Phase II Soil Quality Investigation
27900 Bodega Street
Hayward, California

October 31, 2005

Prepared For:

Leona Investments
7077 Koll Center Parkway, Suite 120
Pleasanton, California 94566

Prepared By:

Northgate Environmental Management, Inc.
300 Frank H. Ogawa Plaza, Suite 510
Oakland, California 94612

Dennis Laduzinsky, C.E.G., R.E.A.
Principal

Josh Otis
Senior Staff Scientist

1153.01

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1.0 INTRODUCTION AND SCOPE OF SERVICES

This report presents the results of a Phase II soil and groundwater quality investigation performed by Northgate Environmental Management, Inc. (Northgate) at 27900 Bodega Street in Hayward, California (the Site). The Site consists of generally vacant land developed with a small residential ranch complex located on the western portion of the Site. The Site is part of a larger residential development project located on the Garin and McKenzie properties (Assessor's Parcel Numbers 083-0265-003-01 and 083-0265-003-02, as well as a portion of APN 083-0125-001-12). A Site Location Map is shown on Figure 1 and a Site Plan is shown on Figure 2.

The purpose of the investigation has been to evaluate potential impacts to on-Site soil and groundwater related to the historic presence of an underground fuel storage tank (UST) at the small ranch on the western portion of the Site. The work was performed in general accordance with our Proposal for Phase II Investigation, dated September 23, 2005.

The investigation included the following services:

- Advancing one soil boring to an approximate depth of 20 feet below ground surface (bgs) in the vicinity of the former UST;
- Collecting soil samples from the boring at 5-foot intervals;
- Collecting a grab groundwater sampling from a temporary polyvinyl chloride (PVC) screen installed in the borehole; and
- Analyzing the soil and water samples for total petroleum hydrocarbons as gasoline (TPH-g), diesel (TPH-d), and motor oil (TPH-mo) using U.S. Environmental Protection Agency (EPA) Method 8015; and for benzene, toluene, ethylbenzene, and xylene (BTEX), and methyl tert-butyl ether (MTBE) using EPA Method 8260.

2.0 BACKGROUND

2.1 Site Description

The Site consists of a small farm, including a single-family dwelling and several outbuildings for livestock and equipment, located at 27900 Bodega Street in Hayward, California. The Site is bordered on the east by vacant hillside land, on the south by Woodland Avenue and residential development, on the west by Bodega Street and residential development, and on the north by residential properties.

2.2 Previous Investigations

Northgate conducted a Phase I Environmental Site Assessment (ESA) on the Site and the adjacent McKenzie property in September 2005 to identify and evaluate areas of potential environmental concern within the Site and near-vicinity that may affect on-Site soil and groundwater quality. Information collected during that investigation indicated that the Site has been used for cattle grazing, other minor agricultural uses, and rock quarries since the 1940s. A small farm or ranch has been located on the western portion of the Site since at least 1947, although it has not been active for several years. The southern area of the Site contained rock quarries for a brief period of time in the 1950s and early 1960s. Our review indicated that a UST used to store gasoline and diesel fuel for farm vehicles and equipment was formerly located adjacent to a garage on the western portion of the Site. It is not known if the UST has been removed from the Site. Northgate recommended chemical testing to evaluate potential impacts to soil and groundwater quality related to the UST.

3.0 SOIL AND GROUNDWATER INVESTIGATION

3.1 Investigation Methods

One soil boring (NG-1) was advanced to an approximate depth of 24 feet bgs adjacent to the west end of the identified UST location to evaluate the potential presence of petroleum hydrocarbons in soil and groundwater. The approximate boring location is shown on Figure 2.

The boring was advanced using a truck-mounted direct-push drill rig. During sampling, continuous cores of the subsurface materials were collected in clear, acetate liners. Sample intervals selected for chemical analysis at approximate 5-foot intervals were sealed with Teflon™-lined end caps, labeled, and stored on ice in a cooler for transport to the laboratory under chain-of-custody control. A groundwater sample was collected from the open borehole using a peristaltic pump and clean, disposable tubing. Water samples were placed in laboratory-supplied glassware, labeled, and stored on ice in a cooler for transport to the laboratory under appropriate chain-of-custody control.

The boring was logged in the field in accordance with the Unified Soils Classification System. A log of the boring is presented in Appendix A. Note that no physical tests were conducted on the soil samples, and the information contained in the boring log is based exclusively on field observations.

Soil and groundwater samples collected from the boring were analyzed for TPH-g, TPH-d, and TPH-mo using EPA Method 8015; and for BTEX and MTBE using EPA Method 8260, at Torrent Laboratories of Milpitas, California.

All drilling and sampling equipment was steam-cleaned prior to use. Upon the completion of sampling, the borehole was backfilled with neat cement.

3.2 Investigation Results

3.2.1 Subsurface Conditions

Materials encountered in the boring generally consisted of silty clay, sandy clay, and clayey sand, to the total depth explored of approximately 24 feet bgs. During drilling, saturated soil was encountered at a depth of approximately 18.5 to 19 feet bgs. However, water in the borehole rose to a depth of about 12 feet bgs approximately 15 minutes after drilling and sampling was complete.

3.2.2 Soil Quality

Samples collected from boring NG-1 at approximate depths of 5, 10, 15, and 20 feet bgs were submitted for chemical analysis. Chemical test results are shown on Table 1, and the laboratory analytical reports are presented in Appendix B. As shown on Table 1, TPH-g, TPH-d, BTEX, and MTBE were not measured above the laboratory method reporting limits (MRLs) in any of the soil samples collected at the Site. Petroleum hydrocarbons in the TPH-mo range were detected in all four samples at concentrations ranging from 4.2 to 7.6 parts per million (ppm). However, the detected compounds did not match the laboratory standard for motor oil. In our opinion, these reported compounds do not appear to represent a significant environmental concern at the concentrations detected in the samples.

3.2.3 Groundwater Quality

One groundwater sample collected from boring NG-1 was submitted for chemical analysis. TPH-g, TPH-d, TPH-mo, benzene, ethylbenzene, xylenes, and MTBE were not measured above laboratory MRLs in the sample. Toluene was reported present in the sample at a concentration of 5.5 parts per billion (ppb). This concentration is well below the California drinking water standard for toluene of 150 ppb. In our opinion, the reported concentration of toluene in the sample does not appear to represent a significant environmental concern.

4.0 CONCLUSIONS AND RECOMMENDATIONS

TPH-g, TPH-d, BTEX, and MTBE were not detected above the laboratory MRLs in any of the soil samples collected to a depth of 20 feet bgs from a boring located immediately adjacent to the reported location of a former UST at the Site. Based on additional information collected during the Phase II investigation, it appears that the UST may still be in the ground at the Site. Petroleum hydrocarbons in the oil range were reported in each of the four soil samples at low concentrations (approximately 4 to 7 ppm). However, the laboratory reports that the hydrocarbons do not match the laboratory standards for motor oils. It has been our experience that low levels of hydrocarbons in the oil range may sometimes be related to naturally occurring organic materials in the soil. Based on the test results, it does not appear that soil quality at the Site has been significantly impacted by the UST at the Site.

TPH-g, TPH-d, TPH-mo, benzene, ethylbenzene, xylenes, and MTBE were not detected above the laboratory MRLs in the groundwater sample collected from the boring. Toluene was reported in the groundwater sample at a concentration of 5.5 ppb. This concentration is well below the California drinking water standard for toluene and below the RWQCB ESL for potential impacts to indoor air quality from toluene in groundwater (see Table 1). Based on these test results, it does not appear that groundwater quality at the Site has been significantly impacted by the UST at the Site.

We recommend that any existing USTs at the Site (if present) be removed under permit from the Hayward Fire Department prior to grading.

5.0 LIMITATIONS

The purpose of a geologic/hydrogeologic study is to reasonably characterize existing site conditions based on the geology/hydrogeology of the area. In performing such a study, it is understood that a balance must be struck between a reasonable inquiry into the site conditions and an exhaustive analysis of each conceivable environmental characteristic. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to describe all geologic/hydrogeologic conditions of interest at a given site. If conditions have not been identified during the study, such a finding should not therefore be construed as a guarantee of the absence of such conditions at the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

We are unable to report on or accurately predict events that may change the site conditions after the described services are performed, whether occurring naturally or caused by external forces. We assume no responsibility for conditions we were not authorized to evaluate, or conditions not generally recognized as predictable when services were performed.

Geologic/hydrogeologic conditions may exist at the site that cannot be identified solely by visual observation. Where subsurface exploratory work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

TABLES

TABLE 1
Soil and Groundwater Analytical Results

Sample ID	Sample Type	Units	Analytes							
			TPH Gasoline (EPA 8015)	TPH Diesel (EPA 8015)	TPH Oil (EPA 8015)	Benzene (EPA 8260)	Toluene (EPA 8260)	Ethyl-benzene (EPA 8021B)	Xylenes (EPA 8260)	MTBE (EPA 8260)
NG1-5.0	soil	mg/Kg	<0.1	<2.0	**7.6** [1]	<0.01	<0.01	<0.01	<0 01	<0.01
NG1-10.0	soil	mg/Kg	<0.1	<2.0	**5.5** [1]	<0.01	<0 01	<0.01	<0.01	<0.01
NG1-15.0	soil	mg/Kg	<0.1	<2.0	**4.4** [1]	<0.01	<0.01	<0.01	<0.01	<0.01
NG1-20.0	soil	mg/Kg	<0.1	<2.0	**4.2** [1]	<0.01	<0.01	<0.01	<0.01	<0.01
NG1	water	µg/L	<50	<114	<228	<1	**5.5**	<1	<1	<3
Standard										
ESL	soil	mg/Kg	100 [2]	100 [2]	500 [2]	0.18 [2]	130 [2]	8.7 [2]	540 [2]	31 [2]
ESL	water	µg/L	na	na	na	1900 [3]	530000 [3]	52000 [3]	160000 [3]	48000 [3]
MCL	water	µg/L	na	na	na	1	150	700	1750	13

NOTES

(1) Hydrocarbon does not match laboratory standard

(2) ESL for direct exposure in residential land use setting

(3) ESL for potential impact to indoor air quality in residential land use setting

<: not detected at or above the indicated laboratory method reporting limit

µg/L: micrograms per liter (parts per billion)

ESL: RWQCB Environmental Screening Level for residential land use

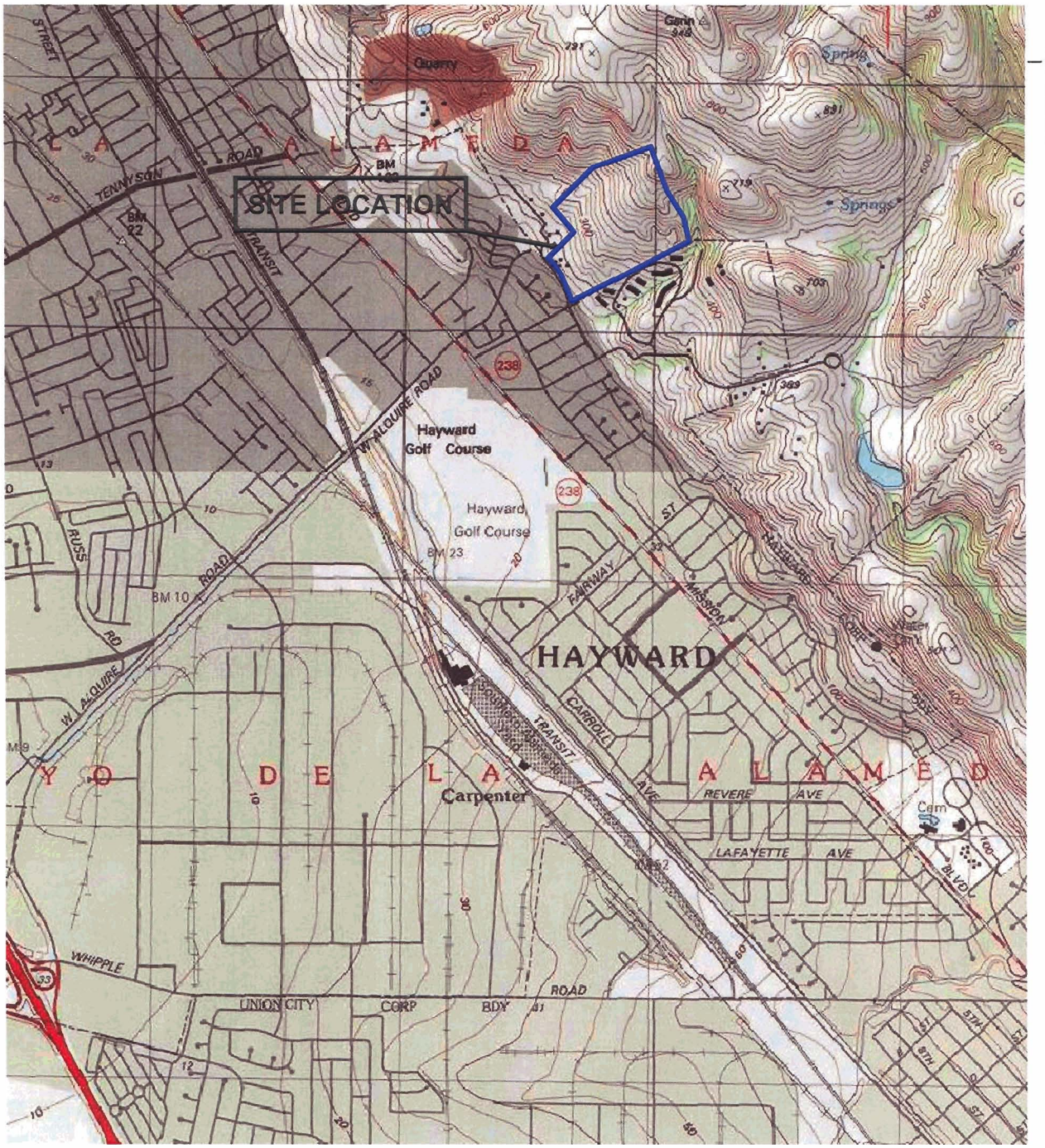
MCL: maximum contaminant level for drinking water (California Code of Regulations, Title 22)

mg/Kg: milligrams per kilogram (parts per million)

MTBE: methyl tert-butyl ether

TPH: total petroleum hydrocarbons

FIGURES



Source: National Geographic USGS TOPO! 2000

FIGURE 1
Site Location Map

27900 Bodega Street
Hayward, California
October 2005

Project No. 1153.01

northgate
environmental management, inc.

G:\Projects\Temp\1153.01 Garin McKenzie UST\Figures\Figure 1 - Site Location.dwg Layout: Site Location User: oleg Oct 31, 2005 - 11:00am

FIGURE 2
Site Plan

27900 Bodega Street
Hayward, California
October 2005

Project No 1153 01

northgate
environmental management, inc

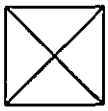
APPENDIX A
Boring Logs

northgate
geotechnical group
300 Frank H. Ogawa Plaza, Suite 510
Oakland, CA 94612
Telephone: (510) 839 0688
Fax: (510) 839 4350

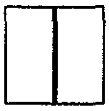
LEGEND

SAMPLE TYPE

Modified California Sampler
2.5-inch I.D



California Sampler
2.0-inch I.D.



Standard Penetration Sampler
1.38-inch I.D.

Grab Sample

Water level at time of drilling

Note:
Pocket penetromenter measurement in tons per square feet

SOIL SYMBOLS		TYPICAL DESCRIPTIONS
GRAPH	LETTER	
	GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	SM	SILTY SANDS, SAND - SILT MIXTURES
	SC	CLAYEY SANDS, SAND - CLAY MIXTURES
	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
		ASPHALT
	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
	CH	INORGANIC CLAYS OF HIGH PLASTICITY
	CL-CH	CLAYS OF LOW TO HIGH PLASTICITY
		CONCRETE

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

northgate
environmental management, inc.
300 Frank H. Ogawa Plaza
Oakland CA 94612
Telephone. (510) 839 0688
Fax: (510) 839 4350

BORING NUMBER NG1

PROJECT NAME 27900 Bodega Street
BORING LOCATION
PROJECT NUMBER 1153.01
PROJECT LOCATION Hayward, California
DATE STARTED **COMPLETED** **GROUND ELEVATION** **HOLE SIZE**
DRILLING CONTRACTOR Resonant Sonic International **GROUND WATER LEVELS:** **AT TIME OF DRILLING** ---
DRILLING METHOD Direct Push **AFTER DRILLING** --- **AT END OF DRILLING** ---
LOGGED BY JWO **CHECKED BY** TXS **SURFACE CONDITIONS:** Asphalt and concrete pavement
NOTES:

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
1		GW		Dirt/Gravel surface. FILL, SANDY GRAVEL (GW); dry, brown, no odor.
2				SILTY CLAY (CL); medium stiff, slightly moist to moist, dark brown, trace coarse sand/fine gravel, no odor.
3				
4		CL		
5				
6	NG1-5.0			
7				Same as above, moist, color becomes brown, 5-10% fine to coarse sand, trace gravel (3/8"- rounded), no odors.
8				
9				
10				
11	NG1-10.0			
12		CL		Becomes stiff, no odor.
13				
14				
15				
16				
17		CL		SANDY CLAY (CL); moist, medium stiff, light yellowish brown, no odors.
18				CLAYEY SAND (SC); light gray, wet, no odor.
19		SC		
20				SANDY CLAY (CL); brown, most to very moist, no odors, 5-10% gravel, 1/2" -subrounded.
21	NG1-20.0			
22		CL		
23				
24				Bottom of borehole at 24.0 feet

GENERAL NORTHGATE ENVIRONMENTAL BORING LOG 1153 01.GPJ GINT US GDT 10/31/05

APPENDIX B
Laboratory Analytical Reports

TORRENT LABORATORY, INC.

483 Sinclair Frontage Rd. • Milpitas, CA 95035 • Ph: (408) 263-5258 • Fax: (408) 263-8293

www.torrentlab.com

October 19, 2005

Dennis Laduzinsky
Northgate Environmental Management Inc.
300 Frank H. Ogawa Plaza, Suite 510
Oakland, CA 94612

TEL: 510-839-0688
FAX 510-839-4350

RE:

Order No.: 0510054

Dear Dennis Laduzinsky:

Torrent Laboratory, Inc. received 5 samples on 10/10/2005 for the analyses presented in the following report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc, is certified by the State of California, ELAP #1991. If you have any questions regarding these tests results, please feel free to contact the Project Management Team at (408)263-5258;ext: 204.

Sincerely,

Laboratory Director

10/19/05
Date

Torrent Laboratory, Inc. **Date:** *19-Oct-05*

CLIENT: Northgate Environmental Management Inc.
Project:
Lab Order: 0510054

CASE NARRATIVE

Analytical Comments for METHOD TPH_D/MO_S_8015B, SAMPLE 0510054-001A-004A: Note: x-Not typical TPH as Motor Oil. The reported values are within the TPH as Motor Oil range quantitation range but do not match a typical motor oil fuel pattern.

TORRENT LABORATORY, INC.

483 Sinclair Frontage Road • Milpitas, CA • Phone: (408) 263-5258 • Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report prepared for: Dennis Laduzinsky
Northgate Environmental Management Inc.

Date Received: 10/10/2005
Date Reported: 10/19/2005

Client Sample ID: NG1-5.0
Sample Location: Hayward, CA
Sample Matrix: SOIL
Date/Time Sampled 10/10/2005 10:25:00 AM

Lab Sample ID: 0510054-001
Date Prepared: 10/11/2005

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	10/18/2005	2	1	2 00	ND	mg/Kg	R7491
TPH (Oil)	SW8015B	10/18/2005	4	1	4.00	7.6 x	mg/Kg	R7491
Surr. Pentacosane	SW8015B	10/18/2005	0	1	53.5-127	92.8	%REC	R7491
x-Not typical TPH as Motor Oil.								
TPH (Gasoline)	SW8015B	10/11/2005	0.1	1	0.100	ND	mg/Kg	R7408
Surr: Trifluorotoluene	SW8015B	10/11/2005	0	1	44 7-125	70 8	%REC	R7408
Benzene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Ethylbenzene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Methyl tert-butyl ether (MTBE)	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Toluene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Xylenes, Total	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Surr: 4-Bromofluorobenzene	SW8260B	10/11/2005	0	1	65-135	84.7	%REC	R7431
Surr: Dibromofluoromethane	SW8260B	10/11/2005	0	1	65-135	123	%REC	R7431
Surr: Toluene-d8	SW8260B	10/11/2005	0	1	65-135	104	%REC	R7431

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Dennis Laduzinsky
Northgate Environmental Management Inc.

Date Received: 10/10/2005
Date Reported: 10/19/2005

Client Sample ID: NG1-10.0
Sample Location: Hayward, CA
Sample Matrix: SOIL
Date/Time Sampled 10/10/2005 10:30:00 AM

Lab Sample ID: 0510054-002
Date Prepared: 10/11/2005

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	10/18/2005	2	1	2 00	ND	mg/Kg	R7491
TPH (Oil)	SW8015B	10/18/2005	4	1	4.00	5.5 x	mg/Kg	R7491
Surr: Pentacosane	SW8015B	10/18/2005	0	1	53.5-127	62.8	%REC	R7491
x-Not typical TPH as Motor Oil								
TPH (Gasoline)	SW8015B	10/11/2005	0 1	1	0.100	ND	mg/Kg	R7408
Surr: Trifluorotoluene	SW8015B	10/11/2005	0	1	44.7-125	63.6	%REC	R7408
Benzene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Ethylbenzene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Methyl tert-butyl ether (MTBE)	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Toluene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Xylenes, Total	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Surr: 4-Bromofluorobenzene	SW8260B	10/11/2005	0	1	65-135	89.8	%REC	R7431
Surr: Dibromofluoromethane	SW8260B	10/11/2005	0	1	65-135	120	%REC	R7431
Surr: Toluene-d8	SW8260B	10/11/2005	0	1	65-135	105	%REC	R7431

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Dennis Laduzinsky
Northgate Environmental Management Inc.

Date Received: 10/10/2005
Date Reported: 10/19/2005

Client Sample ID: NG-15.0
Sample Location: Hayward, CA
Sample Matrix: SOIL
Date/Time Sampled 10/10/2005 10:35:00 AM

Lab Sample ID: 0510054-003
Date Prepared: 10/11/2005

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	10/18/2005	2	1	2 00	ND	mg/Kg	R7491
TPH (Oil)	SW8015B	10/18/2005	4	1	4.00	4.4 x	mg/Kg	R7491
Surr. Pentacosane	SW8015B	10/18/2005	0	1	53.5-127	59.4	%REC	R7491
x-Not typical TPH as Motor Oil.								
TPH (Gasoline)	SW8015B	10/11/2005	0.1	1	0.100	ND	mg/Kg	R7408
Surr: Trifluorotoluene	SW8015B	10/11/2005	0	1	44.7-125	74.2	%REC	R7408
Benzene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Ethylbenzene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Methyl tert-butyl ether (MTBE)	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Toluene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Xylenes, Total	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Surr: 4-Bromofluorobenzene	SW8260B	10/11/2005	0	1	65-135	90.5	%REC	R7431
Surr: Dibromofluoromethane	SW8260B	10/11/2005	0	1	65-135	123	%REC	R7431
Surr: Toluene-d8	SW8260B	10/11/2005	0	1	65-135	103	%REC	R7431

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Dennis Laduzinsky
Northgate Environmental Management Inc.

Date Received: 10/10/2005
Date Reported: 10/19/2005

Client Sample ID: NG-20.0
Sample Location: Hayward, CA
Sample Matrix: SOIL
Date/Time Sampled 10/10/2005 10:45:00 AM

Lab Sample ID: 0510054-004
Date Prepared: 10/11/2005

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	10/18/2005	2	1	2.00	ND	mg/Kg	R7491
TPH (Oil)	SW8015B	10/18/2005	4	1	4.00	4.2 x	mg/Kg	R7491
Surr: Pentacosane	SW8015B	10/18/2005	0	1	53.5-127	86.4	%REC	R7491
x-Not typical TPH as Motor Oil.								
TPH (Gasoline)	SW8015B	10/11/2005	0.1	1	0.100	ND	mg/Kg	R7408
Surr: Trifluorotoluene	SW8015B	10/11/2005	0	1	44.7-125	56.5	%REC	R7408
Benzene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Ethylbenzene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Methyl tert-butyl ether (MTBE)	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Toluene	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Xylenes, Total	SW8260B	10/11/2005	10	1	10	ND	µg/Kg	R7431
Surr. 4-Bromofluorobenzene	SW8260B	10/11/2005	0	1	65-135	94.4	%REC	R7431
Surr: Dibromofluoromethane	SW8260B	10/11/2005	0	1	65-135	126	%REC	R7431
Surr. Toluene-d8	SW8260B	10/11/2005	0	1	65-135	104	%REC	R7431

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Report prepared for: Dennis Laduzinsky
Northgate Environmental Management Inc.

Date Received: 10/10/2005
Date Reported: 10/19/2005

Client Sample ID: NG1
Sample Location: Hayward, CA
Sample Matrix: WATER
Date/Time Sampled 10/10/2005 11:25:00 AM

Lab Sample ID: 0510054-005
Date Prepared: 10/17/2005

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	10/18/2005	0 1	1	0.114	ND	mg/L	R7492
TPH (Oil)	SW8015B	10/18/2005	0.2	1	0.228	ND	mg/L	R7492
Surr: Pentacosane	SW8015B	10/18/2005	0	1	53.3-124	94.6	%REC	R7492
TPH (Gasoline)	SW8015B	10/12/2005	0.05	1	0 0500	ND	mg/L	R7443
Surr. Trifluorotoluene	SW8015B	10/12/2005	0	1	65-135	69.3	%REC	R7443
Benzene	SW8260B	10/18/2005	1	1	1.0	ND	µg/L	R7479
Ethylbenzene	SW8260B	10/18/2005	1	1	1.0	ND	µg/L	R7479
Methyl tert-butyl ether (MTBE)	SW8260B	10/18/2005	3	1	3.0	ND	µg/L	R7479
Toluene	SW8260B	10/18/2005	1	1	1.0	5.2	µg/L	R7479
Xylenes, Total	SW8260B	10/18/2005	1	1	1.0	ND	µg/L	R7479
Surr: 4-Bromofluorobenzene	SW8260B	10/18/2005	0	1	64.1-125	97.3	%REC	R7479
Surr: Dibromofluoromethane	SW8260B	10/18/2005	0	1	61 2-131	115	%REC	R7479
Surr: Toluene-d8	SW8260B	10/18/2005	0	1	75.1-127	113	%REC	R7479

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Definitions, legends and Notes

Note	Description
ug/kg	Microgram per kilogram (ppb, part per billion).
ug/L	Microgram per liter (ppb, part per billion).
mg/kg	Milligram per kilogram (ppm, part per million).
mg/L	Milligram per liter (ppm, part per million)
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate.
MDL	Method detection limit.
MRL	Modified reporting limit. When sample is subject to dilution, reporting limit times dilution factor yields MRL.
MS/MSD	Matrix spike/matrix spike duplicate.
N/A	Not applicable.
ND	Not detected at or above detection limit.
NR	Not reported.
QC	Quality Control.
RL	Reporting limit.
% RPD	Percent relative difference
a	pH was measured immediately upon the receipt of the sample, but it was still done outside the holding time.
sub	Analyzed by subcontracting laboratory, Lab Certificate #

These analyses were performed according to State of California Environmental Laboratory Accreditation program, Certificate # 1991

Torrent Laboratory, Inc.

Date: *19-Oct-05*

CLIENT: Northgate Environmental Management Inc.
Work Order: 0510054
Project:

ANALYTICAL QC SUMMARY REPORT

TestCode: TPH_D/MO_S_8015B

Sample ID	SD051014A-MB	SampType:	MBLK	TestCode:	TPH_D/MO_S	Units:	mg/Kg	Prep Date:	10/14/2005	RunNo:	7491
Client ID:	ZZZZZ	Batch ID:	R7491	TestNo:	SW8015B			Analysis Date:	10/17/2005	SeqNo:	112763

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel)	ND	2.00									
TPH (Oil)	ND	4.00									
Surr: Pentacosane	3.282	0	3.3	0	99.5	53.5	127				

Sample ID	SD051014A-LCS	SampType:	LCS	TestCode:	TPH_D/MO_S	Units:	mg/Kg	Prep Date:	10/14/2005	RunNo:	7491
Client ID:	ZZZZZ	Batch ID:	R7491	TestNo:	SW8015B			Analysis Date:	10/17/2005	SeqNo:	112764

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel)	17.90	2.00	33.33	0	53.7	46.2	109				
Surr: Pentacosane	2.924	0	3.3	0	88.6	53.5	127				

Sample ID	SD051014A-LCSD	SampType:	LCSD	TestCode:	TPH_D/MO_S	Units:	mg/Kg	Prep Date:	10/14/2005	RunNo:	7491
Client ID:	ZZZZZ	Batch ID:	R7491	TestNo:	SW8015B			Analysis Date:	10/17/2005	SeqNo:	112765

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel)	23.30	2.00	33.33	0	69.9	46.2	109	17.9	26.2	30	
Surr: Pentacosane	3.154	0	3.3	0	95.6	53.5	127	0	0	0	

Sample ID	0510068-001AMS	SampType:	MS	TestCode:	TPH_D/MO_S	Units:	mg/Kg	Prep Date:	10/14/2005	RunNo	7491
Client ID:	ZZZZZ	Batch ID:	R7491	TestNo:	SW8015B			Analysis Date:	10/18/2005	SeqNo:	112779

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel)	16.78	2.00	33.33	1.021	47.3	46.2	109				
Surr: Pentacosane	3.184	0	3.3	0	96.5	53.5	127				

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Northgate Environmental Management Inc.
Work Order: 0510054
Project:

ANALYTICAL QC SUMMARY REPORT

TestCode: TPH_D/MO_S_8015B

Sample ID **0510068-001AMSD**	SampType: **MSD**	TestCode: **TPH_D/MO_S**	Units: **mg/Kg**	Prep Date: **10/14/2005**	RunNo: **7491**
Client ID: **ZZZZZ**	Batch ID: **R7491**	TestNo: **SW8015B**		Analysis Date: **10/18/2005**	SeqNo: **112780**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel)	16.95	2.00	33.33	1.021	47.8	46.2	109	16.78	1.00	30	
Surr: Pentacosane	3.253	0	3.3	0	98.6	53.5	127	0	0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Northgate Environmental Management Inc.
Work Order: 0510054
Project:

ANALYTICAL QC SUMMARY REPORT

TestCode: TPH_D/MO_W_8015B

Sample ID WD051017A-MB	SampType: MBLK	TestCode: TPH_D/MO_	Units: mg/L	Prep Date: 10/17/2005	RunNo: 7492
Client ID. ZZZZZ	Batch ID: R7492	TestNo. SW8015B		Analysis Date: 10/18/2005	SeqNo: 112781

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel)	ND	0.100									
TPH (Oil)	ND	0.200									
Surr. Pentacosane	0.08200	0	0.1	0	82.0	53.3	124				

Sample ID WD051017A-LCS	SampType: LCS	TestCode: TPH_D/MO_	Units: mg/L	Prep Date 10/17/2005	RunNo: 7492
Client ID: ZZZZZ	Batch ID: R7492	TestNo: SW8015B		Analysis Date: 10/18/2005	SeqNo: 112782

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel)	0.5900	0.100	1	0	59.0	46.2	109				
Surr: Pentacosane	0.07800	0	0.1	0	78.0	53.3	124				

Sample ID WD051017A-LCSD	SampType. LCSD	TestCode: TPH_D/MO_	Units. mg/L	Prep Date: 10/17/2005	RunNo: 7492
Client ID· ZZZZZ	Batch ID: R7492	TestNo: SW8015B		Analysis Date: 10/18/2005	SeqNo· 112783

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel)	0.5900	0.100	1	0	59.0	46.2	109	0.59	0	20	
Surr: Pentacosane	0.07800	0	0.1	0	78.0	53.3	124	0	0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

CLIENT: Northgate Environmental Management Inc.
Work Order: 0510054
Project:

ANALYTICAL QC SUMMARY REPORT

TestCode: TPH_GAS_S_8015B

Sample ID **MB**	SampType: **MBLK**	TestCode: **TPH_GAS_S**	Units: **mg/Kg**	Prep Date:			RunNo: **7408**			
Client ID: **ZZZZZ**	Batch ID: **R7408**	TestNo: **SW8015B**		Analysis Date: **10/10/2005**			SeqNo: **110576**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	ND	0.100									
Surr. Trifluorotoluene	0.1591	0	0.2	0	79.6	44.7	125				

Sample ID **LCS**	SampType: **LCS**	TestCode: **TPH_GAS_S**	Units: **mg/Kg**	Prep Date:			RunNo: **7408**			
Client ID: **ZZZZZ**	Batch ID: **R7408**	TestNo: **SW8015B**		Analysis Date: **10/10/2005**			SeqNo: **110577**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	1.227	0.100	1	0	123	64.2	126				
Surr: Trifluorotoluene	0.1615	0	0.2	0	80.8	44.7	125				

Sample ID **LCSD**	SampType: **LCSD**	TestCode: **TPH_GAS_S**	Units **mg/Kg**	Prep Date:			RunNo: **7408**			
Client ID: **ZZZZZ**	Batch ID: **R7408**	TestNo. **SW8015B**		Analysis Date. **10/10/2005**			SeqNo **110578**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	1.188	0.100	1	0	119	64.2	126	1.227	3.28	30	
Surr: Trifluorotoluene	0.1610	0	0 2	0	80 5	44.7	125	0	0	30	

Sample ID **0510054-004A MS**	SampType: **MS**	TestCode: **TPH_GAS_S**	Units: **mg/Kg**	Prep Date:			RunNo **7408**			
Client ID: **NG-20.0**	Batch ID **R7408**	TestNo: **SW8015B**		Analysis Date: **10/11/2005**			SeqNo: **111181**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	0 9713	0.100	1	0	97.1	65	135				
Surr: Trifluorotoluene	0.1601	0	0.2	0	80.1	44.7	125				

Sample ID **0510054-004A MSD**	SampType: **MSD**	TestCode: **TPH_GAS_S**	Units. **mg/Kg**	Prep Date:			RunNo. **7408**			
Client ID: **NG-20.0**	Batch ID: **R7408**	TestNo: **SW8015B**		Analysis Date: **10/11/2005**			SeqNo **111182**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	0.6947	0.100	1	0	69.5	65	135	0.9713	33.2	30	R
Surr: Trifluorotoluene	0.09820	0	0.2	0	49.1	44.7	125	0	0	30	

Qualifiers:
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Northgate Environmental Management Inc.
Work Order: 0510054
Project:

ANALYTICAL QC SUMMARY REPORT

TestCode: TPH_GAS_W_8015B

Sample ID **MB**	SampType: **MBLK**	TestCode: **TPH_GAS_W**	Units: **mg/L**	Prep Date:			RunNo: **7443**			
Client ID: **ZZZZZ**	Batch ID: **R7443**	TestNo: **SW8015B**		Analysis Date: **10/12/2005**			SeqNo: **111558**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	ND	0.0500									
Surr: Trifluorotoluene	0.08760	0	0.119	0	73.6	65	135				

Sample ID **LCS**	SampType: **LCS**	TestCode: **TPH_GAS_W**	Units: **mg/L**	Prep Date:			RunNo **7443**			
Client ID **ZZZZZ**	Batch ID: **R7443**	TestNo: **SW8015B**		Analysis Date: **10/12/2005**			SeqNo. **111641**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	0.1960	0.0500	0.2381	0	82.3	71.8	134				
Surr: Trifluorotoluene	0.07760	0	0.119	0	65.2	65	135				

Sample ID **LCSD**	SampType: **LCSD**	TestCode: **TPH_GAS_W**	Units: **mg/L**	Prep Date:			RunNo: **7443**			
Client ID: **ZZZZZ**	Batch ID: **R7443**	TestNo: **SW8015B**		Analysis Date: **10/12/2005**			SeqNo: **111642**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	0.2304	0.0500	0.2381	0	96.8	71.8	134	0.196	16.1	20	
Surr Trifluorotoluene	0.1213	0	0 119	0	102	65	135	0	0	20	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

northgate environmental management, inc.

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

0510054

Project No.: 1153.01	Project Location: Hayward, CA	Date: 10/10/05
Project Name: Grim Manor	Field Logbook No.:	
Sampler (Signature)		

Samples						ANALYSES								Serial No.:
Sample No.	Date	Time	Lab Sample No.	No. of Containers	Sample Type	TPHd	TPHg	BTEX + TBE				HOLD	RUSH	Samplers: JWC
NG1-5.0	10/10/05	1025	001A	1	SOIL	X	X	X						REMARKS
NG1-10.0		1030	002A			X	X	X						5 day TAT - results due Monday, 10/17/05
NG1-15.0		1035	003A			X	X	X						
NG1-20.0		1045	004A			X	X	X						
NG1	10/10/05	1115	005A	6 (5V 1A)	WATER	X	X	X						

Relinquished by: (Signature)	Date 10/10/05	Time 1:30 PM	Received By: (Signature)	Date 10/10/05	Time 1:30
Relinquished by: (Signature)	Date	Time	Received By: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received By: (Signature)	Date	Time
Method of Shipment: drop off	Date	Time	Lab Comments:		

Sample Collector:	Northgate Environmental Management, Inc. 3629 Grand Avenue Oakland, California 94610 (510) 839 0688
Analytical Laboratory:	Torrent Labs

Ami 10/10 Oakland