

PO 2462

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Transmittal

To: Mr. Barney Chan
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

FROM: Meredith Durant
DATE: 10 June 2005
K/J #: 000128.00
SUBJECT: Praxair – 901 Embarcadero

VIA: Fax ## pgs. (inc. cover) USPS Other (please specify)

PLEASE FIND ENCLOSED:

Copies	Date	No.	Description
1	7/25/03		Cover page and page 3 of Table 5 – Groundwater Monitoring Program Report July 2002 Semi-Annual Event January 2003 Annual Event, Ninth Avenue Terminal

Alameda County
Environmental Health
JUL 15 2005

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REMARKS: Barney –
The enclosed data are provided in response to your request. The report was prepared by Subsurface Consultants, Inc. (now Fugro West) for the Port of Oakland in July 2003. If you have any questions regarding the data, I suggest that you contact Jeriann Alexander at Fugro West. Her telephone number is (510) 267-4401.

Copies to: J. Alexander – Fugro West

Signed: Meredith G. Durant
Meredith Durant

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Meredith Durant

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Phone #	<u>BY USMAIL</u>	Phone #	
Fax #		Fax #	



Subsurface Consultants, Inc.

July 25, 2003
SCI 133.018

Mr. Douglas Herman
Environmental Health & Safety Compliance Department
Port of Oakland
530 Water Street, Second Floor
Oakland, CA 94607-2064

Groundwater Monitoring Program Report
July 2002 Semi-Annual Event
January 2003 Annual Event
Ninth Avenue Terminal
Oakland, California

Dear Mr. Herman:

This report presents the results of the 2002 semi-annual groundwater monitoring event conducted during July 2002 and the 2003 annual event conducted in January at the Ninth Avenue Terminal (Site) by Subsurface Consultants, Inc. (SCI). The location of the Site is shown on Plate 1.

Previous investigations indicate that petroleum hydrocarbons, as well as other potentially hazardous chemicals and metals have impacted soil and groundwater at the Site. Monitoring is being performed on a periodic basis in general accordance with the monitoring plan presented in SCI's June 15, 2000 Groundwater Monitoring Report, as amended by Alameda County Health Care Services Agency (ACHCSA) in letters dated July 11 and July 27, 2000 (Appendix A).

MONITORING ACTIVITIES

The current groundwater monitoring program showing which wells are to be included in a semi-annual event or an annual event is outlined in the attached Table 1. Water levels are to be measured in all existing wells on a semi-annual basis. Selected wells were also checked for the presence of free floating product on a semi-annual basis.

Prior to conducting any sampling activities, the depth to water was measured with an electronic well sounder from below the top of the casing in all active wells. Groundwater level measurements were obtained from the tidally influenced wells first, to minimize any potential discrepancies in elevation between wells across the Site. Wells located along the Clinton and Brooklyn Basin shorelines are tidally influenced, the interior wells and those located in close

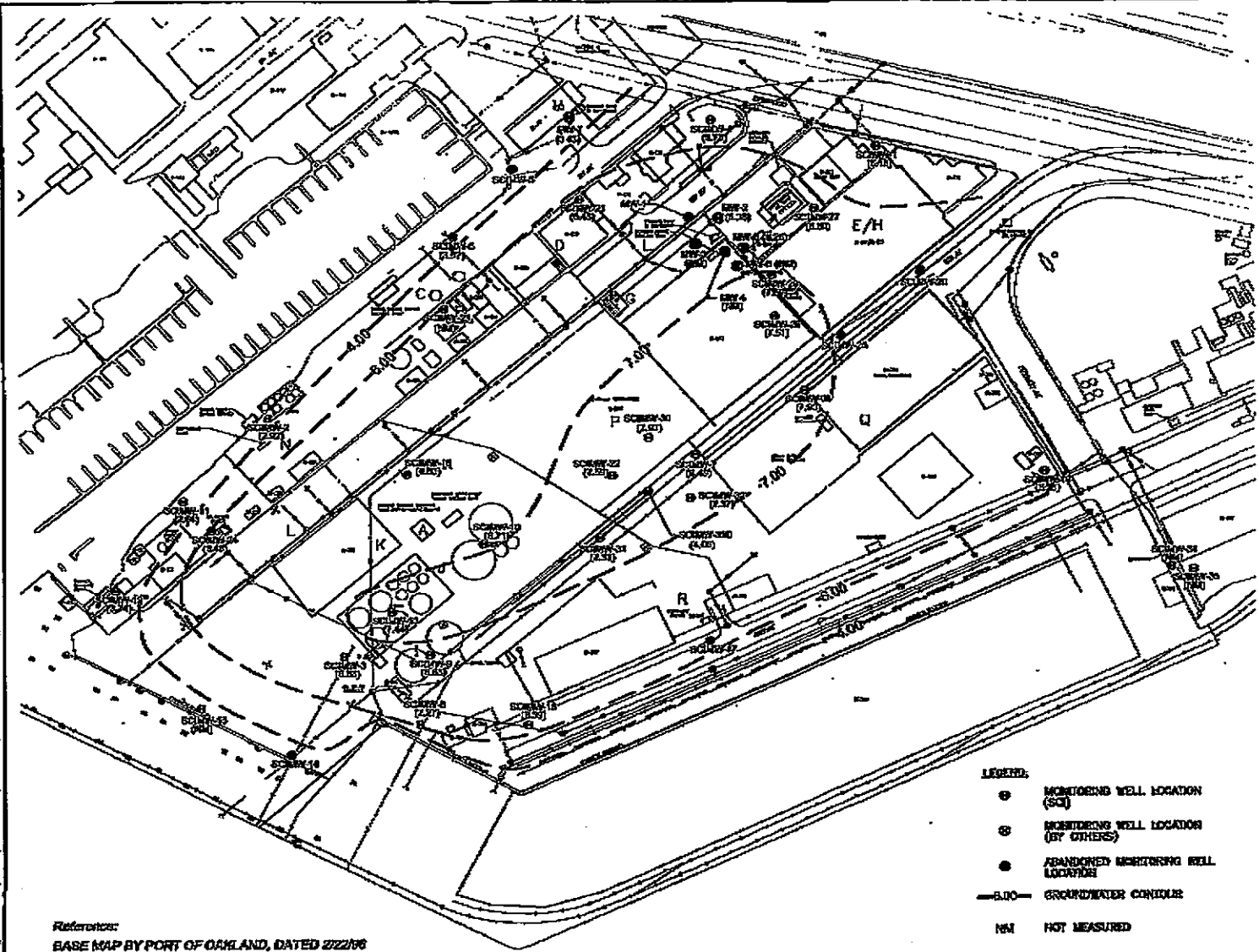
TABLE 6
HEAVY METAL CONCENTRATIONS IN GROUNDWATER
NINTH AVENUE TERMINAL STUDY AREA

Subsurface Consultants, Inc.

SAMPLE DESIGNATION	CONSULTANT	DESCRIPTION	SITE REF. AREA	SAMPLED	GROUNDWATER ELEVATION Foot of Oak. Datum (feet)	ANTIMONY (ug/L)	ARSENIC (ug/L)	BARIUM (ug/L)	BERYLLIUM (ug/L)	CADMIUM (ug/L)	TOTAL CHROMIUM (ug/L)	CHROMIUM VI (ug/L)	COPPER (ug/L)	LEAD (ug/L)	MERCURY (ug/L)	MANGANESE (ug/L)	NICKEL (ug/L)	POTASSIUM (ug/L)	SELENIUM (ug/L)	SILVER (ug/L)	TITANIUM (ug/L)	VANADIUM (ug/L)	ZINC (ug/L)	
SC1M/W-13	SCI	Filtered	J	8/29/1996	7.21	<60	28	33	<2.0	<2.0	<10	<20	<10	3.2	<0.20	<20	<20	-	43	<5.0	<5.0	<10	<20	
SC1M/W-13	SCI	Filtered	J	12/8/1997	6.93	<60	19	31	<2.0	2.1	<10	<20	<10	3.7	<0.20	<20	<20	-	40	<5.0	<5.0	<10	<20	
SC1M/W-14	SCI	Filtered	U	8/29/1996	5.06	<60	9.7	130	<2.0	<2.0	<10	<20	<10	5.3	<0.20	<20	<20	-	34	<5.0	<5.0	<10	<20	
SC1M/W-14	SCI	Filtered	W	1/21/1997	5.64	<60	<5.0	15	<2.0	<2.0	<10	<20	<10	<3.0	<0.20	<20	<20	-	<5.0	<5.0	<5.0	<10	<20	
SC1M/W-14	SCI	-	W	1/30/2001	Well Abandoned																			
SC1M/W-15	SCI	Filtered	W	8/29/1996	6.85	<60	14	570	<2.0	<2.0	<10	<20	<10	3.2	<0.20	<20	<20	-	40	<5.0	<5.0	<10	<20	
SC1M/W-15	SCI	Filtered	W	1/17/1997	5.01	<60	13	460	<2.0	<2.0	<10	<20	<10	5.5	<0.20	<20	<20	-	33	<5.0	<5.0	<10	<20	
SC1M/W-16	SCI	Filtered	R	8/30/1996	6.81	<60	14	300	3.1	<2.0	<10	<20	<10	<3.0	<0.20	<20	<20	-	40	<5.0	<5.0	12	<20	
SC1M/W-16	SCI	Filtered	R	1/21/1997	7.03	<60	14	210	3.6	<2.0	<10	<20	<10	<3.0	<0.20	<20	<20	-	21	<5.0	<5.0	16	<20	
SC1M/W-17	SCI	Filtered	R	8/29/1996	6.55	<60	17	960	<2.0	<2.0	<10	<20	<10	<3.0	<0.20	<20	<20	-	18	<5.0	<5.0	<10	<20	
SC1M/W-17	SCI	Filtered	R	1/21/1997	7.67	<60	<5.0	170	<2.0	<2.0	<10	<20	<10	<3.0	<0.20	<20	<20	-	15	<5.0	<5.0	<10	<20	
SC1M/W-17	SCI	-	R	5/30/2001	Well Abandoned																			
SC1M/W-18	SCI	Filtered	L	8/8/1996	5.22*	<60	20	160	<2.0	<2.0	<10	<20	<10	<1.0	<0.20	<20	<20	-	22	<5.0	<5.0	19	<20	
SC1M/W-18	SCI	Filtered	L	1/20/1997	6.98	<60	21	150	<2.0	<2.0	<10	<20	<10	<1.0	<0.20	<20	<20	-	38	<5.0	<5.0	<10	<20	
SC1M/W-19	SCI	Filtered	R	8/30/1996	6.16	<60	31	140	<2.0	<2.0	<10	<20	<10	6.2	<0.20	<20	<10	-	32	<5.0	<5.0	11	<20	
SC1M/W-19	SCI	Filtered	R	1/21/1997	7.42	<60	23	190	<2.0	<2.0	<10	<20	<10	<1.0	<0.20	<20	22	-	24	<5.0	<5.0	<10	<20	
SC1M/W-20	SCI	Filtered	HQ	8/30/1996	7.03	<60	9.5	930	<2.0	<2.0	<10	<20	<10	<1.0	0.24	<20	<20	-	20	<5.0	<5.0	<10	<20	
SC1M/W-20	SCI	Filtered	HQ	1/20/1997	7.67	<60	6.8	1,600	<2.0	<2.0	<10	<20	<10	<1.0	<0.20	<20	<20	-	18	<5.0	<5.0	<10	41	
SC1M/W-20	SCI	Filtered	HQ	10/7/1998	6.79	-	-	-	-	-	-	-	-	<0.0	-	-	-	-	-	-	-	-	-	
SC1M/W-20	SCI	Filtered	HQ	12/2/1999	3.40	-	-	-	-	-	-	-	-	<0.0	-	-	-	-	-	-	-	-	-	
SC1M/W-20	SCI	-	HQ	5/30/2001	Well Abandoned																			
SC1M/W-21	SCI	Filtered	D	5/8/1997	7.44	-	-	-	-	-	-	-	-	7.2	-	-	-	110,000	-	-	-	-	-	
SC1M/W-22	SCI	Filtered	P	5/6/1997	8.21	-	-	-	-	-	70	-	-	-	-	-	-	170,000	-	-	-	-	-	
SC1M/W-23	SCI	Filtered	B	5/6/1997	3.55	<60	21	56	<2.0	<5.0	<10	80	<20	<10	<5.0	<0.20	<20	<10	16,000	20	<5.0	<5.0	<10	23
SC1M/W-24	SCI	Filtered	N	5/6/1997	4.84	-	-	-	-	-	140	-	-	6.3	-	-	-	-	-	-	-	-	-	
SC1M/W-24	SCI	Filtered	N	9/18/1998	4.96	-	-	-	-	-	-	-	-	<5.0	-	-	-	-	-	-	-	-	-	

JUN 10, 2005-11:10AM KENNEDY/JENKS CONSULTANTS


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Reference:
BASE MAP BY PORT OF OAKLAND, DATED 2/22/96

- LEGEND:
- MONITORING WELL LOCATION (SC)
 - ⊗ MONITORING WELL LOCATION (BY OTHERS)
 - ABANDONED MONITORING WELL LOCATION
 - 5.00 — GROUNDWATER CONTOUR
 - NM NOT MEASURED



GROUNDWATER ELEVATIONS JULY 2002	
NINTH AVENUE TERMINAL PORT OF OAKLAND, CALIFORNIA	
DRAWN BY CFY	DATE 10/16/02
APP. NUMBER 133.018	PROJECT NUMBER B133.018
 Subinterface Consultants, Inc. <small>Contractors of Environmental Engineering</small>	
NO. 10567 P. 4	