REPORTED: May 3, 1996

PROJECT NAME : NAS Cecil Field

PAGE 6 OF 6

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY MS/MSD/LCS</u>	<u>ACCEPT LIMITS</u>	<u>% RPD MS/MSD</u>	<u>ACCEPT LIMITS</u>
<u>EPA Method 8020</u>				
Benzene	90/ 82/ 88	49-149	9	20
Toluene	94/ 83/ 88	43-144	12	14
Ethylbenzene	106/ 93/101	40-135	13	14
m-Xylene & p-Xylene	94/ 87/100	23-167	8	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/ 80/ 89	59-134	16	23
<u>Trace Metals</u>				
Arsenic, 6010	92/ 92/ 95	70-118	<1	12
Barium, 6010	88/ 93/ 95	69-120	6	17
Cadmium, 6010	95/ 98/ 98	69-117	3	14
Chromium, 6010	92/ 96/ 96	75-120	4	20
Lead, 6010	94/ 94/ 97	60-130	<1	31
Mercury, 7471	115/115/113	70-138	<1	12
Selenium, 6010	89/ 90/ 91	58-122	1	14
Silver, 6010	102/108/ 98	69-116	6	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than

MS = Matrix Spike

MSD = Matrix Spike Duplicate

LCS = Laboratory Control Standard

RPD = Relative Percent Difference

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4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210



Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: 7217 128th Street West
Savage, MN 55378

REPORT # : JR2458
DATE SUBMITTED: May 1, 1996
DATE REPORTED : May 3, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

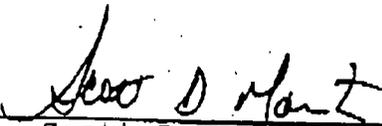
NAS Cecil Field

05/01/96

#1 - NTFFT-139 @ 20:00

Sample identification changed per request of RUST.

PROJECT MANAGER



Scott D. Martin

ENCO LABORATORIES
 REPORT # : JR2458
 DATE REPORTED: May 3, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020 -
VOLATILE AROMATICS

	<u>NTFFT-139</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg

Jurrogate:

	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	89	119	39-125
Date Analyzed	05/02/96	05/02/96	

EPA METHOD 9073 -

TOTAL PETR. HYDROCARBONS

	<u>NTFFT-139</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	05/02/96	05/02/96	

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2458
 DATE REPORTED: May 3, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-139</u>	<u>LAB BLANK.</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 05/02/96	2 U 05/02/96	mg/Kg
Barium Date Analyzed	6010	20 U 05/02/96	20 U 05/02/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 05/02/96	1 U 05/02/96	mg/Kg
Chromium Date Analyzed	6010	3.6 05/02/96	1 U 05/02/96	mg/Kg
Lead Date Analyzed	6010	6.0 05/02/96	1 U 05/02/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 05/02/96	0.01 U 05/02/96	mg/Kg
Selenium Date Analyzed	6010	2 U 05/02/96	2 U 05/02/96	mg/Kg
Silver Date Analyzed	6010	2 U 05/02/96	2 U 05/02/96	mg/Kg

** = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2458
 DATE REPORTED: May 3, 1996
 PROJECT NAME : NAS Cecil Field

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020</u>				
Benzene	90/ 82/ 88	49-149	9	20
Toluene	94/ 83/ 88	43-144	12	14
Ethylbenzene	106/ 93/101	40-135	13	14
m-Xylene & p-Xylene	94/ 87/100	23-167	8	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	94/ 80/ 89	59-134	16	23
<u>Total Metals</u>				
Arsenic, 6010	92/ 92/ 95	70-118	<1	12
Barium, 6010	88/ 93/ 95	69-120	6	17
Cadmium, 6010	95/ 98/ 98	69-117	3	14
Chromium, 6010	92/ 96/ 96	75-120	4	20
Lead, 6010	94/ 94/ 97	60-130	<1	31
Mercury, 7471	121/123/126	70-138	2	12
Selenium, 6010	89/ 90/ 91	58-122	1	14
Silver, 6010	102/108/ 98	69-116	6	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

- < = Less Than
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- LCS = Laboratory Control Standard
- RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6089
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Fax 904 / 296-6210

PRELIMINARY



Laboratories

DHRS Certification No. E62277, 82417

CLIENT : Dustcoating Inc.
ADDRESS: 7217 128th Street West
Savage, MN 55378

REPORT # : JR2476
DATE SUBMITTED: May 3, 1996
DATE REPORTED : May 6, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

05/03/96

#1 - NTFET 140 @ 03:05
#2 - NTFET 141 @ 09:04

PROJECT MANAGER

Scott D. Martin

PRELIMINARY

ENCO LABORATORIES
REPORT # : JR2476
DATE REPORTED: May 6, 1996
PROJECT NAME : NAS Cecil Field

PAGE 2 OF 4

RESULTS OF ANALYSIS

EPA METHOD 8020 - VOLATILE AROMATICS

	<u>NTFFT 140</u>	<u>NTFFT 141</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	10 U	
Benzene	5 U	5 U	5 U	µg/Kg
Toluene	5 U	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	5 U	µg/Kg
<u> surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
p-mofluorobenzene	97	97	122	39-125
Date Analyzed	05/03/96	05/03/96	05/02/96	

EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS

	<u>NTFFT 140</u>	<u>NTFFT 141</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	90	5 U	mg/Kg
Date Analyzed	05/06/96	05/06/96	05/06/96	

U - Compound was analyzed for but not detected to the level shown.

PRELIMINARY

ENCO LABORATORIES
REPORT # : JR2476
DATE REPORTED: May 6, 1996
PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NIFFT 140</u>	<u>NIFFT 141</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 05/06/96	2 U 05/06/96	2 U 05/06/96	mg/Kg
Barium Date Analyzed	6010	20 U 05/06/96	20 U 05/06/96	20 U 05/06/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 05/06/96	1 U 05/06/96	1 U 05/06/96	mg/Kg
Chromium Date Analyzed	6010	5.3 05/06/96	5.8 05/06/96	1 U 05/06/96	mg/Kg
Lead Date Analyzed	6010	5.5 05/06/96	5.4 05/06/96	1 U 05/06/96	mg/Kg
Mercury	DTF				
Selenium Date Analyzed	6010	2 U 05/06/96	2 U 05/06/96	2 U 05/06/96	mg/Kg
Silver Date Analyzed	6010	2 U 05/06/96	2 U 05/06/96	2 U 05/06/96	mg/Kg

DTF Data To Follow

U = Compound was analyzed for but not detected to the level shown.

PRELIMINARY

ENCO LABORATORIES
REPORT # : JR2476
DATE REPORTED: May 6, 1996
PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020</u>				
Benzene	90/ 82/ 88	49-149	9	20
Toluene	94/ 83/ 88	43-144	12	14
Ethylbenzene	106/ 93/101	40-135	13	14
m-Xylene & p-Xylene	94/ 87/100	23-167	8	10
<u>Total Metals</u>				
Arsenic, 6010	99/ 98/ 96	70-118	1	12
Barium, 6010	97/ 97/ 94	69-120	<1	17
Cadmium, 6010	101/101/ 98	69-117	<1	14
Chromium, 6010	98/ 97/ 94	75-120	1	20
Lead, 6010	102/101/ 98	60-130	<1	31
Selenium, 6010	96/ 95/ 90	58-122	1	14
Silver, 6010	102/103/ 98	69-116	<1	10

Environmental Conservation Laboratories Comprehensive QA Plan #960038

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

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Jacksonville, Florida 32216-6069
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Fax 904 / 296-6210



Laboratories

DHRS Certification No. EB2277, B2417

CLIENT : Dustcoating Inc.
ADDRESS: 7217 128th Street West
Savage, MN 55378

REPORT # : JR2512
DATE SUBMITTED: May 7, 1996
DATE REPORTED : May 8, 1996

PAGE 1 OF 4

ATTENTION: Mr. Brian Francis

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

NAS Cecil Field

05/07/96

#1 - NTFFT-142 @ 14:20

MAY 8 1996

V. HERMANN BAUER

PROJECT MANAGER


Scott D. Martin

RECEIVED

MAY 8 1996

V. HERMANN BAUER

ENCO LABORATORIES
REPORT # : JR2512
DATE REPORTED: May 8, 1996
PROJECT NAME : NAS Cecil Field

RESULTS OF ANALYSIS

<u>EPA METHOD 8020 - VOLATILE AROMATICS</u>	<u>NTFFT-142</u>	<u>LAB BLANK</u>	<u>Units</u>
Methyl tert-butyl ether	10 U	10 U	µg/Kg
Benzene	5 U	5 U	µg/Kg
Toluene	5 U	5 U	µg/Kg
Chlorobenzene	5 U	5 U	µg/Kg
Ethylbenzene	5 U	5 U	µg/Kg
m-Xylene & p-Xylene	5 U	5 U	µg/Kg
o-Xylene	5 U	5 U	µg/Kg
1,3-Dichlorobenzene	5 U	5 U	µg/Kg
1,4-Dichlorobenzene	5 U	5 U	µg/Kg
1,2-Dichlorobenzene	5 U	5 U	µg/Kg
<u>Surrogate:</u>	<u>% RECOV</u>	<u>% RECOV</u>	<u>LIMITS</u>
Bromofluorobenzene	84	* 134	39-125
Date Analyzed	05/07/96	05/07/96	

<u>EPA METHOD 9073 - TOTAL PETR. HYDROCARBONS</u>	<u>NTFFT-142</u>	<u>LAB BLANK</u>	<u>Units</u>
Total Petr. Hydrocarbons	5 U	5 U	mg/Kg
Date Analyzed	05/08/96	05/08/96	

* = Surrogate recovery exceeds established limits; all associated data below detection limits.
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2512
 DATE REPORTED: May 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 3 OF 4

RESULTS OF ANALYSIS

<u>TOTAL METALS</u>	<u>METHOD</u>	<u>NTFFT-142</u>	<u>LAB BLANK</u>	<u>Units</u>
Arsenic Date Analyzed	6010	2 U 05/07/96	2 U 05/07/96	mg/Kg
Barium Date Analyzed	6010	20 U 05/07/96	20 U 05/07/96	mg/Kg
Cadmium Date Analyzed	6010	1 U 05/07/96	1 U 05/07/96	mg/Kg
Chromium Date Analyzed	6010	4.7 05/07/96	1 U 05/07/96	mg/Kg
Lead Date Analyzed	6010	5.5 05/07/96	1 U 05/07/96	mg/Kg
Mercury Date Analyzed	7471	0.01 U 05/08/96	0.01 U 05/08/96	mg/Kg
Selenium Date Analyzed	6010	2 U 05/07/96	2 U 05/07/96	mg/Kg
Silver Date Analyzed	6010	2 U 05/07/96	2 U 05/07/96	mg/Kg

= Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
 REPORT # : JR2512
 DATE REPORTED: May 8, 1996
 PROJECT NAME : NAS Cecil Field

PAGE 4 OF 4

QUALITY CONTROL DATA

<u>Parameter</u>	<u>% RECOVERY</u> <u>MS/MSD/LCS</u>	<u>ACCEPT</u> <u>LIMITS</u>	<u>% RPD</u> <u>MS/MSD</u>	<u>ACCEPT</u> <u>LIMITS</u>
<u>EPA Method 8020</u>				
Benzene	98/ 86/ 95	49-149	13	20
Toluene	99/ 86/ 95	43-144	14	14
Ethylbenzene	109/ 95/105	40-135	14	14
m-Xylene & p-Xylene	104/ 90/100	23-167	14	10
<u>Total Metals</u>				
Arsenic, 6010	94/ 96/ 88	70-118	2	12
Barium, 6010	97/ 97/ 91	69-120	<1	17
Cadmium, 6010	100/100/ 94	69-117	<1	14
Chromium, 6010	96/ 96/ 90	75-120	<1	20
Lead, 6010	96/ 96/ 89	60-130	<1	31
Mercury, 7471	113/112/109	70-138	<1	12
Selenium, 6010	92/ 95/ 84	58-122	3	14
Silver, 6010	99/100/ 89	69-116	1	10
<u>EPA Method 9073</u>				
Total Petr. Hydrocarbons	NA/ NA/ 97	59-134	NA	23

Environmental Conservation Laboratories Comprehensive QA Plan #960038

NA = Not Available
 < = Less Than
 MS = Matrix Spike
 MSD = Matrix Spike Duplicate
 LCS = Laboratory Control Standard
 RPD = Relative Percent Difference

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APPENDIX I
CAT-OX START-UP ANALYTICAL DATA

**ANALYTICAL RESULTS FROM STACK SAMPLES
TO-14 ANALYSES
BIOSLURPER SYSTEM
NORTH TANK FUEL FARM
NAS CECIL FIELD**

Compound	Sample CF22402 8/7/97 Post Cat-Ox	Sample CF22403 8/15/97 Post Cat-Ox	Sample CF22404 8/21/97 Post Cat-Ox	Sample CF22405 8/28/97 Post Cat-Ox
Propylene	826.00	275.00	174.00	196.00
Chlorodifluoromethane	ND	20.50	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND
Chloromethane	66.80	57.10	ND	61.30
Freon 114	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND
1, 3-Butadiene	103.00	32.00	ND	15.50
Bromomethane	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND
Pentane	813.00	2,190.00	2,060.00	1,960.00
1, 1-Dichloroethylene	ND	ND	ND	ND
Methylene Chloride	ND	110.00	ND	ND
3-Chloro-1-Propene	ND	ND	ND	ND
Freon 113	ND	118.00	ND	ND
Cis-1, 2-Dichloroethene	ND	ND	ND	ND
1, 1-Dichloroethane	ND	ND	ND	ND
2-Chloro-1, 3-Butadiene	ND	ND	ND	ND
Trans-1, 2-Dichloroethene	ND	ND	ND	ND
Hexane	2,250.00	1,580.00	1,310.00	1,160.00
Chloroform	ND	ND	ND	ND
1, 2-Dichloroethane	ND	ND	ND	ND
1, 1, 1-Trichloroethane	ND	ND	ND	ND
Benzene	222.00	38.00	29.40	48.40
Carbon Tetrachloride	ND	ND	ND	ND
1, 2-Dichloropropane	ND	ND	ND	ND
Bromodichloromethane	ND	ND	5.65	ND
Trichloroethene	ND	309.00	ND	ND
Heptane	2,870.00	402.00	367.00	400.00
Cis-1, 3-Dichloropropene	ND	ND	ND	ND
Trans-1, 3-Dichloropropene	ND	ND	ND	ND
1, 1, 2-Trichloroethane	ND	ND	ND	ND
Toluene	433.00	62.40	90.40	119.00
Dibromochloromethane	ND	ND	ND	ND
1, 2-Dibromoethane	ND	ND	ND	ND

**ANALYTICAL RESULTS FROM STACK SAMPLES
TO-14 ANALYSES
BIOSLURPER SYSTEM
NORTH TANK FUEL FARM
NAS CECIL FIELD**

Compound	Sample CF22402 8/7/97 Post Cat-Ox	Sample CF22403 8/15/97 Post Cat-Ox	Sample CF22404 8/21/97 Post Cat-Ox	Sample CF22405 8/28/97 Post Cat-Ox
Octane	1,070.00	84.60	101.00	114.00
Tetrachloroethene	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND
Ethylbenzene	183.00	ND	31.30	45.00
M, P-Xylenes	582.00	62.60	101.00	145.00
Bromoform	ND	ND	ND	ND
Styrene	ND	ND	ND	ND
1, 1, 2, 2-Tetrachloroethane	ND	ND	ND	ND
O-Xylene	196.00	22.10	34.50	56.00
1, 3, 5-Trimethylbenzene	61.50	ND	12.90	ND
Alpha-Methyl Styrene	ND	ND	ND	ND
Benzyl Chloride	ND	ND	ND	ND
1, 2, 4-Trimethylbenzene	126.00	27.00	28.00	49.50
1, 3-Dichlorobenzene	ND	ND	ND	ND
1, 4-Dichlorobenzene	70.90	83.10	ND	86.80
1, 2-Dichlorobenzene	ND	ND	ND	ND
1, 2, 4-Trichlorobenzene	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND
Methanol	388.00	654.00	76.70	277.00
Ethanol (Ethyl Alcohol)	129.00	136.00	ND	ND
Isopropyl Alcohol	ND	ND	ND	ND
1-Butanol	ND	ND	ND	ND
Acetone	1,020.00	1,010.00	1,280.00	1,180.00
Methyl Ethyl Ketone	193.00	ND	ND	ND
Methyl Isobutyl Ketone	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND
Cyclohexanone	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND
Acrolein	389.00	149.00	112.00	ND
Acetonitrile	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND
Propionitrile	ND	ND	ND	ND
Methacrylonitrile	ND	ND	ND	ND
Benzonitrile	ND	ND	ND	ND
Ether	ND	ND	ND	ND

**ANALYTICAL RESULTS FROM STACK SAMPLES
TO-14 ANALYSES
BIOSLURPER SYSTEM
NORTH TANK FUEL FARM
NAS CECIL FIELD**

Compound	Sample CF22402 8/7/97 Post Cat-Ox	Sample CF22403 8/15/97 Post Cat-Ox	Sample CF22404 8/21/97 Post Cat-Ox	Sample CF22405 8/28/97 Post Cat-Ox
Methyl Tert-Butyl Ether	ND	ND	ND	ND
Ethyl Tert-Butyl Ether	ND	ND	ND	ND
Tetrahydrofuran	ND	ND	813.00	ND
Vinyl Acetate	ND	ND	238.00	ND
1,4-Dioxane	ND	ND	ND	ND
Ethyl Acrylate	ND	ND	ND	ND
Methyl Methacrylate	ND	ND	ND	ND
2-Nitropropane	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	ND
N-Butane	182.00	953.00	1,820.00	1,220.00
IsoButane	380.00	448.00	252.00	382.00
1-Butene	718.00	208.00	146.00	126.00
Trans-2-Butene	137.00	64.50	54.30	48.00
Cis-2-Butene	93.00	31.50	26.80	ND
3-Methyl-1-Butene	95.20	37.40	24.80	21.60
Isopentane	573.00	1,420.00	1,740.00	1,060.00
1-Pentene	283.00	75.90	40.60	20.70
Isoprene	ND	30.60	ND	ND
Trans-2-Pentene	126.00	107.00	56.90	56.10
Cis-2-Pentene	60.40	45.80	25.40	26.60
2-Methyl-2-Butene	102.00	59.90	38.00	34.20
Cyclopentene	174.00	190.00	21.90	21.20
4-Methyl-1-Pentene	52.50	ND	4.17	ND
Cyclopentane	84.30	37.40	82.60	107.00
2,2-Dimethylbutane	397.00	332.00	219.00	142.00
2-Methyl Pentane	1,890.00	1,380.00	1,300.00	630.00
3-Methyl Pentane	1,390.00	1,030.00	963.00	430.00
2-Methyl-1-Pentene	214.00	59.90	33.00	28.00
Cis-2-Hexene	123.00	50.10	20.10	ND
Trans-2-Hexene	43.10	ND	7.07	ND
Methylcyclopentane	1,460.00	357.00	174.00	180.00
2, 3-Dimethylbutane	977.00	152.00	92.00	98.50
Cyclohexane	1,070.00	247.00	117.00	113.00
2-Methyl Hexane	235.00	63.00	31.50	34.60

**ANALYTICAL RESULTS FROM STACK SAMPLES
TO-14 ANALYSES
BIOSLURPER SYSTEM
NORTH TANK FUEL FARM
NAS CECIL FIELD**

Compound	Sample CF22402 8/7/97 Post Cat-Ox	Sample CF22403 8/15/97 Post Cat-Ox	Sample CF22404 8/21/97 Post Cat-Ox	Sample CF22405 8/28/97 Post Cat-Ox
2, 3-Dimethylpentane	592.00	113.00	70.50	71.70
3-Methyl Hexane	1,610.00	254.00	163.00	160.00
Isooctane	56.10	36.10	25.80	24.70
Methylcyclohexane	2,400.00	239.00	193.00	188.00
2, 3, 4-Trimethylpentane	77.00	ND	10.30	ND
2-Methyl Heptane	1,000.00	132.00	83.10	81.20
3-Methyl Heptane	855.00	63.70	66.00	67.50
Nonane	704.00	52.80	62.40	68.20
Cumene	50.50	ND	7.70	ND
N-Propylbenzene	59.00	ND	8.25	ND
Alph-Pinene	ND	ND	ND	ND
Beta-Pinene	50.40	ND	30.60	81.50
TVOCs	30,305.70	15,693.00	14,875.64	11,435.80

All values reported in micrograms per cubic meter (ug/m3)

ND = not detected



Environmental Science & Engineering, Inc.

13586-

P.O. BOX 1703, GAINESVILLE, FLORIDA 32602-1703 (904) 332-3318

LETTER OF TRANSMITTAL

To: Mr. Sam Ross
Bechtel Env. Inc
Quarters E Ave G
NAS Cecil Field
Jacksonville FL 32215

Date: 082997
Attention: _____
Re: _____

Project No. 12960536 0201

2 Day

We are sending you: Attached Under separate cover via _____

Copies	Description

These are transmitted as checked below:

- For approval
- For review and comment
- Returned for corrections
- For your information
- Review and correct
- Prints returned after loan to us
- As requested
- Review and file
- _____

Remarks: SAM
please call w/ questions.
Thom
Robert
ASDR

CLIENT SAMPLE ID'S:	CF-22402	CF-22401	CF-22403
ESE FIELD GROUP:	BEM1A	BEM1A	BEM1A
ESE SEQUENCE #:	16	17	18
DATE COLLECTED:	08/07/97	08/07/97	08/15/97
TIME COLLECTED:	15:45	15:30	10:00

PARAMETERS	UNITS	METHOD			

2-HEXANONE	PPBV	PA TO-14	5050	<50.0	<50.0
CYCLOHEXANONE	PPBV	PA TO-14	<500	<50.0	<50.0
ACETOPHENONE	PPBV	PA TO-14	<500	<50.0	<50.0
ACROLEIN	PPBV	PA TO-14	<500	167	63.8
ACETONITRILE	PPBV	PA TO-14	<500	<50.0	<50.0
ACRYLONITRILE	PPBV	PA TO-14	<500	<50.0	<50.0
PROPIONITRILE	PPBV	PA TO-14	<500	<50.0	<50.0
METHACRYLONITRILE	PPBV	PA TO-14	<500	<50.0	<50.0
BENZONITRILE	PPBV	PA TO-14	<500	<50.0	<50.0
ETHER	PPBV	PA TO-14	<500	<50.0	<50.0
METHYL TERT-BUTYL ETHER	PPBV	PA TO-14	<500	<50.0	<50.0
ETHYL TERT-BUTYL ETHER	PPBV	PA TO-14	<500	<50.0	<50.0
TETRAHYDROFURAN	PPBV	PA TO-14	<500	<50.0	<50.0
VINYL ACETATE	PPBV	PA TO-14	<500	<50.0	<50.0
1,4-DIOXANE	PPBV	PA TO-14	<500	<50.0	<50.0
ETHYL ACRYLATE	PPBV	PA TO-14	<500	<50.0	<50.0
METHYL METHACRYLATE	PPBV	PA TO-14	<500	<50.0	<50.0
2-NITROPROPANE	PPBV	PA TO-14	<500	<50.0	<50.0
NITROBENZENE	PPBV	PA TO-14	<500	<50.0	<50.0
CARBON DISULFIDE	PPBV	PA TO-14	<500	<50.0	<50.0
N-BUTANE	PPBV	PA TO-14	8790	75.2	394
ISOBUTANE	PPBV	PA TO-14	1510	157	185
1-BUTENE	PPBV	PA TO-14	<50.0	308	89.4
TRANS-2-BUTENE	PPBV	PA TO-14	97.0	59.0	27.7
CIS-2-BUTENE	PPBV	PA TO-14	<50.0	39.9	13.5
3-METHYL-1-BUTENE	PPBV	PA TO-14	<50.0	32.6	12.8
ISOPENTANE	PPBV	PA TO-14	24300	191	474
1-PENTENE	PPBV	PA TO-14	<50.0	96.9	26.0
ISOPRENE	PPBV	PA TO-14	<50.0	<5.00	10.8
TRANS-2-PENTENE	PPBV	PA TO-14	381	43.2	36.6

CLIENT SAMPLE ID'S:	CF-22402	CF-22401	CF-22403
ESE FIELD GROUP:	BEM1A	BEM1A	BEM1A
ESE SEQUENCE #:	16	17	18
DATE COLLECTED:	08/07/97	08/07/97	08/15/97
TIME COLLECTED:	15:45	15:30	10:00

PARAMETERS	UNITS	METHOD			

CIS-2-PENTENE	PPBV	PA TO-14	543	20.7	15.7
2-METHYL-2-BUTENE	PPBV	PA TO-14	529	35.1	20.5
CYCLOPENTENE	PPBV	PA TO-14	<50.0	29.8	13.2
4-METHYL-1-PENTENE	PPBV	PA TO-14	190	15.0	<5.00
CYCLOPENTANE	PPBV	PA TO-14	11900	59.5	65.0
2,2-DIMETHYLBUTANE	PPBV	PA TO-14	18900	111	92.7
2-METHYL PENTANE	PPBV	PA TO-14	101000	528	386
3-METHYL PENTANE	PPBV	PA TO-14	72700	388	289
2-METHYL-1-PENTENE	PPBV	PA TO-14	523	61.0	17.1
CIS-2-HEXENE	PPBV	PA TO-14	433	35.2	14.3
TRANS-2-HEXENE	PPBV	PA TO-14	142	12.3	<5.00
METHYLCYCLOPENTANE	PPBV	PA TO-14	104000	418	102
2,3-DIMETHYLBUTANE	PPBV	PA TO-14	63500	273	42.5
CYCLOHEXANE	PPBV	PA TO-14	81200	306	70.7
2-METHYL HEXANE	PPBV	PA TO-14	11100	56.3	15.1
2,3-DIMETHYLPENTANE	PPBV	PA TO-14	28900	142	27.0
3-METHYL HEXANE	PPBV	PA TO-14	87000	387	60.8
ISOCTANE	PPBV	PA TO-14	<50.0	11.8	7.60
METHYLCYCLOHEXANE	PPBV	PA TO-14	389000	588	58.7
2,3,4-TRIMETHYLPENTANE	PPBV	PA TO-14	2960	16.2	<5.00
2-METHYL HEPTANE	PPBV	PA TO-14	60900	211	27.8
3-METHYL HEPTANE	PPBV	PA TO-14	50200	180	13.4
NONANE	PPBV	PA TO-14	54100	132	9.90
CUMENE	PPBV	PA TO-14	3120	10.1	<5.00
N-PROPYLBENZENE	PPBV	PA TO-14	4370	11.8	<5.00
ALPHA-PINENE	PPBV	PA TO-14	147	<5.00	<5.00
BETA-PINENE	PPBV	PA TO-14	<50.0	8.90	<5.00

Environmental Science & Engineering 08/28/97 STATUS :FINAL PAGE 1
 PROJECT NUMBER 1296053G 0204 PROJECT NAME BECHTEL ENV.-CECIL FIELD
 FIELD GROUP BEM1A LAB COORDINATOR EDWARD MANSFIELD

CLIENT SAMPLE ID'S:	CF-22402	CF-22401	CF-22403
ESE FIELD GROUP:	BEM1A	BEM1A	BEM1A
ESE SEQUENCE #:	16	17	18
DATE COLLECTED:	08/07/97	08/07/97	08/15/97
TIME COLLECTED:	15:45	15:30	10:00

PARAMETERS	UNITS	METHOD			

PROPYLENE	UG/M3	PA TO-14	2210	826	275
CHLORODIFLUOROMETHANE	UG/M3	PA TO-14	<180	<18.0	20.5
DICHLORODIFLUOROMETHANE	UG/M3	PA TO-14	<254	<25.4	<25.4
CHLOROMETHANE	UG/M3	PA TO-14	510	66.8	57.1
FREON 114	UG/M3	PA TO-14	<356	<35.6	<35.6
VINYL CHLORIDE	UG/M3	PA TO-14	<130	<13.0	<13.0
1,3-BUTADIENE	UG/M3	PA TO-14	<113	103	32.0
BROMOMETHANE	UG/M3	PA TO-14	<198	<19.8	<19.8
CHLOROETHANE	UG/M3	PA TO-14	<134	<13.4	<13.4
TRICHLOROFLUOROMETHANE	UG/M3	PA TO-14	<286	<28.6	<28.6
PENTANE	UG/M3	PA TO-14	142000	813	2190
1,1-DICHLOROETHYLENE	UG/M3	PA TO-14	<202	<20.2	<20.2
METHYLENE CHLORIDE	UG/M3	PA TO-14	<177	<17.7	110
3-CHLORO-1-PROPENE	UG/M3	PA TO-14	<159	<15.9	<15.9
FREON 113	UG/M3	PA TO-14	<390	<39.0	118
CIS-1,2-DICHLOROETHENE	UG/M3	PA TO-14	<202	<20.2	<20.2
1,1-DICHLOROETHANE	UG/M3	PA TO-14	<206	<20.6	<20.6
2-CHLORO-1,3-BUTADIENE	UG/M3	PA TO-14	<184	<18.4	<18.4
TRANS-1,2-DICHLOROETHENE	UG/M3	PA TO-14	<202	<20.2	<20.2
HEXANE	UG/M3	PA TO-14	963000	2250	1580
CHLOROFORM	UG/M3	PA TO-14	<248	<24.8	<24.8
1,2-DICHLOROETHANE	UG/M3	PA TO-14	1480	<20.6	<20.6
1,1,1-TRICHLOROETHANE	UG/M3	PA TO-14	<278	<27.8	60.5
BENZENE	UG/M3	PA TO-14	9200	222	38.0
CARBON TETRACHLORIDE	UG/M3	PA TO-14	<320	<32.0	<32.0
1,2-DICHLOROPROPANE	UG/M3	PA TO-14	<235	<23.5	<23.5
BROMODICHLOROMETHANE	UG/M3	PA TO-14	<341	<34.1	<34.1
TRICHLOROETHENE	UG/M3	PA TO-14	<273	<27.3	309
HEPTANE	UG/M3	PA TO-14	1520000	2870	402
CIS-1,3-DICHLOROPROPENE	UG/M3	PA TO-14	<231	<23.1	<23.1

CLIENT SAMPLE ID'S:	CF-22402	CF-22401	CF-22403
ESE FIELD GROUP:	BEM1A	BEM1A	BEM1A
ESE SEQUENCE #:	16	17	18
DATE COLLECTED:	08/07/97	08/07/97	08/15/97
TIME COLLECTED:	15:45	15:30	10:00

PARAMETERS	UNITS	METHOD			
TRANS-1,3-DICHLOROPROPENE	UG/M3	PA TO-14	<231	<23.1	<23.1
1,1,2-TRICHLOROETHANE	UG/M3	PA TO-14	<278	<27.8	<27.8
TOLUENE	UG/M3	PA TO-14	69300	433	62.4
DIBROMOCHLOROMETHANE	UG/M3	PA TO-14	<433	<43.3	<43.3
1,2-DIBROMOETHANE (EDB)	UG/M3	PA TO-14	<391	<39.1	<39.1
OCTANE	UG/M3	PA TO-14	363000	1070	84.6
TETRACHLOROETHENE	UG/M3	PA TO-14	<345	<34.5	<34.5
CHLOROBENZENE	UG/M3	PA TO-14	1090	<23.4	<23.4
ETHYLBENZENE	UG/M3	PA TO-14	54700	183	<22.1
M,P-XYLENE	UG/M3	PA TO-14	187000	582	62.6
BROMOFORM	UG/M3	PA TO-14	<526	<52.6	<52.6
STYRENE	UG/M3	PA TO-14	<217	<21.7	<21.7
1,1,2,2-TETRACHLOROETHANE	UG/M3	PA TO-14	572	<34.9	<34.9
O-XYLENE	UG/M3	PA TO-14	58700	196	22.1
1,3,5-TRIMETHYLBENZENE	UG/M3	PA TO-14	27500	61.5	<25.0
ALPHA-METHYL-STYRENE	UG/M3	PA TO-14	<246	<24.6	<24.6
BENZYL CHLORIDE	UG/M3	PA TO-14	<263	<26.3	<26.3
1,2,4-TRIMETHYLBENZENE	UG/M3	PA TO-14	62000	126	27.0
1,3-DICHLOROBENZENE	UG/M3	PA TO-14	<306	<30.6	<30.6
1,4-DICHLOROBENZENE	UG/M3	PA TO-14	813	70.9	83.1
1,2-DICHLOROBENZENE	UG/M3	PA TO-14	<306	<30.6	<30.6
1,2,4-TRICHLOROBENZENE	UG/M3	PA TO-14	377	<37.7	<37.7
HEXACHLOROBUTADIENE	UG/M3	PA TO-14	<527	<52.7	<52.7
METHANOL	UG/M3	PA TO-14	1090	388	654
ETHANOL (ETHYL ALCOHOL)	UG/M3	PA TO-14	<960	129	136
ISOPROPYL ALCOHOL	UG/M3	PA TO-14	<1250	<125	<125
1-BUTANOL	UG/M3	PA TO-14	<1540	<154	<154
ACETONE	UG/M3	PA TO-14	4780	1020	1010
METHYL ETHYL KETONE	UG/M3	PA TO-14	<1500	193	<150
METHYL ISOBUT' KETONE	UG/M3	PA TO-14	5200	<208	<208

CLIENT SAMPLE ID'S:	CF-22402	CF-22401	CF-22403
ESE FIELD GROUP:	BEM1A	BEM1A	BEM1A
ESE SEQUENCE #:	16	17	18
DATE COLLECTED:	08/07/97	08/07/97	08/15/97
TIME COLLECTED:	15:45	15:30	10:00

PARAMETERS	UNITS	METHOD			

2-HEXANONE	UG/M3	PA TO-14	21000	<208	<208
CYCLOHEXANONE	UG/M3	PA TO-14	<2040	<204	<204
ACETOPHENONE	UG/M3	PA TO-14	<2500	<250	<250
ACROLEIN	UG/M3	PA TO-14	<1170	389	149
ACETONITRILE	UG/M3	PA TO-14	<855	<85.5	<85.5
ACRYLONITRILE	UG/M3	PA TO-14	<1110	<111	<111
PROPIONITRILE	UG/M3	PA TO-14	<1150	<115	<115
METHACRYLONITRILE	UG/M3	PA TO-14	<1400	<140	<140
BENZONITRILE	UG/M3	PA TO-14	<2150	<215	<215
ETHER	UG/M3	PA TO-14	<1540	<154	<154
METHYL TERT-BUTYL ETHER	UG/M3	PA TO-14	<1830	<183	<183
ETHYL TERT-BUTYL ETHER	UG/M3	PA TO-14	<2130	<213	<213
TETRAHYDROFURAN	UG/M3	PA TO-14	<1500	<150	<150
VINYL ACETATE	UG/M3	PA TO-14	<1790	<179	<179
1,4-DIOXANE	UG/M3	PA TO-14	<1830	<183	<183
ETHYL ACRYLATE	UG/M3	PA TO-14	<2080	<208	<208
METHYL METHACRYLATE	UG/M3	PA TO-14	<2080	<208	<208
2-NITROPROPANE	UG/M3	PA TO-14	<1850	<185	<185
NITROBENZENE	UG/M3	PA TO-14	<2560	<256	<256
CARBON DISULFIDE	UG/M3	PA TO-14	<1590	<159	<159
N-BUTANE	UG/M3	PA TO-14	21300	182	953
ISOBUTANE	UG/M3	PA TO-14	3650	380	448
1-BUTENE	UG/M3	PA TO-14	<117	718	208
TRANS-2-BUTENE	UG/M3	PA TO-14	226	137	64.5
CIS-2-BUTENE	UG/M3	PA TO-14	<117	93.0	31.5
3-METHYL-1-BUTENE	UG/M3	PA TO-14	<146	95.2	37.4
ISOPENTANE	UG/M3	PA TO-14	72900	573	1420
1-PENTENE	UG/M3	PA TO-14	<146	283	75.9
ISOPRENE	UG/M3	PA TO-14	<142	<14.2	30.6
TRANS-2-PENTENE	UG/M3	PA TO-14	1110	126	107

CLIENT SAMPLE ID'S:	CF-22402	CF-22401	CF-22403
ESE FIELD GROUP:	BEM1A	BEM1A	BEM1A
ESE SEQUENCE #:	16	17	18
DATE COLLECTED:	08/07/97	08/07/97	08/15/97
TIME COLLECTED:	15:45	15:30	10:00

PARAMETERS	UNITS	METHOD			

CIS-2-PENTENE	UG/M3	PA TO-14	1590	60.4	45.8
2-METHYL-2-BUTENE	UG/M3	PA TO-14	1540	102	59.9
CYCLOPENTENE	UG/M3	PA TO-14	<142	84.3	37.4
4-METHYL-1-PENTENE	UG/M3	PA TO-14	665	52.5	<17.5
CYCLOPENTANE	UG/M3	PA TO-14	34700	174	190
2,2-DIMETHYLBUTANE	UG/M3	PA TO-14	67700	397	332
2-METHYL PENTANE	UG/M3	PA TO-14	362000	1890	1380
3-METHYL PENTANE	UG/M3	PA TO-14	260000	1390	1030
2-METHYL-1-PENTENE	UG/M3	PA TO-14	1830	214	59.9
CIS-2-HEXENE	UG/M3	PA TO-14	1520	123	50.1
TRANS-2-HEXENE	UG/M3	PA TO-14	497	43.1	<17.5
METHYLCYCLOPENTANE	UG/M3	PA TO-14	364000	1460	357
2,3-DIMETHYLBUTANE	UG/M3	PA TO-14	227000	977	152
CYCLOHEXANE	UG/M3	PA TO-14	284000	1070	247
2-METHYL HEXANE	UG/M3	PA TO-14	46300	235	63.0
2,3-DIMETHYLPENTANE	UG/M3	PA TO-14	121000	592	113
3-METHYL HEXANE	UG/M3	PA TO-14	363000	1610	254
ISOCTANE	UG/M3	PA TO-14	<238	56.1	36.1
METHYLCYCLOHEXANE	UG/M3	PA TO-14	1590000	2400	239
2,3,4-TRIMETHYLPENTANE	UG/M3	PA TO-14	14100	77.0	<23.8
2-METHYL HEPTANE	UG/M3	PA TO-14	289000	1000	132
3-METHYL HEPTANE	UG/M3	PA TO-14	238000	855	63.7
NONANE	UG/M3	PA TO-14	288000	704	52.8
CUMENE	UG/M3	PA TO-14	15600	50.5	<25.0
N-PROPYLBENZENE	UG/M3	PA TO-14	21900	59.0	<25.0
ALPHA-PINENE	UG/M3	PA TO-14	832	<28.3	<28.3
BETA-PINENE	UG/M3	PA TO-14	<283	50.4	<28.3

BATCH : G84718

Method Blank Sample Summary

E	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
20/97	MB*082097*1	95021*TO14-G	CHLORODIFLUOROMETHANE	PPBV	0.02	0.05
20/97	MB*082097*1	95022*TO14-G	PROPYLENE	PPBV	0.08	0.05
20/97	MB*082097*1	34668*TO14-G	DICHLORODIFLUOROMETHANE	PPBV	0.01	0.05
20/97	MB*082097*1	34418*TO14-G	CHLOROMETHANE	PPBV	0.24	0.05
20/97	MB*082097*1	96776*TO14-G	FREON 114	PPBV	ND	0.05
20/97	MB*082097*1	39175*TO14-G	VINYL CHLORIDE	PPBV	ND	0.05
20/97	MB*082097*1	95023*TO14-G	1,3-BUTADIENE	PPBV	ND	0.05
20/97	MB*082097*1	34413*TO14-G	BROMOMETHANE	PPBV	0.02	0.05
20/97	MB*082097*1	34311*TO14-G	CHLOROETHANE	PPBV	ND	0.05
20/97	MB*082097*1	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	ND	0.05
20/97	MB*082097*1	95024*TO14-G	PENTANE	PPBV	ND	0.05
20/97	MB*082097*1	34501*TO14-G	1,1-DICHLOROETHYLENE	PPBV	0.002	0.05
20/97	MB*082097*1	34423*TO14-G	METHYLENE CHLORIDE	PPBV	ND	0.05
20/97	MB*082097*1	95025*TO14-G	3-CHLORO-1-PROPENE	PPBV	ND	0.05
20/97	MB*082097*1	77647*TO14-G	FREON 113	PPBV	0.05	0.05
20/97	MB*082097*1	95034*TO14-G	TRANS-1,2-DICHLOROETHENE	PPBV	ND	0.05
20/97	MB*082097*1	34496*TO14-G	1,1-DICHLOROETHANE	PPBV	0.001	0.05
20/97	MB*082097*1	95033*TO14-G	2-CHLORO-1,3-BUTADIENE	PPBV	ND	0.05
20/97	MB*082097*1	77093*TO14-G	CIS-1,2-DICHLOROETHENE	PPBV	ND	0.05
20/97	MB*082097*1	95032*TO14-G	HEXANE	PPBV	ND	0.05
20/97	MB*082097*1	32106*TO14-G	CHLOROFORM	PPBV	0.01	0.05
20/97	MB*082097*1	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	ND	0.05
20/97	MB*082097*1	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	ND	0.05
20/97	MB*082097*1	34030*TO14-G	BENZENE	PPBV	ND	0.05
20/97	MB*082097*1	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	ND	0.05
20/97	MB*082097*1	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	ND	0.05
20/97	MB*082097*1	95026*TO14-G	BROMODICHLOROMETHANE	PPBV	ND	0.05
20/97	MB*082097*1	39180*TO14-G	TRICHLOROETHENE	PPBV	ND	0.05
20/97	MB*082097*1	95027*TO14-G	HEPTANE	PPBV	ND	0.05
20/97	MB*082097*1	34704*TO14-G	CIS-1,3-DICHLOROPROPENE	PPBV	ND	0.05
20/97	MB*082097*1	34699*TO14-G	TRANS-1,3-DICHLOROPROPENE	PPBV	ND	0.05
20/97	MB*082097*1	34511*TO14-G	1,1,2-TRICHLOROETHANE	PPBV	ND	0.05
20/97	MB*082097*1	34010*TO14-G	TOLUENE	PPBV	0.01	0.05
20/97	MB*082097*1	95028*TO14-G	DIBROMOCHLOROMETHANE	PPBV	ND	0.05
20/97	MB*082097*1	77651*TO14-G	1,2-DIBROMOETHANE (EDB)	PPBV	ND	0.05
20/97	MB*082097*1	95029*TO14-G	OCTANE	PPBV	ND	0.05
20/97	MB*082097*1	34475*TO14-G	TETRACHLOROETHENE	PPBV	0.007	0.05
20/97	MB*082097*1	34301*TO14-G	CHLOROBENZENE	PPBV	ND	0.05
20/97	MB*082097*1	34371*TO14-G	ETHYLBENZENE	PPBV	ND	0.05
20/97	MB*082097*1	97234*TO14-G	M,P-XYLENE	PPBV	ND	0.05
20/97	MB*082097*1	95031*TO14-G	BROMOFORM	PPBV	ND	0.05
20/97	MB*082097*1	77128*TO14-G	STYRENE	PPBV	ND	0.05
20/97	MB*082097*1	34516*TO14-G	1,1,2,2-TETRACHLOROETHANE	PPBV	ND	0.05
20/97	MB*082097*1	97235*TO14-G	O-XYLENE	PPBV	ND	0.05
20/97	MB*082097*1	77226*TO14-G	1,3,5-TRIMETHYLBENZENE	PPBV	ND	0.05
20/97	MB*082097*1	95030*TO14-G	ALPHA-METHYL-STYRENE	PPBV	ND	0.05
20/97	MB*082097*1	77222*TO14-G	1,2,4-TRIMETHYLBENZENE	PPBV	ND	0.05
20/97	MB*082097*1	97754*TO14-G	BENZYL CHLORIDE	PPBV	ND	0.05
20/97	MB*082097*1	34566*TO14-G	1,3-DICHLOROBENZENE	PPBV	ND	0.05
20/97	MB*082097*1	34571*TO14-G	1,4-DICHLOROBENZENE	PPBV	0.10	0.05
20/97	MB*082097*1	34536*TO14-G	1,2-DICHLOROBENZENE	PPBV	ND	0.05
20/97	MB*082097*1	34551*TO14-G	1,2,4-TRICHLOROBENZENE	PPBV	ND	0.05
20/97	MB*082097*1	34391*TO14-G	HEXACHLOROBUTADIENE	PPBV	0.006	0.05
20/97	MB*082097*1	95864*TO14-G	N-BUTANE	PPBV	0.02	0.05
20/97	MB*082097*1	95865*TO14-G	ISOBUTANE	PPBV	0.06	0.05
20/97	MB*082097*1	95866*TO14-G	1-BUTENE	PPBV	0.08	0.05
20/97	MB*082097*1	95867*TO14-G	TRANS-2-BUTENE	PPBV	ND	0.05
20/97	MB*082097*1	95868*TO14-G	CIS-2-BUTENE	PPBV	0.005	0.05
20/97	MB*082097*1	95869*TO14-G	3-METHYL-1-BUTENE	PPBV	ND	0.05
20/97	MB*082097*1	95870*TO14-G	ISOPENTANE	PPBV	0.02	0.05
20/97	MB*082097*1	95871*TO14-G	1-PENTENE	PPBV	ND	0.05
20/97	MB*082097*1	95872*TO14-G	ISOPRENE	PPBV	0.002	0.05
20/97	MB*082097*1	95873*TO14-G	TRANS-2-PENTENE	PPBV	ND	0.05
20/97	MB*082097*1	95874*TO14-G	CIS-2-PENTENE	PPBV	ND	0.05
20/97	MB*082097*1	95875*TO14-G	2-METHYL-2-BUTENE	PPBV	ND	0.05
20/97	MB*082097*1	95876*TO14-G	CYCLOPENTENE	PPBV	ND	0.05
20/97	MB*082097*1	95877*TO14-G	4-METHYL-1-PENTENE	PPBV	ND	0.05
20/97	MB*082097*1	95878*TO14-G	CYCLOPENTANE	PPBV	ND	0.05
20/97	MB*082097*1	95879*TO14-G	2,2-DIMETHYLBUTANE	PPBV	ND	0.05
20/97	MB*082097*1	95880*TO14-G	2-METHYL PENTANE	PPBV	ND	0.05
20/97	MB*082097*1	95881*TO14-G	3-METHYL PENTANE	PPBV	0.002	0.05
20/97	MB*082097*1	95882*TO14-G	2-METHYL-1-PENTENE	PPBV	ND	0.05
20/97	MB*082097*1	95883*TO14-G	CIS-2-HEXENE	PPBV	ND	0.05

Method Blank Sample Summary

TIME	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
20/97	MB*082097*1	95884*TO14-G	TRANS-2-HEXENE	PPBV	ND	0.05
20/97	MB*082097*1	95885*TO14-G	METHYLCYCLOPENTANE	PPBV	0.002	0.05
20/97	MB*082097*1	95886*TO14-G	2,3-DIMETHYLBUTANE	PPBV	ND	0.05
20/97	MB*082097*1	95887*TO14-G	CYCLOHEXANE	PPBV	ND	0.05
20/97	MB*082097*1	95888*TO14-G	2-METHYL HEXANE	PPBV	ND	0.05
20/97	MB*082097*1	95889*TO14-G	2,3-DIMETHYLPENTANE	PPBV	ND	0.05
20/97	MB*082097*1	95890*TO14-G	3-METHYL HEXANE	PPBV	0.001	0.05
20/97	MB*082097*1	95891*TO14-G	ISOOCTANE	PPBV	ND	0.05
20/97	MB*082097*1	95892*TO14-G	METHYLCYCLOHEXANE	PPBV	ND	0.05
20/97	MB*082097*1	95893*TO14-G	2,3,4-TRIMETHYLPENTANE	PPBV	ND	0.05
20/97	MB*082097*1	95894*TO14-G	2-METHYL HEPTANE	PPBV	ND	0.05
20/97	MB*082097*1	95895*TO14-G	3-METHYL HEPTANE	PPBV	ND	0.05
20/97	MB*082097*1	95896*TO14-G	NONANE	PPBV	0.003	0.05
20/97	MB*082097*1	95897*TO14-G	CUMENE	PPBV	ND	0.05
20/97	MB*082097*1	95898*TO14-G	N-PROPYLBENZENE	PPBV	ND	0.05
20/97	MB*082097*1	95899*TO14-G	ALPHA-PINENE	PPBV	ND	0.05
20/97	MB*082097*1	95900*TO14-G	BETA-PINENE	PPBV	ND	0.05
20/97	MB*082097*1	77885*TO14-G	METHANOL	PPBV	0.24	0.50
20/97	MB*082097*1	95753*TO14-G	ETHANOL (ETHYL ALCOHOL)	PPBV	0.08	0.50
20/97	MB*082097*1	95754*TO14-G	ISOPROPYL ALCOHOL	PPBV	ND	0.50
20/97	MB*082097*1	95755*TO14-G	1-BUTANOL	PPBV	ND	0.50
20/97	MB*082097*1	81552*TO14-G	ACETONE	PPBV	0.24	0.50
20/97	MB*082097*1	81595*TO14-G	METHYL ETHYL KETONE	PPBV	ND	0.50
20/97	MB*082097*1	81596*TO14-G	METHYL ISOBUTYL KETONE	PPBV	ND	0.50
20/97	MB*082097*1	95756*TO14-G	2-HEXANONE	PPBV	ND	0.50
20/97	MB*082097*1	77097*TO14-G	CYCLOHEXANONE	PPBV	ND	0.50
20/97	MB*082097*1	81553*TO14-G	ACETOPHENONE	PPBV	ND	0.50
20/97	MB*082097*1	95757*TO14-G	ACROLEIN	PPBV	0.02	0.50
20/97	MB*082097*1	95758*TO14-G	ACETONITRILE	PPBV	0.16	0.50
20/97	MB*082097*1	95759*TO14-G	ACRYLONITRILE	PPBV	ND	0.50
20/97	MB*082097*1	95760*TO14-G	PROPIONITRILE	PPBV	ND	0.50
20/97	MB*082097*1	95761*TO14-G	METHACRYLONITRILE	PPBV	ND	0.50
20/97	MB*082097*1	95762*TO14-G	BENZONITRILE	PPBV	ND	0.50
20/97	MB*082097*1	95763*TO14-G	ETHER	PPBV	ND	0.50
20/97	MB*082097*1	95764*TO14-G	METHYL TERT-BUTYL ETHER	PPBV	ND	0.50
20/97	MB*082097*1	95765*TO14-G	ETHYL TERT-BUTYL ETHER	PPBV	ND	0.50
20/97	MB*082097*1	95766*TO14-G	TETRAHYDROFURAN	PPBV	ND	0.50
20/97	MB*082097*1	95767*TO14-G	VINYL ACETATE	PPBV	ND	0.50
20/97	MB*082097*1	97195*TO14-G	1,4-DIOXANE	PPBV	ND	0.50
20/97	MB*082097*1	95768*TO14-G	ETHYL ACRYLATE	PPBV	ND	0.50
20/97	MB*082097*1	95769*TO14-G	METHYL METHACRYLATE	PPBV	ND	0.50
20/97	MB*082097*1	95770*TO14-G	2-NITROPROPANE	PPBV	0.002	0.50
20/97	MB*082097*1	95771*TO14-G	NITROBENZENE	PPBV	ND	0.50
20/97	MB*082097*1	95772*TO14-G	CARBON DISULFIDE	PPBV	0.02	0.50

Reference Sample Summary

TIME	SAMPLE	STORET	PARAMETER	UNITS	KNOWN	FOUND	%REC'D
20/97	RF*082097*1	39175*TO14-G	VINYL CHLORIDE	PPBV	0.53	0.45	84.9
20/97	RF*082097*1	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	0.53	0.50	94.3
20/97	RF*082097*1	34423*TO14-G	METHYLENE CHLORIDE	PPBV	0.53	0.50	94.3
20/97	RF*082097*1	32106*TO14-G	CHLOROFORM	PPBV	0.52	0.45	86.5
20/97	RF*082097*1	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	0.52	0.43	82.7
20/97	RF*082097*1	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	0.51	0.39	76.5
20/97	RF*082097*1	34030*TO14-G	BENZENE	PPBV	0.52	0.43	82.7
20/97	RF*082097*1	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	0.52	0.41	78.8
20/97	RF*082097*1	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	0.52	0.44	84.6
20/97	RF*082097*1	39180*TO14-G	TRICHLOROETHENE	PPBV	0.52	0.41	78.8
20/97	RF*082097*1	34010*TO14-G	TOLUENE	PPBV	0.51	0.46	90.2
20/97	RF*082097*1	34475*TO14-G	TETRACHLOROETHENE	PPBV	0.52	0.42	80.8
20/97	RF*082097*1	34301*TO14-G	CHLOROBENZENE	PPBV	0.52	0.44	84.6
20/97	RF*082097*1	34371*TO14-G	ETHYLBENZENE	PPBV	0.53	0.47	88.7
20/97	RF*082097*1	97235*TO14-G	O-XYLENE	PPBV	0.55	0.46	83.6
20/97	RF*082097*2	39175*TO14-G	VINYL CHLORIDE	PPBV	0.53	0.49	92.5
20/97	RF*082097*2	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	0.53	0.53	100
20/97	RF*082097*2	34423*TO14-G	METHYLENE CHLORIDE	PPBV	0.53	0.51	96.2
20/97	RF*082097*2	32106*TO14-G	CHLOROFORM	PPBV	0.52	0.46	88.5
20/97	RF*082097*2	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	0.52	0.45	86.5
20/97	RF*082097*2	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	0.51	0.45	88.2
20/97	RF*082097*2	34030*TO14-G	BENZENE	PPBV	0.52	0.46	88.5
20/97	RF*082097*2	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	0.52	0.46	88.5
20/97	RF*082097*2	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	0.52	0.47	90.4
20/97	RF*082097*2	39180*TO14-G	TRICHLOROETHENE	PPBV	0.52	0.42	80.8

BATCH : G84718

Reference Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	KNOWN	FOUND	%RECV
2/21/97	RF*08209*2	34010*TO14-G	TOLUENE	PPBV	0.51	0.47	92.2
2/21/97	RF*08209*2	34475*TO14-G	TETRACHLOROETHENE	PPBV	0.52	0.42	80.8
2/21/97	RF*08209*2	34301*TO14-G	CHLOROBENZENE	PPBV	0.52	0.45	86.5
2/21/97	RF*08209*2	34371*TO14-G	ETHYLBENZENE	PPBV	0.53	0.47	88.7
2/21/97	RF*08209*2	97235*TO14-G	O-XYLENE	PPBV	0.55	0.47	85.5

Updated by 3395

GENERAL COMMENTS:
BATCH NARRATIVE

Batch G84718
Client/Samples: Bechtel Environmental
Analyst: Matthew Booth/3395
Date: 08/21/97

Sample Number	Client ID	Canister Number	Date Collected	Date Received	Date Analyzed	Initial Pressure
EEM1A*16	NTFF Bioslurper	GL139	08/15/97	08/16/97	08/20/97	2.6 "Hg
EEM1A*17	NTFF Effluent	DL108	08/07/97	08/15/97	08/20/97	3.2 "Hg
EEM1A*18	NTFF Influent	GL152	08/07/97	08/15/97	08/20/97	2.7 "Hg

EXPLANATION OF QC FAILURES:

The %RSD in the initial calibration and the %D in the CCS are greater than 30% for Chloromethane due to the presence of this compound in the background.

Analyst _____ DATE _____

Reviewer _____ DATE _____

COMPENDIUM METHOD TO14A/TO15 CANISTER FIELD TEST DATA SHEET

QST Environmental, Inc., 404 SW 140th Terrace, Newberry, FL 32669-3000

Shipping Information

Site Address: Bechtel Environmental - NAS Cecil Field

Quarters E

Avenue G

Jacksonville, FL 32215

Attn: Sam Ross

Phone No: (904) 779-8900

QST Contact: Ed Mansfield/Matthew Booth Project Number: 1296053G 0204

Canister Number	Date Cleaned	Canister Pressure	Date Shipped	Initials
GL139	7/12/97	18 mtorr	7/16/97	SR

This canister is certified clean. It has been batch cleaned using an Ertech 3000 Canister Cleaning System. Alternating evacuations and pressurizations occur over a 4-hour period while the canisters are heated to 100°C. One canister per batch of eight is analyzed for cleanliness (no target analyte greater than its reporting limit) by GC/MS and a record of the analysis is maintained at QST.

THIS SECTION TO BE FILLED
OUT BY FIELD PERSONNEL

Field Sampling Information

Site ID: NTFF Biosly-per

Operator: S. Ross

	Date	Time	Canister Pressure	Notes	Initials
Initial	8/15/97	7:39	127.30" H ₂ O		SR
Final	8/15/97	11:00	17.20" H ₂ O		SR

Notes: _____

Laboratory Receipt Information

Sample Number	Date Received	Sample Pressure	Notes	Initials
SEM(A) * 10	8/16/97	2.6" H ₂ O	delivered to 12.15 ps (10.1" H ₂ O)	SR

COMPENDIUM METHOD TO14A/TO15 CANISTER FIELD TEST DATA SHEET

QST Environmental, Inc., 404 SW 140th Terrace, Newberry, FL 32669-3000

Shipping Information

Site Address: Bechtel Environmental - NAS Cecil Field

Quarters E

Avenue G

Jacksonville, FL 32215

Attn: Sam Ross

Phone No: (904) 779-8900

QST Contact: Ed Mansfield/Matthew Booth Project Number: 1296053G 0204

Canister Number	Date Cleaned	Canister Pressure	Date Shipped	Initials
DL108	7/12/97	18 mtorr	7/16/97	SR

This canister is certified clean. It has been batch cleaned using an Entech 3000 Canister Cleaning System. Alternating evacuations and pressurizations occur over a 4-hour period while the canisters are heated to 100°C. One canister per batch of eight is analyzed for cleanliness (no target analyte greater than its reporting limit) by GC/MS and a record of the analysis is maintained at QST.

THIS SECTION TO BE FILLED
OUT BY FIELD PERSONNEL

Field Sampling Information

Site ID: MTEF effluent

Operator: S. Ross

	Date	Time	Canister Pressure	Notes	Initials
Initial	8/7/97	1200	-108.10" H ₂ O		SR
Final	8/7/97	1630	-48.00" H ₂ O		SR

Notes: _____

Laboratory Receipt Information

Sample Number	Date Received	Sample Pressure	Notes	Initials
DL108A # 17	8/15/97	3.2" H ₂	dil 20 + 11.55 psi (10.72)	—

COMPENDIUM METHOD TO14A/TO15 CANISTER FIELD TEST DATA SHEET

QST Environmental, Inc., 404 SW 140th Terrace, Newberry, FL 32669-3000

Shipping Information

Site Address: Bechtel Environmental - NAS Cecil Field

Quarters E

Avenue G

Jacksonville, FL 32215

Attn: Sam Ross

Phone No: (904) 779-8900

QST Contact: Ed Mansfield/Matthew Booth Project Number: 1296053G 0204

Canister Number	Date Cleaned	Canister Pressure	Date Shipped	Initials
GL152	7/12/97	18 mtorr	7/16/97	<i>SR</i>

This canister is certified clean. It has been batch cleaned using an Entech 3000 Canister Cleaning System. Alternating evacuations and pressurizations occur over a 4-hour period while the canisters are heated to 100°C. One canister per batch of eight is analyzed for cleanliness (no target analyte greater than its reporting limit) by GC/MS and a record of the analysis is maintained at QST.

THIS SECTION TO BE FILLED
OUT BY FIELD PERSONNEL

Field Sampling Information

Site ID: MTFF influent

Operator: S. Ross

	Date	Time	Canister Pressure	Notes	Initials
Initial	8/7/97	1230	-100.70" H ₂ O		<i>SR</i>
Final	8/7/97	1630	-24.10" H ₂ O		<i>SR</i>

Notes: _____

Laboratory Receipt Information

Sample Number	Date Received	Sample Pressure	Notes	Initials
BEMLA # 16	8/15/97	2.7" H ₂ O	d ₁ (2x + 10.92L (12.05 pm))	<i>SR</i>

NAVY RAC CHAIN OF JUSTODY RECORD



Facility Name: NAS Cecil Field
 Site Name: NTEF Biosluuper
 Delivery Order No.: _____
 Cooler/Crate No.: _____
 Sampling Event: Initial

SEIR No.: _____
 COC Number: CF028
 Lab: _____
 Field Logbook No.: _____
 Logbook Pg. No.: _____

Sampled by: Sam Ross Sam Ross
 Print Sign Print Sign

Legend	SAMPLE TYPE	MATRIX	QC LEVELS
PSB Preservative Blank FDP Field Duplicate ENV Environmental FDB Field Blank GEO Geotechnical Sample MXD Matrix Spike Duplicate MXS Matrix Spike	BLS Blind Spike BLB Blind Blank PTS Point Source FRP Field Replicate RSB Rinsate Blank SPL Split TRP Trip Blank	AIR Air FLO Flora FAU Fauna GWT Groundwater LCH Leachate OIL Oil DIW Deionized Water DFW Deionized Organic Free Water SBS Subsurface Soil SED Sediment SFS Surface Soil SFW Surface Water SLG Sludge SLW Solid Waste OFW Organic Free Water	PTW Potable Water SEP Seeps SOL Solid WWT Waste Water SLW Solid Waste SST Surface Water Storm Event
			C Sample results and QC reported D Sample results, QC and raw data reported E Sample results, blanks, and calibration reported S Screening level analysis; sample results and QC as reported

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
Stack Effluent	CF-22401	ENV	AIR	8/7/97/1530	1	-	1	T014	14 day	C
Burner Influent	CF 22402	ENV	AIR	8/7/97/1545	1	-	1	T014	14 day	C

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER	COMMENTS/INSTRUCTIONS									
<u>Sam Ross</u>	<u>[Signature]</u>	8/7/97	1700			PO # 289-F2408 2 Symma canisters								
		8/16/97	14:00											
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>CONTAMINATION</th> <th>YES</th> <th>NO</th> </tr> <tr> <td>Radiological</td> <td> </td> <td> </td> </tr> <tr> <td>Chemical</td> <td> </td> <td> </td> </tr> </table>	CONTAMINATION	YES	NO	Radiological			Chemical		
CONTAMINATION	YES	NO												
Radiological														
Chemical														

Shipper: _____
 Ship to: _____
 Airbill No. _____ Traffic Report No. _____

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, n.o.s. UN2910

NAVY RAC CHAIN OF USTODY RECORD

F 3 of 3



Facility Name: NAS Cecil Field
 Site Name: NTPF Bioslurper
 Delivery Order No.: _____
 Cooler/Crate No.: _____
 Sampling Event: 2nd weekly

SEIR No.: _____
 COC Number: CF029
 Lab: _____
 Field Logbook No.: _____
 Logbook Pg. No.: _____

Sampled by: Sam Ross Sam Ross
 Print Sign Print Sign

Legend	SAMPLE TYPE	MATRIX	QC LEVELS
PSB Preservative Blank FDP Field Duplicate ENV Environmental FDB Field Blank GEO Geotechnical Sample MXD Matrix Spike Duplicate MXS Matrix Spike	BLS Blind Spike BLB Blind Blank PTS Point Source FRP Field Replicate RSB Rinsate Blank SPL Split TRP Trip Blank	AIR Air FLO Flora FAU Fauna GWT Groundwater LCH Leachate OIL Oil DIW Deionized Water DFW Deionized Organic Free Water	PTW Potable Water SEP Seeps SOL Solid WWT Waste Water SLW Solid Waste SST Surface Water Storm Event
		SBS Subsurface Soil SED Sediment SFS Surface Soil SFW Surface Water SLG Sludge SLW Solid Waste OFW Organic Free Water	C Sample results and QC reported D Sample results, QC and raw data reported E Sample results, blanks, and calibration reported S Screening level analysis; sample results and QC as reported

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
Stack Effluent	CF-22403	ENV	AIR	8/15/97 1100	01	-	1	TO14	14 day	C

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER	COMMENTS/INSTRUCTIONS
<u>Sam Ross</u>	<u>8/11</u>	<u>8/15/97</u>	<u>1100</u>		<u>PO# 289-F2408</u>
<u>m</u>	<u>2</u>	<u>8/16/97</u>	<u>14:00</u>		

CONTAMINATION	YES	NO
Radiological		
Chemical		

Shipper: _____
 Ship to: _____
 Airbill No. _____ Traffic Report No. _____

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, n.o.s. UN2910



ENVIRONMENTAL
A CILCORP COMPANY

Offering expanded products and services

al
Inc.

3. BOX 1703, GAINESVILLE, FLORIDA 32602-1703 (904) 332-3318

LETTER OF TRANSMITTAL

To: Mr. S. Russ
Resident
Quintan E. Ave. G
NAS Dade Field
Tombsonville FL 32315

Date: 10/5/92
Attention: _____
Re: _____

Project No. 12960530 0201

2 Day mail

We are sending you: Attached Under separate cover via _____

Copies	Description

These are transmitted as checked below:

- For approval
- For review and comment
- Returned for corrections
- For your information
- Review and correct
- Prints returned after loan to us
- As requested
- Review and file
- _____

Remarks: SPM
Please call w/ questions
Richard

Copy to _____

Signed: [Signature]

SAMPLE ID'S	CF22404	CF22405
F ETERS	STORET	BEM1A
UNITS	METHOD	BEM1A
	19	20
DATE	08/21/97	08/28/97
TIME	15:15	
PROPYLENE	95022	99.5 112
PPBV	TO14-G	
CHLORODIFLUOROMETHANE	95021	<0.50 <5.00
PPBV	TO14-G	
DICHLORODIFLUOROMETHANE	34668	<0.50 <5.00
PPBV	TO14-G	
CHLOROMETHANE	34418	<0.50 29.2
PPBV	TO14-G	
FREON 114	96776	<0.50 <5.00
PPBV	TO14-G	
VINYL CHLORIDE	39175	<0.50 <5.00
PPBV	TO14-G	
1,3-BUTADIENE	95023	<0.50 6.90
PPBV	TO14-G	
BROMOMETHANE	34413	<0.50 <5.00
PPBV	TO14-G	
CHLOROETHANE	34311	<0.50 <5.00
PPBV	TO14-G	
TRICHLOROFLUOROMETHANE	34488	<0.50 <5.00
PPBV	TO14-G	
PENTANE	95024	687 654
PPBV	TO14-G	
1,1-DICHLOROETHYLENE	34501	<0.50 <5.00
PPBV	TO14-G	
METHYLENE CHLORIDE	34423	<0.50 <5.00
PPBV	TO14-G	
3-ORO-1-PROPENE	95025	<0.50 <5.00
PPBV	TO14-G	
FREON 113	77647	<0.50 <5.00
PPBV	TO14-G	
CIS-1,2-DICHLOROETHENE	77093	<0.50 <5.00
PPBV	TO14-G	
1,1-DICHLOROETHANE	34496	<0.50 <5.00
PPBV	TO14-G	
2-CHLORO-1,3-BUTADIENE	95033	<0.50 <5.00
PPBV	TO14-G	
TRANS-1,2-DICHLOROETHENE	95034	<0.50 <5.00
PPBV	TO14-G	
HEXANE	95032	367 323
PPBV	TO14-G	
CHLOROFORM	32106	<0.50 <5.00
PPBV	TO14-G	
1,2-DICHLOROETHANE	34531	<0.50 <5.00
PPBV	TO14-G	
1,1,1-TRICHLOROETHANE	34506	<0.50 <5.00
PPBV	TO14-G	
BENZENE	34030	8.96 14.9
PPBV	TO14-G	
CARBON TETRACHLORIDE	32102	<0.50 <5.00
PPBV	TO14-G	
1,2-DICHLOROPROPANE	34541	<0.50 <5.00
PPBV	TO14-G	
BROMODICHLOROMETHANE	95026	0.83 <5.00
PPBV	TO14-G	
TRICHLOROETHENE	39180	<0.50 <5.00
PPBV	TO14-G	
HEPTANE	95027	88.0 96.0
PPBV	TO14-G	
CIS-1,3-DICHLOROPROPENE	34704	<0.50 <5.00
PPBV	TO14-G	
TRANS-1,3-DICHLOROPROPENE	34699	<0.50 <5.00
PPBV	TO14-G	
1,1,2-TRICHLOROETHANE	34511	<0.50 <5.00
PPBV	TO14-G	

SAMPLE ID'S P/ MTERS UNITS	STORET METHOD	CF22404 BEM1A 19	CF22405 BEM1A 20
DATE TIME		08/21/97 15:15	08/28/97
TOLUENE PPBV	34010 TO14-G	23.6	31.1
DIBROMOCHLOROMETHANE PPBV	95028 TO14-G	<0.50	<5.00
1,2-DIBROMOETHANE (EDB) PPBV	77651 TO14-G	<0.50	<5.00
OCTANE PPBV	95029 TO14-G	21.2	24.0
TETRACHLOROETHENE PPBV	34475 TO14-G	<0.50	<5.00
CHLOROBENZENE PPBV	34301 TO14-G	<0.50	<5.00
ETHYLBENZENE PPBV	34371 TO14-G	7.10	10.2
M, P-XYLENE PPBV	97234 TO14-G	23.0	32.8
FORMOFORM PPBV	95031 TO14-G	<0.50	<5.00
STYRENE PPBV	77128 TO14-G	<0.50	<5.00
1,1,2,2-TETRACHLOROETHANE PPBV	34516 TO14-G	<0.50	<5.00
O-XYLENE PPBV	97235 TO14-G	7.82	12.7
1,3,5-TRIMETHYLBENZENE PPBV	77226 TO14-G	2.57	<5.00
METHYL-STYRENE PPBV	95030 TO14-G	<0.50	<5.00
BENZYL CHLORIDE PPBV	97754 TO14-G	<0.50	<5.00
1,2,4-TRIMETHYLBENZENE PPBV	77222 TO14-G	5.59	9.90
1,3-DICHLOROBENZENE PPBV	34566 TO14-G	<0.50	<5.00
1,4-DICHLOROBENZENE PPBV	34571 TO14-G	<0.50	14.2
1,2-DICHLOROBENZENE PPBV	34536 TO14-G	<0.50	<5.00
1,2,4-TRICHLOROBENZENE PPBV	34551 TO14-G	<0.50	<5.00
HEXACHLOROBUTADIENE PPBV	34391 TO14-G	<0.50	<5.00
METHANOL PPBV	77885 TO14-G	57.7	208
ETHANOL (ETHYL ALCOHOL) PPBV	95753 TO14-G	<5.00	<50.0
ISOPROPYL ALCOHOL PPBV	95754 TO14-G	<5.00	<50.0
1-BUTANOL PPBV	95755 TO14-G	<5.00	<50.0
ACETONE PPBV	81552 TO14-G	513	471
METHYL ETHYL KETONE PPBV	81595 TO14-G	53.0	78.0
METHYL ISOBUTYL KETONE PPBV	81596 TO14-G	<5.00	<50.0
1-HEXANONE PPBV	95756 TO14-G	<5.00	<50.0
CYCLOHEXANONE PPBV	77097 TO14-G	<5.00	<50.0
ACE ENONE PPBV	81553 TO14-G	<5.00	<50.0
ACROLEIN PPBV	95757 TO14-G	48.2	<50.0

SAMPLE ID'S P ETERS UNITS	STORET METHOD	CF22404	CF22405
		BEM1A 19	BEM1A 20
DATE		08/21/97	08/28/97
TIME		15:15	
ACETONITRILE	95758	<5.00	<50.0
PPBV	TO14-G		
ACRYLONITRILE	95759	<5.00	<50.0
PPBV	TO14-G		
PROPIONITRILE	95760	<5.00	<50.0
PPBV	TO14-G		
METHACRYLONITRILE	95761	<5.00	<50.0
PPBV	TO14-G		
BENZONITRILE	95762	<5.00	<50.0
PPBV	TO14-G		
ETHER	95763	<5.00	<50.0
PPBV	TO14-G		
METHYL TERT-BUTYL ETHER	95764	<5.00	<50.0
PPBV	TO14-G		
ETHYL TERT-BUTYL ETHER	95765	<5.00	<50.0
PPBV	TO14-G		
TETRAHYDROFURAN	95766	271	<50.0
PPBV	TO14-G		
VINYL ACETATE	95767	66.4	<50.0
PPBV	TO14-G		
1,4-DIOXANE	97195	<5.00	<50.0
PPBV	TO14-G		
ETHYL ACRYLATE	95768	<5.00	<50.0
PPBV	TO14-G		
METHYL METHACRYLATE	95769	<5.00	<50.0
PPBV	TO14-G		
2-METHYLPROPANE	95770	<5.00	<50.0
PPBV	TO14-G		
NITROBENZENE	95771	<5.00	<50.0
PPBV	TO14-G		
CARBON DISULFIDE	95772	<5.00	<50.0
PPBV	TO14-G		
N-BUTANE	95864	751	505
PPBV	TO14-G		
ISOBUTANE	95865	104	158
PPBV	TO14-G		
1-BUTENE	95866	62.6	53.9
PPBV	TO14-G		
TRANS-2-BUTENE	95867	23.3	20.6
PPBV	TO14-G		
CIS-2-BUTENE	95868	11.5	<5.00
PPBV	TO14-G		
3-METHYL-1-BUTENE	95869	8.50	7.40
PPBV	TO14-G		
ISOPENTANE	95870	580	352
PPBV	TO14-G		
1-PENTENE	95871	13.9	7.10
PPBV	TO14-G		
ISOPRENE	95872	<0.50	<5.00
PPBV	TO14-G		
TRANS-2-PENTENE	95873	19.5	19.2
PPBV	TO14-G		
CIS-2-PENTENE	95874	8.69	9.10
PPBV	TO14-G		
2-METHYL-2-BUTENE	95875	13.0	11.7
PPBV	TO14-G		
CYCLOPENTENE	95876	7.75	7.50
PPBV	TO14-G		
4-METHYL-1-PENTENE	95877	1.19	<5.00
PPBV	TO14-G		
CYCLOPENTANE	95878	28.3	36.5
PPBV	TO14-G		
2,2-DIMETHYLBUTANE	95879	61.2	39.8
PPBV	TO14-G		

SAMPLE ID'S	CF22404	CF22405
LETTERS	BEM1A	BEM1A
UNITS	METHOD	METHOD
	19	20
DATE	08/21/97	08/28/97
TIME	15:15	
2-METHYL PENTANE PPBV	95880 TO14-G	363 176
3-METHYL PENTANE PPBV	95881 TO14-G	269 120
2-METHYL-1-PENTENE PPBV	95882 TO14-G	9.42 8.00
CIS-2-HEXENE PPBV	95883 TO14-G	5.73 <5.00
TRANS-2-HEXENE PPBV	95884 TO14-G	2.02 <5.00
METHYLCYCLOPENTANE PPBV	95885 TO14-G	49.6 51.5
2,3-DIMETHYLBUTANE PPBV	95886 TO14-G	25.7 27.5
CYCLOHEXANE PPBV	95887 TO14-G	33.5 32.2
2-METHYL HEXANE PPBV	95888 TO14-G	7.55 8.30
2,3-DIMETHYLPENTANE PPBV	95889 TO14-G	16.9 17.2
3-METHYL HEXANE PPBV	95890 TO14-G	39.1 38.3
ISOOCTANE PPBV	95891 TO14-G	5.43 5.20
METHYLCYCLOHEXANE PPBV	95892 TO14-G	47.4 46.1
2-TRIMETHYLPENTANE PPBV	95893 TO14-G	2.17 <5.00
2-METHYL HEPTANE PPBV	95894 TO14-G	17.5 17.1
3-METHYL HEPTANE PPBV	95895 TO14-G	13.9 14.2
NONANE PPBV	95896 TO14-G	11.7 12.8
UMENE PPBV	95897 TO14-G	1.54 <5.00
N-PROPYLBENZENE PPBV	95898 TO14-G	1.65 <5.00
ALPHA-PINENE PPBV	95899 TO14-G	<0.50 <5.00
BETA-PINENE PPBV	95900 TO14-G	5.41 14.4

SAMPLE ID'S	CF22404	CF22405
P' ETERS	BEM1A	BEM1A
UNITS	METHOD	METHOD
	19	20
DATE	08/21/97	08/28/97
TIME	15:15	
SUMMA Pressure Receipt	95798	NRQ
PSI	0	NRQ
PROPYLENE	95022A	174
UG/M3	TO14-G	196
CHLORODIFLUOROMETHANE	95021A	<1.80
UG/M3	TO14-G	<18.0
DICHLORODIFLUOROMETHANE	34668A	<2.54
UG/M3	TO14-G	<25.4
CHLOROMETHANE	34418A	<1.05
UG/M3	TO14-G	61.3
FREON 114	96776A	<3.56
UG/M3	TO14-G	<35.6
VINYL CHLORIDE	39175A	<1.30
UG/M3	TO14-G	<13.0
1,3-BUTADIENE	95023A	<1.13
UG/M3	TO14-G	15.5
BROMOMETHANE	34413A	<1.98
UG/M3	TO14-G	<19.8
CHLOROETHANE	34311A	<1.34
UG/M3	TO14-G	<13.4
TRICHLOROFLUOROMETHANE	34488A	<2.86
UG/M3	TO14-G	<28.6
PENTANE	95024A	2060
UG/M3	TO14-G	1960
1,1-DICHLOROETHYLENE	34501A	<2.02
UG/M3	TO14-G	<20.2
METHYLENE CHLORIDE	34423A	<1.77
UG/M3	TO14-G	<17.7
1-CHLORO-1-PROPENE	95025A	<1.59
UG/M3	TO14-G	<15.9
FREON 113	77647A	<3.90
UG/M3	TO14-G	<39.0
CIS-1,2-DICHLOROETHENE	77093A	<2.02
UG/M3	TO14-G	<20.2
1,1-DICHLOROETHANE	34496A	<2.06
UG/M3	TO14-G	<20.6
2-CHLORO-1,3-BUTADIENE	95033A	<1.84
UG/M3	TO14-G	<18.4
TRANS-1,2-DICHLOROETHENE	95034A	<2.02
UG/M3	TO14-G	<20.2
HEXANE	95032A	1310
UG/M3	TO14-G	1160
CHLOROFORM	32106A	<2.48
UG/M3	TO14-G	<24.8
1,2-DICHLOROETHANE	34531A	<2.06
UG/M3	TO14-G	<20.6
1,1,1-TRICHLOROETHANE	34506A	<2.78
UG/M3	TO14-G	<27.8
BENZENE	34030A	29.1
UG/M3	TO14-G	48.4
CARBON TETRACHLORIDE	32102A	<3.20
UG/M3	TO14-G	<32.0
1,2-DICHLOROPROPANE	34541A	<2.35
UG/M3	TO14-G	<23.5
BROMODICHLOROMETHANE	95026A	5.65
UG/M3	TO14-G	<34.1
TRICHLOROETHENE	39180A	<2.73
UG/M3	TO14-G	<27.3
HEPTANE	95027A	367
UG/M3	TO14-G	400
CIS-DICHLOROPROPENE	34704A	<2.31
UG/M3	TO14-G	<23.1
TRANS-1,3-DICHLOROPROPENE	34699A	<2.31
UG/M3	TO14-G	<23.1

SAMPLE ID'S PETERS UNITS	STORET METHOD	CF22404	CF22405
		BEM1A 19	BEM1A 20
DATE		08/21/97	08/28/97
TIME		15:15	
1,1,2-TRICHLOROETHANE	34511A	<2.78	<27.8
UG/M3	TO14-G		
TOLUENE	34010A	90.4	119
UG/M3	TO14-G		
DIBROMOCHLOROMETHANE	95028A	<4.33	<43.3
UG/M3	TO14-G		
1,2-DIBROMOETHANE (EDB)	77651A	<3.91	<39.1
UG/M3	TO14-G		
OCTANE	95029A	101	114
UG/M3	TO14-G		
TETRACHLOROETHENE	34475A	<3.45	<34.5
UG/M3	TO14-G		
CHLOROBENZENE	34301A	<2.34	<23.4
UG/M3	TO14-G		
ETHYLBENZENE	34371A	31.3	45.0
UG/M3	TO14-G		
M,P-XYLENE	97234A	101	145
UG/M3	TO14-G		
BROMOFORM	95031A	<5.3	<52.6
UG/M3	TO14-G		
STYRENE	77128A	<2.17	<21.7
UG/M3	TO14-G		
1,1,2,2-TETRACHLOROETHANE	34516A	<3.49	<34.9
UG/M3	TO14-G		
O-XYLENE	97235A	34.5	56.0
UG/M3	TO14-G		
1,2,4-TRIMETHYLBENZENE	77226A	12.9	<25.0
UG/M3	TO14-G		
ALPHA-METHYL-STYRENE	95030A	<2.46	<24.6
UG/M3	TO14-G		
BENZYL CHLORIDE	97754A	<2.63	<26.3
UG/M3	TO14-G		
1,2,4-TRIMETHYLBENZENE	77222A	28.0	49.5
UG/M3	TO14-G		
1,3-DICHLOROBENZENE	34566A	<3.06	<30.6
UG/M3	TO14-G		
1,4-DICHLOROBENZENE	34571A	<3.06	86.8
UG/M3	TO14-G		
1,2-DICHLOROBENZENE	34536A	<3.06	<30.6
UG/M3	TO14-G		
1,2,4-TRICHLOROBENZENE	34551A	<3.77	<37.7
UG/M3	TO14-G		
HEXACHLOROBUTADIENE	34391A	<5.3	<52.7
UG/M3	TO14-G		
METHANOL	77885A	76.7	277
UG/M3	TO14-G		
ETHANOL (ETHYL ALCOHOL)	95753A	<9.60	<96.0
UG/M3	TO14-G		
ISOPROPYL ALCOHOL	95754A	<12.5	<125
UG/M3	TO14-G		
1-BUTANOL	95755A	<15.4	<154
UG/M3	TO14-G		
ACETONE	81552A	1280	1180
UG/M3	TO14-G		
METHYL ETHYL KETONE	81595A	159	234
UG/M3	TO14-G		
METHYL ISOBUTYL KETONE	81596A	<20.8	<208
UG/M3	TO14-G		
2-HEXANONE	95756A	<20.8	<208
UG/M3	TO14-G		
2-HEXANONE	77097A	<20.4	<204
UG/M3	TO14-G		
ACETOPHENONE	81553A	<25.0	<250
UG/M3	TO14-G		

SAMPLE ID'S	CF22404	CF22405
PF	STORET	BEM1A
UNITS	METHOD	19
DATE	08/21/97	08/28/97
TIME	15:15	
ACROLEIN	95757A	112
UG/M3	TO14-G	<117
ACETONITRILE	95758A	<8.55
UG/M3	TO14-G	<85.5
ACRYLONITRILE	95759A	<11.1
UG/M3	TO14-G	<111
PROPIONITRILE	95760A	<11.5
UG/M3	TO14-G	<115
METHACRYLONITRILE	95761A	<14.0
UG/M3	TO14-G	<140
BENZONITRILE	95762A	<21.5
UG/M3	TO14-G	<215
ETHER	95763A	<15.4
UG/M3	TO14-G	<154
METHYL TERT-BUTYL ETHER	95764A	<18.3
UG/M3	TO14-G	<183
ETHYL TERT-BUTYL ETHER	95765A	<21.3
UG/M3	TO14-G	<213
TETRAHYDROFURAN	95766A	813
UG/M3	TO14-G	<150
VINYL ACETATE	95767A	238
UG/M3	TO14-G	<179
1,4-DIOXANE	97195A	<18.3
UG/M3	TO14-G	<183
ETHYL ACRYLATE	95768A	<20.8
UG/M3	TO14-G	<208
METHACRYLATE	95769A	<20.8
UG/M3	TO14-G	<208
2-NITROPROPANE	95770A	<18.5
UG/M3	TO14-G	<185
NITROBENZENE	95771A	<25.6
UG/M3	TO14-G	<256
CARBON DISULFIDE	95772A	<15.9
UG/M3	TO14-G	<159
N-BUTANE	95864A	1820
UG/M3	TO14-G	1220
ISOBUTANE	95865A	252
UG/M3	TO14-G	382
1-BUTENE	95866A	146
UG/M3	TO14-G	126
TRANS-2-BUTENE	95867A	54.3
UG/M3	TO14-G	48.0
CIS-2-BUTENE	95868A	26.8
UG/M3	TO14-G	<11.7
3-METHYL-1-BUTENE	95869A	24.8
UG/M3	TO14-G	21.6
ISOPENTANE	95870A	1740
UG/M3	TO14-G	1060
1-PENTENE	95871A	40.6
UG/M3	TO14-G	20.7
ISOPRENE	95872A	<1.42
UG/M3	TO14-G	<14.2
TRANS-2-PENTENE	95873A	56.9
UG/M3	TO14-G	56.1
CIS-2-PENTENE	95874A	25.4
UG/M3	TO14-G	26.6
3-METHYL-2-BUTENE	95875A	38.0
UG/M3	TO14-G	34.2
CYCLOPENTENE	95876A	21.9
UG/M3	TO14-G	21.2
4-METHYL-1-PENTENE	95877A	4.17
UG/M3	TO14-G	<17.5
CYCLOPENTANE	95878A	82.6
UG/M3	TO14-G	107

SAMPLE ID'S PARENTERS UNITS	STORET METHOD	CF22404	CF22405
		BEM1A 19	BEM1A 20
DATE		08/21/97	08/28/97
TIME		15:15	
2,2-DIMETHYLBUTANE	95879A	219	142
UG/M3	TO14-G		
2-METHYL PENTANE	95880A	1300	630
UG/M3	TO14-G		
3-METHYL PENTANE	95881A	963	430
UG/M3	TO14-G		
2-METHYL-1-PENTENE	95882A	33.0	28.0
UG/M3	TO14-G		
CIS-2-HEXENE	95883A	20.1	<17.5
UG/M3	TO14-G		
TRANS-2-HEXENE	95884A	7.07	<17.5
UG/M3	TO14-G		
METHYLCYCLOPENTANE	95885A	174	180
UG/M3	TO14-G		
2,3-DIMETHYLBUTANE	95886A	92.0	98.5
UG/M3	TO14-G		
CYCLOHEXANE	95887A	117	113
UG/M3	TO14-G		
2-METHYL HEXANE	95888A	31.5	34.6
UG/M3	TO14-G		
2,3-DIMETHYLPENTANE	95889A	70.5	71.7
UG/M3	TO14-G		
3-METHYL HEXANE	95890A	163	160
UG/M3	TO14-G		
ISOOCTANE	95891A	25.8	24.7
UG/M3	TO14-G		
METHYLCYCLOHEXANE	95892A	193	188
UG/M3	TO14-G		
2,3,4-TRIMETHYLPENTANE	95893A	10.3	<23.8
UG/M3	TO14-G		
2-METHYL HEPTANE	95894A	83.1	81.2
UG/M3	TO14-G		
3-METHYL HEPTANE	95895A	66.0	67.5
UG/M3	TO14-G		
NONANE	95896A	62.4	68.2
UG/M3	TO14-G		
LIMENE	95897A	7.70	<25.0
UG/M3	TO14-G		
N-PROPYLBENZENE	95898A	8.25	<25.0
UG/M3	TO14-G		
ALPHA-PINENE	95899A	<2.83	<28.3
UG/M3	TO14-G		
BETA-PINENE	95900A	30.6	81.5
UG/M3	TO14-G		

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
08/27/97	MB*082797*1	95021*TO14-G	CHLORODIFLUOROMETHANE	PPBV	0.03	0.05
08/27/97	MB*082797*1	95022*TO14-G	PROPYLENE	PPBV	0.08	0.05
08/27/97	MB*082797*1	34668*TO14-G	DICHLORODIFLUOROMETHANE	PPBV	0.01	0.05
08/27/97	MB*082797*1	34418*TO14-G	CHLOROMETHANE	PPBV	0.29	0.05
08/27/97	MB*082797*1	96776*TO14-G	FREON 114	PPBV	0.002	0.05
08/27/97	MB*082797*1	39175*TO14-G	VINYL CHLORIDE	PPBV	0.002	0.05
08/27/97	MB*082797*1	95023*TO14-G	1,3-BUTADIENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34413*TO14-G	BROMOMETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	34311*TO14-G	CHLOROETHANE	PPBV	0.005	0.05
08/27/97	MB*082797*1	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95024*TO14-G	PENTANE	PPBV	0.01	0.05
08/27/97	MB*082797*1	34501*TO14-G	1,1-DICHLOROETHYLENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34423*TO14-G	METHYLENE CHLORIDE	PPBV	ND	0.05
08/27/97	MB*082797*1	95025*TO14-G	3-CHLORO-1-PROPENE	PPBV	ND	0.05
08/27/97	MB*082797*1	77647*TO14-G	FREON 113	PPBV	0.03	0.05
08/27/97	MB*082797*1	95034*TO14-G	TRANS-1,2-DICHLOROETHENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34496*TO14-G	1,1-DICHLOROETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95033*TO14-G	2-CHLORO-1,3-BUTADIENE	PPBV	ND	0.05
08/27/97	MB*082797*1	77093*TO14-G	CIS-1,2-DICHLOROETHENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95032*TO14-G	HEXANE	PPBV	ND	0.05
08/27/97	MB*082797*1	32106*TO14-G	CHLOROFORM	PPBV	ND	0.05
08/27/97	MB*082797*1	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	34030*TO14-G	BENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	ND	0.05
08/27/97	MB*082797*1	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95026*TO14-G	BROMODICHLOROMETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	39180*TO14-G	TRICHLOROETHENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95027*TO14-G	HEPTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	34704*TO14-G	CIS-1,3-DICHLOROPROPENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34699*TO14-G	TRANS-1,3-DICHLOROPROPENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34511*TO14-G	1,1,2-TRICHLOROETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	34010*TO14-G	TOLUENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95028*TO14-G	DIBROMOCHLOROMETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	77651*TO14-G	1,2-DIBROMOETHANE (EDS)	PPBV	0.002	0.05
08/27/97	MB*082797*1	95029*TO14-G	OCTANE	PPBV	0.004	0.05
08/27/97	MB*082797*1	34475*TO14-G	TETRACHLOROETHENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34301*TO14-G	CHLOROBENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34371*TO14-G	ETHYLBENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	97234*TO14-G	M,P-XYLENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95031*TO14-G	BROMOFORM	PPBV	ND	0.05
08/27/97	MB*082797*1	77128*TO14-G	STYRENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34516*TO14-G	1,1,2,2-TETRACHLOROETHANE	PPBV	ND	0.05
08/27/97	MB*082797*1	97235*TO14-G	O-XYLENE	PPBV	ND	0.05
08/27/97	MB*082797*1	77226*TO14-G	1,3,5-TRIMETHYLBENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95030*TO14-G	ALPHA-METHYL-STYRENE	PPBV	ND	0.05
08/27/97	MB*082797*1	77222*TO14-G	1,2,4-TRIMETHYLBENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	97754*TO14-G	BENZYL CHLORIDE	PPBV	ND	0.05
08/27/97	MB*082797*1	34566*TO14-G	1,3-DICHLOROBENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34571*TO14-G	1,4-DICHLOROBENZENE	PPBV	0.07	0.05
08/27/97	MB*082797*1	34536*TO14-G	1,2-DICHLOROBENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34551*TO14-G	1,2,4-TRICHLOROBENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	34391*TO14-G	HEXACHLOROBUTADIENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95864*TO14-G	N-BUTANE	PPBV	0.04	0.05
08/27/97	MB*082797*1	95865*TO14-G	ISOBUTANE	PPBV	0.06	0.05
08/27/97	MB*082797*1	95866*TO14-G	1-BUTENE	PPBV	0.06	0.05
08/27/97	MB*082797*1	95867*TO14-G	TRANS-2-BUTENE	PPBV	0.005	0.05
08/27/97	MB*082797*1	95868*TO14-G	CIS-2-BUTENE	PPBV	0.02	0.05
08/27/97	MB*082797*1	95869*TO14-G	3-METHYL-1-BUTENE	PPBV	0.001	0.05
08/27/97	MB*082797*1	95870*TO14-G	ISOPENTANE	PPBV	0.02	0.05
08/27/97	MB*082797*1	95871*TO14-G	1-PENTENE	PPBV	0.002	0.05
08/27/97	MB*082797*1	95872*TO14-G	ISOPRENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95873*TO14-G	TRANS-2-PENTENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95874*TO14-G	CIS-2-PENTENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95875*TO14-G	2-METHYL-2-BUTENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95876*TO14-G	CYCLOPENTENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95877*TO14-G	4-METHYL-1-PENTENE	PPBV	0.001	0.05
08/27/97	MB*082797*1	95878*TO14-G	CYCLOPENTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95879*TO14-G	2,2-DIMETHYLBUTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95880*TO14-G	2-METHYL PENTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95881*TO14-G	3-METHYL PENTANE	PPBV	0.002	0.05
08/27/97	MB*082797*1	95882*TO14-G	2-METHYL-1-PENTENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95883*TO14-G	CIS-2-HEXENE	PPBV	ND	0.05

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
08/27/97	MB*082797*1	95884*TO14-G	TRANS-2-HEXENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95885*TO14-G	METHYLCYCLOPENTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95886*TO14-G	2,3-DIMETHYLBUTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95887*TO14-G	CYCLOHEXANE	PPBV	0.002	0.05
08/27/97	MB*082797*1	95888*TO14-G	2-METHYL HEXANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95889*TO14-G	2,3-DIMETHYLPENTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95890*TO14-G	3-METHYL HEXANE	PPBV	0.007	0.05
08/27/97	MB*082797*1	95891*TO14-G	ISOOCTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95892*TO14-G	METHYLCYCLOHEXANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95893*TO14-G	2,3,4-TRIMETHYLPENTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95894*TO14-G	2-METHYL HEPTANE	PPBV	0.001	0.05
08/27/97	MB*082797*1	95895*TO14-G	3-METHYL HEPTANE	PPBV	ND	0.05
08/27/97	MB*082797*1	95896*TO14-G	NONANE	PPBV	0.003	0.05
08/27/97	MB*082797*1	95897*TO14-G	CUMENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95898*TO14-G	N-PROPYLBENZENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95899*TO14-G	ALPHA-PINENE	PPBV	ND	0.05
08/27/97	MB*082797*1	95900*TO14-G	BETA-PINENE	PPBV	ND	0.05
08/27/97	MB*082797*1	77885*TO14-G	METHANOL	PPBV	0.28	0.50
08/27/97	MB*082797*1	95753*TO14-G	ETHANOL (ETHYL ALCOHOL)	PPBV	0.08	0.50
08/27/97	MB*082797*1	95754*TO14-G	ISOPROPYL ALCOHOL	PPBV	ND	0.50
08/27/97	MB*082797*1	95755*TO14-G	1-BUTANOL	PPBV	ND	0.50
08/27/97	MB*082797*1	81552*TO14-G	ACETONE	PPBV	ND	0.50
08/27/97	MB*082797*1	81595*TO14-G	METHYL ETHYL KETONE	PPBV	ND	0.50
08/27/97	MB*082797*1	81596*TO14-G	METHYL ISOBUTYL KETONE	PPBV	ND	0.50
08/27/97	MB*082797*1	95756*TO14-G	2-HEXANONE	PPBV	ND	0.50
08/27/97	MB*082797*1	77097*TO14-G	CYCLOHEXANONE	PPBV	ND	0.50
08/27/97	MB*082797*1	81553*TO14-G	ACETOPHENONE	PPBV	ND	0.50
08/27/97	MB*082797*1	95757*TO14-G	ACROLEIN	PPBV	0.02	0.50
08/27/97	MB*082797*1	95758*TO14-G	ACETONITRILE	PPBV	0.14	0.50
08/27/97	MB*082797*1	95759*TO14-G	ACRYLONITRILE	PPBV	ND	0.50
08/27/97	MB*082797*1	95760*TO14-G	PROPIONITRILE	PPBV	ND	0.50
08/27/97	MB*082797*1	95761*TO14-G	METHACRYLONITRILE	PPBV	ND	0.50
08/27/97	MB*082797*1	95762*TO14-G	BENZONITRILE	PPBV	ND	0.50
08/27/97	MB*082797*1	95763*TO14-G	ETHER	PPBV	ND	0.50
08/27/97	MB*082797*1	95764*TO14-G	METHYL TERT-BUTYL ETHER	PPBV	ND	0.50
08/27/97	MB*082797*1	95765*TO14-G	ETHYL TERT-BUTYL ETHER	PPBV	ND	0.50
08/27/97	MB*082797*1	95766*TO14-G	TETRAHYDROFURAN	PPBV	ND	0.50
08/27/97	MB*082797*1	95767*TO14-G	VINYL ACETATE	PPBV	0.02	0.50
08/27/97	MB*082797*1	97195*TO14-G	1,4-DIOXANE	PPBV	ND	0.50
08/27/97	MB*082797*1	95768*TO14-G	ETHYL ACRYLATE	PPBV	ND	0.50
08/27/97	MB*082797*1	95769*TO14-G	METHYL METHACRYLATE	PPBV	ND	0.50
08/27/97	MB*082797*1	95770*TO14-G	2-NITROPROPANE	PPBV	0.006	0.50
08/27/97	MB*082797*1	95771*TO14-G	NITROBENZENE	PPBV	ND	0.50
08/27/97	MB*082797*1	95772*TO14-G	CARBON DISULFIDE	PPBV	0.02	0.50

Reference Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	KNOWN	FOUND	%RECV
08/27/97	RF*082697*1	39175*TO14-G	VINYL CHLORIDE	PPBV	0.53	0.54	102
08/27/97	RF*082697*1	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	0.53	0.55	104
08/27/97	RF*082697*1	34423*TO14-G	METHYLENE CHLORIDE	PPBV	0.53	0.52	98.1
08/27/97	RF*082697*1	32106*TO14-G	CHLOROFORM	PPBV	0.52	0.56	108
08/27/97	RF*082697*1	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	0.52	0.53	102
08/27/97	RF*082697*1	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	0.51	0.62	122
08/27/97	RF*082697*1	34030*TO14-G	BENZENE	PPBV	0.52	0.53	102
08/27/97	RF*082697*1	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	0.52	0.63	121
08/27/97	RF*082697*1	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	0.52	0.53	102
08/27/97	RF*082697*1	39180*TO14-G	TRICHLOROETHENE	PPBV	0.52	0.51	98.1
08/27/97	RF*082697*1	34010*TO14-G	TOLUENE	PPBV	0.51	0.52	102
08/27/97	RF*082697*1	34475*TO14-G	TETRACHLOROETHENE	PPBV	0.52	0.50	96.2
08/27/97	RF*082697*1	34301*TO14-G	CHLOROENZENE	PPBV	0.52	0.52	100
08/27/97	RF*082697*1	34371*TO14-G	ETHYLBENZENE	PPBV	0.53	0.54	102
08/27/97	RF*082697*1	97235*TO14-G	O-XYLENE	PPBV	0.55	0.54	98.2
08/27/97	RF*082697*2	39175*TO14-G	VINYL CHLORIDE	PPBV	0.53	0.50	94.3
08/27/97	RF*082697*2	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	0.53	0.53	100
08/27/97	RF*082697*2	34423*TO14-G	METHYLENE CHLORIDE	PPBV	0.53	0.51	96.2
08/27/97	RF*082697*2	32106*TO14-G	CHLOROFORM	PPBV	0.52	0.51	98.1
08/27/97	RF*082697*2	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	0.52	0.51	98.1
08/27/97	RF*082697*2	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	0.51	0.57	112
08/27/97	RF*082697*2	34030*TO14-G	BENZENE	PPBV	0.52	0.50	96.2
08/27/97	RF*082697*2	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	0.52	0.60	115
08/27/97	RF*082697*2	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	0.52	0.51	98.1
08/27/97	RF*082697*2	39180*TO14-G	TRICHLOROETHENE	PPBV	0.52	0.48	92.3

Reference Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	KNOWN	FOUND	%RCV
08/27/97	RF*082697*2	34010*TO14-G	TOLUENE	PPBV	0.51	0.48	94.1
08/27/97	RF*082697*2	34475*TO14-G	TETRACHLOROETHENE	PPBV	0.52	0.47	90.4
0 /97	RF*082697*2	34301*TO14-G	CHLOROBENZENE	PPBV	0.52	0.49	94.2
08 /97	RF*082697*2	34371*TO14-G	ETHYLBENZENE	PPBV	0.53	0.52	98.1
08/27/97	RF*082697*2	97235*TO14-G	O-XYLENE	PPBV	0.55	0.49	89.1

Updated by 3395

GENERAL COMMENTS:
BATCH NARRATIVE

Batch G85033
Client/Samples: Bechtel Environmental
Analyst: Matthew Booth/3395
Date: 08/27/97

Sample Number	Client ID	Canister Number	Date Collected	Date Received	Date Analyzed	Initial Pressure
BEM1A*19	NTFF Bioslurper	GL114	08/21/97	08/26/97	08/27/97	2.0 "Hg

EXPLANATION OF QC FAILURES:

The %RSD in the initial calibration and the %D in the CCS are greater than 30% for Chloromethane due to the presence of this compound in the background.

Analyst _____ DATE _____
Reviewer _____ DATE _____

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
09/07/97	MB*090697*1	95021*TO14-G	CHLORODIFLUOROMETHANE	PPBV	0.02	0.05
09/07/97	MB*090697*1	95022*TO14-G	PROPYLENE	PPBV	0.08	0.05
09/07/97	MB*090697*1	34668*TO14-G	DICHLORODIFLUOROMETHANE	PPBV	0.01	0.05
09/07/97	MB*090697*1	34418*TO14-G	CHLOROMETHANE	PPBV	0.29	0.05
09/07/97	MB*090697*1	96776*TO14-G	FREON 114	PPBV	ND	0.05
09/07/97	MB*090697*1	39175*TO14-G	VINYL CHLORIDE	PPBV	ND	0.05
09/07/97	MB*090697*1	95023*TO14-G	1,3-BUTADIENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34413*TO14-G	BROMOMETHANE	PPBV	0.006	0.05
09/07/97	MB*090697*1	34311*TO14-G	CHLOROETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95024*TO14-G	PENTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	34501*TO14-G	1,1-DICHLOROETHYLENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34423*TO14-G	METHYLENE CHLORIDE	PPBV	ND	0.05
09/07/97	MB*090697*1	95025*TO14-G	3-CHLORO-1-PROPENE	PPBV	ND	0.05
09/07/97	MB*090697*1	77647*TO14-G	FREON 113	PPBV	ND	0.05
09/07/97	MB*090697*1	95034*TO14-G	TRANS-1,2-DICHLOROETHENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34496*TO14-G	1,1-DICHLOROETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95033*TO14-G	2-CHLORO-1,3-BUTADIENE	PPBV	ND	0.05
09/07/97	MB*090697*1	77093*TO14-G	CIS-1,2-DICHLOROETHENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95032*TO14-G	HEXANE	PPBV	ND	0.05
09/07/97	MB*090697*1	32106*TO14-G	CHLOROFORM	PPBV	0.006	0.05
09/07/97	MB*090697*1	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	34030*TO14-G	BENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	ND	0.05
09/07/97	MB*090697*1	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95026*TO14-G	BROMODICHLOROMETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	39180*TO14-G	TRICHLOROETHENE	PPBV	0.002	0.05
09/07/97	MB*090697*1	95027*TO14-G	HEPTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	34704*TO14-G	CIS-1,3-DICHLOROPROPENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34699*TO14-G	TRANS-1,3-DICHLOROPROPENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34511*TO14-G	1,1,2-TRICHLOROETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	34010*TO14-G	TOLUENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95028*TO14-G	DIBROMOCHLOROMETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	77651*TO14-G	1,2-DIBROMOETHANE (EDB)	PPBV	ND	0.05
09/07/97	MB*090697*1	95029*TO14-G	OCTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	34475*TO14-G	TETRACHLOROETHENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34301*TO14-G	CHLOROBENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34371*TO14-G	ETHYLBENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	97234*TO14-G	M, P-XYLENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95031*TO14-G	BROMOFORM	PPBV	ND	0.05
09/07/97	MB*090697*1	77128*TO14-G	STYRENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34516*TO14-G	1,1,2,2-TETRACHLOROETHANE	PPBV	ND	0.05
09/07/97	MB*090697*1	97235*TO14-G	O-XYLENE	PPBV	ND	0.05
09/07/97	MB*090697*1	77226*TO14-G	1,3,5-TRIMETHYLBENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95030*TO14-G	ALPHA-METHYL-STYRENE	PPBV	ND	0.05
09/07/97	MB*090697*1	77222*TO14-G	1,2,4-TRIMETHYLBENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	97754*TO14-G	BENZYL CHLORIDE	PPBV	ND	0.05
09/07/97	MB*090697*1	34566*TO14-G	1,3-DICHLOROBENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34571*TO14-G	1,4-DICHLOROBENZENE	PPBV	0.08	0.05
09/07/97	MB*090697*1	34536*TO14-G	1,2-DICHLOROBENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34551*TO14-G	1,2,4-TRICHLOROBENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	34391*TO14-G	HEXACHLOROBUTADIENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95864*TO14-G	N-BUTANE	PPBV	0.05	0.05
09/07/97	MB*090697*1	95865*TO14-G	ISOBUTANE	PPBV	0.06	0.05
09/07/97	MB*090697*1	95866*TO14-G	1-BUTENE	PPBV	0.06	0.05
09/07/97	MB*090697*1	95867*TO14-G	TRANS-2-BUTENE	PPBV	0.004	0.05
09/07/97	MB*090697*1	95868*TO14-G	CIS-2-BUTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95869*TO14-G	3-METHYL-1-BUTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95870*TO14-G	ISOPENTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95871*TO14-G	1-PENTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95872*TO14-G	ISOPRENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95873*TO14-G	TRANS-2-PENTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95874*TO14-G	CIS-2-PENTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95875*TO14-G	2-METHYL-2-BUTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95876*TO14-G	CYCLOPENTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95877*TO14-G	4-METHYL-1-PENTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95878*TO14-G	CYCLOPENTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95879*TO14-G	2,2-DIMETHYLBUTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95880*TO14-G	2-METHYL PENTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95881*TO14-G	3-METHYL PENTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95882*TO14-G	2-METHYL-1-PENTENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95883*TO14-G	CIS-2-HEXENE	PPBV	ND	0.05

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
09/07/97	MB*090697*1	95884*TO14-G	TRANS-2-HEXENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95885*TO14-G	METHYLCYCLOPENTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95886*TO14-G	2,3-DIMETHYLBUTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95887*TO14-G	CYCLOHEXANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95888*TO14-G	2-METHYL HEXANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95889*TO14-G	2,3-DIMETHYLPENTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95890*TO14-G	3-METHYL HEXANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95891*TO14-G	ISOOCTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95892*TO14-G	METHYLCYCLOHEXANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95893*TO14-G	2,3,4-TRIMETHYLPENTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95894*TO14-G	2-METHYL HEPTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95895*TO14-G	3-METHYL HEPTANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95896*TO14-G	NONANE	PPBV	ND	0.05
09/07/97	MB*090697*1	95897*TO14-G	CUMENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95898*TO14-G	N-PROPYLBENZENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95899*TO14-G	ALPHA-PINENE	PPBV	ND	0.05
09/07/97	MB*090697*1	95900*TO14-G	BETA-PINENE	PPBV	ND	0.05
09/07/97	MB*090697*1	77885*TO14-G	METHANOL	PPBV	0.20	0.50
09/07/97	MB*090697*1	95753*TO14-G	ETHANOL (ETHYL ALCOHOL)	PPBV	ND	0.50
09/07/97	MB*090697*1	95754*TO14-G	ISOPROPYL ALCOHOL	PPBV	ND	0.50
09/07/97	MB*090697*1	95755*TO14-G	1-BUTANOL	PPBV	ND	0.50
09/07/97	MB*090697*1	81552*TO14-G	ACETONE	PPBV	ND	0.50
09/07/97	MB*090697*1	81595*TO14-G	METHYL ETHYL KETONE	PPBV	ND	0.50
09/07/97	MB*090697*1	81596*TO14-G	METHYL ISOBUTYL KETONE	PPBV	ND	0.50
09/07/97	MB*090697*1	95756*TO14-G	2-HEXANONE	PPBV	ND	0.50
09/07/97	MB*090697*1	77097*TO14-G	CYCLOHEXANONE	PPBV	ND	0.50
09/07/97	MB*090697*1	81553*TO14-G	ACETOPHENONE	PPBV	ND	0.50
09/07/97	MB*090697*1	95757*TO14-G	ACROLEIN	PPBV	ND	0.50
09/07/97	MB*090697*1	95758*TO14-G	ACETONITRILE	PPBV	ND	0.50
09/07/97	MB*090697*1	95759*TO14-G	ACRYLONITRILE	PPBV	ND	0.50
09/07/97	MB*090697*1	95760*TO14-G	PROPIONITRILE	PPBV	ND	0.50
09/07/97	MB*090697*1	95761*TO14-G	METHACRYLONITRILE	PPBV	ND	0.50
09/07/97	MB*090697*1	95762*TO14-G	BENZONITRILE	PPBV	ND	0.50
09/07/97	MB*090697*1	95763*TO14-G	ETHER	PPBV	ND	0.50
09/07/97	MB*090697*1	95764*TO14-G	METHYL TERT-BUTYL ETHER	PPBV	ND	0.50
09/07/97	MB*090697*1	95765*TO14-G	ETHYL TERT-BUTYL ETHER	PPBV	ND	0.50
09/07/97	MB*090697*1	95766*TO14-G	TETRAHYDROFURAN	PPBV	ND	0.50
09/07/97	MB*090697*1	95767*TO14-G	VINYL ACETATE	PPBV	ND	0.50
09/07/97	MB*090697*1	97195*TO14-G	1,4-DIOXANE	PPBV	ND	0.50
09/07/97	MB*090697*1	95768*TO14-G	ETHYL ACRYLATE	PPBV	ND	0.50
09/07/97	MB*090697*1	95769*TO14-G	METHYL METHACRYLATE	PPBV	ND	0.50
09/07/97	MB*090697*1	95770*TO14-G	2-NITROPROPANE	PPBV	ND	0.50
09/07/97	MB*090697*1	95771*TO14-G	NITROBENZENE	PPBV	ND	0.50
09/07/97	MB*090697*1	95772*TO14-G	CARBON DISULFIDE	PPBV	0.02	0.50

Reference Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	KNOWN	FOUND	%REC
09/06/97	RF*090697*1	39175*TO14-G	VINYL CHLORIDE	PPBV	0.53	0.52	98.1
09/06/97	RF*090697*1	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	0.53	0.57	108
09/06/97	RF*090697*1	34423*TO14-G	METHYLENE CHLORIDE	PPBV	0.53	0.56	106
09/06/97	RF*090697*1	32106*TO14-G	CHLOROFORM	PPBV	0.52	0.54	104
09/06/97	RF*090697*1	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	0.52	0.52	100
09/06/97	RF*090697*1	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	0.51	0.60	118
09/06/97	RF*090697*1	34030*TO14-G	BENZENE	PPBV	0.52	0.55	106
09/06/97	RF*090697*1	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	0.52	0.56	108
09/06/97	RF*090697*1	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	0.52	0.55	106
09/06/97	RF*090697*1	39180*TO14-G	TRICHLOROETHENE	PPBV	0.52	0.53	102
09/06/97	RF*090697*1	34010*TO14-G	TOLUENE	PPBV	0.51	0.56	110
09/06/97	RF*090697*1	34475*TO14-G	TETRACHLOROETHENE	PPBV	0.52	0.53	102
09/06/97	RF*090697*1	34301*TO14-G	CHLOROBENZENE	PPBV	0.52	0.55	106
09/06/97	RF*090697*1	34371*TO14-G	ETHYLBENZENE	PPBV	0.53	0.56	106
09/06/97	RF*090697*1	97235*TO14-G	O-XYLENE	PPBV	0.55	0.55	100
09/07/97	RF*090697*2	39175*TO14-G	VINYL CHLORIDE	PPBV	0.53	0.55	104
09/07/97	RF*090697*2	34488*TO14-G	TRICHLOROFLUOROMETHANE	PPBV	0.53	0.59	111
09/07/97	RF*090697*2	34423*TO14-G	METHYLENE CHLORIDE	PPBV	0.53	0.57	108
09/07/97	RF*090697*2	32106*TO14-G	CHLOROFORM	PPBV	0.52	0.53	102
09/07/97	RF*090697*2	34531*TO14-G	1,2-DICHLOROETHANE	PPBV	0.52	0.52	100
09/07/97	RF*090697*2	34506*TO14-G	1,1,1-TRICHLOROETHANE	PPBV	0.51	0.54	106
09/07/97	RF*090697*2	34030*TO14-G	BENZENE	PPBV	0.52	0.53	102
09/07/97	RF*090697*2	32102*TO14-G	CARBON TETRACHLORIDE	PPBV	0.52	0.51	98.1
09/07/97	RF*090697*2	34541*TO14-G	1,2-DICHLOROPROPANE	PPBV	0.52	0.53	102
09/07/97	RF*090697*2	39180*TO14-G	TRICHLOROETHENE	PPBV	0.52	0.49	94.2

QST BATCH : G85254

Reference Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	KNOWN	FOUND	%RECV
09/07/97	RF*090697*2	34010*TO14-G	TOLUENE	PPBV	0.51	0.52	102
09/07/97	RF*090697*2	34475*TO14-G	TETRACHLOROETHENE	PPBV	0.52	0.50	96.2
7/97	RF*090697*2	34301*TO14-G	CHLOROBENZENE	PPBV	0.52	0.53	102
7/97	RF*090697*2	34371*TO14-G	ETHYLBENZENE	PPBV	0.53	0.54	102
09/07/97	RF*090697*2	97235*TO14-G	O-XYLENE	PPBV	0.55	0.56	102

Updated by 3395, 3395

GENERAL COMMENTS:
 BATCH NARRATIVE

Batch G85254
 Client/Samples: Bechtel Environmental
 Analyst: Matthew Booth/3395
 Date: 09/06/97

Sample Number	Client ID	Canister Number	Date Collected	Date Received	Date Analyzed	Initial Pressure
BEM1A*20	Stack Effluent	GL086	08/28/97	08/29/97	09/06/97	3.1 "Hg

EXPLANATION OF QC FAILURES:

The %RSD in the initial calibration and the %D in the CCS are greater than 30% for Chloromethane due to the presence of this compound in the background.

Analyst _____ DATE _____
 Reviewer _____ DATE _____

HAZARDOUS WASTE CHAIN OF CUSTODY

Page 1 of 1



Facility Name: <u>NAS Cecil Field</u>	CFIR No. _____
Site Name: <u>MTFF Bioscience</u>	COG Number: <u>CF031</u>
Delivery Order No.: _____	Lab: _____
Cooler/Crate No.: _____	Field Logbook No.: _____
Sampling Event: <u>4th Weekly</u>	Logbook Pg. No.: _____

Sampled by: Sam Ross Sam Ross

Print Sign Print Sign

Legend	SAMPLE TYPE	MATRIX	QC LEVELS
PSB Preservative Blank	BLS Blind Spike	AIR Air	C Sample results and QC reported
FDP Field Duplicate	BLB Blind Blank	FLC Flora	D Sample results, QC and raw data reported
ENV Environmental	PTS Point Source	FAU Fauna	E Sample results, blanks, and calibration data reported
FDB Field Blank	FRP Field Replicate	GWG Groundwater	S Screening level analysis; sample results and QC as reported
GEO Geotechnical Sample	RSB Rinse Blank	LCH Leachate	
MXD Matrix Spike Duplicate	SPL Spill	OIL Oil	
MXS Matrix Spike	TRP Trip Blank	DFW Delonized Organic Free Water	
		SBB Subsurface Soil	
		SED Sediment	
		SFS Surface Soil	
		SWF Surface Water	
		SLG Sludge	
		SLW Solid Waste	
		SS1 Surface Water	
		OFW Organic Free Water	
		STW Storm Event	
		PTW Potable Water	
		SEP Seeps	
		SOL Solid	
		WWI Waste Water	

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Level
<u>Stack Effluent</u>	<u>CF22405</u>	<u>ENV</u>	<u>AIR</u>	<u>8/28/97/1445</u>	<u>1</u>	<u>-</u>	<u>T014</u>	<u>Triology T014</u>	<u>14 day</u>	<u>C</u>

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER
<u>Sam Ross</u>		<u>8/28/97</u>	<u>1500</u>	

COMMENTS/INSTRUCTIONS		

CONTAMINATION	YES	NO
Radiological		
Chemical		

Shipper: _____
 Ship to: _____

Airbill No. _____ Traffic Report No. _____

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material limited quantity, n.e.s., OEQ 900.

CHAIN OF CUSTODY RECORD



Facility Name: NAS Cecil Field
 Site Name: NTEF Biosluper
 Delivery Order No.: _____
 Cooler/Crate No.: _____
 Sampling Event: 3rd weekly

SEIR No.: _____
 COC Number: CF 030
 Lab: _____
 Field Logbook No.: _____
 Logbook Pg. No.: _____

Sampled by: Sam Ross Sam Ross
Print Sign Print Sign

Legend	SAMPLE TYPE	MATRIX	QC LEVELS
PSB Preservative Blank	BLS Blind Spike	AIR Air	C Sample results and QC reported D Sample results, QC and raw data reported E Sample results, blanks, and calibration reported S Screening level analysis; sample results and as reported
FDP Field Duplicate	BLB Blind Blank	FLO Flora	
ENV Environmental	PTS Point Source	FAU Fauna	
FDB Field Blank	FRP Field Replicate	GWT Groundwater	
GEO Geotechnical Sample	RSB Rinsate Blank	LCH Leachate	
MXD Matrix Spike Duplicate	SPL Split	OIL Oil	
MXS Matrix Spike	TPB Trip Blank	DIW Deionized Water	
		DFW Deionized Organic Free Water	
		SBS Subsurface Soil (>6")	
		SED Sediment	
		SFS Surface Soil (0-6")	
		SPW Surface Water	
		SLG Sludge	
		SLW Solid Waste	
		OFW Organic Free Water	
		PBS Post Burn Soil	
		PTW Potable Water	
		SEP Seeps	
		SOL Solid	
		WWT Waste Water	
		SST Surface Water	
		Storm Event	

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
Stack Effluent	CF 22404	ENV	AIR	8/21/97/1515	1	-	1	TO 14	14 day	C

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER	COMMENTS/INSTRUCTIONS									
<u>Sam Ross</u>		8/21/97	1530		PO # 289-F 2408 <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">CONTAMINATION</td> <td style="width: 10%;">YES</td> <td style="width: 10%;">NO</td> </tr> <tr> <td>Radiological</td> <td></td> <td></td> </tr> <tr> <td>Chemical</td> <td></td> <td></td> </tr> </table>	CONTAMINATION	YES	NO	Radiological			Chemical		
CONTAMINATION	YES	NO												
Radiological														
Chemical														

Shipper: _____
 Ship to: _____
 Airbill No. _____ Traffic Report No. _____

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, n.o.s. UN2910

COMPENDIUM METHOD TO14A/TO15 CANISTER FIELD TEST DATA SHEET

QST Environmental, Inc., 404 SW 140th Terrace, Newberry, FL 32669-3000

Shipping Information

Site Address: Bechtel Environmental - NAS Cecil Field

Quarters E

Avenue G

Jacksonville, FL 32215

Attn: Sam Ross

Phone No: (904) 779-8900

QST Contact: Ed Mansfield/Matthew Booth Project Number: 1296053G 0204

Canister Number	Date Cleaned	Canister Pressure	Date Shipped	Initials
GL114	7/12/97	18 mtorr	7/16/97	SR

This canister is certified clean. It has been batch cleaned using an Entech 3000 Canister Cleaning System. Alternating evacuations and pressurizations occur over a 4-hour period while the canisters are heated to 100°C. One canister per batch of eight is analyzed for cleanliness (no target analyte greater than its reporting limit) by GC/MS and a record of the analysis is maintained at QST.

THIS SECTION TO BE FILLED
OUT BY FIELD PERSONNEL

Field Sampling Information

Site ID: NTFF Bioslyper

Operator: Sam Ross

	Date	Time	Canister Pressure	Notes	Initials
Initial	8/21/97	1330	>150" H ₂ O		SR
Final	8/21/97	1500	4" H ₂ O		SR

Notes: _____

Laboratory Receipt Information

Sample Number	Date Received	Sample Pressure	Notes	Initials
DEM1A-19	8/26/97	2.0" H ₂ O	2.0 L x 1 1.2 L (12.25 pm)	SR

Further notes may be made on the back of this canister field test data sheet.

Sub Job 000 Rec Type DS Comm Date 12/30/1994 Admin Rec N CCN-Item No. 016240-1
 Subject DO#0022 FIELD FILE - ORS ENVIRONMENTAL EQUIPMENT SITEPRO QUICK START INSTALLATION AND CONFIGURATION SUPPLEMENT
 From BAUER, H. Org BEI To FILE Org XXX File Loc M Closes CCN
 Comm Reference Published N
 Cross Reference (Affected Doc) DO#0022 Field CCN
 Site Codes 289
 Subject Codes 3015 3020 Film Reel

Owed By Org Due Date Closing CCN
 Owed To Org Forecast Date Compl Date
 Comment/Action

0162

DISTRIBUTION	WA	WO	DISTRIBUTION	WA	WO	DISTRIBUTION	WA	WO
PROGRAM MGR O. N. McNEIL						NAVY SouthDiv: E. G. BALL		
PROG MGR SECY C. HENSON						S. BERRY		
						B. HILL		
PROJ MGRS T.CONRAD						M. HERRON		
V. H. BAUER						K. LOTT		
						R. MEDDICK		
						B. GATES		
						B. NWOKIKE		
PROJECT ENGINEER J. R. MANNING						B. GLOVER		
						D. PATRICK		
SITE SUPERINTENDENTS W. HEVRDEYS								
S. MOORE								
DATA MGMT R. CRABTREE								
S&H MANAGER M. ATWOOD								
ENVIR COMPLIANCE R. ATWOOD								
CONTRACT ADM MGR T. FERGUSON								
NAVY RAC PROC J. KELLAR								
NAVY RAC FLD PROC S. WEINMAN			75-YEAR RECORD FILE					
PROJ CTRLS SUPV F. MCGHEE			SENSITIVE FILE					
R.HOWARD			SUBMITTAL FILE					
			CONDOR					
ACCTNG FARMER/HARGREAVES			REFERENCE LIBRARY					
FIELD QC MGR J. A. GRISSETT								
PROJECT ADMINISTRATOR L. LANDERS								
RECORDS MGMT B .STOUT/T.MILLER			PDC FILE	1				



SOUTHERN DIVISION
 NAVAL FACILITIES ENGINEERING COMMAND
 NORTH CHARLESTON, SOUTH CAROLINA



241= Bldg 25

016240

- 241-DD124-001	JOB NO. 22567	SITE PLAN	REV. 1	(2 COPIES)
- 241-DD124-002	JOB NO. 22567	PIPING AND INSTRUMENT DIAGRAM	REV. 3	(2 COPIES)
- 241-DD124-003	JOB NO. 22567	TRENCH CROSS SECTIONS	REV. 1	(2 COPIES)
- 241-DD124-004	JOB NO. 22567	SPARGE WELL, VACUUM STRESS MONITOR WELL AND SVE WELL CONSTRUCTION DETAILS	REV. 2	(2 COPIES)
- 243-F-612	JOB NO. 22567			
- 243-F-541	JOB NO. 22567	NO DRAWINGS IN FILE		
- 241-DD124-002	JOB NO. 22567	PIPING AND INSTRUMENT DIAGRAM	REV. 1	(2 COPIES)
- QUICK START	ORS - Bioslurper (NTFF)			
- ORS	DRW NO. B10461	SITEPRO PANEL MECHANICAL INSTALLATION DIAGRAM	REV. 2	(1 COPY)
- ORS	DRW NO. B10442	SITE CONFIGURATION WORKSHEET	REV. 3	(1 COPY)
- ORS	DRW NO. D10410	SITEPRO 2000 CONFIGURATION GUIDE	REV. 4	(1 COPY)
- ORS	DRW NO. D10411	SITEPRO 2000 OPTIONAL FEATURE WIRING DIAGRAM	REV. 4	(1 COPY)
- ORS	DRW NO. D10490	SITEPRO 2000 CONTROL DRAWING FM APPROVAL	REV. 0	(1 COPY)
- ORS	DRW NO. D0453	SITEPRO EXTERNAL CONTRACTOR WIRING DETAIL	REV. 2	(1 COPY)
- ORS	DRW NO. D10571	SITEPRO FIELD WIRING DIAGRAM SINGLE PHASE 115/230V-WIRE WTDP	REV. 0	(2 COPY)

- MEI	DRW NO. 5	FREE RECOVERY SKID SYSTEM SYSTEM WIRING INSTALLATION DIAGRAM		(1 COPY)
- ORS	DRW NO. D10490	SITEPRO 2000 CONTROL DRAWING FM APPROVAL	REV. 0	(1 COPY)
- ORS	DRW NO. D10410	SITEPRO 2000 CONFIG. GUIDE	REV. 4	(1 COPY)
- MEI	DRW NO. 1	VACUUM PUMP SKID EQUIP.		(1 COPY)
- ORS	DRW NO. D0453	SITEPRO EXTERNAL CONTRACTOR WIRING DETAIL	REV. 2	(1 COPY)
- MEI	DRW NO. 5	FREE PRODUCT RECOVERY SKID		(2 COPIES)
- ORS	DRW NO. B10442	SITE CONFIGURATION WORKSHEET	REV.3	(1 COPY)
- MEI TESTING CERTIFICATION				
- ORS	DRW NO. B10461	SITEPRO PANEL MECHANICAL INSTALLATION DIAGRAM	REV. 2	(1 COPY)
- HANDLE INSTALLATION INSTRUCTIONS				
- INSTRUCCION FOR MOUNTING HC WP, MH WP AND QMB WP ENCLOSURES				
- RACEWAY SCHEDULE				
- CABLE SCHEDULE				
- EQUIPMENT SCHEDULE				
- SCOPE OF WORK	228-SW567-001		REV. 0	



QUICK START



THIS ENVELOPE CONTAINS YOUR QUICK START INSTALLATION & CONFIGURATION SUPPLEMENT. FAMILIARITY WITH THE INFORMATION IN THIS ENVELOPE IS ABSOLUTELY ESSENTIAL FOR SAFE AND TROUBLE FREE OPERATION OF THE SITEPRO™ 2000 CONTROL PANEL.

The SITEPRO Quick Start Supplement consists of a Site Configuration Worksheet, a Panel Configuration Guide, a Field Wiring Diagram, a Mechanical Installation Diagram and an Optional Feature Wiring Diagram. The information in this supplement is provided to complement the SITEPRO™ 2000 Installation & Operation manual. Please read the entire manual before operating your SITEPRO system.

NOTE: These drawings are generic and may not exactly reflect your application.

Please proceed as follows:

1. Use the Site Configuration Worksheet to determine the layout of your site.
2. Use the Mechanical Installation Diagram to mount the SITEPRO panel and then carry out basic wiring according to the generic Field Wiring Diagram.
3. Carry out additional site-specific wiring according to the recommendations and examples provided in the Optional Features Wiring Diagram.
4. Configure each panel according to the Panel Configuration Guide.
5. Document configuration of each panel by filling out the Panel Configuration Sheet included in Appendix A of the SITEPRO manual. Be certain that these sheets are available for reference before calling ORS for assistance.



Observe all Warnings and Cautions included in the SITEPRO manual.

LIGHTNING PROTECTION

WHEN INSTALLING SITEPRO™ PANELS IN LIGHTNING PRONE AREAS, RUN THE RS-485 NETWORK CABLES INSIDE GROUNDED CONDUIT. USE 8-GAUGE WIRE TO GROUND THE CONDUIT TO A STAKE GROUND.

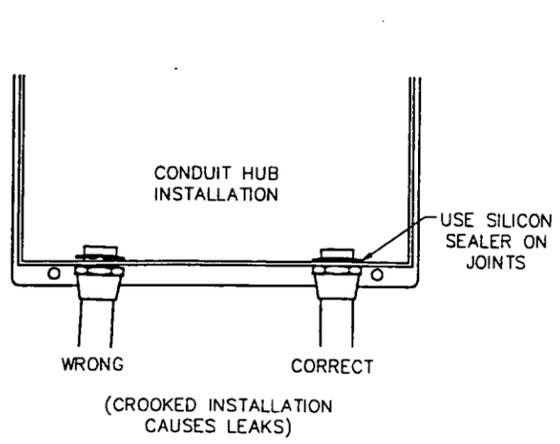
BEFORE INSTALLING THE NETWORK CABLE, REFER TO THE WIRING INSTRUCTIONS IN CHAPTER 2 OF THE SITEPRO INSTALLATION & OPERATION MANUAL.

2390094

Rev 12/30/94

SITEPRO PANEL MECHANICAL INSTALLATION DIAGRAM

REV	DATE	BY	REVISION	APP	CR
1	1/17/94	JH	REVISE ELECTRICAL REFERENCE INFORMATION	JH	CR
2	1/20/94	JH	CHANGED TO AS BUILT	JH	CR



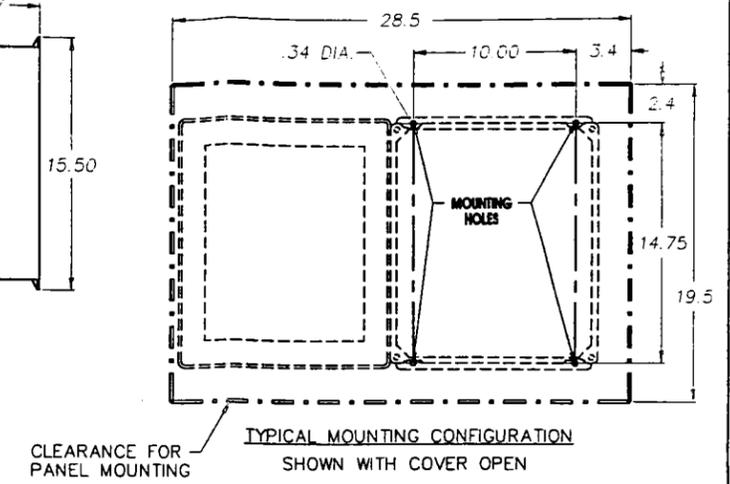
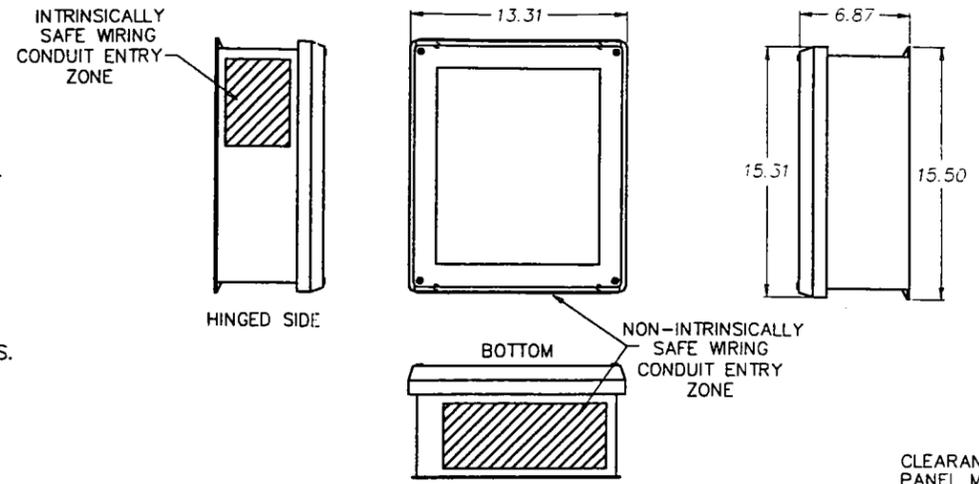
WIRING ACCESS TO PANEL

ALL INTRINSICALLY SAFE WIRING SHOULD ENTER AT THE LEFT SIDE OF PANEL AS SHOWN AT RIGHT. NON-INTRINSICALLY SAFE WIRING SHOULD ENTER THROUGH THE BOTTOM OF PANEL.

DO NOT RUN POWER WIRES WITHIN 2 INCHES OF INTRINSICALLY SAFE WIRES OR TERMINALS.

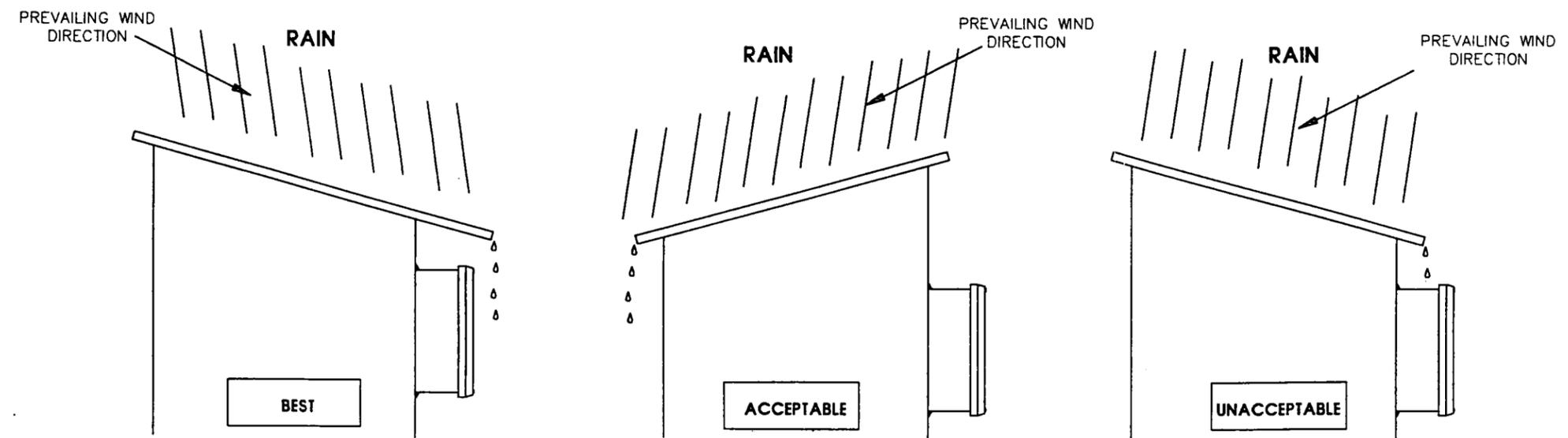
REFER TO NEC ARTICLE 508 FOR DETAILS.

ALL WIRING MUST BE CARRIED OUT BY A QUALIFIED ELECTRICIAN AND BE IN ACCORDANCE WITH LOCAL CODES.



PROTECTION FROM ELEMENTS

ALTHOUGH THE SITEPRO PANEL IS HOUSED WITHIN A NEMA 4 (IP-66) WEATHERPROOF ENCLOSURE, MOUNT IN SUCH A WAY THAT ENTRY OF RAIN IS MINIMIZED WHEN DOOR IS OPENED.



PANEL PROTECTION

WIRING PRECAUTIONS

- CHASSIS GROUND:** INSTALL A GROUND WIRE FROM THE PANEL GROUND LUG TO A GOOD EARTH GROUND. GAUGE OF WIRE MUST BE THE SAME OR LARGER THAN THAT OF POWER WIRING. REFER TO NEC ARTICLE 250 FOR PROPER GROUNDING PROCEDURES.
- INTRINSICALLY SAFE GROUND:** RUN A SEPARATE (14 ga) GROUND WIRE FROM THE INTRINSICALLY SAFE GROUND LUG (NEXT TO TB1) TO A GOOD EARTH GROUND.
- ELIMINATING PROBLEMS CAUSED BY ELECTRICAL INTERFERENCE:** INSTALL PANEL, AND WIRES ATTACHED TO PANEL, AS FAR AS POSSIBLE FROM ARCING DEVICES. USE SNUBBERS ON ALL ARCING DEVICES (ANY DEVICE THAT CAUSES A SPARK WHEN ACTIVATED, ie. CONTACTORS) THAT MUST BE NEAR OR CONNECTED TO THE SITEPRO PANEL. KEEP ALL SITEPRO CURRENT SENSORS AS FAR AS POSSIBLE FROM HIGH VOLTAGE/HIGH CURRENT DEVICES OR WIRES.

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UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES	ORS ENVIRONMENTAL EQUIPMENT A DIV. OF ENVIRONMENTAL TECHNOLOGY, INC.	28 000 Street Orangetown, NY 12548 (518) 578-1800 (518) 528-2700
TELEPHONE (EXCEPT AS NOTED)	DRAWN BY: HOUGHTON	CHECKED BY: JH
SCALE: 1:1	DATE: 01/17/94	
TITLES: SITEPRO PANEL MECHANICAL INSTALLATION DIAGRAM		
SHEET 1 OF 1	DRAWING NO. B10461	REV. 2

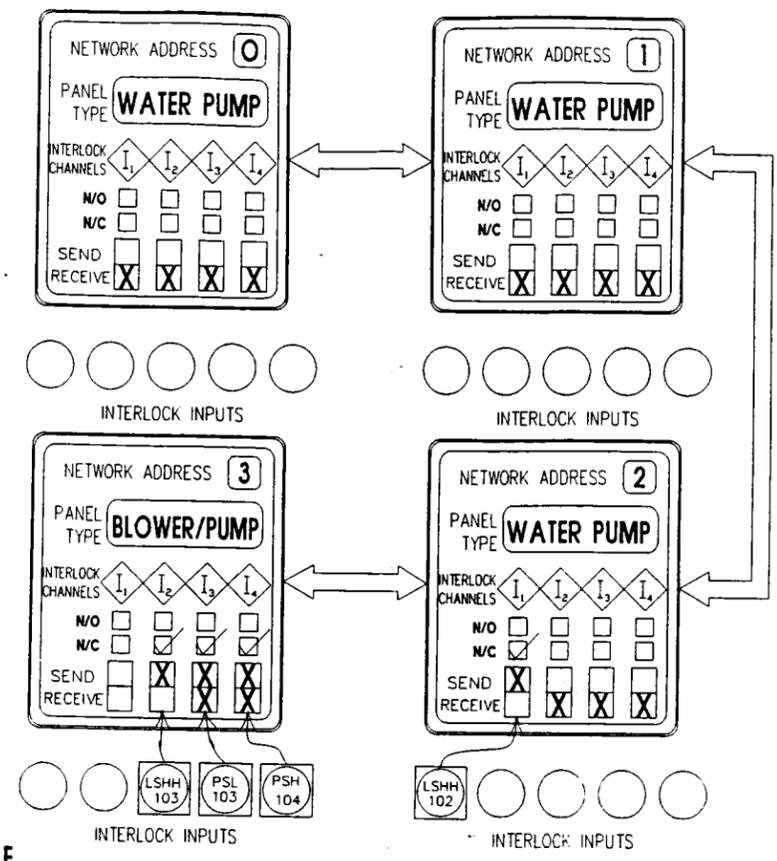
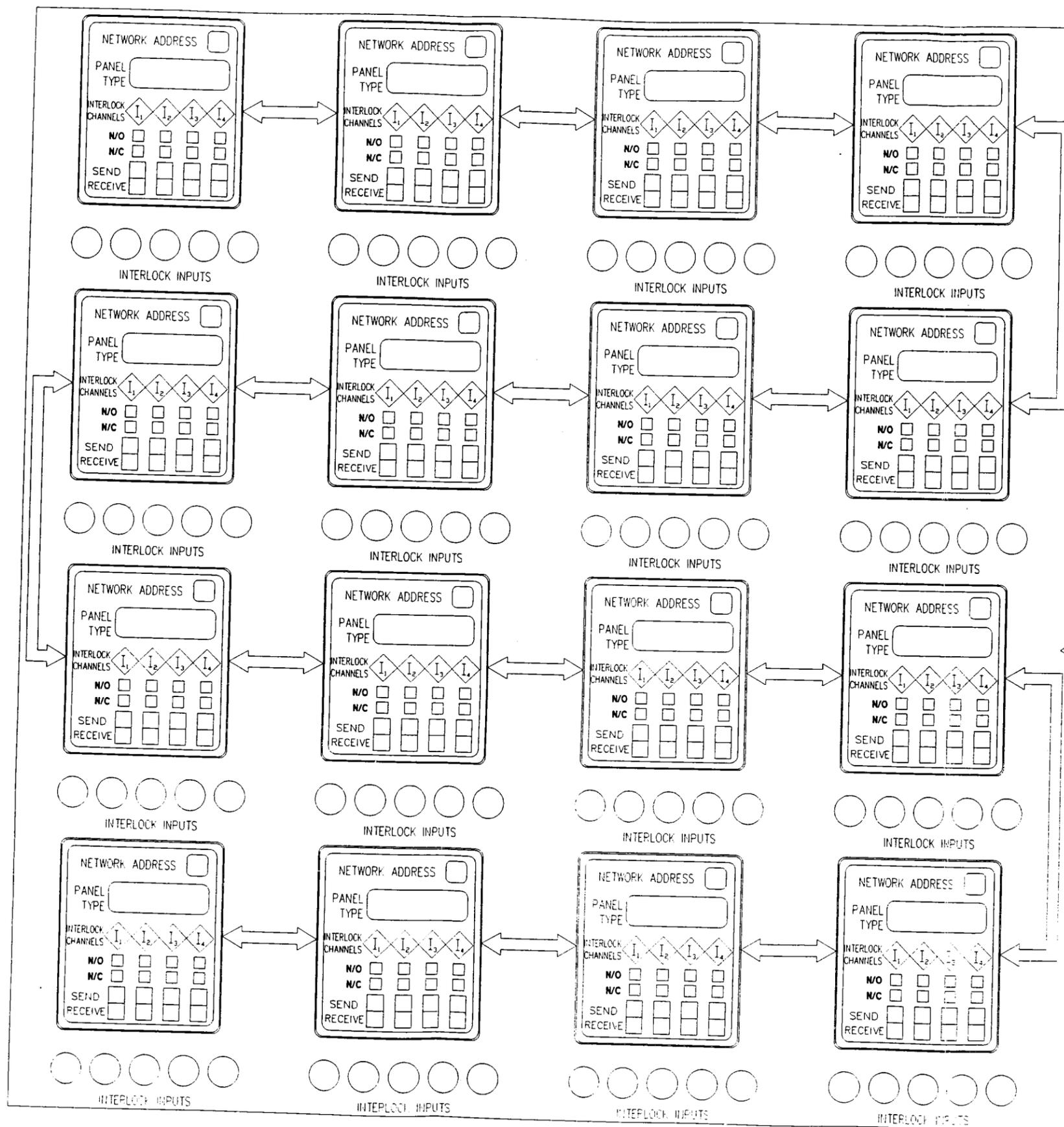


FIGURE 3.
SITE
NETWORK
MAP EXAMPLE

E. Fill in Site Network Map

Once the P&ID has been completed, refer to the sample 4-panel network in Figure 3 (above) and fill in the Site Network Map as follows:

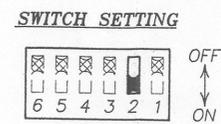
- Step 1: Assign a network address to each SITEPRO panel.**
In the Network Address field of each panel, write in the appropriate network address. As shown in Figure 3, always assign addresses in ascending numerical order with the Master panel designated Panel "0".
- Step 2: Indicate interlock device wiring.**
For each interlock device tagged with a SITEPRO interlock symbol in Figure 2, fill in an Interlock Input balloon (see Figure 3) and draw an arrow to the interlock channel to which the device will be wired. For example, LSHH102 is wired to Interlock Channel 1 of Panel 1.
- Step 3: Indicate Interlock Input Switch Status (N/O or N/C).**
For each interlock channel to which an interlock device is wired, check the appropriate box to indicate whether the device is wired Normally Open (N/O) or Normally Closed (N/C). Note: If more than one interlock device is wired to the same channel, both must be wired either N/O or N/C.
- Step 4: Set RECEIVE Switches.**
Working from your completed P&ID (see Figure 2), determine which interlock channels in each panel must be configured to receive alarms either directly from interlock devices, or indirectly from other panels. Fill in the appropriate "RECEIVE" boxes in each of the panels in the Site Network Map (Figure 3). Note that an X or check mark in a box indicates that the dip switch is set to the "ON" position.
- Step 5: Set SEND Switches.**
Working from your completed P&ID (see Figure 2), determine which panels must be configured to send alarms to other panels. For example, Panel 3 can receive alarms on Interlock Channel 2, 3 & 4 that must be relayed to the other panels in the network. For this reason, the Channels 2, 3 & 4 "SEND" switches are set to "ON" (see Figure 3).
- Step 6: Configure Panels**
Once the Site Network Map has been completely filled out, the individual panels in your SITEPRO network can be configured. Refer to the SITEPRO 2000 Configuration Guide supplied with your Quick Start package and proceed with panel configuration.

ECN	DATE	SYM	REVISION RECORD	DR	DC
-----	9/7/93	1	UPDATED AND FINALIZED INFORMATION	EDP	
-----	9/27/93	2	REVISE MASTER AND SLAVE PANEL TABLES	LSH	
-----	1/19/94	3	ADDED TO WARNING NOTE & PROBE NOTE	GRP	
2014	4/27/94	4	ADDED WARNING NOTE FOR UNUSED CHANNEL TO BE SET TO NORMALLY OPEN	LSH	

TO CONFIGURE YOUR PANEL FOR STAND-ALONE OR NETWORK OPERATION, SET CONTROLLER/ADDRESS SWITCH AS FOLLOWS:

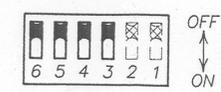
FOR MASTER* PANELS

STEP 1- SET DIP SWITCH 2 TO ON.



NOTE: DIP SWITCH 1 IS ALWAYS LEFT IN THE OFF POSITION.

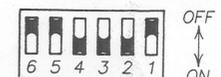
STEP 2- SET DIP SWITCHES 3 THROUGH 6 TO THE NUMBER OF SLAVE PANELS IN NETWORK



USE TABLE BELOW TO DETERMINE SETTINGS FOR SWITCHES 3 THROUGH 6.

NUMBER OF SLAVE PANELS IN NETWORK	SETTINGS FOR DIP SWITCHES 3-6
1	ON OFF OFF OFF
2	OFF ON OFF OFF
3	ON ON OFF OFF
4	OFF OFF ON OFF
5	ON OFF ON OFF
6	OFF ON ON OFF
7	ON ON ON OFF
8	OFF OFF OFF ON
9	ON OFF OFF ON
10	OFF ON OFF ON
11	ON ON OFF ON
12	OFF OFF ON ON
13	ON OFF ON ON
14	OFF ON ON ON
15	ON ON ON ON

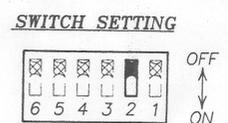
EXAMPLE: THE SWITCH SETTINGS BELOW INDICATE THAT THE PANEL IS A MASTER AND THAT THERE ARE 12 SLAVE PANELS IN THE NETWORK.



MASTER PANEL TABLE

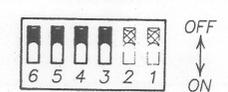
FOR SLAVE** PANELS

STEP 1- SET DIP SWITCH 2 TO OFF.



NOTE: DIP SWITCH 1 IS ALWAYS LEFT IN THE OFF POSITION.

STEP 2- SET DIP SWITCHES 3 THROUGH 6 TO INDICATE THE ADDRESS OF THE PANEL ON THE NETWORK.



USE TABLE BELOW TO DETERMINE SETTINGS FOR SWITCHES 3 THROUGH 6.

SLAVE NETWORK ADDRESS	SETTINGS FOR DIP SWITCHES 3-6
1	ON OFF OFF OFF
2	OFF ON OFF OFF
3	ON ON OFF OFF
4	OFF OFF ON OFF
5	ON OFF ON OFF
6	OFF ON ON OFF
7	ON ON ON OFF
8	OFF OFF OFF ON
9	ON OFF OFF ON
10	OFF ON OFF ON
11	ON ON OFF ON
12	OFF OFF ON ON
13	ON OFF ON ON
14	OFF ON ON ON
15	ON ON ON ON

EXAMPLE: THE SWITCH SETTINGS BELOW INDICATE THAT THE PANEL IS A SLAVE AND THAT ITS NETWORK ADDRESS IS "2".



SLAVE PANEL TABLE

*MASTER — THE FIRST (OR ONLY) PANEL IN A SITEPRO™ NETWORK. THE MASTER PANEL ALWAYS HAS A NETWORK ADDRESS OF "0".
 **SLAVE — ANY PANEL IN ADDITION TO THE MASTER. UP TO 15 SLAVES CAN BE WIRED TO THE MASTER.

TO CONFIGURE YOUR PANEL TO DISTINGUISH NORMALLY OPEN FROM NORMALLY CLOSED SENSOR INPUT, SET LOGIC SWITCH AS FOLLOWS:

TO SET THE LOGIC SWITCH, SELECT EITHER THE NORMALLY OPEN (N/O) OR NORMALLY CLOSED (N/C) SETTING FOR EACH CHANNEL TO WHICH AN EXTERNAL INTERLOCK DEVICE IS ATTACHED.

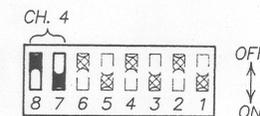
INTERLOCK DEVICES MUST CARRY NO EXTERNAL VOLTAGE OR CURRENT TO THE PANEL. THEY MUST BE DRY CONTACT DEVICES THAT SWITCH 1/5 OR +5VDC VOLTAGE SUPPLIED BY THE PANEL.

THE EXAMPLES BELOW SHOW ALL POSSIBLE SETTINGS FOR THE CHANNEL 4 DIP SWITCHES. CHANNELS 1, 2 AND 3 ARE CONFIGURED SIMILARLY.

ALARM STATUS

ALARM CONDITION IF N/O SENSOR CONTACT CLOSES ON ALARM

SWITCH SETTINGS:



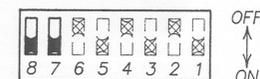
ALARM CONDITION IF N/C SENSOR CONTACT OPENS ON ALARM



NOT ALLOWABLE



NOT ALLOWABLE



UNUSED CHANNELS MUST BE SET TO NORMALLY OPEN (N/O).

WHEN CONFIGURING THE LOGIC SWITCH FOR A CHANNEL, NEVER SET BOTH THE NORMALLY OPEN AND NORMALLY CLOSED SWITCHES TO THE ON OR OFF POSITION. DOING SO COULD CAUSE THE PANEL EITHER TO LOCK IN ALARM OR BE UNABLE TO READ AN ALARM.

NOTE: IF POSSIBLE, WIRE EXTERNAL INTERLOCK DEVICES NORMALLY CLOSED SO THAT THEY OPEN ON ALARM. SUCH CIRCUITS ARE FAIL SAFE IN THAT AN ALARM WILL BE GENERATED IF A WIRE IS BROKEN OR BECOMES DISCONNECTED.

TO CONFIGURE YOUR PANEL TO SEND AND/OR RECEIVE ALARMS, SET SEND/RECEIVE SWITCH AS FOLLOWS:

RECEIVE: SET RECEIVE DIP SWITCHES TO ON TO RECEIVE ALARMS ANOTHER PANEL OR FROM ATTACHED INTERLOCK DEVICES.

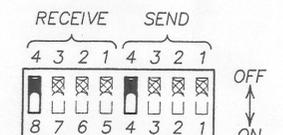
SEND: SET SEND DIP SWITCHES TO ON TO SEND ALARMS TO OTHER PANELS.

THE EXAMPLES BELOW SHOW ALL POSSIBLE SETTINGS FOR THE CHANNEL 4 SEND AND RECEIVE DIP SWITCHES. CHANNELS 1, 2 AND 3 ARE CONFIGURED SIMILARLY.

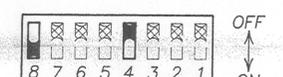
PANEL RESPONSE TO ALARM ON CHANNEL 4

SWITCH SETTINGS:

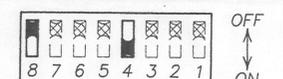
PANEL DOES NOT SHUT DOWN. NO ALARM SENT TO OTHER PANELS.



PANEL SHUTS DOWN. NO ALARM SENT TO OTHER PANELS.



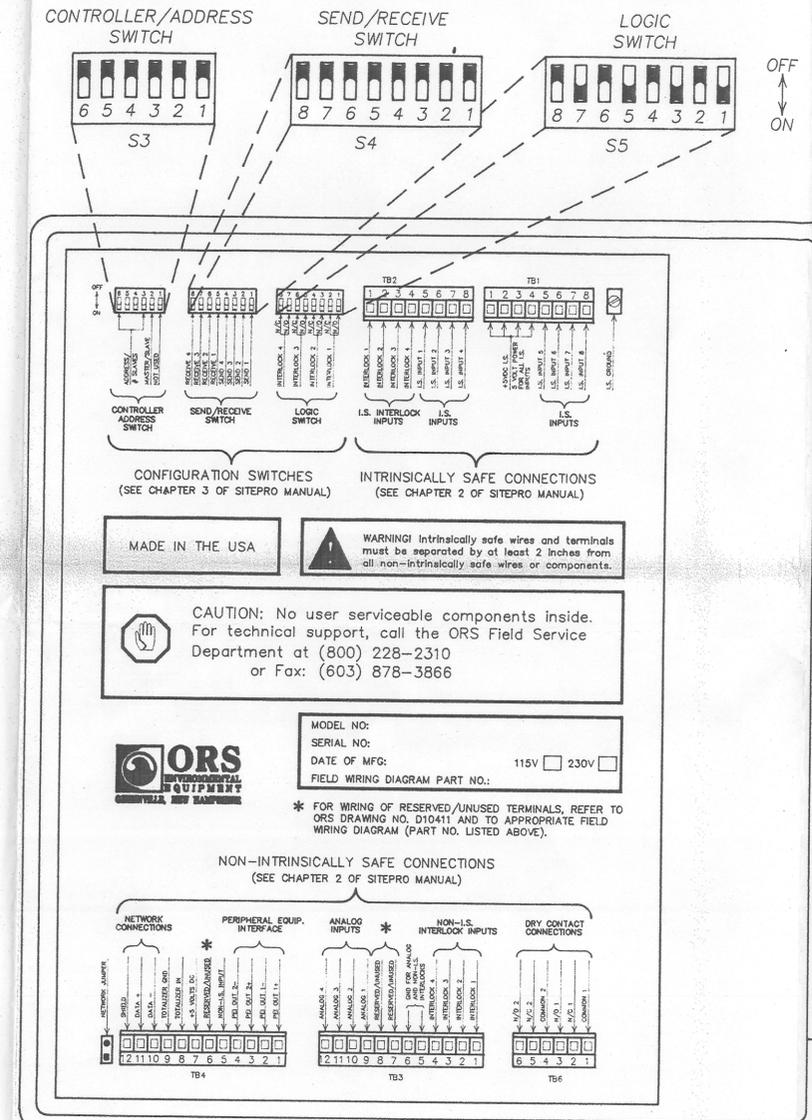
PANEL DOES NOT SHUT DOWN. ALARM IS SENT TO OTHER PANEL.



PANEL SHUTS DOWN. ALARM IS SENT TO OTHER PANEL.



NOTE: IN PROBE SCAVENGER™/WATER PUMP PANELS, AN ALARM ON CHANNEL 1 SHUTS DOWN THE PRODUCT PUMP ONLY. THE TANKFULL JUMPER MUST BE INSTALLED. REFER TO SITEPRO PROBE SCAVENGER FIELD WIRING DIAGRAM FOR DETAILS.



MADE IN THE USA

WARNING! Intrinsically safe wires and terminals must be separated by at least 2 inches from all non-intrinsically safe wires or components.

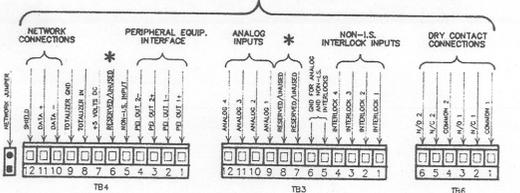
CAUTION: No user serviceable components inside. For technical support, call the ORS Field Service Department at (800) 228-2310 or Fax: (603) 878-3866

ORS ENVIRONMENTAL EQUIPMENT CENTRA, NEW HAMPSHIRE

MODEL NO: SERIAL NO: DATE OF MFG: 115V 230V FIELD WIRING DIAGRAM PART NO:

* FOR WIRING OF RESERVED/UNUSED TERMINALS, REFER TO ORS DRAWING NO. D10411 AND TO APPROPRIATE FIELD WIRING DIAGRAM (PART NO. LISTED ABOVE).

NON-INTRINSICALLY SAFE CONNECTIONS



SITEPRO™ 2000 CONFIGURATION GUIDE

PROPRIETARY INFORMATION

UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES

TOLERANCES (EXCEPT AS NOTED)

DECIMAL .XXX +/- .005
 .XX +/- .010
 .X +/- .020

FRACTIONAL +/- 1/16
 ANGULAR +/- 1'

DISK LOCATION

ORIS ENVIRONMENTAL EQUIPMENT
 A DIV. OF GROUNDWATER TECHNOLOGY, INC.
 32 Hill Street
 Greenville, NH 03048
 (603) 878-2500
 (800) 228-2310

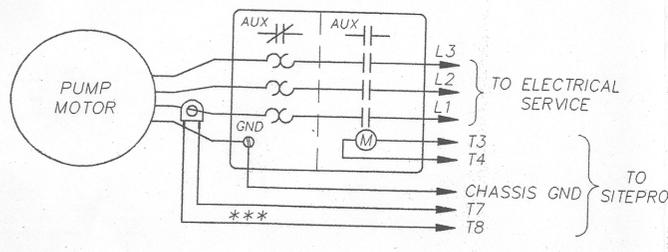
DRAWN BY: M.MCQUADE
 CHECKED BY: J. J. [Signature]
 SCALE: NONE
 DATE: 8/25/93

TITLE: SITEPRO™ 2000 CONFIGURATION GUIDE

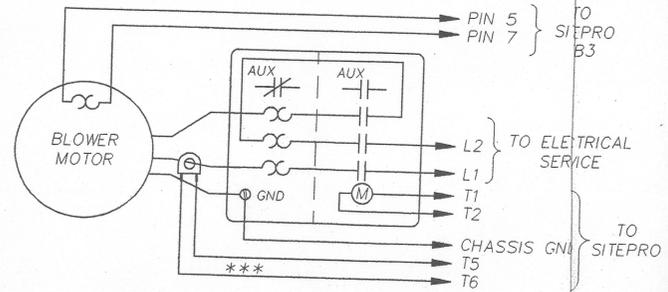
APPROVED BY: J. J. [Signature]
 SHEET: 1 of 1
 DRAWING NO.: D10410
 REV.: 4

ECN	DATE	SYM	REVISION RECORD	DR	CK
1985	2/4/94	0	CREATED NEW DRAWING	WB	
2002	4/19/94	1	CHANGED TO AS BUILT	WB	
2049	10/26/94	2	CHANGED TO SHOW CORRECT WIRING	RLT	

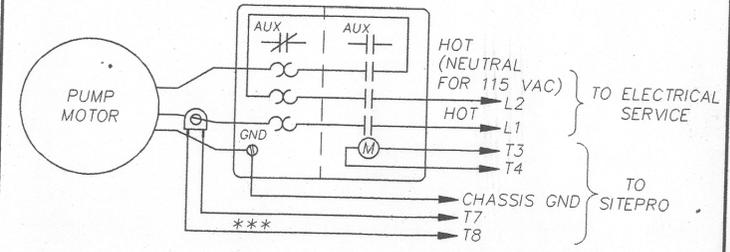
NOTE: *** THIS SENSOR REPLACES THE SENSOR SHOWN ON FIELD WIRING DIAGRAMS FOR SITEPRO APPLICATIONS.



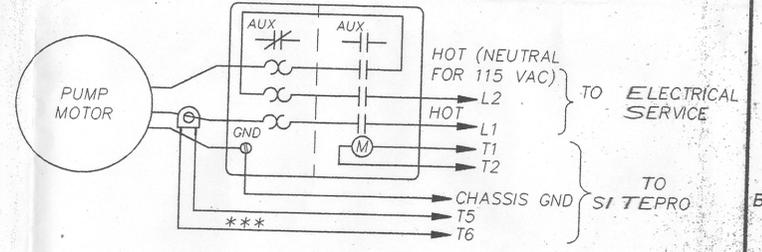
BLOCK 1
OPTIONAL WIRING FOR
THREE PHASE WATER PUMP
FOR 3 PHASE MOTORS.
ALL HP, ANY VOLTAGE



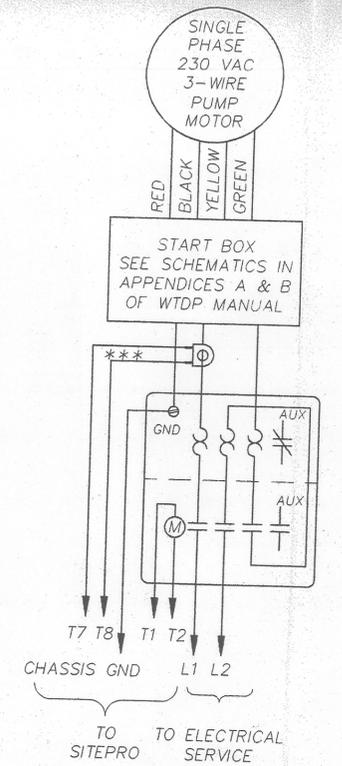
BLOCK 2
OPTIONAL WIRING FOR
SINGLE PHASE BLOWERS
FOR MOTORS > 1 HP @ 115 VAC
> 2 1/2 HP @ 230 VAC



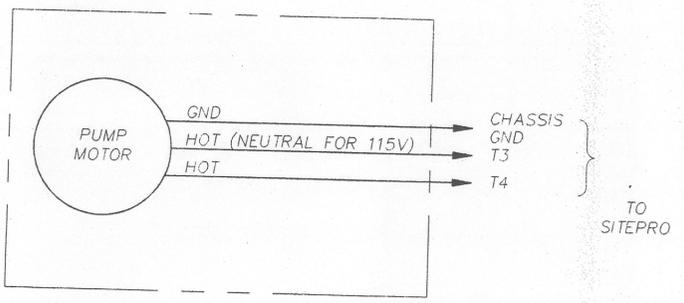
BLOCK 3
OPTIONAL WIRING FOR
SINGLE PHASE WATER PUMP
FOR MOTORS > 1 HP @ 115 VAC
> 2 1/2 HP @ 230 VAC



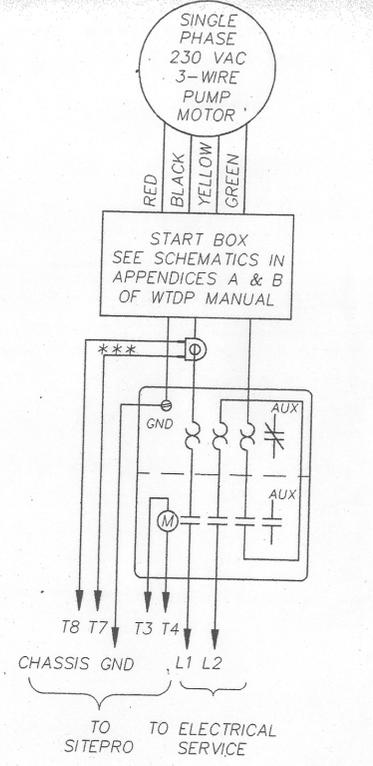
BLOCK 4
OPTIONAL WIRING FOR
SINGLE PHASE PUMPS
FOR MOTORS > 1 HP @ 115 VAC
> 2 1/2 HP @ 230 VAC



BLOCK 5
OPTIONAL WIRING FOR
SINGLE PHASE 3-WIRE PUMPS
FOR MOTORS > 2 1/2 HP @ 230 VAC
> 1 HP @ 115 VAC



BLOCK 6
OPTIONAL WIRING FOR
SINGLE PHASE PUMPS
FOR MOTORS < 1 HP @ 115 VAC
< 2 1/2 HP @ 230 VAC



BLOCK 7
OPTIONAL WIRING FOR
SINGLE PHASE 3-WIRE PUMPS
FOR MOTORS > 1 HP @ 115 VAC
> 2 1/2 HP @ 230 VAC

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PART NUMBER: 10554

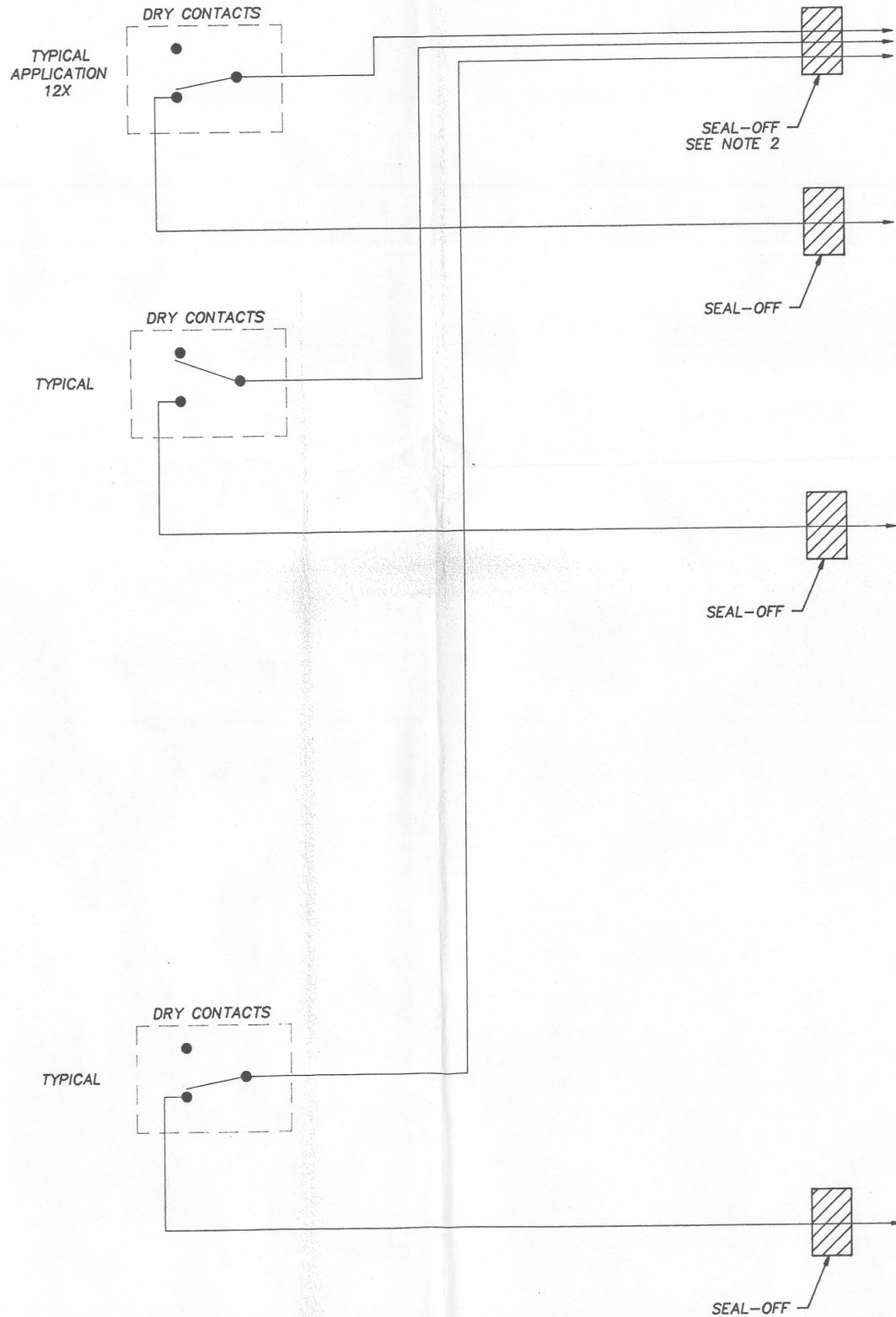
UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES		32 Mill Street Greenville, NH 03048 (603) 878-2500 (800) 228-2310
TOLERANCES (EXCEPT AS NOTED)		DRAWN BY: BOUCHER CHECKED BY: [Signature] TITLE: SITEPRO EXTERNAL CONTRACTOR WIRING DETAIL SHEET: 1 OF 1 DATE: 02/04/94 DRAWING NO: D0453 REV: 2
DECIMAL .xxx +/- .006 .xx +/- .010 .x +/- .020		
FRACTIONAL +/- 1/16		
ANGULAR +/- 1°		
DISK LOCATION		

ECN	DATE	SYM	REVISION RECORD	DR	CK
2008	5/8/94	0	RELEASE TO PRODUCTION BY FM APPROVAL		

HAZARDOUS AREA

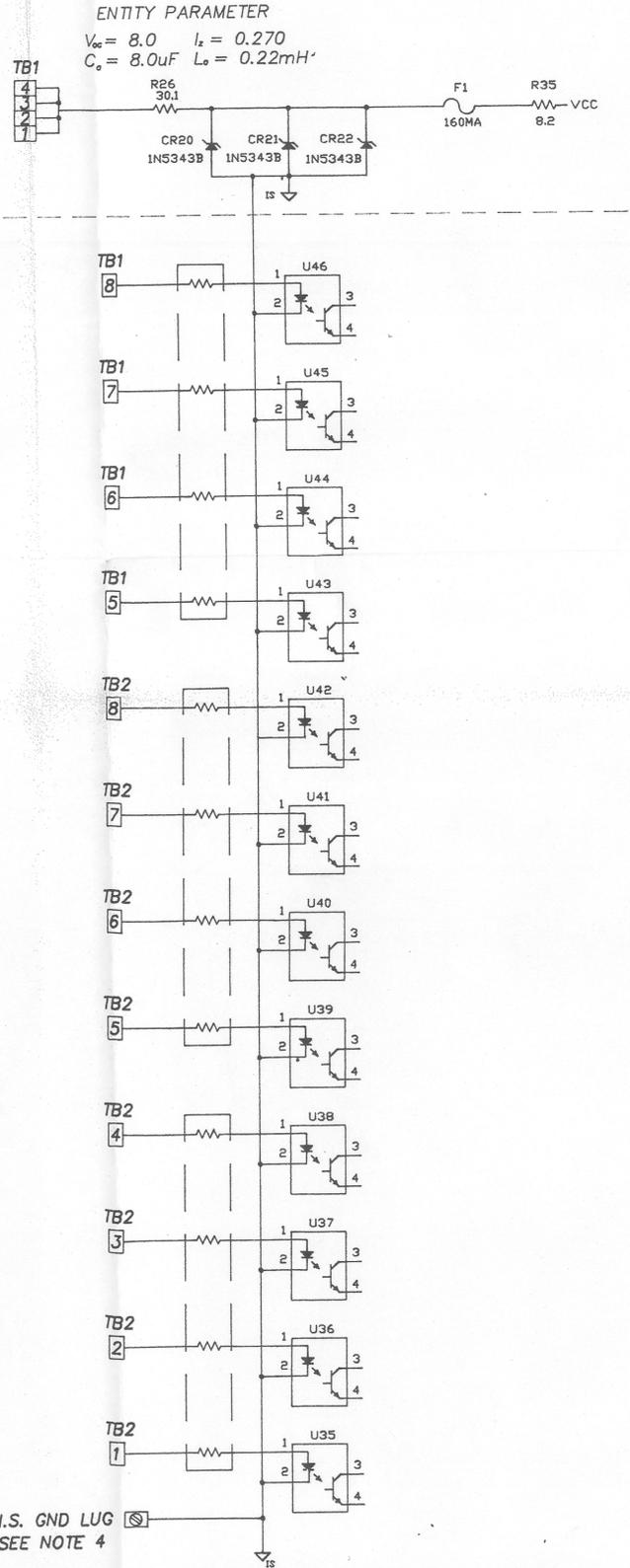
SEE NOTE 3

INTRINSICALLY SAFE INPUTS/OUTPUTS



NON-CLASSIFIED AREA

**SITEPRO 2000
MODELS: 2420000 - 2429999**



NOTES:

- 1) IF WIRES TO DRY CONTACTS ARE RUN THRU CONDUIT, MUST USE WIRES WITH 300V MIN. INSULATION RATING.
- 2) CONDUIT SEAL-OFF MUST BE USED FOR ISOLATION OF NON-CLASSIFIED AREA.
- 3) FOR USE IN CLASS 1, DIV 1 OR 2, GROUPS A, B, C OR D.
- 4) RESISTANCE BETWEEN I.S. GND LUG AND GND STAKE MUST BE LESS THAN 1.0 ohm. GROUND STAKE RESISTANCE MUST CONFORM TO NEC ARTICLE 250.
- 5) UNDER "ENTITY" REQUIREMENTS, THE CONCEPT ALLOWS INTERCONNECTION OF INTRINSICALLY SAFE APPARATUS TO ASSOCIATED APPARATUS NOT SPECIFICALLY EXAMINED IN SUCH COMBINATIONS. THE CRITERIA FOR INTERCONNECTION IS THAT THE VOLTAGE (V_{max}) AND CURRENT (I_{max}) WHICH INTRINSICALLY SAFE APPARATUS CAN RECEIVE AND REMAIN INTRINSICALLY SAFE, CONSIDERING FAULTS, MUST BE EQUAL OR GREATER THAN THE VOLTAGE (V_{oc} OR V_t) AND CURRENT (I_{sc} OR I_t) LEVELS WHICH CAN BE DELIVERED BY THE ASSOCIATED APPARATUS, CONSIDERING FAULTS AND APPLICABLE FACTORS. IN ADDITION, THE MAXIMUM UNPROTECTED CAPACITANCE, (C_i) AND INDUCTANCE (L_i) OF THE INTRINSICALLY SAFE APPARATUS, INCLUDING INTERCONNECTING WIRING, MUST BE EQUAL OF LESS THAN THE CAPACITANCE (C_o) AND INDUCTANCE (L_o) WHICH CAN BE SAFELY CONNECTED TO THE ASSOCIATED APPARATUS. IF THESE CRITERIA ARE MET THEN THE COMBINATION MAY BE CONNECTED.
- 6) 500' MAX. LENGTH OF CABLE BETWEEN TB1 OR TB2 AND PROBE. CONSULT FACTORY OTHERWISE.
- 7) NO CHANGES TO THIS DRAWING WITHOUT PRIOR FM AUTHORIZATION.

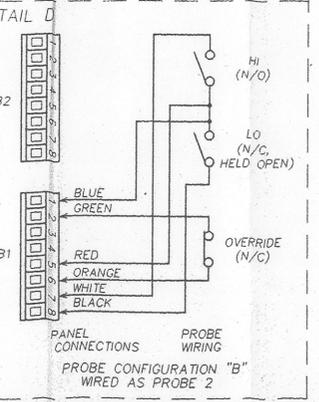
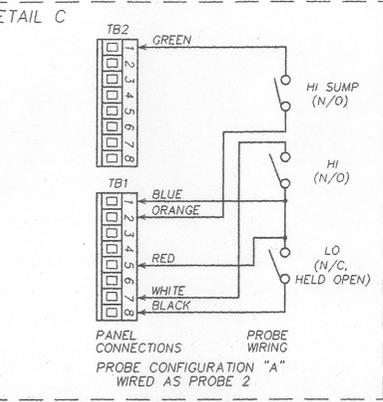
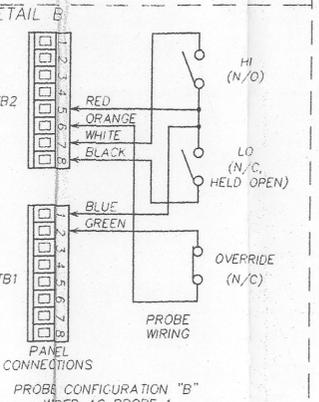
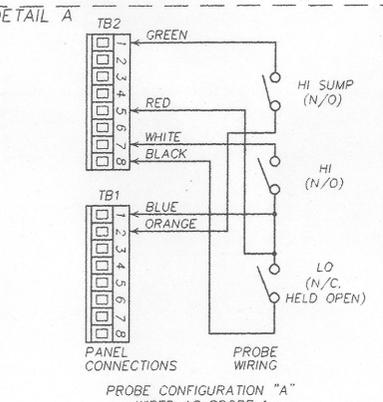
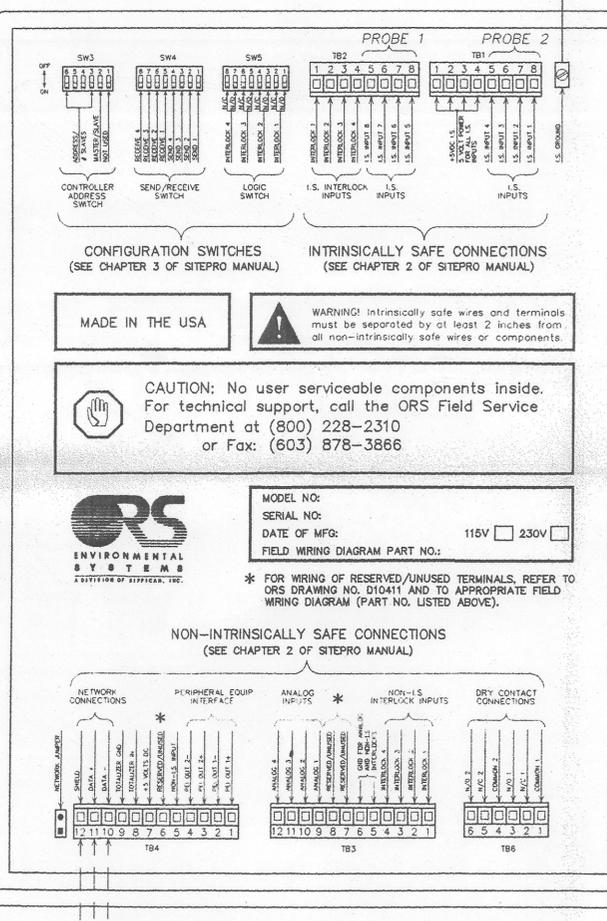
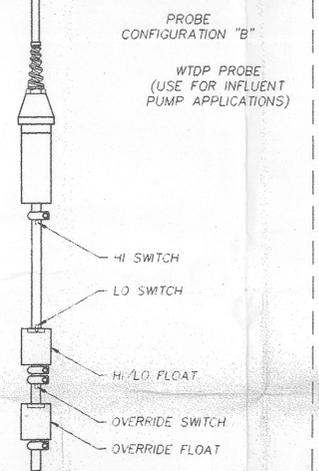
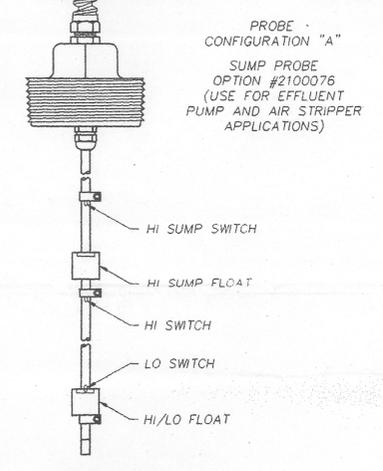
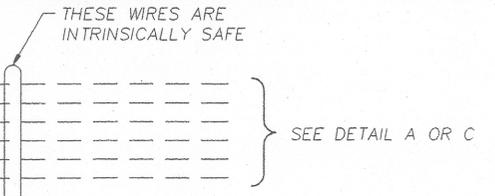
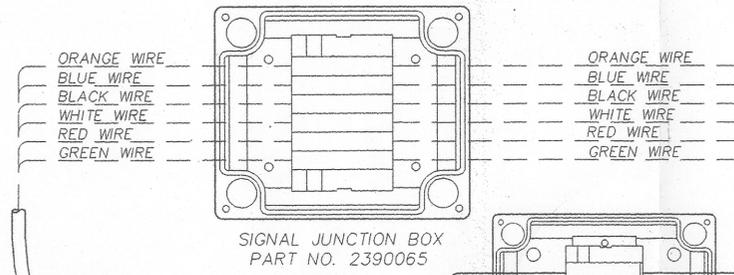
PROPRIETARY INFORMATION

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PART NO.: 10490

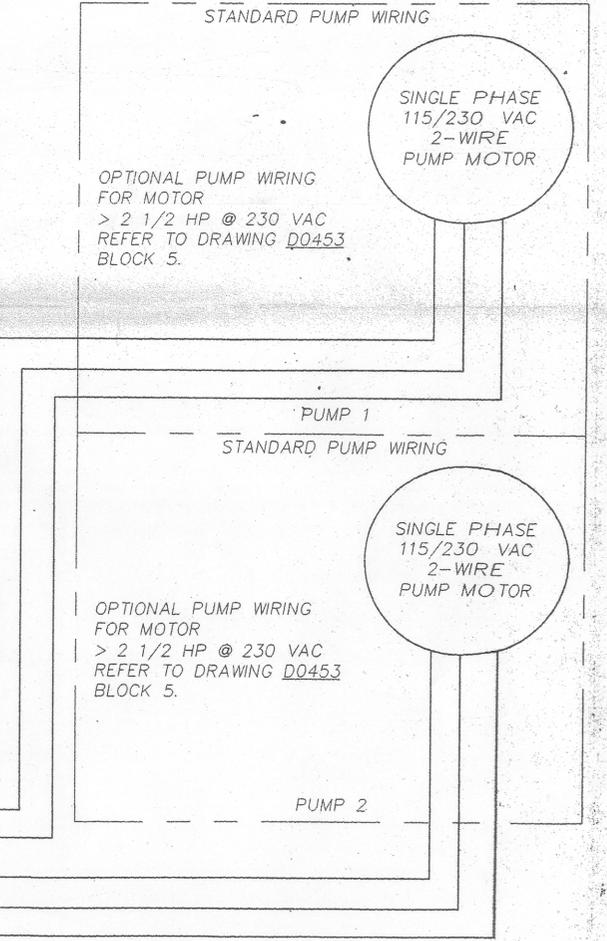
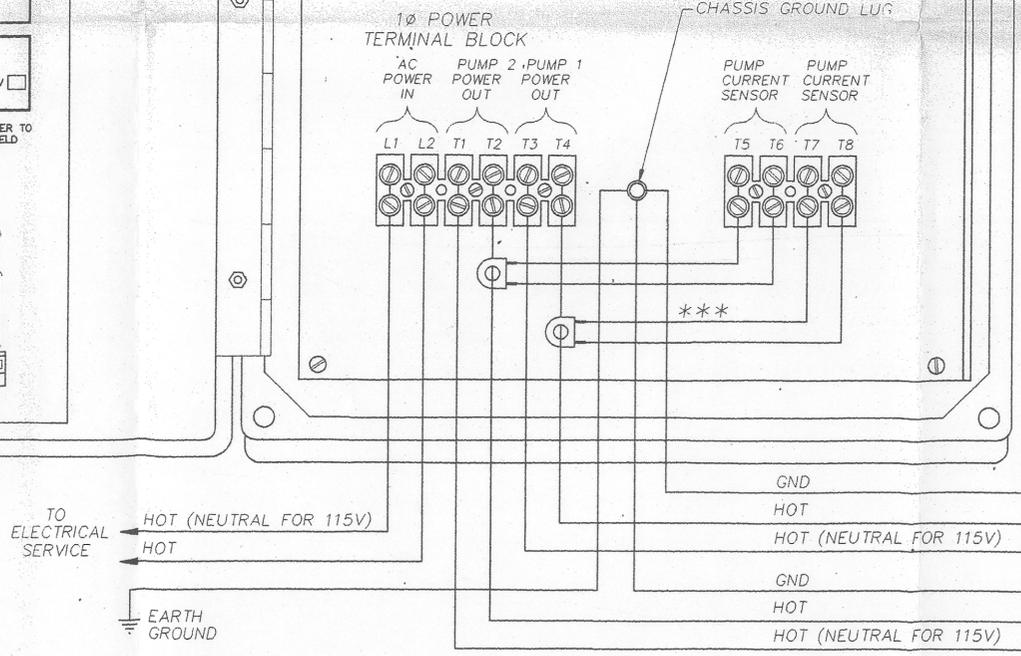
UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES		ORS ENVIRONMENTAL EQUIPMENT A DIVISION OF SEPPACORP, INCORPORATED		32 Mill Street Greenfield, MA 01304 (603) 878-2500 (603) 228-2310
TOLERANCES (EXCEPT AS NOTED)	DRAWN BY: BRADY	CHECKED BY: [Signature]	SCALE: NONE	DATE: 3/14/94
DECIMAL .XXX +/- .005 .XX +/- .010 .X +/- .020	TITLE: SITEPRO 2000 CONTROL DRAWING FM APPROVAL			
FRACTIONAL +/- 1/16	APPROVED BY: [Signature]	SHEET 1 OF 1	DRAWING NO. D10490	REV. 0
ANGULAR +/- 1°	DISK LOCATION			

ECN	DATE	SYM	REVISION RECORD	DR	CK



NOTE:
INTRINSICALLY SAFE GROUND WIRE MUST BE RUN SEPARATELY FROM CHASSIS GROUND.

NOTE: 1:
EXTERNAL MOTOR CONTACTOR IS REQUIRED FOR ALL SINGLE PHASE LOADS
> 1HP @ 115VAC
> 2 1/2 HP @ 230VAC
AND ALL THREE PHASE LOADS.



NOTE:
*** CURRENT SENSOR WIRES ARE TO BE TWISTED PAIR. WHEN AN EXTERNAL CONTACTOR IS REQUIRED, THE CURRENT SENSOR IS TO BE PLACED ON EITHER THE LOAD OR SERVICE SIDE OF CONTACTOR. REFER TO DRAWING D0453 BLOCK 5.

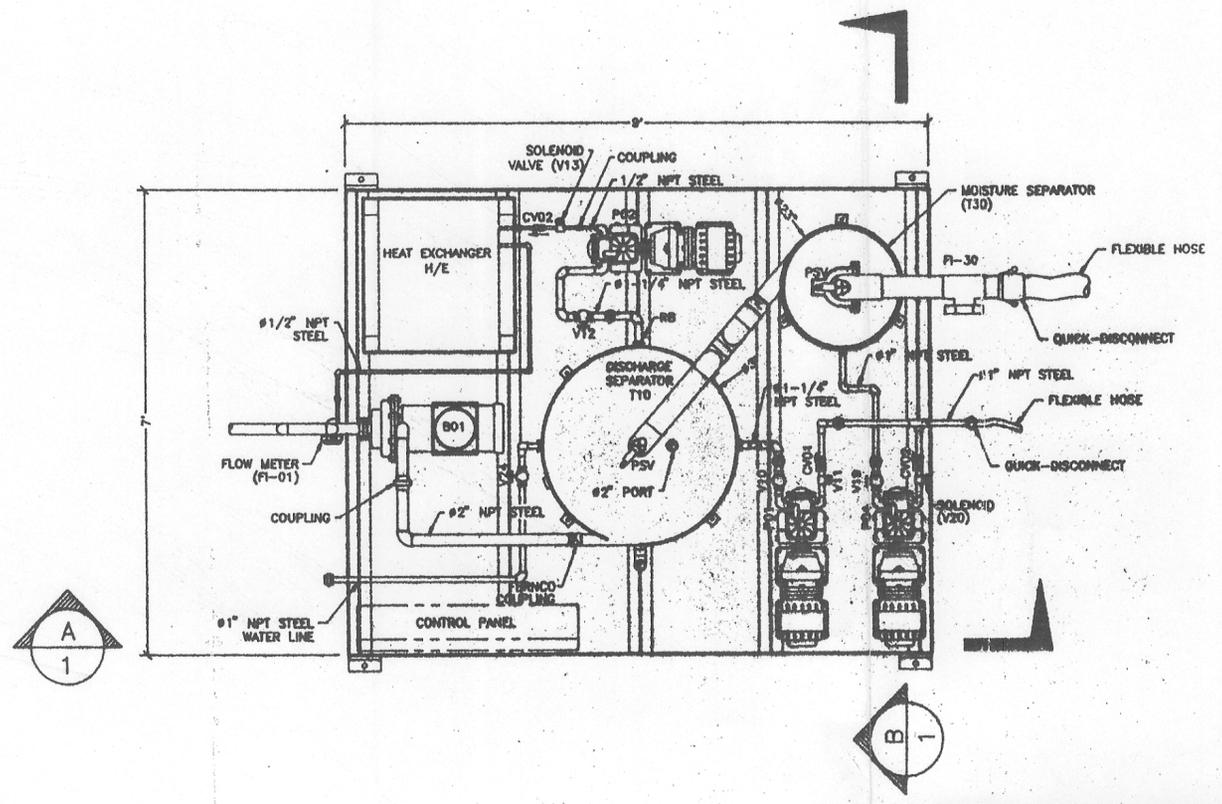
WIRING SINGLE PHASE 115/230VAC 2-WIRE PUMPS TO THE SITEPRO™ 2000 DUAL PUMP CONTROL PANEL

ALL WIRING MUST BE CARRIED OUT BY A QUALIFIED ELECTRICIAN AND BE IN ACCORDANCE WITH STATE AND LOCAL CODES. CONDUIT RUNS MUST CONFORM TO ARTICLE 501-5 OF THE 1993 NATIONAL ELECTRICAL CODE (NEC).

PART NUMBER 10571

UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES				32 Hill Street Greenville, NH 03048 (603) 878-2500 (800) 228-2310
TOLERANCES (EXCEPT AS NOTED)	DRAWN BY: TROTTER	CHECKED BY: [Signature]	SCALE: NONE	DATE: 09/20/94
DECIMAL xxx +/- .005	TITLE: SITEPRO FIELD WIRING DIAGRAM, SINGLE PHASE 115/230V 2-WIRE WTDP			
XX +/- .010	APPROVED BY: [Signature]			
X +/- .020	SHEET: 1 OF 1			
FRACTIONAL +/- 1/16	DRAWING NO. D10571			
ANGULAR +/- 1'	REV. 0			
DISK LOCATION				

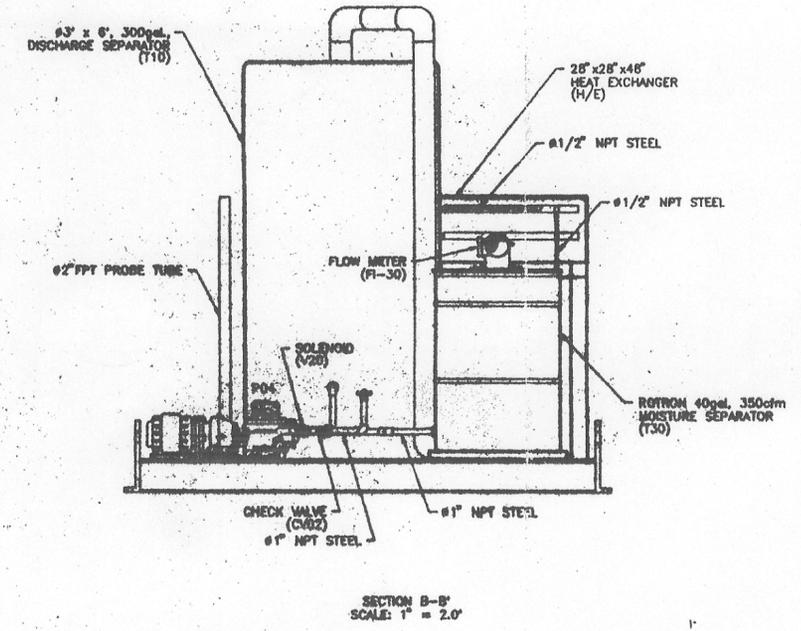
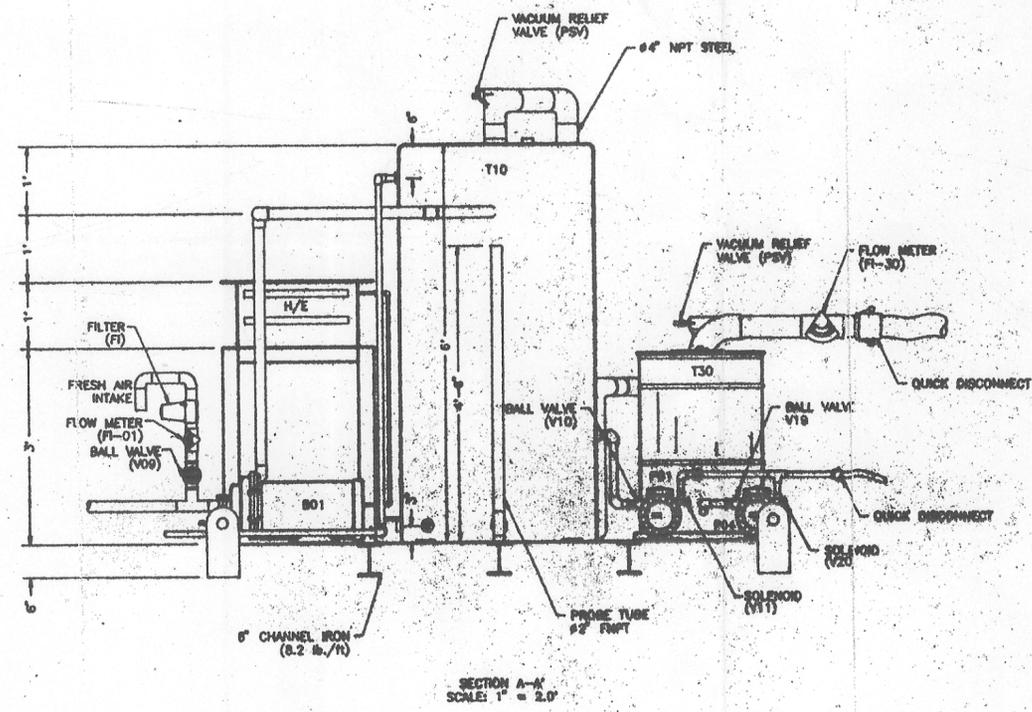
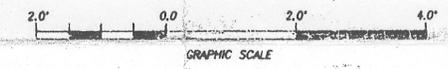
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



BILL OF MATERIALS

UNIT NO.	SPECIFICATION
B01	ATLANTIC FLUIDICS 10hp, 3ø BLOWER
H/E	GREENWOOD 28\"/>
P01	25gpm, 200psi ELECTRIC DIAPHRAGM PUMP
P02	25gpm, 200psi ELECTRIC DIAPHRAGM PUMP
P04	25gpm, 200psi ELECTRIC DIAPHRAGM PUMP
T30	ROTRON 40gal, 350 cfm MOISTURE SEPARATOR
T10	300gpm SA-36 DISCHARGE SEPARATOR

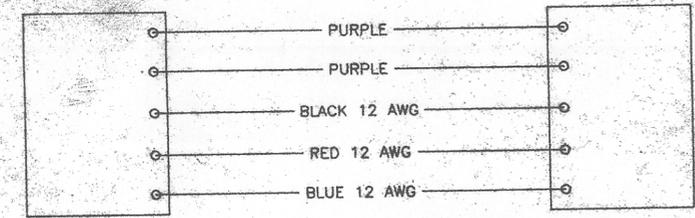
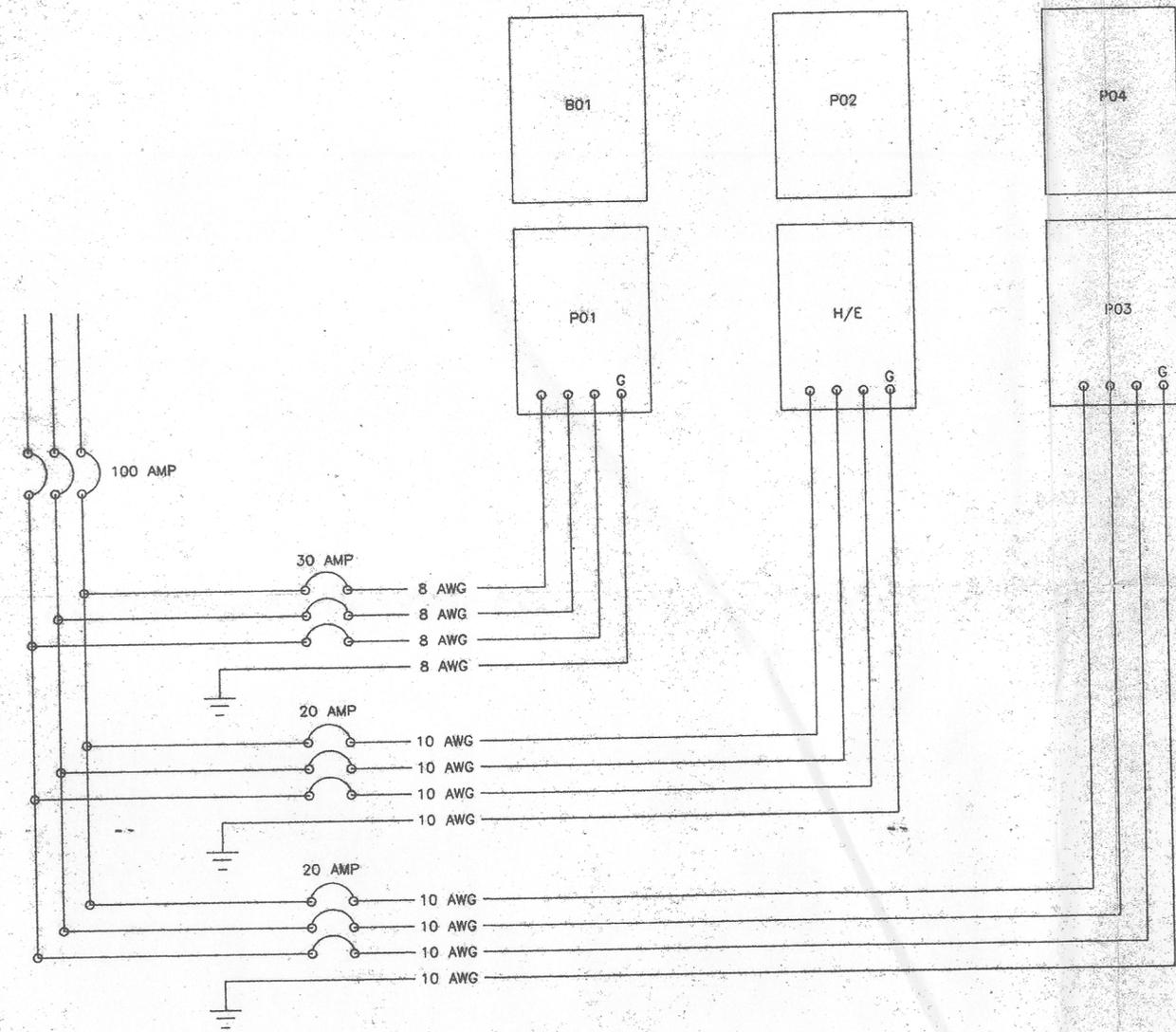
- NOTES:
- 1.) ALL MOUNTING TO BE WITH 1/2"x1" BOLT, LOCKWASHER, WASHER AND NUT THROUGH TAPPED HOLE IN SKID DECK.
 - 2.) ALL SIDE PORTS ON DISCHARGE SEPARATOR (T10) TO BE #2"
 - 3.) DISCHARGE SEPARATOR EQUIPPED WITH INTERNALLY MOUNTED COALESCING SCREEN
 - 4.) ALL PUMPS FITTED WITH NEMA C-FACE MOTORS AND GEAR REDUCERS
 - 5.) ALL BUNG COUPLINGS ON DISCHARGE SEPARATOR TO SA-105
 - 6.) 6" CHANNEL IRON IS 16 LB./FT. WITH 4.030 WIDE x 0.405 THICK FLANGE & 0.260 THICK WEB
 - 7.) DO NOT SCALE THIS DRAWING



ENGINEER:	DATE:	DRAWN:	SIZE:	REV:	PROJECT:	DWG. NO.:
W.S.	11-30-95	S.B.R.	C		95-995	1
APPROVED:			SCALE:	FILE NAME:	DRAWN:	SHEET OF
			1"=2.0'	95-995-E-LAYOUT	N/A	1 OF 2

VACUUM PUMP SKID EQUIPMENT LAYOUT PLAN
 NAVAL AIR STATION
 CECL FIELD
 JACKSONVILLE, FLORIDA

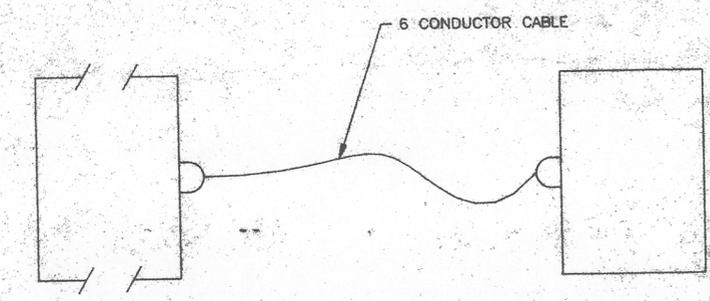
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



VACUUM PUMP SKID JUNCTION BOX

OIL/WATER SEPARATOR SKID JUNCTION BOX

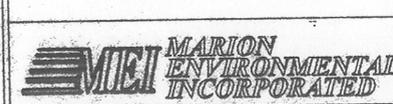
MAKE CONNECTIONS "COLOR FOR COLOR"



VACUUM PUMP SKID PROBE WIRE CONNECTION

OIL/WATER SEPARATOR SKID JUNCTION BOX

MAKE CONNECTIONS "COLOR FOR COLOR"

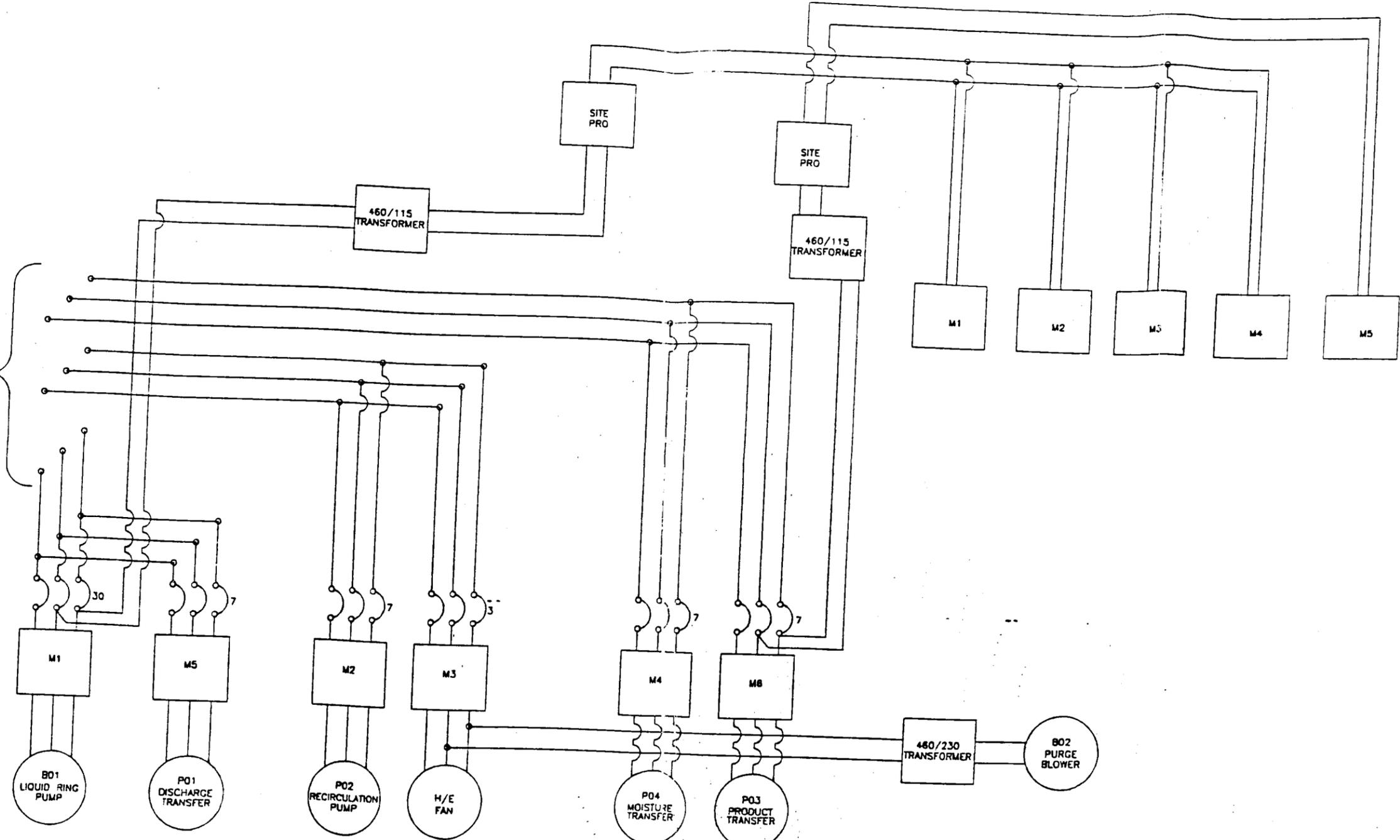


ENGINEER: M.H.	DATE: 11-30-95	DRAWN:	SIZE: S.B.R.	REV
APPROVED:	DATE:	SCALE: 11-30-95	FILE NAME: 95-585\PWRDIST	

PROJECT: 95-585	DWG. NO. 5
FACILITY:	SHEET 5 OF 5

FREE PRODUCT RECOVERY SKID SYSTEM
WIRING INSTALLATION DIAGRAM
BECHTEL ENVIRONMENTAL
CECIL FIELD NAVAL AIR STATION
JACKSONVILLE, FLORIDA

480V AC SERVICE



DESIGNED: M.H.	DATE: 11-30-95	DRWING	SITE: S.B.R.	REV
APPROVED:	DATE:	SCALE: 11-30-95	FILE NAME: 95-585\PWROIST	PROJECT: 95-585

DRWG. NO. 4	SHEET 4	OF 5
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FREE PRODUCT RECOVERY SKID SYSTEM
 POWER DISTRIBUTION DIAGRAM
 BECHTEL ENVIRONMENTAL
 CECIL FIELD NAVAL AIR STATION
 JACKSONVILLE, FLORIDA

SITE CONFIGURATION WORKSHEET AND EXAMPLE

D. Construct Process & Instrumentation Diagram

Step 1: Sketch local control loops.

As shown in Figure 1, sketch the local control loop for each pump or blower in the remediation system. For example, P1 is controlled by a hand switch (HS100) that can override input from the downwell probe HI-LO switches (LSHL100) and the LO-OVERRIDE switch (LSLL100). NOTE: ANSI standards should be used when designating measurement and control instruments. See the separate ORS P&ID Legend sheet for a list of symbols and conventions commonly used in ORS Process & Instrumentation Diagrams.

Step 2: Determine the type and number of SITEPRO panels required to control all site equipment.

As shown in Figure 2, pumps P1, P2 and P3 each requires its own SITEPRO Water Table Depression Pump control panel. Transfer pump P4 and the air stripper blower can be controlled by a single SITEPRO Blower/Pump control panel. Draw in the panels above the equipment components they control. Label the panels (WTDP PANEL, etc.) and add the hand switch symbols, but do not sketch in the SITEPRO interlock symbols (I₁, I₂, etc.) until after Step 3, below, has been completed.

Step 3: Determine devices to be used as interlocks.

To meet the control requirements specified in Section C, some of the monitoring instruments in Figure 1 must be wired into the SITEPRO Interlock Communication Bus. Each panel has four alarm channels through which it can receive alarm signals sent either directly from monitoring instruments (interlock devices) wired to the panel or indirectly from other panels in the SITEPRO network. Use SITEPRO interlock symbols to tag the interlock devices to be wired to SITEPRO panels. For example, in Figure 2, pressure switch PSH104 has been tagged with SITEPRO interlock symbol I₄. This indicates that PSH104 is to be wired to alarm channel #4 of the Interlock Communication Bus. Since all the panels are connected through the Bus, PSH104 can be wired to any panel in the network.

Step 4: Determine which panels will respond to alarms.

Again referring to the control requirements specified for the system, use SITEPRO interlock symbols to indicate which panels will be shut off in the event an alarm is generated by an interlock device. For example, in Figure 2, SITEPRO interlock symbols I₃ and I₄ have been sketched inside the BLOWER/PUMP PANEL symbol. This means that the panel will be shut down if either PSH104 monitors a high pressure condition or PSL103 monitors a low pressure condition.

The P&ID is now complete.

E. Fill in Site Network Map (see reverse side of sheet)

Before configuring the individual SITEPRO panels at your site, use this Site Configuration Worksheet to lay out the panel network. The site configuration example on this page is designed to help you create a Process & Instrumentation Diagram (P&ID) and then fill in the Site Network Map on the other side of this sheet. In the sections below, the equipment components at a hypothetical remediation site are described, a possible control scenario is specified, and a step by step procedure for sketching a P&ID is outlined.

A. Site Layout

The remediation site shown in Figures 1 & 2 (at left) consists of two submersible pumps (P1 & P2) that deliver contaminated water to a surge tank. The water is then pumped by a transfer pump (P3) into an air stripper for treatment. A second transfer pump (P4) then pumps the treated water through a carbon canister for final polishing.

B. Instrumentation

The following instruments are used to monitor conditions at various parts of the system.

- (LSHL 100) (LSLL 100) are switches on the downwell probe that controls P1
- (LSHL 101) (LSLL 101) are switches on the downwell probe that controls P2
- (LSHH 102) is the HI-OVERRIDE switch on the surge tank probe
- (LSHL 102) consists of HI-LO switches that cycle P3 on and off
- (LSHH 103) is the HI-OVERRIDE switch on the air stripper sump probe
- (LSHL 103) consists of HI-LO switches that cycle P4 on and off
- (PSH 103) (PSL 103) are HI and LO pressure switches that monitor pressure in the air stripper
- (PSH 104) is a HI pressure switch that monitors liquid pressure entering the carbon canister

C. Control Requirements

1. Recovery well pumps P1 and P2 must each cycle on and off under control of its downwell probe. In addition, P1 and P2 must shut off if the surge tank becomes full, the air stripper sump becomes full, the blower fails or if the carbon canister becomes clogged.
2. Transfer pump P3 must cycle on and off under control of the surge tank probe. This pump must also shut off if the air stripper sump becomes full, the blower fails or if the carbon canister becomes clogged.
3. Transfer pump P4 must cycle on and off under control of the air stripper sump probe. This pump must also shut off if the carbon canister becomes clogged.

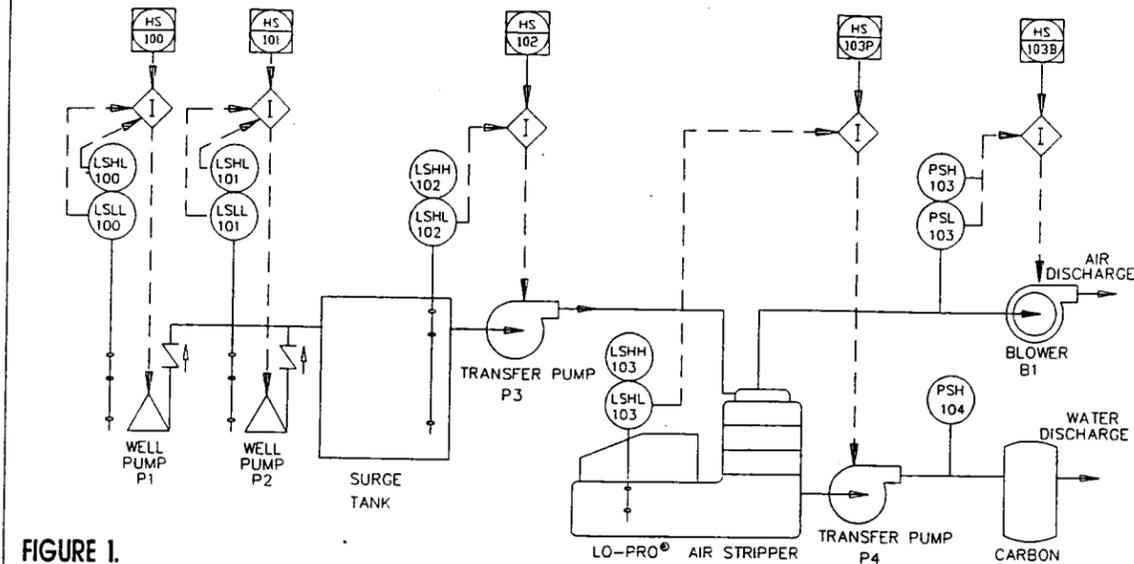


FIGURE 1.

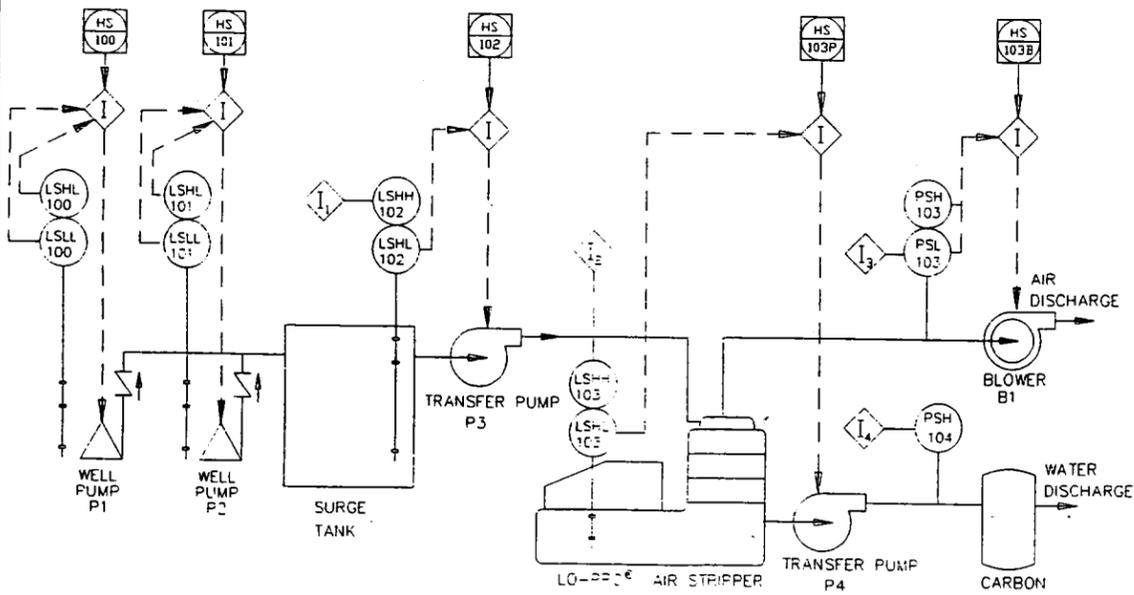
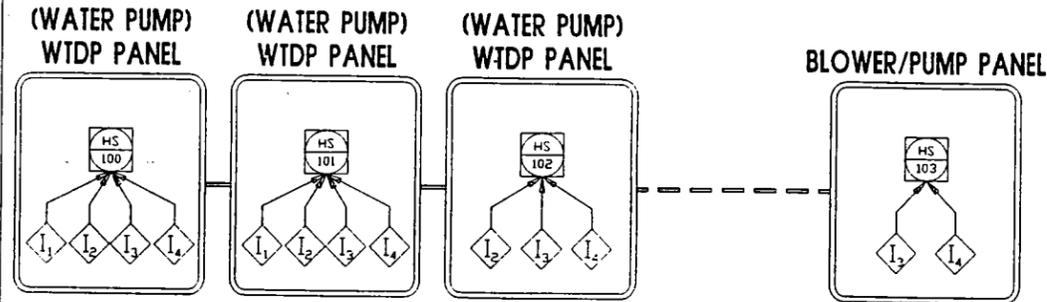


FIGURE 2.

ECN	DATE	SYN	REVISION REQUIRED	DR	CK
1964	11/17/93	1	ADDITIONAL INFORMATION PART NUMBER	LSH	FP
1964	1/6/93	2	REVISE INSTRUCTIONS AND LAYOUT OF SHEET	LSH	FP
2008	4/12/94	3	REVISE FIGURE 2	LSH	FP

ORS PART NUMBER 10442



STARTUP AND CONFIGURATION SERVICES ARE AVAILABLE. PLEASE CALL: (603) 878-2500 (800) 228-2310

DRAWN BY: LSHOUGHTON	CHECKED BY: F. FERRON	SCALE: NTS	DATE: 10/04/93
TITLE: SITE CONFIGURATION WORKSHEET			
APPROVED BY:	SHEET 1 OF 2	DRAWING NO. E10442	REV 3

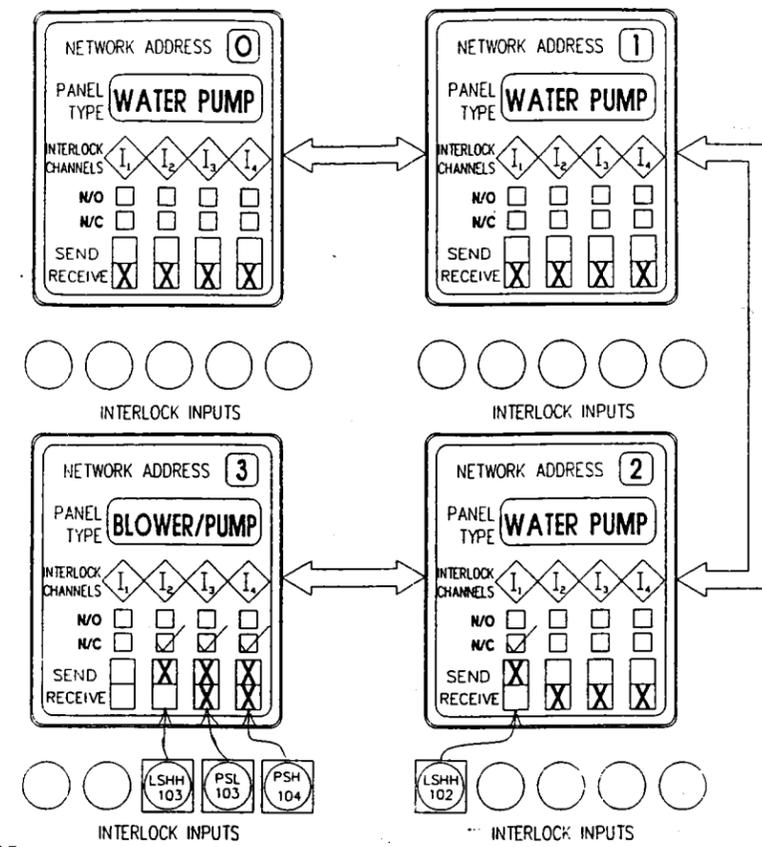
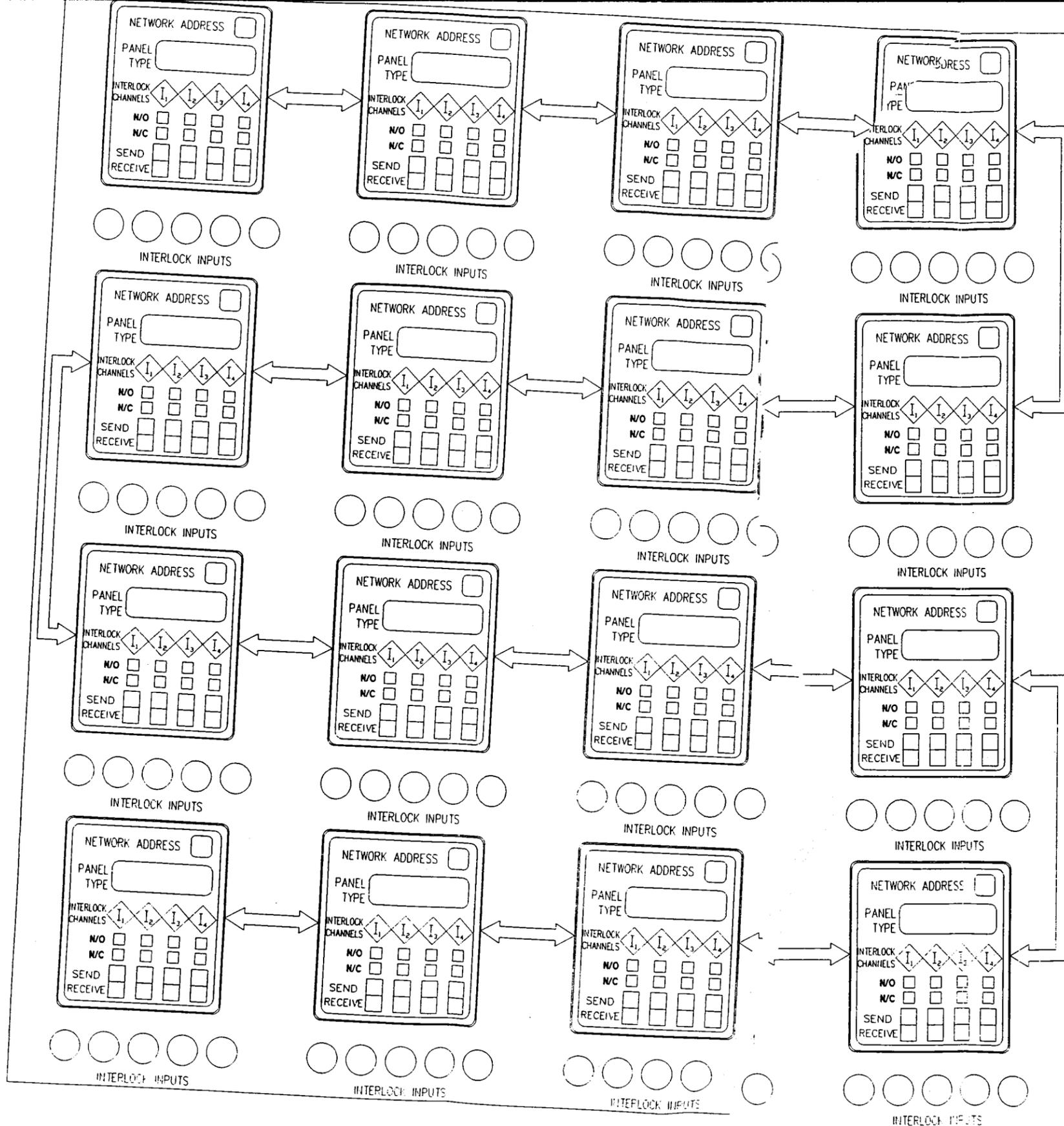
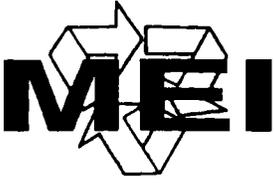


FIGURE 3.
SITE
NETWORK
MAP EXAMPLE

E. Fill in Site Network Map

Once the P&ID has been completed, refer to the sample 4-panel network in Figure 3 (above) and fill in the Site Network Map as follows:

- Step 1: Assign a network address to each SITEPRO panel.**
In the Network Address field of each panel, write in the appropriate network address. As shown in Figure 3, always assign addresses in ascending numerical order with the Master panel designated Panel "0".
- Step 2: Indicate interlock device wiring.**
For each interlock device tagged with a SITEPRO interlock symbol in Figure 2, fill in an Interlock Input balloon (see Figure 3) and draw an arrow to the interlock channel to which the device will be wired. For example, LSHH102 is wired to Interlock Channel 1 of Panel 1.
- Step 3: Indicate Interlock Input Switch Status (N/O or N/C).**
For each interlock channel to which an interlock device is wired, check the appropriate box to indicate whether the device is wired Normally Open (N/O) or Normally Closed (N/C). Note: If more than one interlock device is wired to the same channel, both must be wired either N/O or N/C.
- Step 4: Set RECEIVE Switches.**
Working from your completed P&ID (see Figure 2), determine which interlock channels on each panel must be configured to receive alarms either directly from interlock devices, or indirectly from other panels. Fill in the appropriate "RECEIVE" boxes in each of the panels in the Site Network Map (Figure 3). Note that an X or check mark in a box indicates that the dip switch is set to the "ON" position.
- Step 5: Set SEND Switches.**
Working from your completed P&ID (see Figure 2), determine which panels must be configured to send alarms to other panels. For example, Panel 3 can receive alarms on Interlock Channel 2, 3 & 4 that must be relayed to the other panels in the network. For this reason, the Channels 2, 3 & 4 "SEND" switches are set to "ON" (see Figure 3).
- Step 6: Configure Panels**
Once the Site Network Map has been completely filled out, the individual panels in your SITEPRO network can be configured. Refer to the SITEPRO 2000 Configuration Guide supplied with your Quick Start package and proceed with panel configuration.



MARION ENVIRONMENTAL INCORPORATED

1914 POLYMER DR., CHATTANOOGA, TN 37421 (423) 499-4919 FAX: (423) 892-5122

TESTING CERTIFICATION

FREE PRODUCT RECOVERY SKID SYSTEM

BECHTEL ENVIRONMENTAL

CECIL FIELD NAVAL AIR STATION
JACKSONVILLE, FLORIDA

System piping and joints were pressure tested to 25 psi. Since the entire system is a low pressure application, this was determined to be sufficient for the system needs. All piping passed the pressure test and the system was leak free.

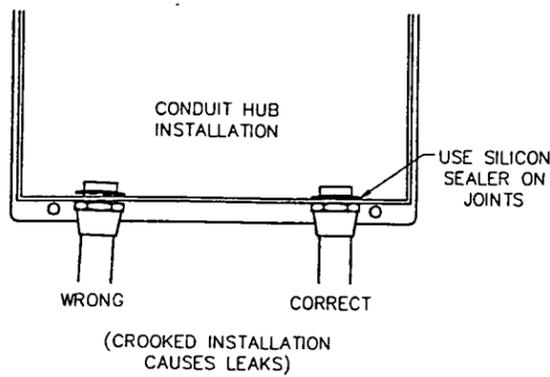
All motors and control panels were tested for proper operation. The motor wiring was checked to determine that they ran in the same direction. If, during installation, the pumps run in the wrong direction, then reverse two of the wires on the power supply at the circuit breaker. The motors all ran properly during testing and the ORS Site Pro control panels operated properly.

All liquid level controls were tested after construction to determine proper function. All controls operated the interlocks properly and in accordance with the Process and Instrumentation Diagram.

Proper operation of all systems and controls can be determined in the field by following the testing/start up procedure located in Section 1 of the Installation, Operation and Maintenance manual.

SITEPRO PANEL MECHANICAL INSTALLATION DIAGRAM

REV	DATE	BY	REVISION RECORD	APP	CHK
---	1/17/94	1	REVISE ELECTRICAL INTERFERENCE INFORMATION	---	---
---	4/28/94	2	CHANGES TO AS BUILT	---	---



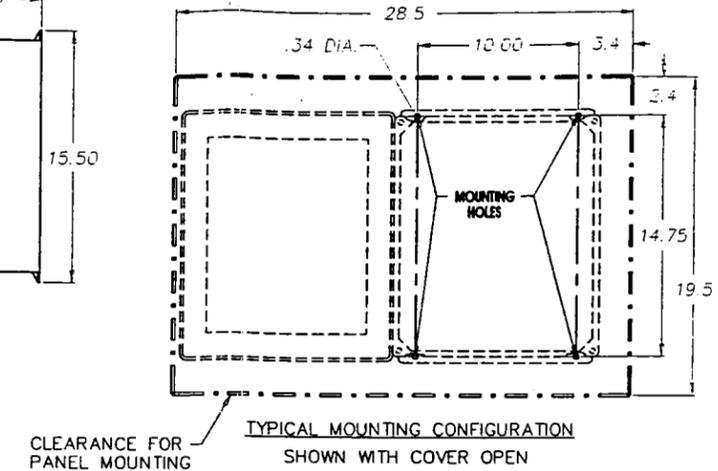
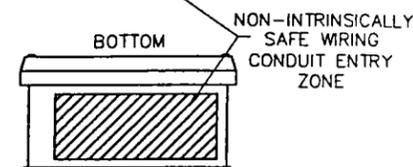
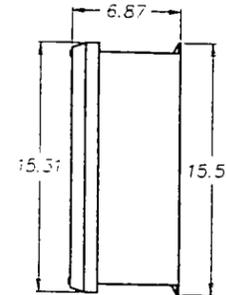
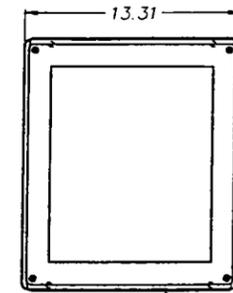
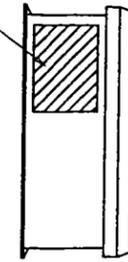
WIRING ACCESS TO PANEL

ALL INTRINSICALLY SAFE WIRING SHOULD ENTER AT THE LEFT SIDE OF PANEL AS SHOWN AT RIGHT. NON-INTRINSICALLY SAFE WIRING SHOULD ENTER THROUGH THE BOTTOM OF PANEL.

DO NOT RUN POWER WIRES WITHIN 2 INCHES OF INTRINSICALLY SAFE WIRES OR TERMINALS.
REFER TO NEC ARTICLE 508 FOR DETAILS.

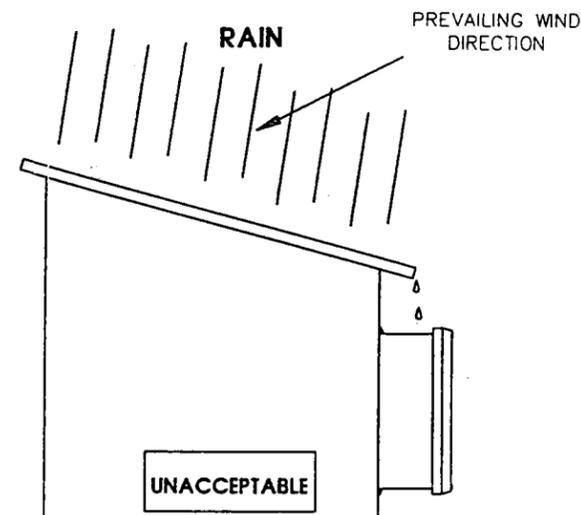
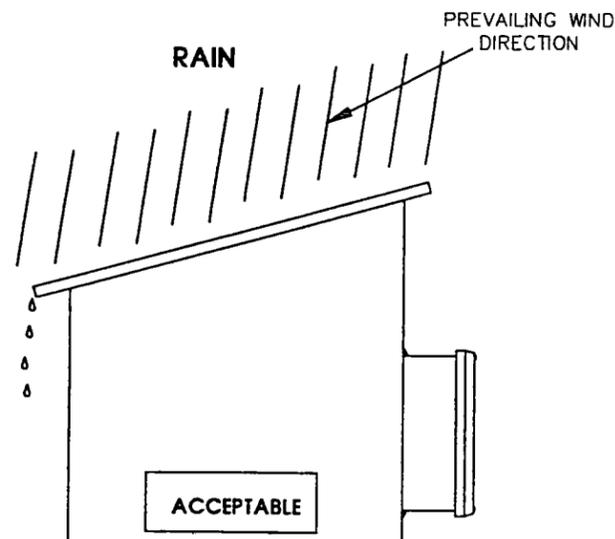
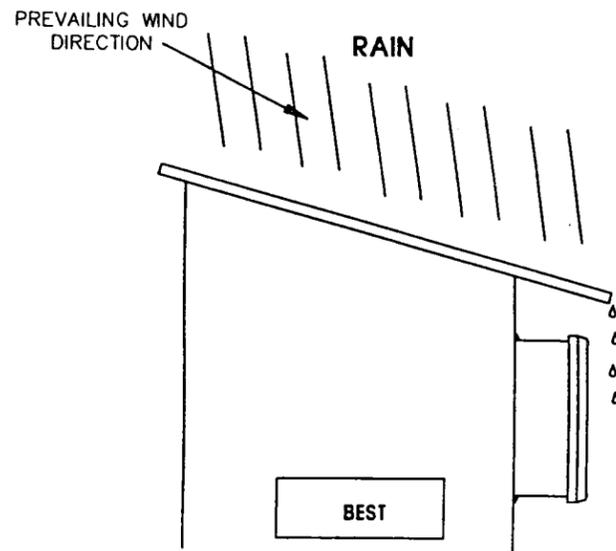
ALL WIRING MUST BE CARRIED OUT BY A QUALIFIED ELECTRICIAN AND BE IN ACCORDANCE WITH LOCAL CODES.

INTRINSICALLY SAFE WIRING CONDUIT ENTRY ZONE



PROTECTION FROM ELEMENTS

ALTHOUGH THE SITEPRO PANEL IS HOUSED WITHIN A NEMA 4 (IP-66) WEATHERPROOF ENCLOSURE, MOUNT IN SUCH A WAY THAT ENTRY OF RAIN IS MINIMIZED WHEN DOOR IS OPENED.



PANEL PROTECTION

WIRING PRECAUTIONS

- CHASSIS GROUND:** INSTALL A GROUND WIRE FROM THE PANEL GROUND LUG TO A GOOD EARTH GROUND. GAUGE OF WIRE MUST BE THE SAME OR LARGER THAN THAT ON POWER WIRING. REFER TO NEC ARTICLE 250 FOR PROPER GROUNDING PROCEDURES.
- INTRINSICALLY SAFE GROUND:** RUN A SEPARATE (14 ga) GROUND WIRE FROM THE INTRINSICALLY SAFE GROUND LUG (NEXT TO TB1) TO A GOOD EARTH GROUND.
- ELIMINATING PROBLEMS CAUSED BY ELECTRICAL INTERFERENCE:** INSTALL PANEL, AND WIRES ATTACHED TO PANEL, AS FAR AS POSSIBLE FROM ARCING DEVICES. USE SNUBBERS ON ALL ARCING DEVICES (ANY DEVICE THAT CAUSES A SPARK WHEN ACTIVATED, ie. CONTACTORS) THAT MUST BE NEAR OR CONNECTED TO THE SITEPRO PANEL. KEEP ALL SITEPRO CURRENT SENSORS AS FAR AS POSSIBLE FROM HIGH VOLTAGE/HIGH CURRENT DEVICES OR WIRES.

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UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES		OES ENVIRONMENTAL EQUIPMENT A DIV. OF GROUNDWATER TECHNOLOGY, INC.		28 9th Street Canaan, NH 03046 (603) 874-2800 (603) 836-2700
TOLERANCES (EXCEPT AS NOTED)	DRAWN BY: HOUGHTON	CHECKED BY: M. J. 420	SCALE: 1:1	DATE: 01/17/94
DECIMAL .001 ± .002 1/16 ± .002	TITLE: SITEPRO PANEL MECHANICAL INSTALLATION DIAGRAM		APPROVED: <i>[Signature]</i>	
FRACTIONAL ± .001 ANGULAR ± .1°	DISK LOCATION	SHEET 1 OF 1	DRAWING NO. B10461	REV. 2

HANDLE INSTALLATION INSTRUCTIONS

NOTE: HANDLE MUST BE INSTALLED TO MAINTAIN 3R/35/5'12 RATING.

HANDLE ASSEMBLY

.38 X 16 HEX NUT

.38 LOCKWASHER

LATCH PLATE

GASKET

HANDLE

10-32 X .31 SEMS
2 REQ'D

⚠ DANGER

- HAZARD OF ELECTRIC SHOCK, BURN OR EXPLOSION.
- TURN OFF POWER SUPPLYING THIS EQUIPMENT BEFORE WORKING INSIDE.
- CLOSE AND SECURE ALL COVERS AND TRIMS BEFORE RE-ENERGIZING. FAILURE TO DO SO WILL RESULT IN ELECTRIC SHOCK, SEVERE PERSONAL INJURY OR DEATH.

- 1) PLACE GASKET ONTO SHAFT OF HANDLE AND ALIGN HOLES IN GASKET WITH MOUNTING HOLES ON HANDLE. PLACE SHAFT THROUGH LARGE HOLE IN DOOR AND ALIGN GASKET AND HANDLE WITH SMALL MOUNTING HOLES ON THE DOOR.
- 2) PLACE MACHINE SCREWS (10-32 X .31 SEMS) THROUGH HOLE IN DOOR AND TORQUE TO 24-35 IN.-LBS.
- 3) PLACE LATCH PLATE ONTO SHAFT AND PRESS FIRMLY IN PLACE OVER SHOULDER AND SECURE WITH LOCKWASHER AND NUT. HOLD HANDLE IN VERTICAL POSITION AS SHOWN AND TORQUE 3/8-16 NUT TO 50-70 IN.-LBS.

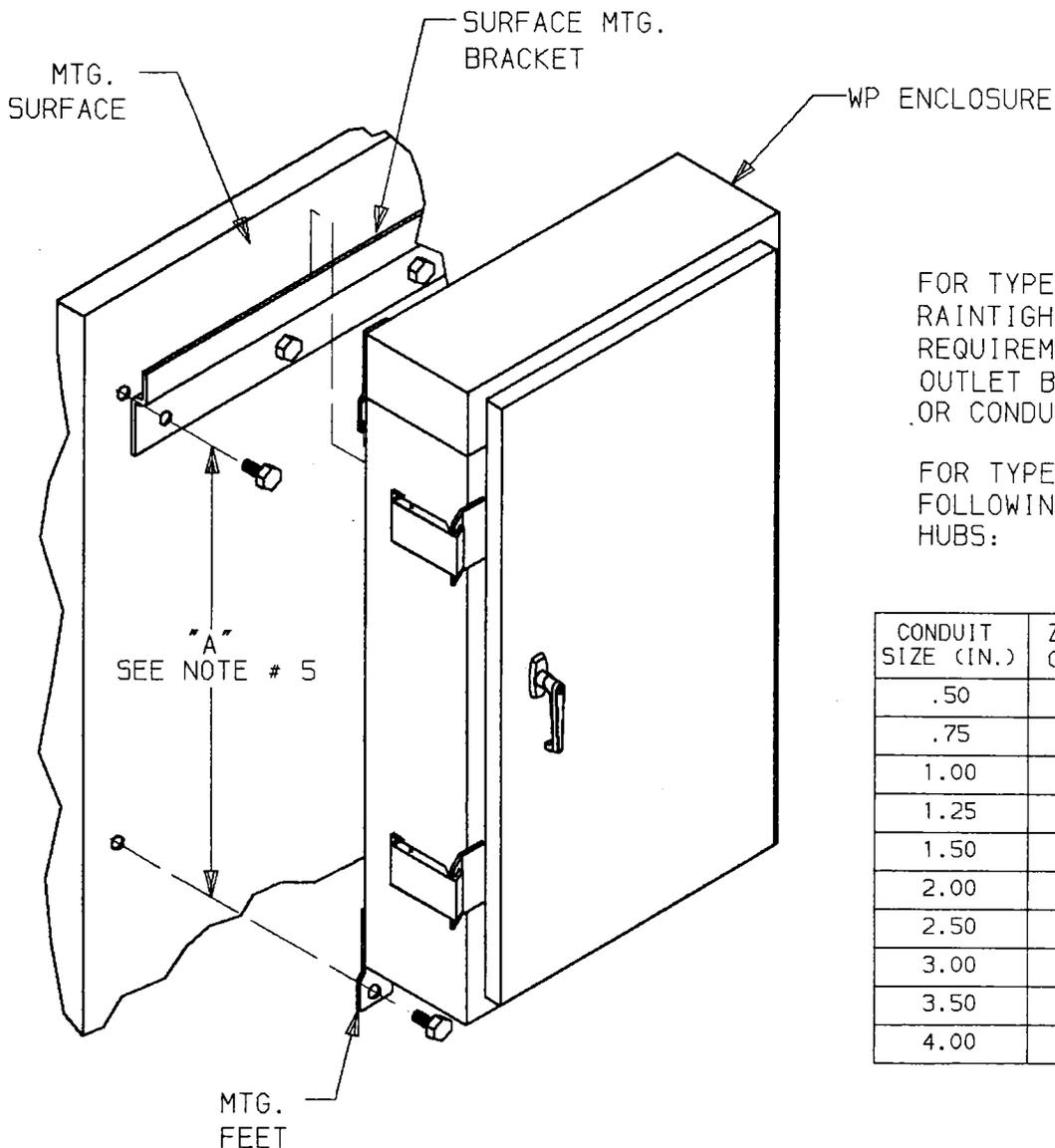
SQUARE D COMPANY

MADE IN USA

80047-413-01

INSTRUCTIONS FOR MOUNTING HC WP, MH WP AND QMB WP ENCLOSURES

1. ALIGN SURFACE MOUNTING BRACKET ON SURFACE TO WHICH ENCLOSURE IS TO BE MOUNTED. BOLT SURFACE MOUNTING BRACKET TO MOUNTING SURFACE. (HARDWARE NOT INCLUDED)
2. PIVOT MOUNTING FEET AT BOTTOM OF ENCLOSURE TO MOUNTING POSITION. (90° ANGLE WITH THE BOTTOM OF THE ENCLOSURE). RE-TIGHTEN TO 65 TO 75 IN.-LBS.
3. POSITION ENCLOSURE ON SURFACE MOUNTING BRACKET.
4. FASTEN MOUNTING FEET TO MOUNTING SURFACE. (HARDWARE NOT INCLUDED)
5. FOR "A" DIMENSION, SUBTRACT 2-13/32 FROM THE CABINET HEIGHT. (CABINET HEIGHT FROM OUTSIDE TO OUTSIDE OF ENCLOSURE)
6. UL LISTED RAINTIGHT HUBS ARE TO BE USED WHEN MOUNTING CONDUIT HUBS IN THE TOP ENDWALL OR SIDEWALLS. SEE CONDUIT HUB INFO BELOW.



CONDUIT HUBS

FOR TYPE 3R AND 3S APPLICATIONS, USE RAINTIGHT HUBS THAT COMPLY WITH THE REQUIREMENTS IN THE STANDARD FOR OUTLET BOXES AND FITTINGS, UL 514, OR CONDUIT HUBS LISTED BELOW.

FOR TYPE 12 APPLICATIONS, USE THE FOLLOWING SQUARE D COMPANY CONDUIT HUBS:

CONDUIT SIZE (IN.)	ZINC PLATED CATALOG NO.	CHROME PLATED CATALOG NO.	TORQUE FT.-LBS
.50	H050	H050CP	66
.75	H075	H075CP	66
1.00	H100	H100CP	83
1.25	H125	H125CP	83
1.50	H150	H150CP	83
2.00	H200	H200CP	133
2.50	H250	H250CP	133
3.00	H300	H300CP	133
3.50	H350	H350CP	133
4.00	H400	H400CP	133

NOTES: IF ENCLOSURE IS TO BE USED AS TYPE 3R, IN AN OUTDOOR APPLICATION, REMOVE DRAIN SCREWS IN BOTTOM ENDWALL AND DISCARD.

SQUARE D COMPANY

RACEWAY SCHEDULE

Installation Key

1. Supplied and installed by Subcontractor
2. Underground portion supplied and installed by Bechtel- Remainder by Subcontractor

Material Key

1. IMC
2. PVC u/g. IMC a g

No	From	To	Size	Mat. Type	Approx Length	Cable I.D.	Installed by:	Comments
1	T-1	DS-1	1 1/2"	2	325'	1	2	
2	DS-1	BSP-1	3/4"	1	1'	2	1	
3	BSP-1	M6	3/4"	1	16'	3	1	Seal-off required ✓
4	BSP-1	M3	3/4"	1	13'	4	1	Seal-off required ✓
5	BSP-1	M1	3/4"	1	10'	5	1	Seal-off required ✓
6	BSP-1	BSP-2	1"	1	5'	6	1	
7	BSP-2	Site Pro 3	3/4"	1	2'	7	1	
8	Site Pro 3	Site Pro 2	3/4"	1	20'	8	1	Seal-off required ✓
9	J-box 6	J-box 7	3/4"	1	10'	9	1	Skid interconnect ✓
10	J-box 1	J-box 2	1"	2	380'	10,11	2	
11	Site Pro 3	J-box 3	3/4"	2	380'	12	2	
12	Site Pro 3	J-box 5	3/4"	2	625'	13	2	
13	J-box 1	J-box 4	1"	2	625'	14,15	2	
14	Site Pro 3	J-box 1	3/4"	1	2'	10,14	1	
15	BSP-2	J-box 1	3/4"	1	2'	11,15	1	
16	J-box 2	DS-4	3/4"	1	1'	11	1	
17	J-box 2	DS-2	3/4"	1	1'	10	1	
18	DS-4	SPC-1	3/4"	2	20'	16	2	Seal-off required
19	NOT USED							
20	DS-2	Sump Casing	3/4"	2	20'	17	2	Seal-off required
21	J-box 3	Sump Casing	3/4"	2	20'	18	2	Seal-off required
22	J-box 4	DS-5	3/4"	1	1'	15	1	
23	J-box 4	DS-3	3/4"	1	1'	14	1	
24	DS-5	SPC-2	3/4"	2	20'	19	2	Seal-off required
25	NOT USED							
26	DS-3	Sump Casing	3/4"	2	20'	20	2	Seal-off required
27	J-box 5	Sump Casing	3/4"	2	20'	21	2	Seal-off required
28	BSP-2	Receptacle	1/2"	1	1'	22	1	

CABLE SCHEDULE

Installation Key

1. Supplied and installed by subcontractor
2. Supplied by Bechtel, installed by subcontractor
3. Supplied and installed by Bechtel, terminated by subcontractor

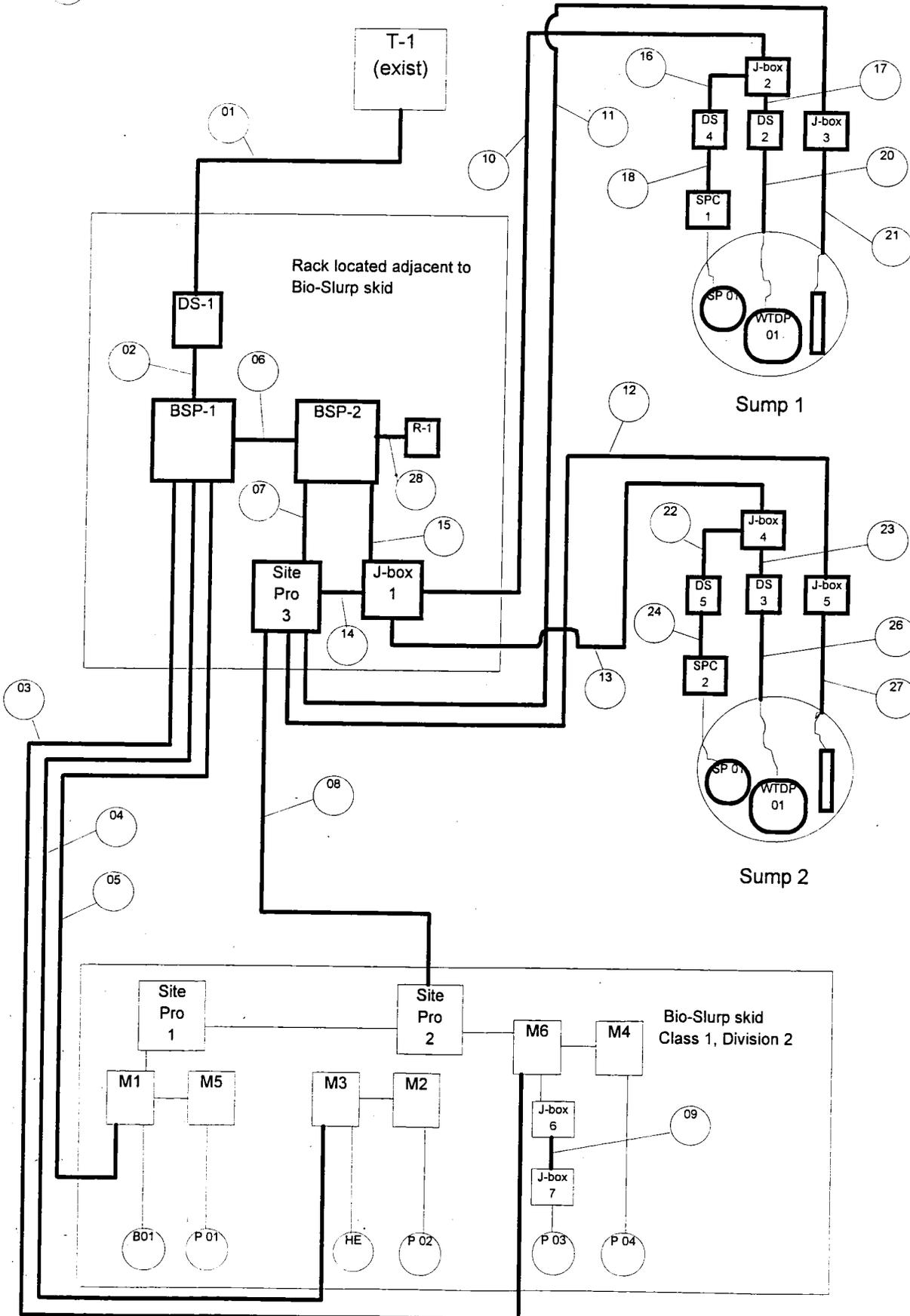
Cable No.	From	To	Type	Conductors	Approx. Length	Raceway I. D.	Inst. by	Comments
1	T-1	DS-1	Cu, THWN or XHHW	3ea #2 w/ #8 gnd	350' 1050 350	1	1	480v
2	DS-1	BSP-1	Cu, THWN or XHHW	3ea #2 w/ #8 gnd	5' 15 5	2	1	480v
3	BSP-1	M6	THWN	3ea #10, w/ #10 gnd	26' 104	3	1	480v
4	BSP-1	M3	THWN	3ea #10, w/ #10 gnd	23' 92	4	1	480v
5	BSP-1	M1	THWN	3ea #8, w/ #8 gnd	20' 80	5	1	480v
6	BSP-1	BSP-2	THWN	3ea #6, w/ #6 gnd	10' 40	6	1	480v
7	BSP-2	Site Pro 3	THWN	2ea #12, w/ #12 gnd	5' 15	7	1	230v
8	Site Pro 3	Site Pro 1	Belden #9841	2c #24 TWSH PR	50'	8	1	Network Interconnect
9	J-box 6	J-box 7	THWN	3ea #12 w/ #12 gnd & 2 ea #14	10' 40	9	2	Skid Interconnect
10	Site Pro 3	DS-2	THWN	2ea #12 w/ #12 gnd	390' 1170	14, 10, 17	1	230v to WTDP 1
11	BSP-2	SPC-1	THWN	2ea #12 w/ #12 gnd	390' 1170	15, 10, 16	1	115v to Scavenger Pump 1
12	Site Pro 3	J-box 3	THWN	6ea #14	390'	11	1	Red, Orange, White, Black, Blue, Green
13	Site Pro 3	J-box 5	THWN	6ea #14	635'	12	1	Red, Orange, White, Black, Blue, Green
14	Site Pro 3	DS-3	THWN	2ea #12 w/ #12 gnd	635' 1905	14, 13, 23	1	230v to WTDP 2
15	BSP-2	SPC-2	THWN	2ea #12 w/ #12 gnd	635' 1905	15, 13, 22	1	115v to Scavenger Pump 2
16	DS-4	SPC-1			20'	18	3	Furnished w/ SP Controller
17	DS-2	WTDP-1			20'	20	3	Furnished w/ Pump
18	J-box 5	Level Probe 1			20'	21	3	Furnished w/ Probe
19	DS-5	SPC-2			20'	24	3	Furnished w/ SP Controller
20	DS-3	WTDP-2			20'	26	3	Furnished w/ Pump
21	J-box 5	Level Probe 2			20'	27	3	Furnished w/ Probe
22	BSP-2	Recept.	THWN	2ea #12 w/ #12 gnd	5' 15	28	1	115v 20a Recept.

EQUIPMENT SCHEDULE

Equip. I. D.	Description	Supplied by	Installed by	Location
T-1	Transformer, 2460 480 3ph <i>PRIMARY 264KVA</i>	Existing	N/A	
BSP-1	Distribution Panel, 125a, 480v, 3ph	Bechtel	Subcontractor	Rack adjacent to Bio-Slurp Skid
BSP-2	Mini Power Zone, 15KVA, 1ph, 480v primary, 240/120v secondary, Square D #MPZ15S40F	Bechtel	Subcontractor	Rack adjacent to Bio-Slurp Skid
DS-1	Disconnect Switch, HD, 600v, 100a, single throw, 3 wire. Square D #H363RB	Bechtel	Subcontractor	Rack adjacent to Bio-Slurp Skid
DS-2	Disconnect Switch, 2 pole, 240v, 20a	Subcontractor	Subcontractor	Located at Sump 1
DS-3	Disconnect Switch, 2 pole, 240v, 20a	Subcontractor	Subcontractor	Located at Sump 2
DS-4	Disconnect Switch, 1 pole, 120v, 20a	Subcontractor	Subcontractor	Located at Sump 1
DS-5	Disconnect Switch, 1 pole, 120v, 20a	Subcontractor	Subcontractor	Located at Sump 2
Site Pro 1	Pump Control Panel	Bechtel	N/A	Mounted on Bio-Slurp Skid
Site Pro 2	Pump Control Panel	Bechtel	N/A	Mounted on Bio-Slurp Skid
Site Pro 3	Pump Control Panel	Bechtel	Subcontractor	Rack adjacent to Bio-Slurp Skid
SPC-1	Scavenger Pump Control Panel	Bechtel	Bechtel	Located at Sump 1
SPC-2	Scavenger Pump Control Panel	Bechtel	Bechtel	Located at Sump 2
SP-1	Scavenger Pump	Bechtel	Bechtel	Located at Sump 1
SP-2	Scavenger Pump	Bechtel	Bechtel	Located at Sump 2
WTDP-1	Water Table Depression Pump	Bechtel	Bechtel	Located at Sump 1
WTDP-2	Water Table Depression Pump	Bechtel	Bechtel	Located at Sump 2
R-1	GFCI receptacle, 20a, w/ weatherproof cover	Subcontractor	Subcontractor	Rack adjacent to Bio-Slurp Skid
J-box 1	Pull box, NEMA 3R, 8"x8"x6", w/ cover	Bechtel	Subcontractor	Rack adjacent to Bio-Slurp Skid
J-box 2	Pull box, NEMA 3R, 8"x8"x6", w/ cover	Bechtel	Subcontractor	Rack at sump 1
J-box 3	Junction box, NEMA 3R, 8"x8"x6", w/ cover	Bechtel	Subcontractor	Rack at sump 1
J-box 4	Pull box, NEMA 3R, 8"x8"x6", w/ cover	Bechtel	Subcontractor	Rack at sump 2
J-box 5	Junction box, NEMA 3R, 8"x8"x6", w/ cover	Bechtel	Subcontractor	Rack at sump 2
J-box 6	Junction box	Existing	N/A	Bio-Slurp Skid
J-box 7	Junction box	Existing	N/A	Bio-Slurp Skid

01

Denotes raceway i.d.



SCOPE OF WORK
228-SW567-00
REVISION 0
PAGE 6 OF 12

CEF-JP5-13

EDGE OF MOUND

BLDG 69

SEE NOTE 8

Sump 1

TANK 76D

TANK 76E

CEF-076-13

BLDG 70

CEF-076-32

GRADE TO DRAIN
(SEE NOTE 4)

CEF-076-17

PAVED ROAD

CEF-076-18

TANK 76B

TANK 76C

ESP. 1, ESP. 2

2" HEADER PIPE
(SEE NOTE 5)

CEF-076-11 (SEE NOTE 3)

CEF-076-R2 CEF-076-16

MINIMIZE DISTANCE

TREATMENT COMPOUND
(SEE NOTE 6)

NOTE 8
GRADE TO DRAIN
(SEE NOTE 4)

Bio-Sump

TANK 76

TANK 76A

260

09

T-1

BLDG 285

SHLD

PAVED

LOOP ROAD

DOUBLE SWING GATE

CEF-076-270

CEF-076-07

CEF-076-19

DITCH

MARKS AND MISCELLANEOUS PAVEMENT IN THIS AREA NOT SHOWN

GRASS

CEF-372-04

GRASS

ATTACHMENT 1

① RAILWAY I.D.

228567-008-SW567-001

Sub Job 000 Rec Type MI Comm Date 11/15/1999 Admin Rec N CCN-Item No. 016279-1

Subject DO#0022 FIELD FILE - BIOSLURPER MAINTENANCE MANUAL, VOLUME I+II - NORTH TANK FUEL FARM (NTFF) - NAS CECIL FIELD

From BAUER, H. Org BEI To PDCC Org BEI File Loc M Closes CCN

Comm Reference Published N

Cross Reference (Affected Doc) DO#0022 Field CCN

Site Codes 289

Subject Codes 3020

Film Reel

Owed By Org Due Date Closing CCN

Owed To Org Forecast Date Compl Date



0162

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SOUTHERN DIVISION
 NAVAL FACILITIES ENGINEERING COMMAND
 NORTH CHARLESTON, SOUTH CAROLINA

