ENVIRONMENTAL CONSULTING

28 October 1991 \$9-105

Mr. Francis Collins 6050 Hollis Street Emeryville, CA 94608

Subject:

Documentation of Well Installation, Soil Sampling, and Groundwater Sampling at 6050

Hollis Street, Emeryville, California

Dear Mr. Collins:

This letter documents the installation of two additional groundwater monitoring wells, soil sampling, and groundwater sampling performed by BASELINE at 6050 Hollis Street, Emeryville, California (Figure 1). The scope of work was submitted to the Alameda County Hazardous Materials Department on 28 June 1991 for their review and approval.

Well Installation and Soil Sampling

Wells MW-H2 and MW-H3 were installed on 29 August 1991. A permit to excavate in the street was obtained from the City of Emeryville for MW-H3 because the well was placed in a street right-of-way (Attachment A). The wells were drilled by Aqua Science Engineers under the direction of a BASELINE geologist. Eight-inch boreholes were advanced using steam cleaned hollow-stem augers. Detailed logs were recorded by the geologist as the boreholes were drilled. Two-inch diameter PVC solid casings and 0.01-inch slotted casings were placed inside the augers in the boreholes. Fine sand was tremied into the annular spaces between the boreholes and the casings through the hollow-stem augers. The top two to three and a half foot sections of the annular spaces were sealed with bentonite and cement. The well heads were sealed with locking water-tight caps and protected in Christy boxes. On 5 September 1991, the wells were developed using a double diaphragm pump and new PVC hoses. The drill cuttings and decontamination water were stored in labeled 55-gallon drums and stored on-site. The wells were surveyed to determine groundwater flow direction. The surveyor report is in Attachment B. Well construction summaries, well development logs, and detailed drilling logs are provided in Attachment C.

One soil sample was collected from the unsaturated zone in each borehole from about six feet below the ground surface. The soil samples were collected using a modified California sampler fitted with three 6-inch brass tubes. The sampler was driven in advance of the augers. The brass tubes containing the samples were capped, labeled, sealed in zip-lock bags, and placed in a cooler with blue ice. The samples were submitted to Curtis and Tompkins, Ltd., a certified laboratory, using chain-of-custody procedures. The samples were analyzed

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for total petroleum hydrocarbon (TPH) as diesel, as kerosene, and as gasoline; and benzene, toluene, ethylbenzene, and xylenes (BTEX). The sampler was decontaminated between samples by washing with TSP and water, and rinsed with deionized water. The decontamination water was stored in 55-gallon drums.

Groundwater Sampling

Monitoring wells MW-H1 through MW-H3 were sampled on 11 September 1991. A dual interface probe was used to check the wells for floating product and to measure the water levels. The probe was decontaminated between wells by washing with TSP and water, and rinsing with deionized water. The decontamination water was transferred to 55-gallon drums. A minimum of five well volumes were purged from each well and stored in 55-gallon drums. The parameters pH, temperature, and electrical conductivity were measured in the purged water and these parameters had stabilized during purging. The water levels were again measured prior to sample collection to ensure that the wells had recharged sufficiently. The groundwater samples were collected using PVC disposable bailers. The portion of the samples that was to be analyzed for TPH as gasoline and BTEX was decanted into VOA vials from the bottom of the bailers using volatile organic compound (VOC) attachments to minimize turbulence and volatilization. The filled vials were checked to ensure that bubbles were not trapped in the bottles. The portion of the samples that was to be analyzed for TPH as diesel and as kerosene was decanted in amber glass bottles without the VOC attachments. The sample bottles were labeled, placed in a cooler with blue ice, and transported to the laboratory using chain-of-custody procedures. The groundwater sampling forms are included in Attachment D

Analytical Results

Analytical results for the soil samples are summarized in Table 1. The sample from well MW-H3 contained TPH as diesel at 800 mg/kg. None of the other constituents analyzed for either samples was found above laboratory detection limits. The laboratory report for the soil samples are contained in Attachment E.

Analytical results for the groundwater samples for the most recent and previous sampling events are summarized in Table 2. TPH as gasoline, TPH as diesel, and BTEX were identified above laboratory detection limits in the MW-H1 sample. None of the analyzed constituents were identified in the MW-H2 sample and only TPH as diesel was found above detection limits in the MW-H3 sample. The laboratory report for the most recent groundwater samples is in Attachment D.

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Groundwater Flow Direction and Gradient

Water levels were measured in the three wells on 11 and 24 September 1991. The measurements are summarized in Table 3. The groundwater flow direction is towards the southwest, S30W and S13W with gradient magnitudes of 0.0068 and 0.0099, respectively. The flow directions are shown in Figure 1.

Copies of this letter and attachments should be submitted to the Alameda County Environmental Health Department and the San Francisco Bay Regional Water Quality Control Board. Please contact us if you have any questions or should need additional assistance.

Sincerely,

Yane Nordhav

Phincipal

Reg. Geologist No. 4009

YN:LH:ic Attachments Lydia Huang

Professional Engineer

No. 43995

SITE PLAN 6050 Hollis Street Emeryville, California

Figure 1

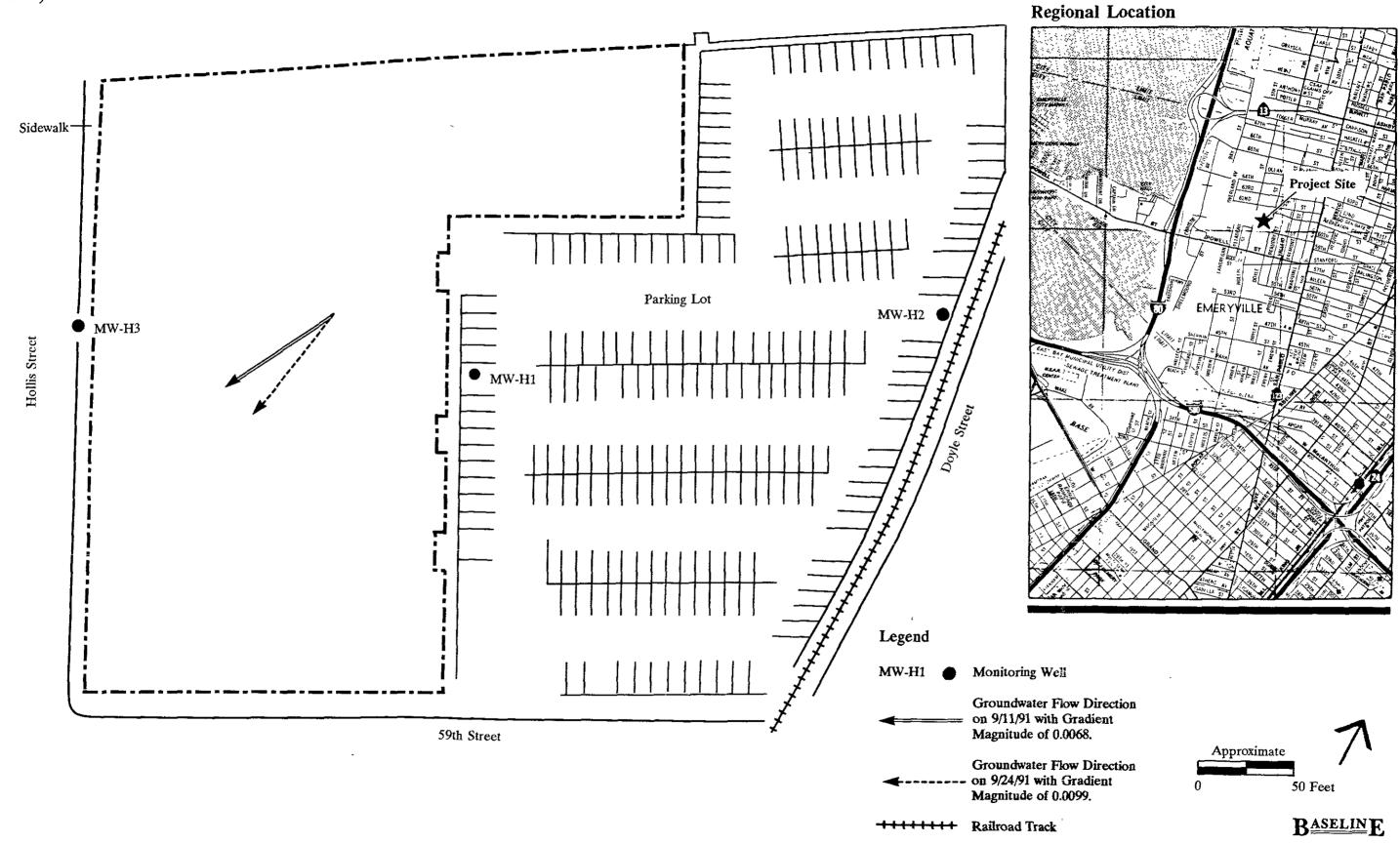


TABLE 1

ANALYTICAL RESULTS, SOILS 6050 Hollis Street, Emeryville

(mg/kg)

Well	Date	Sample Depth	TPH as Diesel ¹	TPH as Kerosene ¹	TPH as Gasoline ¹	Benzene ²	Toluene ²	Ethyl- benzene²	Xylenes ²
MW-H2	08/29/91	6.0-6.5	<1.0	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
MW-H3	08/29/91	6.0-6.5	800	< 10	<1.0	< 0.005	< 0.005	< 0.005	< 0.005

Analyzed in accordance with the DHS LUFT Manual.

Notes: Number(s) shown in bold are concentrations identified above detection limit(s).

Well locations are shown in Figure 1.

Well logs are in Attachment C.

Laboratory report is in Appendix E.

Bolded numbers indicate concentrations above the levels of detection.

Extracted by EPA Method 5030 and analyzed by EPA Method 8020.

TABLE 2 SUMMARY OF ANALYTICAL RESULTS, GROUNDWATER 6050 Hollis Street, Emeryville

(mg/L)

Well	Date	TPII as Gasoline ¹	TPH as Diesel ²	TPII as Kerosene²	Benzene ³	Toluene ³	Ethylbenzene ³	Xylenes ³
MW-H1	02/10/89	<0.05	<0.5	<0.5	< 0.001	<0.001	<0.001	<0.001
	05/01/89	< 0.05	<0.5	<0.5	< 0.001	< 0.001	< 0.001	<0.001
	09/13/89	1.3	<0.5	<0.5	0.061	< 0.0005	0.005	0.002
	12/04/89	0.41/0.37	<0.5/<0.5	<0.5/<0.5	0.0072/0.011	0.0032/0.0024	0.0028/0.0014	0.0032/0.0013
	03/26/90	0.7	<0.5	< 0.5	0.093	0.001	0.0017	< 0.001
	06/14/90⁴	0.344	0.082^4	< 0.054	0.016^4	< 0.0014	<0.0014	<0.0014
	07/24/90	0.14	< 0.5	<0.5	0.006	< 0.0005	< 0.0005	0.0009
	11/16/90	1.1	0.55	< 0.05	0.016	0.0009	0.0018	0.0015
	03/15/91	0.98/1.0	<0.05/<0.05	<0.05/<0.05	0.02/0.017	0.0006/<0.0005	0.0022/0.0019	0.0025/0.0022
	09/11/91	1.0	0.39	< 0.05	0.015	0.0056	0.0027	0.0029
MW-H2	09/11/91	< 0.05	< 0.05	< 0.05	< 0.0005	< 0.0005	<0.0005	< 0.0005
MW-H3	09/11/91	<0.05/<0.05	0.12/0.22	<0.05/<0.05	<0.0005/<0.0005	<0.0005/<0.0005	<0.0005/<0.0005	<0.0005/<0.0005
Field	06/14/904	< 0.05	0.0624	<0.05	< 0.001	<0.001	< 0.001	<0.001
blanks	07/24/90	< 0.05	<0.5	<0.5	< 0.0005	<0.0005	<0.0005	<0.0005
	11/16/90	< 0.05	< 0.05	< 0.05	< 0.0005	< 0.0005	< 0.0005	< 0.0005

Analyzed by EPA Methods 5030/8015 Modified (some of the laboratory reports cite the California DHS Luft Manual).

Number(s) shown in bold are concentrations identified above detection limit(s).

Well locations are shown in Figure 1

Groundwater sampling forms and analytical results for the most recent sampling are in Attachment D.

xx/xx indicates duplicate samples

Analyzed by EPA Methods 3510 or 3550/8015 Modified (some of the laboratory reports cite the California DHS Luft Manual).

Analyzed by EPA Methods 5030/8020.

The field blank for 6/14/90 sampling contained diesel at 0.062 mg/L, therefore all analytical results for MW-H1 for that date may be erroneous.

TABLE 3

GROUNDWATER LEVEL MEASUREMENTS
6050 Hollis Street, Emeryville

Well	Date	Depth to Water from TOC (feet)	Elevation of TOC (feet msl)	Groundwater Elevation (feet msl)
MW-H1	02/08/89	4.85	18.90	14.05
	05/01/89	5.10		13.80
	09/13/89	5.80		13.10
	12/04/89	5.34		13.56
	03/26/90	6.42		12.48
	07/24/90	5,93		12.97
	11/16/90	5.80		13.10
	03/15/91	4.30		14.60
	09/11/91	5.71		13.19
	09/24/91	5.80		13.10
MW-H2	09/11/91	6.84	21.48	14.64
	09/24/91	6.86		14.62
MW-H3	09/11/91	4.84	16.95	12.11
	09/24/91	4.81		12.14

Notes: msl = mean sea level.

Well locations and groundwater flow directions are shown in Figure 1.

ATTACHMENT A CITY OF EMERYVILLE STREET EXCAVATION PERMIT

PERMIT TO EXCAVATE IN CITY STREETS

DEPARTMENT OF PUBLIC WORKS CITY OF EMERYVILLE

12TH FLOOR
2200 POWELL ST., EMERYVILLE, CA 94508

(9-87 THIS SUPERCEDES ALL PREVIOUS FORMS)

NO. 91-8-9 DATE 8/6/91

TOMBANU DATE
COMPANY BASELINE ENVIRONMENTAL
ADDRESS 5900 HOLLIS ST. SUITE D' PHONE 420-8686
LOCATION OF WORK 5100 HOLLIS ST. SIDEWALK and parking buffer (eas
PLANNED I LE OF AUGUST 20
PLANNED DATE OF COMPLETION AUGUST ZO
DESCRIPTION OF WORK DRILLING GROUNDWATER MONITORING WELL
24 HR. NOTICE PRIOR START OF WORK
PLAN REQUIRED
MONUMENTS TO BE REPLACED
EMARKS
OTE: IF SUBCONTRACTOR IS TO DO WORK, PROOF OF ADEQUATE INSURANCE MUST BE PRESENTED PRIOR TO START OF WORK OR THIS PERMIT

IS VOID.

ATTACHMENT B
SURVEYOR REPORT

BATES AND BAILEY

LAND SURVEYORS

The last family

15 SHATTUCK SQUARE • BERKELEY, CA 94704 TELEPHONE (415) 843-2007

> P.O BOX 592 BERKELEY, CA 94701-0592 September 17, 1991

Essenie

Baseline Environmental Consulting 5900 Hollis St., "D" Emeryville, CA 94608

Attention: Bill Scott

Dear Bill,

Listed below are the monitor well elevations for the property at Hollis and 59th Streets.

The elevations are based upon U.S.C. & G.S. datum. The bench mark information was furnished by the City of Emeryville Public Works Dept.

Enclosed is a sketch indicating the distance between each well.

WELL	CASING ELEVATION	GROUND ELEVATION
MW - H 1	18.90	19.10
MW - H 2	21.48	21.93
MM - H 3	16.95	17.37

Yours truly,

Robert W Wilson

RWW/dd

Enc. - sketch

HOLLIS STREET

0 毛艺 59TH STREET ONE 236.76 OME

ATTACHMENT C

WELL CONSTRUCTION SUMMARIES, DEVELOPMENT LOGS, AND DRILLING LOGS

0			WELL	WELL CONSTRUCTION SUMMARY						S9105	_ Well No	o: <u>MW-H</u> 2	2
		SW-GW	11	ame: <u>Hollis S</u>				Date:					
	_	EZCL-MLZ	Location:	6050 Holl	is St.			Personne	:!:	<u>wks</u>			
	•	GC-CL		Emeryville, CA						Aqua S	Science E	ngineers	
5 	-			DRILLIN		MARY			CON	ISTRUC	TION TI	ME LOG	
	¥.		∃!	B-5 Hol			ne fliaht	TASK		STA	RT	Fin	ish
	-		3 1	d: <u>No</u>		COMMINGO	as mgne		ļ	Date	Time	Date	Time
			3ì	neter (inch):				1	Orilling:	8-29-91	7:45	8-29-91	8:57
10		GC.	Boring Dept	h (feet):20					Ĭ.				<u> </u>
	•		Surface Con	pletion: <u>Mo</u>	rrison Chr	isty Box		Geophys L	ogging:				
	1		Ground Sur	face Elevation	(feet): <u>21.</u>	.93			Casing	<u>8-29-91</u>	9:00	8-29-91	9:05
			TOC Elevati	on (feet):	21.48				[.			ļ	ļ
15	_			WELL	L DESIG	N		Filter Plac	ľ		9:05	8-29-91	9:59
1.5	-	SM	Basis: _	X Geologic	Log	_Geophy	sical Log	li		8-29-91 9-5-91	10:15 12:48	8-29-91 9-5-91	10:20 14:10
1	4							ŀ		<u> </u>		722	11.70
	-		Casing Diameter	Material + Length		lot ize	Interval		Other:				
	1		(inch)	(feet)			(feet bgs)				 	ļ.——	<u> </u>
20			2	PVC 4.2	Bl	ank	0.4 - 4.5		W	ELL DE	VELOPM	ENT	L
1	1		2	PVC 10	0	10	4.5 - 14.5	Method: D					!
	-		2	PVC 5.5	0	10	14.5 - 20	Time	Gallon		Арг	esrance	
ļ	1							12:48	0	_	turbid		
25								12:50	4		turbid		
]		Cantral	izer_None				13:03 13:06	8 15		turbid turbid		
	4		li	rial_Lonestar	#2/16		3.5 - 20	13:12	15	1	tly turbid		
	-		\ \	nite			2.5 - 3.5	13:40	22	Sligh	tly turbid		
30	\dashv		Cem	ent			0 - 2.5	13:47	26		tly turbid		
ì	1			WATE	R LEVEL	s		13:56	30 35		slightly tu		
	1			WAIE!	Date	Time	Depth	14:10	33	very	PHENITIA ER	rbid - clear	
ì	-						(ft bgs)			_			
35	\dashv				8-29-91	8:15	≈ 7.0			-			
	1				N.A.	N.A.	N.A.		<u> </u>				
	.]		Before de	evelopment:	9-5-91	12:47	6.81						
•	1			COMMENTS						_			
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45								Signatu	 	NATA	· • •		

WELL DEVELOPMENT

	S9105		Well No.: <u>MW-H2</u> Date: 9-5-91					
	:_ Hollis Stree		Depth of Well from TOC (feet): 20					
Location:			Well Diameter (inch): 2-inch					
	Emeryville	e, CA	Screened Interval (feet)): 4.5 - 20				
Recorded by:			TOC Elevation (feet m	sl): <u>21.48</u>				
	litions: <u>Sunny</u>	7	Water Level from TOC	(feet): 6.81	Time: 12:47			
Precip. in last			Product Level from TO	C (feet): None	Time: 12:47			
5 days (inch):_	None		Water Level Measureme	ent (feet msl):D	ual interface probe			
FIELD MEAS	UREMENTS							
	Gallons		Recharge:					
Time	Removed	Appearance	Time	Water Level	(feet)			
12:48	0		13:08.06	15.5				
12:50	4	Very turbid	13:08.40	15.0				
13:03	8	Very turbid	13:09.23	14.5				
13:06	15	Very turbid	13:09.59	14.0				
Took recharg	e value	Very turbid	13:10.44	13.5				
13:12	15	Slightly turbid						
13:4 0	22	Slightly turbid						
13:47	26	Slightly turbid						
13:56	30	Very slightly turbid						
14:10	35	Very slightly turbid - clear						
otal Gallons R	Removed: 35		Average Recharge Rate	(foot/minute): <u>0.</u>	76			
evelopment M	lethod: Doul	ble diaphragm pump	Purged Water Disposal:_	Drum # MW-HV	V2 & MW-HW3			
			Number of Drums: 2					
econtamination	n Method: 7	(SP & DI rinse	Rinsate Disposal: Drum	# MW 17072 0 3	nu Unue			

BASELINE 5900 Hollis Street, Suite D Emeryville, CA 94608 (415) 420-8686

Location Driller Method Logger	6050 Holli ASE Hollow ste WKS	em .	Boring No. <u>MW-H2</u> Project No. <u>S9105</u> Date <u>8-29-91</u> Casing size <u>2-inch</u>
Depth	Graphic	Lithology	Notes
0		Concrete slab Yellowish brown, silty gravelly SAND - sandy GRAVEL	,
1	SW-GW	fine-grained, sub-angular - angular clasts 1/2 - 3/4 inch diameter, loose to loosely dense, dry-damp (fill).	
2	CL/ML	Black, silty CLAY - clayey SILT with some gravel, low plasticity; firm sub-rounded clasts 1/3 inch diameter damp.	Brick pieces
3			
4	GC/CL	Brown, sandy clayey GRAVEL - gravelly CLAY. 1/3 - 1/4 inch diameter clasts. Sub-angular.	
		Angular, medium plasticity, loose, moist-very moist.	
5			8-9-9
6			Increase in moisture. Some water in between gravel. 5 ppm Hnu
7			8-8-9-10
8			
9	 	Brown, clayey sandy GRAVEL, sub-angular sub-rounded	17-8-9-10
10	GC	clasts 1/3 - 3/4 inch diameter, loose. Medium loose, some interbedding of coarse grained sandy wet.	

(10/23/91)

Page <u>1</u> of <u>2</u>

BASELINE 5900 Hollis Street, Suite D Emeryville, CA 94608 (415) 420-8686

Depth	Graphic	Lithology	Notes
	O. apple	14thology	140162
10			
11			
12			
13			
14	SM	Pale olive - yellowish brown, silty SAND; very fine-grained - some interbedding of fine-grained sands, iron oxide stains, wet.	8-8-9
15			
16			
17			
18			
19		Some interbedding of gravelly clay - clayey gravels. 1-3 inches thich.	
20		T.D. 20.0 ft	12-24-19-23

		- 7		
Scale: 1 inch =\1	β feet	-M	a. 11 60	(10/23/91)
Scale: 1 inch =\1 Signature	1/1/1//	. // /	WALAN)	Dama 2 of 2
oignature	10000	470	NWWW.	Page <u>2</u> of <u>2</u>
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0			WELI	L CONST	RUCTIC	N SUN	MARY	Project	No.:_!	S9105	_Well No	: MW-H3	3
		GM ZZS	Project N	Project Name: Hollis Street Project				Date:		8-2 9-91			
			Location	6050 H	ollis Stree	<u>t</u>		Personne	el:	WKS			
	_ 1	- GC]	Emeryv	ille, CA			Driller:		Aqua S	cience Er	ngineers	
	Y												
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10	4		≕ !	th (feet):1									<u> </u>
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				face Elevation	` '	17.37		<u> </u>	Casing:	8-29-91	12:25	8-29-91	12:27
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	4		2	PVC 2		010	13 - 15	Time	Gallon	5	Арр	carance	
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25	\dashv							8:20	2.5	Very	turbid		
	4		<u> </u>	<u>. </u>				8:29	4.0	Very	turbid		
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WELL DEVELOPMENT

Project No:	S9105		Well No.: MW-H3	Date: 9-5-91				
	e: Hollis Stree	et Project	Depth of Well from TOC (feet): 15.0					
	6050 Holli		Well Diameter (inch): 2-inch					
	Emeryville	, CA	Screened Interval (feet): 3-15					
Recorded by:	:_WKS		TOC Elevation (feet msl):					
Weather Con	ditions: Cloud	<u>y</u>	Water Level from TOC (feet): 4.71 Time: 8:10 Product Level from TOC (feet): None Time: 8:10					
Precip. in last	t							
5 days (inch):	: None		Water Level Measurement: Dual interface probe					
FIELD MEAS	SUREMENTS							
	Gallons		Recharge:					
<u>Time</u>	Removed	Appearance	<u>Time</u>	Water Level (feet)				
8:10	0	Very turbid	10:13.51	12.10				
8:20	2.5	Very turbid	10:13.59	12.00				
8:29	4.0	Very turbid	10:14.08	11.90				
8:45	6.0	Very turbid	10:14.18	11.80				
Pump clogged	d. Stopped pur	rging. Sand & bentonite inside well.	10:14.29	11.70				
Purged very f	fast Q rate in o	rder to collect sand.						
10:10	16.0	Slightly turbid						
Took recharge	e value.	Slightly turbid.						
10:25	20.0	Very slightly turbid						
10:35	22.0	Very slightly turbid - clear						
10:42	27.0	Very slightly turbid - clear						
Total Gallons	Removed: 27	7,0	Average Recharge Rate (fo	ot/minute): 0.37				
		ible diaphragm pump	Purged Water Disposal:D	,				
		-apmagn pump	Number of Drums: 1	Num # MW-11W2				
Decontaminat	ion Method:	TSP & DI water	Rinsate Disposal: Drum #	MW-HW2				
				(9/9/91)				

DRILLING LOG

Location	6050 Hollis	Street	Boring No. <u>MW-H3</u>
Driller	ASE		Project No. S9105
Method	Hollow ste		Date 8-29-91
Logger	<u>WKS</u>	Datum Bore size 8-inch	Casing size 2-inch
Depth	Graphic	Lithology	Notes
0		Reddish Brown CLAY, silty gravelly sand; fine-grained, clasts 1/4 - 1/3 inch diameter, sub-angular, loose, damp.	
1	GM		
2		Increase in clay. Gray, sandy, gravelly CLAY; medium-high plasticity, 1/4 - 1/3 inch diameter sub-rounded clasts, loose, moist.	
3	CL		
4			
5	СН	Dark greenish gray, silty CLAY with gravel, medium-high plasticity, very soft, very moist, wet.	Hnu - 10 ppm Pushed sample; no blow counts; strong petroleum odor - diesel?
6			Hnu - 10 ppm of sample
7		Yellowish brown, clayey sandy GRAVEL; clasts sub-rounded - rounded 1/4 - 1 1/2 inch diameter. Medium-fine grained sand, medium dense, very	Decrease in moisture
8	GC	moist.	
9			18-19-18-24
10			

Scale: 1 inch = 1.5 feet
Signature

(10/23/91)

Page <u>1</u> of <u>2</u>

BASELINE 5900 Hollis Street, Suite D Emeryville, CA 94608 (415) 420-8686

<u></u>			(413) 420-0000
Depth	Graphic	Lithology	Notes
10			
11			
12			
13			7-7-7-2
14	СН	Pale yellowish-brown, sandy silty CLAY; medium-high plasticity, very fine-grained, firm, iron oxide stained, wet.	
15		T.D. 15.0 ft	
16			
17			
18			
19			
20			

Scale: 1 inch = 15/tea

Signature

(10/23/91)

Page 2 of 2

ATTACHMENT D

GROUNDWATER SAMPLING FORMS AND LABORATORY REPORT

Project No: S9150-	AU		Well N	o.: <u>MW-H1</u>	Date: 9-11-91						
Project Name: Banta	Collins	····	Depth	of Well from	ГОС (feet): 20						
Location: 6050 Hollis	Street		Well D	Well Diameter (inch): 2-inch							
Emerwille			Screen	Screened Interval (feet): 6-20							
Recorded by: WKS			TOC I	TOC Elevation (feet msl): 18.90							
Weather Conditions:				Level from TC	OC (feet): 5.71 Time: 8:56						
Precip. in last			Produc	Product Level from TOC (feet): None Time: 8:56							
5 days (inch):None			Water	Level Measure	ment: Dual interface probe						
VOLUME OF WATER	R TO BE REMOV	ED BEFORE S	AMPLING:								
	(<u>5.71</u> ft Water Level		ft) ² x 3.14 x	7.48 =	2.3 gallons on one well volum 11.5 gallons in 5 well volumes. 12.0 total gallons removed.						
CALIBRATION:											
Calibration Standard: Before Purging: After Purging:		Temp (° 24 24 25	7.00 7.01 7.00	1,00 1,10	00						
FIELD MEASUREME	NTS:			Cumulative							
<u>Time</u>	Temp_(°C)	рН	EC (µmho)	Gallons Removed	Ampoorongo						
10:59	<u></u>		EC (µmno)	0	Appearance						
11:04	21	6,50	1,100	1.5	Clear, slight odor Clear, slight odor						
11:17	21	6,46	1.100	4	Clear, slight odor						
11:30	21	6.45	1.100	8	Clear, slight odor						
11:41	21	6.42	1,050	12	Clear, slight odor						
Water Level After Pu		pling (feet): <u>8.</u>	.5		Time: 11:48						
Appearance of Sampl					Time: 11:50						
Duplicate/Blank No.:_	·				Time: 14:15						
Purge Method: Doub											
Sampling Equipment:					OAs						
Sample Containers: 2											
	77 7		TOTALTE * 1		s & Tompkins						

Designa No. 20150										
Project No: _S9150-		<u> </u>		No.: <u>MW-H2</u>		9-11-91				
Project Name: Banta					TOC (feet): 20					
Location: 6050 Hollis	s Street		Well	Well Diameter (inch): 2-inch						
Emerwille	<u> </u>		Ѕстее	Screened Interval (feet): 4.5 - 20						
Recorded by: WKS			TOC	TOC Elevation (feet msl): 21.48						
Weather Conditions:_	Overcast		Wate	Water Level from TOC (feet): 6.84 Time: 8:59						
Precip. in last			Produ	ict Level from	TOC (feet): None	Time: 8:59				
5 days (inch): None					rement (feet msl): Du					
VOLUME OF WATER	TO BE REMO	VED BEFORE			\					
I(ft) - Well Depth	(<u>6,84</u> 1 Water Level	(1)] x (<u>.08</u> Well rad		x 7.48 =	10.6 gallons	on one well volume. in 5 well volumes. llons removed.				
CALIBRATION:										
Calibration Standard: Before Purging: After Purging:	<u>Time</u> 9:45 9:46 13.48	24 24	7.0 7.0 7.0 7.0	0 1, 1 1,	<u>umho)</u> 000 100 100					
0.0		• ••	7.0	- ,	100					
FIELD MEASUREME	NTS:			Cun. lative Gallons						
Time	Temp (°C)	<u>pH</u>	EC (µmho)	Removed	Appearanc	<u>e</u>				
9:43	<u></u>			0	Ci					
9:48	20	6.68	180	2	Clear Very slightly turbi	d alaas				
9:59	20	6.65	240	4	Very slightly turbi					
10:07	20	6.68	220	6	Very slightly turbi					
10:14	2 0	6.66	215	8	Very slightly turbi					
10:27	20	6.66	230	11	Very slightly turbi					
Water Level After Pur	ging Prior to San	npling (feet):_	8.15		Time: 10:34					
Appearance of Sample		ırbid - clear			Time: 10:40					
Duplicate/Blank No.:					Time: 14:15					
Purge Method: <u>Double</u>				<u> </u>						
Sampling Equipment:_					'OAs					
Sample Containers: 2	1-liter amber glas	ss, 3-40 ml VC	DAs preserved w/	HCL						
Sample Analyses: TVI	I as gasoline, as	diesel, as kero	sene: BTXE La	boratory: Curt	is & Tompkins					
Decontamination Meth	od: TSP and w	ater, DI water	rinse Rinsate	Disposal: <u>Drun</u>	#MW-HW					
						(5/15/91)				

Project Name: Banta Collins	Project No: _S9150-	A O	——————————————————————————————————————	Wall	No. MW.H3	Date: 0.11.01						
Coation: 6050 Hollis Street Screened Interval (feet): 3-15	·	0.11										
Emeriville Screened Interval (feet msl): 16.95 TOC Elevation Elevation Standard: 16.95 Toc Elevation Standard: 16.95 Toc Elevation Standard: 17.95 Total gallons conceved (feet msl): 17.95 Total gallons removed. Calibration Standard: 17.95 Toc Elevation Standard: 17.95 Total gallons removed. Calibration Standard: 17.95 Toc Elevation Standard: 17.95 Total gallons removed. Calibration Standard: 17.95 Toc Elevation Standard: 17.95 Total gallons removed. Calibration Standard: 17.95 Total gallons on one well volumes. Calibration Standard: 17.95 Total gallons on one well volumes. Calibration Standard: 17.95 Total gallons in 5 well volumes. Calibration Standard: 17.95 Total gallons in 5 well volumes. Calibration Standard: 17.95 Total gallons in 5 well volumes. Calibration Standard: 17.95 Total gallons in 5 well volumes. Calibration Standard: 17.95 Total gallons in 5 well volumes. Calibration Standard: 17.95 Total gallons in 5 wel	· · ·											
Mater Conditions: Overcast Water Level from TOC (feet): 4.84 Time: 8.50												
Water Level from TOC (feet):4.84												
Product Level from TOC (feet): Film Time: 8:50	<u> </u>				•							
Volume of Water R to Be Removed Before Sampling:	_	Overcasi				,						
VOLUME OF WATER TO BE REMOVED BEFORE SAMPLING: I(_15fi) - (4.84fi)] x (0.83fi)^2 x 3.14 x 7.48 =	•					· -						
Calibration	5 days (mon). Tronc		· · · · · · · · · · · · · · · · · · ·	Water	Level Measure	ment (feet msl): Dual interface probe						
Well Depth Water Level Well radius 8.2 (III) gallons in 5 well volumes. total gallons removed. CALIBRATION: Time Temp (*C) pH EC (umho) Before Purging: 9:45 24 7.00 1,000 Before Purging: 9:45 24 7.00 1,000 Before Purging: 9:45 24 7.00 1,000 Before Purging: 9:45 24 7.00 1,100 Appearance Time: Temp (*C) pH EC (umho) Appearance 13:11 22 6.80 1.100 5 Very slightly turbid - clear 13:32 22 6.80 1.100 9 Clear Well as the purging Prior to Sampling (feet): 5.6 Time: 13:58 Time: 14:00 Duplicate/Blank	VOLUME OF WATER	R TO BE REMOV	ED BEFORE	SAMPLING:								
Calibration Standard: Time 9,45 Z4 7.00 1.000 Before Purging: 9,45 24 7.00 1.100 After Purging: 13:48 25 7.00 1.100 FIELD MEASUREMENTS: Cumulative Gallons Time Temp (*C) pH EC (μmbo) 4 Slightly turbid - filter sand coming through casing wall 13:11 22 6.77 1.250 4 Slightly turbid - filter sand coming through casing wall 13:16 22 6.80 1.100 5 Very slightly turbid - clear 13:24 22 6.80 1.100 7 Very slightly turbid - clear 13:32 22 6.80 1.100 9 Clear 13:41 22 6.80 1.150 11 Clear Water Level After Purging Prior to Sampling (feet): 5.6 Time: 13:58 Time: 14:00 Duplicate/Blank No.: MW-H3a Time: 14:00 Time: 14:15 Purge Method: Double diaphram pump VOC Attachment: Yes for VOAs Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes for VOAs Sample Containers: 2 1-liter ambe	· · /		,, . _		x 7.48 =	8.2 gallons in 5 well volumes.						
Calibration Standard: 9.45 24 7.00 1.000 Before Purging: 9:45 24 7.01 1.100 After Purging: 13:48 25 7.00 1.100 FIELD MEASUREMENTS: Cumulative Gallons Time Temp (°C) pH EC (µmho) Removed Appearance 13:11 22 6.77 1.250 4 Slightly turbid - filter sand coming through casing wall 13:16 22 6.80 1.100 5 Very slightly turbid - clear 13:24 22 6.80 1.100 7 Very slightly turbid - clear 13:32 22 6.80 1.100 9 Clear 13:41 22 6.80 1.150 11 Clear Water Level After Purging Prior to Sampling (feet): 5.6 Time: 13:58 Appearance of Sample: Clear Time: 14:00 Duplicate/Blank No.: MW-H3a Time: 14:15 Purge Method: Double diaphram pump Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes for VOAs Sample Containers: 2 1-liter amber glass, 3-40 ml VOAs preserved w/HCL Sample Analyses: TVH as gasolme, as diesel, as kerosene: BTXE Laboratory: Curtis & Tompkins	CALIBRATION:											
Time Temp (°C) pH EC (μmho) Removed Appearance	Before Purging:	9:45 9:45	24 24	7.0 7.0	0 1,00 1 1,10	0						
Time Temp (°C) pH EC (μmho) Gallons Removed Appearance 13:11 22 6.77 1.250 4 Slightly turbid - filter sand coming through easing wall 13:16 22 6.80 1.100 5 Very slightly turbid - clear 13:24 22 6.80 1.100 7 Very slightly turbid - clear 13:32 22 6.80 1.150 9 Clear 13:41 22 6.80 1.150 11 Clear Water Level After Purging Prior to Sampling (feet): 5.6 Time: 13:58 Appearance of Sample: Clear Time: 14:00 Duplicate/Blank No.: MW-H3a Time: 14:15 Purge Method: Double diaphram pump Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes for VOAs Sample Containers: 2 1-liter amber glass, 3-40 ml VOAs preserved w/HCL Sample Analyses: TVH as gasoline, as diesel, as kerosene: BTXE Laboratory: Curtis & Tompkins			20	710	_,							
Time Temp (°C) pH EC (µmho) Removed Appearance	FIELD MEASUREME	ENTS:										
Water Level After Purging Prior to Sampling (feet): 5.6 Appearance of Sample: Clear Duplicate/Blank No.: MW-H3a Purge Method: Double diaphram pump Sampling Equipment: Disposable PVC bailer Sample Analyses: TVH as gasoline, as diesel, as kerosene: BTXE Laboratory: Curtis & Tompkins through casing wall through casing wall Very slightly turbid - clear Very slightly turbid - clear Time: 13:58 Time: 13:58 Time: 14:00 Time: 14:15 Time: 14:15 VOC Attachment: Yes for VOAs	Time	Temp (°C)	<u>pH</u>	EC (umho)		Appearance						
13:16 22 6.80 1.100 5 Very slightly turbid - clear 13:24 22 6.80 1.100 7 Very slightly turbid - clear 13:32 22 6.80 1.100 9 Clear 13:41 22 6.80 1.150 11 Clear Water Level After Purging Prior to Sampling (feet): 5.6 Time: 13:58 Appearance of Sample: Clear Time: 14:00 Duplicate/Blank No.: MW-H3a Time: 14:15 Purge Method: Double diaphram pump Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes for VOAs Sample Containers: 2 1-liter amber glass, 3-40 ml VOAs preserved w/HCL Sample Analyses: TVH as gasoline, as diesel, as kerosene: BTXE Laboratory: Curtis & Tompkins	13:11	22	6.77	-								
Water Level After Purging Prior to Sampling (feet): 5.6 Time: 13:58 Appearance of Sample: Clear Time: 14:00 Duplicate/Blank No.: MW-H3a Time: 14:15 Purge Method: Double diaphram pump Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes for VOAs Sample Containers: 2 1-liter amber glass, 3-40 ml VOAs preserved w/HCL Sample Analyses: TVH as gasoline, as diesel, as kerosene; BTXE Laboratory: Curtis & Tompkins	13:16	22	6.80	1.100	5	•						
Water Level After Purging Prior to Sampling (feet): 5.6 Time: 13:58 Appearance of Sample: Clear Time: 14:00 Duplicate/Blank No.: MW-H3a Time: 14:15 Purge Method: Double diaphram pump Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes for VOAs Sample Containers: 2 1-liter amber glass, 3-40 ml VOAs preserved w/HCL Sample Analyses: TVH as gasoline, as diesel, as kerosene; BTXE Laboratory: Curtis & Tompkins	13:24	22	6.80	1.100	7	Very slightly turbid - clear						
Water Level After Purging Prior to Sampling (feet): 5.6 Time: 13:58 Appearance of Sample: Clear Time: 14:00 Duplicate/Blank No.: MW-H3a Time: 14:15 Purge Method: Double diaphram pump Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes for VOAs Sample Containers: 2 1-liter amber glass, 3-40 ml VOAs preserved w/HCL Sample Analyses: TVH as gasoline, as diesel, as kerosene; BTXE Laboratory: Curtis & Tompkins	13:32	22	6.80	1.100	9	Clear						
Appearance of Sample: Clear Time: 14:00 Duplicate/Blank No.: MW-H3a Time: 14:15 Purge Method: Double diaphram pump Sampling Equipment: Disposable PVC bailer VOC Attachment: Yes for VOAs Sample Containers: 2 1-liter amber glass, 3-40 ml VOAs preserved w/HCL Sample Analyses: TVH as gasoline, as diesel, as kerosene; BTXE Laboratory: Curtis & Tompkins	13:41	22	6.80	1,150	11	Clear						
	Appearance of Sample Duplicate/Blank No.: Purge Method: Doub Sampling Equipment: Sample Containers: 2 Sample Analyses: TV	e: Clear MW-H3a ble diaphram pum Disposable PVC 1-liter amber gla TH as gasoline, as	bailer is, 3-40 ml V diesel, as ken	VOC Attachm OAs preserved w	ent: <u>Yes for VC</u> /HCL aboratory: <u>Curti</u>	Time: 14:00 Time: 14:15 As S & Tompkins						



Curtis & Tompkins, Ltd., Analytical Laboratofie Stage 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 48650900 7 1937

BASELINE.

DATE RECEIVED: 09/11/91 DATE REPORTED: 09/24/91

LABORATORY NUMBER: 105142

CLIENT: BASELINE

PROJECT ID: \$9-105-A0

LOCATION: B. COLLINS, 6050 HOLLIS STREET

RESULTS: SEE ATTACHED

Final Approva

Berkeley

Wilmington

Los Angeles



NUMBER: 105142

ELINE

9 - 105 - AO

DATE RECEIVED: 09/11/91

DATE ANALYZED: 09/24/91 DATE REPORTED: 09/24/91

OLLINS, 6050 HOLLIS STREET

al Volatile Hydrocarbons with BTXE in Aqueous Solutions H y California DOHS Method/LUFT Manual October 1989 BTXE by EPA 5030/8020

SAPLE ID	TVH AS GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-H2	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MAN TH 1	1,000	15	5.6	2.7	2.9
MM H 3	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-H3a ■	ND(50)	ND(0.5)	ND(0.5)		ND(0.5)

cted at or above reporting limit; Reporting limit h parentheses.

2

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ATTACHMENT D

GROUNDWATER SAMPLING FORMS
AND
LABORATORY REPORT

Project No: S9150-A	.0		Well	Well No.: <u>MW-H1</u> Date: 9-11-91								
Project Name: Banta	Collins		Depth	Depth of Well from TOC (feet): 20								
Location:6050 Hollis S	treet		Well I	Well Diameter (inch): 2-inch								
Emeryville			Screen	Screened Interval (feet): 6-20								
Recorded by: WKS		***	TOC	Elevation (feet	msl):18.90							
Weather Conditions:	Overcast		Water	Level from TC	OC (feet): 5.71	Time: 8:56						
Precip. in last			Produ	ct Level from T	OC (feet): None	Time: 8:56						
5 days (inch):None			Water	Level Measure	ment: Dual interfac	ce probe						
VOLUME OF WATER	TO BE REMOV	ED BEFORE	SAMPLING:									
				7.40								
[(ft) Well Depth	(<u>5.71</u> ft Water Level)] x (<u>.08</u> Well rac		x /.48 = 	11.5 gallon	s on one well volume is in 5 well volumes. gallons removed.						
CALIBRATION:												
Calibration Standard:	<u>Time</u> 9:45	<u>Temp</u> 24	o (°C) pH 7.0									
Before Purging:	9:46	24	7.0 7.0	,-								
After Purging:	13:46	25	7.0	0 1,10	00							
FIELD MEASUREMEI	NTS:			Cumulative								
<u>Time</u>	Temp (°C)	_pH_	EC (µmho)	Gallons Removed	Appeara	nce						
10:59		**		0	Clear, s	light odor						
11:04	21	6.50	1,100	1.5		slight odor						
11:17	21	6.46	1.100	4	Clear, s	light odor						
11:30	21	6.45	1.100	8	Clear, s	light odor						
11:41	21	6.42	1,050	12	Clear, s	light odor						
Water Level After Pur					Time: 11:48	· · · · · · · · · · · · · · · · · · ·						
Appearance of Sample					Time: 11:50							
Duplicate/Blank No.: N				·	Time: 14:15							
Purge Method: <u>Double</u>												
Sampling Equipment:					UAs							
Sample Containers: 2-	-				a & Torreli							
Sample Analyses: TVI Decontamination Meth												
	TOUC LAP SHOW:	aier. 111 Wate	rrinse Kinsate	LUSDOSAI: LITH	m#MW-HW							

				 						
Project No: S9150-	AO		Wel	l No.: <u>MW-H2</u>	2 Date:_	9-11-91				
Project Name: Banta	Collins		Dep	th of Well fron	TOC (feet): 20					
Location: 6050 Holli	s Street		Wel	l Diameter (inc	h): 2-inch					
Emeryville Emeryville		-	Scre	Screened Interval (feet): 4.5 - 20						
Recorded by: WKS		·		TOC Elevation (feet msl): 21.48						
Weather Conditions:	Overcast			Water Level from TOC (feet): 6.84 Time: 8:59						
Precip. in last				Product Level from TOC (feet): None Time: 8:59						
5 days (inch): None					rement (feet msl): Dua					
VOLUME OF WATER	R TO BE REMO	VED BEFORE				nacriaco prote				
	(<u>6.84</u> Water Level		3ft) ² x 3.1	4 x 7.48 =	10.6 gallons	on one well volume. in 5 well volumes. lons removed.				
CALIBRATION:										
Calibration Standard: Before Purging: After Purging:	<u>Time</u> 9:45 9:46 13.4	24	7. 7.	00 1, 01 1,	<u>(µmho)</u> 000 100 100					
FIELD MEASUREME	NTC.									
Time	Temp (°C)	<u>pH</u>	EC (µmho)	Cun. llative Gallons Removed	<u>Appearance</u>	<u>.</u>				
		···			<u> </u>	•				
9:43	-	-		0	Clear					
9:48	2 0	6.68	180	2	Very slightly turbic	l - clear				
9 :5 9	20	6.65	240	4	Very slightly turbic	l - clear				
10:07	20	6.68	220	6	Very slightly turbic	l - clear				
10:14	20	6.66	215	8	Very slightly turbic	l - clear				
10:27	20	6.66	230	11	Very slightly turbid	l - clear				
Water Level After Pur					Time: 10:34					
Appearance of Sample		urbid - clear			Time: 10:40					
Duplicate/Blank No.:					Time: 14:15					
Purge Method: <u>Double</u>	 -		 		<u> </u>					
Sampling Equipment:					/OAs					
Sample Containers: 2						·				
Sample Analyses: TVI	I as gasoline, as	diesel, as kero	sene; BTXE L	aboratory: Curt	is & Tompkins					
Decontamination Meth	od: TSP and w	ater, DI water	rinse Rinsate	Disposal:Drun	#MW-HW					
						(5/15/91)				

D												
Project No: S9150-			-		Date: 9-11-91							
Project Name: Banta					FOC (feet): 15							
Location: 6050 Holl			.	Diameter (inch):								
Emeryvill	e			Screened Interval (feet): 3-15								
Recorded by: WKS			TOC	TOC Elevation (feet msl): 16.95								
Weather Conditions:	Overcast		Wate	Water Level from TOC (feet): 4.84 Time: 8:50								
Precip. in last			Produ	act Level from T	OC (feet): Film Time: 8:50							
5 days (inch): None			Wate	Water Level Measurement (feet msl): Dual interface probe								
VOLUME OF WATER	R TO BE REMOV	ED BEFOR	E SAMPLING:									
[(15ft) -	(<u>4.84</u> ft Water Level)] x (<u>.08</u> Well rad		x 7.48 =	1.6 gallons on one well volume. 8.2 gallons in 5 well volumes. 11 total gallons removed.							
CALIBRATION:												
Calibration Standard: Before Purging: After Purging:	9:45	24 24		00 1,00 01 1,10	00							
FIELD MEASUREME	ENTS:			Cumulative								
Time	Temp (°C)	Hq	EC (umho)	Gallons Removed	Appearance							
13:11	22	6.77	1,250	4	Slightly turbid - filter sand coming							
			٠		through casing wall							
13:16	22	6.80	1.100	5	Very slightly turbid - clear							
13:24 13:32	22	6.80	1.100	7	Very slightly turbid - clear							
13:32	22 22	6.80 6.80	1.100 1.150	9 11	Clear Clear							
Water Level After Pu	rging Prior to San	pling (feet):	5.6		Time: 13:58							
Appearance of Sampl		_ _			Time: 14:00							
Duplicate/Blank No.:					Time: 14:15							
Purge Method: Doub												
Sampling Equipment:	Disposable PVC	bailer	_ VOC Attachm	ent: Yes for VC	As							
Sample Containers: 2												
Sample Analyses: TV												
Decontamination Met	hod: TSP and wa	iter. DI wate	rrinse Rinsate	Disposal: <u>Drum</u>	# MW-HW							
					(5/15/91)							



Curtis & Tompkins, Ltd., Analytical Laboratofie Cstage 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 48650900 7 193;

BASELINE

DATE RECEIVED: 09/11/91 DATE REPORTED: 09/24/91

LABORATORY NUMBER: 105142

CLIENT: BASELINE

PROJECT ID: S9-105-A0

LOCATION: B. COLLINS, 6050 HOLLIS STREET

RESULTS: SEE ATTACHED

Final Approva

Berkeley

Wilmington

Los Angeles



DATE RECEIVED: 09/11/91

LABORATORY NUMBER: 105142

CLIENT: BASELINE

DATE ANALYZED: 09/24/91 PROJECT ID: S9-105-AO DATE REPORTED: 09/24/91

LOCATION: B. COLLINS, 6050 HOLLIS STREET

Total Volatile Hydrocarbons with BTXE in Aqueous Solutions TVH by California DOHS Method/LUFT Manual October 1989 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
		(u g / L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
105142.1	MW-H2	ND(50)	ND(0,5)	ND(0.5)	ND(0.5)	ND(0.5)
105142-2	MW - H 1	1,000	15	5.6	2.7	2.9
105142-3	MW-H3	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
105142-4	MW-H3a	ND(50)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, % 2

RECOVERY, % 94



LABORATORY NUMBER: 105142

CLIENT: BASELINE

PROJECT ID: S9-105-AO

LOCATION: B. COLLINS, 6050 HOLLIS STREET

DATE RECEIVED: 09/11/91

DATE EXTRACTED: 09/18/91 DATE ANALYZED: 09/21/91

DATE REPORTED: 09/24/91

Extractable Petroleum Hydrocarbons in Aqueous Solutions California DOHS Method LUFT Manual October 1989

LAB 1D	CLIENT ID	KEROSENE RANGE (ug/L)	DIESEL RANGE (ug/L)	REPORTING LIMIT* (ug/L)
105142-1	MW-H2	ND	ND	5 0
105142-2	MW-H1	ND	390	5 0
105142-3	MW-H3	ND	120	5 0
105142-4	MW-H3a	NĐ	220	5 0

ND = Not detected at or above reporting limit.

*Reporting limit applies to all analytes.

QA/QC SUMMARY

5900 Hollis Street, Suite D Emeryville, CA 94608 (415) 420-8686

CHAIN OF CUSTODY RECORD

Lab Cuilis & Tompkins

Contact Person 13:11 Scott

Project No.		Project	Name ar	nd Locati	nn							,					,	, , , , , , , , , , , , , , , , , , , ,		
59105	-40	B. 0	Collin	· S	60 ±	5 0 /	Hollis Sire	- T		alysi										
Samplers: (Sig	gnature)										/ 1	/3	//	/ ,	/ ,	/ /	/ ,	/ / /		
Samplers: (Signal)	licen	te	See	IT						/										
No. Station	Date	Time	Media		Compo- sites	No. of Con- tainers	Station Loca	tion	11/2/		7 7/ ć				/		/	Rem	arks	Detection Limits
MW-H2	9-11-91	10:40	water			5			X	×	X									Pr. Valey
MW-H1	9-11-91	14:50	Water			5			$\boldsymbol{\chi}$	×	×								·	
MW-H3	11-51	14.00	Water			5			×	×	×									
MW-43a	1-11-91	14:15	w.7,			5		:	χ	×	×									
																				
											 			 .				<u> </u>	 .	
															 					
		<u> </u>							<u> </u>			<u> </u>				<u> </u>				
Relinquished by	y: (Signatur	(c)	D	ate / Time		Received I	by: (Signature)		Date	/Tim	c		Arri	val at	Labo	mples ratory:				
Relinquished by	/ (Signatur	c)	D	ite / Time		Received t	oy: (Signature)		Date	 Tim 	c		2		-èn	n-		10000000000000000000000000000000000000		
Relinquished by			0:	ite / Time		Received (Signature)	or Laboratory by:	0((Date	i /Tim 	e		-{'```	· · · · · · · · · · · · · · · · · · ·						ļ

ATTACHMENT E

LABORATORY REPORT, SOIL



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710. Phone (415) 486-0900

KECEIVED

78 66 189.

DATE RECEIVED SELOS 29/91
DATE REPORTED: 09/05/91

LABORATORY NUMBER: 105007

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-105

LOCATION: BONTA COLLINS

RESULTS: SEE ATTACHED

QA/QC Approval

Final Appr



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (415) 486-0900

DATE RECEIVED: 08/29/91 DATE REQUESTED: 09/05/91 DATE REPORTED: 09/17/91

LABORATORY NUMBER: 105072

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-105

LOCATION: 6050 HOLLIS STREET

RESULTS: SEE ATTACHED

QA/QC Approval

Final

Berkeley

Wilmington

Los Angeles



LABORATORY NUMBER: 105007

CLIENT: BASELINE ENVIRONMENTAL

PROJECT ID: S9-105

LOCATION: BONTA COLLINS

DATE RECEIVED: 08/29/91 DATE ANALYZED: 09/05/91

DATE REPORTED: 09/05/91

Total Volatile Hydrocarbons with BTXE in Soils and Wastes TVH by California DOHS Method/LUFT Manual October 1989 BTXE by EPA 5030/8020

LAB ID	SAMPLE ID	TVH AS GASOLINE	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
	• • • • • • • • • • • • • • • • • • • •	(mg/Kg)	(ug/Kg)	(ug/Kg)	(ug/Kg)	
105007-1 105007-2	MW-H3 MW-H2	ND(1.0) ND(1.0)			ND(5.0) ND(5.0)	

ND = Not detected at or above reporting limit; Reporting limit indicated in parentheses.

QA/QC SUMMARY

RPD, % 2 RECOVERY, %

106



LABORATORY NUMBER: 105072

LIENT: BASELINE ENVIRONMENTAL

ROJECT ID: S9-105

LOCATION: 6050 HOLLIS STREET

DATE RECEIVED: 08/29/91 DATE REQUESTED: 09/05/91 DATE EXTRACTED: 09/11/91

DATE ANALYZED: 09/13,15/91 DATE REPORTED: 09/17/91

Extractable Petroleum Hydrocarbons in Soils & Wastes

California DOHS Method LUFT Manual October 1989

LAB ID	SAMPLE ID	KEROSENE RANGE (mg/Kg)	DIESEL RANGE (mg/Kg)	REPORTING LIMIT* (mg/Kg)
10 072-1	MW-H3	ND	800	10
10 072-2	MW-H2	ND	ND	

D Not Detected at or above reporting limit.

Reporting limit applies to all analytes.

1/QC SUMMARY

ıD . COVERY, %

103007 (COC of Alias)

new loan 105072

5900 Hollis Street, Suite D Emeryville, CA 94608 (415) 420-8686

CHAIN OF CUSTODY RECORD

Turn-Around Time North Lab Couling Thought is

								_						muci	rers	····			
Project No. Project Name and Location																			
159-105 5900 Hallis St.					Analysis														
Samplers: (Sig	Samplers: (Signature)						/	Ki.	*/ 45/	/ /	/ /	/ /	/ /	/ ,	/ / /				
Project No. S9-105 Samplers: (Signature) Milliment Department of Depa						Analysis (1)													
No. Station	Date	Time	Media		Сопіро-	No. of Con- tainers	Station Locati	on								/	/	Remarks	Detection Limits
MW-113 MW-112	8/29/11	11:45	50,1	6.64		1			Κ	Χ								Hold Sample after analysis	
MW-HZ	4/2/11/12	8113	50.1	6-64	 	(χ	X						· .			
								·						<u> </u>					
									-12				· 				 		
																			·
									 -				 				_		
<u> </u>									 .										
Retinguished by	Relinguished by: (Signature) Date / Time Received by: (Signature)						Det		<u></u>						<u></u>				
Li - 1/24/91		(Orginature)			Date / Time			Condition of Samples upon Arrival at Laboratory:											
Relinquished by: (Signature) Date / Time			Received by: (Signature)			Date / Time				chilled, interest									
Relinquished by: (Signature) Date / fime			Received for Laboratory by:		<u>.</u>	Date / Time				Ren	narks:								
and designed a property and design address of			1/100	tillioning	y: Date / Time														

VERBAL ADDITIONS / CANCELLATIONS TO ANALYSIS REQUEST SHEET CLIENT: Bas DATE: REQUESTED BY:__ RECORDED BY: Current Lab ID Circle | Specify add (Previous Lab ID) Client_ID matrix or cancel Analysis Due date 105072-001 MWH-2 soil 56A water other (105007-001) (soil 105072-002 mw water other (105007-002) soil water other Original in job jacket.

Copies to analytical departments.