### RECEIVED

By dehloptoxic at 9:13 am, Aug 07, 2006



environmental management, inc.

August 4, 2006

Mr. Steven Plunkett Alameda County Department of Environmental Health 1131 Harbor Bay Parkway Alameda, California 95402

Re: Site Conceptual Model

Alameda Theater Restoration, Former Video Maniacs Parcel

2305 Central Avenue, Alameda, California

Project 1057.12

Dear Mr. Plunkett:

This letter presents the case narrative and summary of investigations conducted at the former Video Maniacs parcel, located at 2305 Central Avenue in Alameda, California (the "Site"). The Site is the former location of a video rental store (Video Maniacs), which was demolished between August 8 and 18, 2005. The Site currently consists of a vacant, graded pad surrounded by sidewalks and paved parking. The Site is located in the downtown commercial district of the City of Alameda, and will be redeveloped as a multi-level parking structure associated with a new movie theater development. Previous investigations conducted at the Site have detected low to moderate levels of petroleum hydrocarbon compounds in soil and groundwater. A Site Location Map is shown on Figure 1 and a Site Plan is shown on Figure 2.

#### **Site Geology**

Alameda lies on the eastern margin of a broad, alluvial plain that slopes gently down to the west, from the Oakland-Berkeley hills to the San Francisco Bay. The sediments that form the alluvial plain are derived from erosion of the hills to the east. The fine-grained alluvial and tidal-bay sediments include silt, sand, and Bay Mud to reported depths of at least 280 feet below the ground surface (bgs). Subsurface materials encountered in soil borings advanced at the Site by Northgate in January 2005 consisted of loose to medium-dense sand and clayey sand to a maximum depth explored of 15 feet bgs. Boring locations are shown on Figure 2, and boring logs are presented in Attachment 1.

Groundwater was encountered in the borings at an approximate depth of 11 feet bgs. Information contained in unpublished engineering reports for nearby sites indicate that the local

groundwater flow direction is uncertain and perhaps variable, with reported groundwater flow directions to the south, east, and north at a site located about 300 feet northeast of the subject site. The groundwater flow direction has also been reported to be toward the southeast at another site located about 700 feet to the northeast of the subject site; and toward the northeast at a third site located about 700 feet northwest of the subject site. These differences in the reported groundwater flow direction suggest that groundwater flow may be influenced by tidal action or other factors, and a consistent groundwater flow direction may not be present. However, based on our review, it appears that the most commonly reported groundwater flow direction for the area is in a general easterly direction.

### **Proposed Release Mechanisms**

- On-Site release: According to Alameda County Fire Department (ACFD) records, the Site was occupied by a gasoline service station from the 1920s to the early 1950s. ACFD files indicate that approximately 11 underground storage tanks (USTs) were installed at the Site during this time. Northgate was unable to find any records documenting the removal of the USTs from the Site. The former presence of the tanks and use of the Site as a gasoline service station represents a potential source of impacts to soil and groundwater quality at the Site.
- Migration from off-Site sources: A Phase I Environmental Site Assessment (ESA) performed at the Site by Northgate in March 2004, identified two nearby sites that have a potential to impact soil or groundwater quality at the subject Site: a property located on the south corner of Central Avenue and Oak Street (2301 Central Avenue) which was formerly used as a gasoline service station and paint stripping operation from which several USTs and aboveground solvent dip-tanks were removed in the past; and the adjacent property to the northeast, currently a parking lot for Long's Drugs, which was formerly used as a gasoline service station. Previous investigations at the adjacent Long's Drugs site have indicated the presence of low to moderate levels of diesel fuel in groundwater.

### **Previous Investigation Results**

Magnetic scan of Site: Northgate contracted with a utility locator to scan the Site with a
metal-detecting device for anomalies that could indicate the presence and location of
USTs at the Site. The Site was scanned on July 28, 2004. No significant anomalies were
detected that would indicate the presence of USTs at the Site. It should be noted that
reinforced concrete that was present in the sidewalks, the building slab area around the

former video store, and a concrete slab north of the video store could have interfered with the ability of the metal-detecting device to detect potential USTs in those areas.

• *Phase II Investigation:* Eight soil borings (SB-1 through SB-8) were advanced to a maximum depth of 15 feet at the Site in January 2005. Boring locations are shown of Figure 2, and boring logs are presented in Attachment 1. Continuous cores were collected using a direct-push sampling rig. Stained soil with a slight hydrocarbon odor was encountered in one boring (SB-8) located on the eastern corner of the Site, at a depth of 5 to 6 feet bgs. No other staining, odors, or other indications of contamination were observed in any of the soil borings.

Soil samples collected between the depths of 5 and 11 feet from each boring were analyzed for total petroleum hydrocarbons as gasoline (TPH-g), diesel (TPH-d) and motor oil (TPH-mo), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tert-butyl ether (MTBE). Chemical test results are shown on Table 1. As shown on the Table, TPH-g, TPH-d, TPH-mo, BTEX, and MTBE were not detected above the laboratory method reporting limits (MRLs) in any of the soil samples.

A groundwater sample was collected from each boring location through a temporary PVC casing placed in the borehole. Each groundwater sample was analyzed for TPH-g, TPHd, TPH-mo, and volatile organic compounds (VOCs). Chemical test results are shown on Table 2. As shown on the Table, groundwater samples collected during this investigation did not contain TPH-g above the laboratory MRLs. However, TPH-d and TPH-mo were measured in five of the eight groundwater samples collected. TPH-d was measured in samples collected at SB-1, SB-2, SB-4, SB-6, and SB-8 at concentrations of 170, 110, 200, 180, 1,100 micrograms per liter ( $\mu$ g/L), respectively. TPH-mo was detected in the same samples at respective concentrations of 1,400, 710, 1,800, 1,800, and 7,300 µg/L. Benzene and MTBE were not measured in any of the groundwater samples collected at the Site. Toluene was detected at concentrations of 0.67 to 7.8 µg/L in six of the eight groundwater samples. Ethylbenzene was detected at 0.72 µg/L in one sample, and xylenes were detected in four samples, with concentrations ranging from 1.2 to 4.4 μg/ L. Cis-1,2-dichloroethene (cis-1,2-DCE) was measured in one sample at 2.3 µg/L, tetrachloroethene (PCE) was measured in three samples at 1.0 to 3.9 µg/L, trichloroethene (TCE) was measured in two samples (0.84 and 1.5 µg/L), and acetone was measured in three samples at 6.7 to  $16 \mu g/L$ .

• **Demolition Excavations:** Stained and odorous soil was encountered at a depth of 7 to 10 feet bgs at on the western corner of the Site where concrete piers were being excavated

and removed below the foundation during the demolition of the former Video Maniacs store in August 2005. A representative sample of the material (soil sample S-001) was collected from the excavation using the excavator bucket, and analyzed for TPH-g, TPH-d, TPH-mo, BTEX, MTBE, and naphthalene. The chemical test results presented in Table 1 show that the sample contained TPH-g, THP-d, and TPH-mo at concentrations of 420, 360, and 490 milligrams per kilogram (mg/Kg), respectively. Ethylbenzene, xylenes, and naphthalene were measured at concentrations of 1.1, 1.26, and 0.54 mg/Kg, respectively. However, benzene, toluene, and MTBE were not detected above the laboratory MRLs. The area of stained and odorous soil represented by sample S-001 is shown on Figure 2.

### • Summary

The investigations performed to date indicate that low to moderate levels of TPH-d and TPH-mo, as well as low levels of VOCs are present in soil and/or groundwater beneath the Site. In general, petroleum hydrocarbons are present in soil at an approximate depth of 7 – 10 feet bgs on the western corner of the Site. Hydrocarbons as diesel and oil are present in groundwater on the southwestern and northeastern portions of the Site. The date and mechanism of the release is not known, but may be related to use of the Site for a gasoline service station from the 1920s through the early 1950s. Groundwater impacts may also be related to off-Site contamination sources. Groundwater isoconcentration contours for TPH-d and cross-section locations are shown on Figure 3. Cross-sections parallel and perpendicular to the plume axis are shown in Figures 4 and 5.

Contaminants known to be present in groundwater at the Site include TPH-d, TPH-mo, toluene, ethylbenzene, xylenes, acetone, cis-1-2-DCE, PCE, and TCE. However, with the exception of the TPH-mo measured in groundwater at the western corner of the Site, none of the constituents exceed Environmental Screening Levels (ESLs) for non-drinking water sources established by the California Regional Water Quality Control Board (RWQCB). No benzene, MTBE, or naphthalene have been detected above the laboratory MRLs in any groundwater samples collected from the Site.

Contaminants known to be present in soil at the Site include TPH-g, TPH-d, TPH-mo, ethylbenzene, xylenes, and naphthalene. However, these contaminants have been measured only in one soil sample collected in the western corner of the Site. None of the measured concentrations of constituents exceed the ESLs for commercial land use overlying non-drinking water sources established by the RWQCB, with the exception of TPH-g, which at 420 mg/Kg slightly exceeds the ESL of 400 mg/Kg.

### **Potential Exposure Pathways**

- **Direct Exposure:** Construction workers, during redevelopment of the Site or future utility construction and excavation, may be directly exposed to contaminants in the subsurface.
- **Inhalation:** Volatilization of contaminants from contaminated soil and groundwater to indoor air could potentially represent an inhalation hazard for future Site users.
- **Ingestion:** Based on our review, shallow groundwater in the vicinity of the Site is not used for a drinking water source. Therefore, the ingestion pathway is considered to be incomplete, and does not appear to be a concern at the Site.

### **Data Gaps / Additional Investigation**

No additional investigation is proposed. With the exception of a single soil sample, all soil sample test results from the Site are below the ESLs for commercial land-use setting established by the RWQCB. All groundwater sample analytical results are below the ESLs established for commercial land uses in a non-drinking water source. In summary, for the potential exposure pathways identified at the subject Site, the detected concentrations do not appear to represent a significant environmental concern.

### **Perjury Statement**

"On behalf of the City of Alameda, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

DUZINSK

Sincerely,

Northgate Environmental Management, Inc.

Dennis Laduzinsky, C.E.G

Principal

**Enclosures:** 

Table 1 Soil Sample Analytical Results

Table 2 Groundwater Sample Analytical Results

Figure 1 Site Location Map

Figure 2 Site Plan

Figure 3 TPH-mo Isoconcentration Contours in Groundwater

Figure 4 Cross-section A-A'

Figure 5 Cross-section B-B'

Attachment 1 Boring Logs

### Table 1 Soil Sample Analytical Results

Video Maniacs Parcel Alameda, California

Sample ID (location & depth in feet)	Date Collected	TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Naphthalene
Results reporte										
SB-1-5.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	< 0.005	< 0.005	< 0.005	<0.05	NA
SB-1-8.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	NA
SB-2-5.5	1/25/2005	<1.0	<1.0	<5.0	< 0.005	< 0.005	< 0.005	< 0.005	<0.05	NA
SB-2-11.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	< 0.05	NA
SB-3-5.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	< 0.05	NA
SB-3-8.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	< 0.05	NA
SB-4-5.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	< 0.05	NA
SB-4-11.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	< 0.05	NA
SB-5-5.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	NA
SB-5-8.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	NA
SB-6-5.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	NA
SB-6-8.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	NA
SB-7-5.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	NA
SB-7-8.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	NA
SB-8-5.5	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	< 0.05	NA
SB-8-8.0	1/25/2005	<1.0	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	NA
S-001 (7' - 10')	8/18/2005	420	360	490	<0.13	<0.13	1.1	1.26	<0.5	0.54
ESL (GW = DW)		100	100	1,000	0.044	2.9	3.2	2.3	0.023	1.5
ESL (GW = NDV	V)	400	500	1,000	0.38	9.3	3.2	11	5.6	1.5

#### Notes:

mg/Kg: Milligrams per kilogram TPH: Total Petroleum Hydrocarbons MTBE: Methyl Tert-Butyl Ether

<: Not measured above the indicated laboratory detection limit

NA: Not analyzed

ESL: RWQCB Environmental Screening Level for commercial/industrial land use

GW=DW: Groundwater IS considered a drinking water source GW=NDW: Groundwater is NOT considered a drinking water source

### Table 2 Groundwater Analytical Results

Video Maniacs Parcel Alameda, California

Sample ID Results reported i	TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	cis-1,2- Dichloroethene	Tetrachloroethene	Trichloroethene	Acetone	Naphthalene	Other VOCs
SB-1	<50	170	1400	<0.5	7.8	0.72	4.4	<0.5	2.3	1	1.5	<0.5	<0.5	ND
SB-2	<50	110	710	<0.5	0.67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND
SB-3	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.85	<0.5	<0.5	<0.5	ND
SB-4	<50	200	1800	<0.5	1.2	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	ND
SB-5	<50	<50	<250	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	6.7	<0.5	ND
SB-6	<50	180	1800	<0.5	1.9	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	12	<0.5	ND
SB-7	<50	<50	<250	<0.5	1.9	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	< 0.5	<0.5	ND
SB-8	<50	1100	7300	<0.5	0.68	<0.5	<0.5	<0.5	<0.5	3.9	0.84	16	<0.5	ND
ESL (GW=DW)	100	100	100	1	40	30	20	5	6	5	5	20,000	21	**
ESL (GW=NDW)	5,000	2,500	2,500	20,000	400	300	5,300	1,800	50,000	3,000	50,000	50,000	210	**

#### Notes:

μg/L: Micrograms per liter

TPH: Total Petroleum Hydrocarbons MTBE: Methyl Tert-Butyl Ether VOCs: Volatile Organic Compounds

<: Not detected above the indicated laboratory detection limit

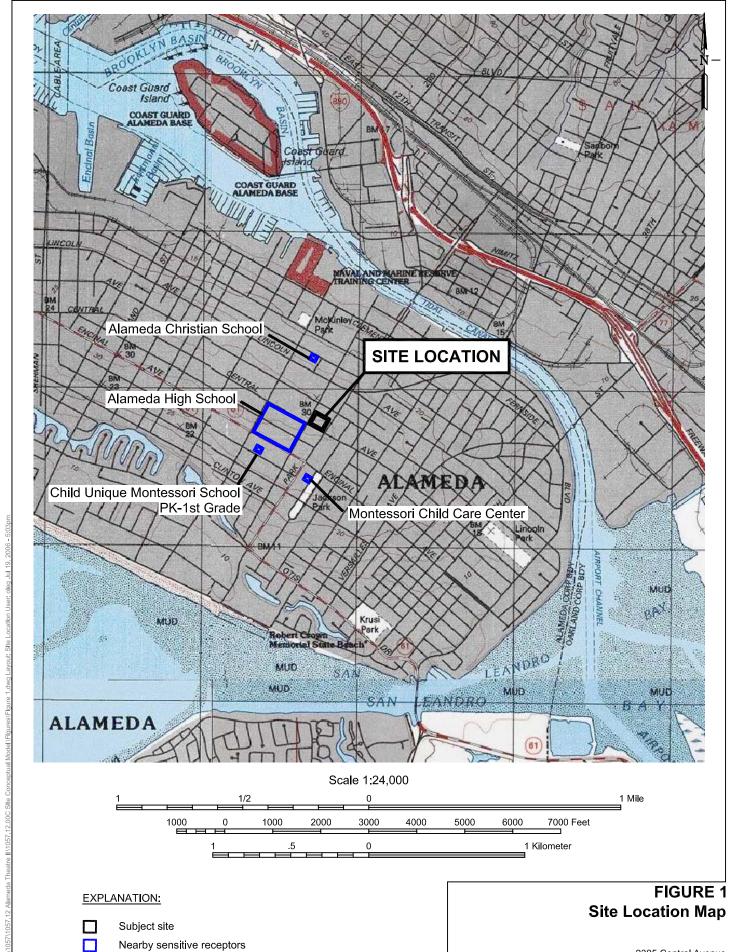
ND: Not detected; detection limits vary with compound

\*\*: Varies for specific compounds

ESL: RWQCB Environmental Screening Level for commercial/industrial land use

GW=DW: Groundwater IS considered a drinking water source

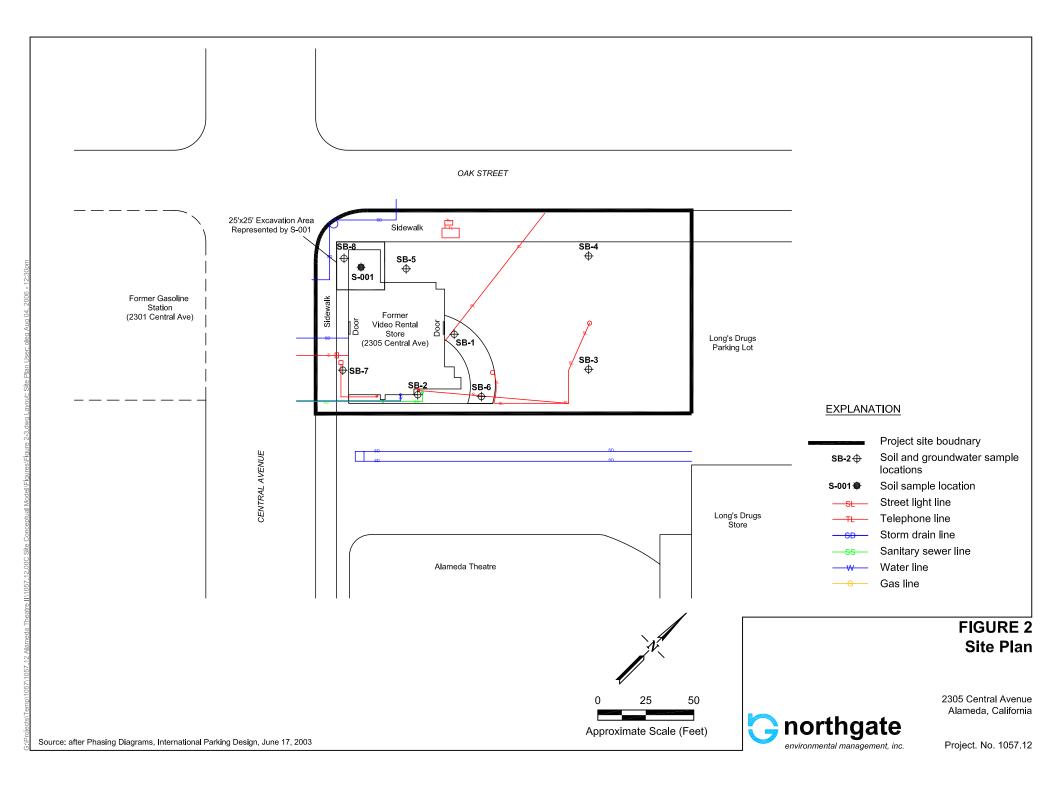
GW=NDW: Groundwater is NOT considered a drinking water source

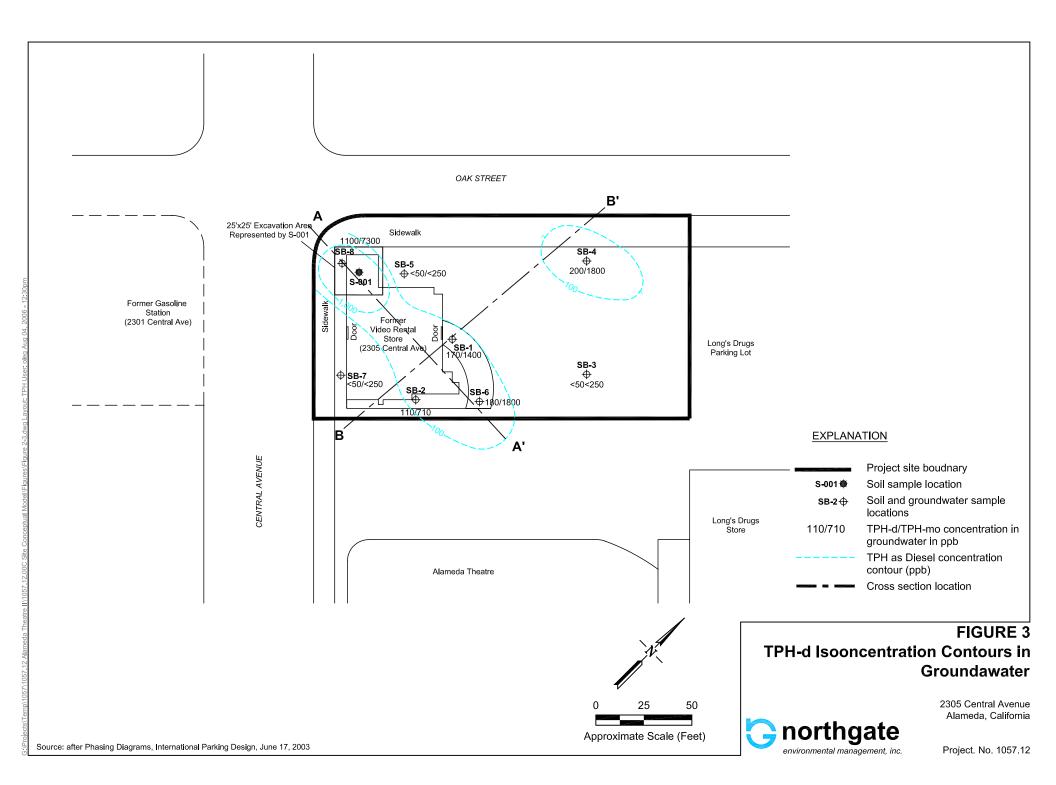


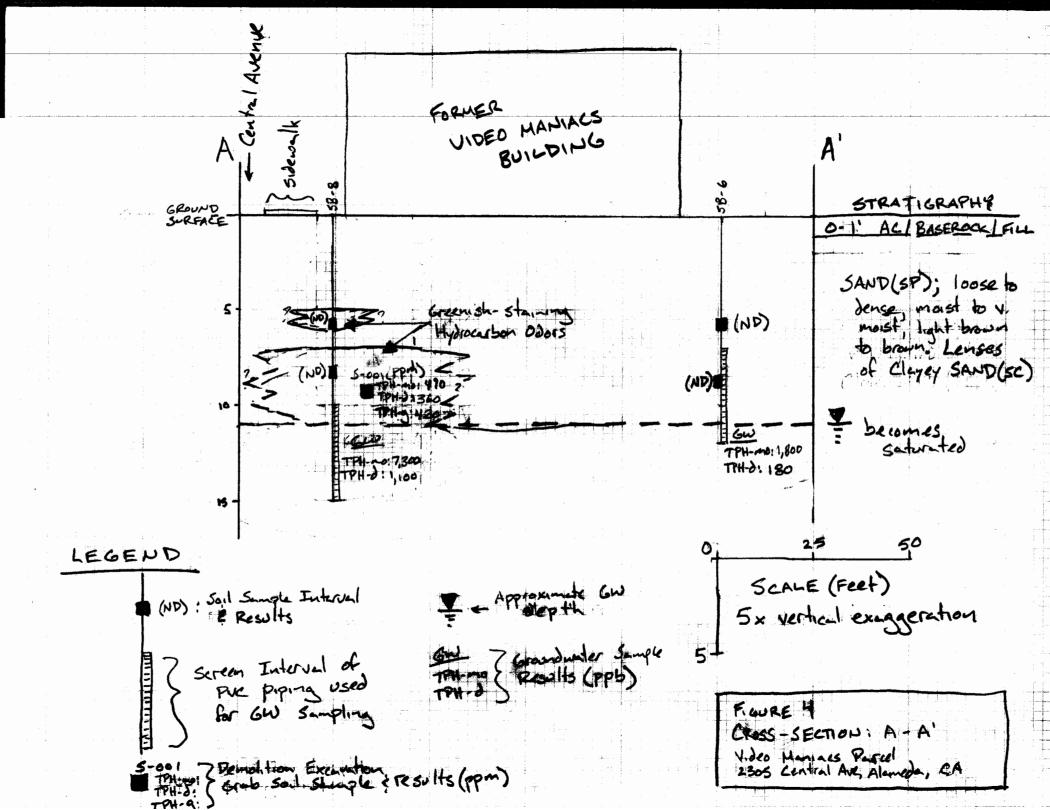
Source: National Geographic USGS TOPO! 2000

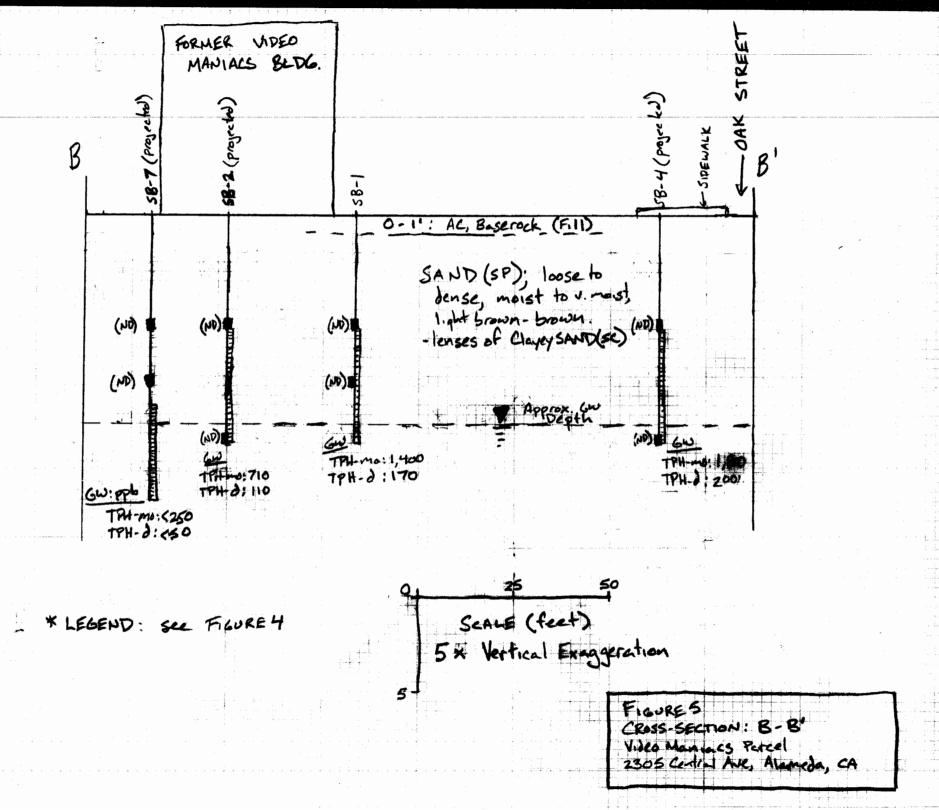
2305 Central Avenue Alameda, California

Project. No. 1057.12









GENERAL NORTHGATE ENVIRONMENTAL (PID) 1057.07 VIDEO MAINICS.GPJ GINT US.GDT

**BORING NUMBER SB-1** 

PAGE 1 OF 1

Telephone: (510) 839 0688 environmental management, inc. Fax: (510) 839 4350 PROJECT NAME Video Manics PROJECT NUMBER 1057.07 PROJECT LOCATION Alameda, California DATE STARTED 1/25/05 COMPLETED 1/25/05 GROUND ELEVATION 10.90 ft HOLE SIZE **DRILLING CONTRACTOR** Vironex **GROUND WATER LEVELS:** AT TIME OF DRILLING ---DRILLING METHOD Geoprobe AFTER DRILLING \_---AT END OF DRILLING ---LOGGED BY SMT CHECKED BY DML SURFACE CONDITIONS:\_\_ NOTES: SAMPLE TYPE NUMBER PID (ppm) GRAPHIC LOG DEPTH (ft) WELL DIAGRAM MATERIAL DESCRIPTION **CONCRETE 4"** SAND (SP), medium dense, moist, brown, no odor, medium-SB-1-2.0 2.5 SAND (SP), medium dense, moist, light brown, no odor, sand is fine to medium coarse, some lenses of clayey sand 5.0 SB-1-5.5 grout backfill changes from medium dense to dense 7.5 SB-1-8.5 10.0 SAND (SP), medium dense to dense, saturated, light brown, no odor, medium- fine sand SB-1-11.5 Bottom of borehole at 12.0 feet.

## **G**northgate

GENERAL NORTHGATE ENVIRONMENTAL (PID) 1057.07 VIDEO MANICS.GPJ GINT US.GDT

3629 Grand Ave Oakland CA 94610 Telephone: (510) 839 0688 **BORING NUMBER SB-2** 

PAGE 1 OF 1

Fax: (510) 839 4350 environmental management, inc. PROJECT NAME Video Manics PROJECT NUMBER 1057.07 PROJECT LOCATION Alameda, California DATE STARTED 1/25/05 COMPLETED 1/25/05 **GROUND ELEVATION** 10.78 ft HOLE SIZE **DRILLING CONTRACTOR** Vironex **GROUND WATER LEVELS:** AT TIME OF DRILLING ---DRILLING METHOD Geoprobe AFTER DRILLING ---AT END OF DRILLING ---LOGGED BY SMT CHECKED BY DML SURFACE CONDITIONS:\_ NOTES: SAMPLE TYPE NUMBER PID (ppm) GRAPHIC LOG DEPTH (ft) WELL DIAGRAM MATERIAL DESCRIPTION **CONCRETE 4'** SILTY GRAVEL (GM), saturated, light brown, no odor, some gravel up to 0.5' SAND (SP), medium dense to dense, moist, dark brown, no odor, medium- fine sand 2.5 SB-2-2.5 changes from dark brown to light brown 5.0 SAND (SP), damp to wet, light brown, no odor, medium-fine SB-2-5.5 sand, some lenses of clayey sand grout backfill 7.5 SAND (SP), medium stiff, wet, light gray, no odor SB-2-8.5 SAND (SP), very dense, wet, light brown, no odor, mediumfine sand 10.0 SAND (SP), wet, light brownish gray, no odor, medium-fine sand changes to from moist, light orangish brown to damp, light SB-2-11.5 brown Bottom of borehole at 12.0 feet.

### **BORING NUMBER SB-3**

3629 Grand Ave Oakland CA 94610 Telephone: (510) 839 0688 Fax: (510) 839 4350

PAGE 1 OF 1

DATE STARTED 1/25/ DRILLING CONTRACT DRILLING METHOD G	OR Vironex				GROUND ELEVATION 10.95 ft GROUND WATER LEVELS: AFTER DRILLING	AT TIME OF DRILLING
LOGGED BY SMT NOTES:			CHEC	KED BY DML	SURFACE CONDITIONS:	
DEPTH (ft) (ta) SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	PID (ppm)	GRAPHIC LOG	MATERIA	AL DESCRIPTION	WELL DIAGRA
2.5 SB-3-2.5 SB-3-5.5 SB-3-8.5 SB-3-11.5				gravel up to 0.25"  SAND (SP), mediur medium- fine sand  SAND (SP), moist to medium- fine sand,	M), loose, saturated, brown, no odor, some lense to dense, moist, brown, no odor, some lenses of clayey sand	

# northgate 3629 Grand Ave Oakland CA 94610 Telephone: (510) 839 0688

BORING NUMBER SB-4
PAGE 1 OF 1

						PROJECT LOCATION Alameda, California				
						GROUND ELEVATION 10.96 ft				
DRILLING CONTRACTOR Vironex DRILLING METHOD Geoprobe										
						SURFACE CONDITIONS:				
NOTE	S:									
SAMPLE TYPE NUMBER NUMBER COUNTS (N VALUE)				GRAPHIC LOG		IAL DESCRIPTION	V	WELL DIAGRAM		
2.5	SB-4-2.5				fine sand	e, moist to damp, brown, no odor, medium				
7.5	SB-4-5.5	-			SAND (SP), very of fine sand, some le	dense, wet, light brown, no odor, medium- nses of clayey sand		←grout backfill		
10.0	SB-4-8.5	-			SAND (SP), very fine sand	dense, wet, light brown, no odor, medium				
					Bot	tom of borehole at 12.0 feet.	F 3, 53,55			

BORING NUMBER SB-5
PAGE 1 OF 1

						PROJECT LOCATION Alameda, California				
DATE	<b>STARTED</b> 1/25/0	)5		COM	PLETED 1/25/05	GROUND ELEVATION 10.81 ft	HOLE SIZE			
DRILLING CONTRACTOR Vironex DRILLING METHOD Geoprobe						GROUND WATER LEVELS:	AT TIME O	F DRILLING		
						AFTER DRILLING	AT END O	F DRILLING		
LOGG	ED BY SMT			CHEC	CKED BY DML	SURFACE CONDITIONS:				
NOTE	S:									
DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	PID (ppm)	GRAPHIC LOG		AL DESCRIPTION	W	ÆLL DIAGRAM		
					organic material, bi	-				
2.5	SB-5-2.5	-			SAND (SP), dense	, moist, brown, no odor, medium- fine sand	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
5.0	SB-5-5.5	_				m dense, moist, light brown, no odor, , some lenses of clayey sand		<b>⊷</b> grout backfill		
7.5					SAND (SP), loose to medium- fine sand,	to medium dense, wet, light brown, no odor , some lenses of clayey sand		g. C		
	SB-5-8.5									
10.0	SB-5-9.5	1								
					Bott	rom of borehole at 12.0 feet.				

### northgate

NORTHGATE ENVIRONMENTAL (PID) 1057.07 VIDEO MANICS.GPJ GINT US.GDT

3629 Grand Ave Oakland CA 94610 Telephone: (510) 839 0688 **BORING NUMBER SB-6** 

PAGE 1 OF 1

environmental management, inc. Fax: (510) 839 4350 PROJECT NAME Video Manics PROJECT NUMBER 1057.07 PROJECT LOCATION Alameda, California DATE STARTED 1/25/05 COMPLETED 1/25/05 GROUND ELEVATION 10.83 ft HOLE SIZE **DRILLING CONTRACTOR** Vironex **GROUND WATER LEVELS:** AT TIME OF DRILLING ---DRILLING METHOD Geoprobe AFTER DRILLING \_---AT END OF DRILLING ---LOGGED BY SMT CHECKED BY DML SURFACE CONDITIONS:\_\_ NOTES: SAMPLE TYPE NUMBER PID (ppm) GRAPHIC LOG DEPTH (ft) WELL DIAGRAM MATERIAL DESCRIPTION SAND (SP), medium dense, moist, brown, no odor, mediumfine sand 2.5 SB-6-2.5 changes from brown to light brown 5.0 SB-6-5.5 SAND (SP), damp, light brown, no odor, medium- fine sand, some lenses of clayey sand 7.5 grout backfill SB-6-8.5 changes from damp to wet 10.0 SB-6-11.5 SAND (SP), dense, wet, light brown, no odor, medium-fine 12.5 sand SB-6-13.5

# northgate 3629 Grand Ave Oakland CA 94610 Telephone: (510) 839 0688

BORING NUMBER SB-7
PAGE 1 OF 1

					inc. Fax: (510) 83	9 4350		
PROJECT NAME Video Manics PROJECT NUMBER 1057.07						PROJECT LOCATION Alameda, Califo	ornia	
DATE STARTED 1/25/05 DRILLING CONTRACTOR Vironex				PLETED 1/25/05	GROUND ELEVATION 10.75 ft  GROUND WATER LEVELS:  AFTER DRILLING	HOLE SIZE		
						SURFACE CONDITIONS:		
IOTE	S:							
(ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	PID (ppm)	GRAPHIC LOG	MATER	IAL DESCRIPTION	WELL DIAGRAM	
-					SILTY SAND (GM 0.25"	), damp, brown, no odor, soem gravel up to		
- - 25 - - 50 - - -	SB-7-2.5 SB-7-5.5			<u>Π</u>	SAND (SP), mediumedium- fine sand	Im dense to dense, damp, brown, no odor,	grout backfill	
-	SB-7-8.5	-						
- 0.0_								
-	SB-7-10.5	-						
2.5_					SAND (SP), dense	e, wet, brown, no odor, medium- fine sand		
]	SB-7-13.5	_						

# northgate 3629 Grand Ave Oakland CA 94610 Telephone: (510) 839 0688

### **BORING NUMBER SB-8**

	05	СОМ		GROUND ELEVATION 10.76 ft	
DRILLING CONTRACTORILLING METHOD G				GROUND WATER LEVELS:  AFTER DRILLING	
				SURFACE CONDITIONS:	
NOTES:					
DEPTH (ft) (ft) SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	PID (ppm) GRAPHIC LOG		AL DESCRIPTION	WELL DIAGRAM
2.5 SB-8-2.5  5.0 SB-8-5.5  7.5 SB-8-8.0			odor, medium-fine  SAND (SP), dense odor, medium-fine	m dense to dense, moist, dark brown, is sand  , damp, greenish brown, strong hydroc sand, some lenses of clayey sand , wet, brown, no odor, medium-fine sai	abon