

LIMITED PHASE II
ENVIRONMENTAL SITE ASSESSMENT REPORT
1123 SOUTH HATCHER AVENUE
CITY OF INDUSTRY,
LOS ANGELES COUNTY,
CALIFORNIA

Project No. 300000291

September 5, 2002

Prepared For

Industry Urban Development Agency
c/o CNC Engineering
255 North Hacienda Boulevard, Suite 222

September 5, 2002

Project No. 300000291

To: Industry Urban Development Agency
c/o CNC Engineering
255 North Hacienda Boulevard, Suite 222
City of Industry, California 91744

Attention: Mr. Dale Masl

Subject: Limited Phase II Environmental Site Assessment Report, 1123 South Hatcher Avenue, City of Industry, Los Angeles County, California

Introduction

Gradient Engineers, Inc., (Gradient) is pleased to present this Limited Phase II Environmental Site Assessment (ESA) Report for soil sampling activities conducted at the subject site located southwest of the intersection of South Hatcher Avenue and Railroad Street in the City of Industry, Los Angeles County, California (see Figure 1 – Site Location Map). The Site is associated with APN 8264-004-076. One address was associated with this parcel, 1123 South Hatcher Avenue; however, this address is also used by Wholesale Roofing Supplies which occupies parcels -077 and -066 adjacent to and southeast of the Site. The purpose of this Limited Phase II ESA was to further investigate the areas of the concrete patches and the inaccessible areas observed by Gradient and identified in the Phase I ESA conducted for the facility in July 2002 for signs of potential current or past chemical usage/handling.

Background

In July 2002, Gradient performed a Phase I ESA for the Site in conformance with the scope and limitations of American Society Testing and Materials (ASTM) Practice E1527-00. Based on the findings of the Phase I ESA, our recommendations included:

1. "Further investigation in the area of the concrete patches. This can include further interviews with former owners, a review of building permits, a geophysical survey, and/or potholing to determine if these patches were associated with an underground structure. If any subsurface structures are determined to exist in these areas, these should be removed in accordance with current regulatory guidelines. This may also include a soil sampling program to determine if the subsurface has been impacted as a result of the subsurface structure."
2. "The metal building which was inaccessible during the site visit should be inspected since it has been present at the site since approximately 1970 (prior to the current owner)."

Gradient also was provided access to the inaccessible areas identified in the Phase I ESA including the metal building and the AT& T leased portion of the warehouse. A stained area was observed on the ground surface in the metal building, therefore a soil boring was advanced in this area. A fuel tank or emergency generator was not observed in the AT&T leased portion of the warehouse. This area was filled with cellular phone-related computer equipment.

Laboratory Analysis

Select geoprobe soil samples were analyzed for carbon chain range hydrocarbons (C6 – C35) by California Department of Health Services (CADHS) Method "Total Petroleum Hydrocarbons". Seventeen soil samples including three soil samples from soil boring GP1 and two soil samples from each of the remaining soil borings (GP2 through GP8) were analyzed during this investigation. The onsite mobile laboratory retained the remaining soil samples. Results of laboratory analysis of the soil samples are summarized in Table 1. Copies of the laboratory reports and chain of custody records are included in Appendix C.

Results of Investigation

Geology and Hydrogeology

Based the results from this investigation, the top two to six inches below the ground surface of the area of the site investigation is concrete. Beneath the concrete layer, the site is underlain by sandy silts and clay to approximately 10 feet bgs, and a mixture of sandy clays and sandy silts from approximately 10 feet bgs to approximately 20 feet bgs. Groundwater was not encountered during this investigation.

According to a geotechnical report prepared for the Site by Norcal Engineering in 1999, depth to groundwater is approximately 40 feet bgs (Norcal Engineering, 1999). Groundwater is assumed to flow to the northwest, generally following topography.

Geoprobe Soil Sample Results

Total petroleum hydrocarbons were not detected in any of the analyzed soil samples at concentrations above laboratory detection limits.

Conclusions

Based on analytical results obtained from soil samples collected in the areas of the five concrete patches, stained areas around the trash enclosure and inside the metal structure along with visual observations made during this investigation, the soils beneath these areas do not appear to be impacted by petroleum hydrocarbons to the depth investigated.

In addition, the site inspection of the inaccessible areas did not identify any additional potential environmental concerns.



The building permit which identified USTs is likely associated with the adjacent property to the southeast, also addressed 1123 South Hatcher Avenue. Therefore the USTs are not likely located on the subject property. Gradient observed the area where the USTs were reportedly installed in 1964 and evidence of the presence or absence of the USTs was not observed. Documentation regarding removal of the USTs was not found during the Phase I or Phase II ESAs.

Recommendations

Based on the results of this investigation, Gradient concludes that the areas identified in the Phase I ESA have been adequately assessed and further investigation is not recommended at this time.

In general, observations should be made during any future site development for areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, staining soil or odorous soils. Should such materials be encountered, further investigation and analysis may be necessary at that time.

If you have any questions regarding this report, please contact either of the undersigned or Kris Lutton, R.G. at (949) 477-0555. We appreciate this opportunity to be of continued service.

Sincerely,

GRADIENT ENGINEERS, INC.



Matthew Patton, REA I 7658
Sr. Staff Engineer



Kristin Stout, REA I 7604
Project Manager

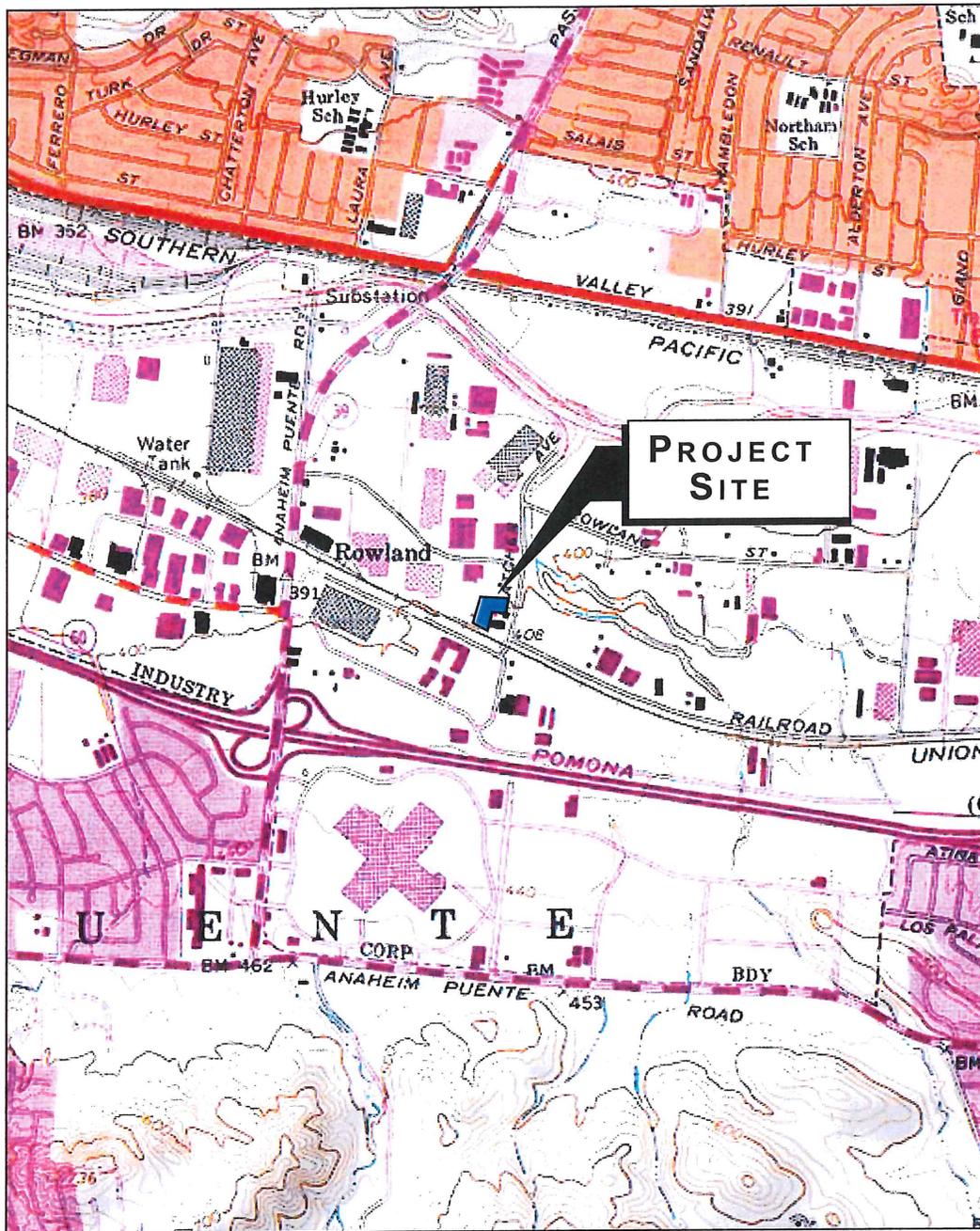
Attachments: Figure 1 - Site Location Map
Figure 2 - Site Map Showing Soil Sampling Locations

Table 1 - Carbon Chain Soil Sample Results

Appendix A - References
Appendix B - Boring Logs
Appendix C - Laboratory Reports and Chain of Custody Records

Distribution: (3) Addressee
(1) Mr. Mike Grace, Leighton and Associates, Inc.





TN * MN
13 1/2°

0 5 1 MILE
0 1000 FEET 0 500 1000 METERS

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SITE LOCATION MAP

1123 South Hatcher Avenue
City of Industry, California



PROJECT No.

30000291

DATE

SEPTEMBER 2002

FIGURE NO. 1

17438 Railroad
Industrial

3 Empty
55 Gallon
Drums

17380 Railroad Street
Rods Food Products

Warehouse Building

Cellular
Tower

AT&T
Area

LEGEND

- GP1 ● GeoProbe Sample Locations,
Gradient August 22, 2002
- T Transformer
- Site Boundary
- ▨ Concrete Patches



GRADIENT
ENGINEERS INC
*Environmental Engineering and
Construction Services*

Project No.	<u>30000291</u>
Approx. Scale	<u>Not To Scale</u>
Engr./Geol.	<u>MMP/KAS</u>
Drafted By	<u>HCB</u>
Date	<u>SEPTEMBER 2002</u>

SITE PLAN

1123 South Hatcher Avenue
City of Industry, California

FIGURE NO. 2

TABLE 1: CARBON CHAIN SOIL SAMPLE RESULTS

Sample ID	Sample Date	Carbon Chain Range										
		C6-C7	C8-C9	C10-C11	C12-C13	C14-C15	C16-C17	C18-C19	C20-C23	C24-C27	C28-C31	C32-C35
Reporting Limit (mg/kg)		10	10	10	10	10	10	10	10	10	10	10
GP1-5'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP1-10'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP1-15'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP2-5'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP2-15'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP3-10'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP3-20'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP4-10'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP4-20'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP5-10'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP5-20'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP6-10'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP6-20'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP7-10'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP7-20'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP8-10'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP8-20'	08/22/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Carbon Chain analyzed by CADHS "Total Petroleum Hydrocarbons"

ND = not detected

mg/kg = milligrams per kilograms or parts per million

APPENDIX A

REFERENCES

Gradient Engineers Inc., Phase I Environmental Site Assessment Report, Assessor Parcel Number 8264-004-076, 1123 South Hatcher Avenue, City of Industry, Los Angeles County, California, Project No. 300000272, July 2, 2002.

Gradient Engineers Inc., Addendum to the Phase I Environmental Site Assessment Report, Assessor Parcel Number 8264-004-076, 1123 South Hatcher Avenue, City of Industry, Los Angeles County, California, Project No. 300000272, August 7, 2002.

Norcal Engineering, Geotechnical Engineering Investigation, O'Connell Development, 1123 South Hatcher Avenue, City of Industry, California, Project No. 8400-99, October 22, 1999.



BORING LOG

PROJECT NUMBER 300000291 BORING/WELL NUMBER GP1
 PROJECT NAME City of Industry, C/O CNC Engineering DATE DRILLED 8/22/2002
 LOCATION 1123 S. Hatcher Street, City of Industry CASING TYPE/DIAMETER NA / NA
 DRILLING METHOD Geoprobe SCREEN TYPE/SLOT NA / NA
 SAMPLING METHOD Direct Push GRAVEL PACK TYPE NA
 GROUND ELEVATION NA GROUT TYPE/QUANTITY NA / NA
 TOP OF CASING NA DEPTH TO WATER _____
 LOGGED BY MMP GROUND WATER ELEVATION _____
 REMARKS Hand augered first 5' bgs.

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	PID (ppm)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								@Surface: 4" CONCRETE Core. Gravelly SILTY SAND, brown, moist, fine to coarse size grain.
5			GP1-5'		0	GW		@5': Gravelly SILTY SAND, light brown, moist, fine to coarse size grain.
10			GP1-10'		0	SM CL		@10': SANDY CLAY, dark brown, moist, fine size sand, stiff.
15			GP1-15'		0	SM ML		@15': SANDY SILT, light brown, moist, predominantly fine size grain.
20			GP1-20'		0	SM ML		@20': SANDY SILT, light brown, moist, predominantly fine size grain.
25								Total Depth: 21.6' bgs. Borehole backfilled with bentonite chip and capped with concrete.
30								

GE_SBL_30000291.rpt J LAEWNN01.GDT 8/29/02

BORING LOG

PROJECT NUMBER 300000291 BORING/WELL NUMBER GP2
 PROJECT NAME City of Industry, C/O CNC Engineering DATE DRILLED 8/22/2002
 LOCATION 1123 S. Hatcher Street, City of Industry CASING TYPE/DIAMETER NA / NA
 DRILLING METHOD Geoprobe SCREEN TYPE/SLOT NA / NA
 SAMPLING METHOD Direct Push GRAVEL PACK TYPE NA
 GROUND ELEVATION NA GROUT TYPE/QUANTITY NA / NA
 TOP OF CASING NA DEPTH TO WATER _____
 LOGGED BY MMP GROUND WATER ELEVATION _____
 REMARKS Hand augered first 5' bgs.

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	PID (ppm)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								@Surface: 6" CONCRETE Core.
5			GP2-5'	0		GW		@5': Gravelly SANDY SILT, reddish brown, moist, fine to medium size grain.
10			GP2-10'	0		SM CL		@10': SANDY CLAY, reddish brown, moist, predominantly fine size grain.
15			GP2-15'	0		SM CL		@15': SANDY CLAY, reddish brown, moist, predominantly fine size grain.
20			GP2-20'	0		ML SM		@20': SILTY SAND, brown, moist, predominantly fine size grain.
25								Total Depth: 21.6' bgs. Borehole backfilled with bentonite chip and capped with concrete.
30								

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BORING LOG

PROJECT NUMBER	<u>300000291</u>	BORING/WELL NUMBER	<u>GP3</u>
PROJECT NAME	<u>City of Industry, C/O CNC Engineering</u>	DATE DRILLED	<u>8/22/2002</u>
LOCATION	<u>1123 S. Hatcher Street, City of Industry</u>	CASING TYPE/DIAMETER	<u>NA / NA</u>
DRILLING METHOD	<u>Geoprobe</u>	SCREEN TYPE/SLOT	<u>NA / NA</u>
SAMPLING METHOD	<u>Direct Push</u>	GRAVEL PACK TYPE	<u>NA</u>
GROUND ELEVATION	<u>NA</u>	GROUT TYPE/QUANTITY	<u>NA / NA</u>
TOP OF CASING	<u>NA</u>	DEPTH TO WATER	<u> </u>
LOGGED BY	<u>MMP</u>	GROUND WATER ELEVATION	<u> </u>
REMARKS	<u>Hand augered first 5' bgs.</u>		

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	PID (ppm)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
						SM ML		@Surface: 3" CONCRETE Core.
5			GP3-5'		0	SM ML		@5': SANDY SILT, reddish brown, moist, predominantly fine to medium size grain.
10			GP3-10'		0	CL		@10': CLAY, dark brown, moist, predominantly fine size grain, stiff.
15			GP3-15'		0	SM ML		@15': SANDY SILT, reddish brown, moist, predominantly fine size grain.
20			GP3-20'		0	ML SM		@20': SILTY SAND, light brown, moist, predominantly fine size grain.
25								Total Depth: 21.6' bgs. Borehole backfilled with bentonite chip and capped with concrete.
30								

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BORING LOG

PROJECT NUMBER 300000291 BORING/WELL NUMBER GP4
 PROJECT NAME City of Industry, C/O CNC Engineering DATE DRILLED 8/22/2002
 LOCATION 1123 S. Hatcher Street, City of Industry CASING TYPE/DIAMETER NA / NA
 DRILLING METHOD Geoprobe SCREEN TYPE/SLOT NA / NA
 SAMPLING METHOD Direct Push GRAVEL PACK TYPE NA
 GROUND ELEVATION NA GROUT TYPE/QUANTITY NA / NA
 TOP OF CASING NA DEPTH TO WATER _____
 LOGGED BY MMP GROUND WATER ELEVATION _____
 REMARKS Hand augered first 5' bgs.

DEPTH (ft BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	PID (ppm)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
						SM ML		@Surface: 2" CONCRETE Core.
5			GP4-5'		0	SM ML		@5': SANDY SILT, reddish brown, moist, predominantly fine size grain, some medium size grain.
10			GP4-10'		0	CL		@10': CLAY, dark brown, moist, stiff.
15			GP4-15'		0	ML SM		@15': SILTY SAND, light brown, moist, fine size grain.
20			GP4-20'		0	ML SM		@20': SILTY SAND, light brown, moist, fine size grain.
25								Total Depth: 21.6' bgs. Borehole backfilled with bentonite chip and capped with concrete.
30								

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BORING LOG

PROJECT NUMBER	<u>300000291</u>	BORING/WELL NUMBER	<u>GP5</u>
PROJECT NAME	<u>City of Industry, C/O CNC Engineering</u>	DATE DRILLED	<u>8/22/2002</u>
LOCATION	<u>1123 S. Hatcher Street, City of Industry</u>	CASING TYPE/DIAMETER	<u>NA / NA</u>
DRILLING METHOD	<u>Geoprobe</u>	SCREEN TYPE/SLOT	<u>NA / NA</u>
SAMPLING METHOD	<u>Direct Push</u>	GRAVEL PACK TYPE	<u>NA</u>
GROUND ELEVATION	<u>NA</u>	GROUT TYPE/QUANTITY	<u>NA / NA</u>
TOP OF CASING	<u>NA</u>	DEPTH TO WATER	<u> </u>
LOGGED BY	<u>MMP</u>	GROUND WATER ELEVATION	<u> </u>
REMARKS	<u>Hand augered first 5' bgs.</u>		

DEPTH (ft. BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	PID (ppm)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
						SM CL		@Surface: 3" CONCRETE Core.
5			GP5-5'		0	SM CL		@5': SANDY CLAY, brown, moist, fine size sand, stiff.
10			GP5-10'		0	CL		@10': CLAY, dark brown, moist, some fine sand grain, stiff.
15			GP5-15'		0	SM ML		@15': SANDY SILT, light brown, moist, predominantly fine size grain.
20			GP5-20'		0	GW		@20': GRAVELLY SAND, light brown, moist, fine to coarse size grain.
25								Total Depth: 21.6' bgs. Borehole backfilled with bentonite chip and capped with concrete.
30								

GE_SBL_30000291.GPJ LAEWINN01.GDT 8/29/02

BORING LOG

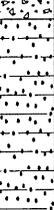
PROJECT NUMBER	<u>300000291</u>	BORING/WELL NUMBER	<u>GP7</u>
PROJECT NAME	<u>City of Industry, C/O CNC Engineering</u>	DATE DRILLED	<u>8/22/2002</u>
LOCATION	<u>1123 S. Hatcher Street, City of Industry</u>	CASING TYPE/DIAMETER	<u>NA / NA</u>
DRILLING METHOD	<u>Geoprobe</u>	SCREEN TYPE/SLOT	<u>NA / NA</u>
SAMPLING METHOD	<u>Direct Push</u>	GRAVEL PACK TYPE	<u>NA</u>
GROUND ELEVATION	<u>NA</u>	GROUT TYPE/QUANTITY	<u>NA / NA</u>
TOP OF CASING	<u>NA</u>	DEPTH TO WATER	<u> </u>
LOGGED BY	<u>MMP</u>	GROUND WATER ELEVATION	<u> </u>
REMARKS	<u>Hand augered first 5' bgs.</u>		

DEPTH (ft BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	PID (ppm)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
						SM CL		@Surface: 3" CONCRETE Core.
5			GP7-5'		0	SM CL		@5': SANDY CLAY, dark brown, moist, predominantly fine size Sand, stiff.
10			GP7-10'		0	CL		@10': CLAY, dark brown, moist, stiff.
15			GP7-15'		0	SM		@15': SAND, light reddish brown, moist, fine to coarse size grain.
20			GP7-20'		0	SW		@20': Gravelly SAND, reddish brown, moist, fine to medium size grain.
25								Total Depth: 21.6' bgs. Borehole backfilled with bentonite chip and capped with concrete.
30								

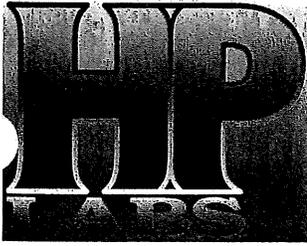
GE_SBL_30000291.GPJ LAEWNN01.GDT 8/29/02

BORING LOG

PROJECT NUMBER 30000291 BORING/WELL NUMBER GP8
 PROJECT NAME City of Industry, C/O CNC Engineering DATE DRILLED 8/22/2002
 LOCATION 1123 S. Hatcher Street, City of Industry CASING TYPE/DIAMETER NA / NA
 DRILLING METHOD Geoprobe SCREEN TYPE/SLOT NA / NA
 SAMPLING METHOD Direct Push GRAVEL PACK TYPE NA
 GROUND ELEVATION NA GROUT TYPE/QUANTITY NA / NA
 TOP OF CASING NA DEPTH TO WATER _____
 LOGGED BY MMP GROUND WATER ELEVATION _____
 REMARKS Hand augered first 5' bgs. Inside metal structure.

DEPTH (ft BGL)	BLOW COUNTS	RECOVERY (inches)	SAMPLE ID.	EXTENT	PID (ppm)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
								@Surface: 6" CONCRETE Core.
5			GP8-5'		0	SM ML		@5': SANDY SILT, reddish brown, moist, predominantly fine size Sand.
10			GP8-10'		0	ML		@10': SILT, brown, moist.
15			GP8-15'		0	ML		@15': SILT, reddish brown, moist.
20			GP8-20'		0	CL		@20': CLAY, brown, moist, stiff.
25								Total Depth: 21.6' bgs. Backfilled with bentonite chip and capped with concrete.
30								

GE_SBL_30000291.GPJ_LAEWNN01.GDT 8/29/02



8/27/2002

Gradient Engineers
17881 Cowan, Suite 140
Irvine, CA 92614

Project Name: 1123 S. Hatcher Ave.
Project No.: 300000291

Attention: Ms. Kristin Stout

The following sample(s) were received and analyzed:

<u>Date Received</u>	<u>Quantity</u>	<u>Matrix</u>
8/22/2002	17	Soil

The samples were analyzed by one or more of the EPA methodologies or equivalent methods listed below.

TPH -- CA DHS "Total Petroleum Hydrocarbons"

The results are included with a summary of the quality control procedures. Please note that the symbol "nd" indicates a value below the reporting limit for the particular compound in the sample.

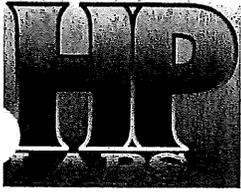
Please feel free to call us to discuss any part of this report or to schedule future projects.

Sincerely,


James E. Picker, Ph.D.
Managing Partner

Mobile One Laboratories is certified by the California Department of Health Services (certificate #s: 1194, 1561, 1921, 2088, 2278).

HP Labs Project # GR082202-L3



Report Summary

Client: Gradient Engineers
Project: 1123 S. Hatcher Ave.

Matrix: soil
Units: mg/kg

Date Analyzed: 8/22/2002 Detection Limits, see below					
SAMPLE I.D.=	GP1-5	GP1-10	GP1-15	GP2-5	GP2-15
Carbon Range:					
C ₆ -C ₇	nd	nd	nd	nd	nd
C ₈ -C ₉	nd	nd	nd	nd	nd
C ₁₀ -C ₁₁	nd	nd	nd	nd	nd
C ₁₂ -C ₁₃	nd	nd	nd	nd	nd
C ₁₄ -C ₁₅	nd	nd	nd	nd	nd
C ₁₆ -C ₁₇	nd	nd	nd	nd	nd
C ₁₈ -C ₁₉	nd	nd	nd	nd	nd
C ₂₀ -C ₂₃	nd	nd	nd	nd	nd
C ₂₄ -C ₂₇	nd	nd	nd	nd	nd
C ₂₈ -C ₃₁	nd	nd	nd	nd	nd
C ₃₂ -C ₃₅	nd	nd	nd	nd	nd
Total TPH	nd	nd	nd	nd	nd

Detection Limits: C₆-C₁₂: 10ppm; C₁₃-C₃₆: 10ppm

Notes:

1. Quantitation of C₆ thru C₁₂ and detection limits are based on Gasoline calibration curves.
2. Quantitation of C₁₃ thru C₃₆ and detection limits are based on Diesel calibration curves.

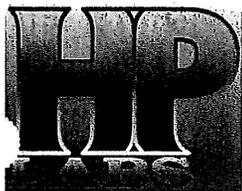
Footnotes:

nd = Not found above the detection limit.

* = Sample dilution was required. Detection limits were adjusted accordingly.

E = Analyte amount exceeds calibration range. Amount quantitated by extrapolation.

Analyses performed by: T. Davis
GR082202-L3



Report Summary

Client: Gradient Engineers
Project: 1123 S. Hatcher Ave.

Matrix: soil
Units: mg/kg

Date Analyzed: 8/22/2002					
Detection Limits, see below					
SAMPLE I.D.=	GP3-10	GP3-20	GP4-10	GP4-20	
Carbon Range:					
C ₆ -C ₇	nd	nd	nd	nd	
C ₈ -C ₉	nd	nd	nd	nd	
C ₁₀ -C ₁₁	nd	nd	nd	nd	
C ₁₂ -C ₁₃	nd	nd	nd	nd	
C ₁₄ -C ₁₅	nd	nd	nd	nd	
C ₁₆ -C ₁₇	nd	nd	nd	nd	
C ₁₈ -C ₁₉	nd	nd	nd	nd	
C ₂₀ -C ₂₃	nd	nd	nd	nd	
C ₂₄ -C ₂₇	nd	nd	nd	nd	
C ₂₈ -C ₃₁	nd	nd	nd	nd	
C ₃₂ -C ₃₅	nd	nd	nd	nd	
Total TPH	nd	nd	nd	nd	

Detection Limits: C₆-C₁₂: 10ppm; C₁₃-C₃₆: 10ppm

Notes:

1. Quantitation of C₆ thru C₁₂ and detection limits are based on Gasoline calibration curves.
2. Quantitation of C₁₃ thru C₃₆ and detection limits are based on Diesel calibration curves.

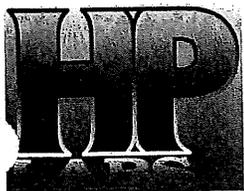
Footnotes:

nd = Not found above the detection limit.

* = Sample dilution was required. Detection limits were adjusted accordingly.

E = Analyte amount exceeds calibration range. Amount quantitated by extrapolation.

Analyses performed by: T. Davis
GR082202-L3



Report Summary

Client: Gradient Engineers
Project: 1123 S. Hatcher Ave.

Matrix: soil
Units: mg/kg

SAMPLE I.D.=	GP5-10	GP5-20	GP6-10	GP6-20	
Carbon Range:					
C ₆ -C ₇	nd	nd	nd	nd	
C ₈ -C ₉	nd	nd	nd	nd	
C ₁₀ -C ₁₁	nd	nd	nd	nd	
C ₁₂ -C ₁₃	nd	nd	nd	nd	
C ₁₄ -C ₁₅	nd	nd	nd	nd	
C ₁₆ -C ₁₇	nd	nd	nd	nd	
C ₁₈ -C ₁₉	nd	nd	nd	nd	
C ₂₀ -C ₂₃	nd	nd	nd	nd	
C ₂₄ -C ₂₇	nd	nd	nd	nd	
C ₂₈ -C ₃₁	nd	nd	nd	nd	
C ₃₂ -C ₃₅	nd	nd	nd	nd	
Total TPH	nd	nd	nd	nd	

Detection Limits: C₆-C₁₂: 10ppm; C₁₃-C₃₆: 10ppm

Notes:

1. Quantitation of C₆ thru C₁₂ and detection limits are based on Gasoline calibration curves.
2. Quantitation of C₁₃ thru C₃₆ and detection limits are based on Diesel calibration curves.

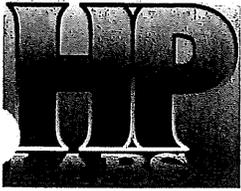
Footnotes:

nd = Not found above the detection limit.

* = Sample dilution was required. Detection limits were adjusted accordingly.

E = Analyte amount exceeds calibration range. Amount quantitated by extrapolation.

Analyses performed by: T. Davis
GR082202-L3



Report Summary

Client: Gradient Engineers
Project: 1123 S. Hatcher Ave.

Matrix: soil
Units: mg/kg

Date Analyzed: 8/22/2002 Detection Limits, see below					
SAMPLE I.D.=	GP7-10	GP7-20	GP8-10	GP8-20	
Carbon Range:					
C ₆ -C ₇	nd	nd	nd	nd	
C ₈ -C ₉	nd	nd	nd	nd	
C ₁₀ -C ₁₁	nd	nd	nd	nd	
C ₁₂ -C ₁₃	nd	nd	nd	nd	
C ₁₄ -C ₁₅	nd	nd	nd	nd	
C ₁₆ -C ₁₇	nd	nd	nd	nd	
C ₁₈ -C ₁₉	nd	nd	nd	nd	
C ₂₀ -C ₂₃	nd	nd	nd	nd	
C ₂₄ -C ₂₇	nd	nd	nd	nd	
C ₂₈ -C ₃₁	nd	nd	nd	nd	
C ₃₂ -C ₃₅	nd	nd	nd	nd	
Total TPH	nd	nd	nd	nd	

Detection Limits: C₆-C₁₂: 10ppm; C₁₃-C₃₆: 10ppm

Notes:

1. Quantitation of C₆ thru C₁₂ and detection limits are based on Gasoline calibration curves.
2. Quantitation of C₁₃ thru C₃₆ and detection limits are based on Diesel calibration curves.

Footnotes:

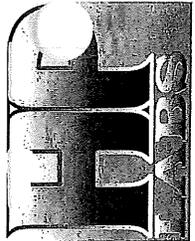
nd = Not found above the detection limit.

* = Sample dilution was required. Detection limits were adjusted accordingly.

E = Analyte amount exceeds calibration range. Amount quantitated by extrapolation.

Analyses performed by: T. Davis

GR082202-L3



QC Summary

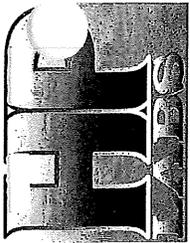
Client: Gradient Engineers
Project: 1123 S. Hatcher Ave.

Matrix: soil

Method	TPH gasoline	TPH diesel	TRPH	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
APR - % QC Limits	(67-125)	(67-125)	(75-126)	(60-125)	(60-125)	(59-125)	(52-125)	(60-127)
RPD - % QC Limits	<30	<30	<30	<30	<30	<30	<30	<30
<u>Date Analyzed:</u> 8/22/2002								
Spike Level (mg/kg)	151	251						
MS Amount Found	165	262						
MSD Amount Found	154	278						
APR - %	105.6	107.6						
RPD - %	6.9	5.9						

Calibration verification was within acceptable limits.

GR082202-L3



QC Summary - Method Blanks

Client: Gradient Engineers
Project: 1123 S. Hatcher Ave.

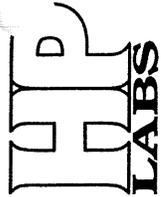
Matrix: soil
Units: mg/kg

Method =	TPH	TPH	TPH
Analyte =	Gasoline C ₆ -C ₁₂	Diesel C ₁₃ -C ₂₄	EXT C ₂₅ -C ₃₆
Detection Limit -	10	10	10
SAMPLE I.D.			
Date Analyzed:	8/22/2002		
GC6	nd	nd	nd

Footnotes: See Footnote Summary page

Footnote Summary

<u>Footnote</u>	<u>Definition</u>
E.Q.L. nd J	Estimated Quantitation Limit Not detected above the E.Q.L. or detection limit. The concentration reported is between the Method Detection Limit and the E.Q.L.
D	Concentration reported from a secondary dilution; E.Q.L.s adjusted accordingly.
B	Analyte found in the associated blank.
E	Analyte amount exceeds calibration range. Amount quantitated by extrapolation.
***	MS/MSD, LCS/LCSD recovery is outside QC range; no corrective action taken.
M S	Surrogate recovery outside QC range due to matrix interference. Because of necessary sample dilution, value was outside QC limits.
& #	Gasoline range organics not identified as gasoline. Diesel range organics not identified as diesel.
**	This compound has been screened by EPA method 8020. Any positive results should be confirmed by a second analysis.



Chain of Custody Record

148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469
 432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404
 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798

Date: 8/22/02

HPL Project # GR082202-13

Outside Lab: _____

Client: Gradient

Collector: Matt

Page: 1 Of 3

Address: _____

Client Project # _____

Project Manager _____

Phone: _____

Fax: _____

Location: _____

Turn around time: _____

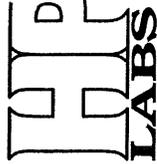
Notes: _____

Sample	Depth	Time	Date	Sample Type	Container Type	TPH gasoline / diesel	TPH extended	8021 for BTEX/MTBE	8021 for Halogenated compounds	418.1 TRPH	VOCs and Oxygenates			Fixed Gases	Field Notes	Total # of containers
											BTEX / Oxygenates	Oxygenates	VOCs			
GP1-05	5'	0900	8/22/02	S	Acetate Sleeve	X	X									
GP2-05	5'	0930				X	X									
GP3-05	5	0950				X	X									
GP1@10	10	1025				X	X									
GP@15	15	1025				X	X									
GP3@5	5	1045				X	X									
GP4@5	5	1050				X	X									
GP2@10	10	1100				X	X									
GP2-15	15	1105				X	X									
GP2-20	20	1120			brass	X	X									
GP3-10	10	1140			"	X	X									
GP3-15	15	1150				X	X									
GP3-20	20	1200				X	X									
GP4-10	10	1212				X	X									
Relinquished by: (Signature) <u>Matt Fallon</u>						Received by: (Signature) <u>Jamie Davis</u>						Date: <u>8/22/02</u> Time: <u>1530</u>				
Relinquished by: (Signature) _____						Received by: (Signature) _____						Date: _____ Time: _____				
Relinquished by: (Signature) _____						Received by: (Signature) _____						Date: _____ Time: _____				

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: Disposal @ \$2.00 each Return to client

Pickup



Chain of Custody Record

148 S. Vinewood St., Escondido, CA 92029 • ph 760.735.3208 • fax 760.735.2469
 432 N. Cedros Ave., Solana Beach, CA 92075 • ph 858.793.0401 • fax 858.793.0404
 2373 208th Street Unit F-1, Torrance, CA 90501 • ph 310.782.2929 • fax 310.782.2798

Date: 8/22/02
 HPL Project # GK080202-13
 Outside Lab: _____

Client: Gradient

Collector: _____ Page: 2 of 3

Address: _____

Project Manager _____

Phone: _____

Fax: _____

Location: _____

Turn around time: _____

Notes: _____

Sample	Depth	Time	Date	Sample Type	Container Type	TPH gasoline / diesel	TPH extended	8021 for BTEX/MTBE	8021 for Halogenated compounds	418.1 TRPH	VOCs and Oxygenates			Fixed Gases	Field Notes	Total # of containers
											BTEX / Oxygenates	Oxygenates	VOCs			
GP4-15	15	1225	8/22	S	glass	X										
GP4-20	20	1235				X										
GP5-5	5	1300														
GP5-10	10	1320				X										
GP5-15	15	1332				X										
GP5-20	20	1345				X										
GP6-5	5	1400				X										
GP6-10	10	1405				X										
GP6-15	15	1412				X										
GP6-20	20	1422				X										
GP7-5	5	1430				X										
GP7-10	10	1430				X										
GP7-15	15	1445														
GP7-20	20	1500				X										
Relinquished by: (Signature) <u>Moet Ballon</u>						Received by: (Signature) <u>Marcel Davis</u>						Date: <u>8/22/02</u>		Time: <u>1530</u>		
Relinquished by: (Signature) _____						Received by: (Signature) _____						(company) _____		(company) _____		
Relinquished by: (Signature) _____						Received by: (Signature) _____						(company) _____		(company) _____		

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: Disposal @ \$2.00 each Return to client Pickup

