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ENVIRONMENTAL
PROTECTION

Transmitted Via UPS Next Day Air

January 12, 2001

Barney M. Chan
Hazardous Materials Specialist
Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Re: Ground-Water Monitoring Reports
September 1999 and October 2000
Southern Fueling Area
UPS-Oakland Center
8400 Pardee Drive, Oakland, California
BBL Project # 36768.03
State ID # 583

Dear Mr. Chan:

On behalf of United Parcel Service (UPS), Blasland, Bouck, & Lee, Inc. (BBL) is pleased to submit this ground-water monitoring report on the referenced facility. The report summarizes removal activities associated with oxygen release compound (ORC) socks and the results of two subsequent ground-water monitoring events. The ground-water monitoring events were conducted in accordance with the Work Plan approval letter, dated August 8, 1997, from the Alameda County Health Care Services Agency, which required ground-water sampling following ORC sock removal.

Included in this report is a conceptual plan to remove free product from ground water and decrease gasoline and diesel concentrations in soil from the Southern Fueling Area. After your review, we request a meeting to discuss site closure goals and implementation of an agreed-upon course of remediation.

If you have any questions or require further clarification please call the undersigned at (949) 474-9052.

Sincerely,

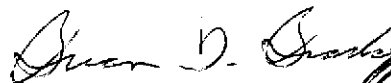
BLASLAND, BOUCK, & LEE, INC.



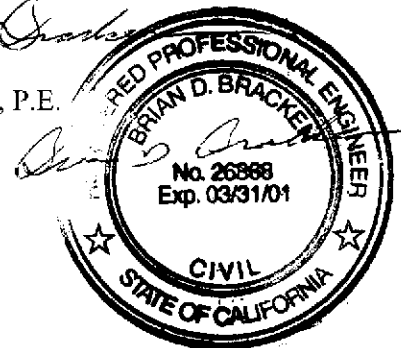
Anthony T. Parenteau, R.E.A.
Senior Scientist/Manager

Attachments

cc/encl: Linda Lyons, UPS
Hugh Devery, BBL



Brian D. Bracken, P.E.
Vice President



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REPORT

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*Ground-Water
Monitoring Report*

#583

*United Parcel Service
Southern Fueling Area
8400 Pardee Drive
Oakland, California*

United Parcel Service, Inc.
Atlanta, Georgia

January 2001

*Ground-Water
Monitoring Report*

*United Parcel Service
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January 2001

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

2600 Michelson Drive, Suite 830
Irvine, California 92612-6520
(949) 474-9052

**GROUND-WATER MONITORING REPORT
FOR
UNITED PARCEL SERVICE
SOUTH TANK AREA**

SECTION I. SITE INFORMATION

| | | | |
|---|--|--|--|
| Site Name: | United Parcel Service Distribution Center | Location: | 8400 Pardee Drive Oakland, California |
| Reporting Periods: | September 1999 and October 2000 | Site Monitoring Data Available Since: | Third Quarter 1990 |
| Report Date: | January 11, 2000 | Dates Sampled: | September 30, 1999, October 11, 2000 |
| Prepared By: | Blasland, Bouck, & Lee 2600 Michelson Drive, Suite 830 Irvine, CA, 92612 | Prepared For: | United Parcel Service 55 Glenlake Parkway, NE Atlanta, Georgia |
| Consultant Contact: | Brian D. Bracken, P.E. Vice President (949) 474-9052 | Owner Contact: | Ms. Linda Lyons (404) 828-6766 |
| Alameda County Health Care Services Contact: | Mr. Barney M. Chan (510) 567-6700 | | |

SECTION II. LIST OF ATTACHED TABLES, FIGURES AND APPENDICES

Tables

- Table 1. September 1999 Ground-Water Elevations
- Table 2. October 2000 Ground-Water Elevations
- Table 3. Historical Ground-Water Elevation Summary
- Table 4. September 1999 Ground-Water Analytical Data Summary
- Table 5. October 2000 Ground-Water Analytical Data Summary
- Table 6. Historical Ground-Water Monitoring Results Summary

Figures

- Figure 1. Topographic Map of Site Location and Vicinity
- Figure 2. Previous Soil and Ground-Water Sampling Locations
- Figure 3. Ground-Water Elevations, September 1999
- Figure 4. Ground-Water Elevations, October 2000
- Figure 5. TPH as Diesel Concentrations in Ground Water, September 1999
- Figure 6. TPH as Diesel Concentrations in Ground Water, October 2000
- Figure 7. TPH as Gasoline Concentrations in Ground Water, September 1999
- Figure 8. TPH as Gasoline Concentrations in Ground Water, October 2000

Appendices

| | |
|------------|--|
| Appendix A | BBL Standard Field Procedures |
| Appendix B | Analytical Laboratory Results and Chain-of-Custody Documentation |
| Appendix C | Ground-Water Sampling Forms |
| Appendix D | Disposal Documentation |
| Appendix E | Soil and Ground-Water Sampling and Analysis Report |

SECTION III. DESCRIPTION OF GROUND-WATER MONITORING NETWORK AND WELLS

| Well | Screen (ft) | Construction | Installed |
|------|-------------|-------------------|---------------|
| MW-1 | 3-15 | 4 in / PVC / 0.02 | 8/22/90 |
| MW-2 | 3-15 | 4 in / PVC / 0.02 | 8/22/90 |
| MW-3 | 3-15 | 4 in / PVC / 0.02 | 8/23/90 |
| OW-1 | N/A | 6 in / PVC / N/A | Prior to 5/93 |

Depths are in feet below ground surface (bgs).

Construction relates to well diameter, casing material, and screen slot size in inches.

N/A = Not Available

SECTION IV. SEPTEMBER 1999 GROUND-WATER CONDITIONS

| | | | |
|--|---|--|-----------------------|
| Average Ground-Water Depth: | 5.19 feet below top-of-casing | Average Ground-Water Elevation Change Since June 1998: | -0.013 feet |
| Average Hydraulic Gradient: | 26 ft./1000 ft. (on-site) | Direction of Ground-Water Flow: | Southwest |
| On-Site Range of TPH as Diesel Concentrations: | 6,300 ug/L – 1,570,000 ug/L | On-Site Range of TPH as Gasoline Concentrations: | 220 ug/L – 5,600 ug/L |
| Other Compounds Detected: | Toluene, ethylbenzene, and total xylenes. | | |

ORC Sock Removal. The oxygen release compound (ORC) socks installed in monitoring wells MW-1, MW-2, MW-3, and observation well OW-1 on June 3, 1998, were to be removed prior to the next ground-water sampling event (BBL, Appendix E). The ORC socks were installed to enhance bioremediation and reduce the dissolved-phase Total Petroleum Hydrocarbon (TPH) as Diesel concentrations. The ORC socks were removed from these wells on September 27, 1999. Upon examination, the socks from MW-1, MW-3, and OW-1 revealed a strong odor with some staining; however, socks removed from MW-2 exhibited a very strong odor and heavy staining. The ORC socks from all the wells were placed in labeled DOT-approved 55-gallon drums for subsequent transport and disposal. The site location is indicated on Figure 1, and previous soil and ground-water sampling locations are indicated on Figure 2.

Ground-Water Flow. Depths to ground water in wells MW-1, MW-2, MW-3, and OW-1 were measured on September 30, 1999. The ground-water elevations at the three monitoring wells were calculated using top-of-casing elevations and the September 1999 depth to ground-water measurements. The depth to water at OW-1 was corrected based on the measurable thickness of free-phase hydrocarbons of 0.1 foot present on the water table as indicated in Table 1. This correction was performed by multiplying the free-phase hydrocarbon thickness by the specific gravity of diesel (0.8654 at 59°F) and subtracting it from the depth to water. The hydraulic gradient of 0.026 feet per foot was calculated based on the ground-water elevations at the three monitoring wells at the southern tank area of the site. Consistent with previous investigations, the resulting hydraulic gradient suggests an apparent ground-water flow direction to the southwest. September 1999 ground-water elevations are presented in Table 1. Historical ground-water elevations are presented in Table 3. September 1999 ground-water elevation contours are presented on Figure 3.

Ground-Water Quality. Ground-water monitoring was performed at monitoring wells MW-1 through MW-3 and OW-1 in the area of the southern tank area. Samples were collected using BBL Standard Field Procedures (Appendix A) and analyzed for TPH as gasoline and diesel by modified EPA Method 8015; and benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl-tert butyl ether (MTBE) by EPA Method 8021. Dissolved oxygen was measured in the field using a YSI DO Meter Model 50B with a down hole probe. Table 4 summarizes the September 1999 ground-water analytical results, and Table 6 summarizes the historical ground-water analytical results. Figures 5 and 7 show September 1999 concentrations of TPH as diesel and TPH as gasoline in ground water, respectively.

A slight sheen was observed in monitoring wells MW-1, MW-2, and MW-3. Interface tape measurements and the first bailer inserted into observation well OW-1 during purging revealed a 0.1 foot thickness of brown liquid-phase hydrocarbons. Subsequently, the purge water showed decreasing amounts of product until it was no longer present in measurable thickness in OW-1 after five bailer volumes of ground water were removed from the well. The purge water from OW-1 (20 gallons) was placed in a separate drum than the purge water from the three monitoring wells.

Laboratory analyses detected TPH as diesel and TPH as gasoline in all four wells (Table 4, Appendix B). Detected concentrations of toluene, ethylbenzene, and xylenes are below the respective California Title 22 Maximum Contaminant Levels (MCLs) for ground water. MTBE was not detected in any of the samples collected. TPH concentrations have remained constant or increased from the previous sampling event. The laboratory analytical report and the sampling forms are included as Appendix B and Appendix C, respectively. The duplicate sample, labeled MW-4 on the laboratory report, was obtained from observation well OW-1. The large discrepancy in analytical results between the original sample from OW-1 and its duplicate sample is likely due to the presence of free-product residue in a greater amount in the original sample than the duplicate, even though the same sampling bailer was used. Figures 5 and 7 present the September 1999 distributions of TPH as diesel and TPH as gasoline, respectively.

Soil/Water Disposal Activities. On November 2, 1999, following receipt of the analytical data, the ORC socks and the purge water were transported for disposal by Clearwater Environmental Management, Inc. to Alviso Independent Oil in Alviso, California. Related documentation is provided in Appendix D.

Did County approve annual monitoring?

SECTION V. OCTOBER 2000 GROUND WATER CONDITIONS

| | | | |
|--|-------------------------------|--|-----------------------|
| Average Ground Water Depth: | 4.94 feet below top-of-casing | Average Ground Water Elevation Change: | -0.12 feet |
| Average Hydraulic Gradient: | 33.3 ft./1000 ft. (onsite) | Direction of Ground Water Flow: | Southwest |
| On Site Range of TPH as Diesel Concentrations: | 4,400 ug/L - 69,000 ug/L | On Site Range of TPH as Gasoline Concentrations: | 170 ug/L - 2,100 ug/L |
| Other Compounds Detected: | None above detection limits. | | |

Ground-Water Flow. Depths to ground water in MW-1, MW-2, MW-3, and OW-1 were measured on October 11, 2000. The ground water elevations at the three monitoring wells were calculated using top-of-casing elevations and the October 2000 depth to ground-water measurements. The depths to water at MW-2 and OW-1 were corrected based on the measurable thickness of free-phase hydrocarbons present on the water table as indicated in Table 2. This correction was performed by multiplying the free-phase hydrocarbon thickness by the specific gravity of diesel (0.8654 at 59°F) and subtracting it from the depth to water. The hydraulic gradient of 0.033 feet per foot was calculated based on the ground-water elevations at the three monitoring wells in the southern tank area. Consistent with previous investigations, the resulting hydraulic gradient suggests an apparent ground-water flow direction to the southwest. October 2000 ground-water elevations are presented in Table 2. Historical ground-water elevations are presented as Table 3. October 2000 ground-water elevation contours are presented in Figure 4.

Ground-Water Quality. Ground-water monitoring was performed at monitoring wells MW-1 through MW-3 and observation well OW-1, in the southern tank area. Samples were collected using BBL Standard Field Procedures (Appendix A) and analyzed for TPH as gasoline and diesel by modified EPA Method 8015 and BTEX and MTBE by EPA Method 8021. Dissolved oxygen was measured in the field using a YSI DO Meter Model 50B down hole probe. Table 5 summarizes the October 2000 ground-water analytical results, and Table 6 summarizes the historical ground-water analytical results. Figures 6 and 8 show October 2000 concentrations of TPH as diesel and TPH as gasoline in ground water, respectively.

A light sheen was observed in monitoring wells MW-1 and MW-3, while observation well OW-1 and monitoring well MW-2 contained 0.09-foot and 0.08-foot thickness of brown liquid-phase hydrocarbons, respectively. Subsequent bailing of the wells showed decreasing amounts of product until it was no longer present in measurable thickness in OW-1 and MW-2. The purge water from OW-1 (20 gallons) and MW-2 (15 gallons) was placed in 55-gallon drums with the purge water from monitoring wells MW-1 and MW-3.

Laboratory analyses detected no concentrations of benzene, toluene, ethylbenzene, xylenes, or MTBE above the respective detection limits. TPH as diesel and TPH as gasoline were detected in all five samples collected (Table 5, Appendix B). All four wells sampled experienced marked decreases in concentrations of TPH as gasoline since the September 1999 monitoring event. Monitoring wells MW-1 and MW-2 showed some reduction in TPH as diesel. Well OW-1 showed a dramatic reduction in TPH as diesel since the September 1999 monitoring event. MW-3 had an increase in TPH as diesel. The laboratory analytical report and the sampling forms are included as Appendix B and Appendix C, respectively. The duplicate sample, labeled MW-4 on the laboratory report, was obtained from observation well OW-1.

Soil/Water Disposal Activities. On October 31, 2000, following receipt of the analytical data, the purge water was transported for disposal by Clearwater Environmental Management, Inc. to Alviso Independent Oil in Alviso, California. Related documentation is provided in Appendix D.

CONCEPTUAL REMEDIATION PLAN AND REMEDIATION GOALS

Discussion of Findings

The ORC socks were removed from monitoring wells MW-1, MW-2, MW-3, and OW-1. Product sheen was observed on ground-water purged from MW-1, MW-2, and MW-3 during both the September 1999 and October 2000 events. A 0.1-foot thickness of free-phase petroleum hydrocarbons was observed in OW-1 during the September 1999 event. Free-phase petroleum hydrocarbon thicknesses of 0.08 feet and 0.09 feet were observed in MW-2 and OW-1 during the October 2000 event, respectively. TPH as gasoline concentrations generally decreased in all four wells monitored between the September 1999 and October 2000 sampling events. TPH as diesel decreased in three of the four wells monitored, but increased in upgradient well MW-3.

The hydraulic gradient indicates the ground-water flow direction is to the southwest. The lowest concentrations of TPH as diesel and TPH as gasoline are found in down-gradient well MW-2 located in the southwest corner of the southern fueling area. To determine the distribution and extent of petroleum hydrocarbons in ground water, data from the June 1996 and June 1998 direct-push investigations were also examined. Based on the data available, it appears the TPH as diesel distribution is more extensive to the north-northeast of the southern UST area. The TPH as gasoline spatial distribution is smaller in extent and appears to be present within the TPH as diesel areal distribution.

The chromatogram fingerprints for MW-1, MW-2, and MW-3 in the laboratory report for the October 2000 sampling event are indicative of crude oil, whereas the chromatogram fingerprint for OW-1 indicates very weathered diesel fuel. Historically, analytical results for ground-water samples at the site indicated the presence of heavier hydrocarbons with chromatogram signatures that did not resemble those of diesel fuel (BBL, September 1996). Consequently, these results suggest two sources of hydrocarbons are present at the site. We suspect that there is some minor residual diesel fuel in the UST pit due to a past release; however, we also believe that there is diesel and heavier oils in the backfilled sediments. TPH as diesel concentrations have been detected at elevated concentrations at distances up to 95 feet upgradient of the UST pit. Historical aerial photographs indicate the property was backfilled between 1959 and 1968; and prior to backfilling, the area was a tidal marsh. The source of the backfill or possible impacts to this backfill material are unknown.

Conclusions

Free product of about one-inch thickness is present in two of four wells monitored in the vicinity of the USTs. Residual hydrocarbons are located within the UST pit and in the surrounding backfill material located at the site. The source of site backfill material is unknown, but is suspected of being harbor dredge material. Diesel, heavier oils and limited amounts of free product are believed to be contained in this backfilled material.

Remediation Objectives

The existence of free product in ground water and elevated concentrations of hydrocarbons in the subsurface warrant active site remediation to achieve closure. Such remediation should be focused on free product removal.

Remediation Options

Regarding options for product recovery, the following factors apply to the subject site:

- Product detection is intermittent
- Product is present as sheen or globules
- Product has been classified in three categories: gasoline, a weathered diesel and a heavier oil.
- Lithology is stratified marine sediments with clayey gravel in the upper five feet (e.g., believed to be harbor bottom dredged material – fill) and silts and clays at greater depths.

Product removal alternatives that may be applicable include:

- Periodic bailing of impacted wells ✓
- Installation of ground-water extraction pumps ✓
- Installation of skimmer pumps ✓
- Installation of other skimmer devices ✓
- Dual-phase extraction with product separation
- Application of surfactants to improve product recovery
- Application of heat to improve product recovery ✓

• enhanced bioremediation

Individual recovery options are addressed below.

Periodic bailing This method is effective for a limited radius since there is little potential for flow during periodic short term bailing. However, product tends to accumulate in wells over time at many sites, so even in the absence of sustained flow, there is a potential to recover separate phase material in this manner. The technique is labor intensive and therefore the cost per gallon of product material recovered is greater than for other methods unless the total volume recovered is low.

Ground-Water Extraction The potential for separate phase product to flow toward a recovery well can be improved by inducing ground-water flow toward the well by pumping. This alternative requires that the ground water, which is likely to be contaminated, must be treated before discharge. Furthermore, since this site is of low permeability, the ground water cannot be recharged to the subsurface on site. It is possible that an NPDES permit can be obtained and the recovered water can be discharged to nearby surface waters or storm drain systems. This system would require the installation of two or three recovery wells and pumps. An above-ground treatment system consisting of an oil-water separator and carbon filtering for the ground-water treatment prior to discharge would be necessary.

Skimmer pumps Skimmer pumps are available commercially, but their application is limited to low viscosity hydrocarbons. Since the separate phase material at this site is reported to be a heavy oil in some areas, skimmer pump operation may not achieve site clean-up goals.

If adequate water-table surface area is accessible, the accumulated oil can be collected by employing a mechanical skimmer. Such a device has hydrophobic surfaces that contact the air-water interface and the oil that is floating adheres to the surface and is withdrawn. The hydrophobic surface may be a tube or belt. An adequate surface could be produced by installing an interceptor trench, backfilling with coarse gravel, and placing a collection sump at a central location. The skimmer would be located to remove accumulated oil from within the sump. An effective interceptor trench at this site would be constructed to a depth of six feet and would be about two feet wide. The skimmer would discharge collected oil to a holding tank that would be emptied periodically for off site disposal.

Dual phase recovery Dual phase recovery, which denotes recovery of liquid and vapor simultaneously, is effective on localized zones of separate phase material and in areas of low permeability. The latter condition is found at this site. Dual phase recovery employs high suction and is therefore energy-intensive and correspondingly expensive. The relatively higher recovery rate creates a greater cost for ground-water treatment. Two dual phase recovery wells would need to be installed. The combined flow from the recovery system is separated and separate treatments are required for the vapor, floating product and ground water. Vapor treatment would be necessary.

Surfactant Application Application of surfactants could enhance some of the other technologies described above. Surfactants increase solubility and allow oil to flow more easily toward the recovery system, but also render the treatment processes considered above less effective. Surfactants can increase plume migration rate; however, they may be difficult to neutralize. The use of surfactants would have to be reviewed in advance with Alameda County.

Heating Heating also reduces the viscosity of separate phase oil and thereby makes it easier to flow toward whatever recovery system is in place. Heating is usually economical only if there is a source of waste heat available. Unfortunately, no such source is known and this option is, therefore, not deemed feasible.

Selected Remediation Remedy

Based on our knowledge of the extent and physical characteristics of the separate phase liquid and the lithology of the site, BBL recommends that an inceptor trench be installed on each side of the UST pit. These four separate trenches would act as a collection trough for separate phase product. Recovery sumps would be installed at the ends of each trough. Initially, hydrocarbon absorbent pads/booms would be placed in these sumps to absorb any accumulated product. These would initially be checked monthly for the first 3 months and, if applicable, quarterly thereafter. If any of these trenches are effectively recovering free phase liquid, then manual bailing can be initiated on a more frequent schedule, and if necessary, a skimmer system (equipped with an oil holding tank) can be installed and operated. Conversely, if the product recovery rate remains low (less than one-half gallon per event), then routine pad replacement or hydrocarbon bailing may be reduced to a quarterly or semi-annual event after three months.

Based on site conditions, and past recovery of available separate phase product, BBL believes that this selected remedial strategy will be an effective approach to achieve site closure.

References

Blasland, Bouck & Lee, Inc., September 6, 1996. Subsurface Investigation Results, letter report prepared for UPS-Oakland Hub, 8400 Pardee Drive, Oakland, California.

Geraghty and Miller, Inc., January 23, 1996. Results of Groundwater Monitoring, December 28, 1995, UPS-Oakland Hub, 8400 Pardee Drive, Oakland, California.

Geraghty and Miller, Inc., October 31, 1990. Results of Soil and Groundwater Assessment Activities, United Parcel Services, Inc. Facility, 8400 Pardee Drive, Oakland, California.

Tables

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TABLE 1

SEPTEMBER 1999 GROUND-WATER ELEVATIONS
 UNITED PARCEL SERVICE DISTRIBUTION CENTER
 OAKLAND, CALIFORNIA

| WELL I.D. | SCREEN INTERVAL (feet bgs) | REFERENCE ELEVATION | DEPTH TO FREE-PHASE PRODUCT | DEPTH TO GROUND-WATER | GROUND-WATER ELEVATION | FREE-PHASE PRODUCT THICKNESS |
|-----------|----------------------------|---------------------|-----------------------------|-----------------------|------------------------|------------------------------|
| MW-1 | 3-15 | 7.43 | 3.75 | 3.75 | 3.68 | Light sheen |
| MW-2 | 3-15 | 7.15 | 4.95 | 4.95 | 2.20 | Light sheen |
| MW-3 | 3-15 | 7.42 | 3.72 | 3.72 | 3.70 | Light sheen |
| OW-1 | N/A | N/A | 8.36 | 8.35 | N/A | 0.1-foot |

Notes:

1. Measurements in feet, except where noted.
2. Reference elevation = Elevation surveyed relative to an arbitrary bench mark.
3. Depth to ground water and free-phase product = Measured from highest point of well casing, marked by notch on casing.
4. Measurements recorded on 9/30/99.
5. Screen interval is given in feet below ground surface (bgs)
6. N/A = Not Available

TABLE 2

OCTOBER 2000 GROUND-WATER ELEVATIONS
 UNITED PARCEL SERVICE DISTRIBUTION CENTER
 OAKLAND, CALIFORNIA

| WELL I.D. | SCREEN INTERVAL (feet bgs) | REFERENCE ELEVATION | DEPTH TO FREE-PHASE PRODUCT | DEPTH TO GROUND WATER | GROUND WATER ELEVATION | FREE PHASE PRODUCT THICKNESS |
|-----------|----------------------------|---------------------|-----------------------------|-----------------------|------------------------|------------------------------|
| MW-1 | 3-15 | 7.43 | 3.88 | 3.88 | 3.55 | Light sheen |
| MW-2 | 3-15 | 7.15 | 4.95 | 4.96 | 2.19 | 0.08-feet |
| MW-3 | 3-15 | 7.42 | 3.88 | 3.88 | 3.54 | Light sheen |
| OW-1 | N/A | N/A | 6.88 | 6.89 | N/A | 0.09-feet |

Notes:

1. Measurements in feet, except where noted.
2. Reference elevation surveyed relative to an arbitrary bench mark.
3. Depth to ground water and free-phase product measured from highest point of well casing, marked by notch on casing.
4. Measurements recorded on October 11, 2000.
5. Screen interval is given in feet below ground surface (bgs).
6. N/A = Not Available
7. Ground water elevation for wells containing free-phase product corrected for density differences between hydrocarbons and water.

TABLE 3

HISTORICAL GROUND-WATER ELEVATION SUMMARY
 UNITED PARCEL SERVICE DISTRIBUTION CENTER
 OAKLAND, CALIFORNIA

| WELL I.D. | REFERENCE ELEVATION | DATE | DEPTH TO GROUND WATER | GROUND WATER ELEVATION | CHANGE SINCE PREVIOUS MEASUREMENT | PRODUCT THICKNESS |
|-----------|---------------------|----------|-----------------------|------------------------|-----------------------------------|-------------------|
| MW-1 | 7.43 | 8/28/90 | 3.80 | 3.63 | -- | Sheen |
| | | 9/20/90 | 3.99 | 3.44 | -0.19 | N/A |
| | | 6/19/91 | 3.47 | 3.96 | 0.52 | N/A |
| | | 7/23/91 | 3.70 | 3.73 | -0.23 | N/A |
| | | 8/26/91 | 3.92 | 3.51 | -0.22 | N/A |
| | | 11/18/91 | 4.21 | 3.22 | -0.29 | N/A |
| | | 2/3/92 | 3.99 | 3.44 | 0.22 | N/A |
| | | 6/29/92 | 3.38 | 4.05 | 0.61 | N/A |
| | | 6/23/93 | 2.72 | 4.71 | 0.66 | N/A |
| | | 10/11/93 | 3.87 | 3.56 | -1.15 | N/A |
| | | 1/4/94 | 3.34 | 4.09 | 0.53 | N/A |
| | | 5/10/94 | 2.14 | 5.29 | 1.20 | N/A |
| | | 2/1/95 | 1.84 | 5.59 | 0.30 | N/A |
| | | 8/2/95 | 3.10 | 4.33 | -1.26 | N/A |
| | | 10/16/95 | 3.75 | 3.68 | -0.65 | N/A |
| | | 12/28/95 | 3.56 | 3.87 | 0.19 | N/A |
| | | 6/4/97 | 3.16 | 4.27 | 0.40 | None present |
| | | 6/3/98 | NM | N/A | N/A | Sheen |
| | | 9/30/99 | 3.75 | 3.68 | -0.59 | Light sheen |
| | | 10/11/00 | 3.88 | 3.55 | -0.13 | Light sheen |

Notes:

1. Reference elevation surveyed relative to mean sea level by Geraghty and Miller (Geraghty and Miller, Inc., 1990)
2. Depth to ground water measured from notch/mark on north edge of well casing.
3. Sources: Geraghty and Miller, 1996; BBL
4. NS = Not sampled; NA = Not analyzed; NM = Not measured; NC = Not calculated; N/A = Not Available.
5. Measurements in feet unless noted otherwise.

TABLE 3
(Continued)

**HISTORICAL GROUND-WATER ELEVATION SUMMARY
UNITED PARCEL SERVICE DISTRIBUTION CENTER
OAKLAND, CALIFORNIA**

| WELL I.D. | REFERENCE ELEVATION | DATE | DEPTH TO GROUND WATER | GROUND WATER ELEVATION | CHANGE SINCE PREVIOUS MEASUREMENT | PRODUCT THICKNESS |
|------------------|----------------------------|-------------|------------------------------|-------------------------------|--|--------------------------|
| MW-2 | 7.15 | 8/28/90 | 4.98 | 2.17 | -- | Sheen |
| | | 9/20/90 | 4.94 | 2.21 | 0.04 | N/A |
| | | 6/19/91 | 4.66 | 2.49 | 0.28 | N/A |
| | | 7/23/91 | 4.81 | 2.34 | -0.15 | N/A |
| | | 8/26/91 | 4.89 | 2.26 | -0.08 | N/A |
| | | 11/18/91 | 4.93 | 2.22 | -0.04 | N/A |
| | | 2/3/92 | 4.44 | 2.71 | 0.49 | N/A |
| | | 6/29/92 | 4.80 | 2.35 | -0.36 | N/A |
| | | 6/23/93 | 4.38 | 2.77 | 0.42 | N/A |
| | | 10/11/93 | 5.20 | 1.95 | -0.82 | N/A |
| | | 1/4/94 | 4.56 | 2.59 | 0.64 | N/A |
| | | 5/10/94 | 4.20 | 2.95 | 0.36 | N/A |
| | | 2/1/95 | 4.00 | 3.15 | 0.20 | N/A |
| | | 8/2/95 | 4.71 | 2.44 | -0.71 | N/A |
| | | 10/16/95 | 5.02 | 2.13 | -0.31 | N/A |
| | | 12/28/95 | 4.56 | 2.59 | 0.46 | N/A |
| | | 6/12/96 | NM | N/A | N/A | 0.25-feet |
| | | 6/4/97 | 6.02 | 1.13 | -1.46 | Small globules |
| | | 9/30/99 | 4.95 | 2.20 | 1.07 | Light sheen |
| | | 10/11/00 | 4.97 | 2.18 | -0.02 | 0.08-feet |

Notes:

1. Reference elevation surveyed relative to mean sea level by Geraghty and Miller (Geraghty and Miller, Inc., 1990)
2. Depth to ground water measured from notch/mark on north edge of well casing.
3. Sources: Geraghty and Miller, 1996; BBL
4. NS = Not sampled; NA = Not analyzed; NM = Not measured; NC = Not calculated; N/A = Not Available.
5. Measurements in feet unless noted otherwise.

TABLE 3
(Continued)

**HISTORICAL GROUND-WATER ELEVATION SUMMARY
UNITED PARCEL SERVICE DISTRIBUTION CENTER
OAKLAND, CALIFORNIA**

| WELL I.D. | REFERENCE | | DEPTH TO GROUND WATER | GROUND WATER ELEVATION | CHANGE SINCE PREVIOUS MEASUREMENT | PRODUCT THICKNESS |
|--------------|-----------|----------|-----------------------------|------------------------------|---|----------------------|
| | ELEVATION | DATE | | | | |
| MW-3 | 7.42 | 8/28/90 | 3.88 | 3.54 | -- | Sheen |
| | | 9/20/90 | 3.99 | 3.43 | -0.11 | N/A |
| | | 6/19/91 | 3.49 | 3.93 | 0.50 | N/A |
| | | 7/23/91 | 3.71 | 3.71 | -0.22 | N/A |
| | | 8/26/91 | 3.94 | 3.48 | -0.23 | N/A |
| | | 11/18/91 | 4.23 | 3.19 | -0.29 | N/A |
| | | 2/3/92 | 4.01 | 3.41 | 0.22 | N/A |
| | | 6/29/92 | 3.40 | 4.02 | 0.61 | N/A |
| | | 6/23/93 | 2.75 | 4.67 | 0.65 | N/A |
| | | 10/11/93 | 3.84 | 3.58 | -1.09 | N/A |
| | | 1/4/94 | 3.40 | 4.02 | 0.44 | N/A |
| | | 5/10/94 | 2.25 | 5.17 | 1.15 | N/A |
| | | 2/1/95 | 2.43 | 4.99 | -0.18 | N/A |
| | | 8/2/95 | 3.20 | 4.22 | -0.77 | N/A |
| | | 10/16/95 | 3.72 | 3.70 | -0.52 | N/A |
| | | 12/28/95 | 3.56 | 3.86 | 0.16 | N/A |
| | | 6/4/97 | 3.20 | 4.22 | 0.36 | None present |
| | | 6/3/98 | NM | N/A | N/A | Sheen |
| 9/30/99 | 3.72 | 3.70 | -0.54 | Light sheen | | |
| 10/11/00 | 3.88 | 3.54 | -0.16 | Light sheen | | |
| OW-1 | N/A | 6/4/97 | 7.22 | NC | NC | Trace |
| | | 9/30/99 | 8.35 | NC | -1.13 | 0.01-feet |
| | | 10/11/00 | 6.90 | NC | 1.45 | 0.09-feet |

Notes:

1. Reference elevation surveyed relative to mean sea level by Geraghty and Miller (Geraghty and Miller, Inc., 1990)
2. Depth to ground water measured from notch/mark on north edge of well casing.
3. Sources: Geraghty and Miller, 1996; BBL
4. NS = Not sampled; NA = Not analyzed; NM = Not measured; NC = Not calculated; N/A = Not Available.
5. Measurements in feet unless noted otherwise.

TABLE 4

**SEPTEMBER 1999 GROUND-WATER ANALYTICAL DATA SUMMARY
UNITED PARCEL SERVICE DISTRIBUTION CENTER
OAKLAND, CALIFORNIA**

| SAMPLE ID | Benzene | Toluene | Ethyl - benzene | Total Xylenes | MTBE | TPH as Gasoline | TPH as Diesel | Dissolved Oxygen (mg/L) |
|-----------|---------|------------|-----------------|---------------|------|-----------------|------------------|-------------------------|
| MW-1 | < 0.5 | 0.6 | < 0.5 | 1.8 | < 3 | 1,600 | 28,000 | 9.9 |
| MW-2 | < 0.5 | < 0.5 | < 0.5 | < 1 | < 3 | 220 | 6,300 | 9.5 |
| MW-3 | < 0.5 | 0.6 | 0.7 | 1.2 | < 3 | 1,300 | 8,700 | 8.6 |
| OW-1 | < 2 | < 2 | < 2 | 4.2 | < 12 | 8,300 | 2,800,000 | 9.7 |
| OW-1 Dup | < 1 | < 1 | 1.9 | 8.9 | < 6 | 2,900 | 340,000 | -- |
| Blank | NA | NA | NA | NA | NA | N/A | < 50 | -- |
| MCL | 1 | 150 | 700 | 1750 | 13 | N/A | N/A | -- |

Notes:

1. Units are micrograms per liter (ug/L) except where noted.
2. NA = Not Analyzed; N/A = Not Available; ND=Not Detected above laboratory detection limits.
3. TPH = Total petroleum hydrocarbons; MTBE = Methyl tertiary butyl ether.
4. Title 22 of the California Code of Regulations, Maximum Contaminant Levels (MCLs) for drinking water.
5. Dissolved Oxygen measured in the field.
6. Bold values indicate analytical detections.
7. TPH as Gasoline and TPH as Diesel from EPA 5030/CA LUFT Method
8. Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), and MTBE from EPA Method 5030/8021B
9. Samples collected on September 30, 1999.

TABLE 5

**OCTOBER 2000 GROUND-WATER ANALYTICAL DATA SUMMARY
UNITED PARCEL SERVICE DISTRIBUTION CENTER
OAKLAND, CALIFORNIA**

| SAMPLE ID | Benzene | Toluene | Ethyl - benzene | Total Xylenes | MTBE | TPH as Gasoline | TPH as Diesel | Dissolved Oxygen (mg/L) |
|------------------|----------------|----------------|------------------------|----------------------|-------------|------------------------|----------------------|--------------------------------|
| MW-1 | < 0.5 | <0.5 | < 0.5 | <1.0 | <5 | 260 | 21,000 | 0.39 |
| MW-2 | < 0.5 | <0.5 | < 0.5 | <1.0 | <5 | 170 | 4,400 | 0.43 |
| MW-3 | < 0.5 | <0.5 | < 0.5 | <1.0 | <5 | 430 | 20,000 | 0.51 |
| OW-1 | < 0.5 | <0.5 | < 0.5 | <1.0 | <5 | 2,100 | 58,000 | 0.74 |
| OW-1 Dup | < 0.5 | <0.5 | < 0.5 | <1.0 | <5 | 1,700 | 69,000 | -- |
| Blank | < 0.5 | <0.5 | < 0.5 | <1.0 | <5 | <50 | <50 | -- |
| MCL | 1 | 150 | 700 | 1750 | 13 | N/A | N/A | N/A |

Notes:

1. Units are micrograms per liter (ug/L) except where noted.
2. N/A = Not Available.
3. TPH = Total petroleum hydrocarbons; MTBE = Methyl tertiary butyl ether.
4. Title 22 of the California Code of Regulations, California Maximum Contaminant levels (MCLs) for drinking water.
5. Dissolved Oxygen measured in the field.
6. Bold values indicate analytical detections.
11. TPH as Gasoline and TPH as Diesel from EPA 5030/CA LUFT Method
12. Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), and MTBE from EPA Method 5030/8021B
13. Samples collected on October 11, 2000.

TABLE 6

**HISTORICAL GROUND-WATER MONITORING RESULTS SUMMARY
UNITED PARCEL SERVICE DISTRIBUTION CENTER
OAKLAND, CALIFORNIA**

| Monitoring Well | Date | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | TPH as gasoline (µg/L) | TPH as diesel (µg/L) | D.O. (mg/L) |
|-----------------|-----------------|-----------------|-----------------|----------------------|----------------------|---------------|------------------------|----------------------|-------------|
| MW-1 | 8/28/90 | 3 | 1.4 | 4 | 2.4 | NA | NA | 21,000 | NA |
| | 6/19/91 | 1.7 | 0.7 | 0.5 | 0.9 | NA | NA | 7,100 | NA |
| | 7/23/91 | 1.6 | 1.1 | 0.5 | 1.5 | NA | 220 | 8,700 | NA |
| | 8/26/91 | 180 | 120 | 31 | 160 | NA | NA | 2,800 | NA |
| | 11/18/91 | 1.1 | 0.4 | 0.5 | < 0.3 | NA | NA | 6,600 | NA |
| | 2/3/92 | 0.9 | < 0.3 | 0.8 | 0.7 | NA | NA | 2,200 | NA |
| | 6/29/92 | 0.8 | 0.4 | 0.4 | 0.9 | NA | NA | 2,100 | NA |
| | 6/23/93 | 0.66 | < 0.5 | 0.5 | < 0.5 | NA | NA | 3,200 | NA |
| | 10/11/93 | 1.3 | < 0.5 | < 0.5 | < 0.5 | NA | NA | 9,600 | NA |
| | 1/4/94 | 2.1 | 0.65 | 1.3 | 2.1 | NA | NA | 12,000 | NA |
| | 5/10/94 | 0.54 | 0.53 | < 0.5 | 1.1 | NA | NA | 6,400 | NA |
| | 2/1/95 | < 1 | < 1 | 1 | < 1 | NA | 510 | 10,000 | NA |
| | 8/2/95 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NA | 510 | 8,700 | NA |
| | 10/16/95 | 2.8 | < 0.5 | < 0.5 | < 0.5 | NA | 830 | 15,000 | NA |
| | 12/28/95 | 2.1 | < 0.5 | < 0.5 | < 0.5 | NA | 560 | 15,000 | NA |
| | 6/4/97 | NA | NA | NA | NA | NA | NA | 28,000 | 0.76 |
| | 9/30/99 | < 0.5 | 0.6 | < 0.5 | 1.8 | < 3 | 1,600 | 28,000 | 9.9 |
| 10/11/00 | < 0.5 | < 0.5 | < 0.5 | < 1.0 | < 5 | 260 | 21,000 | 0.39 | |
| MCL | -- | 1 | 150 | 700 | 1750 | 13 | N/A | N/A | -- |

Notes:

1. Units are micrograms per liter (ug/L) unless otherwise indicated.
2. NA = Not analyzed; NS = Not Sampled.
3. TPH = Total petroleum hydrocarbons; MTBE = Methyl tertiary butyl ether.
4. Title 22 of the California Code of Regulations, California Maximum Contaminant Levels (MCLs) for drinking water.
5. D.O. = Dissolved Oxygen measured in the field.
6. Results collected between the dates of 8/28/90 and 12/28/95 are based on prior reporting by Geraghty & Miller, Inc. (1996)
7. Bold values indicate analytical detections.
8. The 9/96, 10/96 BBL reports revealed concentrations reported as TPH as diesel did not resemble the diesel chromatogram standard, containing > C-26.
9. The 6/4/97 sample revealed the following PAHs by EPA 8100: acenaphthylene 10ug/L; fluorene 17ug/L; phenanthrene 10ug/L.

TABLE 6
(Continued)
HISTORICAL GROUND-WATER MONITORING RESULTS SUMMARY
UNITED PARCEL SERVICE DISTRIBUTION CENTER
OAKLAND, CALIFORNIA

| Monitoring Well | Date | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | TPH as gasoline (µg/L) | TPH as diesel (µg/L) | D.O. (mg/L) |
|-----------------|----------|----------------|----------------|---------------------|----------------------|-------------|------------------------|----------------------|-------------|
| MW-2 | 8/28/90 | 0.6 | 0.4 | 0.6 | 0.7 | NA | NA | 3,500 | NA |
| | 6/19/91 | 0.5 | < 0.3 | < 0.3 | < 0.3 | NA | NA | < 50 | NA |
| | 7/23/91 | 0.7 | < 0.3 | < 0.3 | < 0.3 | NA | < 50 | 660 | NA |
| | 8/26/91 | 0.7 | < 0.3 | < 0.3 | < 0.3 | NA | NA | < 50 | NA |
| | 11/18/91 | 0.8 | < 0.3 | < 0.3 | < 0.3 | NA | NA | 3,200 | NA |
| | 2/3/92 | 0.7 | < 0.3 | < 0.3 | 0.5 | NA | NA | 400 | NA |
| | 6/29/92 | 0.6 | < 0.3 | < 0.3 | < 0.3 | NA | NA | 250 | NA |
| | 6/23/93 | 0.55 | < 0.5 | < 0.5 | < 0.5 | NA | NA | 11,000 | NA |
| | 10/11/93 | 1.2 | < 0.5 | < 0.5 | 1.3 | NA | NA | 1,400 | NA |
| | 1/4/94 | 0.72 | < 0.5 | < 0.5 | 1.1 | NA | NA | 3,700 | NA |
| | 5/10/94 | 0.74 | < 0.5 | < 0.5 | 0.7 | NA | NA | 2,300 | NA |
| | 2/1/95 | 2.1 | < 1.0 | < 1.0 | < 1.0 | NA | < 100 | 2,100 | NA |
| | 8/2/95 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NA | 210 | 3,600 | NA |
| | 10/16/95 | 0.73 | < 0.5 | < 0.5 | < 0.5 | NA | 130 | 1,400 | NA |
| | 12/28/95 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NA | 210 | 2,800 | NA |
| | 6/12/96 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/4/97 | NA | NA | NA | NA | NA | NA | 3,300 | 0.52 |
| 9/30/99 | < 0.5 | < 0.5 | < 0.5 | < 1 | < 3 | 220 | 6,300 | 9.5 | |
| 10/11/00 | < 0.5 | < 0.5 | < 0.5 | < 1.0 | < 5 | 170 | 4,400 | 0.43 | |
| MCL | -- | 1 | 150 | 700 | 1750 | 13 | N/A | N/A | -- |

Notes:

1. Units are micrograms per liter (µg/L) unless otherwise indicated.
2. NA = Not analyzed; NS = Not Sampled.
3. TPH = Total petroleum hydrocarbons; MTBE = Methyl tertiary butyl ether.
4. Title 22 of the California Code of Regulations, California Maximum Contaminant Levels (MCLs) for drinking water.
5. D.O. = Dissolved Oxygen measured in the field.
6. Results collected between the dates of 8/28/90 and 12/28/95 are based on prior reporting by Geraghty & Miller, Inc. (1996)
7. Bold values indicate analytical detections.
8. The 9/96, 10/96 BBL reports revealed concentrations reported as TPH as diesel did not resemble the diesel chromatogram standard, containing > C-26.
9. The 6/4/97 sample revealed the following PAHs by EPA 8100: acenaphthylene 10µg/L; fluorene 17µg/L; phenanthrene 10µg/L.

TABLE 6
(Continued)
HISTORICAL GROUND-WATER MONITORING RESULTS SUMMARY
UNITED PARCEL SERVICE DISTRIBUTION CENTER
OAKLAND, CALIFORNIA

| Monitoring Well | Date | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | TPH as gasoline (µg/L) | TPH as diesel (µg/L) | D.O. (mg/L) |
|-----------------|----------|----------------|----------------|----------------------|----------------------|-------------|------------------------|----------------------|-------------|
| MW-3 | 8/28/90 | 0.5 | 0.8 | 4.3 | 2.3 | NA | NA | 18,000 | NA |
| | 6/19/91 | 0.4 | 0.4 | 1.7 | 1.4 | NA | NA | 1,300 | NA |
| | 7/23/91 | 0.3 | < 0.3 | 1.5 | 0.5 | NA | 330 | 6,800 | NA |
| | 8/26/91 | 13 | 13 | 5.8 | 26 | NA | NA | < 50 | NA |
| | 11/18/91 | 0.6 | < 0.3 | < 0.3 | < 0.3 | NA | NA | 2,500 | NA |
| | 2/3/92 | 0.4 | < 0.3 | 1.3 | 0.6 | NA | NA | 1,100 | NA |
| | 6/29/92 | < 0.3 | < 0.3 | 1.3 | 0.3 | NA | NA | 3,200 | NA |
| | 6/23/93 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NA | NA | 8,100 | NA |
| | 10/11/93 | 1 | < 0.5 | 1.5 | 2.4 | NA | NA | 7,100 | NA |
| | 1/4/94 | < 0.5 | < 0.5 | 1.6 | < 0.5 | NA | NA | 7,400 | NA |
| | 5/10/94 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NA | NA | 5,700 | NA |
| | 2/1/95 | < 1.0 | < 1.0 | 2.7 | 4.1 | NA | 810 | 10,000 | NA |
| | 8/2/95 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NA | 1,200 | 6,500 | NA |
| | 10/16/95 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NA | 930 | 9,800 | NA |
| | 12/28/95 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NA | 690 | 11,000 | NA |
| | 6/4/97 | NA | NA | NA | NA | NA | NA | 34,000 | 0.84 |
| 9/30/99 | < 0.5 | 0.6 | 0.7 | 1.2 | < 3 | 1,300 | 8,700 | 8.6 | |
| 10/11/00 | < 0.5 | < 0.5 | < 0.5 | < 1.0 | < 5 | 430 | 20,000 | 0.51 | |
| OW-1 | 6/23/93 | < 0.5 | < 0.5 | < 0.5 | 31 | NA | NA | 3,400,000 | NA |
| | 6/4/97 | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/30/99 | < 2 | < 2 | < 2 | 4.2 | < 12 | 8,300 | 2,800,000 | 9.7 |
| | 9/30/99 | < 1 | < 1 | 1.9 | 8.9 | < 6 | 2,900 | 340,000 | -- |
| | 10/11/00 | < 0.5 | < 0.5 | < 0.5 | < 1.0 | < 5 | 2,100 | 58,000 | 0.74 |
| MCL | -- | 1 | 150 | 700 | 1750 | 13 | N/A | N/A | -- |

Notes:

1. Units are micrograms per liter (ug/L) unless otherwise indicated.
2. NA = Not analyzed; NS = Not Sampled.
3. TPH = Total petroleum hydrocarbons; MTBE = Methyl tertiary butyl ether.
4. Title 22 of the California Code of Regulations, California Maximum Contaminant Levels (MCLs) for drinking water.
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7. Bold values indicate analytical detections.
8. The 9/96, 10/96 BBL reports revealed concentrations reported as TPH as diesel did not resemble the diesel chromatogram standard, containing > C-26.
9. The 6/4/97 sample revealed the following PAHs by EPA 8100: acenaphthylene 10ug/L, fluorene 17ug/L, phenanthrene 10ug/L.

TABLE 6
(Continued)
HISTORICAL GROUND-WATER MONITORING RESULTS SUMMARY
UNITED PARCEL SERVICE DISTRIBUTION CENTER
OAKLAND, CALIFORNIA

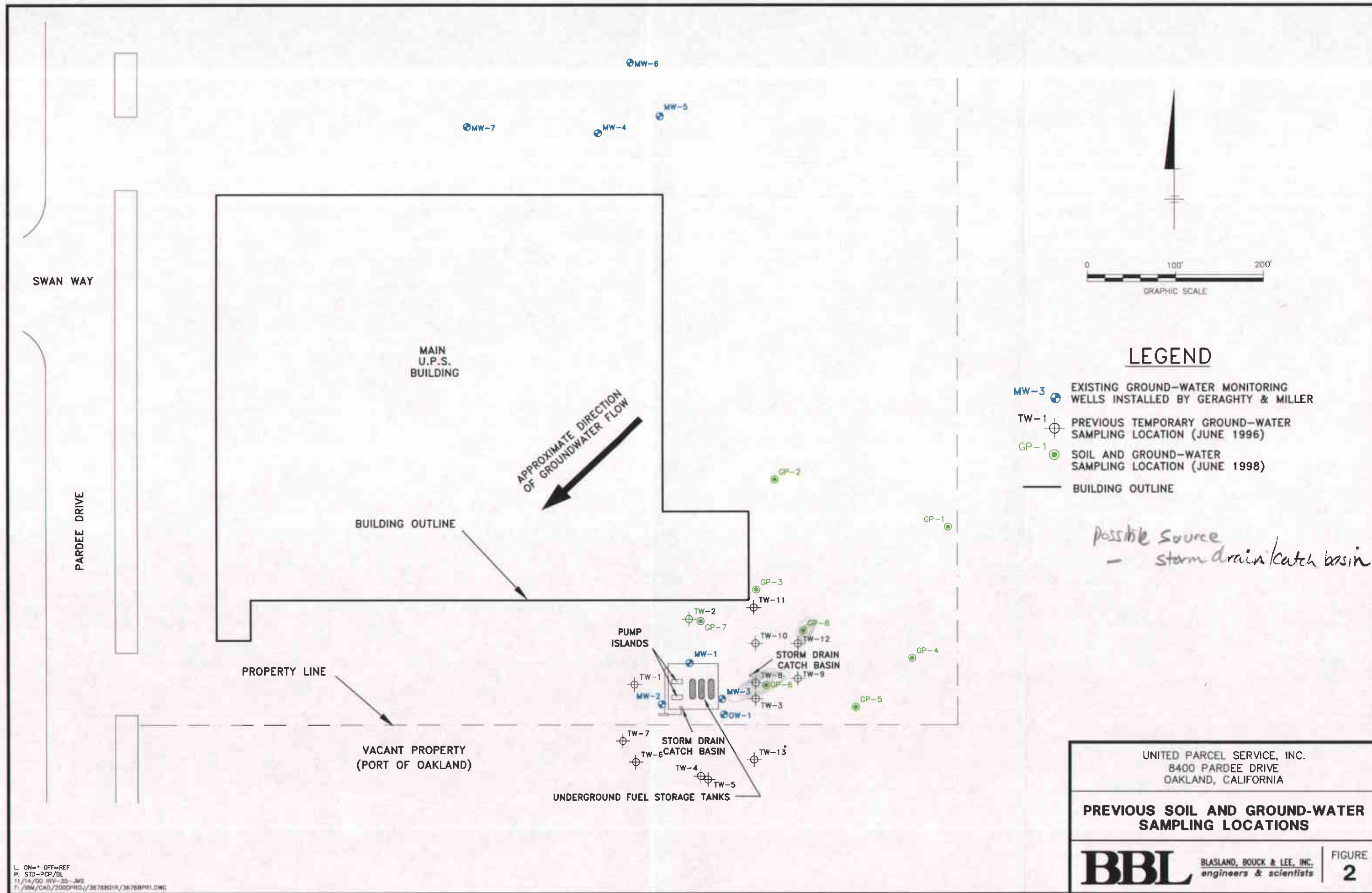
| Monitoring Well | Date | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | MTBE (µg/L) | TPH as gasoline (µg/L) | TPH as diesel (µg/L) | D.O. (mg/L) | Comments |
|-----------------|---------|----------------|----------------|---------------------|----------------------|-------------|------------------------|----------------------|-------------|---|
| TW-1 | 6/12/96 | < 1 | 12 | 1.4 | 7.9 | NA | NA | 2,000 | NA | TPHd pattern does not match standard. Hydrocarbons present >C26. |
| TW-2 | 6/12/96 | < 1 | < 1 | < 1 | < 1 | NA | NA | 11,000 | NA | TPHd pattern does not match standard. Hydrocarbons present >C26. |
| TW-4 | 6/12/96 | < 1 | < 1 | < 1 | < 1 | NA | NA | NA | NA | -- |
| TW-6 | 6/12/96 | < 1 | < 1 | < 1 | < 1 | NA | NA | 330 | NA | TPHd pattern does not match standard. Sample exhibits unknown peaks. |
| TW-7 | 6/12/96 | NA | NA | NA | NA | NA | NA | 130 | NA | TPHd pattern does not match standard. |
| TW-8 | 6/12/96 | < 1 | < 1 | 3 | < 1 | NA | NA | 46,000 | NA | -- |
| TW-9 | 6/12/96 | < 1 | < 1 | < 1 | < 1 | NA | NA | 2,300 | NA | TPHd pattern does not match standard. Sample exhibits unknown peaks. Hydrocarbons present >C26. |
| GP-1 | 6/3/98 | < 1 | 0.51 | 0.51 | < 1 | NA | < 50 | < 50 | 9.75 | 400 ppb heavy oil present. |
| GP-2 | 6/3/98 | NA | NA | NA | NA | NA | NA | < 50 | 9.71 | -- |
| GP-4 | 6/3/98 | < 1 | 0.53 | < 1 | < 1 | NA | < 50 | < 50 | 9.78 | 1,400 ppb heavy oil present. |
| GP-6 | 6/3/98 | < 2 | < 2 | 2 | 10 | NA | < 200 | 120,000 | 9.27 | Higher b.p. mixture at 1500 ppb. |
| GP-6 Dup | 6/3/98 | < 2 | < 2 | < 2 | < 2 | NA | < 200 | 68,000 | NA | Higher b.p. mixture at 440 ppb. |
| GP-8 | 6/3/98 | NA | NA | NA | NA | NA | NA | 68,000 | 10.26 | -- |
| MCL | -- | 1 | 150 | 700 | 1750 | 13 | N/A | N/A | -- | -- |

Notes:

1. Units are micrograms per liter (ug/L) unless otherwise indicated.
2. NA = Not analyzed; NS = Not Sampled.
3. TPH = Total petroleum hydrocarbons; MTBE = Methyl tertiary butyl ether.
4. Title 22 of the California Code of Regulations, California Maximum Contaminant Levels (MCLs) for drinking water.
5. D.O. = Dissolved Oxygen measured in the field.
6. Results collected between the dates of 8/28/90 and 12/28/95 are based on prior reporting by Geraghty & Miller, Inc. (1996)
7. Bold values indicate analytical detections.
8. The 9/96, 10/96 BBL reports revealed concentrations reported as TPH as diesel did not resemble the diesel chromatogram standard, containing > C-26.
9. The 6/4/97 sample revealed the following PAHs by EPA 8100: acenaphthylene 10ug/L; fluorene 17ug/L; phenanthrene 10ug/L.

Figures

BLASLAND, BOUCK & LEE, INC.
engineers & scientists



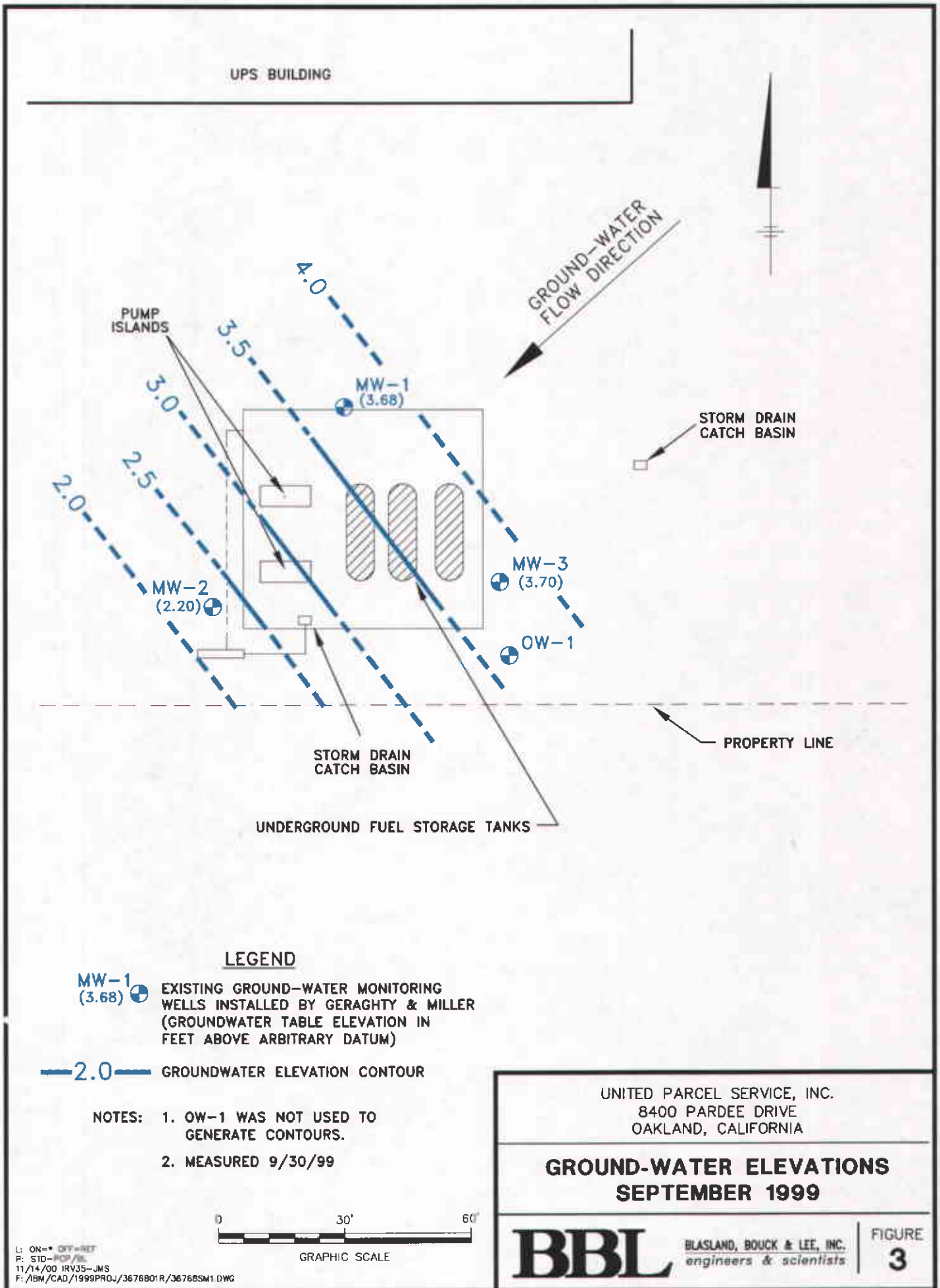
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UNITED PARCEL SERVICE, INC.
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA

PREVIOUS SOIL AND GROUND-WATER SAMPLING LOCATIONS

BBL BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE 2



UPS BUILDING

GROUND-WATER FLOW DIRECTION

STORM DRAIN CATCH BASIN

PROPERTY LINE

STORM DRAIN CATCH BASIN

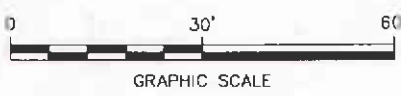
UNDERGROUND FUEL STORAGE TANKS

LEGEND

MW-1 (3.68) ⊕ EXISTING GROUND-WATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER (GROUNDWATER TABLE ELEVATION IN FEET ABOVE ARBITRARY DATUM)

—2.0— GROUNDWATER ELEVATION CONTOUR

- NOTES: 1. OW-1 WAS NOT USED TO GENERATE CONTOURS.
2. MEASURED 9/30/99



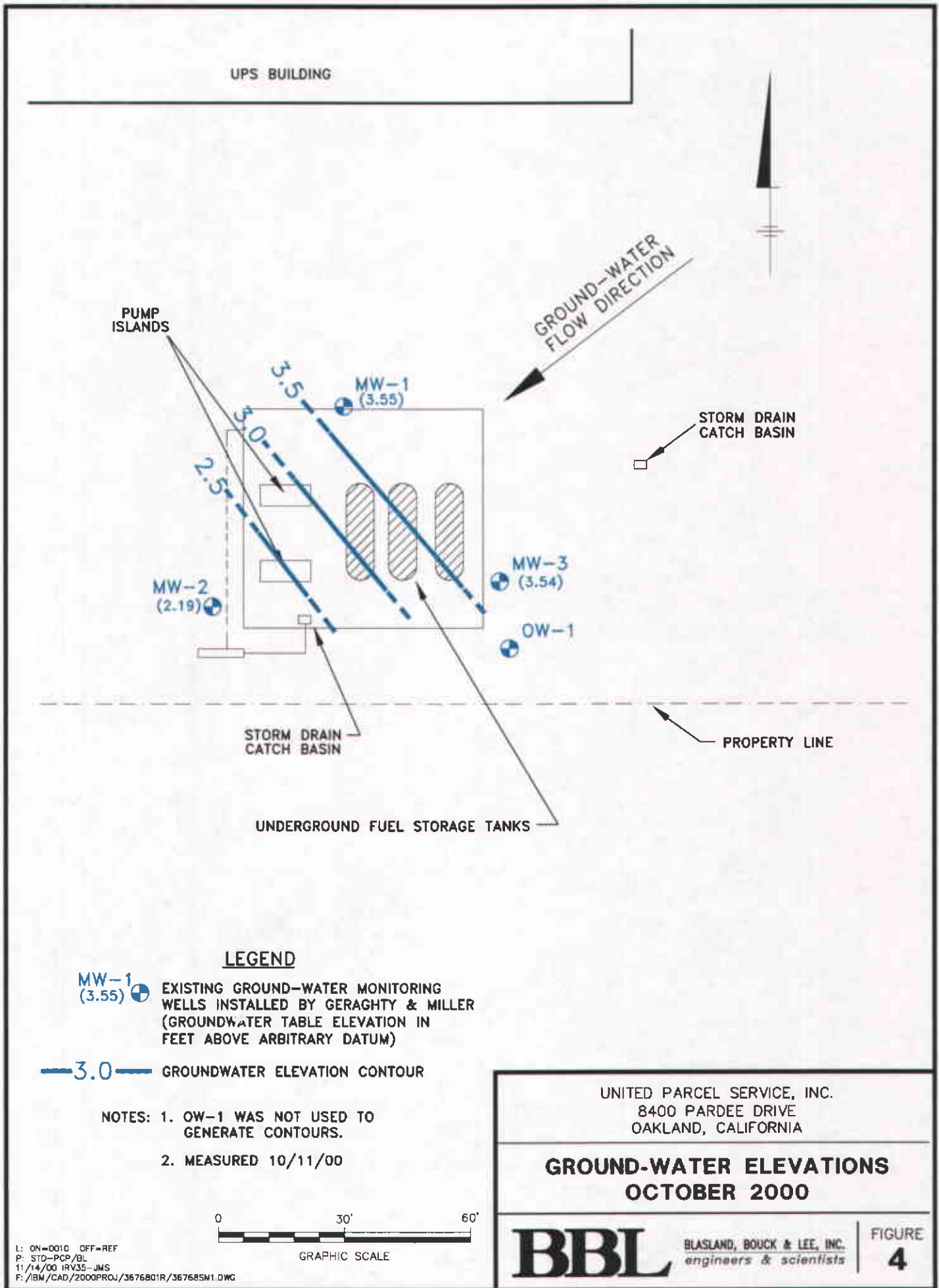
UNITED PARCEL SERVICE, INC.
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA

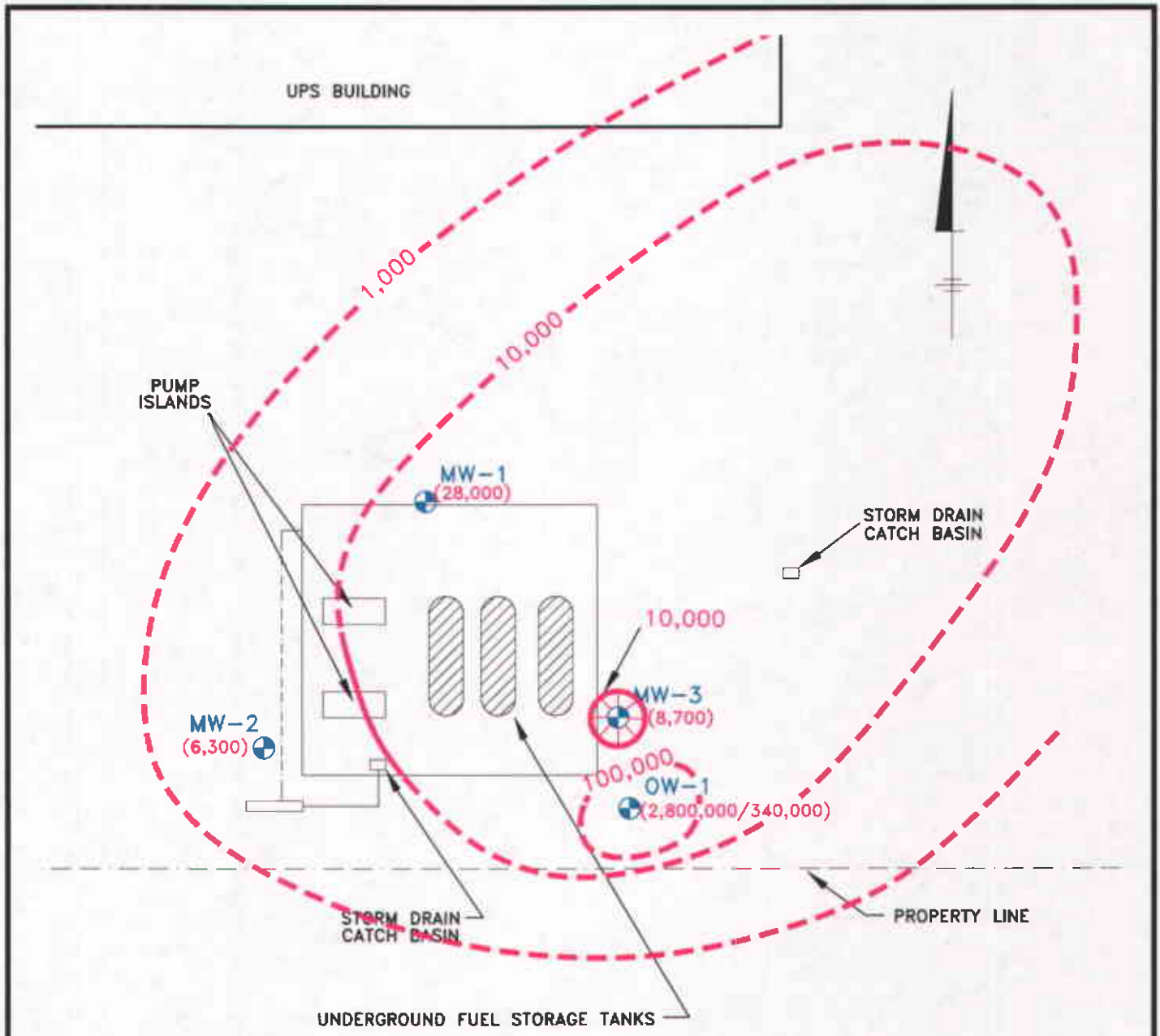
**GROUND-WATER ELEVATIONS
SEPTEMBER 1999**

BBL BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE
3

L: ON** OFF=RET
P: STD-HCP/SB
11/14/00 IRV35-JNS
F: /IBM/CAD/1999PROJ/3676801R/36768SM1 DWG



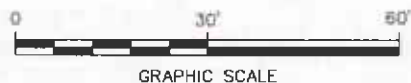


LEGEND

MW-1
(28,000) EXISTING GROUND-WATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER (SEPTEMBER, 1999 WELL DATA IN ug/L)

— 5,000 — CONCENTRATION CONTOUR

NOTE: CONTOURS EXTEND TO NORTHEAST BASED ON HISTORICAL DATA (BBL, SEPT. 1996)



UNITED PARCEL SERVICE, INC.
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA

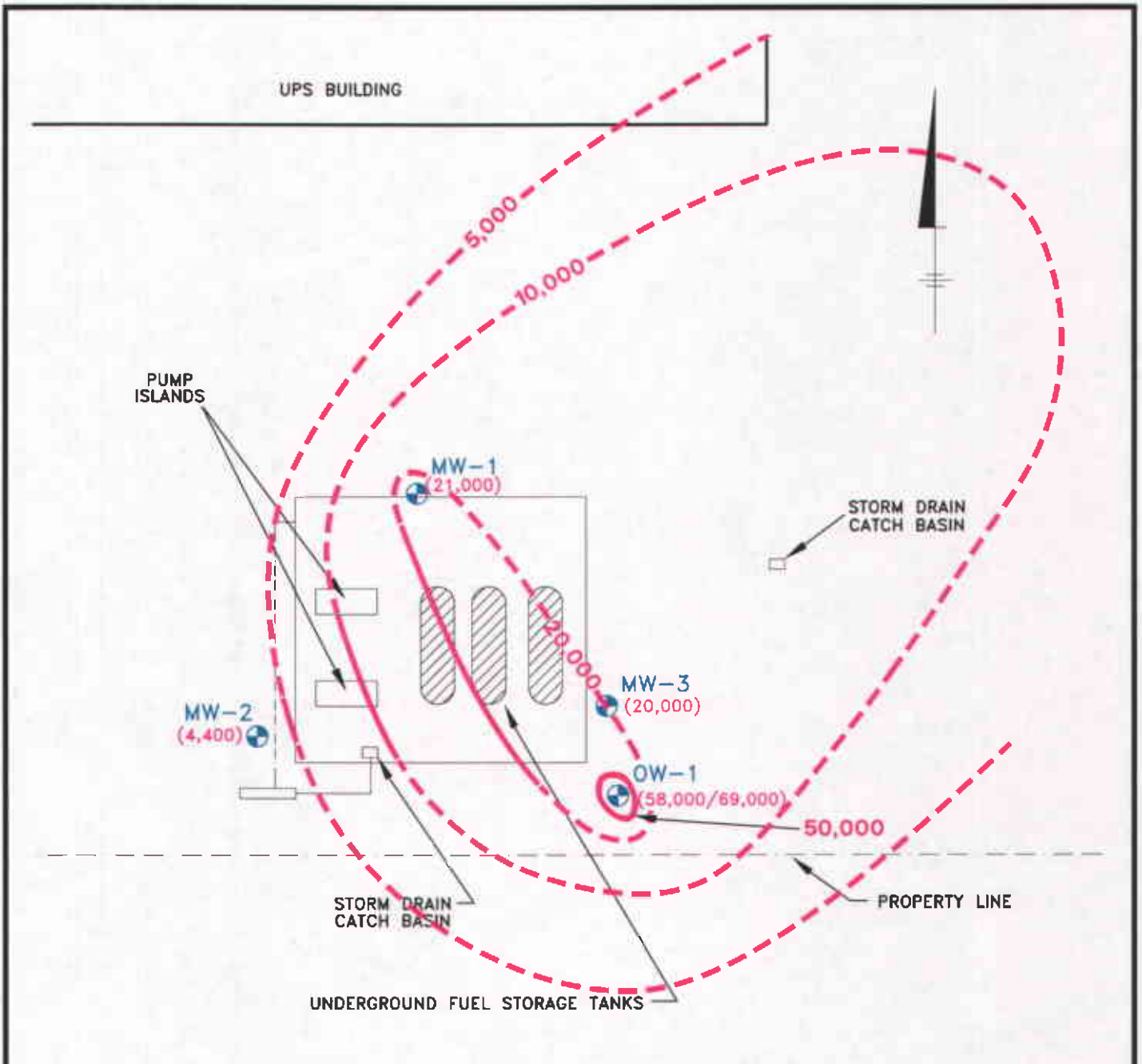
**TPH AS DIESEL CONCENTRATIONS
IN GROUND WATER SEPTEMBER 1999**

BBL

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE
5

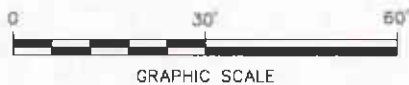
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LEGEND

- **MW-1** (21,000) EXISTING GROUND-WATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER (OCTOBER, 2000 WELL DATA IN ug/L)
- **5,000** CONCENTRATION CONTOUR

NOTE: CONTOURS EXTEND TO NORTHEAST BASED ON HISTORICAL DATA (BBL, SEPT. 1996)



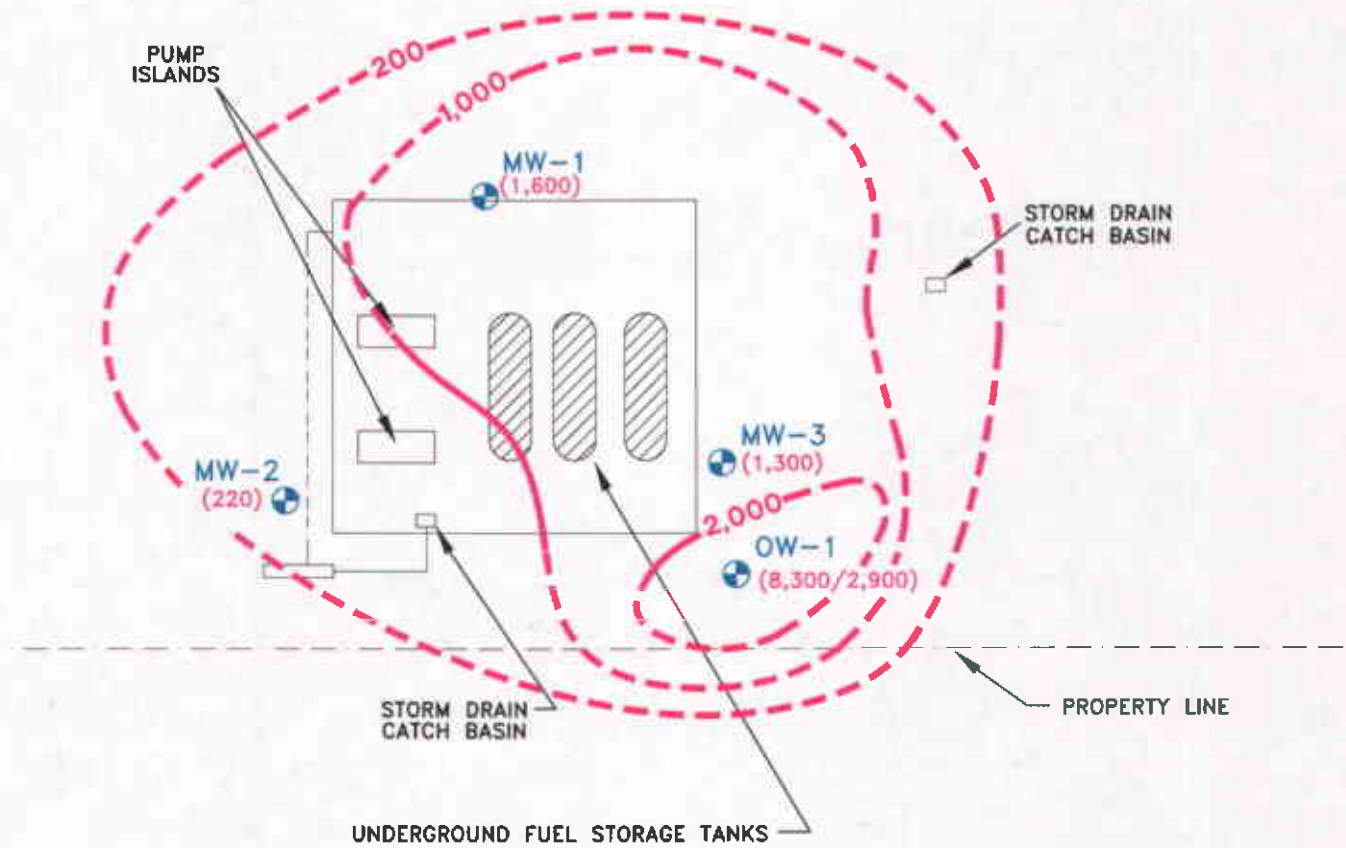
UNITED PARCEL SERVICE, INC.
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA

TPH AS DIESEL CONCENTRATIONS IN GROUND WATER OCTOBER 2000

| | | |
|-----|---|-------------|
| BBL | BLASLAND, BOUCK & LEE, INC. engineers & scientists | FIGURE 6 |
| | | |

L: ON= OFF=REF
P: STD-POP/BL
11/14/00 IRV35-JMS
F: IBM/CAD/2000PROJ/3676603R/36766SM3.DWG

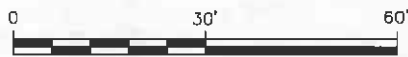
UPS BUILDING



LEGEND

MW-1
(260) EXISTING GROUND-WATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER (SEPTEMBER, 1999 WELL DATA IN ug/L)

200 CONCENTRATION CONTOUR



GRAPHIC SCALE

UNITED PARCEL SERVICE, INC.
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA

**TPH AS GASOLINE CONCENTRATIONS
IN GROUND WATER SEPTEMBER 1999**

BBL

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE
7

UPS BUILDING



PUMP ISLANDS

MW-2
(170)

MW-1
(260)

MW-3
(430)

OW-1
(2,100/1,700)

STORM DRAIN
CATCH BASIN


1,000


PROPERTY LINE

STORM DRAIN
CATCH BASIN

UNDERGROUND FUEL STORAGE TANKS

LEGEND

MW-1 (260)  EXISTING GROUND-WATER MONITORING WELLS INSTALLED BY GERAGHTY & MILLER (OCTOBER, 2000 WELL DATA IN ug/L)

 200  CONCENTRATION CONTOUR



GRAPHIC SCALE

UNITED PARCEL SERVICE, INC.
8400 PARDEE DRIVE
OAKLAND, CALIFORNIA

**TPH AS GASOLINE CONCENTRATIONS
IN GROUND WATER OCTOBER 2000**

BBL

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

FIGURE
8

L: ON=" OFF=REF
P: STD-PCP/BL
11/14/00 IRV35-JMS
F: IBM/CAD/2000PROJ/3676803R/36768SM3.DWG

Appendices

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Appendix A

BBL Standard Field Procedures

BLASLAND, BOUCK & LEE, INC.

engineers & scientists

BBL STANDARD FIELD PROCEDURES

BBL utilizes standard field procedures for soil and ground-water investigations. The following is a description of the standard ground-water sampling procedures used during the investigation.

Ground-Water Sampling Procedure

Prior to the collection of ground-water samples at the subject property, each well is sounded to determine depth to water and total well-depth using a Keck electric sounder. From this data the wetted casing volume is calculated for each monitoring well. The electric sounder is thoroughly cleaned in a solution of Liquinox and water, and triple-rinsed with de-ionized water before and after measuring each well. The wells are purged a minimum of three wetted casing volumes prior to sampling utilizing a peristaltic pump and clean disposable tubing, and/or disposable polyurethane bailers. Field measurements including temperature, pH, conductivity, and dissolved oxygen concentration are measured in samples collected during fairly even intervals of the purging process. The initial samples are collected quiescently by using a peristaltic pump set at the slowest rate and setting the tubing against the wall of the collecting cup. Subsequent samples are collected using this manner or using a disposable bailer, depending on the purging method. The samples are analyzed in the field by inserting the probe of a Horiba U10 Water Quality Meter into the sample until the readings stabilize. Purged water from the casing and gravel pack is contained in labeled, sealed, DOT approved 55-gallon drums. This purge water is stored on-site in the hazardous waste storage area until proper disposal can be determined based on the laboratory results of the sample analysis.

Subsequent to the purging of the wells, ground-water samples are collected using environmentally clean polyurethane bailers. Dedicated latex surgical gloves and string are used when sampling each well. The Teflon bailer is decontaminated in a solution of Liquinox and water, and triple-rinsed with de-ionized water before and after sampling each well. In addition, a field blank is collected by sampling purged deionized water from the final cleaning of the pump.

Upon collection, the ground-water samples are transferred from the sampling bailer to clean, laboratory-provided, glass 40-milliliter VOA vials. Four vials from each well are filled, labeled and sealed with Teflon lined screw lids and septa. The four sample vials are double-bagged in self-locking plastic bags to prevent cross contamination, placed on blue-ice to prevent possible volatilization, and transported to a California state-certified laboratory. Transportation of the samples follow industry standard chain-of-custody protocol. In addition, a field blank is collected by sampling purged deionized water from the final cleaning of the pump. The field blank and laboratory-supplied trip blank are also transported in the iced cooler with the collected ground-water samples.

Appendix B
Analytical Laboratory Results and Chain-of-Custody
Documentation

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

RECEIVED

OCT 21 1999

Blasland, Bouck & Lee



October 15, 1999

Service Request No.: S9903044

Mr. Tony Parenteau
Blasland, Bouck & Lee, Inc.
2600 Michelson Drive
Suite 830
Irvine, CA 92612-6520

RE: UPS Oakland

Dear Mr. Parenteau:

Enclosed are the results of the sample(s) submitted to our laboratory on October 1, 1999. All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply to the sample(s) analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Signature of this CAS Analytical Report confirms that pages 2 through 13, following, have been thoroughly reviewed and approved for release.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 2352, expiration: January 31, 2001).

If you have any questions, please call me at (408) 748-9700.

Respectfully submitted,

Columbia Analytical Services, Inc.

Bernadette Troncales
Project Chemist

COLUMBIA ANALYTICAL SERVICES, Inc.

Acronyms

| | |
|-------------------|---|
| AZLA | American Association for Laboratory Accreditation |
| ASTM | American Society for Testing and Materials |
| BOD | Biochemical Oxygen Demand |
| BTEX | Benzene, Toluene, Ethylbenzene, Xylenes |
| CAM | California Assessment Metals |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| COD | Chemical Oxygen Demand |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DLCS | Duplicate Laboratory Control Sample |
| DMS | Duplicate Matrix Spike |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| IC | Ion Chromatography |
| ICB | Initial Calibration Blank sample |
| ICP | Inductively Coupled Plasma atomic emission spectrometry |
| ICV | Initial Calibration Verification sample |
| J | Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding. |
| LCS | Laboratory Control Sample |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MBAS | Methylene Blue Active Substances |
| MCL | Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U. S. EPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| MS | Matrix Spike |
| MTBE | Methyl tert-Butyl Ether |
| NA | Not Applicable |
| NAN | Not Analyzed |
| NC | Not Calculated |
| NCASI | National Council of the paper industry for Air and Stream Improvement |
| ND | Not Detected at or above the method reporting/detection limit (MRL/MDL) |
| NIOSH | National Institute for Occupational Safety and Health |
| NTU | Nephelometric Turbidity Units |
| ppb | Parts Per Billion |
| ppm | Parts Per Million |
| PQL | Practical Quantitation Limit |
| QA/QC | Quality Assurance/Quality Control |
| RCRA | Resource Conservation and Recovery Act |
| RPD | Relative Percent Difference |
| SIM | Selected Ion Monitoring |
| SM | Standard Methods for the Examination of Water and Wastewater, 18th Ed., 1992 |
| STLC | Solubility Threshold Limit Concentration |
| SW | Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed., 1986 and as amended by Updates I, II, IIA, and IIB. |
| TCLP | Toxicity Characteristic Leaching Procedure |
| TDS | Total Dissolved Solids |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level. The concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding. |
| TRPH | Total Recoverable Petroleum Hydrocarbons |
| TSS | Total Suspended Solids |
| TTLC | Total Threshold Limit Concentration |
| VOA | Volatile Organic Analyte(s) |

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: 9/30/99
Date Received: 10/1/99

TPH as Diesel

Prep Method: EPA 3510
Analysis Method: CA/LUFT
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Sample Name | Lab Code | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|--------------|--------------|-----|-----------------|----------------|---------------|---------|--------------|
| MW-1 | S9903044-001 | 50 | 10 | 10/05/99 | 10/14/99 | 28000 | |
| MW-2 | S9903044-002 | 50 | 10 | 10/05/99 | 10/13/99 | 6300 | |
| MW-3 | S9903044-003 | 50 | 1 | 10/05/99 | 10/13/99 | 8700 | |
| MW-4 | S9903044-004 | 50 | 100 | 10/05/99 | 10/14/99 | 340000 | |
| OW-1 | S9903044-005 | 50 | 1000 | 10/05/99 | 10/14/99 | 2800000 | |
| Method Blank | S991005-WB1 | 50 | 1 | 10/05/99 | 10/13/99 | ND | |

Approved By: _____



Date: _____

10/15/99

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
TPH as Diesel

Prep Method: EPA 3510
Analysis Method: CA/LUFT

Units: PERCENT
Basis: NA

| Sample Name | Lab Code | Test Notes | Percent Recovery p-Terphenyl |
|--------------|--------------|------------|---------------------------------|
| MW-1 | S9903044-001 | | 97 |
| MW-2 | S9903044-002 | | 98 |
| MW-3 | S9903044-003 | | 94 |
| MW-4 | S9903044-004 | | I |
| OW-1 | S9903044-005 | | I |
| Method Blank | S991005-WB1 | | 104 |

CAS Acceptance Limits: 41-140

I Not Applicable because of the sample matrix. Analysis of this sample required a dilution such that the surrogate concentration was diluted below the method reporting limit.

Approved By: _____



Date: _____

10/15/99

SUR1/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: 09/30/99
Date Received: 10/01/99

BTEX, MTBE and TPH as Gasoline

Sample Name: MW-1
Lab Code: S9903044-001
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 10/14/99 | 1600 | |
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | 0.6 | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/14/99 | 1.8 | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 3 | 1 | NA | 10/14/99 | ND | |

Approved By: _____



Date: _____

10/15/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: 09/30/99
Date Received: 10/01/99

BTEX, MTBE and TPH as Gasoline

Sample Name: MW-2
Lab Code: S9903044-002
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 10/13/99 | 220 | |
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/13/99 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/13/99 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/13/99 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/13/99 | ND | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 3 | 1 | NA | 10/13/99 | ND | |

Approved By: _____



Date: _____

10/15/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: 09/30/99
Date Received: 10/01/99

BTEX, MTBE and TPH as Gasoline

Sample Name: MW-3
Lab Code: S9903044-003
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 10/14/99 | 1300 | |
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | 0.6 | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | 0.7 | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/14/99 | 1.2 | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 3 | 1 | NA | 10/14/99 | ND | |

Approved By: _____



Date: _____

10/15/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: 09/30/99
Date Received: 10/01/99

BTEX, MTBE and TPH as Gasoline

Sample Name: OW-1
Lab Code: S9903044-005
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 4 | NA | 10/14/99 | 8300 | |
| Benzene | EPA 5030 | 8021B | 0.5 | 4 | NA | 10/14/99 | <2 | C1 |
| Toluene | EPA 5030 | 8021B | 0.5 | 4 | NA | 10/14/99 | <2 | C1 |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 4 | NA | 10/14/99 | <2 | C1 |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 4 | NA | 10/14/99 | 4.2 | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 3 | 4 | NA | 10/14/99 | <12 | C1 |

C1

The MRL was elevated due to high analyte concentration requiring sample dilution.

Approved By: _____



Date: _____

10/15/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: 09/30/99
Date Received: 10/01/99

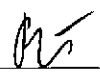
BTEX, MTBE and TPH as Gasoline

Sample Name: Trip Blank
Lab Code: S9903044-007
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 10/14/99 | ND | |
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/14/99 | ND | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 3 | 1 | NA | 10/14/99 | ND | |

Approved By: _____



Date: _____

10/15/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: NA
Date Received: NA

BTEX, MTBE and TPH as Gasoline

Sample Name: Method Blank
Lab Code: S991013-WB2
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 10/13/99 | ND | |
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/13/99 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/13/99 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/13/99 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/13/99 | ND | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 3 | 1 | NA | 10/13/99 | ND | |

Approved By: _____



Date: _____

10/15/99

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: NA
Date Received: NA

BTEX, MTBE and TPH as Gasoline

Sample Name: Method Blank
Lab Code: S991014-WB1
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 10/14/99 | ND | |
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/14/99 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/14/99 | ND | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 3 | 1 | NA | 10/14/99 | ND | |

Approved By: _____



Date: _____



1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: United Parcel Service
Project: UPS Oakland
Sample Matrix: Water

Service Request: S9903044
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
BTEX, MTBE and TPH as Gasoline

Prep Method: EPA 5030
Analysis Method: 8021B CA/LUFT

Units: PERCENT
Basis: NA

| Sample Name | Lab Code | Test Notes | Percent Recovery | |
|--------------|--------------|------------|----------------------|------------------------|
| | | | 4-Bromofluorobenzenc | a,a,a-Trifluorotoluene |
| MW-1 | S9903044-001 | | 99 | 105 |
| MW-2 | S9903044-002 | | 103 | 100 |
| MW-3 | S9903044-003 | | 100 | 102 |
| MW-4 | S9903044-004 | | 112 | 100 |
| OW-1 | S9903044-005 | | 97 | 100 |
| Trip Blank | S9903044-007 | | 93 | 103 |
| Method Blank | S991013-WB2 | | 95 | 98 |
| Method Blank | S991014-WB1 | | 98 | 99 |

CAS Acceptance Limits: 69-116 72-139

Approved By: _____



Date: _____

10/15/99

SUR2/020397p



3334 Victor Court • Santa Clara, CA 95054
(408) 748-9700 • FAX (408) 748-9860

CHAIN OF CUSTODY/LABORATORY ANALYSIS REPORT FORM

SERVICE REQUEST NO. 5990 3044 P.O.# _____ PAGE 1 OF 1

PROJECT NAME UPS Oakland #
 PROJECT MGR. TONY PARENTAU
 COMPANY BBL
 ADDRESS 2600 Michelson Drive, Ste 880
IRVINE, CA 92612 PHONE 949 474 9052
 SAMPLER'S SIGNATURE [Signature] FAX _____

| NUMBER OF CONTAINERS | ANALYSIS REQUESTED | | | | | | | | | | | | | REMARKS * | | | | |
|----------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------|
| | PRESERVATIVE | HCl | HCl | HCl | NP | NP | NP | HCl | HNO ₃ | NP | H ₂ SO ₄ | NaOH | | | | | | |
| 4 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
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| 4 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | FIELD BLANK FOR ANALYSIS. |

| SAMPLE I.D. | DATE | TIME | LAB I.D. | SAMPLE MATRIX |
|-------------|---------|------|----------|------------------|
| MW-1 | 7/30/99 | | (1) | H ₂ O |
| MW-2 | | | (2) | |
| MW-3 | | | (3) | |
| MW-4 | | | (4) | |
| OW-1 | | | (5) | |
| FIELD BLANK | | | (6) | |
| TRIP BLANK | | | (7) | |

- per Dan Attenburg on 10/04/99, cancel analyses for Field Blk
 on 10/04/99

RELINQUISHED BY:
 Signature: [Signature]
 DANIEL T. ALTENBURG
 BBL
 Firm: BBL
 Date/Time: 10/1/99 0845

RECEIVED BY:
 Signature: [Signature]
 JOSEPH MACHADO
 DAS
 Firm: DAS
 Date/Time: 10/1/99 1434

RELINQUISHED BY:
 Signature: _____
 Printed Name: _____
 Firm: _____
 Date/Time: _____

RECEIVED BY:
 Signature: _____
 Printed Name: _____
 Firm: _____
 Date/Time: _____

TURNAROUND REQUIREMENTS
 ___ 1 day ___ 2 day ___ 3 day
 ___ 5 day ___ Other
 Standard (10 working days)
 Results Due 10/15/99

REPORT REQUIREMENTS
 ___ I. Routine Report
 ___ II. Report (includes MS, MSD, as required, may be charged as samples)
 ___ III. Data Validation Report (includes All Raw Data)
 ___ MDLs/PQLs/Trace #
 ___ Electronic Data Deliverables

RELINQUISHED BY:
 Signature: _____
 Printed Name: _____
 Firm: _____

RECEIVED BY:
 Signature: _____
 Printed Name: _____
 Firm: _____

SAMPLE RECEIPT: Condition _____ Custody Seals _____
 SPECIAL INSTRUCTIONS/COMMENTS:
 Circle which metals are to be analyzed:
 Metals: Al Sb Ba Be B Cd Ca Cr Co Cu Fe Mg Mn Mo Ni K Ag Na Sn V Zn
 As Pb Se Ti Hg
As Cd Cooler - started Machado
R11/D3-T



November 8, 2000

Tony Parenteau
Blasland, Bouck & Lee, Inc.
2600 Michelson Drive
Suite 830
Irvine, CA 92612

RECEIVED

NOV 10 2000

Blasland, Bouck & Lee

Re: UPS-Oakland/Project # 36768

Dear Tony:

Enclosed are the results of the samples submitted to our laboratory on October 12, 2000. For your reference, these analyses have been assigned our service request number L2003242.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 1296A, expiration: August 31, 2002).

If you have any questions, please call me at (818) 587-5550, extension 311.

Respectfully submitted,

Columbia Analytical Services, Inc.

Eydie Schwartz
Project Chemist

ES/md

Columbia Analytical Services, Inc.

Acronyms

| | |
|------------|---|
| 8015M | California DHS LUFT Method |
| A2LA | American Association for Laboratory Accreditation |
| ASTM | American Society for Testing and Materials |
| BOD | Biochemical Oxygen Demand |
| BTEX | Benzene/Toluene/Ethylbenzene/Xylenes |
| CAM | California Assessment Metals |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service Registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| COD | Chemical Oxygen Demand |
| CRDL | Contract Required Detection Limit |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DLCS | Duplicate Laboratory Control Sample |
| DMS | Duplicate Matrix Spike |
| DOE | Department of Ecology |
| DOH or DHS | Department of Health Services |
| ELAP | Environmental Laboratory Accreditation Program |
| EPA | U.S. Environmental Protection Agency |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| IC | Ion Chromatography |
| ICB | Initial Calibration Blank sample |
| ICP | Inductively Coupled Plasma atomic emission spectrometry |
| ICV | Initial Calibration Verification sample |
| J | Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding. |
| LCS | Laboratory Control Sample |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MBAS | Methylene Blue Active Substances |
| MCL | Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U.S. EPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| MS | Matrix Spike |
| MTBE | Methyl- <i>tert</i> -Butyl Ether |
| NA | Not Applicable |
| NAN | Not Analyzed |
| NC | Not Calculated |
| NCASI | National Council of the paper industry for Air and Stream Improvement |
| ND | None Detected at or above the Method Reporting/Detection Limit (MRL/MDL) |
| NIOSH | National Institute for Occupational Safety and Health |
| NTU | Nephelometric Turbidity Units |
| ppb | Parts Per Billion |
| ppm | Parts Per Million |
| PQL | Practical Quantitation Limit |
| QA/QC | Quality Assurance/Quality Control |
| RCRA | Resource Conservation and Recovery Act |
| RPD | Relative Percent Difference |
| SIM | Selected Ion Monitoring |
| SM | <i>Standard Methods for the Examination of Water and Wastewater</i> , 18th Ed., 1992. |
| STLC | Solubility Threshold Limit Concentration |
| SW | <i>Test Methods for Evaluating Solid Waste. Physical/Chemical Methods</i> , SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB. |
| TCLP | Toxicity Characteristics Leaching Procedure |
| TDS | Total Dissolved Solids |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding. |
| TRPH | Total Recoverable Petroleum Hydrocarbons |
| TSS | Total Suspended Solids |
| TTLC | Total Threshold Limit Concentration |
| VOA | Volatile Organic Analyte(s) |

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
 Project: UPS-Oakland/36768
 Sample Matrix: Water

Service Request: L2003242
 Date Collected: NA
 Date Received: NA

MTBE, BTEX and TPH as Gasoline

Sample Name: Method Blank
 Lab Code: L201016-MB
 Test Notes: †

Units: ug/L (ppb)
 Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/16/00 | ND | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 1 | NA | 10/16/00 | ND | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 5 | 1 | NA | 10/16/00 | ND | |

† TPH as Gasoline does not include MTBE.

Approved By:

Eydie Schwarz

Date:

11/8/00

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: NA
Date Received: NA

MTBE, BTEX and TPH as Gasoline

Sample Name: Method Blank
Lab Code: L201017-MB
Test Notes: †

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|-------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/17/00 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/17/00 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/17/00 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/17/00 | ND | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 1 | NA | 10/17/00 | ND | |
| Methyl tert-Butyl Ether | EPA 5030 | 8021B | 5 | 1 | NA | 10/17/00 | ND | |

† TPH as Gasoline does not include MTBE.

Approved By: Eydie Schwartz Date: 11/8/00
1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-1
Lab Code: L2003242-001
Test Notes: †

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|--------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/16/00 | ND | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 1 | NA | 10/16/00 | 260 | |
| Methyl tert -Butyl Ether | EPA 5030 | 8021B | 5 | 1 | NA | 10/16/00 | ND | |

† TPH as Gasoline does not include MTBE.

Approved By: Eydie Schwarz

Date: 11/8/00

IS22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-2
Lab Code: L2003242-002
Test Notes: †

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|--------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/16/00 | ND | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 1 | NA | 10/16/00 | 170 | |
| Methyl tert -Butyl Ether | EPA 5030 | 8021B | 5 | 1 | NA | 10/16/00 | ND | |

† TPH as Gasoline does not include MTBE.

Approved By:

Eydie Schwartz

Date:

11/8/00

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-3
Lab Code: L2003242-003
Test Notes: †

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/16/00 | ND | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 1 | NA | 10/16/00 | 430 | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 5 | 1 | NA | 10/16/00 | ND | |

† TPH as Gasoline does not include MTBE.

Approved By: Eydie Schwartz

Date: 11/8/00

1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
 Project: UPS-Oakland/36768
 Sample Matrix: Water

Service Request: L2003242
 Date Collected: 10/11/00
 Date Received: 10/12/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-4
 Lab Code: L2003242-004
 Test Notes: †

Units: ug/L (ppb)
 Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/16/00 | ND | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 1 | NA | 10/16/00 | 1700 | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 5 | 1 | NA | 10/16/00 | ND | |

† TPH as Gasoline does not include MTBE.

Approved By:

Eydie Schwartz

Date:

11/8/00

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

MTBE, BTEX and TPH as Gasoline

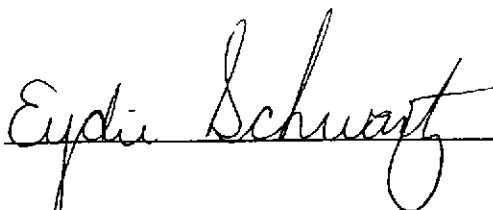
Sample Name: OW-1
Lab Code: L2003242-005
Test Notes: †

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/17/00 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/17/00 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/17/00 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/17/00 | ND | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 1 | NA | 10/17/00 | 2100 | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 5 | 1 | NA | 10/17/00 | ND | |

† TPH as Gasoline does not include MTBE.

Approved By:



Date:

11/8/00

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

MTBE, BTEX and TPH as Gasoline

Sample Name: TRIP BLANK
Lab Code: L2003242-006
Test Notes: †

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|---------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| Benzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Toluene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 1 | NA | 10/16/00 | ND | |
| Xylenes, Total | EPA 5030 | 8021B | 1.0 | 1 | NA | 10/16/00 | ND | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 1 | NA | 10/16/00 | ND | |
| Methyl <i>tert</i> -Butyl Ether | EPA 5030 | 8021B | 5 | 1 | NA | 10/16/00 | ND | |

† TPH as Gasoline does not include MTBE.

Approved By: Eydie Schwartz Date: 11/8/00
1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: NA
Date Received: NA

Hydrocarbon Scan / Fuel Characterization

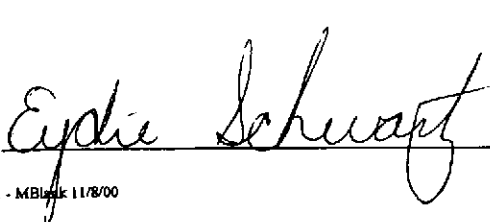
Sample Name: Method Blank
Lab Code: L201013-MB
Test Notes: X5

Units: mg/L (ppm)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| C6 - C12 GRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | ND | |
| C13 - C22 DRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | ND | |
| C23 - C32 HRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | ND | |
| Total Petroleum Hydrocarbons | EPA 3510M | 8015M | 1.5 | 1 | 10/13/00 | 10/13/00 | ND | |
| Fuel Characterization | EPA 3510M | 8015M | | | | | NA | |

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics
X5 Quantified with diesel fuel.

Approved By:



Date:

11/8/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

Hydrocarbon Scan / Fuel Characterization

Sample Name: MW-1
Lab Code: L2003242-001
Test Notes: X5

Units: mg/L (ppm)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| C6 - C12 GRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 0.8 | |
| C13 - C22 DRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 21 | |
| C23 - C32 HRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 15 | |
| Total Petroleum Hydrocarbons | EPA 3510M | 8015M | 1.5 | 1 | 10/13/00 | 10/13/00 | 37 | |
| Fuel Characterization | EPA 3510M | 8015M | | | | | | HC1 |

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics
X5 Quantified with diesel fuel.

HC1 Chromatogram fingerprint is indicative of crude oil.

Approved By: Eydie Schwartz

Date: 11/8/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

Hydrocarbon Scan / Fuel Characterization

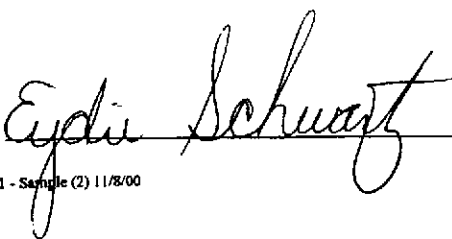
Sample Name: MW-2
Lab Code: L2003242-002
Test Notes: X5
Units: mg/L (ppm)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| C6 - C12 GRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/16/00 | 0.5 | |
| C13 - C22 DRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/16/00 | 4.4 | |
| C23 - C32 HRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/16/00 | 1.7 | |
| Total Petroleum Hydrocarbons | EPA 3510M | 8015M | 1.5 | 1 | 10/13/00 | 10/16/00 | 6.6 | |
| Fuel Characterization | EPA 3510M | 8015M | | | | | | HC1 |

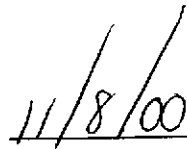
GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics
X5 Quantified with diesel fuel.

HC1 Chromatogram fingerprint is indicative of crude oil.

Approved By:



Date:



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

Hydrocarbon Scan / Fuel Characterization

Sample Name: MW-3
Lab Code: L2003242-003
Test Notes: X5

Units: mg/L (ppm)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| C6 - C12 GRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 1.1 | |
| C13 - C22 DRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 20 | |
| C23 - C32 HRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 13 | |
| Total Petroleum Hydrocarbons | EPA 3510M | 8015M | 1.5 | 1 | 10/13/00 | 10/13/00 | 34 | |
| Fuel Characterization | EPA 3510M | 8015M | | | | | | HC1 |

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics
X5 Quantified with diesel fuel.

HC1 Chromatogram fingerprint is indicative of crude oil.

Approved By: Eydie Schwarz Date: 11/8/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

Hydrocarbon Scan / Fuel Characterization

Sample Name: MW-4
Lab Code: L2003242-004
Test Notes: X5

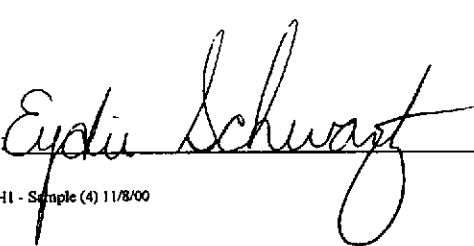
Units: mg/L (ppm)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| C6 - C12 GRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 6.4 | |
| C13 - C22 DRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 69 | |
| C23 - C32 HRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 10 | |
| Total Petroleum Hydrocarbons | EPA 3510M | 8015M | 1.5 | 1 | 10/13/00 | 10/13/00 | 85 | |
| Fuel Characterization | EPA 3510M | 8015M | | | | | | HC1 |

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics
X5 Quantified with diesel fuel.

HC1 Chromatogram fingerprint is indicative of diesel.

Approved By



Date:

11/8/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: 10/11/00
Date Received: 10/12/00

Hydrocarbon Scan / Fuel Characterization

Sample Name: OW-1
Lab Code: L2003242-005
Test Notes: X5

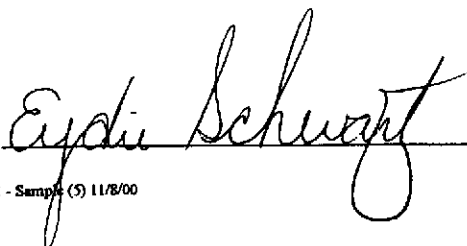
Units: mg/L (ppm)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|------------------------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| C6 - C12 GRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 4.5 | |
| C13 - C22 DRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 58 | |
| C23 - C32 HRO | EPA 3510M | 8015M | 0.5 | 1 | 10/13/00 | 10/13/00 | 8.4 | |
| Total Petroleum Hydrocarbons | EPA 3510M | 8015M | 1.5 | 1 | 10/13/00 | 10/13/00 | 71 | |
| Fuel Characterization | EPA 3510M | 8015M | | | | | | HC1 |

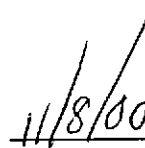
GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics
X5 Quantified with diesel fuel.

HC1 Chromatogram fingerprint is indicative of diesel.

Approved By:



Date:



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
MTBE, BTEX and TPH as Gasoline

Prep Method: EPA 5030
Analysis Method: 8021B/8015M

Units: PERCENT
Basis: NA

| Sample Name | Lab Code | Test Notes | Percent Recovery | |
|--------------|-----------------|------------|----------------------|----------------------|
| | | | 4-Bromofluorobenzene | 4-Bromofluorobenzene |
| MW-1 | L2003242-001 | | 92 | 109 |
| MW-2 | L2003242-002 | | 98 | 114 |
| MW-3 | L2003242-003 | | 93 | 111 |
| MW-4 | L2003242-004 | | 79 | 86 |
| OW-1 | L2003242-005 | | 92 | 98 |
| TRIP BLANK | L2003242-006 | | 92 | 105 |
| Method Blank | L201016-MB | | 88 | 100 |
| Method Blank | L201017-MB | | 91 | 96 |
| Batch QC | L2003258-001MS | | 97 | 107 |
| Batch QC | L2003258-001DMS | | 96 | 108 |
| Batch QC | L2003280-001MS | | 95 | 110 |
| Batch QC | L2003280-001DMS | | 95 | 103 |

CAS Acceptance Limits: 60-130 60-140

Approved By: Eydie Schwartz

Date: 11/8/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: United Parcel Service
 Project: UPS-Oakland/36768
 Sample Matrix: Water

Service Request: L2003242
 Date Collected: NA
 Date Received: NA
 Date Extracted: NA
 Date Analyzed: 10/16/00

Matrix Spike/Duplicate Matrix Spike Summary
 MTBE, BTEX and TPH as Gasoline

Sample Name: Batch QC
 Lab Code: L2003258-001MS, L2003258-001DMS
 Test Notes:

Units: ug/L (ppb)
 Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Spike Level | | Sample Result | Spike Result | | Percent Recovery | | CAS Acceptance Limits | Relative Percent Difference | Result Notes |
|-----------------|-------------|-----------------|-----|-------------|------|---------------|--------------|------|------------------|-----|-----------------------|-----------------------------|--------------|
| | | | | MS | DMS | | MS | DMS | MS | DMS | | | |
| Benzene | EPA 5030 | 8021B | 0.5 | 12.7 | 12.7 | ND | 17.1 | 16.6 | 135 | 131 | 39-150 | 3 | |
| Toluene | EPA 5030 | 8021B | 0.5 | 140 | 140 | ND | 131 | 129 | 94 | 92 | 46-148 | 2 | |
| Ethylbenzene | EPA 5030 | 8021B | 0.5 | 35.2 | 35.2 | ND | 31.9 | 31.4 | 91 | 89 | 32-160 | 2 | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 2000 | 2000 | ND | 2210 | 2110 | 110 | 106 | 70-140 | 5 | |

Approved By: Eydie Schwartz Date: 11/8/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: United Parcel Service
 Project: UPS-Oakland/36768
 Sample Matrix: Water

Service Request: L2003242
 Date Collected: NA
 Date Received: NA
 Date Extracted: NA
 Date Analyzed: 10/17/00

Matrix Spike/Duplicate Matrix Spike Summary
 MTBE, BTEX and TPH as Gasoline

Sample Name: Batch QC
 Lab Code: L2003280-001MS, L2003280-001DMS
 Test Notes:

Units: ug/L (ppb)
 Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Spike Level | | Sample Result | Spike Result | | Percent Recovery | | | | Result Notes |
|-----------------|-------------|-----------------|-----|-------------|------|---------------|--------------|------|-------------------|--------------------|----------|----|--------------|
| | | | | MS | DMS | | MS | DMS | CAS | | Relative | | |
| | | | | MS | DMS | | MS | DMS | Acceptance Limits | Percent Difference | | | |
| Benzene | EPA 5030 | 8021B | 0.5 | 12.7 | 12.7 | ND | 17.5 | 17.8 | 138 | 140 | 39-150 | 2 | |
| Toluene | EPA 5030 | 8021B | 0.5 | 140 | 140 | ND | 131 | 132 | 94 | 94 | 46-148 | <1 | |
| Methylbenzene | EPA 5030 | 8021B | 0.5 | 35.2 | 35.2 | ND | 30.2 | 32.6 | 86 | 93 | 32-160 | 8 | |
| TPH as Gasoline | EPA 5030 | 8015M | 50 | 2000 | 2000 | ND | 2070 | 2120 | 103 | 106 | 70-140 | 2 | |

Approved By: Eydie Schwartz Date: 11/8/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: United Parcel Service
Project: UPS-Oakland/36768
Sample Matrix: Water

Service Request: L2003242
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Hydrocarbon Scan / Fuel Characterization

Prep Method: EPA 3510M
Analysis Method: 8015M

Units: PERCENT
Basis: NA

| Sample Name | Lab Code | Test Notes | Percent Recovery <i>p</i> -Terphenyl |
|------------------------------|--------------|------------|---|
| MW-1 | L2003242-001 | | 112 |
| MW-2 | L2003242-002 | | 109 |
| MW-3 | L2003242-003 | | 114 |
| MW-4 | L2003242-004 | | 115 |
| OW-1 | L2003242-005 | | 117 |
| Method Blank | L201013-MB | | 116 |
| Lab Control Sample | L201013-LCS | | 115 |
| Duplicate Lab Control Sample | L201013-DLCS | | 115 |

CAS Acceptance Limits: 50-140

Approved By: Eydie Schwartz

Date: 11/8/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: United Parcel Service
Project: UPS-Oakland/36768
LCS Matrix: Water

Service Request: L2003242
Date Collected: NA
Date Received: NA
Date Extracted: 10/13/00
Date Analyzed: 10/13/00

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Hydrocarbon Scan / Fuel Characterization

Sample Name: Duplicate Lab Control Sample
Lab Code: L201013-LCS L201013-DLCS
Test Notes:

Units: mg/L (ppm)
Basis: NA

| Analyte | Prep Method | Analysis Method | True Value | | Result | | Percent Recovery | | CAS Acceptance Limits | Relative Percent Difference |
|---------|-------------|-----------------|------------|------|--------|------|------------------|------|-----------------------|-----------------------------|
| | | | LCS | DLCS | LCS | DLCS | LCS | DLCS | | |
| Diesel | EPA 3510M | 8015M | 20.0 | 20.0 | 20.9 | 22.1 | 104 | 110 | 41-136 | 6 |

Approved By: Eydie Schwartz

Date: 11/8/00

Appendix C
Ground-water sampling forms

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Site Name: UPS - OAKLAND
 Project Number: 36768
 Recorded by: DAN | STEVE

Well Number: MW1
 Well Type: Monitor Extraction Other: _____
 Date: 9/30/99 Time: _____

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches)
 2-inch 4-inch 6-inch Other _____
 Total Depth of Casing (TD in feet BTOC): 14.25
 Water Level Depth (WL in feet BTOC): 3.75
 Number Of Well Volumes to be Purged (# Vols)
 4 5 10 Other 3

PURGE METHOD

Bailer-Type: 1 1/2" 5gal peristaltic pump
 Submersible Centrifugal Bladder
 Other-Type: _____

PURGE VOLUME CALCULATION

$$\left(\frac{14.25}{10.5} - \frac{3.75}{10.5} \right) \times \frac{4^2}{4} \times 3 \times 0.0408 = \frac{20.5}{\text{Calculated Purge Volume}} \text{ gallons}$$

VOLUME GENERATED

20.5 gallons

PURGE TIME

1445 Start 1522 Stop 37 Elapsed

PURGE RATE

Initial _____ gpm Final _____ gpm

CONTROLLER SETTING

Initial _____ Hz Final _____ Hz

FIELD PARAMETER MEASUREMENT

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | _____ |
|------|------------------|----------|-----|--------------|------------------|
| 1500 | 5 | 25 | 7.2 | 1.6 | 9.2 |
| 1508 | 10 | 24 | 7.5 | 1.7 | 9.4 |
| 1513 | 15 | 25 | 7.4 | 1.5 | 9.1 |
| 1522 | 20.5 | 25 | 7.2 | 1.5 | 9.9 |

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|------|------------------|----------|----|--------------|-------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Observations During Purging (Turbidity, Colour, Odor, Well Condition etc): Slight Turb, Odors, ~~Strong~~ Light She
 Discharge Water Disposal: 55 gal drum left on-site

WELL SAMPLING

SAMPLING METHOD

(Sample at 80% (Minimum) recharge)
 (Sample Turbidity <10 NTU)
 Bailer Type: DISPOSABLE
 Sampling Time (80%) Recharge: 1525
 Depth to Water: 3.80

SAMPLE INFORMATION

| Sample No | Number Containers | Container Type | Lab | Analysis | Preservatives |
|------------|-------------------|----------------|-----|----------|---------------|
| <u>MW1</u> | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Site Name: UPS - OAKLAND
 Project Number: 36768
 Recorded by: DAN / STEVE

Well Number: MW 2
 Well Type: Monitor Extraction Other: _____
 Date: 9/30/99 Time: 1507

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches)
 2-inch 4-inch 6-inch Other _____
 Total Depth of Casing (TD in feet BTOC): 14.4
 Water Level Depth (WL in feet BTOC): 4.95
 Number Of Well Volumes to be Purged (# Vols)
 4 5 10 Other 3

PURGE METHOD

Bailer-Type: 1st 5 gal. Peristaltic Pump
 Submersible Centrifugal Bladder
 Other-Type: _____

PURGE VOLUME CALCULATION

$$\frac{(14.4 - 4.95)}{9.45} \times \frac{4^2}{4} \times 3 \times .0408 = 18.5 \text{ gallons}$$

TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume

VOLUME GENERATED

15 gallons (dry)

PURGE TIME

1507 Start _____ Stop _____ Elapsed _____

PURGE RATE

Initial _____ gpm Final _____ gpm

CONTROLLER SETTING

Initial _____ Hz Final _____ Hz

FIELD PARAMETER MEASUREMENT

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|------|-------------------|----------|-----|--------------|------------------------|
| 1541 | 5 | 25 | 7.0 | 5.1 | 10.9 |
| 1553 | 10 | 24 | 7.2 | 5.4 | 9.8 |
| 1605 | 15 | 23 | 7.1 | 5.2 | 9.5 |
| | 15 dry | | | | |

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|------|------------------|----------|----|--------------|-------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Observations During Purging (Turbidity, Colour, Odor, Well Condition etc): Slightly Turbid, Spew, Odors, Yellow Color
 Discharge Water Disposal: 55 gal drum left on site

WELL SAMPLING

SAMPLING METHOD

(Sample at 80% (Minimum) recharge)
 (Sample Turbidity <10 NTU)
 Bailer Type: DISPOSABLE 1625
 Sampling Time (80%) Recharge: 5:05
 Depth to Water: 5.05

SAMPLE INFORMATION

| Sample No | Number Containers | Container Type | Lab | Analysis | Preservatives |
|-------------|-------------------|----------------|-----|----------|---------------|
| <u>MW 2</u> | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



BLASLAND, BOUCK & LEE, INC.
engineers & scientists

GROUND-WATER SAMPLING FORM

Site Name: UPS - OAKLAND
Project Number: 36768
Recorded by: DAV / STEVE

Well Number: MW 3
Well Type: Monitor Extraction Other: _____
Date: 9/30/98 Time: _____

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches)
2-inch 4-inch 6-inch Other _____
Total Depth of Casing (TD in feet BTOC): 14.6
Water Level Depth (WL in feet BTOC): 3.72
Number Of Well Volumes to be Purged (# Vols)
4 5 10 Other _____

PURGE METHOD

Bailer-Type: 1 1/2 Gal Peristaltic Pump
Submersible Centrifugal Bladder
Other-Type: _____

PURGE VOLUME CALCULATION

VOLUME GENERATED

$$\frac{(14.6 - 3.72)}{10.88} \times \frac{4^2}{17.4} \times \frac{3}{1} \times .0408 = \frac{21}{17.4} \text{ gallons}$$

TD (feet) WL (feet) D (inches) # Vols Calculated Purge Volume

_____ gallons

PURGE TIME

PURGE RATE

CONTROLLER SETTING

1555 Start _____ Stop _____ Elapsed _____ Initial _____ gpm Final _____ gpm Initial _____ Hz Final _____ Hz

FIELD PARAMETER MEASUREMENT

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|-------------|------------------|-----------|------------|--------------|------------------------|
| <u>1605</u> | <u>5</u> | <u>25</u> | <u>7.4</u> | <u>1.2</u> | <u>9.3</u> |
| <u>1611</u> | <u>10</u> | <u>25</u> | <u>7.9</u> | <u>1.3</u> | <u>9.1</u> |
| <u>1617</u> | <u>15</u> | <u>24</u> | <u>7.1</u> | <u>1.1</u> | <u>9.1</u> |
| <u>1630</u> | <u>21</u> | <u>24</u> | <u>6.9</u> | <u>1.1</u> | <u>8.6</u> |

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|------|------------------|----------|----|--------------|-------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Observations During Purging (Turbidity, Colour, Odor, Well Condition etc): CLAR & SOME ODORS, Light GREEN
Discharge Water Disposal: 55 gal drum left on site

WELL SAMPLING

SAMPLING METHOD

SAMPLE INFORMATION

(Sample at 80% (Minimum) recharge)
(Sample Turbidity <10 NTU)
Bailer Type: DISPOSABLE
Sampling Time (80% Recharge): 1635
Depth to Water: 3.72

| Sample No | Number Containers | Container Type | Lab | Analysis | Preservatives |
|-------------|-------------------|----------------|-----|----------|---------------|
| <u>MW 3</u> | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Site Name: UPS - OAKLAND
 Project Number: 36768
 Recorded by: DAN/STEVE

Well Number: OW 1
 Well Type: Monitor Extraction Other: _____
 Date: 9/30/99 Time: 1637

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches)
 2-inch 4-inch 6-inch Other _____
 Total Depth of Casing (TD in feet BTOC): 19.02
 Water Level Depth (WL in feet BTOC): 8.91
 Number Of Well Volumes to be Purged(# Vols)
 4 5 10 Other 3

PURGE METHOD

Bailer-Type: disposable
 Submersible Centrifugal Bladder
 Other-Type: _____

PURGE VOLUME CALCULATION

$$\frac{(19.02 - 8.91)}{10.11} \times \frac{4^2}{D \text{ (inches)}} \times \frac{3}{\# \text{ Vols}} \times .0408 = \frac{19.8}{\text{Calculated Purge Volume}} \text{ gallons}$$

VOLUME GENERATED

_____ gallons

PURGE TIME

1637 Start _____ Stop _____ Elapsed _____

PURGE RATE

Initial _____ gpm Final _____ gpm

CONTROLLER SETTING

Initial _____ Hz Final _____ Hz

FIELD PARAMETER MEASUREMENT

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level <u>0.0</u> |
|-------------|------------------|-----------|------------|--------------|--------------------------------------|
| <u>1658</u> | <u>5</u> | <u>22</u> | <u>6.8</u> | <u>3.4</u> | <u>9.7</u> |
| | <u>10</u> | | | | |
| | <u>15</u> | | | | |
| | <u>20</u> | | | | |

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|------|------------------|----------|----|--------------|-------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Observations During Purging (Turbidity, Colour, Odor, Well Condition etc): _____

Discharge Water Disposal: _____

WELL SAMPLING

SAMPLING METHOD

(Sample at 80% (Minimum) recharge)
 (Sample Turbidity <10 NTU)
 Bailer Type: _____
 Sampling Time (80%) Recharge: _____
 Depth to Water: _____

SAMPLE INFORMATION

| Sample No | Number Containers | Container Type | Lab | Analysis | Preservatives |
|------------|-------------------|----------------|-----|----------|---------------|
| <u>OW1</u> | | | | | |
| <u>MW4</u> | | | | | |
| | | | | | |
| | | | | | |

Site Name: VPS - Oakland
 Project Number: 38768
 Recorded by: JMS

Well Number: MW-1
 Well Type: Monitor Extraction Other: _____
 Date: 12/11/00 Time: 12:00p

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches)
 2-inch 4-inch 6-inch Other _____
 Total Depth of Casing (TD in feet BTOC): 14.25
 Water Level Depth (WL in feet BTOC): 3.88
 Number Of Well Volumes to be Purged(# Vols)
 4 5 10 Other 3

PURGE METHOD

Bailer-Type: Disposable
 Submersible Centrifugal Bladder
 Other-Type: _____

PURGE VOLUME CALCULATION

$$\frac{(14.25 - 3.88) \times 4^2 \times 3 \times .0408}{\text{TD (feet)} \quad \text{WL (feet)} \quad \text{D (inches)} \quad \text{\# Vols}} = \frac{20.3}{\text{Calculated Purge Volume}} \text{ gallons}$$

VOLUME GENERATED

20 gallons

PURGE TIME

12:00 Start 12:45 Stop _____ Elapsed _____

PURGE RATE

Initial _____ gpm Final _____ gpm

CONTROLLER SETTING

Initial _____ Hz Final _____ Hz

FIELD PARAMETER MEASUREMENT

D.O. N.M.

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level | Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|-------|------------------|----------|------|--------------|-------------|------|------------------|----------|----|--------------|-------------|
| 12:10 | 5 | 23.8 | 7.07 | 1.53 | — | | | | | | |
| 12:25 | 10 | 23.7 | 6.99 | 1.68 | — | | | | | | |
| 12:35 | 15 | 23.5 | 6.98 | 1.59 | — | | | | | | |
| 12:45 | 20 | 23.7 | 6.95 | 1.57 | — | | | | | | |

Observations During Purging (Turbidity, Colour, Odor, Well Condition etc): _____

Discharge Water Disposal: _____

WELL SAMPLING

SAMPLING METHOD

(Sample at 80% (Minimum) recharge)
 (Sample Turbidity <10 NTU)
 Bailer Type: Disposable
 Sampling Time (80%) Recharge: 3:45
 Depth to Water: 3.88

SAMPLE INFORMATION

| Sample No | Number Containers | Container Type | Lab | Analysis | Preservatives |
|-------------|-------------------|----------------|-------------|----------|---------------|
| <u>MW-1</u> | <u>4</u> | <u>VOAS</u> | <u>Cal.</u> | | |
| | | | | | |
| | | | | | |

Site Name: UPS-Oakland
Project Number: 36768
Recorded by: CSM

Well Number: MW-2
Well Type: Monitor Extraction Other: _____
Date: 10/11/00 Time: 11:00a

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches)
2-inch 4-inch 6-inch Other _____
Total Depth of Casing (TD in feet BTOC): 14.4
Water Level Depth (WL in feet BTOC): 4.95
Number Of Well Volumes to be Purged(# Vols)
4 5 10 Other 3

PURGE METHOD

Bailer-Type: Disposable
Submersible Centrifugal Bladder
Other-Type: _____

PURGE VOLUME CALCULATION

$$\frac{(14.4 - 4.95)}{\text{TD (feet)}} \times \frac{4}{\text{D (inches)}}^2 \times \frac{3}{\text{\# Vols}} \times .0408 = \frac{18.5}{\text{Calculated Purge Volume}} \text{ gallons}$$

VOLUME GENERATED

~~18.5~~ gallons
15 (dry)

PURGE TIME

11:20 Start 12:15 Stop _____ Elapsed _____

PURGE RATE

Initial _____ gpm Final _____ gpm

CONTROLLER SETTING

Initial _____ Hz Final _____ Hz

FIELD PARAMETER MEASUREMENT

| Time | Volume (gallons) | Temp (°C) | pH | Conductivity | Water Level (mg/L) |
|-------|------------------|-----------|------|--------------|--------------------|
| 11:35 | 5 | 22.5 | 6.47 | 4.42 | 18.9 |
| 12:00 | 10 | 21.9 | 7.15 | 5.34 | 9.49 |
| 12:15 | 15 (dry) | 21.7 | 6.97 | 5.38 | 8.99 |
| | | | | | |
| | | | | | |

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|------|------------------|----------|----|--------------|-------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Observations During Purging (Turbidity, Colour, Odor, Well Condition etc): Strong odor, free product, turbid
Discharge Water Disposal: 55-gal drums (2)

WELL SAMPLING

SAMPLING METHOD

(Sample at 80% (Minimum) recharge)
(Sample Turbidity <10 NTU)
Bailer Type: Disposable
Sampling Time (80%) Recharge: 3:30
Depth to Water: 8.44

SAMPLE INFORMATION

| Sample No | Number Containers | Container Type | Lab | Analysis | Preservatives |
|-------------|-------------------|----------------|-------------|----------|---------------|
| <u>MW-2</u> | <u>4</u> | <u>VOLS</u> | <u>Col.</u> | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Site Name: UPS - oakland
Project Number: 36768
Recorded by: CSM

Well Number: MW-3
Well Type: Monitor Extraction Other: _____
Date: 10/11/00 Time: 12:35p

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches)
2-inch 4-inch 6-inch Other _____
Total Depth of Casing (TD in feet BTOC): 14.6
Water Level Depth (WL in feet BTOC): 3.88
Number Of Well Volumes to be Purged (# Vols)
4 5 10 Other 3

PURGE METHOD

Bailer-Type: Disposable
Submersible Centrifugal Bladder
Other-Type: _____

PURGE VOLUME CALCULATION

$$\frac{(14.6 - 3.88)}{TD \text{ (feet)}} \times \frac{4^2}{D \text{ (inches)}} \times \frac{3}{\# \text{ Vols}} \times .0408 = \frac{21}{\text{Calculated Purge Volume}} \text{ gallons}$$

VOLUME GENERATED

21 gallons

PURGE TIME

12:40 Start 1:16 Stop _____ Elapsed _____

PURGE RATE

Initial _____ gpm Final _____ gpm

CONTROLLER SETTING

Initial _____ Hz Final _____ Hz

FIELD PARAMETER MEASUREMENT

| Time | Volume (gallons) | Temp (°C) | pH | Conductivity | Water Level |
|--------------|------------------|-------------|-------------|--------------|-------------|
| <u>12:46</u> | <u>5</u> | <u>23.7</u> | <u>6.98</u> | <u>1.23</u> | <u>—</u> |
| <u>12:56</u> | <u>10</u> | <u>23.7</u> | <u>7.14</u> | <u>1.10</u> | <u>—</u> |
| <u>1:06</u> | <u>15</u> | <u>23.5</u> | <u>7.10</u> | <u>1.10</u> | <u>—</u> |
| <u>1:16</u> | <u>21</u> | <u>23.2</u> | <u>7.10</u> | <u>1.10</u> | <u>—</u> |

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|------|------------------|----------|----|--------------|-------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Observations During Purging (Turbidity, Colour, Odor, Well Condition etc): Strong odor, sheen, slightly turbid
Discharge Water Disposal: 55-gal. drums (2)

WELL SAMPLING

SAMPLING METHOD

(Sample at 80% (Minimum) recharge)
(Sample Turbidity <10 NTU)
Bailer Type: Disposable
Sampling Time (80%) Recharge: 3:55
Depth to Water: 3.88

SAMPLE INFORMATION

| Sample No | Number Containers | Container Type | Lab | Analysis | Preservatives |
|-------------|-------------------|----------------|------------|----------|---------------|
| <u>MW-3</u> | <u>4</u> | <u>VOLS</u> | <u>Col</u> | | |
| | | | | | |
| | | | | | |
| | | | | | |

Site Name: UPS-oakland
Project Number: 36768
Recorded by: JMS/CSM

Well Number: DW-1
Well Type: Monitor Extraction Other Observation
Date: 10/11/00 Time: 1:10P

WELL PURGING

PURGE VOLUME

Casing Diameter (D in inches)
2-inch 4-inch 6-inch Other _____
Total Depth of Casing (TD in feet BTOC): 19.05
Water Level Depth (WL in feet BTOC): 6.88
Number Of Well Volumes to be Purged(# Vols)
4 5 10 Other 3

PURGE METHOD

Bailer-Type: Disposable
Submersible Centrifugal Bladder
Other-Type: _____

PURGE VOLUME CALCULATION

$$\frac{(19.05 - 6.88) \times 6^2 \times 3}{TD \text{ (feet)} \quad WL \text{ (feet)} \quad D \text{ (inches)} \quad \# \text{ Vols}} \times 0.0408 = \text{Calculated Purge Volume} \text{ gallons}$$

VOLUME GENERATED

20 (dry) gallons

PURGE TIME

1:10 Start 1:50 Stop _____ Elapsed _____

PURGE RATE

Initial _____ gpm Final _____ gpm

CONTROLLER SETTING

Initial _____ Hz Final _____ Hz

FIELD PARAMETER MEASUREMENT

| Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level | Time | Volume (gallons) | Temp (F) | pH | Conductivity | Water Level |
|------|------------------|----------|------|--------------|-------------|------|------------------|----------|----|--------------|-------------|
| 1:20 | 5 | 21.4 | 6.63 | 3.53 | — | | | | | | |
| 1:30 | 10 | 20.8 | 6.66 | 3.77 | — | | | | | | |
| 1:45 | 15 | 19.9 | 6.83 | 3.78 | — | | | | | | |
| 1:50 | 20 (dry) | 20.2 | 6.60 | 3.83 | — | | | | | | |

Observations During Purging (Turbidity, Colour, Odor, Well Condition etc): Strong odor, green, slightly turbid

Discharge Water Disposal: 55-gal drums (2)

WELL SAMPLING

SAMPLING METHOD

(Sample at 80% (Minimum) recharge)
(Sample Turbidity <10 NTU)
Bailer Type: Disposable
Sampling Time (80% Recharge): 4:05
Depth to Water: 14.18

SAMPLE INFORMATION

| Sample No. | Number Containers | Container Type | Lab | Analysis | Preservatives |
|-------------|-------------------|----------------|-------------|----------|---------------|
| <u>DW-1</u> | <u>4</u> | <u>VOAS</u> | <u>Col.</u> | | |
| <u>MW-4</u> | <u>4</u> | <u>VOAS</u> | <u>Col.</u> | | |

Appendix D
Disposal Documentation

BLASLAND, BOUCK & LEE, INC.
engineers & scientists



CLEARWATER

ENVIRONMENTAL MANAGEMENT, INC.
 P.O. Box 2407 UNION CITY CA 94587-2407
 800-499-3676 FAX 510-476-1786
 CAR000007013

INVOICE # 1999-12
 VOUCHER # CLEA050
 AMOUNT \$525.00

71435

530-090-520-010

36768.03 APP

Bill of Lading
 Invoice # 19829

Fed ID

DATE 11-2-99
 PREPARED BY [Signature]
 BLASLAND, BOUCK & LEE, INC.

BILLING INFORMATION

943233315 JOB SITE

| | | | | |
|---|--------------------------------------|------------------------------|------|-------|
| NAME B.B.L. Inc | NAME UNITED PARCEL SERVICE | PO # | CASH | CHECK |
| ADDRESS 2600 MICHELSON DR 830 | ADDRESS 8400 PARDEE DR | CUSTOMER EPA ID # | | |
| CITY IRVINE, CA | CITY OAKLAND, CA | PROFILE # | | |
| PHONE NO. 949 474-9052 | PHONE NO. (510) 633-4035 | CUSTOMER ID NO: 36768 | | |

| PRODUCT | PROPER SHIPPING DESCRIPTION | WASTE CODE | MANIFEST NUMBER | QUANTITY | UNITS | PRICE | AMOUNT |
|--|-----------------------------|------------|-----------------|----------|-------|---------------------|---------------------|
| Used Oil, Non-RCRA Hazardous Waste, Liquid | | 221 | | | GAL. | | |
| Used Automotive Antifreeze, Non-RCRA Hazardous Waste, Liquid | | 134 | | | GAL. | | |
| Oily Water Non RCRA Hazardous Waste Liquid | | | | | GAL. | | |
| Non RCRA Hazardous Waste Solid | | | | | GAL. | | |
| Oil Contaminated Debris | | | | | GAL. | | |
| Waste Flammable Liquid, n.o.s. JN1993, PG III | | | | | GAL. | | |
| Non Hazardous Waste Liquid | | | N/H 46528 | 2 DM | GAL. | \$125 ⁰⁰ | \$250 ⁰⁰ |
| Non Hazardous Waste Solid | | | N/H 46528 | 1 DM | GAL. | \$275 ⁰⁰ | \$275 ⁰⁰ |
| Transportation Charges | | | | | Hours | | |
| Washout Charges | | | | | Each | | |
| Drained Used Oil Filters | | | | | Each | | |
| Empty Drums | | | | | Each | | |
| Additional Labor | | | | | | | |
| Pressure Washer | | | | | | | |
| Other: | | | | | | | |

RECEIVED
 NOV 08 1999

Blasland, Bouck & Lee

DISPOSAL/RECYCLING FACILITY:

Collection Station Industrial Agriculture Government Marine

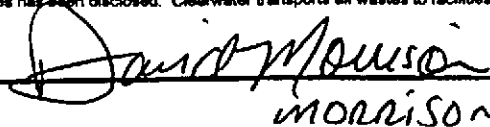
TOTAL

\$525⁰⁰

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> Alviso Independent Oil 5002 Archer Street, Alviso, CA CAL000161743 (510) 797-8511 | <input type="checkbox"/> McKittrick Waste Treatment Site 56533 Hwy 58 West, McKittrick, CA CAD980636831 (805) 762-7366 | <input type="checkbox"/> Solvent Services, dba Laidlaw 1021 Berryessa Road, San Jose, CA CAD059494310 (408) 451-5000 |
| <input type="checkbox"/> AETS 1125 Hensley Street, Richmond, CA CAT080022148 (510) 233-8001 | <input type="checkbox"/> Seaport Environmental 675 Seaport Blvd, Redwood City, CA CAD000032058 (415) 364-8154 | <input type="checkbox"/> Commercial Filter Recycling 33210 Western Ave, Union City, CA (510) 487-9277 |
| <input type="checkbox"/> DeMenno Kardon 2000 N. Alameda Blvd, Compton, CA CAT080013352 (310) 571-3700 | <input type="checkbox"/> Evergreen Oil 6880 Smith Ave, Newark, CA CAD980687418 (510) 795-4400 | |

NET 10 DAYS

hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of the waste. All relevant information regarding known or suspected hazards associated with the wastes has been disclosed. Clearwater transports all wastes to facilities which are properly permitted and licensed to accept these wastes.

DRIVER SIGNATURE

 MORRISON

GENERATOR SIGNATURE

Department of the Treasury
Internal Revenue Service

Name (If your name is not the same as the name of the business, you must enter it in Part I below. See instructions on page 2 if your name has changed.)

Business Name (Give business name as shown on page 2. If you are exempt from backup withholding, certified that there are no "S-CORP" in Part II below.)

Clearwater Environmental Management, INC.

Address (Number and Street)
P.O. Box 2407

City, State, and ZIP Code
Union City, CA 94587

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. For dividends, this is your social security number (SSN). For sole proprietors, see the instructions on page 2. For other entities, it is your employer identification number (EIN), if you do not have a unique, see How To Obtain a TIN below.

Social security number
| | | | | | | | | |

OR

Employer identification number
94-3033319

Part II For Payees Exempt From Backup Withholding See Exempt Payees and Payments on Page 2

Requester Name and Social Security Number

Note: If the account is in more than one name, see the start on page 2 for guidelines on whose number to enter.

Certification—Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding.

Certification Instructions—You must check the item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because of underreporting interest or dividends on your tax return. For new estate beneficiaries, item 2 does not apply. For mortgage interest paid, the deduction of acquisition debt of secured property, contributions to an individual retirement arrangement (IRA), and generally payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (Also see Signing the Certification on page 2.)

Sign Here

Signature

[Handwritten Signature] Date: 11-9-99

Section references are to the Internal Revenue Code.

Purpose of Form—A person who is required to file an information return with the IRS must obtain your correct TIN to report income paid to you, net estate transactions, mortgage interest you paid, the acquisition or abandonment of secured property, or contributions you made to an IRA. Use Form W-9 to furnish your correct TIN to the requester (see instructions on page 2 for how to furnish your TIN) and, when applicable, (1) to certify that the TIN you are furnishing is correct for that you are waiting for a number to be issued, (2) to certify that you are not subject to backup withholding, and (3) to claim exemption from backup withholding if you are an exempt payee. Furnishing your correct TIN and making the appropriate certifications will prevent certain payments from being subject to backup withholding.

Note: If a requester gives you a form other than a W-9 to request your TIN, you must use the requester's form.

How To Obtain a TIN—If you do not have a TIN, apply for one immediately. To apply, get Form SS-8, Application for a Social Security Card (for individuals), from your local office of the Social Security Administration, or Form 6054, Application for Employer Identification Number (for businesses and all other entities), from your local IRS office.

To complete Form W-9 if you do not have a TIN, write "Applied for" in the space for the TIN in Part I, sign and date the form, and give it to the requester. Generally, you will then have

60 days to obtain a TIN and furnish it to the requester. If the requester does not receive your TIN within 60 days, backup withholding, if applicable, will begin and continue until you furnish your TIN to the requester. For reportable interest or dividend payments, the payer must withhold one of the following amounts during backup withholding during this 60-day period. Under option (1), a payer must backup withhold on any withdrawals you make from your account after 7 business days after the requester receives this form back from you. Under option (2), the payer must backup withhold on any reportable interest or dividend payment made to your account, regardless of whether you make any withdrawals. The backup withholding under option (2) must begin no later than 7 business days after the requester receives this form back. Under option (3), the payer is required to refund the amounts withheld if your certified TIN is received within the 60-day period and you were not subject to backup withholding during that period.

Marking "Applied for" on the form means that you have already applied for a TIN OR that you intend to apply for one in the near future.

As soon as you receive your TIN, complete another Form W-9, include your TIN, sign and date the form, and give it to the requester.

What is Backup Withholding?—Beyond making certain payments to you after 1982 are required to withhold and pay to the IRS 31% of such payments under certain conditions. This is called "backup withholding." Payments that could be subject to backup withholding include interest,

dividends, error and omissions exchange transactions, annuities, royalties, nonemployee compensation, and certain payments from federal stock deposits, but do not include real estate transactions.

If you give the requester your correct TIN, make the appropriate certifications, and report all your income (interest and dividends on your tax return, your payments will not be subject to backup withholding. Payments you receive will be subject to backup withholding if:

- 1. You do not furnish your TIN to the requester, or
- 2. The IRS notified the requester that you furnished an incorrect TIN, or
- 3. You are notified by the IRS that you are subject to backup withholding because you failed to report all your interest and dividends on your tax return (for reportable interest and dividends only), or
- 4. You do not certify to the requester that you are not subject to backup withholding under 1 above (for reportable interest and dividends accounts opened after 1983 only), or
- 5. You do not certify your TIN. This applies only to reportable interest, dividends, error, or omissions accounts opened after 1982, or broker accounts considered inactive in 1983.

Except as otherwise in 3 above, other reportable payments are subject to backup withholding only if 1 or 2 above apply. Certain payees and payments are exempt from backup withholding and information reporting. See Payees and Payments Exempt From

CLEARWATER

ENVIRONMENTAL MANAGEMENT, INC.

P.O. Box 2407 UNION CITY, CA 94587-2407

(800) 499-3676 FAX (510) 476-1786

CAR 000 007 013 WE ACCEPT VISA & MASTERCARD

Bill of Lading

Invoice # **31878**

Date 11/31/00

BILLING INFORMATION



JOB SITE

| | | | | | | | |
|-------------------------------------|---------------------|--------------------------|--------------------------------------|---------------------|---------------------|---------------------|--|
| NAME <u>BRL Inc.</u> | | | NAME <u>United Parcel Service</u> | | | PO# <u>36768.03</u> | |
| ADDRESS <u>2000 Alameda Blvd</u> | | | ADDRESS <u>5400 Pardoe DR.</u> | | | CUSTOMER EPA ID # | |
| CITY <u>Hayward</u> | STATE <u>CA.</u> | ZIP <u>94603-6520</u> | CITY <u>OAKLAND</u> | STATE <u>CA.</u> | ZIP <u>94603</u> | PROFILE # | |
| PHONE NO. <u>(949) 747-9052</u> | | | PHONE NO. <u>(510) 633-4035</u> | | | CUSTOMER ID NO: | |

| PRODUCT | PROPER SHIPPING DESCRIPTION | WASTE CODE | MANIFEST NUMBER | QUANTITY | UNITS | PRICE | AMOUNT |
|---|-----------------------------|------------|-----------------|-------------|-------|---------------|---------------|
| Used Oil, Non-RCRA Hazardous Waste, Liquid | | 221 | | | | | |
| Used Automotive Antifreeze, Non-RCRA Hazardous Waste, Liquid | | 134 | | | | | |
| Oily Water Non RCRA Hazardous Waste Liquid | | | | | | | |
| Non RCRA Hazardous Waste Solid Oil Contaminated Debris / Soil | | | | | | | |
| Waste - Combustible Liquid nos 3 UN1993, PG III | | | | | | | |
| Non Hazardous Waste Liquid | | | <u>42300</u> | <u>2 DM</u> | | <u>125.00</u> | <u>250.00</u> |
| Non Hazardous Waste Solid | | | | | | | |
| Transportation Charges | | | | | | | |
| Washout Charges | | | | | | | |
| Drained Used Oil Filters | | | | | | | |
| Empty Drums | | | | | | | |
| Additional Labor | | | | | | | |
| Pressure Washer | | | | | | | |
| Other: | | | | | | | |

DISPOSAL/RECYCLING FACILITY:

| | | | |
|---|---|--|--|
| <input type="checkbox"/> Advise Independent Oil 8002 Archer Street, Alhambra, CA CAL 000 161 743; 95002 (610) 797-8511 | <input type="checkbox"/> McKittrick Waste Treatment Site 66533 Hwy 68 West, McKittrick, CA CAD 000 630 831; 83261 (806) 782-7368 | <input type="checkbox"/> OIK Environmental 3650 E. 29th Street, Yreka, CA CAT 080 033 881; 90023 (323) 288-0056 | TOTAL 250.00 NET 10 DAYS |
| <input type="checkbox"/> Onyx Environmental Services 1126 Hensley Street, Richmond, CA CAL 080 022 148; 94061 (610) 233-8001 | <input type="checkbox"/> Seaport Environmental 875 Seaport Blvd, Redwood City, CA CAD 000 032 08R; 94063 (415) 364-8154 | <input type="checkbox"/> Commercial Filter Recycling 33210 Western Ave, Union City, CA (510) 487-0277; 04587 | |
| <input type="checkbox"/> DeMenno Kardon 2000 N. Alameda Blvd, Compton, CA CAT 080 013 362; 90221 (310) 871-3700 | <input type="checkbox"/> Evergreen Oil 6860 Smith Ave, Newark, CA CAD 000 687 418; 94568 (610) 758-4400 | | |

I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of the waste. All relevant information regarding known or suspected hazards associated with the wastes has been disclosed. Clearwater transports all wastes to facilities which are properly permitted and licensed to accept these wastes.

DRIVER SIGNATURE Ronald Adams

GENERATOR SIGNATURE [Signature]

| | | | | | | | | |
|--|--|--|--|--|---|---|---------------------------------|----------------------|
| NON-HAZARDOUS WASTE MANIFEST | | 1. Generator's US EPA ID No. <i>CAD 097075709</i> | | 2. Page 1 of <i>18</i> | | 3. Document Number <i>NH-52 40300</i> | | |
| GENERATOR | 4. Generator's Name and Mailing Address <i>United States ... 5100 ... DR Oakland, CA 94612 Generator's Phone: <i>510-633-4035</i></i> | | | | | | | |
| | 5. Transporter Company Name <i>CLEARWATER ENVIRONMENTAL</i> | | | 6. US EPA ID Number <i>CAR000007013</i> | | 7. Transporter Phone <i>(510) 476-1740</i> | | |
| | 8. Designated Facility Name and Site Address <i>ALVISO INDEPENDENT OIL 5002 ARCHER STREET ALVISO, CA 95002</i> | | | 9. US EPA ID Number <i>CAL000161743</i> | | 10. Facility's Phone <i>(510) 476-1740</i> | | |
| | 11. Waste Shipping Name and Description <i>Non-Hazardous waste, liquid</i> <i>purge water</i> | | | | 12. Containers No. <i>202</i> Type <i>DM</i> | | 13. Total Quantity <i>70</i> | 14. Unit <i>G</i> |
| | | | | | | | | |
| 15. Special Handling Instructions and Additional Information <i>Wear PPE Emergency Contact (510) 476-1740 Attn: Kirk Hayward</i> <i>SAME as Generator</i> | | | | | | Handling Codes for Wastes Listed Above 11a. 11b. | | |
| 16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to state or federal regulations for reporting proper disposal of Hazardous Waste | | | | | | | | |
| Printed/Typed Name <i>Stacy V. ...</i> | | | | Signature <i>[Signature]</i> | | | | |
| 17. Transporter Acknowledgement of Receipt of Materials | | | | | | | | |
| Printed/Typed Name <i>Raul Adair</i> | | | | Signature <i>Raul Adair</i> | | | | |
| 18. Discrepancy Indication Space | | | | | | | | |
| 19. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in item 18. | | | | | | | | |
| Printed/Typed Name | | | | Signature | | | | |

Appendix E

Soil & Ground-Water Sampling and Analysis Report

BLASLAND, BOUCK & LEE, INC.

engineers & scientists

BBL

BLASLAND, BOUCK & LEE, INC.
engineers & scientists

Transmitted Via UPS Next Day Air

January 15, 2001

Barney M. Chan
Hazardous Materials Specialist
Alameda County Health Care Services
Environmental Health Services
1131 Harbor Bay Parkway, #250
Alameda, California 94502-6577

Re: Soil and Ground-water Sampling and Analysis Report
United Parcel Service Center
8400 Pardee Drive
Oakland, California
Project #: 36768.02

Dear Mr. Chan:

On June 4, 1998, Blasland, Bouck & Lee, Inc. (BBL) conducted a subsurface soil and ground-water investigation at the above mentioned project site in Oakland, California. The work conducted was based on a Work Plan dated August 4, 1997, submitted by BBL on behalf of United Parcel Service (UPS). This letter report presents a summary of the activities which took place during this investigation effort and provides the results and conclusions regarding data generated from these investigation activities. Soil and ground-water sample locations are depicted on the attached Figure 1. Laboratory results are tabulated on the attached Tables 1 and 2. Laboratory reports and chain-of-custody documentation are provided as Attachment A. Borehole logs are provided as Attachment B. A copy of the well permit is provided as Attachment C.

BACKGROUND

On July 29, 1997, a meeting was held at your office with Ms. Linda Lyons, representing United Parcel Service (UPS), and Mr. Bruce Scheibach, representing Blasland, Bouck & Lee, Inc. (BBL). The purpose of this meeting was to discuss ground-water data collected during the previous year at the UPS Oakland Service Center southern fueling island and the request for case closure. At the conclusion of this meeting it was decided that the following would take place:

- The northern fueling island is not an environmental concern, therefore the monitoring wells at this location can be removed.

- Up to eight direct push borings would be drilled at selected locations upgradient of the southern fueling island underground storage tanks (USTs) at the UPS facility to collect soil and ground-water samples for analysis. These data will be used to assess the extent of contaminated fill at the property.
- ORC "socks" would be installed in three monitoring wells and one piezometer in the southern fueling island area. After approximately six months, the three monitoring wells will be sampled and analyzed for total petroleum hydrocarbons as diesel (TPHd).
- Assuming TPHd contaminated fill, unrelated to UPS activities, is confirmed as the upgradient source for TPHd detected, Alameda County Environmental Health Services will issue a no further action letter or grant case closure.

The following sections describe the soil and ground-water sampling efforts in greater detail.

SCOPE OF WORK

ORC Installation in Monitoring Wells

On June 3, 1998, BBL installed approximately 50 ORC "socks" in the three existing monitoring wells and one piezometer. The "socks" would be removed after approximately six months (December 1998), after which each monitoring well would be purged and sampled for TPHd.

Soil and Ground-Water Sampling

Attempts were made to collect soil and ground-water samples from the eight locations identified on the attached Figure 1. Ground-water samples were collected from five of the eight borings attempted. Ground-water samples were not obtained from boring locations designated GP-3, GP-5, or GP-7 due to poor recovery. Soil samples were collected using a truck-mounted direct-push apparatus (Geoprobe™) equipped with a 2-inch I.D., stainless-steel split-spoon sampler lined with 4-foot long acetate liners. The sampling device was pneumatically driven to depths ranging from 8 to 15-feet below ground surface. Soil samples (one from each boring) were collected for analysis within approximately two feet of the assumed ground-water elevation. Each borehole was lithologically logged (see Attachment B).

After collecting the soil sample each boring was advanced to 2 to 5 feet below the estimated water table or to a maximum depth of 15-feet. If ground water was not encountered at the estimated water table depth then the boring was advanced to a maximum of 15 feet below ground surface (bgs). Initial attempts to collect ground-water samples were made using the HydroPunch method, which involves pneumatically driving a 5-foot long, 3/4-inch I.D. perforated probe connected to 5-foot long sections of probe pipe. Insert rods were placed through the probe and pneumatically driven to the desired depth. The insert rods were removed and ground-water was allowed to infiltrate through the perforated section of the probe. Based on poor sample recovery rates experienced in the field during ground-water sampling, the sampling method was changed. After advancing the borings to maximum depths, the rods were removed and temporary well points were installed in the open boreholes to allow sufficient water to seep into the boring. Sample collection was accomplished using a peristaltic pump with clean Tygon tubing. Water samples were analyzed for dissolved oxygen (DO) in the field using a Horiba U10 Water Quality Meter. DO field measurements are tabulated

on Table 4. Boreholes were backfilled after sampling with ORC and/or grout and capped with either asphalt cold patch or concrete.

Soil and ground-water samples were labeled, stored in an ice chest with ice, and transported under standard chain-of-custody procedures to Columbia Analytical in San Jose, California for analysis. Each sample was analyzed using EPA Test Method 8015-modified for Total Petroleum Hydrocarbons in the diesel range (TPH-d). As directed by Alameda County, each sample was be pretreated with a silica gel to remove naturally occurring hydrocarbons.

FINDINGS AND RESULTS

Soil conditions encountered below grade consisted generally of clayey sands and gravels to depth of approximately 5 to 10 feet bgs. These shallow soils appear to be fill material placed during site development and/or bay fill activities. Dark silty clays (bay mud) were found below the coarser-grained fill. Ground-water was encountered at depths ranging from 4 to 11 feet bgs, with the exception of those borings where ground-water was not encountered (GP-3, GP-5, and GP-7).

Soil samples were collected at depths ranging from 3 to 12 feet bgs. Laboratory analysis of soil samples indicate that diesel range hydrocarbons were detected in two of the eight samples at concentrations that ranged from 2.6 mg/kg in GP-5-11' to 590 mg/kg in sample GP-8-7'. The laboratory noted that several soil samples contained heavy oils outside of the diesel range. Heavy oils were detected in soil samples designated GP-1-8', GP-4-10', GP-5-11', and GP-6-7. These heavy oils were quantified by the laboratory and ranged from 21 to 50 ppm in soil.

Ground-water samples were successfully collected from five of the eight soil borings. Dissolved oxygen field measurements ranged from 9.27 to 10.26 mg/l. Laboratory analysis of ground-water samples indicate that diesel range hydrocarbons were detected in two samples at concentrations that ranged from 68,000 ug/L in sample GP-8 to 120,000/68,000 mg/kg in sample GP-6. Ground-water samples designated GP-1, GP-2 and GP-4 were not found to contain diesel range hydrocarbons; however, heavy oils were reported by the laboratory in ground-water samples designated GP-1 and GP-4 at concentrations of 400 and 1,400 ppb, respectively.

Ground-water samples GP-1, GP-4, and GP-6 were additionally analyzed by the laboratory for gasoline range hydrocarbons by EPA Method 8015g/8020, but gasoline range hydrocarbons were not detected. The laboratory reported matrix interference in sample GP-6 which required dilution that raised the detection limit to 200 ug/L. Ethylbenzene and xylenes were detected in sample GP-6 at concentrations ranging of 2 ug/L and 10 ug/L, respectively.

During the installation of ORC socks in wells MW-2, MW-3 and OW-1, free-phase liquid hydrocarbon were observed on water-level sounding equipment. The thickness of accumulated hydrocarbons in these wells could not be determined.

CONCLUSIONS

Based on the analytical results of soil and ground-water samples described above, BBL concludes that two distinct types of hydrocarbons were detected at the site. The data suggests that those samples obtained within a relatively close proximity to the fueling station contain diesel range hydrocarbons in the soil and ground-water. Those samples obtained at a greater distance from the fueling station appear to contain hydrocarbons associated with a heavier oil. This heavier hydrocarbon is relatively widespread and may be associated with degraded hydrocarbon impacted fill materials and/or historic insect abatement activities prior to site development.

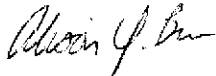
The ground-water monitoring wells located at the northern fueling station are scheduled to be properly destroyed in the near future. Ground-water monitoring of the remaining wells currently containing ORC socks is scheduled for December, 1998. Please do not hesitate to call if there are any questions or you require further clarification.

Sincerely,

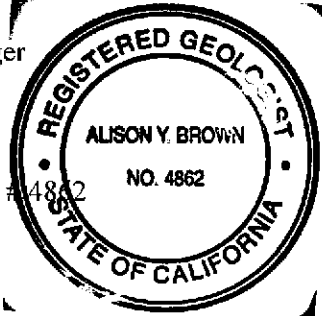
BLASLAND, BOUCK & LEE, INC.



Anthony T. Parenteau
Senior Scientist/Manager



Alison Y. Brown, R.G. #4862
Associate



Enclosures

Table 1

**Summary of Analytical Results for Soil Samples Collected at the
UPS Service Center in Oakland, California
June 1998**

| Sample Description | Total Extractable Hydrocarbons EPA Method 8015d (ppm) |
|--------------------|--|
| GP-1-8' | ND(1) (2) |
| GP-2-3' | ND |
| GP-3-5' | ND |
| GP-4-10' | ND(3) |
| GP-5-11' | 2.6(5) |
| GP-6-7' | ND(4) |
| GP-7-12' | ND |
| GP-8-7' | 590 |

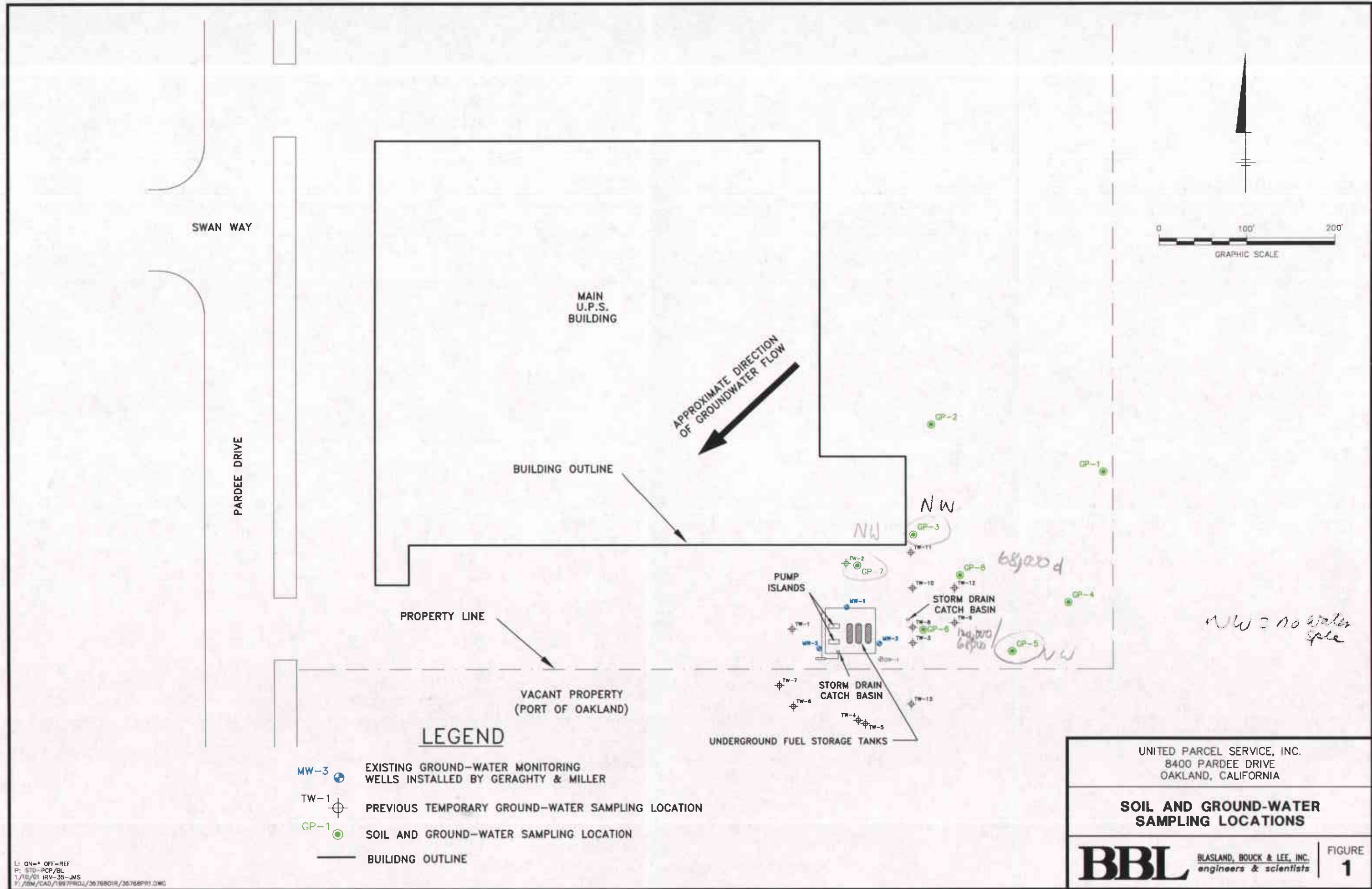
- Table Notes: (1) ND = Not detected above method reporting limit (MRL).
8015 Diesel MRL 1 mg/kg for soil, and 50 ug/L for water
8015 TPH Gasoline MRL 50 ug/L for water
8020 BTEX MRL 0.5 ug/L for water
(2) Sample contains 50 ppm of a heavy oil
(3) Sample contains 21 ppm of a heavy oil
(4) Sample contains 30 ppm of a heavy oil
(5) Quantified as diesel. The sample contained components that eluted in the diesel range, but the chromatograph does not match the typical diesel fingerprint.

Table 2

**Summary of Analytical Results for Water Samples Collected at the
UPS Service Center in Oakland, California
June 1998**

| Sample Description | EPA Method 8015d | EPA Method 8015g/8020 (ppb) | | | | | Dissolved Oxygen (mg/L) |
|--------------------|------------------|-----------------------------|--------|--------|--------|--------|-------------------------|
| | TPHd(2) (ug/L) | TPHg(3) | B(4) | T(4) | E(4) | X(4) | |
| GP-1 | ND(9) | ND | ND | 0.51 | 0.51 | ND | 9.75 |
| GP-2 | ND | NA | NA | NA | NA | NA | 9.71 |
| GP-4 | ND(10) | ND | ND | 0.53 | ND | ND | 9.78 |
| GP-6 | 120,000 | <200(11) (12) | <2(12) | <2(12) | 2 | 10 | 9.27 |
| GP-6 (duplicate) | 68,000 | <200(11) (13) | <2(11) | <2(11) | <2(11) | <2(11) | NA |
| GP-8 | 68,000 | NA | NA | NA | NA | NA | 10.26 |
| Trip Blank | NA | ND | ND | ND | ND | ND | NA |

- Table Notes: (1) ND = Not detected above method reporting limit (MRL).
 8015 Diesel MRL 1 mg/kg for soil, and 50 ug/L for water
 8015 TPH Gasoline MRL 50 ug/L for water
 8020 BTEX MRL 0.5 ug/L for water
 (2) TPHd = Total Petroleum Hydrocarbons as Diesel
 (3) TPHg = Total Petroleum Hydrocarbons as Gasoline
 (4) BTEX = Benzene, Toluene, Ethylbenzene, Xylenes (total)
 (5) Sample contains 50 ppm of a heavy oil
 (6) Sample contains 21 ppm of a heavy oil
 (7) Sample contains 30 ppm of a heavy oil
 (8) Quantified as diesel. The sample contained components that eluted in the diesel range, but the chromatograph does not match the typical diesel fingerprint.
 (9) Sample contains 400 ppb of a heavy oil
 (10) Sample contains 1400 ppb of a heavy oil
 (11) The MRL was elevated due to matrix interference
 (12) Sample contains a higher hydrocarbon boiling point mixture at 1500 ppb
 (13) Sample contains a higher hydrocarbon boiling point mixture at 440 ppb



L: ON= OFF=REF
 P: 579-PCP/BL
 1/10/01 IRV-35-JMS
 F:/BIM/CAO/19971102/3676801R/36768P11.DWG

| | |
|---|--------------------|
| UNITED PARCEL SERVICE, INC. 8400 PARDEE DRIVE OAKLAND, CALIFORNIA | |
| SOIL AND GROUND-WATER SAMPLING LOCATIONS | |
| BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists | FIGURE 1 |

ATTACHMENT A
LABORATORY REPORTS
AND
CHAIN-OF-CUSTODY DOCUMENTATION

RECEIVED
JUN 22 1998
Blasland Bouck & Lee



June 18, 1998

Service Request No.: S9801438

Peter Murphy
BLASLAND, BOUCK & LEE, INC.
8001 Irvine Center Dr., Ste. 880
Irvine, CA 92618

RE: UPS-Oakland

Dear Mr. Murphy:

The following pages contain analytical results for sample(s) received by the laboratory on June 4, 1998. Results of sample analyses are followed by Appendix A which contains sample custody documentation and quality assurance deliverables requested for this project. The work requested has been assigned the Service Request No. listed above. To help expedite our service, please refer to this number when contacting the laboratory.

Analytical results were produced by procedures consistent with Columbia Analytical Services' (CAS) Quality Assurance Manual (with any deviations noted). Signature of this CAS Analytical Report below confirms that pages 2 through 15, following, have been thoroughly reviewed and approved for release in accord with CAS Standard Operating Procedure ADM-DatRev3.

Please feel welcome to contact me should you have questions or further needs.

Sincerely,

Steven L. Green
Project Chemist

COLUMBIA ANALYTICAL SERVICES, Inc.

Acronyms

| | |
|------------|---|
| A2LA | American Association for Laboratory Accreditation |
| ASTM | American Society for Testing and Materials |
| BOD | Biochemical Oxygen Demand |
| BTEX | Benzene, Toluene, Ethylbenzene, Xylenes |
| CAM | California Assessment Metals |
| CARB | California Air Resources Board |
| CAS Number | Chemical Abstract Service registry Number |
| CFC | Chlorofluorocarbon |
| CFU | Colony-Forming Unit |
| COD | Chemical Oxygen Demand |
| DEC | Department of Environmental Conservation |
| DEQ | Department of Environmental Quality |
| DHS | Department of Health Services |
| DLCS | Duplicate Laboratory Control Sample |
| DMS | Duplicate Matrix Spike |
| DOE | Department of Ecology |
| DOH | Department of Health |
| EPA | U. S. Environmental Protection Agency |
| ELAP | Environmental Laboratory Accreditation Program |
| GC | Gas Chromatography |
| GC/MS | Gas Chromatography/Mass Spectrometry |
| IC | Ion Chromatography |
| ICB | Initial Calibration Blank sample |
| ICP | Inductively Coupled Plasma atomic emission spectrometry |
| ICV | Initial Calibration Verification sample |
| J | Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding. |
| LCS | Laboratory Control Sample |
| LUFT | Leaking Underground Fuel Tank |
| M | Modified |
| MBAS | Methylene Blue Active Substances |
| MCL | Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U. S. EPA. |
| MDL | Method Detection Limit |
| MPN | Most Probable Number |
| MRL | Method Reporting Limit |
| MS | Matrix Spike |
| MTBE | Methyl tert-Butyl Ether |
| NA | Not Applicable |
| NAN | Not Analyzed |
| NC | Not Calculated |
| NCASI | National Council of the paper industry for Air and Stream Improvement |
| ND | Not Detected at or above the method reporting/detection limit (MRL/MDL) |
| NIOSH | National Institute for Occupational Safety and Health |
| NTU | Nephelometric Turbidity Units |
| ppb | Parts Per Billion |
| ppm | Parts Per Million |
| PQL | Practical Quantitation Limit |
| QA/QC | Quality Assurance/Quality Control |
| RCRA | Resource Conservation and Recovery Act |
| RPD | Relative Percent Difference |
| SIM | Selected Ion Monitoring |
| SM | Standard Methods for the Examination of Water and Wastewater, 18th Ed., 1992 |
| STLC | Solubility Threshold Limit Concentration |
| SW | Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed., 1986 and as amended by Updates I, II, IIA, and IIB. |
| TCLP | Toxicity Characteristic Leaching Procedure |
| TDS | Total Dissolved Solids |
| TPH | Total Petroleum Hydrocarbons |
| tr | Trace level. The concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding. |
| TRPH | Total Recoverable Petroleum Hydrocarbons |
| TSS | Total Suspended Solids |
| TTLc | Total Threshold Limit Concentration |
| VOA | Volatile Organic Analyte(s) |

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Soil

Service Request: S9801438
Date Collected: 6/4/98
Date Received: 6/4/98

TPH as Diesel

Prep Method: LUFT
Analysis Method: California DHS LUFT
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

| Sample Name | Lab Code | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|--------------|--------------|-----|-----------------|----------------|---------------|--------|--------------|
| GP-1-8' | S9801438-001 | 1 | 1 | 6/11/98 | 6/13/98 | ND | D5,1 |
| GP-2-3' | S9801438-003 | 1 | 1 | 6/11/98 | 6/12/98 | ND | |
| GP-3-5' | S9801438-005 | 1 | 1 | 6/11/98 | 6/13/98 | ND | |
| GP-4-10' | S9801438-006 | 1 | 1 | 6/11/98 | 6/13/98 | ND | D5,2 |
| GP-5-11' | S9801438-008 | 1 | 1 | 6/11/98 | 6/12/98 | 2.6 | D1 |
| GP-6-7' | S9801438-010 | 1 | 1 | 6/11/98 | 6/13/98 | ND | D5,3 |
| GP-7-12' | S9801438-012 | 1 | 1 | 6/11/98 | 6/12/98 | ND | |
| GP-8-7' | S9801438-013 | 1 | 1 | 6/11/98 | 6/13/98 | 590 | |
| Method Blank | S980611-MB | 1 | 1 | 6/11/98 | 6/12/98 | ND | |

D5,1 Sample contains 50 ppm of a heavy oil.
D5,2 Sample contains 21 ppm of a heavy oil.
D5,3 Sample contains 30 ppm of a heavy oil.
D1 Quantitated as diesel. The sample contained components that eluted in the diesel range, but the chromatogram does not match the typical diesel fingerprint.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: 6/4/98
Date Received: 6/4/98

TPH as Diesel

Prep Method: EPA 3510
Analysis Method: CA/LUFT
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Sample Name | Lab Code | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|--------------|--------------|-----|-----------------|----------------|---------------|--------|--------------|
| GP-1 | S9801438-002 | 50 | 1 | 6/10/98 | 6/11/98 | ND | D5,1 |
| GP-2 | S9801438-004 | 50 | 1 | 6/10/98 | 6/11/98 | ND | |
| GP-4 | S9801438-007 | 50 | 1 | 6/10/98 | 6/13/98 | ND | D5,2 |
| GP-6 | S9801438-011 | 50 | 20 | 6/10/98 | 6/13/98 | 120000 | |
| GP-8 | S9801438-014 | 50 | 10 | 6/10/98 | 6/13/98 | 68000 | |
| GP-6 (Dupl.) | S9801438-016 | 50 | 10 | 6/10/98 | 6/13/98 | 68000 | |
| Method Blank | S980610-MB | 50 | 1 | 6/10/98 | 6/11/98 | ND | |

D5,1
D5,2

Sample contains 400 ppb of a heavy oil.
Sample contains 1400 ppb of a heavy oil.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: 6/4/98
Date Received: 6/4/98

BTEX and TPH as Gasoline

Sample Name: GP-1
Lab Code: S9801438-002
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|-----------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 6/16/98 | ND | |
| Benzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Toluene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | 0.51 | |
| Ethylbenzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | 0.51 | |
| Xylenes, Total | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: 6/4/98
Date Received: 6/4/98

BTEX and TPH as Gasoline

Sample Name: GP-4
Lab Code: S9801438-007
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|-----------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 6/16/98 | ND | |
| Benzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Toluene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | 0.53 | |
| Ethylbenzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Xylenes, Total | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: 6/4/98
Date Received: 6/4/98

BTEX and TPH as Gasoline

Sample Name: GP-6
Lab Code: S9801438-011
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|-----------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 4 | NA | 6/17/98 | <200 | M1, G3 |
| Benzene | EPA 5030 | 8020 | 0.5 | 4 | NA | 6/17/98 | <2 | M1 |
| Toluene | EPA 5030 | 8020 | 0.5 | 4 | NA | 6/17/98 | <2 | M1 |
| Ethylbenzene | EPA 5030 | 8020 | 0.5 | 4 | NA | 6/17/98 | 2 | |
| Xylenes, Total | EPA 5030 | 8020 | 0.5 | 4 | NA | 6/17/98 | 10 | |

M1
G3

The MRL was elevated due to matrix interference.
 Sample contains a higher boiling point hydrocarbon mixture at 1500 ppb.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: 6/8/98
Date Received: 6/4/98

BTEX and TPH as Gasoline

Sample Name: Trip Blank
Lab Code: S9801438-015
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|-----------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 6/16/98 | ND | |
| Benzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Toluene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Ethylbenzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Xylenes, Total | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: 6/4/98
Date Received: 6/4/98

BTEX and TPH as Gasoline

Sample Name: GP-6 (Dupl.)
Lab Code: S9801438-016
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|-----------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 4 | NA | 6/17/98 | <200 | M1, G3 |
| Benzene | EPA 5030 | 8020 | 0.5 | 4 | NA | 6/17/98 | <2 | M1 |
| Toluene | EPA 5030 | 8020 | 0.5 | 4 | NA | 6/17/98 | <2 | M1 |
| Ethylbenzene | EPA 5030 | 8020 | 0.5 | 4 | NA | 6/17/98 | <2 | M1 |
| Xylenes, Total | EPA 5030 | 8020 | 0.5 | 4 | NA | 6/17/98 | <2 | M1 |

M1
G3

The MRL was elevated due to matrix interference.
 Sample contains a higher boiling point hydrocarbon mixture at 440 ppb.

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: NA
Date Received: NA

BTEX and TPH as Gasoline

Sample Name: Method Blank
Lab Code: S980616-WB1
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|-----------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 6/16/98 | ND | |
| Benzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Toluene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Ethylbenzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |
| Xylenes, Total | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/16/98 | ND | |

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: NA
Date Received: NA

BTEX and TPH as Gasoline

Sample Name: Method Blank
Lab Code: S980617-WB1
Test Notes:

Units: ug/L (ppb)
Basis: NA

| Analyte | Prep Method | Analysis Method | MRL | Dilution Factor | Date Extracted | Date Analyzed | Result | Result Notes |
|-----------------|-------------|-----------------|-----|-----------------|----------------|---------------|--------|--------------|
| TPH as Gasoline | EPA 5030 | CA/LUFT | 50 | 1 | NA | 6/17/98 | ND | |
| Benzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/17/98 | ND | |
| Toluene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/17/98 | ND | |
| Ethylbenzene | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/17/98 | ND | |
| Xylenes, Total | EPA 5030 | 8020 | 0.5 | 1 | NA | 6/17/98 | ND | |

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Soil

Service Request: S9801438
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
TPH as Diesel

Prep Method: LUFT
Analysis Method: California DHS LUFT

Units: PERCENT
Basis: NA

| Sample Name | Lab Code | Test Notes | Percent Recovery p-Terphenyl |
|--------------|--------------|------------|---------------------------------|
| GP-1-8' | S9801438-001 | | 64 |
| GP-2-3' | S9801438-003 | | 61 |
| GP-3-5' | S9801438-005 | | 62 |
| GP-4-10' | S9801438-006 | | 70 |
| GP-5-11' | S9801438-008 | | 70 |
| GP-6-7' | S9801438-010 | | 70 |
| GP-7-12' | S9801438-012 | | 64 |
| GP-8-7' | S9801438-013 | | 66 |
| Method Blank | S980611-MB | | 96 |

CAS Acceptance Limits: 41-140

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
TPH as Diesel

Prep Method: EPA 3510
Analysis Method: CALUFT

Units: PERCENT
Basis: NA

| Sample Name | Lab Code | Test Notes | Percent Recovery p-Terphenyl |
|--------------|--------------|------------|---------------------------------|
| GP-1 | S9801438-002 | | 82 |
| GP-2 | S9801438-004 | | 75 |
| GP-4 | S9801438-007 | | 82 |
| GP-6 | S9801438-011 | | 82 |
| GP-8 | S9801438-014 | | 75 |
| GP-6 (Dupl.) | S9801438-016 | | 97 |
| Method Blank | S980610-MB | | 112 |

CAS Acceptance Limits:

41-140

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Blasland, Bouck & Lee
Project: UPS-Oakland
Sample Matrix: Water

Service Request: S9801438
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
BTEX and TPH as Gasoline

Prep Method: EPA 5030
Analysis Method: 8020 CA/LUFT

Units: PERCENT
Basis: NA

| Sample Name | Lab Code | Test Notes | Percent Recovery | |
|--------------|--------------|------------|----------------------|------------------------|
| | | | 4-Bromofluorobenzene | a,a,a-Trifluorotoluene |
| GP-1 | S9801438-002 | | 81 | 93 |
| GP-4 | S9801438-007 | | 75 | 82 |
| GP-6 | S9801438-011 | | 105 | 89 |
| Trip Blank | S9801438-015 | | 105 | 98 |
| GP-6 (Dupl.) | S9801438-016 | | 81 | 81 |
| Method Blank | S980616-WB1 | | 72 | 77 |
| Method Blank | S980617-WB1 | | 81 | 95 |

CAS Acceptance Limits: 69-116 69-116



CHAIN OF CUSTODY/LABORATORY ANALYSIS REPORT FORM

3334 Victor Court • Santa Clara, CA 95054 • (408) 437-2400 • FAX (408) 437-9356

SERVICE REQUEST NO. _____

P.O.# _____

PAGE 2 OF 2

TOTAL P. 02

PROJECT NAME UPS - Oakland # 36768.02
 PROJECT MGR. Peter Murphy
 COMPANY Bland Bank & Lee, Inc.
 ADDRESS 800 Irvine Center Drive, Suite 880
Irvine, CA 92618-2920 PHONE (949) 453-0530
 FAX (949) 453-1830
 SAMPLER'S SIGNATURE [Signature]

| NUMBER OF CONTAINERS | ANALYSIS REQUESTED | | | | | | | | | | | | | | REMARKS | |
|----------------------|--|--|-----------------|-------------------|---|----------------------------|--------------|-----------------------|--|--|--|--------------------------------|--|---------|---------|--|
| | PRESERVATIVE | HCl | HCl | HCl | NP | NP | NP | HCl | HCl | HNO ₃ | NP | H ₂ SO ₄ | H ₂ SO ₄ /H ₂ SO ₅ | NaOH | | |
| | Volatiles Organics GC/MS 824/8240/8260 | Halogenated or Aromatic Volatiles 801/8010 D, 602/8020 D | TPH as Gas/BTEX | TPH as Diesel/BHC | Base/Neutral/Acid Organics GC/MS 825/8270 | Pesticides / PCBs 808/8080 | TRPH - 418.1 | Oil and Grease Method | Metals (total or dissolved) List Below | pH Cond. Cl ⁻ SO ₄ ⁻² F ⁻ TDS, TSS | NH ₄ ⁺ , COD, Total P, TKN, NO ₃ ⁻ / NO ₂ ⁻ (circle) | Total Organic Carbon | Total Phenols | Cyanide | | |
| 1 | | | X | | | | | | | | | | | | | Only 1 sample for 8020 BTEX |
| 1 | | | O | | | | | | | | | | | | | |
| 12 | X | X | | | | | | | | | | | | | | FILTER SAMPLES w/ SILICA GEL |
| 2 | | X | | | | | | | | | | | | | | detected in the H ₂ O sample. |
| 2 | | X | | | | | | | | | | | | | | Normal TBT |
| 2 | | O | | | | | | | | | | | | | | |
| 2 | | O | | | | | | | | | | | | | | |
| 1 | | X | | | | | | | | | | | | | | O = HOLD |
| 1 | | X | | | | | | | | | | | | | | |
| 1 | | X | | | | | | | | | | | | | | |

RELINQUISHED BY: [Signature]
 Signature
Anthony Parkeau
 Printed Name
 Firm BBL

RECEIVED BY: [Signature]
 Signature
Carl W. H. C. [unclear]
 Printed Name
 Firm WORLD COURIER

RELINQUISHED BY: _____
 Signature
 Printed Name
 Firm

RECEIVED BY: _____
 Signature
 Printed Name
 Firm

TURNDOWN REQUIREMENTS
 ___ 1 day ___ 2 day ___ 3 day
 ___ 5 day ___ Other
 Standard (10 working days)
 Results Due _____

REPORT REQUIREMENTS
 I. Routine Report
 II. Report (includes MS, MSD, as required, may be charged as samples)
 III. Data Validation Report (includes All Raw Data)
 10/1/98

RELINQUISHED BY: _____
 Signature
 Printed Name
 Firm
 Date/Time _____
 Shipped Via/Tracking # _____

RECEIVED BY: _____
 Signature
 Printed Name
 Firm
 Date/Time _____

SAMPLE RECEIPT: Condition _____ Custody Seals _____

SPECIAL INSTRUCTIONS/COMMENTS:
 Circle which metals are to be analyzed:
 Metals: Al Sb Ba Be B Cd Ca Cr Co Cu Fe Mg Mn Mo Ni K Ag Na Sn V Zn
 As Pb Se Tl Hg

Storage: _____



8001 Irvine Center Dr., Suite 880, Irvine, California, 92618-2920 (949) 453-0530
FAX: (949) 453-1830

FACSIMILE TRANSMISSION

TO: Benadette BBL PROJECT # 36768.02

FROM: Jan Parenteau at (949) 453-0530 Ext. _____

DATE: 6/1/98 PAGES: 2 (including cover sheet)

NOTES: As discussed by telephone today, please report these samples with a "GP" designation rather than the "SG" designation indicated

Original will not follow Original will follow by: on the original chain-of-custody
[Regular Mail / Overnight Mail / Courier / Other]

Confidentiality Notice

This facsimile transmission, including this Cover Sheet and any accompanying documents (individually and collectively, "the Transmission"), contains information from Blasland, Bouck & Lee, Inc. The Transmission is intended solely for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and/or otherwise exempt from disclosure under applicable law.

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| | | |
|---|---|--|
| Date Start/Finish: 6/4/98 - 6/4/98 Drilling Company: Vironex Driller's Name: Scott Drilling Method: Direct Push Rig Type: Geoprobe Spoon Size: -in Hammer Weight: -lb Height of Fall: -in. | Borehole Depth: 12 ft. Geologist: Tony Parenteau | Boring No. GP-1 Client: UPS Location: UPS Oakland, California |
|---|---|--|

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Blows/6 In. | N | Recovery (ft.) | PID (ppm) Headspace | Geotechnical Test | Geologic Column | Stratigraphic Description | Boring Construction |
|-------|-----------|-------------------|-----------------|-------------|---|----------------|---------------------|-------------------|-----------------|---|---------------------|
| | | | | | | | | | | GROUND SURFACE | |
| 5 | | | | | | | 0.0 | | | CLAYEY SANDY GRAVEL: gray & reddish brown, fine, weathered, moist, soft, no odor, no staining. | |
| 10 | | GP-1-8' | | | | | | | | SILTY CLAY: reddish gray, fine to medium gravel, weathered, saturated, moderately firm, no odor, no staining. | |
| 15 | | | | | | | | | | SAND: reddish brown, medium grained, poorly graded, saturated, soft to moderately firm, no odor, no staining. | |
| 20 | | | | | | | | | | SILTY CLAY: black to gray, (bay mud), high organic content, organic odor, no staining. | |
| | | | | | | | | | | Bottom of boring. | |

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Remarks:

Boring was backfilled with 8lbs. ORC, volclay grout and capped with asphalt cold patch.

Saturated Zones

| Date / Time | Elevation | Depth |
|----------------|-----------|-------|
| 8/4/98/7:40am. | | 8' ↓ |
| | | |
| | | |

| | | |
|---|--|---|
| Date Start/Finish: 6/4/98 - 6/4/98 Drilling Company: Vironex Driller's Name: Scott Drilling Method: Direct Push Rig Type: Geoprobe Spoon Size: -in Hammer Weight: -lb Height of Fall: -in. | Borehole Depth: 8 ft. Geologist: Tony Parenteau | Boring No.: GP--2 Client: UPS Location: UPS Oakland, California |
|---|--|---|

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Blows/6 In. | N | Recovery (ft.) | PID (ppm) Headspace | Geotechnical Test | Geologic Column | Stratigraphic Description | Boring Construction |
|-------|-----------|-------------------|-----------------|-------------|---|----------------|---------------------|-------------------|-----------------|--|---------------------|
| | | | | | | | | | | GROUND SURFACE | |
| 5 | | GP-2-3' | | | | | 0.0 | | | CLAYEY SANDY GRAVEL: gray & reddish brown, fine to coarse, slightly moist, moderately firm, no odor, no staining, weathered. SAND: greenish gray, fine to medium sand, poorly graded, slightly moist, moderately firm, no odor, no staining, groundwater encountered. | |
| 10 | | | | | | | | | | SILTY CLAY: blackish gray, (bay mud), very moist, soft to moderately firm, no odor, no staining. SILTY CLAY: greenish gray & black, slightly gravelly and sandy, very moist, no odor, no staining. | |
| 15 | | | | | | | | | | Bottom of boring. | |
| 20 | | | | | | | | | | | |



Remarks:

Boring was backfilled with 8lbs. ORC and grout/coldpatch plug.

Saturated Zones

| Date / Time | Elevation | Depth |
|---------------|-----------|-------|
| 6/4/98/8:30am | | 4' ↓ |
| | | |
| | | |

| | | |
|---|---|---|
| Date Start/Finish: 6/4/98 - 6/4/98 Drilling Company: Vironex Driller's Name: Scott Drilling Method: Direct Push Rig Type: Geoprobe Spoon Size: -in Hammer Weight: -lb Height of Fall: -in. | Borehole Depth: 14 ft. Geologist: Tony Parenteau | Boring No. GP-3 Client: UPS Location: UPS Oakland, California |
|---|---|---|

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Blows/6 In. | N | Recovery (ft.) | PID (ppm) Headspace | Geotechnical Test | Geologic Column | Stratigraphic Description | Boring Construction |
|-------|-----------|-------------------|-----------------|-------------|---|----------------|---------------------|-------------------|-----------------|--|---------------------|
| | | | | | | | | | | GROUND SURFACE | |
| | | | | | | | | | | CONCRETE. | |
| | | | | | | | | | | CLAYEY SAND & GRAVEL: reddish brown, fine to coarse, dry to slightly moist, soft to moderately firm, no odor, no staining. | |
| 5 | | GP-3-5' | | | | | 0.3 | | | CLAYEY SAND & GRAVEL: greenish gray, fine to medium, moist to very moist, no odor, no staining. | |
| | | | | | | | | | | SILTY CLAY: dark gray to black (bay mud), organics, very moist to saturated, organic odor no staining. | |
| | | | | | | | | | | Bottom of boring. | |
| 5 | | | | | | | | | | | |

| | | | |
|--|------------------------|-----------|-------|
| Remarks: Backfilled with grout and capped with concrete. Attempted water sample, no recovery, hole closed up at 7', pushed to 14'. | Saturated Zones | | |
| | Date / Time | Elevation | Depth |
| | | | |

| | | |
|---|---|--|
| Date Start/Finish: 6/4/98 - 6/4/98 Drilling Company: Vironex Driller's Name: Scott Drilling Method: Direct Push Rig Type: Geoprobe Spoon Size: -in Hammer Weight: -lb Height of Fall: -in. | Borehole Depth: 12 ft. Geologist: Tony Parenteau | Boring No.: GP-4 Client: UPS Location: UPS Oakland, California |
|---|---|--|

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Blows/6 In. | N | Recovery (ft.) | PID (ppm) Headspace | Geotechnical Test | Geologic Column | Stratigraphic Description | Boring Construction |
|-------|-----------|-------------------|-----------------|-------------|---|----------------|---------------------|-------------------|-----------------|--|---------------------|
| | | | | | | | | | | GROUND SURFACE | |
| | | | | | | | | | | CONCRETE. | |
| 5 | | | | | | | | | | CLAYEY SAND & GRAVEL: gray & reddish brown, fine to coarse, weathered, dry slightly moist, soft to moderately firm, no odor, no staining. | |
| 10 | | GP-4-10' | | | | | 0.3 | | | SILTY CLAY: dark gray to black, moist to very moist, soft to moderately firm, no odor, no staining. | |
| 15 | | | | | | | | | | SILTY CLAY: dark greenish gray to reddish brown, some fine to medium gravel, very moist to saturated, soft to moderately firm, no odor, no staining, organics. | |
| 20 | | | | | | | | | | Bottom of boring. | |



Remarks:

Boring was backfilled with grout and capped with concrete.

Saturated Zones

| Date / Time | Elevation | Depth |
|-----------------|-----------|-------|
| 6/4/98/10:50am. | | 11' ↓ |
| | | |
| | | |

| | | |
|---|---|--|
| Date Start/Finish: 6/4/98 - 6/4/98 Drilling Company: Vironex Driller's Name: Scott Drilling Method: Direct Push Rig Type: Geoprobe Spoon Size: -in Hammer Weight: -lb Height of Fall: -in. | Borehole Depth: 15 ft. Geologist: Tony Parenteau | Boring No.: GP-5 Client: UPS Location: UPS Oakland, California |
|---|---|--|

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Blows/6 In. | N | Recovery (ft.) | PID (ppm) Headspace | Geotechnical Test | Geologic Column | Stratigraphic Description | Boring Construction |
|-------|-----------|-------------------|-----------------|-------------|---|----------------|---------------------|-------------------|-----------------|---|---------------------|
| | | | | | | | | | | GROUND SURFACE | |
| | | | | | | | | | | CONCRETE. | |
| | | | | | | | | | | CLAYEY SAND & GRAVEL: reddish brown, weathered, dry to slightly moist, soft to moderately firm, no odor, no staining. | |
| 5 | | | | | | | | | | SILTY CLAY: dark gray to black (bay mud), some fine gravel, moist to very moist, soft to moderately firm, no odor, no staining. | |
| | | | | | | | | | | SANDY GRAVELLY CLAY: reddish brown, very moist, soft to moderately firm, no odor, no staining. | |
| 10 | | | | | | | | | | SILTY CLAY: dark gray to black, organics, very moist to saturated, organic odor, no staining. | |
| | | GP-5-11' | | | | | | | | | |
| 5 | | | | | | | | | | | |
| | | | | | | | | | | Bottom of boring. | |
| 20 | | | | | | | | | | | |



Remarks:
Boring was backfilled with concrete.

| Saturated Zones | | |
|-----------------|-----------|-------|
| Date / Time | Elevation | Depth |
| | | |
| | | |
| | | |

| | | |
|---|---|---|
| Date Start/Finish: 6/4/98 - 6/4/98 Drilling Company: Vironex Driller's Name: Scott Drilling Method: Direct Push Rig Type: Geoprobe Spoon Size: -in Hammer Weight: -lb Height of Fall: -in. | Borehole Depth: 10 ft. Geologist: Tony Parenteau | Boring No. GP-6 Client: UPS Location: UPS Oakland, California |
|---|---|---|

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Blows/6 In. | N | Recovery (ft.) | PID (ppm) Headspace | Geotechnical Test | Geologic Column | Stratigraphic Description | Boring Construction |
|-------|-----------|-------------------|-----------------|-------------|---|----------------|---------------------|-------------------|-----------------|--|---------------------|
| | | | | | | | | | | GROUND SURFACE | |
| | | | | | | | | | | CONCRETE. | |
| 5 | | GP-6-3' | | | | | 112 | | | CLAYEY SAND & GRAVEL: dark greenish gray to reddish brown, fine to coarse, moist, soft to moderately firm, no odor, some black pieces, staining. | |
| 10 | | GP-6-7' | | | | | 1 | | | SILTY CLAY: dark gray to black (bay mud), organics, very moist to saturated, soft, diesel sheen. | |
| 20 | | | | | | | | | | Bottom of boring. | |



Remarks:
 Boring was backfilled with 15lbs. ORC, grout, capped with asphalt cold patch.

| Saturated Zones | | |
|-----------------|-----------|-------|
| Date / Time | Elevation | Depth |
| 6/4/98/2:00pm. | | 8 ↓ |
| | | |
| | | |

| | | |
|---|---|--|
| Date Start/Finish: 6/4/98 - 6/4/98 Drilling Company: Vironex Driller's Name: Scott Drilling Method: Direct Push Rig Type: Geoprobe Spoon Size: -in Hammer Weight: -lb Height of Fall: -in. | Borehole Depth: 13 ft. Geologist: Tony Parenteau | Boring No.: GP-7 Client: UPS Location: UPS Oakland, California |
|---|---|--|

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Blows/6 In. | N | Recovery (ft.) | PID (ppm) Headspace | Geotechnical Test | Geologic Column | Stratigraphic Description | Boring Construction |
|-------|-----------|-------------------|-----------------|-------------|---|----------------|---------------------|-------------------|-----------------|---|---------------------|
| | | | | | | | | | | GROUND SURFACE | |
| | | | | | | | | | | CONCRETE. | |
| | | | | | | | | | | CLAYEY SAND & GRAVEL: reddish brown, fine to medium, moist, soft to moderately firm, no odor, no staining. | |
| 5 | | | | | | | | | | CLAYEY SAND & GRAVEL: greenish gray, fine to medium, moist, soft to moderately firm, no odor, no staining. | |
| | | | | | | | | | | SILTY CLAY: dark gray to black, some medium gravel, (bay mud), very moist, no odor, no staining. | |
| | | | | | | | 1 | | | | |
| | | GP-7-12' | | | | | | | | | |
| | | | | | | | | | | Bottom of boring. | |
| 5 | | | | | | | | | | | |

| | | | |
|---|------------------------|-----------|-------|
| Remarks: Boring was backfilled with concrete. Refusal at 13', possible gravel/rock layer. | Saturated Zones | | |
| | Date / Time | Elevation | Depth |
| | | | |

| | | |
|--|---|--|
| Date Start/Finish: 6/4/98 -- 6/4/98 Drilling Company: Vironex Driller's Name: Scott Drilling Method: Direct Push Rig Type: Geoprobe Spoon Size: -in Hammer Weight: -lb Height of Fall: -in. | Borehole Depth: 15 ft. Geologist: Tony Parenteau | Boring No.: GP-8 Client: UPS Location: UPS Oakland, California |
|--|---|--|

| DEPTH | ELEVATION | Sample Run Number | Sample/Int/Type | Blows/6 In. | N | Recovery (ft.) | PID (ppm) Headspace | Geotechnical Test | Geologic Column | Stratigraphic Description | Boring Construction |
|-------|-----------|-------------------|-----------------|-------------|---|----------------|---------------------|-------------------|-----------------|--|---------------------|
| | | | | | | | | | | GROUND SURFACE | |
| | | | | | | | | | | CONCRETE. | |
| | | | | | | | | | | CLAYEY SAND & GRAVEL: reddish brown, dry to slightly moist, moderately firm, no odor, no staining. | |
| 5 | | | | | | | | | | SILTY SAND & GRAVEL: greenish gray, slightly moist to moist, moderately firm, no odor, no staining. | |
| | | GP-8-7' | | | | | | | | SANDY SILT: dark greenish gray to black (bay mud), very moist to saturated, soft, diesel odor, sheen. | |
| 10 | | | | | | | | | | Oil sheen, moderate odor. | |
| 15 | | | | | | | | | | Bottom of boring. | |
| 20 | | | | | | | | | | | |

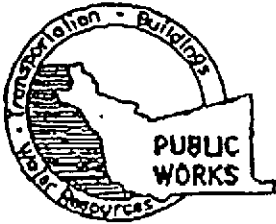
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Remarks:

Boring was backfilled with 15lbs. orc, volclay grout, and capped with asphalt cold patch.

Saturated Zones

| Date / Time | Elevation | Depth |
|----------------|-----------|-------|
| 6/4/98/3:55pm. | | 8 ↓ |
| | | |
| | | |



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651

PHONE (510) 670-5575 ANDREAS GODFREY

FAX (510) 670-5262

(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT United Parcel Service Center
8400 Pardee Drive
Oakland, CA 94621

California Coordinates Source CGA Accuracy ± 1 ft
CON APN

CLIENT Name United Parcel Service Attn: Caroline Ehrlich
Address 8400 Pardee Drive Phone 510-657-4036
City Oakland, CA Zip 94621

APPLICANT Name Blasland Bowditch Lee, Inc
Attn: Peter Murphy Fax 714-453-1830
Address Pool Irvine Center Dr. Phone 714-453-0530
City Irvine CA Zip 92618

TYPE OF PROJECT
Well Construction Geotechnical Investigation
Cathodic Protection General
Water Supply Contamination
Monitoring Well Destruction
(Temporary)

PROPOSED WATER SUPPLY WELL USE NA
New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other

DRILLING METHOD:
Mud Rotary Air Rotary Auger
Cable Other Direct push soil & water sampling.

DRILLER'S LICENSE NO. 705927

WELL PROJECTS
Drill Hole Diameter 2 in. Maximum Depth 15 ft.
Casing Diameter 2 in. Number 8
Surface Seal Depth 4 ft. Abandoned w/ ORC

GEOTECHNICAL PROJECTS
Number of Borings Maximum Depth ft.
Hole Diameter in.

ESTIMATED STARTING DATE 4/9/98 or the following week
ESTIMATED COMPLETION DATE w/1-2 weeks of starting
Work plan for this project approved by B. Chan of ACPWS 3/8/97
I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Peter Murphy DATE 3/31/98

FOR OFFICE USE

PERMIT NUMBER 98WR153
WELL NUMBER
APN

PERMIT CONDITIONS

Circled Permit Requirements Apply

- (A) GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.
- B. WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- (C) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL**
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
- E. CATHODIC**
FOI hole above anode zone with concrete placed by tremie
- F. WELL DESTRUCTION**
See attached.
- G. SPECIAL CONDITIONS**

APPROVED Alvin Kan DATE 4/6/98