



Subsurface Consultants, Inc.

ENVIRONMENTAL
PROTECTION
97 JAN 14 AM 8:56

R. William Rudolph, P.E.
President

January 8, 1997
SCI 447.055

Mr. George Hill
655 University Avenue, Suite 100
Sacramento, California 95825

Mr. Gordon Linden
150 La Salle Avenue
Piedmont, California 94611

**Project Update
Free Product Recovery
3093 Broadway
Oakland, California**

Dear Gentlemen:

This letter summarizes the results of free product recovery at the referenced site. On January 3, 1997, all the wells were checked for the presence of free product. Free product was recovered from wells MW-1 and MW-4 by hand bailing. Recovery of free product during this event is consistent with past events. To date a total of approximately 226 gallons of product have been removed as summarized below. Approximately 85 gallons of product have been removed by the soil vapor extraction system (SVES) since startup on October 29, 1996. Product recovery and depth to groundwater data are presented on the attached Tables 1 and 2. In December 1996, the SVES was taken out of operation for maintenance and reprogramming. Additionally, SCI has temporarily stopped the operation of the SVES because of the large quantity of moisture that is being extracted by the system due to the recent rainfall. The system will resume operation following replacement of the moisture trap.

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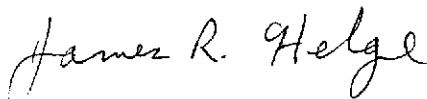
<u>Well</u>	<u>Product Thickness 1/3/97 (feet)</u>	<u>Product Removed 1/3/97 (gal)</u>	<u>Total Cumulative Product Removed (gal)</u>
MW-1	0.81	0.37	9.76
MW-4	0.10	0.02	47.91
MW-6	NM	NA	83.40
MW-9	0.00	0.00	<u>0.10</u>
		Total by bailing	141.17
		MW-6(by SVES)	84.50
		Total Product Removed	225.67

Free product was not measured in well MW-6 because this well is actively being remediated by the SVES system.

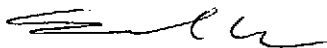
The next free product recovery event will be performed the first week of February. If you have any questions, please call.

Yours very truly,

Subsurface Consultants, Inc.



James R. Helge
 Environmental Scientist



Samuel C. Won, REA
 Project Engineer

JRH:SCW:sld

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Attachment: Table 1 - Free Product Recovery
Table 2 - Groundwater and Free Product Elevation Data

cc: ✓ Ms. Susan Hugo
Senior Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Mr. Jonathan Redding
Fitzgerald, Abbott & Beardsley
1221 Broadway, 21st Floor
Oakland, California 94612

**TABLE 1
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA**

Subsurface Consultants, Inc.

<u>Well</u>	<u>Removal Date</u>	<u>Product Removed (gallons)</u>	<u>Cumulative Product Removed (gallons)</u>
MW-1	12/23/91	2.00	2.00
	12/26/91	0.50	2.50
	1/13/92	1.00	3.50
	2/28/92	2.00	5.50
	11/9/93	0.50	6.00
	11/3/95	0.25	6.75
	11/30/95	0.25	7.00
	1/3/96	0.53	7.53
	2/2/96	0.75	8.28
	3/1/96	0.10	8.38
	4/4/96	0.00	8.38
	5/2/96	0.00	8.38
	6/5/96	0.10	8.48
	7/9/96	0.10	8.58
	8/8/96	0.05	8.63
	9/10/96	0.10	8.73
	10/1/96	0.25	8.98
11/4/96	0.13	9.11	
12/2/96	0.26	9.37	
1/3/97	0.39	9.76	
MW-4	12/23/91	2.50	2.50
	12/26/91	6.00	8.50
	1/10/92	5.00	13.50
	2/28/92	4.00	17.50
	3/11/92	3.50	21.00
	3/13/92	3.50	24.50
	3/17/92	2.25	26.75
	3/18/92	2.50	29.25
	3/19/92	1.50	30.75
	3/23/92	4.00	34.75
	3/24/92	1.50	36.25
	3/25/92	1.00	37.25

**TABLE 1
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA**

Subsurface Consultants, Inc.

<u>Well</u>	<u>Removal Date</u>	<u>Product Removed (gallons)</u>	<u>Cumulative Product Removed (gallons)</u>
MW-4	3/26/92	1.00	38.25
	3/27/92	0.50	38.75
	3/31/92	0.50	39.25
	4/1/92	0.25	39.50
	4/2/92	0.13	39.63
	4/6/92	0.13	39.76
	4/10/92	0.25	40.01
	4/13/92	0.25	40.26
	4/20/92	0.13	40.39
	5/4/92	0.13	40.52
	5/18/92	0.13	40.65
	5/26/92	0.13	40.78
	6/1/92	0.06	40.84
	6/29/92	0.25	41.09
	7/29/92	1.11	42.20
	8/28/92	1.68	43.88
	4/3/93	0.13	44.01
	11/9/93	0.03	44.04
	8/30/95	1.75	45.79
	10/2/95	0.50	46.29
	11/3/95	0.25	46.54
	11/30/95	0.25	46.79
	1/3/96	0.05	46.84
	2/2/96	0.10	46.94
	3/1/96	0.20	47.14
	4/4/96	0.20	47.34
	5/2/96	0.20	47.54
	6/5/96	0.15	47.59
	7/9/96	0.16	47.75
	8/8/96	0.00	47.75
9/10/96	0.05	47.80	
10/1/96	0.05	47.85	
11/4/96	0.02	47.87	

**TABLE 1
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA**

Subsurface Consultants, Inc.

<u>Well</u>	<u>Removal Date</u>	<u>Product Removed (gallons)</u>	<u>Cumulative Product Removed (gallons)</u>	
MW-4	12/2/96	0.02	47.89	
	1/3/97	0.02	47.91	
MW-6	12/23/91	7.50	7.50	
	12/26/91	2.00	9.50	
	1/10/92	1.00	10.50	
	2/4/92	2.00	12.50	
	2/28/92	3.00	15.50	
	3/10/92	2.75	18.25	
	3/12/92	2.00	20.25	
	3/23/92	1.00	21.25	
	3/30/92	0.50	21.75	
	4/10/92	0.25	22.00	
	4/13/92	0.13	22.13	
	4/20/92	0.13	22.26	
	5/4/92	0.13	22.39	
	5/8/92	0.06	22.45	
	5/26/92	0.13	22.58	
	6/1/92	0.06	22.64	
	6/29/92	0.19	22.83	
	7/29/92	0.60	23.43	
	8/28/92	2.40	25.83	
	12/2/92	(obstruction in well)		--
	4/3/93	1.75	27.58	
	11/9/93	0.83	28.41	
	8/30/95	4.50	32.91	
10/2/95	4.0	36.91		
11/3/95	3.00	39.91		
11/30/95	2.50	42.41		
1/3/96	2.50	44.91		
2/2/95	5.00	49.90		
3/1/96	4.00	53.90		
4/4/96	5.00	58.90		

**TABLE 1
FREE PRODUCT RECOVERY
3093 BROADWAY
OAKLAND, CALIFORNIA**

<u>Well</u>	<u>Removal Date</u>	<u>Product Removed (gallons)</u>	<u>Cumulative Product Removed (gallons)</u>
MW-6	5/2/96	4.50	63.40
	6/5/96	4.00	67.40
	7/9/96	4.50	71.90
	8/8/96	4.00	75.90
	9/10/96	3.50	79.40
	10/1/96	4.00	83.40
	11/4/96	NM*	NM*
	12/2/96	NM*	NM*
	1/3/97	NM*	NM*
MW-9	8/8/96	0.10	0.10
	9/10/96	0.00	0.10
	10/1/96	0.00	0.10
	11/4/96	0.00	0.10
	12/2/96	0.00	0.10
	1/3/97	0.00	0.10
Total Product removed by bailing			141.17
Total Product removed by Soil Vapor Extraction			<u>64.56</u>
Cumulative Total of Product Removed			205.34

* NM - Not measured. Product is currently being removed by vapor extraction from this well.

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TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-1	94.48	10/3/90	26.40	68.08	NM	--
		3/5/91	27.46	67.02	NM	--
		3/18/91	26.88	67.60	NM	--
		4/12/91	25.49	68.99	NM	--
		12/23/91	26.86	67.62	1.15	68.77
		12/26/91	26.08	68.40	0.22	68.63
		1/13/92	26.53	67.95	0.66	68.61
		2/28/92	27.75	66.73	0.42	67.15
		5/18/92	24.75	69.73	NM	--
		6/29/92	25.09	69.39	0.04	69.43
		7/29/92	25.46	69.02	0.15	69.17
		8/28/92	25.56	68.92	0.29	69.21
		10/28/92	26.44	68.04	0.52	68.56
		11/24/92	26.63	67.85	NM	--
		12/22/92	26.37	68.11	NM	--
		4/5/93	23.77	70.71	0.00	--
		7/20/93	24.51	69.97	0.60	70.57
		11/9/93	26.06	68.42	1.17	69.59
		8/30/95	21.73	72.75	0.23	72.98
		9/15/95	21.88	72.61	0.15	72.75
		10/2/95	22.42	72.06	0.42	72.48
		11/3/95	23.10	72.74	0.76	73.50
		11/30/95	23.38	72.54	0.70	73.24
		1/3/96	23.30	72.62	0.78	73.40
		2/2/96	22.96	72.28	0.84	74.12
		3/1/96	21.69	72.79	0.14	72.65
		4/4/96	21.11	73.67	0.00	--
		5/2/96	20.96	73.83	0.00	--
		6/5/96	20.98	73.81	0.04	73.85
		7/9/96	21.64	72.84	0.20	73.04
		8/8/96	22.43	72.05	0.33	72.38
		9/10/96	23.25	71.23	0.60	71.83
		10/1/96	23.58	70.90	0.60	71.50

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-1	94.48	11/4/96	24.29	70.19	0.78	70.97
		12/2/96	24.63	69.85	0.88	70.73
		1/3/97	24.08	70.40	0.81	71.21
MW-2	94.81	3/5/91	27.86	66.95	0.00	--
		3/18/91	27.46	67.35	0.00	--
		4/12/91	26.98	67.83	0.00	--
		5/18/92	26.50	68.31	0.00	--
		6/29/92	26.80	68.01	0.00	--
		7/29/92	27.08	67.73	0.00	--
		8/28/92	27.33	67.48	0.00	--
		10/28/92	27.65	67.16	0.00	--
		11/24/92	27.91	66.90	0.00	--
		12/22/92	27.74	67.07	--	--
		4/5/93	25.95	68.86	0.00	--
		7/20/93	25.59	69.22	0.00	--
		11/9/93	26.72	68.09	0.00	--
		8/30/95	25.75	69.06	0.00	--
		10/2/95	25.10	69.71	0.00	--
		11/3/95	25.73	69.02	0.00	--
		11/30/95	25.34	69.41	0.00	--
		1/3/96	25.32	69.43	0.00	--
		2/2/96	25.10	69.65	0.00	--
		3/1/96	24.05	70.76	0.00	--
		4/4/96	23.41	71.49	0.00	--
5/2/96	23.37	71.53	0.00	--		
6/5/96	23.75	71.11	0.00	--		
7/9/96	23.79	71.02	0.00	--		
8/8/96	24.27	70.54	0.00	--		
9/10/96	24.87	69.94	0.00	--		
10/1/96	25.12	69.69	0.00	--		
11/4/96	25.54	69.27	0.00	--		
12/2/96	25.74	69.07	0.00	--		

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-2	94.81	1/3/97	25.51	69.30	0.00	--
MW-3	90.08	3/6/91	23.17	66.91	NM	--
		3/18/91	22.76	67.32	NM	--
		4/12/91	22.51	67.57	NM	--
		5/12/92	23.17	66.91	NM	--
		6/29/92	22.90	67.18	NM	--
		7/29/92	22.17	67.91	NM	--
		8/28/92	22.28	67.80	NM	--
		10/28/92	22.67	67.41	0.00	--
		11/24/92	23.01	67.07	0.00	--
		12/22/92	22.91	67.17	--	--
		4/5/93	22.11	67.97	0.00	--
		7/20/93	23.93	66.15	0.00	--
		11/9/93	23.14	66.94	0.00	--
		8/29/95	20.61	69.47	0.00	--
		10/2/95	21.18	68.90	0.00	--
		11/3/95	20.74	69.60	0.00	--
		11/30/95	20.68	69.66	0.00	--
		1/3/96	20.58	69.76	0.00	--
		2/2/96	20.43	69.91	0.00	--
		3/1/96	20.24	69.84	0.00	--
		4/4/96	18.50	71.58	0.00	--
		5/2/96	18.43	71.65	0.00	--
		6/5/96	18.51	71.57	0.00	--
		7/9/96	18.97	71.11	0.00	--
		8/8/96	19.51	70.57	0.00	--
		9/10/96	19.86	70.22	0.00	--
		10/1/96	20.04	70.04	0.00	--
		11/4/96	20.25	69.83	0.00	--
		12/2/96	20.40	69.68	0.00	--
		1/3/97	20.33	69.75	0.00	--

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-4	88.84	3/5/91	23.79	65.05	NM	--
		3/18/91	22.30	66.54	NM	--
		4/12/91	21.85	66.99	NM	--
		12/23/91	22.63	66.22	0.98	67.19
		12/26/91	22.52	66.32	0.96	67.28
		1/10/92	22.74	66.10	0.99	67.09
		2/28/92	22.00	66.84	0.67	67.51
		3/11/92	21.71	67.13	0.55	67.68
		3/13/92	21.56	67.28	0.49	67.77
		3/17/92	25.46	63.38	0.44	63.82
		3/18/92	21.38	67.47	0.44	67.90
		3/19/92	21.33	67.51	0.48	67.99
		3/23/92	21.29	67.55	0.42	67.97
		3/24/92	21.31	67.53	0.38	67.90
		3/25/92	21.17	67.67	0.36	68.04
		3/26/92	21.08	67.76	0.35	68.11
		3/27/92	20.92	67.92	0.26	68.18
		3/31/92	21.15	67.69	0.44	68.13
		4/1/92	20.90	67.94	0.24	68.18
		4/2/92	20.90	67.94	0.17	68.11
		4/10/92	20.91	67.93	0.33	68.26
		4/13/92	21.04	67.80	0.42	68.22
		4/20/92	20.74	68.10	0.19	68.29
		5/4/92	20.83	68.01	0.33	68.34
		5/18/92	21.33	67.51	0.23	67.74
		5/26/92	20.83	68.01	0.17	68.18
		6/1/92	20.85	67.99	0.19	68.17
		6/29/92	21.38	67.46	0.53	67.99
		7/29/92	21.69	67.15	0.56	67.71
		8/28/92	21.35	67.49	0.63	68.12
		10/28/92	22.48	66.36	0.84	67.20
		11/24/92	22.60	66.24	NM	--
		12/22/92	22.47	66.37	NM	--

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-4	88.84	4/3/93	20.11	68.73	0.51	69.24
		7/20/93	20.48	68.36	0.52	68.88
		11/9/93	21.71	67.13	0.63	67.76
		8/30/95	19.90	68.94	2.20	71.14
		9/15/95	18.76	70.08	0.57	70.65
		10/2/95	19.17	69.67	0.65	70.32
		11/3/95	19.45	69.39	0.44	69.83
		11/30/95	19.50	69.44	0.32	69.76
		1/3/96	19.31	69.53	0.20	69.73
		2/2/96	18.91	69.93	0.20	70.13
		3/1/96	18.25	70.59	0.19	70.78
		4/4/96	17.53	71.31	0.18	71.47
		5/2/96	17.50	71.34	0.25	71.59
		6/5/96	17.67	71.17	0.39	71.56
		7/9/96	18.29	70.55	0.50	71.05
		8/8/96	18.84	70.00	0.00	--
		9/10/96	19.31	69.53	0.34	69.87
		10/1/96	19.51	69.33	0.29	69.62
11/4/96	20.13	68.71	0.35	69.06		
12/2/96	20.23	68.61	0.33	68.94		
1/3/97	19.33	69.51	0.10	69.61		
MW-5	84.84	3/18/91	26.31	58.53	NM	--
		3/12/91	26.41	58.43	NM	--
		5/18/92	26.75	58.09	NM	--
		6/29/92	26.73	58.11	NM	--
		7/29/92	26.66	58.18	NM	--
		8/28/92	26.90	57.94	NM	--
		10/28/92	26.39	58.45	0.00	--
		11/24/92	26.83	58.01	0.00	--
		12/22/92	27.33	57.51	--	--
		4/3/93	26.62	58.22	0.00	--
7/20/93	26.60	58.24	0.00	--		

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-5	84.84	11/9/93	27.24	57.60	0.00	--
		8/30/95	27.46	57.38	0.00	--
		10/2/95	26.85	57.99	0.00	--
		11/3/95	26.67	58.87	0.00	--
		11/30/95	27.05	58.49	0.00	--
		1/3/96	26.60	59.04	0.00	--
		2/2/96	26.70	59.14	0.00	--
		3/1/96	26.00	58.84	0.00	--
		4/4/96	26.20	58.64	0.00	--
		5/2/96	26.02	58.82	0.00	--
		6/5/96	25.91	58.93	0.00	--
		7/9/96	26.20	58.64	0.00	--
		8/8/96	26.38	58.46	0.00	--
		9/10/96	26.42	58.42	0.00	--
		10/1/96	26.52	58.32	0.00	--
		11/4/96	26.69	58.15	0.00	--
12/2/96	26.70	58.14	0.00	--		
1/3/97	25.84	59.00	0.00	--		
MW-6	85.62	3/18/91	25.82	59.80	NM	--
		4/12/91	27.23	58.39	NM	--
		12/23/91	28.40	57.22	3.21	60.44
		12/26/91	27.25	58.37	1.67	60.04
		1/10/92	27.23	58.39	0.90	59.29
		2/4/92	27.71	57.91	2.04	59.95
		2/28/92	27.92	57.70	3.00	60.70
		3/10/92	27.16	58.46	2.06	60.53
		3/12/92	25.96	59.66	0.52	60.18
		3/13/92	25.70	59.92	0.21	60.13
		3/23/92	26.34	59.28	1.09	60.37
		3/30/92	25.73	59.89	0.35	60.25
		4/10/92	25.29	60.33	0.05	60.38
4/13/92	25.52	60.10	0.21	60.31		

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-6	85.62	4/20/92	25.38	60.25	0.10	60.35
		5/4/92	25.40	60.22	NM	--
		5/18/92	25.50	60.12	0.17	60.29
		5/26/92	25.46	60.16	0.13	60.29
		6/1/92	25.46	60.16	0.09	60.26
		6/29/92	25.59	60.03	0.14	60.17
		7/29/92	26.90	58.72	1.71	60.43
		8/28/92	25.09	60.53	2.62	63.15
		10/28/92	25.02	60.60	3.94	64.54
		11/24/92	28.87	56.75	NM	--
		4/3/93	26.96	58.66	2.86	61.52
		7/20/93	26.17	59.45	2.60	62.05
		11/9/93	27.51	58.11	3.06	61.17
		8/30/95	28.00	57.62	7.96	65.58
		9/15/95	28.24	57.38	6.14	63.52
		10/2/95	28.39	57.23	6.13	63.36
		11/3/95	26.91	58.71	3.44	62.15
		11/30/95	27.58	58.04	4.41	62.45
		1/3/96	27.58	58.04	4.37	62.41
		2/2/96	27.96	57.68	5.15	62.83
		3/1/96	27.96	57.68	5.41	63.09
		4/4/96	27.69	57.93	5.69	63.62
		5/2/96	26.83	58.79	4.66	63.45
		6/5/96	27.15	58.47	5.17	63.64
		7/9/96	27.08	58.54	4.86	63.40
		8/8/96	26.71	58.91	4.05	62.96
		9/10/96	26.83	58.79	3.82	62.61
		10/1/96	26.96	58.66	3.77	62.43
		11/4/96	NM	NM	NM	NM
		12/2/96	NM	NM	NM	NM
		1/3/97	NM	NM	NM	NM

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-7	85.41	3/18/91	21.63	63.78	NM	--
		4/12/91	22.13	63.28	NM	--
		5/18/92	21.67	63.74	NM	--
		6/29/92	20.75	64.66	NM	--
		7/29/92	21.07	64.34	NM	--
		8/28/92	21.35	64.06	NM	--
		10/28/92	21.81	63.60	0.00	--
		11/24/92	21.52	63.89	0.00	--
		12/22/92	obstructed	--	0.00	--
		4/3/93	20.08	65.33	0.00	--
		7/20/93	19.59	65.82	0.00	--
		11/9/93	20.65	64.76	0.00	--
		8/30/95	18.78	66.63	0.00	--
		10/2/95	18.73	66.68	0.00	--
		11/3/95	19.23	66.18	0.00	--
		11/30/95	19.47	65.94	0.00	--
		1/3/96	18.52	66.89	0.00	--
		2/2/96	17.83	67.58	0.00	--
		3/1/96	17.61	67.80	0.00	--
		4/4/96	17.28	68.13	0.00	--
		5/2/96	17.15	68.26	0.00	--
		6/5/96	17.47	67.94	0.00	--
		7/9/96	18.06	67.35	0.00	--
		8/8/96	18.48	-18.48	0.00	--
		9/10/96	18.79	-18.79	0.00	--
10/1/96	18.90	-18.90	0.00	--		
11/4/96	18.69	66.72	0.00	--		
12/2/96	18.47	-18.47	0.00	--		
1/3/97	17.98	-17.98	0.00	--		
MW-8	85.50	10/28/92	27.70	57.80	0.00	--
		11/24/92	27.62	57.88	0.00	--
		12/22/92	27.40	58.10	--	--

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-8	85.50	4/3/93	26.64	58.86	0.00	--
		7/20/93	26.60	58.90	0.00	--
		11/9/93	27.18	58.32	0.00	--
		8/30/95	26.35	59.15	0.00	--
		10/2/95	26.60	58.90	0.00	--
		11/3/95	26.62	58.88	0.00	--
		11/30/95	26.72	58.78	0.00	--
		1/3/96	26.64	58.86	0.00	--
		2/2/96	26.28	59.22	0.00	--
		3/1/96	25.81	59.69	0.00	--
		4/4/96	25.81	59.69	0.00	--
		5/2/96	26.15	60.03	0.00	--
		6/5/96	26.17	60.01	0.00	--
		7/9/96	26.32	59.18	0.00	--
		8/8/96	26.41	59.09	0.00	--
		9/10/96	26.66	58.84	0.00	--
		10/1/96	26.65	58.85	0.00	--
11/4/96	26.77	58.73	0.00	--		
12/2/96	26.59	58.91	0.00	--		
1/3/97	25.98	59.52	0.00	--		
MW-9	90.37	10/28/92	23.37	67.00	0.00	--
		11/24/92	23.51	66.86	0.00	--
		12/22/92	23.31	67.06	--	--
		4/3/93	21.14	69.23	0.00	--
		7/20/93	21.54	68.83	0.00	--
		11/9/93	27.53	62.84	0.00	--
		8/30/95	19.59	70.78	0.00	--
		10/2/95	20.05	70.32	0.00	--
		11/3/95	20.40	69.97	0.00	--
		11/30/95	20.65	69.72	0.00	--
		1/3/96	20.73	69.64	0.00	--
		2/2/96	20.19	70.18	0.00	--

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-9	90.37	3/1/96	19.53	70.84	0.00	--
		4/4/96	18.74	71.63	0.00	--
		5/2/96	18.63	71.74	0.00	--
		7/9/96	19.15	71.22	0.00	--
		8/8/96	19.89	70.48	0.35	70.83
		9/10/96	20.11	70.26	0.00	--
		10/1/96	20.37	70.00	0.00	--
		11/4/96	20.69	69.68	0.00	--
		12/2/96	21.43	68.94	0.00	--
		1/3/97	20.72	69.65	0.00	--
MW-10	88.60	10/28/92	21.55	67.05	0.00	--
		11/24/92	21.86	66.74	0.00	--
		12/22/92	21.68	66.92	--	--
		4/3/93	19.14	69.46	0.00	--
		7/20/93	19.79	68.81	0.00	--
		11/9/93	20.83	67.77	0.00	--
		8/30/95	17.99	70.61	0.00	--
		10/2/95	18.42	70.18	0.00	--
		11/3/95	18.82	69.78	0.00	--
		11/30/95	19.03	69.57	0.00	--
		1/3/96	18.96	69.64	0.00	--
		2/2/96	18.55	70.05	0.00	--
		3/1/96	17.81	70.79	0.00	--
		4/4/96	17.11	71.49	0.00	--
		5/2/96	17.04	71.56	0.00	--
		6/5/96	17.11	71.49	0.00	--
		7/9/96	17.64	70.96	0.00	--
		8/8/96	18.24	70.36	0.00	--
		9/10/96	18.82	69.78	0.00	--
		10/1/96	19.02	69.58	0.00	--
11/4/96	19.59	69.01	0.00	--		
12/2/96	19.72	68.88	0.00	--		

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-10	88.60	1/3/97	18.86	69.74	0.00	--
MW-11	102.06	11/24/92	33.65	68.41	0.00	--
		12/22/92	33.37	68.69	--	--
		4/5/93	31.03	71.03	0.00	--
		7/20/93	31.90	70.16	0.00	--
		11/9/93	32.60	69.46	0.00	--
		8/29/95	28.92	73.14		
		10/2/95	29.48	72.58	0.00	--
		11/3/95	29.73	72.33	0.00	--
		11/30/95	30.26	71.80	0.00	--
		1/3/96	30.06	72.00	0.00	--
		2/2/96	29.67	72.39	0.00	--
		3/1/96	28.74	73.32	0.00	--
		4/4/96	28.13	73.93	0.00	--
		5/2/96	28.26	74.06	0.00	--
		6/5/96	28.30	74.02	0.00	--
		7/9/96	28.92	73.14	0.00	--
		8/8/96	29.64	72.42	0.00	--
		9/10/96	30.66	71.40	0.00	--
		10/1/96	30.58	71.48	0.00	--
		11/4/96	31.14	70.92	0.00	--
		12/2/96	31.36	70.70	0.00	--
		1/3/97	30.73	71.33	0.00	--
MW-13	84.06	11/24/92	26.05	58.01	0.00	--
		12/22/92	25.08	58.98	--	--
		4/5/93	24.64	59.42	0.00	--
		7/20/93	24.29	59.77	0.00	--
		11/9/93	24.23	59.83	0.00	--
		8/29/95	23.30	60.76	NM	--
		10/2/95	23.78	60.28	0.00	--
		11/3/95	23.73	60.33	0.00	--

TABLE 2
GROUNDWATER AND FREE PRODUCT ELEVATION DATA
3093 BROADWAY
OAKLAND, CALIFORNIA

<u>Well</u>	<u>TOC Elevation (feet)</u>	<u>Date</u>	<u>Groundwater Depth (feet)</u>	<u>Groundwater Elevation (feet)</u>	<u>Product Thickness (feet)</u>	<u>Product Elevation (feet)</u>
MW-13	84.06	11/30/95	23.80	60.26	0.00	--
		1/3/96	23.95	60.11	0.00	--
		2/2/96	23.70	60.36	0.00	--
		3/1/96	23.36	60.70	0.00	--
		4/4/96	23.27	60.79	0.00	--
		5/2/96	23.35	60.87	0.00	--
		6/5/96	23.07	60.99	0.00	--
		7/9/96	23.31	60.75	0.00	--
		8/8/96	23.44	60.62	0.00	--
		9/10/96	23.66	60.40	0.00	--
		10/1/96	23.80	60.26	0.00	--
		11/4/96	24.04	60.02	0.00	--
		12/2/96	24.00	60.06	0.00	--
		1/3/97	23.30	60.76	0.00	--

Reference datum: arbitrary benchmark established by Levine Fricke.

TOC = Top of casing

Groundwater depths are measured below TOC.

NM = Not measured

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Subsurface Consultants, Inc.

EXPENSE RECORD for SCI FIELD SERVICES and FIELD SUPPLIES

PROJECT NAME: *Connell olds*

JOB NUMBER: *447.055*

DATE SUBMITTED: *1/3/97*

SUBMITTED BY: *D. Alexander*

ENTERED BY:

TYPE OF FIELD SUPPLY/FIELD SERVICE	UNIT NUMBER	NUMBER OF UNITS/DAYS	COST
			\$
<i>Beilers</i>	<i>53023</i>	<i>1</i>	<i>8.00</i>
FILE COPY			

SCI FIELD SUPPLIES

Unit No.	Unit Name	Billing Per Unit	Cost Per Unit
53020	Plastic Sheet (20x100')	per roll	\$100.00
53021	Plastic Sheet (10x100' or 20x50')	per roll	50.00
53022	Brass Liners	each	5.00
53023	Disposable Ballers	each	0.00
53024	Keyed-Allke Locks	each	0.00
53025	Zip-Lock Bags - quart	per box	2.00
53026	Zip-Lock Bags - gallon	per box	4.00
53027	Portland Cement - 94#	sack	8.95
53028	Concrete Mix - 90#	sack	4.05
53029	Asphalt Mix - 90#	sack	5.01
53030	Bentonite Gel - 1#	sack	6.10
53031	Bentonite Pellets - 1/4"	bucket	39.84
53032	Bentonite Pellets - 3/8"	bucket	32.37
53033	Bentonite Pellets - 1/2"	bucket	20.64
53034	Sand - #3	sack	7.12
53035	2" PVC Slip Cap	each	.94
53036	2" PVC Screw Cap	each	7.51
53037	2" Locking Cap	each	22.91
53038	4" PVC Slip Cap	each	7.53
53039	4" PVC Screw Cap	each	13.25
53040	4" Locking Cap	each	24.93

Unit No.	Unit Name	Billing Per Unit	Cost Per Unit
53041	2" PVC Blank Pipe - 5' section	per foot	3.11
53042	2" PVC Blank Pipe - 10' section	per foot	2.05
53043	2" PVC Screen Pipe - 5' section	per foot	4.32
53044	2" PVC Screen Pipe - 10' section	per foot	3.05
53045	4" PVC Blank Pipe - 5' section	per foot	6.24
53046	4" PVC Blank Pipe - 10' section	per foot	4.89
53047	4" PVC Screen Pipe - 5' section	per foot	0.92
53048	4" PVC Screen Pipe - 10' section	per foot	7.10
53049	55 Gallon Drum	each	43.57
53050	Slope Indicator Casing	10-foot sec	65.90
53051	Coupling	each	5.29
53052	End Cap	each	3.73

FIELD SERVICES

53001	Generator	\$25/day
53002	Steam Cleaner	\$75/day
53003	Inclinometer	\$150/day
53004	Rotary Hammer	\$25/day
53005	Hand Pump	\$10/day
53006	Nitrogen Pump	\$50/day
53007	OVM	\$25/day
53008	Gas Tech	\$25/day
53009	PH Meter	\$10/day
53010	Conductivity Meter	\$10/day
53011	Submersible Pump	\$25/day