

Golder Associates Inc.
180 Grand Avenue, Suite 250
Oakland, California 94612
Telephone (510) 239-9000
Facsimile (510) 239-9010

ENVIRONMENTAL
PROTECTION

99 JAN 20 PM 4: 05



TRANSMITTAL LETTER

TO: Ms. Eva Chu
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

DATE: January 15, 1999
PROJECT NO.: 963-7136

SENT BY: Kent Reynolds

Mail XX
Hand Carried
Overnight Express

Other
Under Separate Cover
Enclosed

| Quantity | Item | Description |
|----------|----------|--|
| 1 | 963-7136 | Additional sampling results for 2364 Baumann Avenue, San Lorenzo, California. Stn 6086 dep/ref - n |
| Remarks: | | |

Per: _____

Golder Associates Inc.

180 Grand Avenue, Suite 250
Oakland, CA USA 94612
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ENVIRONMENTAL
PROTECTION
MAY 12 PM 11



May 8, 1997

Our Ref: 963-7136

Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

ATTENTION: Ms. Amy Leech

SUBJECT: ADDITIONAL SAMPLING RESULTS FOR 2364 BAUMANN AVENUE, SAN
LORENZO, CALIFORNIA

Dear Ms. Leech:

This letter report presents the results of additional soil and groundwater sampling conducted by Golder Associates Inc. (Golder) for the property located at 2364 Baumann Avenue, San Lorenzo, California (Figure 1). The property is owned by Sarah Abrams and is currently unoccupied. Golder previously completed a Preliminary Environmental Site Assessment documented in our report dated March 4, 1997.

INTRODUCTION

The sampling activities were performed in response to the letter from Amy Leech of Alameda County Environmental Health Services dated April 28, 1997 regarding her review of Golder's Preliminary Environmental Site Assessment Report. The purpose of the additional sampling was to further characterize soil and groundwater in the vicinity of the oil-stained compressor area, grit tank/catch basin, and paint booth as requested by the Alameda County Environmental Health Services.

The Preliminary Environmental Site Assessment (ESA) identified total petroleum hydrocarbons as oil (TPHo) in soil near the compressor area and grit tank/catch basin. Alameda County Environmental Health Services requested that soil samples from these areas be analyzed for Polynuclear Aromatics (PNAs) and that a groundwater sample be collected from beneath the grit tank/catch basin and be analyzed for volatile organic compounds (VOCs) by EPA method 8260 and for PNAs by EPA Method 8270. In addition, because the grit tank/catch basin was historically used for the clean-up of the painting operation, because the groundwater sample should be analyzed for CAM 17 metals (EPA Method 6010A and 7470A). The Alameda County Environmental Health Services also requested that soil and groundwater samples be collected beneath the former paint booth and analyzed for VOCs (EPA Method 8260).

FIELD INVESTIGATION

Golder performed additional soil and groundwater sampling on May 2, 1997. Three boreholes were advanced; borehole B-7 in the oil-stained compressor area (adjacent to borehole B-2), borehole B-8 next to the grit tank/catch basin (adjacent to borehole B-1), and borehole B-9 in

the center of the former paint booth. The locations of the additional and previous boreholes are shown in Figure 2.

The boreholes were advanced with a hydraulic push drill rig and continuously cored. Soil samples were logged using the Unified Soil Classification System. Borehole logs are included in Appendix A. Borehole B-7 was drilled to 13 feet below ground surface (bgs), and boreholes B-8 and B-9 were drilled to 19 feet bgs. Soil samples were collected at 3 feet bgs from borehole B-7, at 5 feet bgs from borehole B-8, and at 5.5 feet bgs from borehole B-9. Soil samples were collected in clean stainless steel tubes sealed with Teflon sheets and plastic caps and transported under chain-of-custody to a State of California certified laboratory. Soil samples were analyzed for total petroleum hydrocarbons as diesel fuel and motor oil (TPHd and TPHo) using Environmental Protection Agency (EPA) Test Methods 3550/8015 (modified), VOCs using EPA Test Method 8260, and PNAs using EPA Test Method 8270.

Groundwater samples were collected from temporary PVC stand-pipes placed to the bottom of boreholes B-8 and B-9. Groundwater samples were collected with a stainless steel bailer and decanted into laboratory provided sample containers. Groundwater sample B-9 was filtered in the field with a 0.45 micron filter and preserved for CAM 17 metals analysis. All groundwater samples were transported under chain-of-custody to a State of California certified laboratory. Groundwater samples were analyzed for VOCs using EPA Test Method 8260 and PNAs using EPA Test Method 8270. The groundwater sample from borehole B-9 was also analyzed for CAM 17 metals using EPA Test Methods 6010A and 7470A and TPHd and TPHo using EPA Methods 3550/8015 (modified).

RESULTS

Soil sample analytical reports are included in Appendix B and summarized in Table 1. No PNAs were detected in any soil samples. TPHo was detected in all soil samples at concentrations ranging from 13 mg/kg to 156 mg/kg. VOCs were detected in soil samples B-8 and B-9 at levels above reporting limits. Detected VOCs include acetone and 2-butanone (or Methyl Ethyl Ketone (MEK)). Acetone was detected in boreholes B-8 and B-9 at concentrations of 0.043 mg/kg and 0.1 mg/kg, respectively. MEK was detected in boreholes B-8 and B-9 at concentrations of 0.014 mg/kg and 0.028 mg/kg, respectively.

Groundwater sample analytical reports are included in Appendix B and summarized in Table 2. No PNAs were detected in groundwater samples. TPHd was detected in groundwater sample B-8 at a concentration of 0.64 mg/L. No TPHo was detected in groundwater samples. Acetone was detected in groundwater sample B-9 at a concentration 0.024 mg/L. No other VOCs were detected in groundwater samples. Detected metals are summarized in Table 2.

All laboratory quality assurance/quality control were within acceptable criteria. Laboratory quality assurance/quality control data are included in Appendix B.

SUMMARY AND CONCLUSIONS

Three boreholes were drilled to collect soil and groundwater samples as requested by Alameda County Environmental Health Services. Soil samples were collected in the vicinity of previous sample locations associated with the compressor area and grit tank/catch basin. TPH as oil was detected in soil samples at concentrations consistent with preliminary sampling results. Soil and groundwater sample results indicate that no PNAs were detected. TPH as diesel fuel was detected in groundwater sample B-9 at a concentration of 0.64 mg/L. TPH as diesel detected in the groundwater is likely due to oil adhered to suspended soil particles contained in the groundwater sample given the relatively low concentration detected, turbidity of the sample, and the low solubility of diesel in water.

In order to place perspective on the concentrations of VOCs detected in soil and groundwater samples from the site, the maximum detected concentrations of acetone and MEK were compared with risk-based screening levels published by the EPA Region IX as Preliminary Remediation Goals (PRGs). These screening values are useful in assessing whether the site poses an environmental concern much like Maximum Contaminant Levels for drinking water (MCLs) provide a conservative screening tool for non-drinking water. Comparison of the maximum acetone concentration in soil (0.1 mg/kg borehole B-9) at the site to the PRGs indicates that the concentration of acetone in soil at the site does not exceed the EPA level of 2.1 mg/kg for residential use and the site is zoned for industrial use. MEK was detected at a maximum concentration of 0.028 mg/kg in soil at the site. The PRG for MEK in soil at a residential site is 7.1 mg/kg. No other volatile organic compounds were detected in soil samples at the site.

Acetone was detected in groundwater sample B-9 at a concentration of 0.024 mg/L. Since no drinking water maximum contaminant level exists for acetone, the concentration of acetone detected in site groundwater was compared to the EPA PRG of 0.61 mg/L for acetone in tap water. The concentration of acetone in groundwater does not exceed the EPA PRG for acetone in tap water. No other volatile organic compounds were detected in groundwater samples.

The groundwater sample collected from borehole B-8 in the vicinity of the grit tank/catch basin was filtered prior to acid preservation for CAM 17 metal analysis. However, after filtering with a 0.45 micron filter the groundwater sample remained turbid. Due to the turbidity of the groundwater sample, reported metal concentrations are not likely representative of the dissolved metal concentrations. CAM 17 metal results are compared to MCLs and the PRGs for tap water in Table 2. Reported concentrations of metals are below MCLs and PRGs, or in the case of arsenic, chromium, lead, and thallium are reasonable for water containing fine grained soil particles. This additional investigation confirms our previous findings and conclusions regarding subsurface conditions.

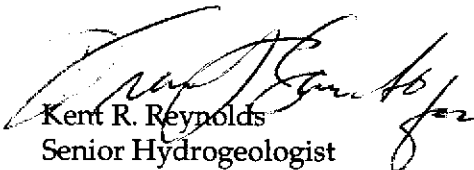
If you have any questions or require any additional information concerning the data and the discussion above, please contact the undersigned.

Sincerely,

GOLDER ASSOCIATES INC.



Ken Kisiel
Staff Hydrologist



Kent R. Reynolds
Senior Hydrogeologist

Attachments:

- Tables 1 and 2
- Figures 1 and 2
- Appendix A - Soil borehole Logs
- Appendix B - Chemical Analytical Reports / Chain of Custody Forms

Table 1
Summary of Analytical Soil Sample Chemical Results
 2364 Baumann Avenue,
 San Lorenzo, California

| Boring Location | B-7 | B-8 | B-9 |
|--|-----------|-----------|-----------|
| Sample Depth Interval (feet bgs) | 5.5 - 6.0 | 5.0 - 5.5 | 3.0 - 3.5 |
| Date Sampled | 5/2/97 | 5/2/97 | 5/2/97 |
| Analyte | | | |
| Polynuclear Aromatics (PNAs) (EPA Method 8270B) | ND | ND | ND |
| TPH as oil (EPA Method 3550/GC-FID) | 47 | 156 | 13 |
| Volatile Organic Compounds (VOCs) (EPA Method 8260) | | | |
| Acetone | 0.012 (j) | 0.043 | 0.100 |
| 2-Butanone (Methyl Ethyl Ketone) | ND | 0.014 | 0.028 |
| All other VOCs | ND | ND | ND |

Notes: All concentrations reported in milligrams per kilogram (mg/kg)
 ND - None detected at or above laboratory reporting limits
 (j) - concentration reported below reporting limit of 20 mg/kg

Table 2
Summary of Analytical Groundwater Sample Chemical Results
 2364 Baumann Avenue,
 San Lorenzo, California

| Boring Location Date Sampled | B-8 5/2/97 | B-9 5/2/97 | PRGs | MCLs |
|--|---------------|---------------|-------|------|
| Analyte | | | | |
| Polynuclear Aromatics (PNAs) (EPA Method 8270B) | ND | ND | - | - |
| TPH as oil | ND | NT | - | - |
| TPH as diesel fuel (EPA Method 3550/GC-FID) | 640 | NT | - | - |
| Volatile Organic Compounds (VOCs) (EPA Method 8260) | | | | |
| Acetone | 17 (j) | 24 | 610 | - |
| All other VOCs | ND | ND | - | - |
| CAM 17 Metals (EPA Method 6010A and 7470A) | | | | |
| Antimony | 5.4 | NT | 150 | 6 |
| Arsenic | 58 | NT | NL | 50 |
| Barium | 768 | NT | 2600 | 1000 |
| Beryllium | ND | NT | 0.016 | 4 |
| Cadmium | ND | NT | 18 | 5 |
| Chromium | 198 | NT | 180 | 50 |
| Cobalt | 48.3 | NT | 2200 | NL |
| Copper | 150 | NT | 1400 | NL |
| Lead | 29.8 | NT | 4 | NL |
| Mercury | 1 | NT | NL | 2 |
| Molybdenum | 121 | NT | 180 | NL |
| Nickel | 214 | NT | 730 | 100 |
| Selenium | ND | NT | 180 | 50 |
| Silver | ND | NT | 180 | NL |
| Thallium | 11.9 | NT | NL | 2 |
| Vanadium | 205 | NT | 260 | NL |
| Zinc | 260 | NT | 11000 | NL |

Notes: All concentrations reported in milligrams per liter ($\mu\text{g/L}$) or parts per billion
 ND - None detected at or above laboratory reporting limits
 NT - Not Tested
 NL - Not Listed
 (j) concentration reported below reporting limit of 20 $\mu\text{g/L}$
 - Not applicable or do not exist

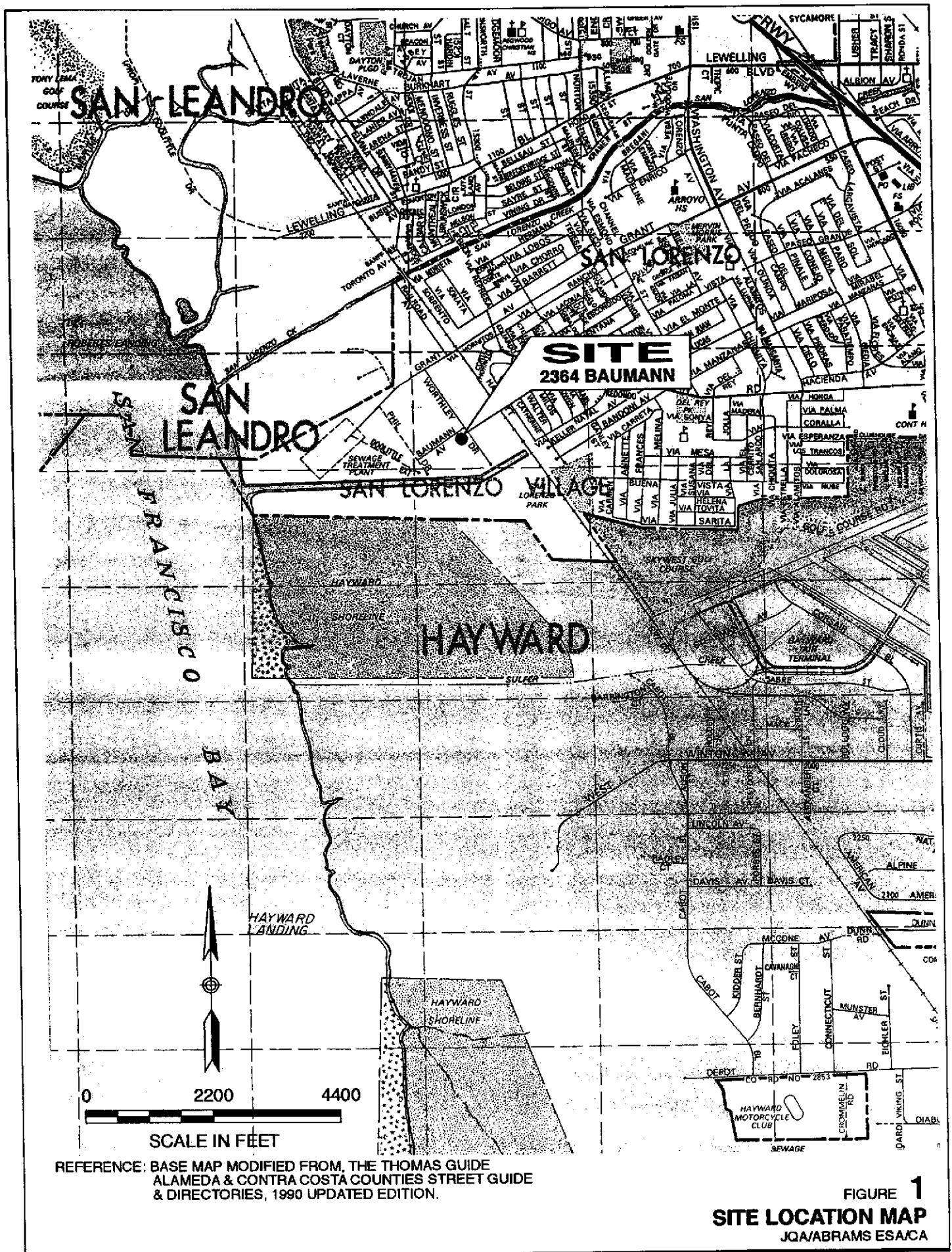


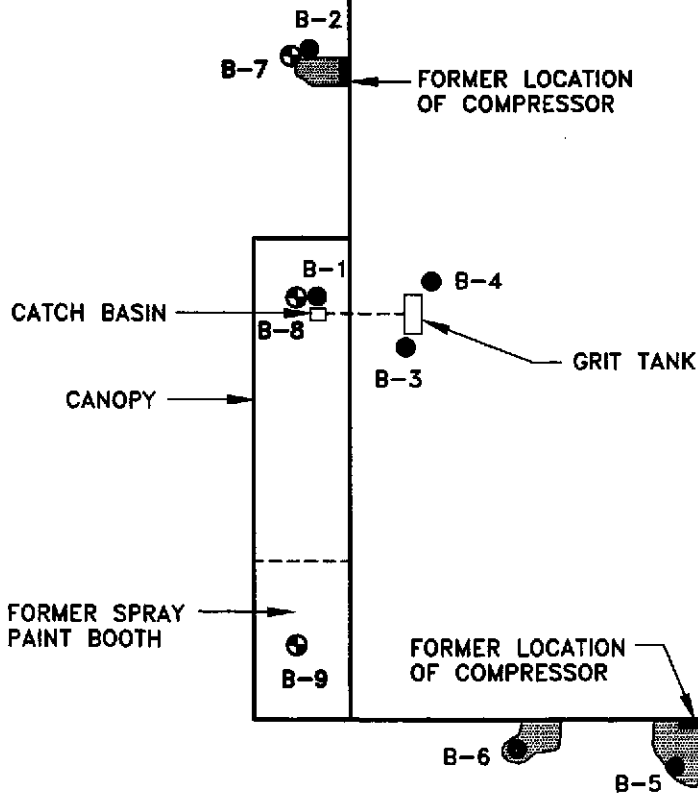
FIGURE 1
SITE LOCATION MAP
JQA/ABRAMS ESACA

BAUMANN AVENUE

WORTHLEY AVENUE

PROPERTY BOUNDARY

2364 BAUMANN



PROPERTY BOUNDARY

LEGEND:

- B-1 PREVIOUS BOREHOLE LOCATION
- ⊕ B-7 BOREHOLE LOCATION (MARCH 1997)
- OIL STAIN

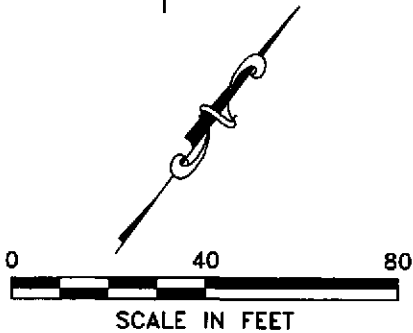


FIGURE 2
SITE PLAN
 JQA/ABRAMS ESA/CA

APPENDIX A

Borehole Logs

RECORD OF BOREHOLE # B-7

STA. B-7 OFFSET L R

ELEVATION NA

SHEET 1 OF 1

PROJECT NO. 963-7136.100

DRILLING DATE 5/2/97

DATUM MSL

INCLINATION 90° AZIMUTH NA

DRILL RIG XD-1

| DEPTH SCALE (FEET) | BORING METHOD | SOIL PROFILE | GRAPHIC LOG | USCS | SAMPLES | | | | SAMPLE DESCRIPTION | NOTES — PIEZOMETER — STANDPIPE INSTALLATION |
|--------------------|---------------|---|-------------|------|---------|-------|-----------------|----------------------|--------------------|--|
| | | SOIL PROFILE DESCRIPTION | | | NUMBER | TYPE* | BLOWS/ 6 IN. | RECOVERY | | |
| 0 | | 0-0.30 ft. Asphalt. | | | | | | | | |
| 0.3-3.0 | | Loose, light brown (7.5YR 6/4), sand and gravel, damp (FILL). | | FILL | | | | | | |
| 2 | | 2.8-3.0 ft. Oxidized to yellow brown. | | | | | | | | |
| 3.0-4.0 | | Compact, gray brown (5Y 5/2), sand and gravel, damp (FILL). | | | | | | | | |
| 4 | | 4.0-4.8 ft. Compact, olive (5Y 5/4), SILTY SAND, some GRAVEL, (SM), damp. | | SM | | | | | | |
| 4.8-7.4 | | Medium stiff, dark brown (7.5YR 3/2), CLAYEY SILT, some organics/wood, (ML), moist. | | ML | | | | Sample B-7 (5.5-6.0) | | |
| 6 | | | | | | | | | | |
| 7.4-9.7 | | Medium dense, olive (5Y 4/3), SILTY SAND, some red oxidized material, (SM), wet. | | SM | | | | | | |
| 8 | | | | | | | | | | |
| 9.7-13.0 | | Stiff, gray (2.5YR N4), SILTY CLAY, trace SAND, (CL), moist. | | CL | | | | | | |
| 10 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 14 | | Total depth = 13.0 ft. | | | | | | | | |
| 16 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| | | | | | | | | | | Borehole grouted to surface with neat cement on 5/2/97. |

DEPTH SCALE As Indicated
 DRILLING CONTRACTOR Precision Drilling
 DRILLER --



LOGGED BY K. Kisiel
 CHECKED K. Reynolds
 DATE 5/7/97

RECORD OF BOREHOLE # B-8

STA. B-8 OFFSET L R

ELEVATION NA
 DRILLING DATE 5/2/97

SHEET 1 OF 1

PROJECT NO. 963-7136.100

DATUM MSL

INCLINATION 90° AZIMUTH NA

DRILL RIG XD-1

| DEPTH SCALE (FEET) | BORING METHOD | SOIL PROFILE | GRAPHIC LOG | USCS | SAMPLES | | | | SAMPLE DESCRIPTION | NOTES — PIEZOMETER — STANDPIPE INSTALLATION |
|--------------------|---------------|---|--------------------------|------|---------|------|-----------------|---|--------------------|--|
| | | SOIL PROFILE DESCRIPTION | | | NUMBER | TYPE | BLOWS/ 6 IN. | RECOVERY | | |
| 0 | | 0-0.40 ft. Concrete. | [Cross-hatched pattern] | | | | | | | |
| 0.4-3.0 | | Loose, light brown (7.5YR 6/4), sand and gravel, damp (FILL). | [Dotted pattern] | FILL | | | | | | |
| 2 | | 2.8-3.0 ft. Oxidizing yellow to brown. | [Cross-hatched pattern] | | | | | | | |
| 3.0-4.0 | | Compact, gray brown (5Y 5/2), sand and gravel, damp (FILL). | [Dotted pattern] | | | | | | | |
| 4 | | 4.0-5.0 ft. Compact, olive (5Y 5/4), SILTY SAND, some GRAVEL, (SM), damp. | [Dotted pattern] | SM | | | | | | |
| 5.0-7.0 | | Medium stiff, dark brown (7.5YR 3/2), CLAYEY SILT, some organics/wood, (ML), moist. | [Dotted pattern] | ML | | | | Sample B-8 (5.0-5.5) | | |
| 6 | | 7.0-8.5 ft. Compact, olive (5Y 4/3), SILTY SAND, some oxidized material [RED (2.5YR 4/6)], (SM), wet. | [Dotted pattern] | SM | | | | | | |
| 8 | | 9.5-17.2 ft. Stiff, gray (2.5YR N4), SILTY CLAY, (CL), moist. | [Diagonal lines pattern] | CL | | | | | | |
| 10 | | 17.2-19.0 ft. Loose, olive (5Y 5/3), SAND, (SP), wet. | [Dotted pattern] | SP | | | | | | |
| 12 | | Total depth = 19.0 ft. | | | | | | | | |
| 14 | | | | | | | | Borehole grouted to surface with neat cement on 5/2/97. | | |
| 16 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 20 | | | | | | | | | | |

DEPTH SCALE As Indicated
 DRILLING CONTRACTOR Precision Drilling
 DRILLER --



LOGGED BY K.Kisiel
 CHECKED K. Reynolds
 DATE 5/7/97

RECORD OF BOREHOLE # B-9

STA. B-9 OFFSET L R

ELEVATION NA
 DRILLING DATE 5/2/97

SHEET 1 OF 1

PROJECT NO. 963-7136.100

DATUM MSL

INCLINATION 90° AZIMUTH NA

DRILL RIG XD-1

| DEPTH SCALE (FEET) | BORING METHOD | SOIL PROFILE | GRAPHIC LOG | USCS | SAMPLES | | | | SAMPLE DESCRIPTION | NOTES |
|--------------------|---------------|---|--------------------------|------|---------|------|--------------|---|--------------------|---|
| | | SOIL PROFILE DESCRIPTION | | | NUMBER | TYPE | BLOWS/ 6 IN. | RECOVERY | | PIEZOMETER STANDPIPE INSTALLATION |
| 0 | | 0-0.40 ft. Concrete. | [Cross-hatch pattern] | | | | | | | |
| 0.4-3.0 | | Loose, light brown (7.5YR 6/4), sand and gravel, damp (FILL). | [Dotted pattern] | FILL | | | | | | |
| 2 | | 2.6-3.0 ft. Oxidizing yellow to brown. | [Dotted pattern] | | | | | | | |
| 3.0-3.5 | | Compact, gray brown (5Y 5/2), sand and gravel, damp (FILL). | [Dotted pattern] | | | | | Sample B-9 (3.0-3.5) | | |
| 3.5-5.0 | | Compact, olive (5Y 5/4), SILTY SAND, some GRAVEL, (SM), damp. | [Dotted pattern] | SM | | | | | | |
| 5.0-7.0 | | Medium stiff, dark brown (7.5YR 3/2), CLAYEY SILT, some organics/wood, (ML), moist. | [Dotted pattern] | ML | | | | | | |
| 7.0-9.5 | | Compact, olive (5Y 4/3), SILTY SAND, some oxidized material [RED (2.5YR 4/6)], (SM), wet. | [Dotted pattern] | SM | | | | | | |
| 9.5-17.8 | | Stiff, gray (2.5YR N4), SILTY CLAY, (CL), moist. | [Diagonal lines pattern] | CL | | | | | | |
| 17.8-19.0 | | Loose, olive (5Y 5/3), SAND, (SP), wet. | [Dotted pattern] | SP | | | | | | |
| | | Total depth = 19.0 ft. | | | | | | | | |
| | | | | | | | | Borehole grouted to surface with neat cement on 5/2/97. | | |

DEPTH SCALE As Indicated
 DRILLING CONTRACTOR Precision Drilling
 DRILLER ---



LOGGED BY K.Kisiel
 CHECKED K.Reynolds
 DATE 5/7/97

APPENDIX B

Laboratory Analytical Reports

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA 8270B-PNA GOLDER.

Sample ID: B-8
APPL ID: AP50132
ARF: 24988

| APPL_SAMP | Method | Units | Result | Reporting Limit | E_Date | A_Date |
|-----------------------|----------|--------------------------|--------|-----------------|--------|---------------|
| EPA 8270B-PNA GOLDER. | | | | | | |
| AP50132 | EPA 8270 | Acenaphthene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Anthracene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Benz(a)anthracene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Benzo(a)pyrene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Benzo(b)fluoranthene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Benzo(k)fluoranthene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Chrysene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Dibenz(a,h)anthracene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Fluoranthene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Fluorene | ug/L | Not detected | 15 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Indeno(1,2,3-cd)pyrene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | 2-Methylnaphthalene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Naphthalene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Phenanthrene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Pyrene | ug/L | Not detected | 20 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Surrogate recovery (FBP) | % | 69.5 | 43-116 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Surrogate recovery (NBZ) | % | 82.1 | 35-114 | 5/5/97 5/7/97 |
| AP50132 | EPA 8270 | Surrogate recovery (TPH) | % | 77.7 | 33-141 | 5/5/97 5/7/97 |

Run #: 0506809

Instrument: SP

Sequence: 3050697

Initials: CC

APPL Inc.

EPA 8270B-PNA GOLDER.

Sample ID: B-9

203 West Swift Avenue

APPL ID: AP50133

Fresno, CA 93722

ARF: 24988

| APPL_SAMP | Method | | Units | Result | Reporting Limit | E_Date | A_Date |
|-----------------------|----------|--------------------------|-------|--------------|-----------------|--------|--------|
| EPA 8270B-PNA GOLDER. | | | | | | | |
| AP50133 | EPA 8270 | Acenaphthene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Anthracene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Benzo(a)anthracene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Benzo(a)pyrene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Benzo(b)fluoranthene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Benzo(k)fluoranthene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Chrysene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Dibenz(a,h)anthracene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Fluoranthene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Fluorene | ug/L | Not detected | 15 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Indeno(1,2,3-cd)pyrene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | 2-Methylnaphthalene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Naphthalene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Phenanthrene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Pyrene | ug/L | Not detected | 20 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Surrogate recovery (FBP) | % | 68.8 | 43-116 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Surrogate recovery (NBZ) | % | 81.2 | 35-114 | 5/5/97 | 5/7/97 |
| AP50133 | EPA 8270 | Surrogate recovery (TPH) | % | 77.0 | 33-141 | 5/5/97 | 5/7/97 |

Run #: 0506810
Instrument: SP
Sequence: 5050697
Initials: ca

APPL Inc.

EPA 8270 Semi-Vol PNA Water

4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: 970505-2176

Batch ID: \$PNA-050597

| Sample Type | Method | Analyte | Units | Result | Reporting Limit | Extract Date | Analyze Date |
|-----------------------------|----------|--------------------------|-------|--------------|-----------------|--------------|--------------|
| EPA 8270 Semi-Vol PNA Water | | | | | | | |
| BLANK | EPA 8270 | Acenaphthene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Anthracene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Benzo(a)anthracene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Benzo(a)pyrene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Benzo(b)fluoranthene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Benzo(k)fluoranthene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Dibenz(a,h)anthracene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Fluoranthene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Fluorene | ug/L | Not detected | 15 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Indeno(1,2,3-cd)pyrene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | 2-Methylnaphthalene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Naphthalene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Phenanthrene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Pyrene | ug/L | Not detected | 20 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Surrogate recovery (FBP) | % | 76.6 | 43-116 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Surrogate recovery (NBZ) | % | 80.9 | 35-114 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Surrogate recovery (TPH) | % | 102 | 33-141 | 05/05/97 | 05/06/97 |

Run #: 50506506Instrument: SPSequence: 5050697Initials: CC

LABORATORY CONTROL SPIKES

PNA's by METHOD 8270

APPL, Inc.
1203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 970505W LCS/LCSD

Date/Initials: 5/7/97 CC

Extraction Date: 5/5/97

Matrix Type: Water

| Compound Names Limits () | SPK Level µg/L | Matrix µg/L | SPK Result µg/L | SPK% Recovery | DUP Result µg/L | DUP% Recovery | %RPD | RPD Limits |
|---------------------------------|-------------------|----------------|--------------------|------------------|--------------------|------------------|-------|---------------|
| ACID COMPOUNDS | | | | | | | | |
| Naphthlene (65-135) | 50 | 0.00 | 41.4 | 82.7% | 36.0 | 72.0% | 13.9% | 20 |
| Fluorene (65-135) | 50 | 0.00 | 49.1 | 98.2% | 46.6 | 93.2% | 5.2% | 20 |
| Pyrene (65-135) | 50 | 0.00 | 50.0 | 100% | 50.0 | 100% | 0.0% | 20 |
| Benzo(a)Pyrene (65-135) | 50 | 0.00 | 47.2 | 94.3% | 47.1 | 94.1% | 0.3% | 20 |
| Indeno(1,2,3-cd)Pyrene (65-135) | 50 | 0.00 | 50.3 | 101% | 43.4 | 86.7% | 14.8% | 20 |

| Surrogate Limits () | Surr Level µg/L | SPK Result µg/L | Surr % Recovery | DUP Result µg/L | DUP% Recovery |
|---------------------------|--------------------|--------------------|--------------------|--------------------|------------------|
| Nitrobenzene-d5 (35-114) | 100 | 88.2 | 88.2% | 82.0 | 82.0% |
| 2-Fluorobiphenyl (43-116) | 100 | 87.2 | 87.2% | 77.6 | 77.6% |
| Terphenyl-d14 (33-141) | 100 | 96.6 | 96.6% | 97.2 | 97.2% |

PRIMARY

| | SPK | DUP |
|------------------|---------|---------|
| Analysis Date: | 5/7/97 | 5/7/97 |
| Analysis Time: | 0:35 | 1:42 |
| Instrument: | SP | SP |
| Column: | DB-5MS | DB-5MS |
| Sample File | 0506S07 | 0506S08 |
| Extraction Ratio | 1/1000 | 1/1000 |
| Dilution Factor: | 1 | 1 |

Comments: _____

GOLDER

Metals Results

ARF: 24988

| APPL Samp | Method | Units | Result | Reporting Limit | DF | E_Date | A_Date |
|-----------|---------------------------|-------|--------|-----------------|------|--------|--------|
| AP50132 | B-8 | | | | | | |
| 6010A | Antimony (Sb) | ug/L | 5.4 | 5 | 15 | 5/5/97 | 5/6/97 |
| 6010A | Arsenic (As) | ug/L | 58.0 | 5 | 50 | 5/5/97 | 5/6/97 |
| 6010A | Barium (Ba) | ug/L | 768 | 5 | 2600 | 5/5/97 | 5/6/97 |
| 6010A | Beryllium (Be) | ug/L | BRL | 2 | x | 5/5/97 | 5/6/97 |
| 6010A | Cadmium (Cd) | ug/L | BRL | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Chromium (Cr) | ug/L | 198 | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Cobalt (Co) | ug/L | 48.3 | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Copper (Cu) | ug/L | 150 | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Lead (Pb) | ug/L | 29.8 | 3 | x | 5/5/97 | 5/6/97 |
| 6010A | Molybdenum (Mo) | ug/L | 121 | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Nickel (Ni) | ug/L | 214 | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Selenium (Se) | ug/L | BRL | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Silver (Ag) | ug/L | BRL | 1 | | 5/5/97 | 5/6/97 |
| 6010A | Thallium (Tl) | ug/L | 11.9 | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Vanadium (V) | ug/L | 205 | 5 | | 5/5/97 | 5/6/97 |
| 6010A | Zinc (Zn) | ug/L | 280 | 50 | | 5/5/97 | 5/6/97 |
| 7470A | Mercury (Hg) by EPA 7470A | ug/L | 1.0 | 0.2 | | 5/5/97 | 5/6/97 |

APPL Inc.
403 West Swift Avenue
Fresno, CA 93722

EPA 8260 Golder.

Sample ID: B-8
APPL ID: AP50132
ARF: 24988

| APPL_SAMP | Method | | Units | Result | Reporting Limit | E_Date | A_Date |
|------------------|----------|---------------------------|-------|--------------|-----------------|--------|--------|
| EPA 8260 Golder. | | | | | | | |
| AP50132 | EPA 8260 | Acetone | ug/L | 17 J | 20 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Benzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Bromodichloromethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Bromoform | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Bromomethane | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 2-Butanone (NT) | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Carbon tetrachloride | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Chlorobenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Chloroethane | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 2-Chloroethylvinyl ether | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Chloroform | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Chloromethane | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Dibromochloromethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,2-Dichlorobenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,3-Dichlorobenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,1-Dichloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,2-Dichloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,1-Dichloroethene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | trans-1,2-Dichloroethene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,2-Dichloropropene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | cis-1,3-Dichloropropene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | trans-1,3-Dichloropropene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Ethylbenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Methylene chloride | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,1,2,2-Tetrachloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Tetrachloroethene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Toluene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,1,1-Trichloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,1,2-Trichloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | 1,1,1-Trichloroethene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Trichlorofluoromethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Vinyl chloride | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Xylenes | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Surrogate recovery (BFB) | % | 96.4 | 86-115 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Surrogate recovery (DCE) | % | 98.6 | 75-114 | 5/3/97 | 5/3/97 |
| AP50132 | EPA 8260 | Surrogate recovery (TOL) | % | 98.7 | 88-110 | 5/3/97 | 5/3/97 |

Run #: 0503012
Instrument: Chrom
Sequence: 0050397
Initials: DA

APPL Inc.
203 West Swift Avenue
Fresno, CA 93722

EPA 8260 Golder.

Sample ID: B-9
APPL ID: AP50133
ARF: 24988

| APPL_SAMP | Method | | Units | Result | Reporting Limit | E_Date | A_Date |
|------------------|----------|---------------------------|-------|--------------|-----------------|--------|--------|
| EPA 8260 Golder. | | | | | | | |
| AP50133 | EPA 8260 | Acetone | ug/L | 24 | 20 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Benzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Bromodichloromethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Bromoform | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Bromomethane | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 2-Butanone (NT) | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Carbon tetrachloride | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Chlorobenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Chloroethane | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 2-Chloroethylvinyl ether | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Chloroform | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Chloromethane | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Dibromochloromethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,2-Dichlorobenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,3-Dichlorobenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,4-Dichlorobenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,1-Dichloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,2-Dichloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,1-Dichloroethene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | trans-1,2-Dichloroethene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,2-Dichloropropane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | cis-1,3-Dichloropropene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | trans-1,3-Dichloropropene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Ethylbenzene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Methylene chloride | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,1,2,2-Tetrachloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Tetrachloroethene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Toluene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,1,1-Trichloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | 1,1,2-Trichloroethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Trichloroethene | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Trichlorofluoromethane | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Vinyl chloride | ug/L | Not detected | 10 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Xylenes | ug/L | Not detected | 5.0 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Surrogate recovery (BFB) | % | 101 | 86-115 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Surrogate recovery (DCE) | % | 104 | 76-114 | 5/3/97 | 5/3/97 |
| AP50133 | EPA 8260 | Surrogate recovery (TOL) | % | 98.7 | 88-110 | 5/3/97 | 5/3/97 |

Run #: 0503613
Instrument: Chico
Sequence: 050397
Initials: DA

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA 8260

Blank Name/QCG: 970503-2157

Batch ID: 8260-050397

| Sample Type | Method | Analyte | Units | Result | Reporting Limit | Extract Date | Analyze Date |
|-------------|----------|---------------------------|-------|--------------|-----------------|--------------|--------------|
| EPA 8260 | | | | | | | |
| BLANK | EPA 8260 | Acetone | ug/L | Not detected | 20 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Benzene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Bromodichloromethane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Bromoform | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Bromomethane | ug/L | Not detected | 10 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 2-Butanone (NT) | ug/L | Not detected | 10 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Carbon tetrachloride | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Chlorobenzene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Chloroethane | ug/L | Not detected | 10 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 2-Chloroethylvinyl ether | ug/L | Not detected | 10 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Chloroform | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Chloromethane | ug/L | Not detected | 10 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Dibromochloromethane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,2-Dichlorobenzene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,3-Dichlorobenzene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,4-Dichlorobenzene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,1-Dichloroethane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,2-Dichloroethane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,1-Dichloroethene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | trans-1,2-Dichloroethene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,2-Dichloropropane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | cis-1,3-Dichloropropene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | trans-1,3-Dichloropropene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Ethylbenzene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Methylene chloride | ug/L | Not detected | 10 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,1,2,2-Tetrachloroethane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Tetrachloroethene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Toluene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,1,1-Trichloroethane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | 1,1,2-Trichloroethane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Trichloroethene | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Trichlorofluoromethane | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Vinyl chloride | ug/L | Not detected | 10 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Xylenes | ug/L | Not detected | 5.0 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Surrogate recovery (BFB) | % | 95.8 | 86-115 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Surrogate recovery (DCE) | % | 92.9 | 76-114 | 05/03/97 | 05/03/97 |
| BLANK | EPA 8260 | Surrogate recovery (TOL) | % | 99.3 | 88-110 | 05/03/97 | 05/03/97 |

Run #: 050309

Instrument: C1100

Sequence: C050397

Initials: mlk

Laboratory Control Spike Recoveries

METHOD 8260

APPL, Inc.
 4203 West Swift Avenue
 Fresno, CA 93722

APPL Sample #: 050397CW LCS/LCSD
 Date/Initials: 5/5/97 MK
 Extraction Date: 5/3/97
 Matrix Type: Water

| Compound Names Limits () | SPK Level µg/L | SPK µg/L | SPK% Recovery | DUP µg/L | DUP% Recovery | %RPD | RPD Limits |
|---------------------------------|-------------------|-------------|------------------|-------------|------------------|------|---------------|
| VOLATILE SPIKE COMPOUNDS | | | | | | | |
| 1,1-Dichloroethene (61-145) | 50.00 | 55.71 | 111% | 51.98 | 104% | 6.9% | 14 |
| Benzene (76-127) | 50.00 | 51.19 | 102% | 51.67 | 103% | 0.9% | 11 |
| Trichloroethene (71-120) | 50.00 | 50.92 | 102% | 50.59 | 101% | 0.7% | 14 |
| Toluene (76-125) | 50.00 | 52.09 | 104% | 52.17 | 104% | 0.2% | 13 |
| Chlorobenzene (75-130) | 50.00 | 52.09 | 104% | 52.30 | 105% | 0.4% | 13 |

| Surrogate Limits () | Spike Level µg/L | SPK µg/L | SPK% Recovery | DUP µg/L | DUP% Recovery |
|--------------------------------|---------------------|-------------|------------------|-------------|------------------|
| 1,2-Dichloroethane-d4 (76-114) | 50.0 | 50.11 | 100% | 47.38 | 94.8% |
| Toluene-d8 (88-110) | 50.0 | 49.49 | 99.0% | 49.16 | 98.3% |
| Bromofluorobenzene (86-115) | 50.0 | 50.47 | 101% | 49.22 | 98.4% |

| | LCS | LCSD | Comments: |
|------------------|---------|---------|-----------|
| Analysis Date: | 5/3/97 | 5/3/97 | |
| Analysis Time: | 8:27 PM | 9:01 PM | |
| Instrument: | CHICO | CHICO | |
| Column: | RTX-Vol | RTX-Vol | |
| Sample/Vial# | 0503c10 | 0503c11 | |
| Extraction Ratio | 5ml | 5ml | |
| Dilution Factor: | NONE | NONE | |

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA 3510 TPH Diesel W-GOLDER

Sample ID: B-8
APPL ID: AP50132
ARF: 24988

| APPL_SAMP | Method | Units | Result | Reporting Limit | E_Date | A_Date |
|------------------------------|-----------------------------|-------|-----------------------------|-----------------|--------|--------|
| EPA 3510 TPH Diesel W-GOLDER | | | | | | |
| AP50132 | EPA 3510 Diesel Fuel | ug/L | 640 (71211) (Limit: 5-6-97) | 50 | 5/5/97 | 5/5/97 |
| AP50132 | EPA 3510 MOTOR OIL | ug/L | Not detected | 250 | 5/5/97 | 5/5/97 |
| AP50132 | EPA 3510 Surrogate recovery | % | 81.0 | 40-121 | 5/5/97 | 5/5/97 |

Run #: 504041.D
Instrument: FID02
Sequence: 970504
Initials: MF.

APPL Inc.

EPA 3510 TPH Diesel Blank W

4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: 970505-2180

Batch ID: \$TPHD-970505

| Sample Type | Method | Analyte | Units | Result | Reporting Limit | Extract Date | Analyze Date |
|-----------------------------|----------|--------------------|-------|--------------|-----------------|--------------|--------------|
| EPA 3510 TPH Diesel Blank W | | | | | | | |
| BLANK | EPA 3510 | Diesel Fuel | ug/L | Not detected | 50 | 05/05/97 | 05/05/97 |
| BLANK | EPA 3510 | MOTOR OIL | ug/L | Not detected | 250 | 05/05/97 | 05/05/97 |
| BLANK | EPA 3510 | Surrogate recovery | % | 86.6 | 40-121 | 05/05/97 | 05/05/97 |

Run #: 504038.D

Instrument: F1002

Sequence: 970504

Initials: MF

TPH EXTRACTABLES

Matrix/Control Spike Recovery Form

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 970505W LCS/LCSD

Date/Initials: 5/6/97 MF

Extraction Date: 5/5/97

Matrix Type: Water

Units: $\mu\text{g/L}$

| Compound Name (see below for limits) | Spike Level | Matrix Results | SPK Results | SPK% Recovery | DUP Results | DUP% Recovery | % RPD |
|---|----------------|-------------------|----------------|------------------|----------------|------------------|----------|
| MOTOR OIL | 2000 | 0.0 | 2160 | 108% | 1910 | 95.5% | 12% |

| Surrogate (see below for limits) | Spike Level | Matrix Results | SPK Results | SPK% Recovery | DUP Results | DUP% Recovery |
|-------------------------------------|----------------|-------------------|----------------|------------------|----------------|------------------|
| O-Terphenyl | 50.0 | ***** | 42.2 | 84.4% | 40.4 | 80.8% |

| | Primary Column | |
|-------------------|----------------|---------|
| | SPK | DUP |
| Analysis Date: | 5/5/97 | 5/5/97 |
| Analysis Time: | 4:58 PM | 5:35 PM |
| Instrument: | FID02A | FID02A |
| Column: | DB5-MS | DB5-MS |
| Sample/Vial #: | 39 | 40 |
| Extraction Ratio: | 5/1000 | 5/1000 |
| Dilution Factor: | 1 | 1 |

Comments:

RECOVERY LIMITS

Soil Water

Diesel 41 - 158 28 - 128
O-Terphenyl 59 - 107 40 - 121

RPD LIMITS

Soil Water

35 24
NA NA

SOIL Diesel limits established 09-19-95 to 10-03-95, RPD 04-21-95 to 09-05-95

WATER Diesel limits established 08-24-95 to 10-09-95, RPD 05-10-95 to 08-11-95

Surrogate limits established (soil) 11-9-95 to 3-5-96 (water) 11-29-95 to 4-1-96

NA = not applicable

TPH EXTRACTABLES

Matrix/Control Spike Recovery Form

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 970505S LCS

Date/Initials: 5/6/97 MF

Extraction Date: 5/5/97

Matrix Type: Soil

Units: $\mu\text{g}/\text{kg}$

| Compound Name (see below for limits) | Spike Level | Matrix Results | SPK Results | SPK% Recovery |
|---|----------------|-------------------|----------------|------------------|
| MOTOR OIL | 40000 | 0.0 | 39500 | 98.8% |

| Surrogate (see below for limits) | Spike Level | Matrix Results | SPK Results | SPK% Recovery |
|-------------------------------------|----------------|-------------------|----------------|------------------|
| O-Terphenyl | 1000 | ***** | 884 | 88.4% |

| | Primary Column | |
|-------------------|----------------|--|
| | SPK | |
| Analysis Date: | 5/5/97 | |
| Analysis Time: | 9:54 PM | |
| Instrument: | FID02A | |
| Column: | DB-5 | |
| Sample/Vial #: | 43 | |
| Extraction Ratio: | 5/50 | |
| Dilution Factor: | 1 | |

Comments:

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA 8270B-PNA SOIL GOLDR.

Sample ID: B-7
APPL ID: AP50134
ARF: 24988

| APPL_SAMP | Method | | Units | Result | Reporting Limit | E_Date | A_Date |
|---------------------------|----------|--------------------------|-------|--------------|-----------------|--------|--------|
| EPA 8270B-PNA SOIL GOLDR. | | | | | | | |
| AP50134 | EPA 8270 | Acenaphthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Benz(a)anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Benzo(a)pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Benzo(b)fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Benzo(k)fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Chrysene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Dibenz(a,h)anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Fluorene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Indeno(1,2,3-cd)pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | 2-Methylnaphthalene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Naphthalene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Phenanthrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Surrogate recovery (FBP) | % | 86.2 | 30-115 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Surrogate recovery (NBZ) | % | 78.7 | 23-120 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 8270 | Surrogate recovery (TPH) | % | 101 | 18-137 | 5/5/97 | 5/6/97 |

Run #: 0505535

Instrument: SP

Sequence: S050597

Initials: CC

APPL Inc.

EPA 8270B-PNA SOIL GOLDER.

Sample ID: B-8

1203 West Swift Avenue

APPL ID: AP50135

Fresno, CA 93722

ARF: 24988

| APPL_SAMP | Method | | Units | Result | Reporting Limit | E_Date | A_Date |
|----------------------------|----------|--------------------------|-------|--------------|-----------------|--------|--------|
| EPA 8270B-PNA SOIL GOLDER. | | | | | | | |
| AP50135 | EPA 8270 | Acenaphthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Benz(a)anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Benzo(a)pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Benzo(b)fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Benzo(k)fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Chrysene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Dibenz(a,h)anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Fluorene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Indeno(1,2,3-cd)pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | 2-Methylnaphthalene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Naphthalene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Phenanthrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Surrogate recovery (FBP) | % | 73.1 | 30-115 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Surrogate recovery (NBZ) | % | 83.7 | 23-120 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 8270 | Surrogate recovery (TPH) | % | 86.6 | 18-137 | 5/5/97 | 5/6/97 |

Run #: 0505532
Instrument: SP
Sequence: 50505917
Initials: CC

APPL Inc.

4203 West Swift Avenue

Fresno, CA 93722

EPA 8270B-PNA SOIL GOLDER.

Sample ID: B-9

APPL ID: AP50136

ARF: 24988

| APPL_SAMP | Method | | Units | Result | Reporting Limit | E_Date | A_Date |
|----------------------------|----------|--------------------------|-------|--------------|-----------------|--------|--------|
| EPA 8270B-PNA SOIL GOLDER. | | | | | | | |
| AP50136 | EPA 8270 | Acenaphthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Benzo(a)anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Benzo(a)pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Benzo(b)fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Benzo(k)fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Chrysene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Dibenz(a,h)anthracene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Fluoranthene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Fluorene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Indeno(1,2,3-cd)pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | 2-Methylnaphthalene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Naphthalene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Phenanthrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Pyrene | mg/Kg | Not detected | 0.6 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Surrogate recovery (FBP) | % | 88.1 | 30-115 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Surrogate recovery (NBZ) | % | 84.8 | 23-120 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 8270 | Surrogate recovery (TPH) | % | 102 | 18-137 | 5/5/97 | 5/6/97 |

Run #: 0505931

Instrument: SP

Sequence: S050597

Intals: CC

APPL Inc.

EPA 8270 Semi-Vol PNA Soil

203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: 970505-2177

Batch ID: \$PNAS-050597

| Sample Type | Method | Analyte | Units | Result | Reporting Limit | Extract Date | Analyze Date |
|----------------------------|----------|--------------------------|-------|--------------|-----------------|--------------|--------------|
| EPA 8270 Semi-Vol PNA Soil | | | | | | | |
| BLANK | EPA 8270 | Acenaphthene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Anthracene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Benzo(a)anthracene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Benzo(a)pyrene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Benzo(b)fluoranthene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Benzo(k)fluoranthene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Dibenz(a,h)anthracene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Fluoranthene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Fluorene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Indeno(1,2,3-cd)pyrene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | 2-Methylnaphthalene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Naphthalene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Phenanthrene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Pyrene | mg/Kg | Not detected | 0.6 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Surrogate recovery (FBP) | % | 98.3 | 30-115 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Surrogate recovery (NBZ) | % | 91.5 | 23-120 | 05/05/97 | 05/06/97 |
| BLANK | EPA 8270 | Surrogate recovery (TPH) | % | 113 | 18-137 | 05/05/97 | 05/06/97 |

Run #: 0505S27

Instrument: SP

Sequence: S050597

Initials: CC

Laboratory Control Spike

PNA's by METHOD 8270

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 970505S LCS

Date/Initials: 5/6/97 CC

Extraction Date: 5/5/97

Matrix Type: Soil

| Compound Names Limits () | Spike Level ug/kg | SPK Result ug/kg | SPK% Recovery |
|---------------------------------|----------------------|---------------------|------------------|
| PNA COMPOUNDS | | | |
| Naphthlene (65-135) | 1667 | 1399 | 83.9% |
| Fluorene (65-135) | 1667 | 1591 | 95.4% |
| Pyrene (65-135) | 1667 | 1679 | 101% |
| Benzo(a)Pyrene (65-135) | 1667 | 1507 | 90.4% |
| Indeno(1,2,3-cd)Pyrene (65-135) | 1667 | 1542 | 92.5% |

| Surrogate Limits () | Surr Level ug/kg | SPK Level ug/kg | Surr % Recovery |
|---------------------------|---------------------|--------------------|--------------------|
| Nitrobenzene-d5 (23-120) | 3333 | 2802 | 84.1% |
| 2-Fluorobiphenyl (30-115) | 3333 | 3020 | 90.6% |
| Terphenyl-d14 (18-137) | 3333 | 3258 | 97.7% |

| | |
|------------------|------------|
| | SPK |
| Analysis Date: | 5/6/97 |
| Analysis Time: | 2:54 |
| Instrument: | SP |
| Column: | DB-5MS |
| Sample/Vial# | 0505S28 |
| Extraction Ratio | 1/30 |
| Dilution Factor: | 1 |

Comments: _____

Matrix Spike Recoveries

PNA's by METHOD 8270

APPL, Inc.
203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 50135S MS/MSD

Date/Initials: 5/6/97 CC

Extraction Date: 5/5/97

Matrix Type: Soil

| Compound Names Limits () | SPK Level ug/kg | Matrix ug/kg | SPK Result ug/kg | SPK% Recovery | DUP Result ug/kg | DUP% Recovery | %RPD | RPD Limits |
|---------------------------------|--------------------|-----------------|---------------------|------------------|---------------------|------------------|------|---------------|
| PNA COMPOUNDS | | | | | | | | |
| Naphthlene (65-135) | 1667 | 0.00 | 1444 | 86.6% | 1404 | 84.2% | 2.8% | 35 |
| fluorene (65-135) | 1667 | 0.00 | 1559 | 93.5% | 1467 | 88.0% | 6.1% | 35 |
| Pyrene (65-135) | 1667 | 0.00 | 1621 | 97.3% | 1573 | 94.4% | 3.0% | 35 |
| benzo(a)Pyrene (65-135) | 1667 | 0.00 | 1522 | 91.3% | 1447 | 86.8% | 5.0% | 35 |
| Indeno(1,2,3-cd)Pyrene (65-135) | 1667 | 0.00 | 1653 | 99.2% | 1523 | 91.3% | 8.2% | 35 |

| Surrogate Limits () | Surr Level ug/kg | SPK Result ug/kg | Surr % Recovery | DUP Result ug/kg | DUP% Recovery |
|--------------------------|---------------------|---------------------|--------------------|---------------------|------------------|
| nitrobenzene-d5 (23-120) | 3333 | 2851 | 85.5% | 2774 | 83.2% |
| Fluorobiphenyl (30-115) | 3333 | 3075 | 92.3% | 3008 | 90.2% |
| Terphenyl-d14 (18-137) | 3333 | 3243 | 97.3% | 3148 | 94.4% |

| | PRIMARY | |
|------------------|---------|---------|
| | SPK | DUP |
| Analysis Date: | 5/6/97 | 5/6/97 |
| Analysis Time: | 8:32 | 9:39 |
| Instrument: | SP | SP |
| Column: | DB-5MS | DB-5MS |
| Sample File | 0505S33 | 0505S34 |
| Extraction Ratio | 1/30 | 1/30 |
| Dilution Factor: | 1 | 1 |

Comment _____

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA 3550 TPH Diesel S-GOLDER

Sample ID: B-7
APPL ID: AP50134
ARF: 24988

| APPL_SAMP | Method | Units | Result | Reporting Limit | E_Date | A_Date |
|------------------------------|-----------------------------|-------|--------------|-----------------|--------|--------|
| EPA 3550 TPH Diesel S-GOLDER | | | | | | |
| AP50134 | EPA 3550 Diesel Fuel | ug/kg | Not detected | 1000-5000 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 3550 MOTOR OIL | ug/kg | 47000 | 25000 | 5/5/97 | 5/6/97 |
| AP50134 | EPA 3550 Surrogate recovery | % | 75.8 | 59-107 | 5/5/97 | 5/6/97 |

Run #: 504051.D (DFS)

Instrument: 81002

Sequence: 970504

Initials: MF

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA 3550 TPH Diesel S-GOLDER

Sample ID: B-8
APPL ID: AP50135
ARF: 24988

| APPL_SAMP | Method | Units | Result | Reporting Limit | E_Date | A_Date |
|------------------------------|-----------------------------|-------|--------------|-----------------|--------|--------|
| EPA 3550 TPH Diesel S-GOLDER | | | | | | |
| AP50135 | EPA 3550 Diesel Fuel | ug/kg | Not detected | 5000 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 3550 MOTOR OIL | ug/kg | 156000 | 25000 | 5/5/97 | 5/6/97 |
| AP50135 | EPA 3550 Surrogate recovery | % | DO 72.52 | 59-107 | 5/5/97 | 5/6/97 |
| Run #: <u>504067.0 (DFS)</u> | | | | | | |
| Instrument: <u>FID02</u> | | | | | | |
| Sequence: <u>970504</u> | | | | | | |
| Initials: <u>MT</u> | | | | | | |

APPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

EPA 3550 TPH Diesel S-GOLDER

Sample ID: B-9
APPL ID: AP50136
ARF: 24988

| APPL_SAMP | Method | Units | Result | Reporting Limit | E_Date | A_Date |
|------------------------------|---|-------|--------------|-----------------|--------|--------|
| EPA 3550 TPH Diesel S-GOLDER | | | | | | |
| AP50136 | EPA 3550 Diesel Fuel | ug/kg | Not detected | 1000 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 3550 MOTOR OIL | ug/kg | 13000 | THM 5000 | 5/5/97 | 5/6/97 |
| AP50136 | EPA 3550 ⁶³ Surrogate recovery | % | 54.0 # | 59-107 | 5/5/97 | 5/6/97 |
| Run #: | 504047.D ^{count} _{5/5/97} | | | | | |
| Instrument: | F1002 | | | | | |
| Sequence: | 970504 | | | | | |
| Initials: | MF | | | | | |

TPH EXTRACTABLES Matrix/Control Spike Recovery Form

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 601368 MS/MSD

Date/Initials: 5/6/97 MF

Extraction Date: 5/5/97

Matrix Type: Soil

Units: $\mu\text{g}/\text{kg}$

| Compound Name (see below for limits) | Spike Level | Matrix Results | SPK Results | SPK% Recovery | DUP Results | DUP% Recovery | % RPD |
|---|-------------|----------------|-------------|---------------|-------------|---------------|-------|
| MOTOR OIL | 40000 | 156000.0 | 224000 | 170% | 259000 | 258% | 14% |

| Surrogate (see below for limits) | Spike Level | Matrix Results | SPK Results | SPK% Recovery | DUP Results | DUP% Recovery |
|-------------------------------------|-------------|----------------|-------------|---------------|-------------|---------------|
| O-Terphenyl | 1000 | ***** | 920 | 92.0% | 946 | 94.6% |

| | Primary Column | |
|-------------------|----------------|----------|
| | SPK | DUP |
| Analysis Date: | 5/5/97 | 5/5/97 |
| Analysis Time: | 10:31 PM | 11:07 PM |
| Instrument: | FID02A | FID02A |
| Column: | DB-5 | DB-5 |
| Sample/Vial #: | 44 | 45 |
| Extraction Ratio: | 5/50 | 5/50 |
| Dilution Factor: | 1 | 1 |

Comments: Spike recovery for motor oil fails due to large hit in parent sample.

| | RECOVERY LIMITS | | RPD LIMITS | |
|-------------|-----------------|----------|------------|-------|
| | Soil | Water | Soil | Water |
| Diesel | 41 - 158 | 28 - 128 | 35 | 24 |
| O-Terphenyl | 59 - 107 | 40 - 121 | NA | NA |

SOIL Diesel limits established 09-19-95 to 10-03-95, RPD 04-21-95 to 09-05-95
 WATER Diesel limits established 08-24-95 to 10-09-95, RPD 05-10-95 to 08-11-95
 Surrogate limits established (soil) 11-9-95 to 3-5-96 (water) 11-29-95 to 4-1-96
 NA = not applicable

TPH EXTRACTABLES Matrix/Control Spike Recovery Form

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 970608S LCS

Date/Initials: 6/6/97 MF

Extraction Date: 5/5/97

Matrix Type: Soil

Units: $\mu\text{g}/\text{kg}$

| Compound Name (see below for limits) | Spike Level | Matrix Results | SPK Results | SPK% Recovery |
|---|-------------|----------------|-------------|---------------|
| MOTOR OIL | 40000 | 0.0 | 39500 | 98.8% |

| Surrogate (see below for limits) | Spike Level | Matrix Results | SPK Results | SPK% Recovery |
|-------------------------------------|-------------|----------------|-------------|---------------|
| O-Terphenyl | 1000 | ***** | 884 | 88.4% |

| | Primary Column | |
|-------------------|----------------|--|
| | SPK | |
| Analysis Date: | 5/5/97 | |
| Analysis Time: | 9:54 PM | |
| Instrument: | FID02A | |
| Column: | DB-5 | |
| Sample/Vial #: | 43 | |
| Extraction Ratio: | 5/50 | |
| Dilution Factor: | 1 | |

Comments:

| | RECOVERY LIMITS | | RPD LIMITS | |
|-------------|-----------------|----------|------------|-------|
| | Soil | Water | Soil | Water |
| Diesel | 41 - 158 | 28 - 128 | 35 | 24 |
| O-Terphenyl | 58 - 107 | 40 - 121 | NA | NA |

SOIL Diesel limits established 09-19-95 to 10-03-95, RPD 04-21-95 to 09-06-95
WATER Diesel limits established 08-24-95 to 10-09-95, RPD 06-10-95 to 08-11-95
Surrogate limits established (soil) 11-9-95 to 3-5-96 (water) 11-29-95 to 4-1-96
NA = not applicable

APPL Inc.
 303 West Swift Avenue
 Fresno, CA 93722

EPA 8260 Golder.

Sample ID: B-7
 APPL ID: AP50134
 ARF: 24988

| APL_SAMP | Method | Units | Result | Reporting Limit | E_Date | A_Date |
|------------------|----------|-------|--------------|-----------------|--------|--------|
| EPA 8260 Golder. | | | | | | |
| AP50134 | EPA 8260 | ug/Kg | 12 J | 20 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | % | 61.6 | 59-113 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | % | 89.3 | 70-121 | 5/4/97 | 5/4/97 |
| AP50134 | EPA 8260 | % | 92.0 | 84-138 | 5/4/97 | 5/4/97 |

Run #: 0504C12Instrument: ChicoSequence: 0050497Initials: DT

APPL Inc.
203 West Swift Avenue
Fresno, CA 93722

EPA 8260 Golder.

Sample ID: B-8
APPL ID: AP50135
ARF: 24988

| PPL_SAMP | Method | Units | Result | Reporting Limit | E_Date | A_Date | |
|------------------|----------|---------------------------|--------|-----------------|--------|--------|--------|
| EPA 8260 Golder. | | | | | | | |
| AP50135 | EPA 8260 | Acetone | ug/Kg | 43 | 20 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Benzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Bromodichloromethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Bromoform | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Bromomethane | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 2-Butanone (NT) | ug/Kg | 14 | 10 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Carbon tetrachloride | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Chlorobenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Chloroethane | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 2-Chloroethylvinyl ether | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Chloroform | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Chloromethane | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Dibromochloromethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,2-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,3-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,4-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,1-Dichloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,2-Dichloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,1-Dichloroethene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | trans-1,2-Dichloroethene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,2-Dichloropropane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | cis-1,3-Dichloropropene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | trans-1,3-Dichloropropene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Ethylbenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Methylene chloride | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,1,2,2-Tetrachloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Tetrachloroethene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Toluene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,1,1-Trichloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | 1,1,2-Trichloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Trichloroethene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Trichlorofluoromethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Vinyl chloride | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Xylenes | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Surrogate recovery (BFB) | % | 93.2 | 59-113 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Surrogate recovery (DCE) | % | 93.5 | 70-121 | 5/4/97 | 5/4/97 |
| AP50135 | EPA 8260 | Surrogate recovery (TOL) | % | 97.2 | 84-138 | 5/4/97 | 5/4/97 |

Run #: 0504015
Instrument: Chico
Sequence: 050497
Initials: DA

APPL Inc.
 103 West Swift Avenue
 Fresno, CA 93722

EPA 8260 Golder.

Sample ID: B-9
 APPL ID: AP50136
 ARF: 24988

| APL_SAMP | Method | | Units | Result | Reporting Limit | E_Date | A_Date |
|------------------|----------|---------------------------|-------|--------------|-----------------|--------|--------|
| EPA 8260 Golder. | | | | | | | |
| AP50136 | EPA 8260 | Acetone | ug/Kg | 100 | 20 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Benzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Bromodichloromethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Bromoform | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Bromomethane | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 2-Butanone (NT) | ug/Kg | 28 | 10 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Carbon tetrachloride | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Chlorobenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Chloroethane | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 2-Chloroethylvinyl ether | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Chloroform | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Chloromethane | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Dibromochloromethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,2-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,3-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,4-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,1-Dichloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,2-Dichloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,1-Dichloroethene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | trans-1,2-Dichloroethene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,2-Dichloropropane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | cis-1,3-Dichloropropene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | trans-1,3-Dichloropropene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Ethylbenzene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Methylene chloride | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,1,2,2-Tetrachloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Tetrachloroethene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Toluene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,1,1-Trichloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | 1,1,2-Trichloroethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Trichloroethene | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Trichlorofluoromethane | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Vinyl chloride | ug/Kg | Not detected | 10 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Xylenes | ug/Kg | Not detected | 5.0 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Surrogate recovery (RRR) | % | 79.5 | 59-113 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Surrogate recovery (DGL) | % | 80.0 | 70-124 | 5/4/97 | 5/4/97 |
| AP50136 | EPA 8260 | Surrogate recovery (TOL) | % | 86.9 | 84-138 | 5/4/97 | 5/4/97 |

Run #: 0504016

Instrument: Chico

Sequence: 0050497

Initials: DA

EPA 8260 Volatile Organics S

PPL Inc.
4203 West Swift Avenue
Fresno, CA 93722

Blank Name/QCG: 970504-2156
Batch ID: 8260S-050497

| Sample Type | Method | Analyte | Units | Result | Reporting Limit | Extract Date | Analyze Date |
|------------------------------|----------|---------------------------|-------|--------------|-----------------|--------------|--------------|
| EPA 8260 Volatile Organics S | | | | | | | |
| BLANK | EPA 8260 | Acetone | ug/Kg | Not detected | 20 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Benzene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Bromodichloromethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Bromoform | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Bromomethane | ug/Kg | Not detected | 10 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 2-Butanone (NT) | ug/Kg | Not detected | 10 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Carbon tetrachloride | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Chlorobenzene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Chloroethane | ug/Kg | Not detected | 10 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 2-Chloroethylvinyl ether | ug/Kg | Not detected | 10 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Chloroform | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Chloromethane | ug/Kg | Not detected | 10 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Dibromochloromethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,2-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,3-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,4-Dichlorobenzene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,1-Dichloroethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,2-Dichloroethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,1-Dichloroethene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | trans-1,2-Dichloroethene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,2-Dichloropropane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | cis-1,3-Dichloropropene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | trans-1,3-Dichloropropene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Ethylbenzene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Methylene chloride | ug/Kg | Not detected | 10 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,1,2,2-Tetrachloroethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Tetrachloroethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Toluene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,1,1-Trichloroethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | 1,1,2-Trichloroethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Trichloroethene | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Trichlorofluoromethane | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Vinyl chloride | ug/Kg | Not detected | 10 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Xylenes | ug/Kg | Not detected | 5.0 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Surrogate recovery (BFB) | % | 92.7 | 59-113 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Surrogate recovery (DCE) | % | 85.2 | 70-121 | 05/04/97 | 05/04/97 |
| BLANK | EPA 8260 | Surrogate recovery (TOL) | % | 97.9 | 84-138 | 05/04/97 | 05/04/97 |

Run #: 050497 09 21 5.5.97
Instrument: Cniec
Sequence: C050497
Initials: ml

Laboratory Control Spike

METHOD 8260

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 050497SC-LCS1

Date/Initials: 5/5/97 MK

Extraction Date: 5/4/97

Matrix Type: Soil (Low Level)

| Compound Names Limits () | Spike Level µg/Kg | SPK µg/Kg | SPK% Recovery |
|---------------------------------|----------------------|--------------|------------------|
| VOLATILE SPIKE COMPOUNDS | | | |
| 1,1-Dichloroethene (59-172) | 50.0 | 43.28 | 86.6% |
| Benzene (66-142) | 50.0 | 47.05 | 94.1% |
| Trichloroethene (62-137) | 50.0 | 46.52 | 93.0% |
| Toluene (59-139) | 50.0 | 46.60 | 93.2% |
| Chlorobenzene (60-133) | 50.0 | 49.76 | 99.5% |

| Surrogate Limits () | Spike Level µg/Kg | SPK µg/Kg | SPK% Recovery |
|--------------------------------|----------------------|--------------|------------------|
| 1,2-Dichloroethane-d4 (70-121) | 50.0 | 43.28 | 86.6% |
| Toluene-d8 (84-138) | 50.0 | 48.52 | 97.0% |
| Bromofluorobenzene (59-113) | 50.0 | 46.02 | 92.0% |

| | | |
|------------------|---------|-----------------|
| Analysis Date: | SPK | Comments: _____ |
| Analysis Time: | 5/4/97 | |
| Instrument: | 16:07 | |
| Column: | Chico | |
| Sample/Vial# | RTX-VOL | |
| Extraction Ratio | 0505C10 | |
| Dilution Factor: | 5g | |
| | none | |

Matrix Spike Recoveries

METHOD 8260

APPL, Inc.
4203 West Swift Avenue
Fresno, CA 93722

APPL Sample #: 50134S MS/MSD

Date/Initials: 5/5/97

Extraction Date: 5/4/97 MK

Matrix Type: Soil (Low Level)

| Compound Names Limits () | SPK Level ug/Kg | Matrix ug/Kg | SPK ug/Kg | SPK% Recovery | DUP ug/Kg | DUP% Recovery | %RPD | RPD Limits |
|---------------------------------|--------------------|-----------------|--------------|------------------|--------------|------------------|------|---------------|
| VOLATILE SPIKE COMPOUNDS | | | | | | | | |
| 1,1-Dichloroethene (59-172) | 50 | 0.00 | 46.69 | 93.4% | 47.01 | 94.0% | 0.7% | 22 |
| Benzene (66-142) | 50 | 0.00 | 47.02 | 94.0% | 44.03 | 88.1% | 6.6% | 21 |
| Trichloroethene (62-137) | 50 | 0.00 | 39.02 | 78.0% | 35.45 | 70.9% | 10% | 24 |
| Toluene (59-139) | 50 | 0.00 | 40.39 | 80.8% | 36.01 | 72.0% | 11% | 21 |
| Chlorobenzene (60-133) | 50 | 0.00 | 39.35 | 78.7% | 34.86 | 69.7% | 12% | 21 |

| Surrogate Limits () | SPK Level ug/Kg | Matrix ug/Kg | SPK Level ug/Kg | SPK% Recovery | DUP ug/kg | DUP% Recovery |
|--------------------------------|--------------------|-----------------|--------------------|------------------|--------------|------------------|
| 1,2-Dichloroethane-d4 (70-121) | 50 | ***** | 45.68 | 91.4% | 44.61 | 89.2% |
| Toluene-d8 (84-138) | 50 | ***** | 46.95 | 93.9% | 47.32 | 94.6% |
| Bromofluorobenzene (59-113) | 50 | ***** | 35.99 | 72.0% | 33.59 | 67.2% |

| PRIMARY | |
|---------|---------|
| SPK | DUP |
| 5/4/97 | 5/4/97 |
| 6:51 PM | 7:25 PM |
| Chico | Chico |
| RTX-Vol | RTX-Vol |
| 0504C13 | 0504C14 |
| 5.0g | 5.0g |
| none | none |

Comment _____

Analysis Date:

Analysis Time:

Instrument:

Column:

Sample/Vial#

Extraction Ratio

Dilution Factor: