

**enviros**®

# Facsimile

July 29, 1997

To: Jennifer Eberle

From: Diane Lundquist

RE: Former Shell Site  
461 8th Street  
Oakland, CA

Here are the old GTI logs for S-4, S-5, and S-6. These are the same as the L-4, L-5, L-6 designations GTI used.

As you can see they are rather rough. In the logs for S-8 through S-10, from our report, you'll see that groundwater was first encountered at 16 - 25 fbg, and stabilized around 25 fbg.

Please give me a call at 707-935-4852 if you have any questions

9 ~~5~~ page(s) (including cover)

L-1 to L-3 destroyed years ago



**DRILLING LOG**

Project: Bart/Shell  
 Name: Oakland, California  
 Date: 8/25/87

Well Designation:                       
 Driller: Powell  
 Equip. Used: LDH Hughes 50' Auger

Geologist: J. Ballerino

Diam	Bar	At	Interval		Description of Rock Cuttings	Remarks (e.g. Soft Spots)	SAMPLE #
			from	to			
12"			0	4'	Artificial Fill -	silt, sand and clay some small pieces of brick	
			4'	7'	Yellow-brown to brown sand	- slightly damp	
			7'	10'	Becoming moist, plastic, clayey sand		
			10'	17'	Increasing in clay: clayey sand		
				17'	Lowered Gas Tech probe: reads 40%		
			18'	22'	Damp brown sand yellow & red streaks	smells of gasoline	
			22'	24'	continues lt. brown sand - water table	begins @ 23'	
12"			24'	30'	cont'd sand and water		
					Hole cased w/4" PVC; 10' of .020" screen and 20' of unslotted PVC		
					Gravel packed w/ pea gravel		
							Sample No. L-1

7-29-1997 2:19PM

FROM

P.2



**DRILLING LOG**

Project: Bart/Shell  
Name: Oakland, California  
Date: 8/26/81

Well Designation: L-2  
Driller: Powell  
Equip. Used: LDH Hughes 50' Auger

Logist: J. Ballerino

Diam	Bar	At	Interval		Description of Rock Cuttings	Remarks (e.g. Soft Spots)	SAMPLE #
			from	to			
12"			0	6'	Artificial fill: brown sand - concrete, asphalt and rock		
			6'	7'	begin clayey sand; light brown to yellow brown, damp		
			7'	10'	well sorted brown sand, some darker streaks		
			10'	12'	small fraction of clay binder		
			12'	15'	loose, unconsolidated uniform sand - moist		
			15'	16'	Gas detector reads 14% slight gasoline smell		
			16'	18'	cont'd brown, uniform sand, damp		sample no. L-2
			18'	19'	gas detector reads greater than 100% - purged with nitrogen		
			19'	23'	no smell cont'd damp brown sand - (well sorted)		
			23'	24'	begin water seepage		
			24'	26'	hole caving from water		
12"			26'	30'	hole kept open only to 26'		
					cased with 4" PVC 10' of slotted .020" screen 20' of regular PVC;		
					gravel packed.		
					Note: It was necessary to drive casing 4' into sand due to caved condition		
					at bottom of hole.		

7-29-1997 2:19PM FROM P.3



**DRILLING LOG**

Project: Bart/Shell  
Name: Oakland, California  
Date: 8-27-81

Well Designation: L-3  
Driller: Powell  
Equip. Used: LDB Hughes 50' Auger

Geologist: J. Ballerino

Depth	Diam	Bar	At	Interval		Pressure	Description of Rock Cuttings	Remarks (e.g. Soft Spots)	SAMPLE #
				from	to				
0	12"			0	4'		Sand, silt and clay, fill, bits of debris and rock		
				4'	6'		begin uniform grained, damp yellow brown sand		
				6'	9'		some clayey sand		
				9'	11'		cont'd brown sand slight gasoline smell		
							detector reads: 10%		
				11'	12'		damp, uniform sand - some gray sand		L-3 #1
				12'	14'		slight gasoline smell thin (1mm seam water)		#2
				14'	16'		gas detector reads: 10% sand		
				16'	18 1/2'		gas detector reads: 40% sand		#3
				18 1/2'	19 1/2'		slightly stiff w/ clay - sand		
				19 1/2'	21'		some gray sand mostly brown sand		
							stronger gasoline smell		#4
				21'	27'		water infiltration		
				27'	30'		caving in water-logged sand - re drill		
							several passes to 37' - casing lowered		
							10' of slotted 4" PVC; 20' of reg. PVC		
	12"						Gravel packed -		

7-29-1997 2:20PM FROM P.4



Project: Dart/Shell  
 Name: Oakland, California  
 Date: 8/31/81

Well Designation: L-4  
 Driller: Powell  
 Equip. Used: LDH Hughes 50' Auger & Barrel

Geologist: J. Ballerino

No	Diam	Bar	At	Interval		Description of Rock Cuttings	Remarks (e.g. Soft Spots)	SAMPLE #
				from	to			
	12"			0	4'	Fill: sand-silt-clay, rock, debris, concrete and bricks		
				4'	7'	light brown sand (backfill?) some clayey sand		
						slightly moist clayey sand - gas detector: Nil		
				7'	13'	cont'd moist sand - some gray sand mixed		
						detector reads: 3%		
				13'	16'	cont'd moist sand - minor clay, detector reads: 5%		
				16'	21'	brown moist sand - layered gray sand		
				21'	23'	cont'd sand - spoon sample - wet		L-4 #1
				23'	24'	bucket grinding put on auger - clear		
				24'	31'	caving from water at 22' -		
						cont'd drilling out to 35' +		
						able to place 30' of casing:		
						10' slotted PVC @ .020"		
						20' regular PVC		
00	12"					Gravel packed - no evidence of gasoline		



**DRILLING LOG**

Project: Bart/Shell  
 Name: Oakland, California  
 Date: 9/2/81

Well Designation: L-5  
 Driller: Powell  
 Equip. Used: LDH Hughes 50' Auger

Geologist: J. Ballerino

Time	Diam	Bar	At	Interval		Description of Rock Cuttings	Remarks (e.g. Soft Spots)	SAMPLE #
				from	to			
0	12"			0	5'	Inside drop inlet - storm drain roadway		
						invert elev: -5' below street level		
				5'	7'	fill sand - gas detector: 7%		
				7'	13'	moist brown sand; gas detector: 10%		
				13'	14'	begin wet sand - smells of gasoline		
				14'	15'	gas detector: 15%		#1
				15'	19'	spoon sample-loose sand		
					19'	detector reads: 50%		#2
				19'	22'	sand saturated with gasoline; reads: 80%		
				22'	23'	encountered water - begin revert		
				23'	27'	caving sand - revert not holding well		
				27'	32'	cont'd sand - in water table		
						strong gasoline fumes		
				32'	40'	becoming more compact sand		
						some clay- (gray to gray-green)		
				40'	42'	dense, stiff clay- bay mud - bottom hole		
						cased with 20' slotted PVC .020" (4")		
						17' regular PVC & gravel packed		
						Elevation at street level		

7-29-1997 2:21PM FROM P.6

**DRILLING LOG**

 Project: Bart/Shell  
 Name: Oakland, California  
 Date: 9-3-81 & 9-8-81

 Well Designation: L-6  
 Driller: Powell  
 Equip. Used: LDH Hughes 50' Auger

 Geologist: J. Ballerino

Diam	Bar	At	Interval		Description of Rock Cuttings	Remarks (e.g. Soft Spots)	SAMPLE #
			from	to			
12"			0	2'	Street concrete and old cobblestones		
			2'	4'	mixed fill and cobbles		
				4'	begin brown sand -		
			4'	10'	sand fill some small pieces brick and rock		
			10'	16'	cont'd sand and clayey sand - moist		
				16'	slight gasoline smell ? - stopped		#1
					hole 9-3-81 to prepare revert		
12"	9-8-81		16'	20'	cont'd sand gas detector reads: 35%		#2
			20'	24'	slightly clayey sand		
				24'	top of water table - caving sand		#3
			24'	30'	revert introduced		
			30'	34'	wet gray-brown clayey sand		#4
			34'	40'	sand to clay - top of bay mud		
			40'	42'	stiff, dense clay - bay mud		
					placed 40' of casing: 20' slotted PVC .020'		
					and 20' reg. PVC - collar of casing 2" below street level		
12"					Gravel-packed		

7-29-1997 2:21PM

FROM

P.7



**DRILLING LOG**

Project: Bart/Shell  
Name: Oakland, California  
Date: 9-10-81

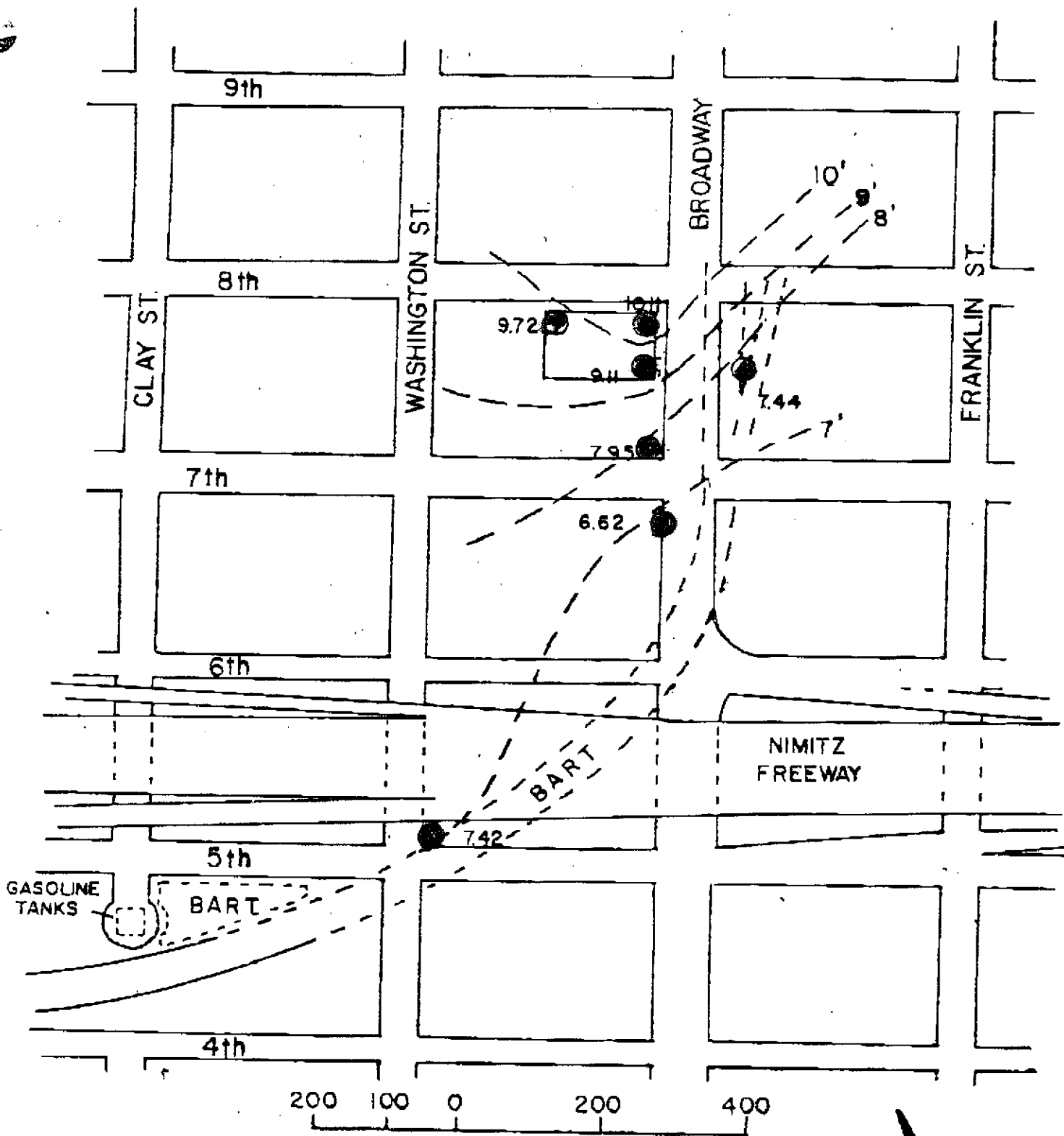
Well Designation: L-7  
Driller: Powell  
Equip. Used: LDH Hughes 50' Auger

Logist: J. Ballerino

Diam	Bar	At	Interval		Description of Rock Cuttings	Remarks (e.g. Soft Spots)	SAMPLE #
			from	to			
12"			0	5'	2" asphalt - damp, loose	light brown sand	
			5'	12'	cont'd loose brown sand		
			12'	16'	gas detector: Nil	- moist sand	
			16'	17'	spoon sample - no gasoline smell		#1
			17'	18'	wet sand becoming slightly	clayey-mottled	
				18'	top of water table caving	sand	
			18'	24'	cont'd caving - placed revert		
				24'	much water - "quicksand"		#2
			24'	34'	cont'd slow drilling with revert		
				34'	sand - brown - some gray revert	"weak"	#3
			34'	40'	becoming clayey sand - (no	gasoline smell)	
12"			40'	41'	end hole in clayey sand -	gray to brown	
					cased with 20' slotted PVC	.020" (4")	
					and 20' regular PVC		
					Gravel packed		

7-29-1997 2:22PM FROM P.B





WATER-TABLE GRADIENT MAP from 9/14/81