FINAL

REMEDIAL ACTION WORKPLAN,
2nd ADDENDUM

Enzyme-Enhanced Bioremediation At the AAFES Main Post Gas Station, Building 699 Fort Monmouth, New Jersey

U.S. Army Garrison
Fort Monmouth, New Jersey

Directorate of Public Works

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1900 Frost Road, Suite 110
Bristol, Pennsylvania 19007

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LIST OF ACRONYMS AND ABBREVIATIONS

AMC	U.S. Army Material Command
A2	TPH Bacterial Consortium
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
BUST	Bureau of Underground Storage Tanks
CADD	Computer Aided Drafting and Design
CBN	Custom Blend Nutrients
CEA	Classification Exception Area
CECOM	U.S. Army Communications and Electronics Command
COC	Constituent of Concern
COR	Contracting Officer's Representative
CY	cubic yard
DICAR	Discharge Investigation and Corrective Action Report
DPW	Directorate of Public Works
EA	Enzyme Accelerator
EEB	Enhanced-Enzyme Bioremediation
ETEC	Enzyme Technologies, Inc.
HASP	Health and Safety Plan
GAC	Granular Activated Carbon
GES	Groundwater & Environmental Systems, Inc.
GPS	Global Positioning System
GWQS	Ground Water Quality Standards
MSDS	Material Safety Data Sheet
MDL	Method Detection Limit
mg/Kg	milligram per Kilogram
MZC	Multi-Enzyme Complexes
NJDEP	New Jersey Department of Environmental Protection
ppm	Part per million
PID	Photoionization Detector
QAPP	Quality Assurance Project Plan
RAW	Remedial Action Workplan
RAWA	Remedial Action Workplan Addendum
RDCSCC	(NJDEP) Residential Direct Contact Soil Cleanup Criteria
RW	Recovery Well
SA	Second Addendum
SOW	Statement of Work
SPP	Separate-phase Product
SVE	Soil Vapor Extraction
TES	Technical Evaluation and Summary
TPHC	Total Petroleum Hydrocarbons

LIST OF ACRONYMS AND ABBREVIATIONS
(continued)

TVS	TECOM-Vinell Services, Inc.
TWA	Treatment Works Approval
UST	Underground Storage Tank
US	United States
VOC	Volatile Organic Compound
WP	Workplan

1.0 INTRODUCTION

Versar, Inc. (Versar) has been contracted by the United States (U.S.) Army Fort Monmouth (Fort Monmouth), Directorate of Public Works (DPW), Fort Monmouth, New Jersey to prepare a second addendum (SA) to the Remedial Action Workplan (RAW) for the AAFES Main Post Gas Station, Building No. 699 located in the Main Post area of Fort Monmouth. This SA addresses the planned implementation of enzyme-enhanced bioremediation (EEB) as a supplement to the previously proposed remedial system upgrade for the Main Post Gas Station, Building 699. The proposed system upgrade was presented in the Remedial Action Workplan Addendum (RAWA), dated 10 June 1999 and prepared by Groundwater & Environmental Systems, Inc. (GES). This SA has been prepared in partial fulfillment of Contract No. DACA 51-00-D-004, Delivery Order No. 0002 for submittal to the New Jersey Department of Environmental Protection (NJDEP) for review and approval.

1.1 Background

Fort Monmouth is located in the central-eastern portion of New Jersey in Monmouth County, approximately 45 miles south of New York City and 70 miles northeast of Philadelphia. In addition to the Main Post, the installation includes two subposts, the Charles Wood Area and the Evans Area. The Main Post (Figure 1) encompasses approximately 630 acres and is generally bounded by State Highway 35, Parkers Creek, Lafetra Brook, the New Jersey Transit Railroad, and a residential area to the south. The post was established during WW I, in 1918, as an Army Signal Corps training center. The Main Post currently provides supporting administrative, training, and housing functions, as well as many of the community facilities for Fort Monmouth. The primary mission of Fort Monmouth is to provide command, administrative, and logistical support for Headquarters, U.S. Army Communications and Electronics Command (CECOM). CECOM is a major subordinate command of the U.S. Army Material Command (AMC) and is the host tenant at Fort Monmouth. The Main Post Gas Station – Building 699 ("the site") is approximately one acre in size and serves as the only on-base Main Post location for non-military vehicles to obtain fuel. Figure 2 shows the layout of the site.

On October 19, 1989, the DPW contacted NJDEP to report an apparent release of gasoline from the piping system at the gas station. The loss of product was discovered as a result of an inventory discrepancy found during routine inventory control. Subsequent pressure testing of the gasoline system indicated that the leak was located in the product line between the tanks and pumps. An Incident Number was assigned to the site by the NJDEP (#89-10-19-1329) for the gasoline release. Following the release, the DPW replaced the piping system connecting the USTs and the fuel pumps with equipment that was compliant with NJDEP Bureau of Underground Storage Tanks (BUST) requirements.

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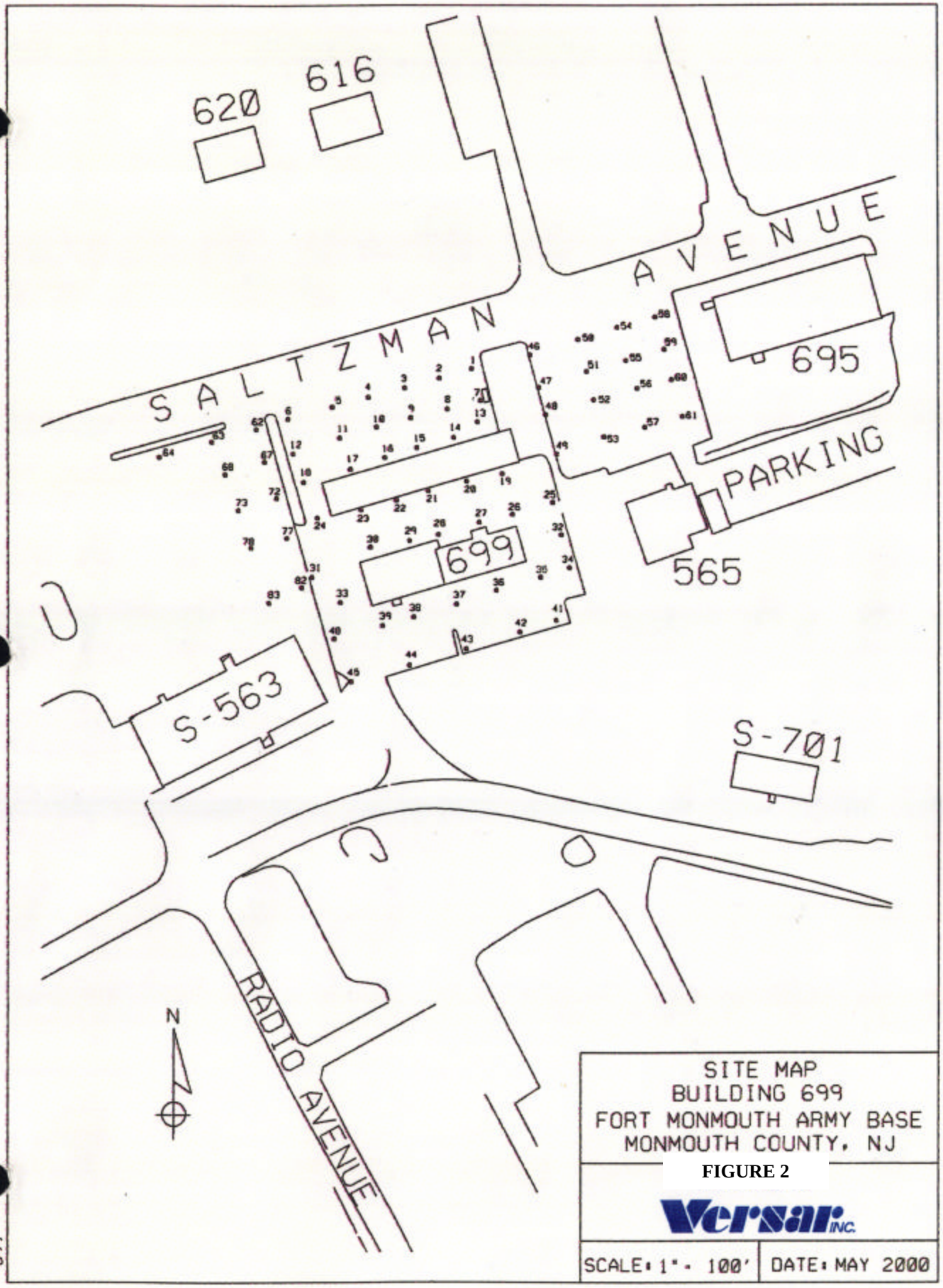

620
616
SALTZMAN AVENUE
695
PARKING
699
565
S-563
S-701
RADIO AVENUE
N
SITE MAP
BUILDING 699
FORT MONMOUTH ARMY BASE
MONMOUTH COUNTY, NJ
Versar INC.
SCALE: 1" = 100'
DATE: MAY 2000

FIGURE 2

699

A separate-phase product (SPP) recovery pump was then installed in a monitoring well immediately downgradient of the source in an attempt to recover remaining SPP. In response to NJDEP's request, Fort Monmouth submitted a Discharge Investigation and Corrective Action Report (DICAR), dated 3 July 1990.

The Krydon Group, Inc. (Krydon) was contracted to determine the extent of gasoline contamination at the site by means of a soil boring program conducted in July 1993. Additionally, in response to the 1989 release, seventeen (17) monitoring wells and three (3) recovery wells were installed at the site. Further, in a letter dated June 18, 1993, the NJDEP requested submission of a RAW, which was submitted by the U.S. Army on October 12, 1993 (Krydon, 1993).

The existing groundwater recovery and treatment system extracts groundwater from one (1) recovery well (RW-11). TECOM-Vinell Services, Inc. (TVS) personnel currently operate and maintain the existing groundwater recovery and treatment system. The current treatment system consists of one (1) sediment filter, and three (3) one hundred and eighty (180) pound liquid-phase granular activated carbon (GAC) units installed in series. The GAC units provide the necessary treatment for the removal of volatile organic compounds (VOCs) from the extracted groundwater. The treated groundwater is then discharged to the sanitary sewer in accordance with Fort Monmouth's existing Treatment Works Approval (TWA) Permit with the Northeast Monmouth County Regional Sewerage Authority.

GES was contracted by DPW (through TVS) to prepare a Remedial Action Workplan Addendum (RAWA) for the site. As part of this effort, GES performed remedial action pilot tests to evaluate potential remedial options. The RAWA (GES, 1999), dated 10 June 1999 was submitted to NJDEP and provided a brief history of the site and area of concern, a performance summary of the current groundwater remedial system, a summary of groundwater monitoring and sampling data, and the design and specifications of a proposed remedial system upgrade. As described in the RAWA, the proposed remedial system upgrade utilized soil vapor extraction (SVE) and groundwater pumping to extract soil vapor and groundwater from existing monitoring wells and proposed extraction laterals and wells. Furthermore, it proposed VOC removal from the groundwater using in-situ air stripping (air sparging). The extracted soil vapor and groundwater were to be treated and discharged in accordance with applicable discharge permits. The RAWA also established a proposed Classification Exception Area (CEA) encompassing the estimated capture zone of the proposed upgraded remedial system.

Subsequent to submission of the RAWA, further characterization and evaluation of site conditions identified the potential existence of clays in the upper horizon at the site. It was presumed that these soils would not be effectively addressed by the proposed SVE system, which is typically designed to remediate permeable sandy soils, such as those underlying the upper clay unit at the site. EEB was therefore proposed to attempt to remediate the contaminated soils in the upper soil horizon within an estimated depth of 3-

4 feet (ft.). EEB involves the process of transforming hazardous constituents to non-hazardous ones in a biological system, and is the result of complex biochemical reactions in which microorganisms (bacteria) convert the hazardous constituents to energy and cell mass. To initiate this process, high levels of target-specific, petroleum-degrading biological enhancements (enzymes, bacteria, nutrients) and oxygen need to be provided to the targeted contaminated soils.

To further delineate the horizontal and vertical extent of soil contamination at the site and to identify "hot spot" areas that could be addressed by the EEB, as well as to support design of the proposed SVE system, supplemental soil sampling was performed at the site in March and April 2000 by DPW and TVS personnel over a sampling grid encompassing eighty-three (83) locations. The borings were installed with a Geoprobe®, and soil samples were collected at 6-inch alternating intervals to a depth of twelve (12) ft. for a total of twelve (12) samples per location. The samples were analyzed for VOCs, total petroleum hydrocarbons (TPHC), lead, and percent (%) solids.

1.2 Objective

The objective of this SA to the RAW is to summarize the additional characterization performed at the site, and present a supplemental site remediation (EEB) for the impacted clay-rich soils beneath the Main Post Gas Station. The purpose of the planned supplemental activities is to inject biological enhancements into the shallow subsurface soils at identified "hot spot" areas to accelerate remediation of "petroleum" contaminants that might not be effectively addressed by the proposed SVE and air sparging system, thereby improving overall remedial performance at the site.

The activities addressed in this SA to the RAW include:

- Presenting and summarizing the results of the additional soil sampling performed in March/April 2000 to identify "hot spot" areas and determine the areal extent of low-permeable soils;
- Planning the application of EEB to "hot spot" areas using a Geoprobe® delivery system;
- Providing procedures for applying the biological enhancements;
- Conducting post-injection soil sampling to evaluate effectiveness of the supplemental site remediation activities; and
- Preparing a Technical Evaluation and Summary Report to document findings.

Construction of the proposed remedial system upgrade, including the SVE system extraction laterals and extraction and sparge wells, will be completed prior to implementing the EEB application. These activities will involve the excavation and removal of subsurface soils some of which may be within the delineated "hot spot"

locations. The EEB application will then be directed toward contaminated shallow subsurface soils within the remaining “hot spot” locations.

2.0 SITE SETTING

2.1 Site Description

As reported in the RAWA, the site is located on Saltzman Avenue, a thoroughfare through Fort Monmouth. The site is approximately one acre in size and serves as the only on-base Main Post location for non-military vehicles to obtain fuel. The site consists of a service station building (Bldg. 699) and two active pump islands under canopy. The station has six 10,000-gallon, fiberglass USTs that store various grades of gasoline products. Building 699 was historically utilized as an automotive service garage, and there are four bays located at the eastern side of the building. However, limited auto servicing is still performed. The site is approximately ninety percent covered by impervious surfaces including pavement, concrete islands, and the service station. Large paved parking areas exist to the east and west of the site. A large grassy area is found to the north across Saltzman Avenue. Building 699 is located approximately 750 ft. northwest of Husky Brook, which empties into Oceanport Creek. Topography at the site is relatively flat, sloping gradually to the southeast.

The current groundwater treatment system is located within an enclosure area on the concrete island that borders the eastern side of the site. As previously discussed, restoration/reconfiguration of the site is planned for implementation. Existing facilities will be demolished, and new refueling facilities and an overhead canopy will be constructed. The proposed remedial system upgrade will be located in a separate fenced enclosure, adjacent to the current treatment system enclosure.

2.2 Regional Geology

As reported in the RAWA (GES, 1999), Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain Physiographic province. The site is located in what may be referred to as the Outer Coastal Plain subprovince, or the Outer Lowlands. In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, and gravel. The mineralogy ranges from quartz to glauconite. The New Jersey Coastal Plain formations record several major transgressive/regressive cycles and contain units, which are generally thicker to the southeast and reflect a deeper water environment. Over twenty (20) regional geologic units are present within the sediments of the Coastal Plain. Regressive, upward coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations, and the Cohansey Sand), while the transgressive deposits act as confining units (e.g., the Merchantville, Marshaltown, and Navensink Formations). The individual thickness for these units varies greatly (i.e., from several ft. to several hundred ft.). The lithologies observed in borings installed within the Main Post area have reportedly consisted of fine-to-medium grained sands, with occasional lenses or lamentations of gravel silt and/or clay.

Based on past drilling, the depth to bedrock is greater than twenty (20) ft. A generalized stratigraphic sequence at the site (progressing upward) includes a lower (Sandy Hook) and upper (Shrewsbury) member of the Red Bank sand. The lower member is a dark gray to black, medium-to-fine grained sand with abundant clay, mica, and glauconite. The upper is a yellowish-gray to reddish brown clayey, medium-to-coarse grained sand that contains abundant rock fragments, minor mica, and glauconite.

2.3 Hydrogeology

Groundwater has been encountered at depths of between two (2) and fourteen (14) ft. across the site. During soil sampling at the site, unsaturated soils were reportedly encountered up to twelve (12) ft. below ground surface (bgs). Seasonal water table fluctuations are expected to be limited to two (2) to three (3) ft. Fluctuations may also be locally influenced by tidal influence (based on proximity to the Atlantic Ocean, rivers, tributaries), the nature of fill material, presence of clay and silt lenses in the overburden, and local recharge areas (streams and lakes). The interbedded sequences of sand and clay transmit water under both confined and unconfined conditions. The intermittent clay strata serve as semi-confining beds, where present. Based on GES groundwater elevation data from July 1998 to February 1999, the predominant groundwater flow direction is northeast to east.

3.0 SITE CHARACTERIZATION

3.1 Previous Soil Sampling Summary

In 1993, samples were collected to further define the extent of gasoline contamination on the east side of the site. A total of twenty-seven (27) soil samples were collected at 5.5 ft. below grade (the soil-groundwater interface). Based on the soil analytical data, total benzene, toluene, ethylbenzene, and xylene (BTEX) concentrations ranged from 125 to 2170 milligrams per Kilogram (mg/Kg), and total VOCs ranged from 307 to 2877 mg/Kg (GES, 1999). However, the extent of contamination was not completely defined. In September 1999, four USTs were discovered below the pump island area on the west side of the site. The USTs and associated contaminated soil were removed, and soil sampling was conducted by DPW and TVS. The data indicated that total BTEX concentrations in the soils beneath the USTs ranged from 2 to 1487 mg/Kg, and total VOCs ranged from 26 to 1728 mg/Kg (DPW, 1999).

3.2 March/April 2000 Geoprobe Sampling

As previously discussed, supplemental soil sampling was performed at the site in March and April 2000 by DPW and TVS personnel to further delineate the horizontal and vertical extent of soil contamination, and to identify "hot spot" areas that could be addressed by EEB, as well as to support design of the proposed SVE system. TVS collected soil samples using a Geoprobe® on a sampling grid established across the site at 30-foot intervals, totaling 83 potential sampling locations. Figure 2 shows the sampling grid for the Geoprobe® soil sampling. Soil samples were collected at alternating 6-inch intervals from ground surface to a depth of 12 ft. at each location for a total of 12 samples per boring. Each boring location was then surveyed using a Global Positioning System (GPS). The collected samples were analyzed at the Fort Monmouth Environmental Testing Laboratory (DPW, 2000) for VOCs (EPA SW-846 Method 8260), Total Petroleum Hydrocarbons (TPHC) (NJDEP Method OQA-QAM-025, 10/97), lead (EPA SW-846 Method 3051A/ Method 3111B FLAA PB), and percent solids. Appendix A provides a copy of Fort Monmouth Standard Operating Procedure (SOP) No. SAM-0221 entitled: Geoprobe Sampling Methods for the AAFES Main Post Gas Station, Building 600, dated 24 February 2000. SAM-0221 documents the procedure used to collect samples to delineate the extent of gasoline contamination at Building 699.

Table 3-1 (following page 19) presents a summary of the analytical results in mg/Kg for the March/April 2000 soil Geoprobe® sampling. The analytes listed include: TPHC, lead (Pb) and the VOCs detected above the respective analytical method detection limits (MDLs) (2-Butanone, 2-Chloroethyl vinyl ether, trichloroethylene (TCE) benzene, perchloroethylene (PCE), ethyl-benzene, xylene, methylene chloride, acetone, toluene, and chloroform). Table 3-1 also lists the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) in mg/Kg for each of the listed constituents of concern (COCs).

(Note: The Method Detection Limit or MDL for each analyte is either at or below the respective RDCSCC.) Each sample that exceeded the respective RDCSCC has been shown in bold print and the table cell has been shaded (e.g., **9.4**). If there was no detection for any COC at a sampling interval, the interval has not been listed in Table 3-1 for the respective boring location. As can be seen in Table 3-1, COCs were detected in fifty-three (53) of the eighty-three (83) boring locations. There were no detections for analyzed constituents at nineteen (19) boring locations: Nos. 37, 39, 40 and 40D (duplicate sample), 41, 42, 44, 51, 52, 53, 54, 55, 56, 57, 59, 60 and 60D (duplicate sample), 63, 64, 73, and 83. At eleven (11) boring locations: Nos. 65, 66, 69, 70, 71, 74, 75, 76, 79, 80, and 81, no samples were collected. In evaluation of the preliminary field investigation efforts, these borings were determined to be out of the area of concern and no samples were taken.

As can be expected in characterizing a site following a release of gasoline, the detected COCs at a majority of the borings were TPHC and BTEX. TPHC was detected at forty-one (41) boring locations with nineteen (19) locations containing detections above the RDCSCC of 1000 mg/Kg. The detections ranged to a maximum of 8,739.63 mg/Kg at Boring No. 21. Benzene was detected at twenty-two (22) boring locations with twenty (20) locations containing detections above the RDCSCC of 3 mg/Kg. The detections ranged to a maximum of 590 mg/Kg at Boring No. 48. Toluene was detected at twenty-four (24) boring locations with six (6) locations containing detections above the RDCSCC of 1000 mg/Kg. The detections ranged to a maximum of 2500 mg/Kg at Boring No. 48. Ethyl-benzene was detected at twenty-eight (28) boring locations with two (2) locations containing detections above the RDCSCC of 1000 mg/Kg. The detections ranged to a maximum of 1200 mg/Kg at Boring No. 48. Xylene was detected at twenty-seven (27) boring locations with eighteen (18) locations containing detections above the RDCSCC of 410 mg/Kg. The detections ranged to a maximum of 6900 mg/Kg at Boring No. 48. Except for four (4) detections at Boring Nos. 13, 16, and 32 that were above the RDCSCC for Methylene Chloride of 49 mg/Kg, there were no detections of the remaining VOCs/SVOCs (2-Butanone, 2-Chloroethyl vinyl ether, TCE, PCE, Acetone, and Chloroform) above the respective RDCSCCs. Methylene Chloride was detected in one (1) of the Laboratory Method Blanks and is generally a laboratory contaminant. Lead was detected in twenty-nine (29) borings, but none of the detections exceeded the RDCSCC of 400 mg/Kg.

Figures 3, 4, 5, 6, and 7 (provided in Appendix B) provide a graphical representation of the analytical results for TPHC, benzene, toluene, ethyl-benzene, and xylene, respectively for each boring location by sampling interval. At sampling intervals where the detection exceeded the RDCSCC, the detection has been “boxed” or outlined in “red”. Not detected (ND) has been listed for results observed below the MDL for the respective analyte. As can be seen from Figures 3 through 7, the majority of the detections that exceed the respective RDCSCCs are located in an area encompassing approximately 22,000 square feet to the north of the existing fuel islands and bordered (to the north) by Saltzman Avenue.

For the purposes of this effort, detections of benzene and xylene in the shallow subsurface (e.g., 0 – 3 ft.) will be used to delineate "hot spot" areas to focus the EEB application. Table 3-2 presents a summary of results for benzene and xylene at the twenty (21) borings with detections (for both benzene and xylene) above the RDCSCC. As can be seen in Table 3-2, there are thirteen (13) boring locations (Nos. 1, 2, 5, 7, 8, 11, 13, 15, 19, 20, 21, 46, and 47) with benzene or xylene detections above the RDCSCC within the shallow subsurface (0 – 3 ft. bgs). In addition, Boring Nos. 3, 9, and 14 are in close proximity to the initially identified boring locations and contain detections above the RDCSCC just below the 3 ft. depth. Further, Boring No. 48 contained the maximum detections for benzene, toluene, ethyl-benzene, and xylene from the March/April 2000 soil sampling and while the detections were at depths greater than the established target depth of 3 ft., has been included to evaluate the effectiveness of the EEB application in the deeper zones. These seventeen (17) total boring locations will be the focus of the EEB implementation.

A secondary objective of the supplemental soil sampling performed in March and April 2000 was to attempt to confirm the existence of clays or a confining clay layer in the upper horizon at the site. It was presumed that these soils would not be effectively addressed by the proposed SVE system, which is typically designed to remediate permeable sandy soils, such as those found beneath the clays at the site. Review of the boring logs generated during the Geoprobe® sampling conducted in March and April 2000 showed a number of observed locations with silty clay conditions. These clays ranged primarily from 0.5 ft. to 10 ft. in depth, often occurring as clay lenses, confirming the feasibility of implementing EEB as a supplement to the previously proposed remedial system upgrade.

Table 3-2

Main Post Gas Station - Bldg. 699

Summary of Soil Analytical Results for Benzene and Xylene at Borings with Detections Above NJDEP Soil Cleanup Criteria

(mg/Kg)

BENZENE																					
Boring No.	1	2	3	5	7	8	9	10	11	13	14	15	16	18	19	20	21	22	46	47	48
Depth																					
6-12"	ND	ND	ND		ND	**5.9**	ND	ND	ND	**5.2**	ND	ND	1.5	ND	ND	ND	ND	ND	**3.9**	**3.7**	1.2
18-24"	0.66	1.1	ND		ND	**14**	ND	ND	ND	**6.5**	ND	ND	0.35	**4.4**	ND	ND	ND	ND	**3**	**3.3**	1.1
30-36"	**9.4**	**3.4**	ND		**39**	**35**	ND	ND	**7.6**	**77**	ND	**14**	1.1	ND	**19**	**26**	**22**	**17**	**19**	ND	0.86
42-48"	**7.4**	**9.4**	**60**		**14**	**34**	ND	ND	**7.8**	**35**	**13**	**17**	ND	ND	**16**	**55**	**25**	ND	**30**	**23**	1.5
54-60"	**18**	**49**	**220**		**20**	**110**	**14**	ND	**9.9**	**64**	ND	**84**	**9.2**	ND	**30**	**41**	**25**	2.3J	**49**	**30**	**5.2**
66-72"	**11**	**54**	**43**		**3**	**230**	**6.1**	ND	ND	**44**	**7.5**	ND	**51**	ND	**16**	**21**	**100**	ND	**28**	**69**	**110**
78-84"	**8.2**	**63**	**25**		**6.5**	**54**	**12**	ND	ND	**24**	**12**	**34**	**18**	ND	**38**	**46**	**15**	ND	**48**	**13**	0.67
90-96"	**2.2**	**15**	**3.3**		**12**	**17**	ND	ND	ND	**11**	**7.6**	**16**	**61**	ND	ND	**44**	**6.3**	ND	**41**	**21**	1.5
102-108"	ND	**46**	**18**		ND	ND	**15**	ND	ND	**47**	**11**	**9.5**	**43**	ND	**13**	**81**	**38**	ND	**48**	**15**	**150**
114-120"	ND	**15**	**11**		ND	ND	**21**	ND	ND	**54**	**9.5**	**14**	**110**	ND	**25**	**58**	ND	ND	**31**	**36**	**590**
126-132"	ND	**4.2**	**6.5**		ND	ND	**12**	0.78	ND	**15**	**13**	ND	**8.9**	ND	**13**	**140**	ND	ND	**67**	**33**	**200**
138-144"	0.38	1.1	**3.7**		ND	ND	ND	**6.9**	ND	**10**	**11**	ND	ND	ND	ND	ND	ND	ND	**18**	**3.6**	**260**
	Residential Direct Contact Soil Cleanup Criteria for Benzene = 3 mg/Kg																				

XYLENE																					
Boring No.	1	2	3	5	7	8	9	10	11	13	14	15	16	18	19	20	21	22	46	47	48
Depth																					
6-12"	ND	ND	0.35J	6.2J	ND	323			16J	24	ND	16J	1.5		5J	ND	16J	ND	17.8	22.1	8.62
18-24"	0.66J	0.36J	0.38J	202	ND	127			47	35	ND	ND	0.67J		27.4	ND	204	36.3	7	10.8	4.73
30-36"	262	1.76	8.9	**730**	**850**	360			**920**	**880**	ND	**680**	8.72		**670**	**490**	**1420**	**1070**	262	9.5J	2.57
42-48"	360	198	**1610**	**1030**	380	**450**			**810**	**470**	**1390**	**840**	210		**600**	**1060**	**1970**	271	400	400	5.8
54-60"	**680**	**460**	**3890E**	257	**690**	**750**			**900**	**780**	**860**	**3590E**	339		**850**	**800**	**1330**	12J	**510**	**590**	173
66-72"	360	348	**410**	243	155	**1670**			116	**540**	**610**	16J	**2300**		400	340	**5200E**	12J	360	**1490**	**2870**
78-84"	222	360	285	**880E**	**460**	350			267	294	289	**1390**	**690**		**730**	**750**	**880**	ND	**640**	225	33.1
90-96"	62	41	5.4J	67	**820**	**1100**			ND	96	38	**620**	**1020**		80	**730**	364	77	**560**	370	50
102-108"	3.65	329	184	230	140	ND			400	**580**	**1170**	355	**840**		207	**1370**	**2410**	96	**640**	358	**1780**
114-120"	0.65J	40	76	150	**700**	ND			330	**750**	**480**	**550**	**1640**		**460**	**960**	116	ND	303	**550**	**6900**
126-132"	0.56J	8.7	21	95	**1190**	ND			329	167	47	72	63		208	**2480**	ND	ND	**870**	**440**	**2990**
138-144"	ND	1.47	3.4J	2.06J	208	19J			ND	114	40	ND	ND		32.9J	16J	ND	ND	183	6.4	**1340**
	Residential Direct Contact Soil Cleanup Criteria for Xylene = 410 mg/Kg																				

KEY:		- Detection above the respective Residential Direct Contact Soil Cleanup Criteria
		- Target depth for EEB application
		- Selected boring locations for EEB application

4.0 ENZYME-ENHANCED BIOREMEDIATION

4.1 Overview of Proposed EEB Implementation

Fort Monmouth proposes to implement EEB to remediate the impacted clay-rich soils in the shallow subsurface beneath Main Post Gas Station and supplement the previously proposed remedial system upgrade. Enzyme Technologies, Inc. (ETEC), Portland, Oregon will support the project. Background information from their Web Site (www.enzymetech.com) has been summarized below to provide an overview of the proposed EEB implementation.

The key to any bioremediation process is the control of specific microorganisms under specific environmental conditions to achieve specific chemical transformations. Bioremediation requires this control be performed in complex hydrogeological settings to transform often complex mixtures of compounds to carbon dioxide and water in a process call "mineralization". The process of transforming a hazardous chemical to a non-hazardous compound in a biological system is a result of complex biochemical reaction in which microorganisms (bacteria) convert the hazardous compound to energy and cell mass. Bioremediation processes are catalyzed chemical reactions in which the microorganism provides the catalyst (enzyme) to transform a specific compound (contaminant) in an oxygen-reduction (redox) reaction. Enzyme production and the subsequent reaction will not occur unless suitable environmental conditions are carefully maintained. The primary components required to sustain a bioremediation process are: a bacteria species capable of producing "target-specific enzymes" to degrade the contaminant, an energy source (contaminant), and an electron acceptor for the redox reaction. Components of secondary importance are: nutrients, moisture, pH, and temperature. The absence or the imbalance of these components may limit the biological process and result in a lack of contaminant transformation. ETEC has developed proprietary methods to enhance the bioremediation process.

Oxygenation is extremely important in the performance of an in-situ bioremediation process, often controlling both the overall rate of contaminant degradation as well as the cleanup levels attainable. Maximizing the available oxygen is critical in order to maximize the degradation rates achievable using the proposed biological enhancement products. There are two common methods for oxygenation of groundwater: 1) air injection, and 2) oxygen (or oxygen-augmented air) injection. With both of these methods, the air or oxygen is forced below the surface into the groundwater to subsequently migrate upward, creating an oxygenated volume of water surrounding the injection location. With air injection, the dissolved oxygen saturation point is approximately 8 to 12 ppm, depending on elevation and temperature. With pure oxygen injection, the dissolved oxygen can typically be increased to 15 to 20 ppm. ETEC manufactures and will provide a BioBox for use at the site that incorporates a unique oxygen mixing process to achieve dissolved oxygen concentrations in the water of 40 ppm or greater, achieving full solubility of the oxygen into the water.

Table 4-1

Procedures for preparing, mixing, and delivering the biological enhancement products

The biological enhancement products will be prepared prior to injection into the soils as follows:

1. Prepare BioBox
   a. Obtain 30 Amp, 110 Volt generator.
   b. Connect mobile BioBox to vehicle.
   c. Connect generator and check operating status of BioBox.

2. Determine injection volumes
   a. Fill BioBox tank (included on trailer) with water.
   b. Read flowmeter totalizer.
   c. Inject water into a geoprobe hole using injection assembly until water flows out of hole or is no longer being accepted.
   d. Read flowmeter totalizer.
   e. Subtract reading in step (d) from reading in step (b): this is the total expected injection volume per well. If the hole continues to take water, a field determination needs to be made regarding injection volume per hole (recommend 20 to 50 gallons, or as much as possible).
   f. Determine the total injection volume required for the entire site by multiplying the volume from (2)(e) by the planned number of geoprobe holes.
   g. If the total estimated volume from 2(f) exceeds the BioBox tank volume, calculate the number of tanks required for the entire project site by dividing the total volume by the useable tank volume (approximately 300 gallons).

3. Prepare for inoculation with Enzyme Accelerator (EA) and Multi-Enzyme Complexes (MZC)
   a. Fill the BioBox tank with water.
   b. Turn on the BioBox and circulate water in the tank with oxygenation system ON.
   c. Circulate water for 10 minutes or until oxygen reaches a minimum of 35 parts per million (ppm).
   d. Add EA and MZC to the tank in relative percentages (FOR EXAMPLE: if the total expected injection volume is 3,000 gallons and the tank volume is 300 gallons, this means that there will be 10 tanks of water injected into the site; therefore, $1/10^{th}$ of the total volume of EA and MZC should be used per batch). The total volume of EA and MZC will be approximately 50 and 25 gallons, respectively.

4. Inoculate the site with EA and MZC
   a. Inject the volume of water determined in step (6)(e) into each hole; monitor the injection volume by using the flowmeter on the BioBox

Table 4-1
(continued)

Procedures for preparing, mixing, and delivering the biological enhancement products

b. Repeat steps (3) and (4) until entire site is inoculated. ALL EA and MZC should be used after completion of these tasks.

5. Prepare for inoculation with Custom Blend Nutrients (CBN) and TPH Bacterial Consortium (A2)
   a. Fill the BioBox tank with water.
   b. Turn on the BioBox and circulate the water in the tank with the oxygenation system ON.
   c. Circulate the water for 10 minutes or until oxygen reaches a minimum of 35 ppm.
   d. Add CBN to the tank in relative percentages as described in step (3)(d). The total volume of CBN and A2 will be approximately 1,000 lbs. and 50 gallons, respectively.
      i. CBN is a dry product and should be apportioned according to weight.
      ii. Use caution when adding to tank to avoid splashing.
      iii. Add CBN to water ONLY, do NOT add water to CBN.
      iv. NOTE: If the formation will only take a small volume of water per injection point, all of the biological products may be injected, but the nutrient volume may need to be reduced.
   e. Add A2 to the tank in relative percentage as described in step (3)(d). The total volume of A2 will be approximately 50 gallons.

6. Inoculate the site with CBN and A2
   a. Inject the estimated volume of water into each hole; monitor the injection volume using the flowmeter on BioBox.
   b. Repeat steps (5) and (6) until the entire site is inoculated. ALL CBN and A2 should be used after completion of these tasks.

The proposed biological enhancements consist of four different products: Enzyme Accelerator (EA), Multi-Enzyme Complexes (MZC), TPH Bacterial Consortium (A2), and Custom Blend Nutrients (CBN). A description of each of the proposed enhancements is provided below:

- EA acts as a pre-treatment agent for enzyme and bacterial applications. EA is a liquid biosurfactant that increases the surface area for enzymes and bacteria, thereby increasing the cleanup rate.
- MZC is a concentrated liquid extract of mono- and dehydroxygenase compounds that are responsible for over 90% of the bioremediation process.
- A2 is a liquid multi-strain bacterial consortium specifically designed to degrade long-chain petroleum hydrocarbons.
- CBN is dry mixture of proprietary nitrogen, phosphorus and potassium compounds with micronutrients.

Material Safety Data Sheets (MSDS) for EA, MZC, and A2 are provided in Appendix C. Water will be oxygenated using an oxygen generator located inside the BioBox and utilized as a transport agent for the biological enhancements.

4.2 EEB Implementation Approach

The application of biological enhancements will be accomplished by using one Geoprobe® rig to install an array of temporary injection points for introduction of the biological enhancements. Injection of the biological products will be continuous from ground surface to three to four ft. in depth. The injection points will be established on 5-foot centers from each of the seventeen (17) selected boring locations for a total of nine (9) injection points per location or one hundred fifty-three (153) total injections. The EEB implementation will be performed following excavation and construction of the planned SVE extraction laterals and wells. Injection points will not be located in backfilled SVE trench areas, or in clean fill areas associated with former USTs. If required, the planned injection pattern will be adjusted away from these areas.

The biological enhancements will be injected in two stages. During stage one, the EA and MZC will be mixed in the Biobox and injected into the ground. During stage two, the CBN and A2 will be mixed in the Biobox and then injected into the same locations. During the initial Geoprobe® installation, a PVC “injection stinger” will be placed in the borehole to keep the hole open until the 2nd injection stage. A production rate of twenty (20) injection points per day has been estimated with penetration depths of 3-4 ft. per borehole. Based on this rate, the 1st stage of biological enhancements will be injected at two (2) boring locations during one day (9 injections per location) followed by the 2nd

stage the next day. This will minimize the treatment area requiring restricted access until the injection process is complete.

Injection of the biological products will be accomplished using a mobile BioBox (Model 10-M). The biological enhancements and BioBox will be supplied by ETEC. Water and electricity for the EEB implementation will be provided by DPW. Assuming an injection volume of ten (10) gallons per well and a total of one hundred and fifty-three (153) injection points, 1,530 total gallons of biological enhancements will be required or five (5) tank volumes (@300 gallons per tank) for each stage. Assuming a product mixture of 5 gallons of EA and 2.5 gallons of MZC per tank for stage 1 and 5 gallons of A2 and 100 pounds of CBN per tank for stage 2, a total of 25 gallons of EA, 12.5 gallons of MZC, 25 gallons of A2, and 500 pounds of CBN will be required.

The injection procedure will be conducted as follows:

- Based on the established grid system from the March/April 2000 soil sampling and the selected boring locations, the planned injection points will be marked on the ground/pavement.
- Required contacts for utility clearances will be made and performed. This information will be confirmed in the daily site logs.
- The Geoprobe® rig will be positioned at the proposed injection location and a concrete core will be used to clear the ground surface/asphalt for the Geoprobe®. The Geoprobe® will then be advanced to the selected application depth.
- Once the probe is inserted to the desired depth and the injection stinger is installed, the BioBox injection hose will be connected to the Geoprobe® assembly using an adapted union.
- Procedures for preparing, mixing, and delivering the biological enhancement products are provided in Table 4-1. Note: Use of high pressure (>40 psi) pumps will ruin the biological products; therefore, the biological enhancement products will be injected using ONLY the pump on the BioBox unit.
- After both stages of enhancement injection have occurred, each Geoprobe® borehole will be abandoned by filling with sand.

During performance of the injection program, an observation of increasing injection pressures and decreasing flow rates should indicate an impermeable boundary. Should this situation be observed, a decision will be made regarding relocation of the proposed injection point.

4.3 Post-Injection Soil Sampling

The objective of post-injection soil sampling is to attempt to determine the extent of biodegradation of contaminants within the treatment zone. Based on NJDEP Technical Requirements for Site Remediation, for in-situ remediation of soils, the minimum post-

remediation sampling frequency is one sample per 900 square foot. Additionally, in accordance with the Technical Requirements, the sample locations are to be biased towards areas that previously exhibited highest contamination.

Post-injection soil sampling will be performed directly adjacent to the seventeen (17) boring locations established as the proposed zones of Geoprobe® enzyme injection (Boring Nos. 1, 2, 3, 5, 7, 8, 9, 11, 13, 14, 15, 19, 20, 21, 46, 47, and 48). The initial boring locations were surveyed using GPS; this should allow the post-injection sampling to be performed directly adjacent to the initial sampling locations. The post-injection soil sampling will be performed 180-days following the completion of the injection program. The soil samples will be collected at alternating 6-inch intervals from ground surface to a depth of 6 ft. at each location for a total of six (6) samples per boring (i.e., 6-12 inches, 18-24 inches, 30-36 inches, 42-48 inches, 54-60 inches, and 66-72 inches). The post injection soil sampling has been proposed to a depth of six (6) ft. to evaluate the direct impact of EEB on the shallow subsurface soils (the primary focus of this effort). The samples will be collected using standard Fort Monmouth DPW Geoprobe® sampling procedures and analyzed for VOCs + 10, TPHC, and percent solids.

4.4 Technical Evaluation and Summary Report

A Technical Evaluation and Summary (TES) Report will be prepared following performance of the post-injection soil sampling and receipt of analytical data. The TES Report will include the analytical data collected prior to the implementation of the EEB program at the site. This data delineates the vertical and horizontal extent of soil contamination. The results of the confirmation sampling will then be presented, and comparisons will be established regarding estimated contaminant reductions.

5.0 PROJECT ORGANIZATION

The Contracting Officer's Representative (COR) for this project is Mr. Kevin Dooney, Chief, Engineering Plans & Services Div., DPW, Fort Monmouth, NJ. The DPW Environmental Coordinator is Mr. Joseph Fallon, CHMM, Fort Monmouth, NJ.

6.0 QUALITY ASSURANCE PROJECT PLAN

Field sampling activities will be conducted in accordance with the NJDEP Field Sampling Manual. All analyses will be conducted in accordance with the NJ Laboratory Certification Program by the Fort Monmouth Environmental Testing Laboratory (NJDEP Certification #13461). A separate Quality Assurance Project Plan will not be submitted for the planned EEB implementation.

7.0 SOIL AND SEDIMENT EROSION

As described within this document, the application of biological enhancements will be accomplished using a Geoprobe® following initial installation of the planned SVE system extraction laterals and extraction and sparge wells. Required soil and sediment erosion control and dust and odor control measures will be implemented as part of the planned remedial (SVE) system upgrade. A soil and sediment erosion control and monitoring plan, and a dust and odor control and monitoring plan (N.J.A.C. 7:26E-6.2(a)10) are not applicable to the proposed site efforts presented within this document.

8.0 SITE SPECIFIC HEALTH AND SAFETY PLAN

A Site Specific Health and Safety Plan, as required by N.J.A.C. 7:26E-6.2(a)(11), will be prepared by the selected EEB implementation contractor to address the planned site activities presented within this document.

9.0 REQUIRED PERMITS

The RAWA (GES, 1999) addresses permits regarding implementation of the proposed remedial system upgrade.

As provided in N.J.A.C. 7:14A-7.5 (Authorization of Discharges to Ground Water By Permit-By-Rule), Subsection (b), any person responsible for discharges to ground water listed in 3i through v are deemed to have a permit-by-rule if the discharge occurs when: 1) NJDEP is remediating a contaminated site as defined in N.J.A.C. 7:26C-1.3, pursuant to the rules at N.J.A.C. 7:14B implementing the Underground Storage of Hazardous Substances Act (N.J.S.A 13:1K-6 *et seq*.), or when the owner or operator of a contaminated site is conducting remediation under NJDEP oversight, or the requirements of the Spill Compensation and Control Act (N.J.S.A. 58:10-23.11), or the Procedures for Department Oversight of the Remediation of Contaminated Sites at N.J.A.C. 7:26C; and 2) the person is in receipt of written approval from NJDEP.

The ground water discharges authorized by permit-by-rule under Subsection (b) include: (iv). Discharges to ground water not to exceed 90 calendar days from any other facility or equipment associated with monitoring, engineering, remedial activities, or design studies necessary to evaluate a contaminated site.

By submittal of this SA to the RAW, Fort Monmouth is requesting written approval for Permit-by-Rule for the proposed EEB implementation and discharge to ground water.

10.0 EFFECTIVENESS ANALYSIS AND CERTIFICATION

As stated in the RAWA (GES, 1999), different remedial approaches had been examined and evaluated, and based upon the technical and site-specific criteria presented in the RAWA and the historical data contained therein, a remedial action encompassing a pump and treat/soil vapor extraction/air-sparging system to remediate soil and groundwater at the site was selected. It was stated at that time that the selection and implementation of this remedial action would be effective and protective of the public health, safety, and the environment as outlined in Section 35(g) of P.L. 1993, c.139 (S-1070) of the Industrial Site Recovery Act.

The intention of the planned implementation of EEB encompassed within this SA to the RAW is to attempt to directly impact identified "hot spots" and remediate contaminated low-permeability soils in the upper soil horizon that might not be effectively addressed by the proposed SVE system, thereby supplementing and enhancing the performance of the selected remedial action.

11.0 IMPLEMENTATION SCHEDULE

DPW has awarded a contract to Versar to implement EEB at the Main Post Gas Station as presented within this SA to the RAW. The implementation schedule will be as follows:

- Preparation of required plans (e.g., Site Specific Health and Safety Plan) – 14 days.
- Procurement and delivery to the site of the BioBox and biological enhancement products – 30 days.
- Site mobilization/utility clearances – 3 days.
- Performance of EEB injection program – 19 days.
- Demobilization – 2 days.
- Post-injection soil sampling – 1 week (to be initiated 180 days following completion of the injection program).
- Submittal of Technical Evaluation and Summary Report – following receipt of analytical data from post-injection soil sampling.

12.0 SITE RESTORATION PLAN AND REMEDIAL SYSTEM DISMANTLING PLAN

As stated in the RAWA (GES, 1999), upon receipt of No Further Action declaration from the NJDEP regarding the remediated soils, DPW will contract to dismantle and remove the aboveground portions of the SVE system. The below ground sections of the SVE systems will be sealed and abandoned in-place following generally accepted procedures. Further, once the groundwater quality has attenuated to concentrations below the applicable NJDEP Ground Water Quality Standards (GWQS) and a No Further Action statement is provided by the NJDEP, DPW will implement proper well abandonment procedures as part of the site restoration plan. All monitoring wells and

vacuum monitoring points on-site and off-site will be properly abandoned by a New Jersey-licensed well driller. The wells will be sealed via a tremie pipe with a grout/cement mixture, the concrete flush mount pads will be removed, and the former well locations will be restored to near pre-construction conditions.

The planned EEB implementation addressed within this document will be performed utilizing mobile/trailer mounted equipment and a Geoprobe® to bore directly through the asphalt/ground surfaces. There are no structures or facilities that will require site restoration or dismantling.

13.0 ESTIMATED COSTS

A cost comparison for the proposed remedial system upgrade was previously presented in the RAWA (GES, 1999). As previously discussed, the intention of the planned EEB implementation encompassed within this 2nd Addendum to the RAW is to attempt to directly impact identified "hot spots" and remediate low-permeability, contaminated soils in the upper soil horizon that might not be effectively addressed by the proposed SVE system, thereby supplementing and enhancing the performance of the selected remedial action.

The estimated order of magnitude costs for implementation of the proposed EEB at Building 699 are provided below. The primary assumptions utilized in estimating the order of magnitude costs are as follows:

- Enzyme injection will be performed utilizing a truck mounted Geoprobe®. There are no proposed capital costs associated with the planned remedial action. The treatment system will be dismantled and removed from the site following completion of the injection program.
- All work will be performed under Level D Personnel Safety Protection. No site air monitoring will be performed.
- The injection points will be established on 5-foot centers from each of the seventeen (17) selected boring locations for a total of nine (9) injection points per location or one hundred fifty-three (153) total injections.
- Injection of the biological products will be continuous from ground surface to three to four ft. in depth. A production rate of twenty (20) injection points per day has been assumed. Based on this rate, the 1st stage of biological enhancements will be injected at two (2) boring locations during one day (9 injections per location) followed by the 2nd stage the next day.
- Performance samples will be analyzed in accordance with the NJ Laboratory Certification Program by the Fort Monmouth Environmental Testing Laboratory (NJDEP Certification #13461).

Estimated Order of Magnitude Costs
Proposed Enzyme-Enhanced Bioremediation
Building 699

TASK	ESTIMATED COSTS
1. Plan Preparation	$ 3,900
2. Site Mobilization	$ 2,700
3. Geoprobe® Injection/EEB Treatment	$ 84,600
4. Demobilization	$ 3,700
5. Report Preparation	$ 20,100
TOTAL ESTIMATED COSTS	$115,000

14.0 REFERENCES

DPW, 2000. Fort Monmouth Environmental Testing Laboratory, Analytical Data Reports (Project: 100004), March and April 2000, Volumes 1 - 5.

GES, 1999. Groundwater & Environmental Services, Inc., *Remedial Action Work Plan Addendum, Bldg. 699 Main Post Area, Fort Monmouth, NJ*, June 10, 1999.

Krydon, 1993. The Krydon Group, Inc. *Remedial Action Workplan*, Fort Monmouth Military Installation Service Station, Fort Monmouth, New Jersey. October 1993.

Table 3-1

Main Post Gas Station – Bldg. 699
Summary of Analytical Results from Geoprobe Soil Sampling – March/April 2000

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5224.02	1	6-12"	3/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5224.03	1	18-24"	3/6/2000	ND	ND	ND	0.66	ND	0.31J	0.66J	ND	ND	0.49	ND	ND	ND
5224.04	1	30-36"	3/6/2000	ND	ND	ND	**9.4**	ND	40	262	ND	ND	120	ND	219.61	ND
5224.05	1	42-48"	3/6/2000	ND	ND	ND	**7.4**	ND	54	360	ND	ND	140	ND	**1130.84**	ND
5224.06	1	54-60"	3/6/2000	ND	ND	ND	**18**	ND	100	**680**	ND	ND	300	ND	ND	ND
5224.07	1	66-72"	3/6/2000	ND	ND	ND	**11**	ND	55	360	ND	ND	170	ND	774.46	ND
5224.08	1	78-84"	3/6/2000	ND	ND	ND	**8.2**	ND	27	222	ND	ND	130	ND	220.4	ND
5224.09	1	90-96"	3/6/2000	ND	ND	ND	**2.2**	ND	9.3	62	ND	ND	43	ND	487.16	26.07
5224.10	1	102-108"	3/6/2000	ND	ND	ND	ND	ND	0.59	3.65	ND	ND	1.9	ND	ND	ND
5224.11	1	114-120"	3/6/2000	ND	ND	ND	ND	ND	ND	0.65J	ND	ND	0.38	ND	ND	ND
5224.12	1	126-132"	3/6/2000	ND	ND	ND	ND	ND	ND	0.56J	ND	ND	ND	ND	ND	ND
5224.13	1	138-144"	3/6/2000	ND	ND	ND	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.02	2	6-12"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	796.58	ND
5226.03	2	18-24"	3/7/2000	ND	ND	ND	1.1	ND	ND	0.36J	ND	ND	0.57	ND	768.3	ND
5226.04	2	30-36"	3/7/2000	ND	ND	ND	**3.4**	ND	0.32J	1.76	ND	ND	3.7	ND	470.36	ND
5226.05	2	42-48"	3/7/2000	ND	ND	ND	**9.4**	ND	31	198	ND	ND	100	ND	900.61	ND
5226.06	2	54-60"	3/7/2000	ND	ND	ND	**49**	ND	77	**460**	ND	ND	280	ND	201.37	ND
5226.07	2	66-72"	3/7/2000	ND	ND	ND	**54**	ND	58	348	ND	ND	240	ND	442.46	23.67
5226.08	2	78-84"	3/7/2000	ND	ND	ND	**63**	ND	60	360	ND	ND	250	ND	397.58	ND
5226.09	2	90-96"	3/7/2000	ND	ND	ND	**15**	ND	6.8	41	ND	ND	36	ND	958.87	ND
5226.10	2	102-108"	3/7/2000	ND	ND	ND	**46**	ND	52	329	ND	ND	220	ND	406.31	ND
5226.11	2	114-120"	3/7/2000	ND	6.3	ND	**15**	ND	6.8	40	ND	ND	33	ND	377.54	ND
5226.12	2	126-132"	3/7/2000	ND	ND	ND	**4.2**	ND	1.5	8.7	ND	ND	6.3	ND	196.28	ND
5226.13	2	138-144"	3/7/2000	ND	ND	ND	1.1	ND	0.3J	1.47	ND	ND	0.89	ND	ND	ND
5226.14	3	6-12"	3/7/2000	ND	ND	ND	ND	ND	ND	0.35J	ND	ND	ND	ND	338.13	ND
5226.15	3	18-24"	3/7/2000	ND	ND	ND	ND	ND	ND	3.8J	ND	ND	ND	ND	ND	ND
5226.16	3	30-36"	3/7/2000	ND	ND	ND	ND	ND	14	89	ND	ND	25	ND	200.23	ND
5226.17	3	42-48"	3/7/2000	ND	ND	ND	**60**	ND	190	**1610**	ND	ND	690	ND	855.41	ND
5226.18	3	54-60"	3/7/2000	ND	ND	ND	**220**	ND	630	**3890E**	ND	ND	**1900E**	ND	**1015.74**	ND
5226.19	3	66-72"	3/7/2000	ND	ND	ND	**43**	ND	76	**410**	ND	ND	260	ND	**1831.21**	ND
5226.20	3	78-84"	3/7/2000	ND	ND	ND	**25**	ND	57	285	ND	ND	120	ND	368.74	ND
5226.21	3	90-96"	3/7/2000	ND	ND	ND	**3.3**	ND	ND	5.4J	ND	ND	3.9	ND	ND	ND
5226.22	3	102-108"	3/7/2000	ND	ND	ND	**18**	ND	33	184	ND	ND	90	ND	346.18	ND
5226.23	3	114-120"	3/7/2000	ND	ND	ND	**11**	ND	16	76	ND	ND	35	ND	ND	ND
5226.24	3	126-132"	3/7/2000	ND	ND	ND	**6.5**	ND	4.5J	21	ND	ND	9.9	ND	ND	ND
5226.25	3	138-144"	3/7/2000	ND	ND	ND	**3.7**	ND	ND	3.4J	ND	ND	ND	ND	ND	ND
5273.14	4	126-132"	#######	ND	ND	ND	0.51	ND	0.71	0.38J	ND	ND	ND	ND	ND	ND
5273.15	4	138-144"	#######	ND	ND	ND	0.51	ND	0.70J	0.80J	ND	ND	0.44	ND	ND	ND
5226.26	5	6-12"	3/7/2000	ND	ND	ND	ND	ND	ND	6.2J	ND	ND	ND	ND	352.43	10.84
5226.27	5	18-24"	3/7/2000	ND	ND	ND	ND	ND	32	202	ND	ND	13	ND	247.73	ND

Source: Fort Monmouth Environmental Testing Laboratory

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5226.28	5	30-36"	3/7/2000	ND	ND	ND	ND	ND	110	**730**	ND	ND	53	ND	**1365.7**	ND
5226.29	5	42-48"	3/7/2000	ND	ND	ND	ND	ND	190	**1030**	ND	ND	100	ND	**4529.63**	ND
5226.30	5	54-60"	3/7/2000	ND	ND	ND	ND	ND	39	257	ND	ND	22	ND	**1313.65**	5.83
5226.31	5	66-72"	3/7/2000	ND	ND	ND	ND	ND	38	243	ND	ND	23	ND	851.72	ND
5226.32	5	78-84"	3/7/2000	ND	ND	ND	ND	ND	150	**880E**	ND	ND	130	ND	**1198.13**	ND
5226.33	5	90-96"	3/7/2000	ND	ND	ND	ND	ND	15	67	ND	ND	7.2	ND	**1579.41**	45.04
5226.34	5	102-108"	3/7/2000	ND	ND	ND	ND	ND	38	230	ND	ND	30	ND	478.02	ND
5226.35	5	114-120"	3/7/2000	ND	ND	ND	ND	ND	25	150	ND	ND	20	ND	304.58	ND
5226.36	5	126-132"	3/7/2000	ND	ND	ND	ND	ND	16	97	ND	ND	16	ND	998.52	7.74
5226.37	5	138-144"	3/7/2000	ND	ND	ND	ND	ND	0.45J	2.06J	ND	ND	ND	ND	ND	ND
5226.38	6	6-12"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.39	6	18-24"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.40	6	30-36"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.41	6	42-48"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.42	6	54-60"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.43	6	66-72"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	44.17
5226.44	6	78-84"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.45	6	90-96"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.46	6	102-108"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.47	6	114-120"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.48	6	126-132"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5226.49	6	138-144"	3/7/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5229.02	7	6-12"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5229.03	7	18-24"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	186.87	ND
5229.04	7	30-36"	3/8/2000	ND	ND	ND	**39**	ND	170	**850**	ND	ND	350	ND	**1450.01**	ND
5229.05	7	42-48"	3/8/2000	ND	ND	ND	**14**	ND	62	380	ND	ND	180	ND	681.84	ND
5229.06	7	54-60"	3/8/2000	ND	ND	ND	**20**	ND	120	**690**	ND	ND	270	ND	926.66	ND
5229.07	7	66-72"	3/8/2000	ND	ND	ND	**3**	ND	26	155	ND	ND	60	ND	425.04	ND
5229.08	7	78-84"	3/8/2000	ND	ND	ND	**6.5**	ND	76	**460**	ND	ND	170	ND	831.09	ND
5229.09	7	90-96"	3/8/2000	ND	ND	ND	**12**	ND	150	**820**	ND	ND	340	ND	458.12	ND
5229.10	7	102-108"	3/8/2000	ND	ND	ND	ND	ND	24	140	ND	ND	63	ND	681.67	ND
5229.11	7	114-120"	3/8/2000	ND	ND	ND	**11**	ND	140	**700**	ND	ND	260	ND	524	ND
5229.12	7	126-132"	3/8/2000	ND	ND	ND	**23**	ND	190	**1190**	ND	ND	510	ND	**3491.92**	ND
5229.13	7	138-144"	3/8/2000	ND	ND	ND	**15**	ND	39	208	ND	ND	130	ND	231.42	ND
5229.14	8	6-12"	3/8/2000	ND	ND	ND	**5.9**	ND	6.2	323	ND	ND	22	ND	ND	ND
5229.15	8	18-24"	3/8/2000	ND	ND	ND	**14**	ND	23	127	ND	ND	71	ND	211.46	ND
5229.16	8	30-36"	3/8/2000	ND	ND	ND	**35**	ND	63	360	ND	ND	190	ND	811.78	ND
5229.17	8	42-48"	3/8/2000	ND	ND	ND	**34**	ND	76	**450**	ND	ND	240	ND	300.29	ND
5229.18	8	54-60"	3/8/2000	ND	ND	ND	**110**	ND	180	**750**	ND	ND	450	ND	326.53	ND
5229.19	8	66-72"	3/8/2000	ND	ND	ND	**230**	ND	290	**1670**	ND	ND	740	ND	220.54	21.57
5229.20	8	78-84"	3/8/2000	ND	ND	ND	**54**	ND	65	350	ND	ND	250	ND	261.15	ND
5229.21	8	90-96"	3/8/2000	ND	ND	ND	**17**	ND	20	**1100**	ND	ND	69	ND	ND	ND

Source: Fort Monmouth Environmental Testing Laboratory

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5229.22	8	102-108"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	210.8	ND
5229.23	8	114-120"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5229.24	8	126-132"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5229.25	8	138-144"	3/8/2000	ND	ND	ND	ND	ND	ND	19J	ND	ND	17	ND	ND	ND
5229.26	9	6-12"	3/8/2000	ND	ND	ND	ND	ND	ND	8.8J	ND	ND	ND	ND	ND	ND
5229.27	9	18-24"	3/8/2000	ND	ND	ND	ND	ND	ND	13J	ND	ND	ND	ND	ND	19.2
5229.28	9	30-36"	3/8/2000	ND	ND	ND	ND	ND	ND	10J	ND	ND	ND	ND	ND	ND
5229.29	9	42-48"	3/8/2000	ND	ND	ND	ND	ND	16	85	ND	ND	23	ND	ND	ND
5229.30	9	54-60"	3/8/2000	ND	ND	ND	**14**	ND	57	302	ND	ND	120	ND	541.33	ND
5229.31	9	66-72"	3/8/2000	ND	ND	ND	**6.1**	ND	13	72	ND	ND	36	ND	ND	ND
5229.32	9	78-84"	3/8/2000	ND	ND	ND	**12**	ND	22	119	ND	ND	72	ND	277.05	ND
5229.33	9	90-96"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.9	ND	427.88	ND
5229.34	9	102-108"	3/8/2000	ND	ND	ND	**15**	ND	34	180	ND	ND	97	ND	275.38	ND
5229.35	9	114-120"	3/8/2000	ND	ND	ND	**21**	ND	49	263	ND	ND	140	ND	315.07	ND
5229.36	9	126-132"	3/8/2000	ND	ND	ND	**12**	ND	19	98	ND	ND	58	ND	202.57	ND
5229.37	9	138-144"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.16	10	126-132"	#######	ND	ND	ND	0.78	ND	0.43J	ND	ND	ND	ND	ND	ND	ND
5273.17	10	138-144"	#######	ND	N	ND	**6.9**	ND	28	132	ND	ND	37	ND	ND	ND
5229.38	11	6-12"	3/8/2000	ND	ND	ND	ND	ND	ND	16J	ND	ND	ND	ND	ND	ND
5229.39	11	18-24"	3/8/2000	ND	ND	ND	ND	ND	7.5J	47	ND	ND	ND	ND	172.83	ND
5229.40	11	30-36"	3/8/2000	ND	ND	ND	**7.6**	ND	160	**920**	ND	ND	95	ND	416.92	ND
5229.41	11	42-48"	3/8/2000	ND	ND	ND	**7.8**	ND	140	**810**	ND	ND	110	ND	**5067.13**	ND
5229.42	11	54-60"	3/8/2000	ND	ND	ND	**9.9**	ND	160	**900**	ND	ND	140	ND	**1172.8**	ND
5229.43	11	66-72"	3/8/2000	ND	ND	ND	ND	ND	20	116	ND	ND	17	ND	888.29	ND
5229.44	11	78-84"	3/8/2000	ND	ND	ND	ND	ND	45	267	ND	ND	33	ND	551.99	46.95
5229.45	11	90-96"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	273.56	ND
5229.46	11	102-108"	3/8/2000	ND	ND	ND	ND	ND	70	400	ND	ND	46	ND	**2559.03**	ND
5229.47	11	114-120"	3/8/2000	ND	ND	ND	ND	ND	58	330	ND	ND	37	ND	**1582.73**	ND
5229.48	11	126-132"	3/8/2000	ND	ND	ND	ND	ND	6.8J	329	ND	ND	ND	ND	587.82	ND
5229.49	11	138-144"	3/8/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1042.52**	ND
5231.02	12	6-12"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	252.54	40.7
5231.03	12	18-24"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	226.77	ND
5231.04	12	30-36"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	185.58	ND
5231.05	12	42-48"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5231.06	12	54-60"	3/9/2000	ND	ND	ND	ND	ND	0.66	3.7	2.2	ND	2.1	ND	ND	ND
5231.07	12	66-72"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND
5231.08	12	78-84"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND
5231.09	12	90-96"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND
5231.10	12	102-108"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	301.05	ND
5231.11	12	114-120"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND
5231.12	12	126-132"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND	ND	29.01
5231.13	12	138-144"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5231.14	13	6-12"	3/9/2000	ND	ND	ND	**5.2**	ND	5.7	24	17	ND	ND	ND	177.25	ND
5231.15	13	18-24"	3/9/2000	ND	ND	ND	**6.5**	ND	6.1J	35	22	ND	15	ND	187.7	ND
5231.16	13	30-36"	3/9/2000	ND	ND	ND	**77**	ND	150	**880**	ND	ND	**1100**	ND	**1665.7**	ND
5231.17	13	42-48"	3/9/2000	ND	ND	ND	**35**	ND	79	**470**	**64**	ND	260	ND	**1071.17**	ND
5231.18	13	54-60"	3/9/2000	ND	ND	ND	**64**	ND	130	**780**	ND	ND	400	ND	212.62	ND
5231.19	13	66-72"	3/9/2000	ND	ND	ND	**44**	ND	92	**540**	ND	ND	310	ND	**1985.29**	ND
5231.20	13	78-84"	3/9/2000	ND	ND	ND	**24**	ND	50	294	**53**	ND	170	ND	534.7	ND
5231.21	13	90-96"	3/9/2000	ND	ND	ND	**11**	ND	17	96	31	ND	66	ND	212.69	ND
5231.22	13	102-108"	3/9/2000	ND	ND	ND	**47**	ND	100	**580**	33	ND	300	ND	**1866.05**	ND
5231.23	13	114-120"	3/9/2000	ND	ND	ND	**54**	ND	130	**750**	36	ND	420	ND	720.01	ND
5231.24	13	126-132"	3/9/2000	ND	ND	ND	**15**	ND	30	167	ND	ND	110	ND	486.18	ND
5231.25	13	138-144"	3/9/2000	ND	ND	ND	**10**	ND	20	114	18	ND	74	ND	275.15	ND
5231.26	14	6-12"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	406.24	ND
5231.27	14	18-24"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5231.28	14	30-36"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	676.44	ND
5231.29	14	42-48"	3/9/2000	ND	ND	ND	**13**	ND	240	**1390**	ND	ND	270	ND	**3490.44**	ND
5231.30	14	54-60"	3/9/2000	ND	ND	ND	ND	ND	140	**860**	ND	ND	140	ND	**1221.51**	51.07
5231.31	14	66-72"	3/9/2000	ND	ND	ND	**7.5**	ND	100	**610**	ND	ND	110	ND	**1049.82**	ND
5231.32	14	78-84"	3/9/2000	ND	ND	ND	**12**	ND	52	289	ND	ND	150	ND	331.42	ND
5231.33	14	90-96"	3/9/2000	ND	ND	ND	**7.6**	ND	7.4J	38	ND	ND	26	ND	208.12	ND
5231.34	14	102-108"	3/9/2000	ND	ND	ND	**11**	ND	200	**1170**	ND	ND	220	ND	**1033.86**	ND
5231.35	14	114-120"	3/9/2000	ND	ND	ND	**9.5**	ND	81	**480**	ND	ND	150	ND	523.68	ND
5231.36	14	126-132"	3/9/2000	ND	ND	ND	**13**	ND	9J	47	ND	ND	19	ND	ND	ND
5231.37	14	138-144"	3/9/2000	ND	ND	ND	**11**	ND	8.4J	40	ND	ND	13	ND	ND	ND
5231.38	15	6-12"	3/9/2000	ND	ND	ND	ND	ND	ND	16J	ND	ND	ND	ND	ND	ND
5231.39	15	18-24"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5231.40	15	30-36"	3/9/2000	ND	ND	ND	**14**	ND	130	**680**	ND	ND	200	ND	521.7	ND
5231.41	15	42-48"	3/9/2000	ND	ND	ND	**17**	ND	160	**840**	ND	ND	280	ND	571.38	ND
5231.42	15	54-60"	3/9/2000	ND	ND	ND	**84**	ND	690	**3590E**	ND	ND	**1300E**	ND	**6957.69**	ND
5231.43	15	66-72"	3/9/2000	ND	ND	ND	ND	ND	ND	16J	ND	ND	12	ND	**2750.01**	ND
5231.44	15	78-84"	3/9/2000	ND	ND	ND	**34**	ND	270	**1390**	ND	ND	560	ND	948.41	ND
5231.45	15	90-96"	3/9/2000	ND	ND	ND	**16**	ND	120	**620**	ND	ND	260	ND	325.81	ND
5231.46	15	102-108"	3/9/2000	ND	ND	ND	**9.5**	ND	70	355	ND	ND	140	ND	920.02	ND
5231.47	15	114-120"	3/9/2000	ND	ND	ND	**14**	ND	110	**550**	ND	ND	230	ND	**1268.96**	ND
5231.48	15	126-132"	3/9/2000	ND	ND	ND	ND	ND	15	72	ND	ND	33	ND	728.83	ND
5231.49	15	138-144"	3/9/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	ND	ND	ND
5242.02	16	6-12"	#######	ND	ND	ND	1.5	ND	0.96	1.5	ND	ND	0.37	ND	ND	35.44
5242.03	16	18-24"	#######	ND	ND	ND	0.35	ND	0.75	0.67J	ND	ND	ND	ND	ND	ND
5242.04	16	30-36"	#######	0.95J	ND	ND	1.1	ND	4.5	8.72	ND	ND	ND	ND	ND	ND
5242.05	16	42-48"	#######	ND	ND	ND	ND	ND	50	210	ND	ND	12	ND	567.23	ND
5242.06	16	54-60"	#######	ND	ND	ND	**9.2**	ND	66	339	ND	ND	98	ND	ND	ND
5242.07	16	66-72"	#######	ND	ND	ND	**51**	ND	440	**2300**	ND	ND	700	ND	**1976.95**	ND
5242.08	16	78-84"	#######	ND	ND	ND	**18**	ND	140	**690**	ND	ND	250	ND	526.44	ND
5242.09	16	90-96"	#######	ND	ND	ND	**61**	ND	200	**1020**	ND	ND	570	ND	260.08	ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5242.10	16	102-108"	#######	ND	ND	ND	**43**	ND	160	**840**	ND	ND	440	ND	589.45	ND
5242.11	16	114-120"	#######	ND	ND	ND	**110**	ND	360	**1640**	ND	ND	940	ND	**7072.04**	ND
5242.12	16	126-132"	#######	ND	ND	ND	**8.9**	ND	13	63	**170**	ND	40	ND	ND	23.05
5242.13	16	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	43	ND	ND	ND	ND	ND
5273.18	17	126-132"	#######	ND	ND	ND	ND	ND	0.44J	1.89	ND	ND	0.48	ND	ND	ND
5273.19	17	138-144"	#######	ND	ND	ND	1	ND	0.48J	2.71	ND	ND	0.42	ND	ND	ND
5242.14	18	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	9.7	ND	ND	ND	ND	ND
5242.15	18	18-24"	#######	ND	ND	ND	**4.4**	ND	14	70	ND	ND	40	ND	ND	ND
5242.16	18	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	5.8J	ND	ND	ND	ND	ND
5242.17	18	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5242.18	18	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5242.19	18	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5242.20	18	78-84"	#######	ND	ND	ND	ND	ND	21	6.7J	ND	ND	ND	ND	ND	ND
5242.21	18	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5242.22	18	102-108"	#######	ND	ND	ND	ND	ND	7.4	14	ND	ND	ND	ND	260.48	ND
5242.23	18	114-120"	#######	ND	ND	ND	ND	ND	17	64.8	ND	ND	ND	ND	353.2	ND
5242.24	18	126-132"	#######	ND	ND	ND	ND	ND	ND	6.6J	ND	ND	ND	ND	ND	ND
5242.25	18	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5242.26	19	6-12"	#######	ND	ND	ND	ND	ND	3.2J	5J	ND	ND	ND	ND	409.34	ND
5242.27	19	18-24"	#######	ND	ND	ND	ND	ND	5.9	27.4	ND	ND	9	ND	**1493.74**	ND
5242.28	19	30-36"	#######	ND	ND	ND	**19**	ND	130	**670**	ND	ND	190	ND	**1267.86**	ND
5242.29	19	42-48"	#######	ND	ND	ND	**16**	ND	120	**600**	ND	ND	190	ND	**2888.57**	ND
5242.30	19	54-60"	#######	ND	ND	ND	**30**	ND	170	**850**	ND	ND	310	ND	**3891.82**	ND
5242.31	19	66-72"	#######	ND	ND	ND	**16**	ND	77	400	ND	ND	170	ND	**1406.05**	ND
5242.32	19	78-84"	#######	ND	ND	ND	**38**	ND	140	**730**	ND	ND	330	ND	**1126.25**	ND
5242.33	19	90-96"	#######	ND	ND	ND	ND	ND	16	80	ND	ND	39	ND	286.26	ND
5242.34	19	102-108"	#######	ND	ND	ND	**13**	ND	42	207	ND	ND	100	ND	719.8	ND
5242.35	19	114-120"	#######	ND	ND	ND	**25**	ND	91	**460**	ND	ND	220	ND	375.77	ND
5242.36	19	126-132"	#######	ND	ND	ND	**13**	ND	43	208	ND	ND	100	ND	**1928.76**	ND
5242.37	19	138-144"	#######	ND	ND	ND	ND	ND	6.7J	32.9J	ND	ND	17	ND	194.82	ND
5245.02	20	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	533.26	44.85
5245.03	20	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	454.19	6.07
5245.04	20	30-36"	#######	ND	ND	ND	**26**	ND	98	**490**	ND	ND	180	ND	554.5	ND
5245.05	20	42-48"	#######	ND	ND	ND	**55**	ND	210	**1060**	ND	ND	410	ND	**1072.54**	ND
5245.06	20	54-60"	#######	ND	ND	ND	**41**	ND	160	**800**	ND	ND	320	ND	375.36	ND
5245.07	20	66-72"	#######	ND	ND	ND	**21**	ND	66	340	ND	ND	160	ND	**1108.07**	6.33
5245.08	20	78-84"	#######	ND	ND	ND	**46**	ND	150	**750**	ND	ND	370	ND	246.72	ND
5245.09	20	90-96"	#######	ND	ND	ND	**44**	ND	150	**730**	ND	ND	340	ND	915.19	7.26
5245.10	20	102-108"	#######	ND	ND	ND	**81**	ND	280	**1370**	ND	ND	830	ND	507.13	ND
5245.11	20	114-120"	#######	ND	ND	ND	**58**	ND	200	**960**	ND	ND	460	ND	739.83	ND
5245.12	20	126-132"	#######	ND	ND	ND	**140**	ND	500	**2480**	ND	ND	**1200**	ND	389.79	14.36

Source: Fort Monmouth Environmental Testing Laboratory

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5245.13	20	138-144"	#######	ND	ND	ND	ND	ND	ND	16J	ND	ND	11	ND	318.05	ND
5245.14	21	6-12"	#######	ND	ND	ND	ND	ND	ND	16J	ND	ND	ND	ND	198.63	ND
5245.15	21	18-24"	#######	ND	ND	ND	ND	ND	44	204	ND	ND	34	ND	258.28	ND
5245.16	21	30-36"	#######	ND	ND	ND	**22**	ND	310	**1420**	ND	ND	300	ND	865.28	4.53
5245.17	21	42-48"	#######	ND	ND	ND	**25**	ND	380	**1970**	ND	ND	380	ND	**1535.72**	ND
5245.18	21	54-60"	#######	ND	ND	ND	**25**	ND	430	**1330**	ND	ND	410	ND	**3205.2**	ND
5245.19	21	66-72"	#######	ND	ND	ND	**100**	ND	**1100**	**5200E**	ND	ND	**1400E**	ND	**8739.63**	ND
5245.20	21	78-84"	#######	ND	ND	ND	**15**	ND	180	**880**	ND	ND	270	ND	694.14	ND
5245.21	21	90-96"	#######	ND	ND	ND	**6.3**	ND	75	364	ND	ND	130	ND	772.27	ND
5245.22	21	102-108"	#######	ND	ND	ND	**38**	ND	500	**2410**	ND	ND	760	ND	**1157.87**	ND
5245.23	21	114-120"	#######	ND	ND	ND	ND	ND	25	116	ND	ND	40	ND	517.59	ND
5245.24	21	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5245.25	21	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5245.26	22	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1208.85**	ND
5245.27	22	18-24"	#######	ND	ND	ND	ND	ND	7.7J	36.3	ND	ND	8.8	ND	**1062.68**	ND
5245.28	22	30-36"	#######	ND	ND	ND	**17**	ND	220	**1070**	ND	ND	340	ND	504.67	ND
5245.29	22	42-48"	#######	ND	ND	ND	ND	ND	56	271	ND	ND	71	ND	**1101.25**	ND
5245.30	22	54-60"	#######	ND	ND	ND	2.3J	ND	19	12J	ND	ND	ND	ND	**1865.73**	40.29
5245.31	22	66-72"	#######	ND	ND	ND	ND	ND	15	12J	ND	ND	ND	ND	580.06	ND
5245.32	22	78-84"	#######	ND	ND	ND	ND	ND	40	ND	ND	ND	ND	ND	300.22	ND
5245.33	22	90-96"	#######	ND	ND	ND	ND	ND	27	77	ND	ND	ND	ND	ND	ND
5245.34	22	102-108"	#######	ND	ND	ND	ND	ND	32	96	ND	ND	ND	ND	291.98	ND
5245.35	22	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5245.36	22	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5245.37	22	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.26	23	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.27	23	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	235.85	ND
5247.28	23	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	222.33	ND
5247.29	23	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	161.67	ND
5247.30	23	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200.75	3.3
5247.31	23	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	187.12	ND
5247.32	23	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.33	23	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.34	23	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.35	23	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.36	23	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.37	23	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.02	24	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	339.68	41.49
5247.03	24	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	210.59	11.78
5247.04	24	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	406.65	ND
5247.05	24	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	231.83	ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5247.06	24	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	193.94	ND
5247.07	24	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.08	24	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.09	24	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.10	24	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.11	24	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.12	24	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.13	24	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.14	24D	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1412.42**	60.37
5247.15	24D	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	463.52	ND
5247.16	24D	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	280.57	ND
5247.17	24D	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	214.09	ND
5247.18	24D	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.19	24D	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.20	24D	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.21	24D	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.22	24D	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.23	24D	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.24	24D	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5247.25	24D	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5254.02	25	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7753.57**	22.01
5254.03	25	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	993.5	65.78
5254.04	25	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	402.32	11.48
5254.05	25	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	493.55	ND
5254.06	25	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	493.45	ND
5254.07	25	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	365.52	ND
5254.08	25	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	259.27	ND
5254.09	25	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	207.83	ND
5254.10	25	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	197.43	ND
5254.11	25	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5254.12	25	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5254.13	25	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	264.75	ND
5254.14	26	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	720.78	6.53
5254.15	26	18-24"	#######	ND	ND	ND	ND	ND	0.37J	0.33J	ND	ND	ND	ND	503.89	ND
5254.16	26	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	319.88	ND
5254.17	26	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	224.72	ND
5254.18	26	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	599.97	ND
5254.19	26	66-72"	#######	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	332.88	ND
5254.20	26	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	239.75	ND
5254.21	26	90-96"	#######	ND	ND	ND	ND	ND	24	69.7	ND	ND	ND	ND	205.27	ND
5254.22	26	102-108"	#######	ND	ND	ND	ND	ND	1.3	3.86	ND	ND	ND	ND	253.99	ND

Table 3-1
Main Post Gas Station - Bldg. 699
Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000
(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5254.23	26	114-120"	#######	ND	ND	ND	ND	ND	6.4	23.2	ND	ND	ND	ND	ND	ND
5254.24	26	126-132"	#######	ND	ND	ND	ND	ND	0.76J	1.8	ND	ND	ND	ND	ND	ND
5254.25	26	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5254.26	27	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	216.57	ND
5254.27	27	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	187.13	ND
5254.28	27	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5254.29	27	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5254.30	27	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	465.37	10.53
5254.31	27	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	236.25	ND
5254.32	27	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	177.04	ND
5254.33	27	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5254.34	27	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	294.68	ND
5254.35	27	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	181.65	ND
5254.36	27	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5254.37	27	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.02	28	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	622.11	302.84
5264.03	28	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	179.48	ND
5264.04	28	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.05	28	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.06	28	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	780.97	ND
5264.07	28	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	247.69	ND
5264.08	28	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	205.97	ND
5264.09	28	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	182.32	ND
5264.10	28	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	346.31	ND
5264.11	28	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	270.26	ND
5264.12	28	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200.18	ND
5264.13	28	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.14	29	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	173.67	ND
5264.15	29	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.16	29	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.17	29	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.18	29	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	285.93	ND
5264.19	29	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	239.25	ND
5264.20	29	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.21	29	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.22	29	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	263.00	ND
5264.23	29	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	528.19	ND
5264.24	29	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	287.89	ND
5264.25	29	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	228.16	ND

Table 3-1
Main Post Gas Station - Bldg. 699
Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000
(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5264.26	30	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	241.09	ND
5264.27	30	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	188.07	ND
5264.28	30	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.29	30	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.30	30	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	531.98	ND
5264.31	30	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	226.39	ND
5264.32	30	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.33	30	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.34	30	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.35	30	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.36	30	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5264.37	30	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5270.26	31	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	53	ND	ND	ND	ND
5270.27	31	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	57	ND	ND	ND	ND
5270.28	31	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	66E	ND	ND	ND	ND
5270.29	31	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	68E	ND	ND	ND	ND
5270.30	31	54-60"	#######	1.5	ND	ND	ND	ND	ND	ND	4.4	ND	ND	ND	ND	11.15
5270.31	31	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND
5270.32	31	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND
5270.33	31	90-96"	#######	1.5	ND	ND	ND	ND	ND	ND	0.89	ND	ND	ND	ND	7.58
5270.34	31	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5270.35	31	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5270.36	31	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5270.37	31	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5270.02	32	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5270.03	32	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.06
5270.04	32	30-36"	#######	1.7	ND	ND	ND	ND	ND	ND	2.7	ND	ND	ND	ND	ND
5270.05	32	42-48"	#######	1.7	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND
5270.06	32	54-60"	#######	1.8	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	213.98	ND
5270.07	32	66-72"	#######	1.8	ND	ND	ND	ND	ND	ND	3.7	ND	ND	ND	ND	ND
5270.08	32	78-84"	#######	1.6	ND	ND	ND	ND	ND	ND	4.6	ND	ND	ND	ND	ND
5270.09	32	90-96"	#######	1.4	ND	ND	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND
5270.10	32	102-108"	#######	1.8	ND	ND	ND	ND	ND	ND	7.3	ND	ND	ND	445.76	ND
5270.11	32	114-120"	#######	1.8	ND	ND	ND	ND	ND	ND	13	ND	ND	ND	271.05	16.32
5270.12	32	126-132"	#######	1.4	ND	ND	ND	ND	ND	ND	23	ND	ND	ND	197.34	ND
5270.13	32	138-144"	#######	1.7	ND	ND	ND	ND	ND	ND	**110E**	ND	ND	ND	ND	ND
5270.14	33	6-12"	#######	1.9	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND
5270.15	33	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	208.92	ND
5270.16	33	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND
5270.17	33	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	0.78	ND	ND	ND	197.12	ND
5270.18	33	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	225.82	6.71
5270.19	33	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	0.88	ND	ND	ND	ND	15.37

Table 3-1
Main Post Gas Station - Bldg. 699
Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000
(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5270.20	33	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	1.9	35	ND	ND	ND	8.67
5270.21	33	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	0.75	36	ND	ND	ND	ND
5270.22	33	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	43	ND	ND	ND	4.95
5270.23	33	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	50	ND	ND	ND	4.97
5270.24	33	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	55	ND	ND	ND	6.7
5270.25	33	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	60	ND	ND	ND	ND
5273.02	34	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.03	34	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.95
5273.04	34	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.05	34	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.06	34	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.07	34	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.08	34	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.09	34	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.10	34	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.11	34	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5273.12	34	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.63
5273.13	34	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.02	35	6-12"	#######	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.03	35	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.04	35	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.05	35	42-48"	#######	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.06	35	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.07	35	66-72"	#######	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.08	35	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.09	35	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.10	35	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	252.4	ND
5279.11	35	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	199.67	ND
5279.12	35	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.13	35	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.14	36	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.15	36	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.16	36	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.17	36	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.18	36	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.19	36	66-72"	#######	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.20	36	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.21	36	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.22	36	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.23	36	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.24	36	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5279.25	36	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.26	37	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.27	37	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.28	37	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.29	37	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.30	37	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.31	37	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.32	37	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.33	37	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.34	37	102-108"	#######	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.35	37	114-120"	#######	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.36	37	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5279.37	37	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5290.02	38	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	209.79	Pb resample samples disposed of.
5290.03	38	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	251.95	
5290.04	38	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	216.78	
5290.05	38	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	213.69	
5290.06	38	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	208.53	
5290.07	38	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	218.53	
5290.08	38	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	204.35	
5290.09	38	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.10	38	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.11	38	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	193.08	
5290.12	38	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.13	38	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5393.01	38	6-12"	5/3/2000	Pb only												ND
5393.02	38	18-24"	5/3/2000													20.1
5393.03	38	30-36"	5/3/2000													ND
5393.04	38	42-48"	5/3/2000													7.12
5393.05	38	54-60"	5/3/2000													ND
5393.06	38	66-72"	5/3/2000													ND
5393.07	38	78-84"	5/3/2000													ND
5393.08	38	90-96"	5/3/2000													ND
5393.09	38	102-108"	5/3/2000													ND
5393.10	38	114-120"	5/3/2000													ND
5393.11	38	126-132"	5/3/2000													ND
5393.12	38	138-144"	5/3/2000													ND
5290.14	39	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.15	39	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.16	39	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.17	39	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5290.18	39	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Pb resample samples disposed of.
5290.19	39	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.20	39	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.21	39	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.22	39	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.23	39	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.24	39	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.25	39	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5393.13	39	6-12"	5/3/2000	Pb only												ND
5393.14	39	18-24"	5/3/2000													ND
5393.15	39	30-36"	5/3/2000													ND
5393.16	39	42-48"	5/3/2000													ND
5393.17	39	54-60"	5/3/2000													ND
5393.18	39	66-72"	5/3/2000													ND
5393.19	39	78-84"	5/3/2000													ND
5393.20	39	90-96"	5/3/2000													ND
5393.21	39	102-108"	5/3/2000													ND
5393.22	39	114-120"	5/3/2000													ND
5393.23	39	126-132"	5/3/2000													ND
5393.24	39	138-144"	5/3/2000													ND
5290.26	40	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Pb resample samples disposed of.
5290.27	40	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.28	40	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.29	40	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.30	40	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.31	40	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.32	40	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.33	40	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.34	40	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.35	40	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.36	40	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5290.37	40	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
5393.25	40	6-12"	5/3/2000	Pb only												ND
5393.26	40	18-24"	5/3/2000													ND
5393.27	40	30-36"	5/3/2000													ND
5393.28	40	42-48"	5/3/2000													ND
5393.29	40	54-60"	5/3/2000													ND
5393.30	40	66-72"	5/3/2000													ND
5393.31	40	78-84"	5/3/2000													ND
5393.32	40	90-96"	5/3/2000													ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5393.33	40	102-108"	5/3/2000	Pb only												ND
5393.34	40	114-120"	5/3/2000													ND
5393.35	40	126-132"	5/3/2000													ND
5393.36	40	138-144"	5/3/2000													ND
5298.02	40D	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.03	40D	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.04	40D	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.05	40D	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.06	40D	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.07	40D	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.08	40D	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.09	40D	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.10	40D	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.11	40D	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.12	40D	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.13	40D	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.14	41	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.15	41	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.16	41	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.17	41	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.18	41	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.19	41	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.20	41	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.21	41	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.22	41	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.23	41	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.24	41	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.25	41	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.26	42	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.27	42	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.28	42	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.29	42	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.30	42	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.31	42	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.32	42	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.33	42	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.34	42	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.35	42	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.36	42	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5298.37	42	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5300.02	43	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.03	43	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.04	43	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.05	43	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.06	43	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.07	43	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.08	43	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.09	43	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.10	43	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.11	43	114-120"	#######	ND	ND	ND	ND	ND	0.46J	0.57J	ND	ND	ND	ND	ND	ND
5300.12	43	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.13	43	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.14	44	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.15	44	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.16	44	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.17	44	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.18	44	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.19	44	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.20	44	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.21	44	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.22	44	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.23	44	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.24	44	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.25	44	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.26	45	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.59
5300.27	45	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.28	45	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.29	45	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.30	45	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.31	45	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.32	45	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.33	45	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.34	45	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.35	45	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.22
5300.36	45	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5300.37	45	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5304.02	46	6-12"	#######	ND	ND	ND	**3.9**	ND	3	17.8	ND	ND	14	ND	ND	ND
5304.03	46	18-24"	#######	ND	ND	ND	**3**	ND	ND	7	ND	ND	8.3	ND	ND	ND
5304.04	46	30-36"	#######	ND	ND	ND	**19**	ND	42	262	ND	ND	160	ND	938.19	ND
5304.05	46	42-48"	#######	ND	ND	ND	**30**	ND	63	400	ND	ND	240	ND	**1784.99**	ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5304.06	46	54-60"	#######	ND	N	ND	**49**	ND	120	**510**	ND	ND	340	ND	238.3	ND
5304.07	46	66-72"	#######	ND	ND	ND	**28**	ND	59	360	ND	ND	240	ND	684.08	ND
5304.08	46	78-84"	#######	ND	ND	ND	**48**	ND	100	**640**	ND	ND	440	ND	**1213.19**	ND
5304.09	46	90-96"	#######	ND	ND	ND	**41**	ND	84	**560**	ND	ND	360	ND	**1146.22**	ND
5304.10	46	102-108"	#######	ND	ND	ND	**48**	ND	97	**640**	ND	ND	490	ND	700.47	ND
5304.11	46	114-120"	#######	ND	ND	ND	**31**	ND	50	303	ND	ND	230	ND	584.23	ND
5304.12	46	126-132"	#######	ND	ND	ND	**67**	ND	130	**870**	ND	ND	640	ND	233.01	ND
5304.13	46	138-144"	#######	ND	ND	ND	**18**	ND	32	183	ND	ND	140	ND	237.44	ND
5304.14	47	6-12"	#######	ND	ND	ND	**3.7**	ND	4J	22.1	ND	ND	15	ND	ND	ND
5304.15	47	18-24"	#######	ND	ND	ND	**3.3**	ND	ND	10.8	ND	ND	8.2	ND	ND	ND
5304.16	47	30-36"	#######	ND	ND	ND	ND	ND	ND	4.2J	ND	ND	5.6	ND	ND	ND
5304.17	47	42-48"	#######	ND	ND	ND	**23**	ND	60	400	ND	ND	210	ND	**1088.62**	ND
5304.18	47	54-60"	#######	ND	ND	ND	**30**	ND	86	**590**	ND	ND	290	ND	**1327.62**	ND
5304.19	47	66-72"	#######	ND	ND	ND	**69**	ND	230	**1490**	ND	ND	800	ND	**1759.2**	ND
5304.20	47	78-84"	#######	ND	ND	ND	**13**	ND	35	225	ND	ND	130	ND	861.43	ND
5304.21	47	90-96"	#######	ND	ND	ND	**21**	ND	54	370	ND	ND	200	ND	423.62	ND
5304.22	47	102-108"	#######	ND	ND	ND	**15**	ND	52	358	ND	ND	170	ND	657.42	ND
5304.23	47	114-120"	#######	ND	ND	ND	**36**	ND	89	**550**	ND	ND	340	ND	828.15	ND
5304.24	47	126-132"	#######	ND	ND	ND	**33**	ND	69	**440**	ND	ND	270	ND	485.03	ND
5304.25	47	138-144"	#######	ND	ND	ND	**3.6**	ND	1.1	6.4	ND	ND	4.9	ND	215.06	ND
5304.26	48	6-12"	#######	ND	ND	ND	1.2	ND	2	8.62	ND	ND	1.8	ND	ND	ND
5304.27	48	18-24"	#######	ND	ND	ND	1.1	ND	1.1	4.73	ND	ND	0.9	ND	ND	ND
5304.28	48	30-36"	#######	ND	ND	ND	0.86	ND	0.58J	2.57	ND	ND	0.77	ND	ND	ND
5304.29	48	42-48"	#######	ND	ND	ND	1.5	ND	1.1	5.8	ND	ND	1.9	ND	ND	ND
5304.30	48	54-60"	#######	ND	ND	ND	**5.2**	ND	29	173	ND	ND	56	ND	**10533.83**	ND
5304.31	48	66-72"	#######	ND	ND	ND	**110**	ND	490	**2870**	ND	ND	990	ND	326.19	ND
5304.32	48	78-84"	#######	ND	ND	ND	0.67	ND	5.2	33.1	ND	ND	9.5	ND	**1733.42**	ND
5304.33	48	90-96"	#######	ND	ND	ND	1.5	ND	7.9	50	ND	ND	17	ND	**2091.69**	ND
5304.34	48	102-108"	#######	ND	ND	ND	**150**	ND	420	**1780**	ND	ND	480	ND	201.31	ND
5304.35	48	114-120"	#######	ND	ND	ND	**590**	ND	**1200**	**6900**	ND	ND	**2500**	ND	341.05	ND
5304.36	48	126-132"	#######	ND	ND	ND	**200**	ND	510	**2990**	ND	ND	**1000**	ND	ND	ND
5304.37	48	138-144"	#######	ND	ND	ND	**260**	ND	400	**1340**	ND	ND	650	ND	676.65	ND
5309.02	49	6-12"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.03	49	18-24"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.04	49	30-36"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.05	49	42-48"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.06	49	54-60"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.07	49	66-72"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.08	49	78-84"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.09	49	90-96"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	196.23	ND

Table 3-1
Main Post Gas Station - Bldg. 699
Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000
(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5309.10	49	102-108"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	776.93	ND
5309.11	49	114-120"	4/3/2000	ND	ND	ND	ND	ND	0.67	1.66	ND	ND	ND	ND	964.48	ND
5309.12	49	126-132"	4/3/2000	ND	ND	ND	ND	ND	18	52.7	ND	ND	ND	ND	219.57	ND
5309.13	49	138-144"	4/3/2000	ND	ND	ND	ND	ND	8.3	24.2	ND	ND	ND	ND	197.94	ND
5309.14	50	6-12"	4/3/2000	ND	ND	ND	ND	ND	0.3J	0.6	ND	ND	ND	ND	ND	ND
5309.15	50	18-24"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.16	50	30-36"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.17	50	42-48"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.18	50	54-60"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.19	50	66-72"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.20	50	78-84"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.21	50	90-96"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.22	50	102-108"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.23	50	114-120"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.24	50	126-132"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.25	50	138-144"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.26	51	6-12"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.27	51	18-24"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.28	51	30-36"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.29	51	42-48"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.30	51	54-60"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.31	51	66-72"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.32	51	78-84"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.33	51	90-96"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.34	51	102-108"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.35	51	114-120"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.36	51	126-132"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5309.37	51	138-144"	4/3/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.02	52	6-12"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.03	52	18-24"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.04	52	30-36"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.05	52	42-48"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.06	52	54-60"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.07	52	66-72"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.08	52	78-84"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.09	52	90-96"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.10	52	102-108"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.11	52	114-120"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.12	52	126-132"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.13	52	138-144"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3-1
Main Post Gas Station - Bldg. 699
Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000
(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5315.14	53	6-12"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.15	53	18-24"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.16	53	30-36"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.17	53	42-48"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.18	53	54-60"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.19	53	66-72"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.20	53	78-84"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.21	53	90-96"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.22	53	102-108"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.23	53	114-120"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.24	53	126-132"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.25	53	138-144"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.26	54	6-12"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.27	54	18-24"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.28	54	30-36"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.29	54	42-48"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.30	54	54-60"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.31	54	66-72"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.32	54	78-84"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.33	54	90-96"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.34	54	102-108"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.35	54	114-120"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.36	54	126-132"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5315.37	54	138-144"	4/4/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.02	55	6-12"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.03	55	18-24"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.04	55	30-36"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.05	55	42-48"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.06	55	54-60"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.07	55	66-72"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.08	55	78-84"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.09	55	90-96"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.10	55	102-108"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.11	55	114-120"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.12	55	126-132"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.13	55	138-144"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.14	56	6-12"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.15	56	18-24"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.16	56	30-36"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.17	56	42-48"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.18	56	54-60"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3-1
Main Post Gas Station - Bldg. 699
Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000
(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5318.19	56	66-72"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.20	56	78-84"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.21	56	90-96"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.22	56	102-108"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.23	56	114-120"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.24	56	126-132"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.25	56	138-144"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.26	57	6-12"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.27	57	18-24"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.28	57	30-36"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.29	57	42-48"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.30	57	54-60"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.31	57	66-72"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.32	57	78-84"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.33	57	90-96"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.34	57	102-108"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.35	57	114-120"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.36	57	126-132"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.37	57	138-144"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.38	58	6-12"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.39	58	18-24"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.5
5318.40	58	30-36"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.29
5318.41	58	42-48"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.83
5318.42	58	54-60"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.4
5318.43	58	66-72"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.95
5318.44	58	78-84"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.45	58	90-96"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.46	58	102-108"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.41
5318.47	58	114-120"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.48	58	126-132"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5318.49	58	138-144"	4/5/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.01	59	6-12"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.02	59	18-24"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.03	59	30-36"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.04	59	42-48"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.05	59	54-60"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.06	59	66-72"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.07	59	78-84"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.08	59	90-96"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.09	59	102-108"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.10	59	114-120"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3-1
Main Post Gas Station - Bldg. 699
Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000
(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5320.11	59	126-132"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.12	59	138-144"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.13	60	6-12"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.14	60	18-24"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.15	60	30-36"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.16	60	42-48"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.17	60	54-60"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.18	60	66-72"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.19	60	78-84"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.20	60	90-96"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.21	60	102-108"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.22	60	114-120"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.23	60	126-132"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.24	60	138-144"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.25	60D	6-12"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.26	60D	18-24"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.27	60D	30-36"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.28	60D	42-48"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.29	60D	54-60"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.30	60D	66-72"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.31	60D	78-84"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.32	60D	90-96"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.33	60D	102-108"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.34	60D	114-120"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.35	60D	126-132"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.36	60D	138-144"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.37	61	6-12"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.38	61	18-24"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.39	61	30-36"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.40	61	42-48"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.41	61	54-60"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.42	61	66-72"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.43	61	78-84"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.44	61	90-96"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49.7
5320.45	61	102-108"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.46	61	114-120"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.47	61	126-132"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5320.48	61	138-144"	4/6/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.02	62	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.03	62	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.04	62	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5353.05	62	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.06	62	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.07	62	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.08	62	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	515.84	ND
5353.09	62	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	209.84	ND
5353.10	62	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.11	62	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.12	62	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.13	62	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.14	63	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.15	63	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.16	63	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.17	63	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.18	63	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.19	63	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.20	63	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.21	63	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.22	63	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.23	63	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.24	63	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.25	63	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.26	64	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.27	64	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.28	64	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.29	64	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.30	64	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.31	64	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.32	64	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.33	64	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.34	64	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.35	64	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.36	64	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5353.37	64	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	65	6-12"	NO SAMPLE TAKEN													
	65	18-24"														
	65	30-36"														
	65	42-48"														
	65	54-60"														
	65	66-72"														
	65	78-84"														

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
	65	90-96"														
	65	102-108"														
	65	114-120"														
	65	126-132"														
	65	138-144"														
	66	6-12"														
	66	18-24"														
	66	30-36"														
	66	42-48"							NO SAMPLE TAKEN							
	66	54-60"														
	66	66-72"														
	66	78-84"														
	66	90-96"														
	66	102-108"														
	66	114-120"														
	66	126-132"														
	66	138-144"														
5376.02	67	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.03	67	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.04	67	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.05	67	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.06	67	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.07	67	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.08	67	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	566.14	ND
5376.09	67	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	212.32	ND
5376.10	67	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.11	67	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.12	67	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.13	67	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.26	68	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	801.6	ND
5378.27	68	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.28	68	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.29	68	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.30	68	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.31	68	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.32	68	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	206.8	ND
5378.33	68	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.34	68	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.35	68	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.36	68	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5378.37	68	138-144"	#######	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND	ND
5378.74	68D	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.75	68D	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.76	68D	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.77	68D	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.78	68D	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.79	68D	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.80	68D	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.81	68D	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.82	68D	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.83	68D	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.84	68D	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.85	68D	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	69	6-12"	NO SAMPLE TAKEN													
	69	18-24"														
	69	30-36"														
	69	42-48"														
	69	54-60"														
	69	66-72"														
	69	78-84"														
	69	90-96"														
	69	102-108"														
	69	114-120"														
	69	126-132"														
	69	138-144"														
	70	6-12"	NO SAMPLE TAKEN													
	70	18-24"														
	70	30-36"														
	70	42-48"														
	70	54-60"														
	70	66-72"														
	70	78-84"														
	70	90-96"														
	70	102-108"														
	70	114-120"														
	70	126-132"														
	70	138-144"														
	71	6-12"	NO SAMPLE TAKEN													
	71	18-24"														
	71	30-36"														
	71	42-48"														

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup Criteria (mg/Kg) NJAC 7:26D				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
	71	54-60"	NO SAMPLE TAKEN													
	71	66-72"														
	71	78-84"														
	71	90-96"														
	71	102-108"														
	71	114-120"														
	71	126-132"														
	71	138-144"														
5376.14	72	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	543.8	28
5376.15	72	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.16	72	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.17	72	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.18	72	54-60"	#######	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND
5376.19	72	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.20	72	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	219.09	ND
5376.21	72	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.22	72	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.23	72	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.24	72	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5376.25	72	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.38	73	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.39	73	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.40	73	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.41	73	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.42	73	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.43	73	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.44	73	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.45	73	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.46	73	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.47	73	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.48	73	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.49	73	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	74	6-12"	NO SAMPLE TAKEN													
	74	18-24"														
	74	30-36"														
	74	42-48"														
	74	54-60"														
	74	66-72"														
	74	78-84"														
	74	90-96"														
	74	102-108"														

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
	74	114-120"														
	74	126-132"														
	74	138-144"														
	75	6-12"														
	75	18-24"														
	75	30-36"						NO SAMPLE TAKEN								
	75	42-48"														
	75	54-60"														
	75	66-72"														
	75	78-84"														
	75	90-96"														
	75	102-108"														
	75	114-120"														
	75	126-132"														
	75	138-144"														
	76	6-12"														
	76	18-24"														
	76	30-36"						NO SAMPLE TAKEN								
	76	42-48"														
	76	54-60"														
	76	66-72"														
	76	78-84"														
	76	90-96"														
	76	102-108"														
	76	114-120"														
	76	126-132"														
	76	138-144"														
5378.02	77	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.03	77	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.04	77	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.05	77	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.06	77	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.07	77	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.08	77	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5106.16**	ND
5378.09	77	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	203.53	18.5
5378.10	77	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.11	77	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.12	77	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.13	77	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.50	78	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.51	78	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Source: Fort Monmouth Environmental Testing Laboratory

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
5378.52	78	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.53	78	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.54	78	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.55	78	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.56	78	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.57	78	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	753.84	ND
5378.58	78	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	286.93	ND
5378.59	78	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.60	78	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.61	78	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	79	6-12"	NO SAMPLE TAKEN													
	79	18-24"														
	79	30-36"														
	79	42-48"														
	79	54-60"														
	79	66-72"														
	79	78-84"														
	79	90-96"														
	79	102-108"														
	79	114-120"														
	79	126-132"														
	79	138-144"														
	80	6-12"	NO SAMPLE TAKEN													
	80	18-24"														
	80	30-36"														
	80	42-48"														
	80	54-60"														
	80	66-72"														
	80	78-84"														
	80	90-96"														
	80	102-108"														
	80	114-120"														
	80	126-132"														
	80	138-144"														
	81	6-12"	NO SAMPLE TAKEN													
	81	18-24"														
	81	30-36"														
	81	42-48"														
	81	54-60"														
	81	66-72"														
	81	78-84"														

Source: Fort Monmouth Environmental Testing Laboratory

Table 3-1

Main Post Gas Station - Bldg. 699

Summary of Analytical Results from Geoprobe Soil Sampling - March/April 2000

(mg/Kg)

Lab ID	Boring	Depth	Date	2-Butanone	2-Chloroethyl vinyl ether	TCE	Benzene	PCE	Ethyl-benzene	Xylene	MeCl	Acetone	Toluene	Chloro-form	TPHC	Pb
Residential Direct Contact Soil Cleanup				1000	NLE	23	3	4	1000	410	49	1000	1000	19	1000	400
	81	90-96"	NO SAMPLE TAKEN													
	81	102-108"														
	81	114-120"														
	81	126-132"														
	81	138-144"														
5378.14	82	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	212.78	50
5378.15	82	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.16	82	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.17	82	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.18	82	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.19	82	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.20	82	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.21	82	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.22	82	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.23	82	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.24	82	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	975.14	ND
5378.25	82	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.62	83	6-12"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.63	83	18-24"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.64	83	30-36"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.65	83	42-48"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.66	83	54-60"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.67	83	66-72"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.68	83	78-84"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.69	83	90-96"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.70	83	102-108"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.71	83	114-120"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.72	83	126-132"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5378.73	83	138-144"	#######	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key

ND - Not Detected

"Bolded" analytical result exceeded the respective NJDEP Residential Direct Contact Soil Cleanup Criteria

Definition of Laboratory Qualifiers

MDL - Method Detection Limit

J - Compound identified below detection limit

B - Compound in both sample and blank

D - Results from dilution of sample

U - Compound searched for but not detected

E - Compound exceeds calibration limit

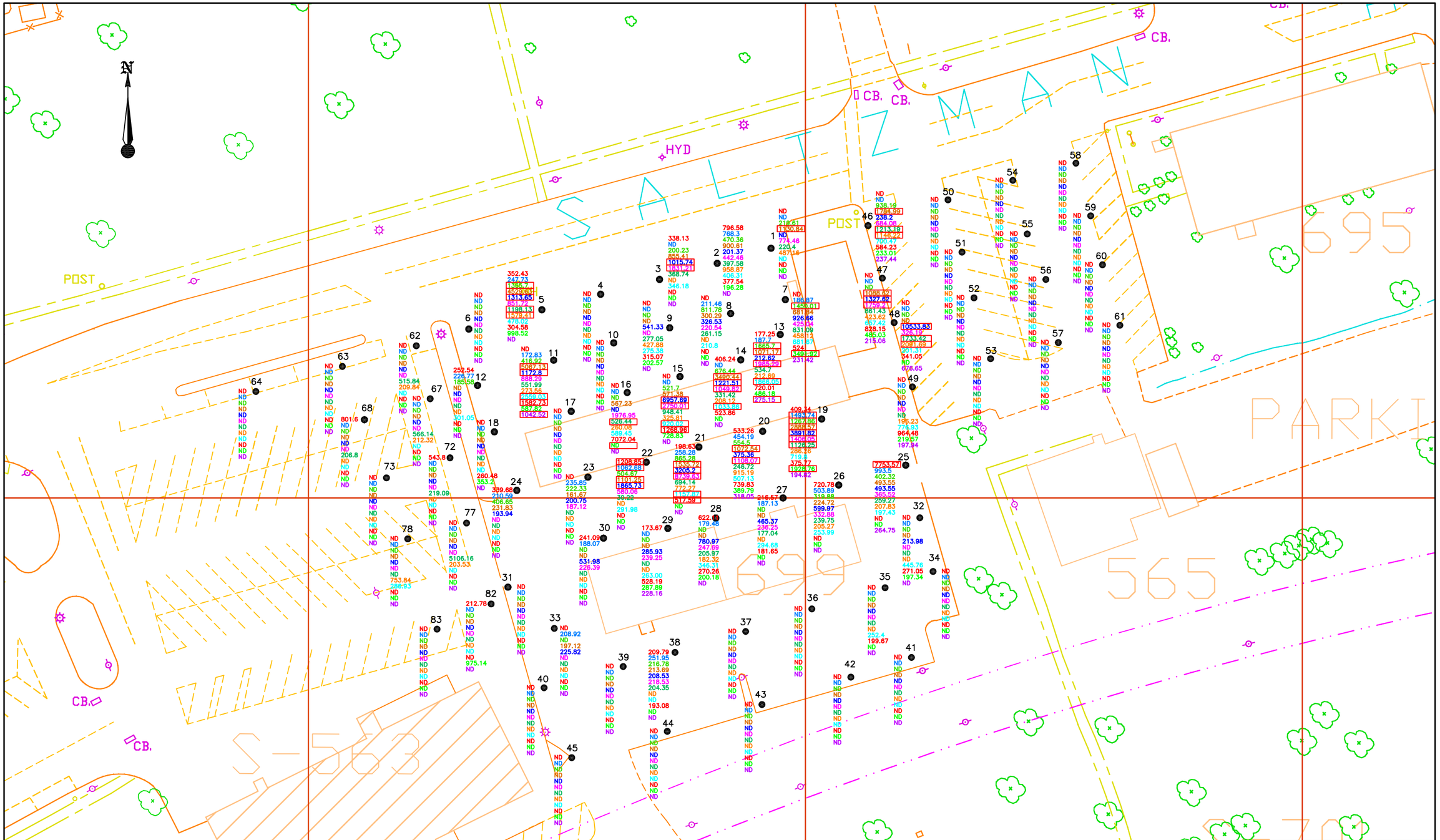
Source: Fort Monmouth Environmental Testing Laboratory

APPENDIX – A
FORT MONMOUTH
STANDARD OPERATING PROCEDURE

Geoprobe Sampling Methods for the AAFES
Main Post Gas Station, Building 699
SOP No.: SAM-0221, Dated 2-24-2000

APPENDIX – B
Drawings

Figure 3 - Analytical Results from Geoprobe Sampling – Total Petroleum Hydrocarbons
Figure 4 - Analytical Results from Geoprobe Sampling – Benzene
Figure 5 - Analytical Results from Geoprobe Sampling – Ethyl-Benzene
Figure 6 - Analytical Results from Geoprobe Sampling – Toluene
Figure 7 - Analytical Results from Geoprobe Sampling – Xylene
Figure 8 - Proposed Areas of Enzyme-Enhanced Bioremediation



LEGEND
6–12"
18–24"
30–36"
42–48"
54–60"
66–72"
78–84"
90–96"
102–108"
114–120"
126–132"
138–144"

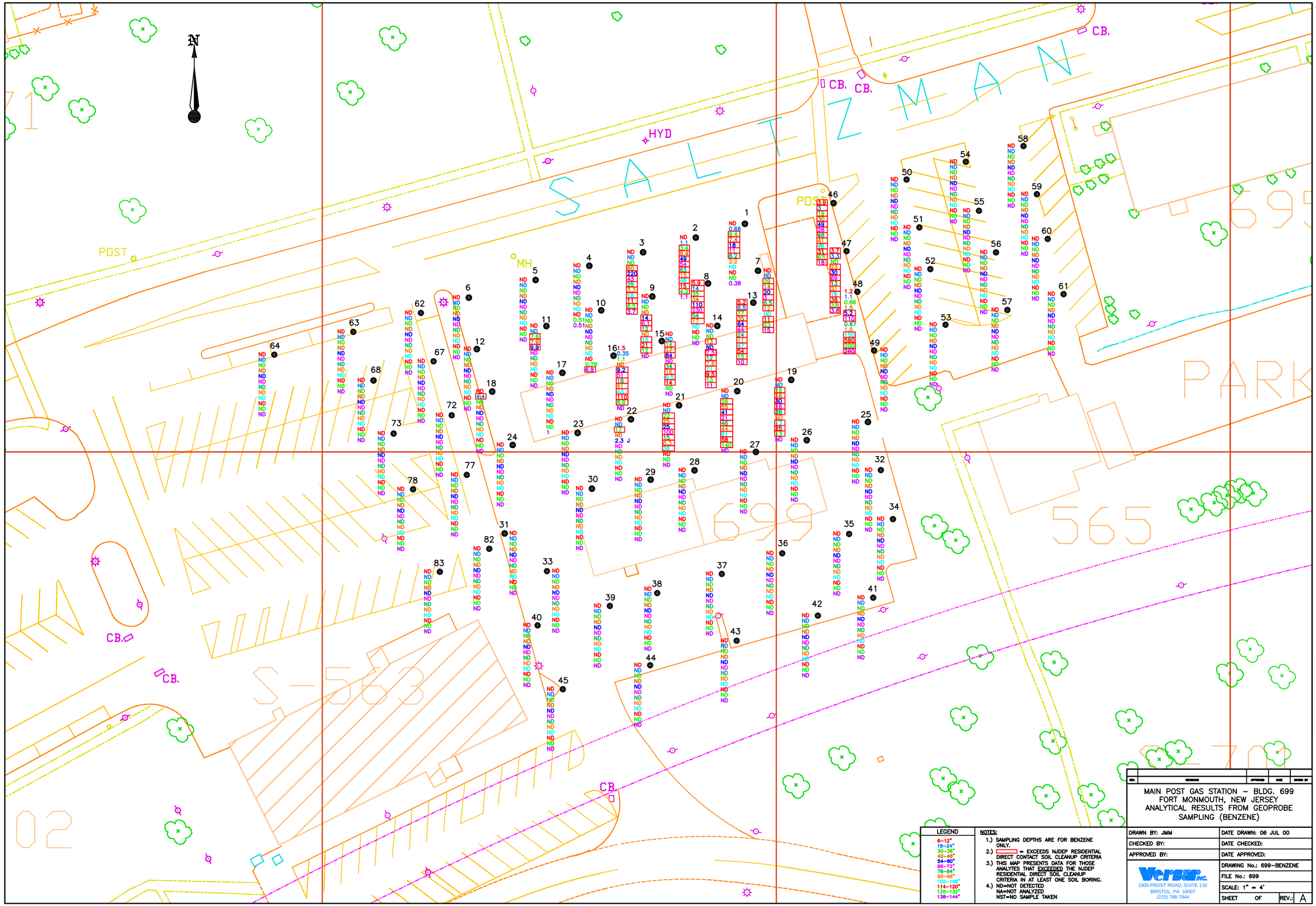
NOTES:

1.) SAMPLING DEPTHS ARE FOR BENZENE ONLY.
2.) = EXCEEDS NJDEP RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
3.) THIS MAP PRESENTS DATA FOR THOSE ANALYTES THAT EXCEEDED THE NJDEP RESIDENTIAL DIRECT SOIL CLEANUP CRITERIA IN AT LEAST ONE SOIL BORING.
4.) ND=NOT DETECTED
NA=NOT ANALYZED
NST=NO SAMPLE TAKEN

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

MAIN POST GAS STATION – BLDG. 699
FORT MONMOUTH, NEW JERSEY
ANALYTICAL RESULTS FROM GEOPROBE SAMPLING (TPHC)

DRAWN BY: JMM	DATE DRAWN: 06 JUL 00
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
Versar INC. 1900 FROST ROAD, SUITE 110 BRISTOL, PA 19007 (215) 788-7844	DRAWING No.: 699–TPHC
	FILE No.: 699
	SCALE: 1" = 4'
	SHEET OF REV.: A



LEGEND
6–12"
18–24"
30–36"
42–48"
54–60"
66–72"
78–84"
90–96"
102–108"
114–120"
126–132"
138–144"

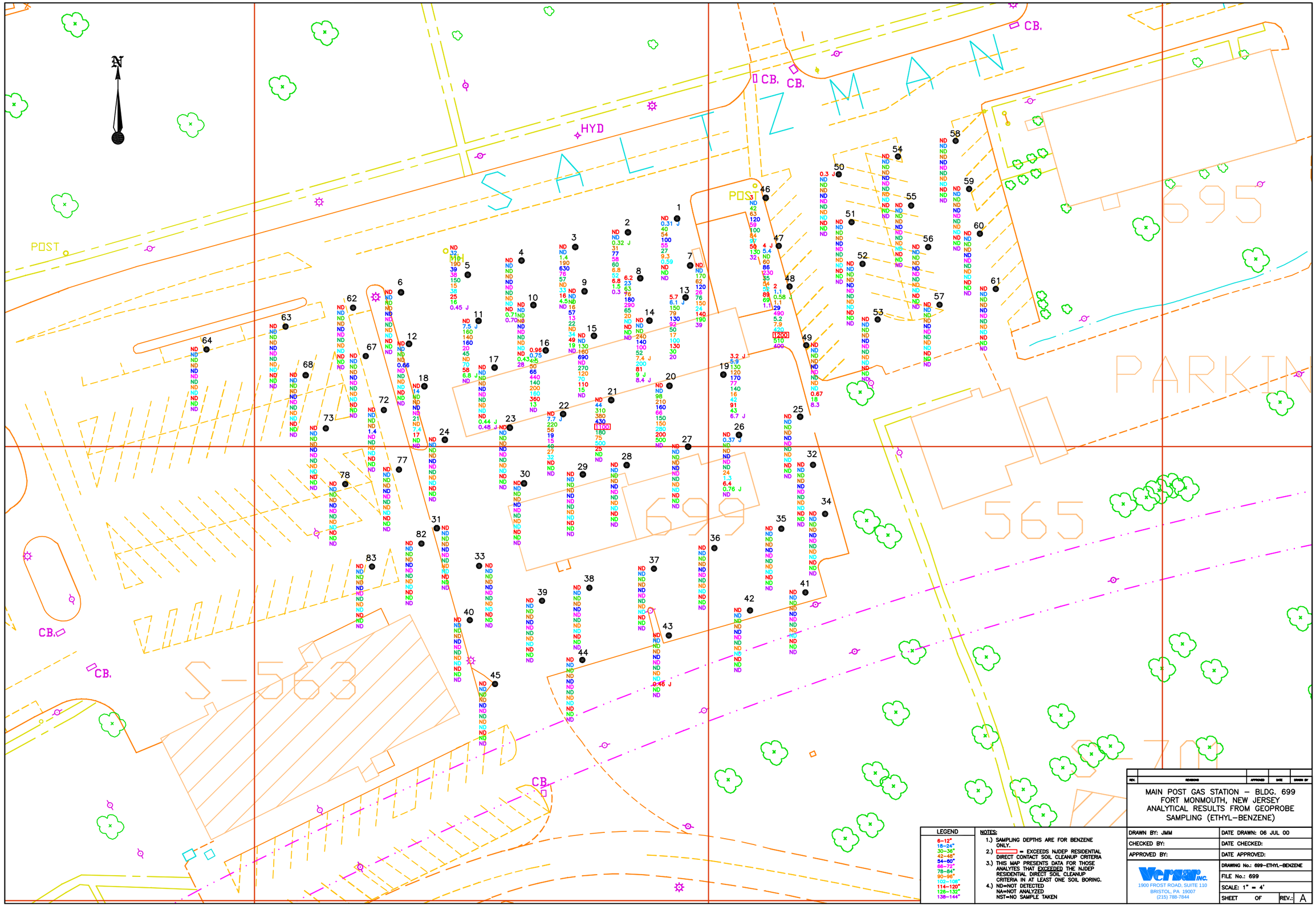
NOTES:

1.) SAMPLING DEPTHS ARE FOR BENZENE ONLY.
2.) = EXCEEDS NJDEP RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
3.) THIS MAP PRESENTS DATA FOR THOSE ANALYTES THAT EXCEEDED THE NJDEP RESIDENTIAL DIRECT SOIL CLEANUP CRITERIA IN AT LEAST ONE SOIL BORING.
4.) ND=NOT DETECTED
NA=NOT ANALYZED
NST=NO SAMPLE TAKEN

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

MAIN POST GAS STATION – BLDG. 699
FORT MONMOUTH, NEW JERSEY
ANALYTICAL RESULTS FROM GEOPROBE SAMPLING (BENZENE)

DRAWN BY: JMM	DATE DRAWN: 06 JUL 00
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
Versar INC. 1900 FROST ROAD, SUITE 110 BRISTOL, PA 19007 (215) 788-7844	DRAWING No.: 699–BENZENE
	FILE No.: 699
	SCALE: 1" = 4'
	SHEET OF REV.: A



REV.	REVISIONS	APPROVED	DATE	DRAWN BY

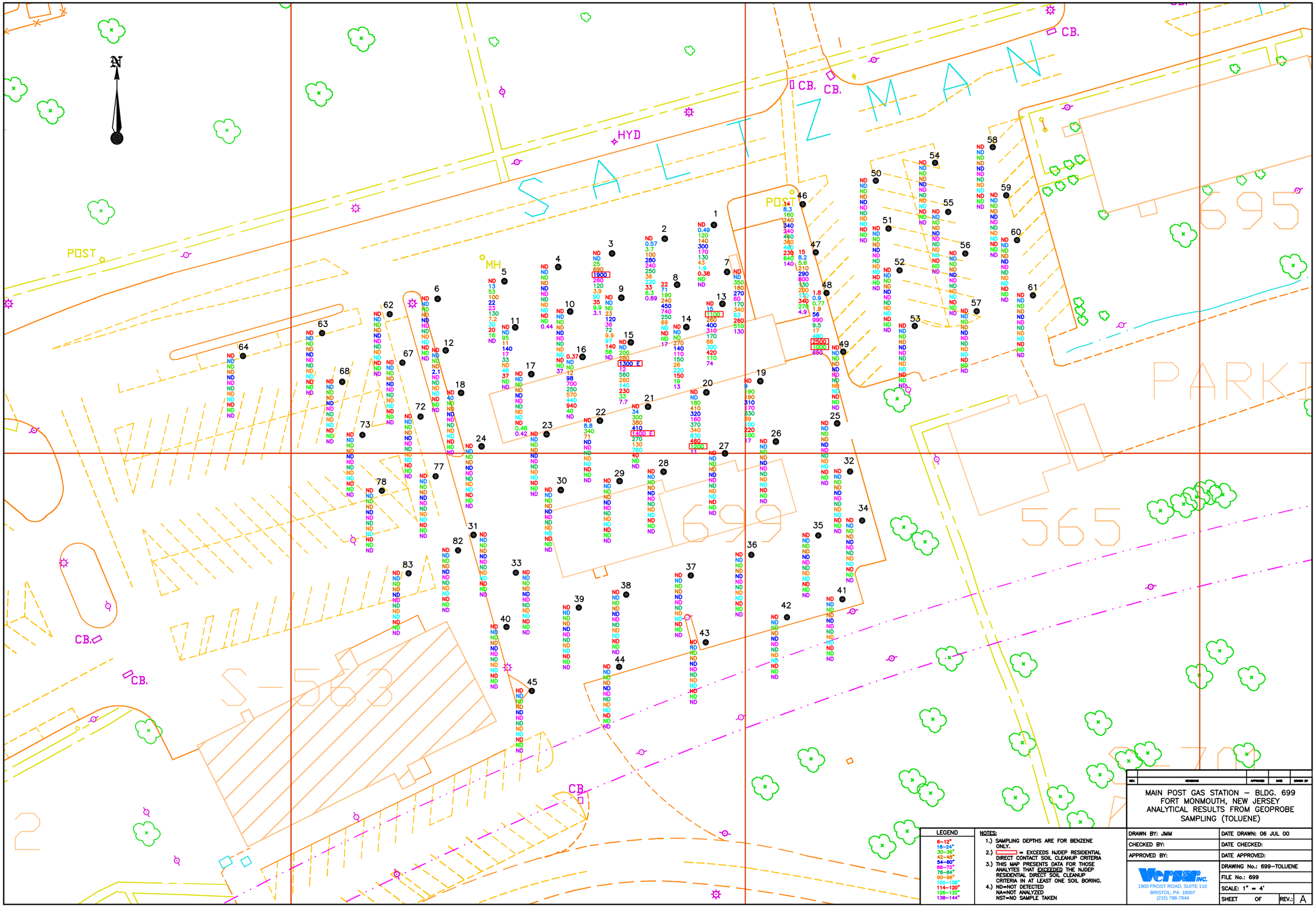
MAIN POST GAS STATION – BLDG. 699
FORT MONMOUTH, NEW JERSEY
ANALYTICAL RESULTS FROM GEOPROBE
SAMPLING (ETHYL–BENZENE)

LEGEND
6–12"
18–24"
30–36"
42–48"
54–60"
66–72"
78–84"
90–96"
102–108"
114–120"
126–132"
138–144"

NOTES:

1.) SAMPLING DEPTHS ARE FOR BENZENE ONLY.
2.) ▭ = EXCEEDS NJDEP RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
3.) THIS MAP PRESENTS DATA FOR THOSE ANALYTES THAT EXCEEDED THE NJDEP RESIDENTIAL DIRECT SOIL CLEANUP CRITERIA IN AT LEAST ONE SOIL BORING.
4.) ND=NOT DETECTED
NA=NOT ANALYZED
NST=NO SAMPLE TAKEN

DRAWN BY: JMM	DATE DRAWN: 06 JUL 00
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
Versar INC. 1900 FROST ROAD, SUITE 110 BRISTOL, PA 19007 (215) 788-7844	DRAWING No.: 699–ETHYL–BENZENE
	FILE No.: 699
	SCALE: 1" = 4'
	SHEET OF REV.: A



LEGEND
6–12"
18–24"
30–36"
42–48"
54–60"
66–72"
78–84"
90–96"
102–108"
114–120"
126–132"
138–144"

NOTES:

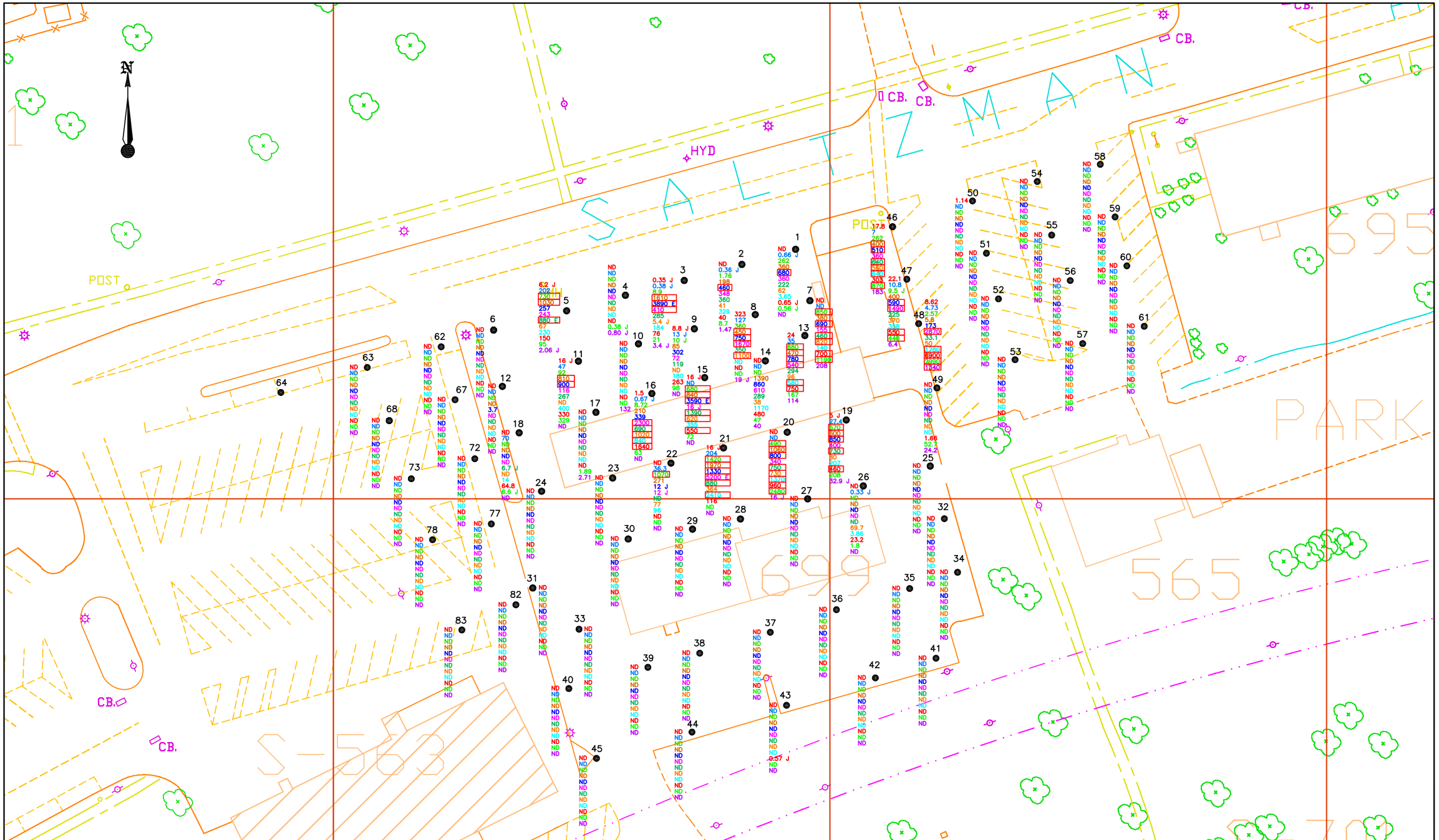
1.) SAMPLING DEPTHS ARE FOR BENZENE ONLY.
2.) ▭ = EXCEEDS NJDEP RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
3.) THIS MAP PRESENTS DATA FOR THOSE ANALYTES THAT EXCEEDED THE NJDEP RESIDENTIAL DIRECT SOIL CLEANUP CRITERIA IN AT LEAST ONE SOIL BORING.
4.) ND=NOT DETECTED
NA=NOT ANALYZED
NST=NO SAMPLE TAKEN

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

MAIN POST GAS STATION – BLDG. 699
FORT MONMOUTH, NEW JERSEY
ANALYTICAL RESULTS FROM GEOPROBE SAMPLING (TOLUENE)

DRAWN BY: JMM	DATE DRAWN: 06 JUL 00
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: 699–TOLUENE
	FILE No.: 699
	SCALE: 1" = 4'
	SHEET OF REV.: A

Versar INC.
1900 FROST ROAD, SUITE 110
BRISTOL, PA 19007
(215) 788-7844



LEGEND
6–12"
18–24"
30–36"
42–48"
54–60"
66–72"
78–84"
90–96"
102–108"
114–120"
126–132"
138–144"

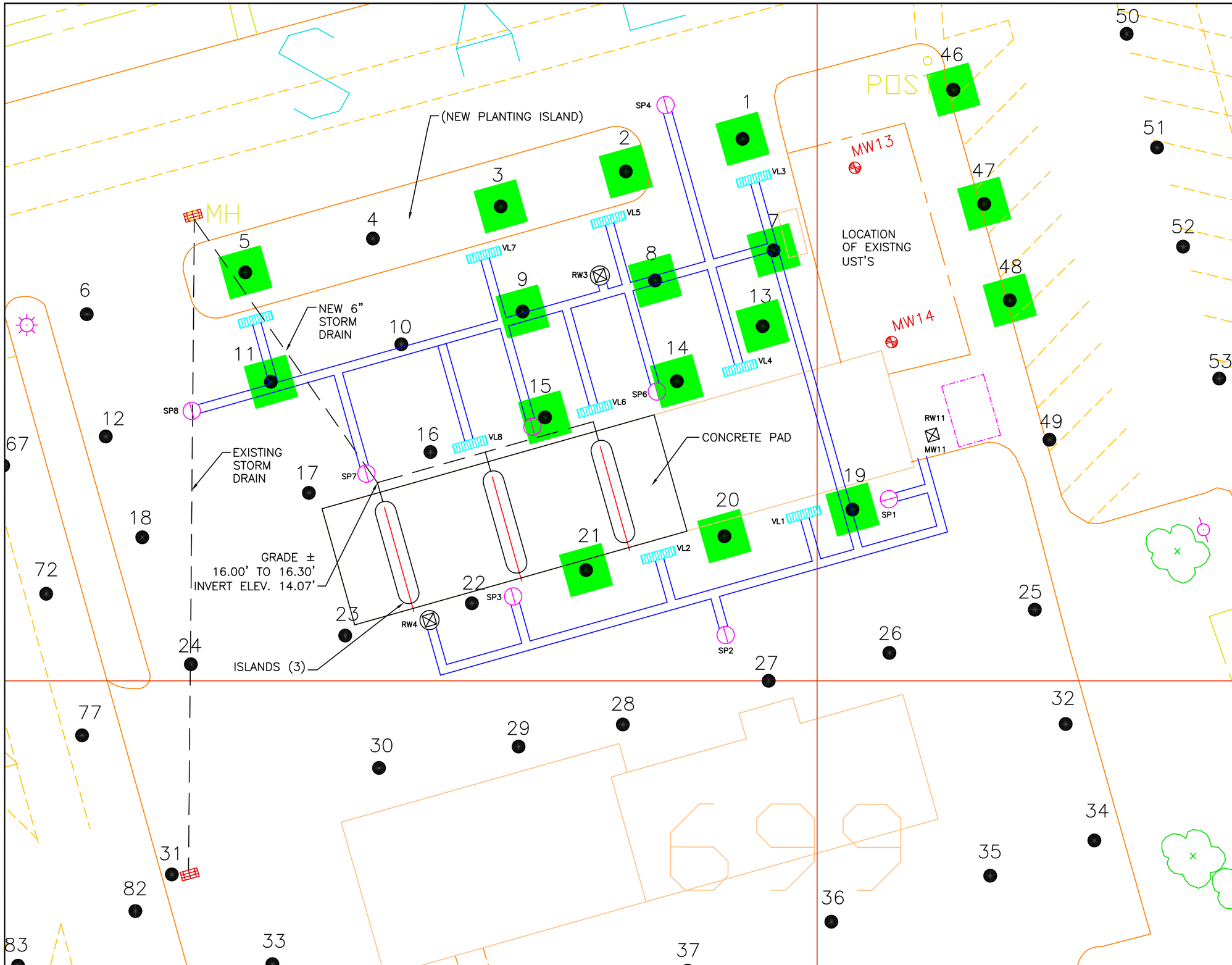
NOTES:

1.) SAMPLING DEPTHS ARE FOR BENZENE ONLY.
2.) ▭ = EXCEEDS NJDEP RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA
3.) THIS MAP PRESENTS DATA FOR THOSE ANALYTES THAT EXCEEDED THE NJDEP RESIDENTIAL DIRECT SOIL CLEANUP CRITERIA IN AT LEAST ONE SOIL BORING.
4.) ND=NOT DETECTED
NA=NOT ANALYZED
NST=NO SAMPLE TAKEN

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

MAIN POST GAS STATION – BLDG. 699
FORT MONMOUTH, NEW JERSEY
ANALYTICAL RESULTS FROM GEOPROBE SAMPLING (XYLENE)

DRAWN BY: JMM	DATE DRAWN: 06 JUL 00
CHECKED BY:	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
Versar INC. 1900 FROST ROAD, SUITE 110 BRISTOL, PA 19007 (215) 788-7844	DRAWING No.: 699–XYLENE
	FILE No.: 699
	SCALE: 1" = 4'
	SHEET OF REV.: A



LEGEND

- Proposed Zones of Geoprobe Enzyme Injection
- (1) EXISTING RECOVERY WELL
- (2) NEW RECOVERY WELLS
- (8) SPARGE POINTS
- (9) SUE LATERALS

NOTES:

1.) PRIOR TO BACKFILLING, ALL TRENCHES AND PIPING RUNS ARE TO BE SURVEYED AND LOCATIONS AND ELEVATIONS RECORDED.
2.) SEE FIGURE 15A, FOR SECTIONS

WELLS

MW11 (EXISTING) } 20 FT. BGS
RW13 (NEW) } TO BOTTOM
RW4 (NEW) } OF SCREEN

VAPOR EXTRACTION LATERAL
(NEW) VL 1 THRU VL 9 (3 FT. BGS)

SPARGE POINTS
(NEW) SP1 THRU SP 8 (5 FT. BGS)

REV.	REVISIONS	APPROVED	DATE	DRAWN BY

TITLE: FIGURE 8
PROPOSED AREAS OF ENZYME-ENHANCED BIOREMEDIATION
BUILDING 699
FORT MONMOUTH, NEW JERSEY

DRAWN BY: JMM	DATE DRAWN: 11 JUL 00
CHECKED BY: SJE	DATE CHECKED:
APPROVED BY:	DATE APPROVED:
	DRAWING No.: FIGURE 8
	FILE No.: 699-C
	SCALE: 1" = 10'
	SHEET 1 OF 1 REV.: A

Versar INC.
1900 FROST ROAD, SUITE 110
BRISTOL, PA 19007
(215) 788-7844

Appendix C
Material Safety Data Sheets

Enzyme Accelerator

EZT-MZC

EZT-A2

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION

NFPA Rating: Health-1; Flammability-0; Reactivity-0; Special- -		**HMIS Rating:** Health-1; Flammability-0; Reactivity-0; Personal Protection-D
Manufacturer's Name:	Enzyme Technologies, Inc.	**DOT Hazard Classification: None**
Address:	5228 NE 158th Ave Portland, OR 97230	**TRADE NAME: Enzyme Accelerator**
Date Prepared: 3/9/98	**Prepared By: KG**	**MSDS Number:** Revision - 2
Information Calls:	**(503) 254-4331**	NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	ACS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
Proprietary		No	N/E	N/E	N/E

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	220 F	Specific Gravity (H2O=1):	1.00
Vapor Pressure: PSIG @ 70 F (Aerosols):	N/A	Vapor Pressure (Non-Aerosols)(mm Hg and Temperature):	18 @75^0 F
Vapor Density (Air = 1):	.62	Evaporation Rate (BUAC = 1):	1.20
Solubility in Water:	Complete	Water Reactive:	No
Appearance and Odor:	Tan colored liquid with citrus odor.		

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA flame projection test (aerosols): N/A	Auto Ignition Temperature: N/E	Flammability Limits in Air by % in Volume:
FLASH POINT AND METHOD USED 115 F (T.C.C.)		% LEL: N/E % UEL: N/E
EXTINGUISHER MEDIA: Non-Combustible	**SPECIAL FIRE FIGHTING PROCEDURES** : None	

Unusual Fire & Explosion Hazards: Provide shielding to protect personnel.

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY: [X] STABLE [ ] UNSTABLE	**HAZARDOUS POLYMERIZATION:** [ ] WILL [X] WILL NOT OCCUR
Incompatibility (Mat. to avoid): None Identified	**Conditions to Avoid:** None Identified

Hazardous Decomposition Products: None

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: [X] INHALATION [ ] INGESTION [X] SKIN ABSORPTION [X] EYE [ ] NOT HAZARDOUS

ACUTE EFFECTS:	**None**		
Inhalation:	Can cause headache, dizziness.		
Eye Contact:	Irritating	**Skin Contact:**	May be an irritant.
Ingestion:	Chemical pneumonitis if aspirated into lungs.		
CHRONIC EFFECTS:	None known.		
Medical Conditions Generally Aggravated by Exposure:	Asthma		

SECTION 6 - EMERGENCY FIRST AID PROCEDURES

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

Skin Contact: Wash with soap and water.

Inhalation: Move to fresh air.

Ingestion: **DO NOT INDUCE VOMITING.** Drink large quantity of water. Get immediate medical attention.

SECTION 7 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (specify type):.	None normally needed		
Protective Gloves:	Solvent resistant	**Eye Protection:**	Safety glasses.
Ventilation Requirements:	Normal room ventilation.		
Other Protective Clothing & Equipment:	None		
Hygienic Work Practices:	Wash with soap and water after contact.		

SECTION 8 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken If Material Is Spilled Or Released: Cover with absorbent material and scoop up. Flush area with water.

Waste Disposal Methods: Dispose of in accordance with local, state and federal regulations.

Precautions To Be Taken In Handling & Storage: Keep away from temperatures above 130 F.

Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

**** Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only**

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION

NFPA Rating: Health-1; Flammability-0; Reactivity-0; Special- -		**HMIS Rating:** Health-1; Flammability-0; Reactivity-0; Personal Protection-D	
Manufacturer's Name:	Enzyme Technologies, Inc.	**DOT Hazard Classification:** None	
Address:	5228 NE 158th Ave. Portland, OR 97230	**TRADE NAME:**	**EZT-MZC**
Date Prepared: 3/9/98	**Prepared By:** KG	**MSDS Number:**	**Revision** - 2
Information Calls:	**(503) 254-4331**	NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA	

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	ACS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
NATURAL ENZYMES	N/A	No	N/E	N/E	N/E
monomethanoxygenase,alcoholdehydrogenase,aldehydehydogenase					

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	212 F	**Specific Gravity (H2O=1):**	1.00
Vapor Pressure: PSIG @ 70 F (Aerosols):	N/A	**Vapor Pressure (Non-Aerosols)(mm Hg and Temperature):**	18 @75^0 F
Vapor Density (Air = 1):	.62	**Evaporation Rate (BUAC = 1):**	1.00
Solubility in Water:	Complete	**Water Reactive:**	No
Appearance and Odor:	Thin brown/tan liquid with slightly sour odor		

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA flame projection test (aerosols): N/A	Auto Ignition Temperature: N/A	Flammability Limits in Air by % in Volume:
FLASH POINT AND METHOD USED N/A		% LEL: N/A % UEL: N/A
EXTINGUISHER MEDIA: Non-Combustible	**SPECIAL FIRE FIGHTING PROCEDURES**: None	
Unusual Fire & Explosion Hazards: None		

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY: [X] STABLE [ ] UNSTABLE	**HAZARDOUS POLYMERIZATION:** [ ] WILL [X] WILL NOT OCCUR
Incompatibility (Mat. to avoid): None Identified	**Conditions to Avoid:** None Identified
Hazardous Decomposition Products: None	

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: [ ] INHALATION [X] INGESTION [X] SKIN ABSORPTION [X] EYE [ ] NOT HAZARDOUS

ACUTE EFFECTS:	None		
Inhalation:	Can cause headache, dizziness.		
Eye Contact:	May be an irritant	**Skin Contact:**	May be an irritant.
Ingestion:	Gastrointestinal irritant		
CHRONIC EFFECTS:	None known.		
Medical Conditions Generally Aggravated by Exposure:	None Identified		

SECTION 6 - EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush with water for 15 minutes. If irritation persists get medical attention.

Skin Contact: Wash with soap and water.

Inhalation: Move to fresh air. No adverse effects noted.

Ingestion: **DO NOT INDUCE VOMITING.** Drink large quantity of water. Get immediate medical attention.

SECTION 7 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (specify type):.	None normally needed		
Protective Gloves:	Rubber if desired	**Eye Protection:**	Safety glasses.
Ventilation Requirements:	Normal room ventilation.		
Other Protective Clothing & Equipment:	Apron and boots if desired.		
Hygienic Work Practices:	Wash with soap and water after contact.		

SECTION 8 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken If Material Is Spilled Or Released: Dike and contain. Collect and re-use.

Waste Disposal Methods: Rinse container with water and dispose of accordingly

Precautions To Be Taken In Handling & Storage: Recommended storage temperature is 50 F. Seal container after use.

Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

**** Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only**

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION

NFPA Rating: Health-1; Flammability-0; Reactivity-0; Special- -		**HMIS Rating:** Health-1; Flammability-0; Reactivity-0; Personal Protection-D	
Manufacturer's Name:	Enzyme Technologies, Inc.	**DOT Hazard Classification:** None	
Address:	5228 NE 158th Ave Portland, OR 97230	**TRADE NAME:**	**EZT-A2**
Date Prepared: 3/9/98	**Prepared By:** KG	**MSDS Number:**	**Revision** - 2
Information Calls:	**(503) 254-4331**	NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA	

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	ACS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
Bacterial Consortium	N/A	No	N/E	N/E	N/E

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	212 F	**Specific Gravity (H2O=1):**	1.00
Vapor Pressure: PSIG @ 70 F (Aerosols):	N/A	**Vapor Pressure (Non-Aerosols)(mm Hg and Temperature):**	18 @75^0 F
Vapor Density (Air = 1):	.62	**Evaporation Rate (BUAC = 1):**	1.00
Solubility in Water:	Complete	**Water Reactive:**	No

Appearance and Odor: Thin brown/tan liquid with slightly sour odor

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA flame projection test (aerosols): N/A	Auto Ignition Temperature: N/A	Flammability Limits in Air by % in Volume:
FLASH POINT AND METHOD USED N/A		% LEL: N/A % UEL: N/A
EXTINGUISHER MEDIA: Non-Combustible	**SPECIAL FIRE FIGHTING PROCEDURES**: None	

Unusual Fire & Explosion Hazards: None

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY: [X] STABLE [ ] UNSTABLE	**HAZARDOUS POLYMERIZATION:** [ ] WILL [X] WILL NOT OCCUR
Incompatibility (Mat. to avoid): None Identified	**Conditions to Avoid:** None Identified

Hazardous Decomposition Products: None

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: [ ] INHALATION [X] INGESTION [X] SKIN ABSORPTION [X] EYE [ ] NOT HAZARDOUS

ACUTE EFFECTS: None

Inhalation: None

Eye Contact: May be an irritant **Skin Contact:** May be an irritant.

Ingestion: Gastrointestinal irritant

CHRONIC EFFECTS: None known.

Medical Conditions Generally Aggravated by Exposure: None Identified

SECTION 6 - EMERGENCY FIRST AID PROCEDURES

Eye Contact: Flush with water for 15 minutes. If irritation persists get medical attention.

Skin Contact: Wash with soap and water.

Inhalation: Move to fresh air. No adverse effects noted.

Ingestion: **DO NOT INDUCE VOMITING.** Drink large quantity of water. Get immediate medical attention.

SECTION 7 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (specify type):. None normally needed

Protective Gloves: Rubber if desired **Eye Protection:** Safety glasses.

Ventilation Requirements: Normal room ventilation.

Other Protective Clothing & Equipment: Apron and boots if desired.

Hygienic Work Practices: Wash with soap and water after contact.

SECTION 8 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken If Material Is Spilled Or Released: Dike and contain. Collect and re-use.

Waste Disposal Methods: Rinse container with water and dispose of accordingly

Precautions To Be Taken In Handling & Storage: Recommended storage temperature is 60 F. Seal container after use.

Other Precautions &/or Special Hazards: KEEP OUT OF REACH OF CHILDREN.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.

**** Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only**