

GRIBI Associates*Geological and Environmental Consulting Services***FACSIMILE TRANSMITTAL**

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Attached please find a memo and site plans for the Liquid Sugars site (proposed Pulte development) in Emeryville. As discussed in our recent meetings, the goals of these maps are: (1) To help in determining whether or not the low levels of PCE encountered in the grab groundwater samples in Lowney Associates borings EB-1 and EB-2 originated from an offsite source; and (2) To help in determining whether or not there is a likelihood that these low levels of PCE will have a greater impact on the proposed Pulte residential development in the future.

I will also attempt to email these documents as two separate pdf file attachments

Thanks!

Jim

M E M O R A N D U M

GRIBI Associates

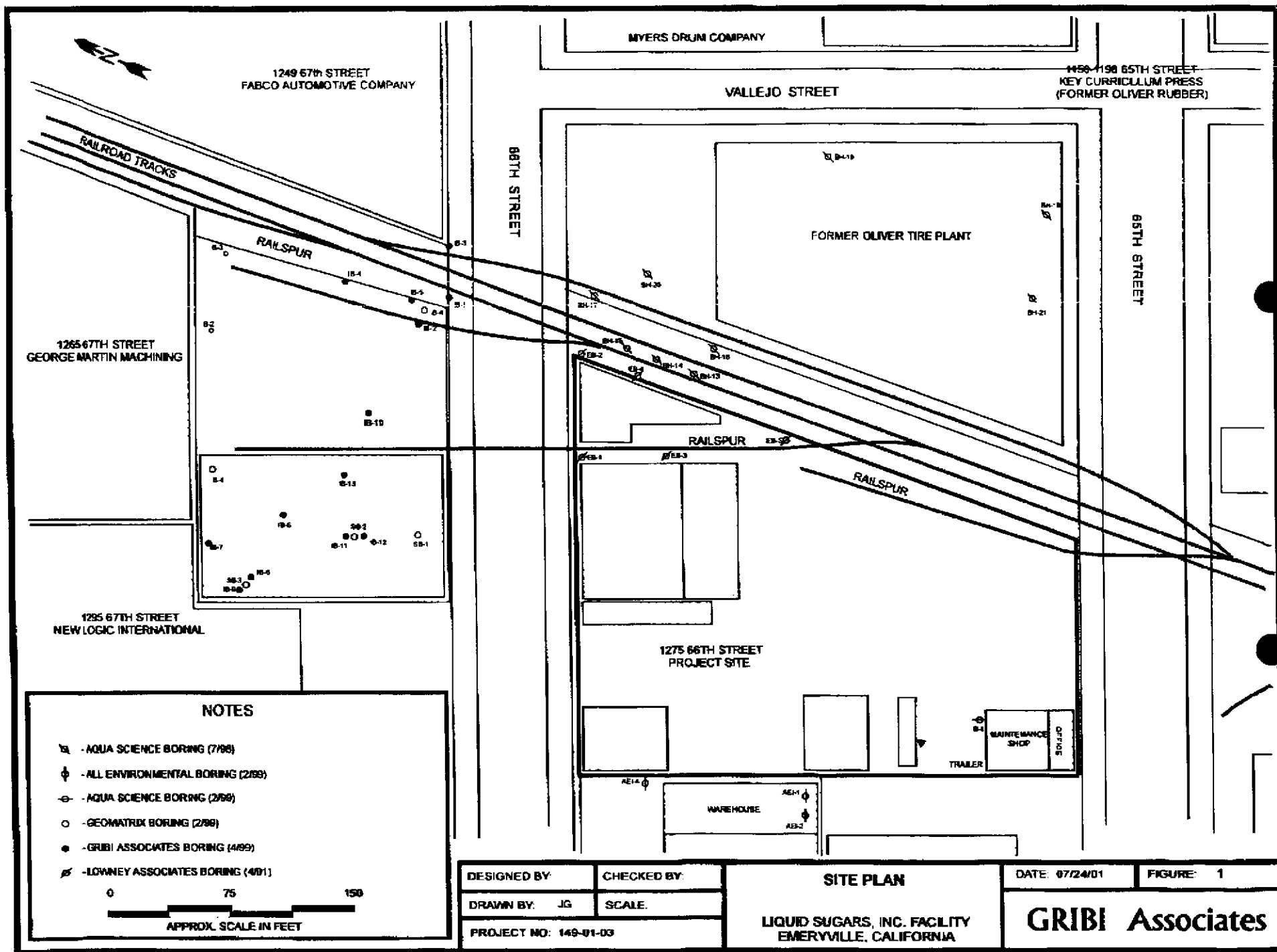
To: Susan Hugo, ACDEH; Ravi Arulanathan, RWQCB
From: Jim Gribi, RG *JG* C:\My Documents\My Files\Letters\RS-LSI-mml.wpd
Date: 07/24/01
Subject: Liquid Sugars, Inc. Site, 1275 65th Street, Emeryville, CA

Pursuant to our recent meetings, attached please find the following figures, compiled from various reports:

- ▶ Figure 1 Site Plan
- ▶ Figure 2 Grab Groundwater PCE Results
- ▶ Figure 3 Groundwater Gradient & HVOC Results - 10/18/00

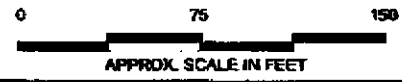
On Figure 1 and Figure 2, I have included only borings where groundwater samples were analyzed for HVOCs. Note also that whereas PCE results are reported in ug/L (ppb) on Figure 2, HVOC results are reported in mg/L (ppm) on Figure 3. In evaluating these results relative to the subject site, we believe that the following site characteristics are of key importance:

1. As with most of the East Bay area, the project site is underlain predominantly by clays and silty clays, with occasional thin, discontinuous sand and gravel layers.
2. HVOC releases identified on the project site and on the immediate north parcel appear to represent small releases which, due to low-permeability soils beneath the site, have resulted in small, concentrated plumes that are bound up in tight soils and have not migrated significant distances.
3. Gribi Associates has uncovered no evidence of historic HVOC use at the subject site or on the adjacent north parcel. Liquid Sugars, Inc. operated a food-grade liquid sugar/vegetable oil facility on both parcels since the 1970s. Prior to LSI ownership, the two parcels were owned by Diamond Alkali and were used for the manufacturing of sodium silicates since at least 1939. Sanborn Fire Insurance Maps identify project site land use in 1903 and 1911 as residential.
4. It is clear that the PCE identified in groundwater in borings EB-2 and EB-1 originated from an offsite, upgradient source. Possible sources include: (1) Fabco Automotive, which apparently began manufacturing truck components at this upgradient facility in 1919; or (2) Spills associated with railroad operations immediately east from the project site, where materials transfer activities have prevailed since at least 1939. Another possible upgradient source is the Myers Drum site, located east from the project site, where all of the chlorinated hydrocarbon compounds detected beneath the subject site and the adjacent north parcel have also been encountered.
5. Given the low-permeability soils beneath the site, as well as changes in chemical handling practices in recent decades, we would not expect conditions to change significantly in future decades.



NOTES

- AS - AQUA SCIENCE BORING (7/98)
- E - ALL ENVIRONMENTAL BORING (2/99)
- G - AQUA SCIENCE BORING (2/98)
- G - GEOMATRIX BORING (2/98)
- GRI - GRIBI ASSOCIATES BORING (4/99)
- L - LOWNEY ASSOCIATES BORING (4/01)



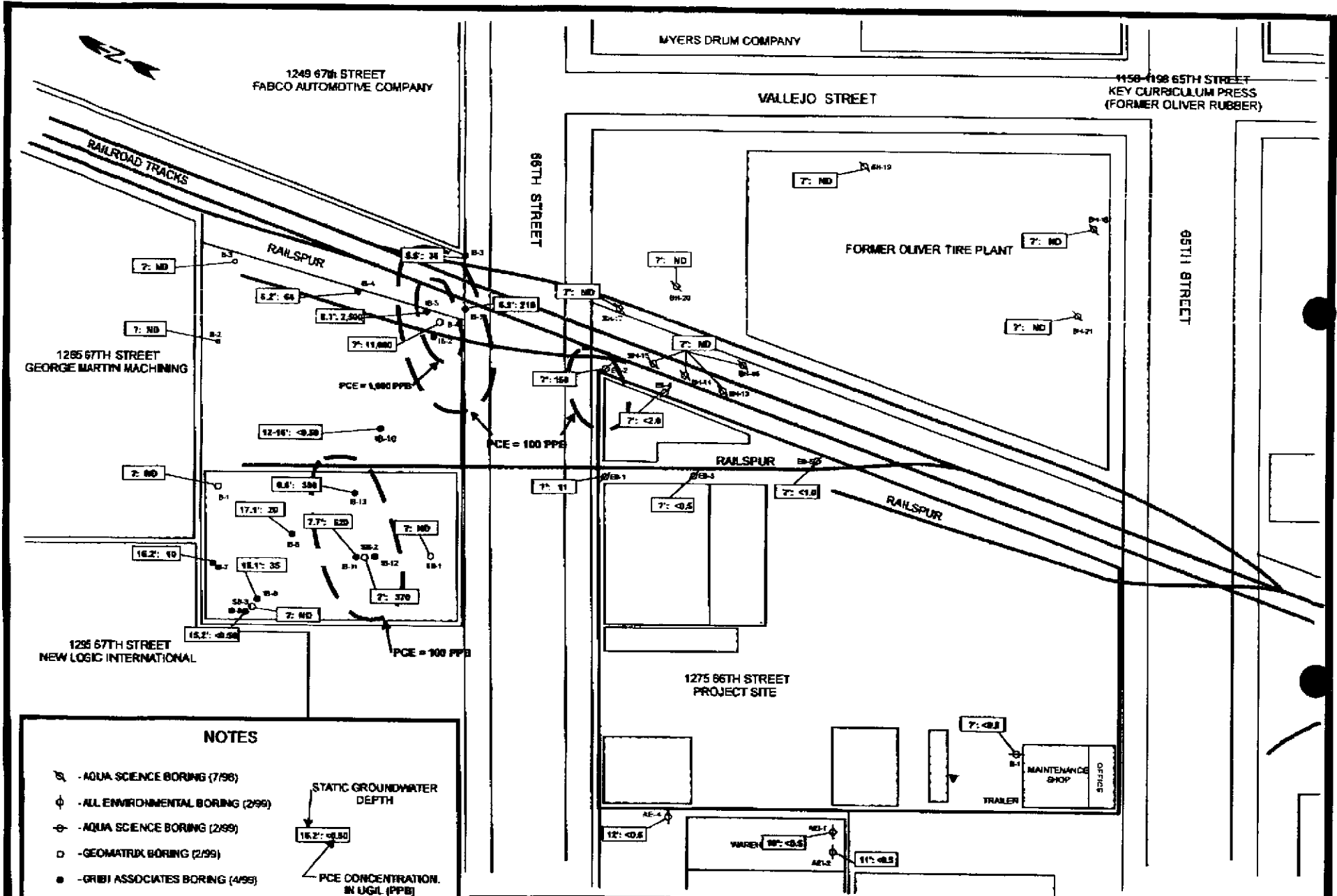
DESIGNED BY	CHECKED BY
DRAWN BY: JG	SCALE:
PROJECT NO: 149-01-03	

SITE PLAN

LIQUID SUGARS, INC. FACILITY
EMERYVILLE, CALIFORNIA

DATE: 07/24/01 FIGURE: 1

GRIBI Associates



NOTES

- ⊗ - AQUA SCIENCE BORING (7/98)
- ⊕ - ALL ENVIRONMENTAL BORING (2/99)
- ⊖ - AQUA SCIENCE BORING (2/99)
- - GEOMATRIX BORING (2/99)
- - GRIBI ASSOCIATES BORING (4/98)
- ⊙ - LOVINEY ASSOCIATES BORING (4/01)

⊕ - STATIC GROUNDWATER DEPTH
 ● - PCE CONCENTRATION IN UG/L (PPB)

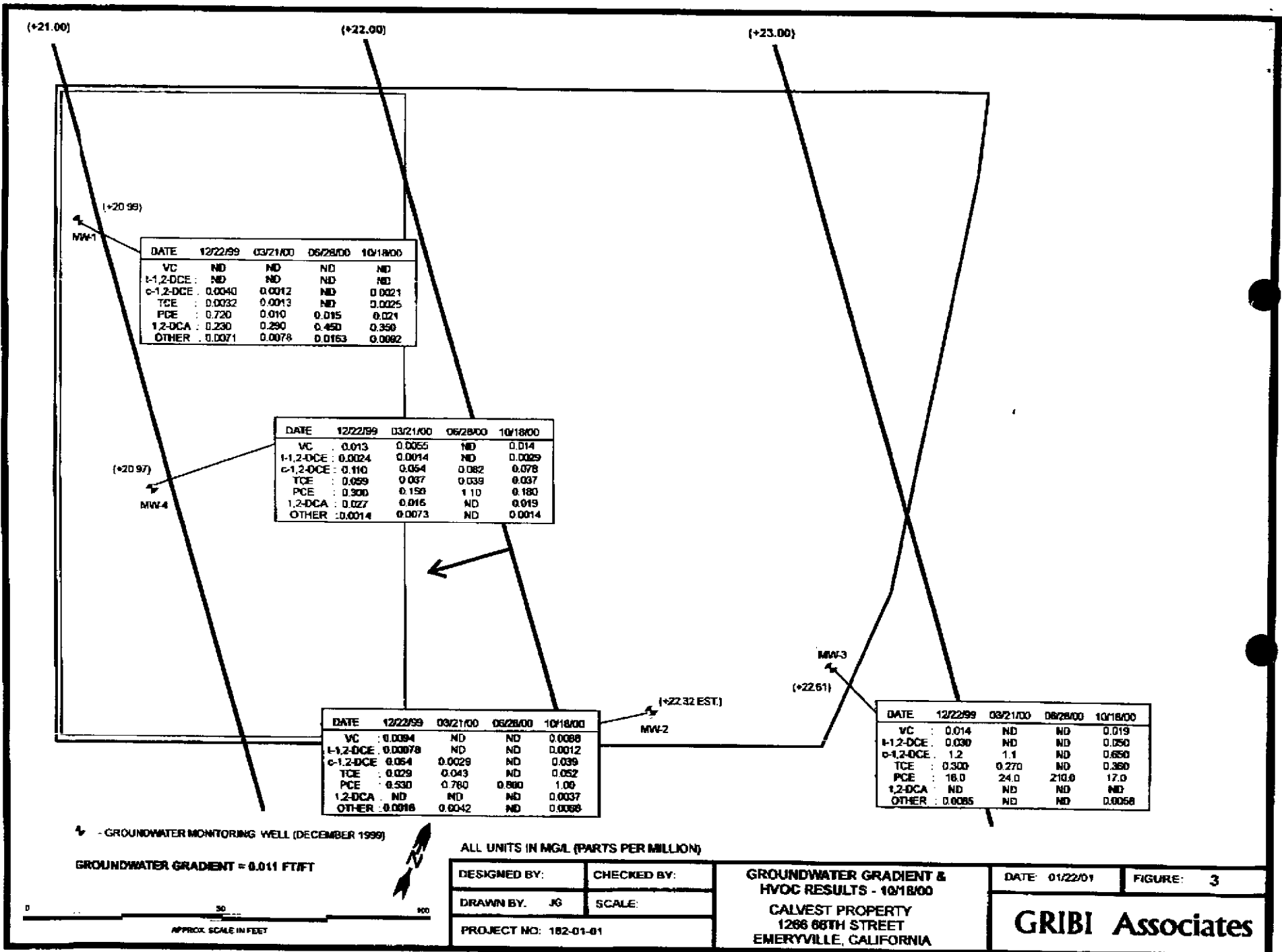
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 APPROX. SCALE IN FEET

DESIGNED BY:	CHECKED BY:
DRAWN BY: JG	SCALE:
PROJECT NO: 149-01-03	

GRAB GROUNDWATER PCE RESULTS

LIQUID SUGARS, INC. FACILITY
EMERYVILLE, CALIFORNIA

DATE: 07/24/01	FIGURE: 2
GRIBI Associates	



MW-1 (+20.99)

DATE	12/22/99	03/21/00	06/28/00	10/18/00
VC	ND	ND	ND	ND
1,1,2-DCE	ND	ND	ND	ND
c-1,2-DCE	0.0040	0.0012	ND	0.0021
TCE	0.0032	0.0013	ND	0.0025
PCE	0.720	0.010	0.015	0.021
1,2-DCA	0.230	0.290	0.450	0.350
OTHER	0.0071	0.0078	0.0153	0.0082

MW-4 (+20.97)

DATE	12/22/99	03/21/00	06/28/00	10/18/00
VC	0.013	0.0055	ND	0.014
1,1,2-DCE	0.0024	0.0014	ND	0.0029
c-1,2-DCE	0.110	0.064	0.082	0.078
TCE	0.059	0.037	0.039	0.037
PCE	0.300	0.150	1.10	0.180
1,2-DCA	0.027	0.016	ND	0.019
OTHER	0.0014	0.0073	ND	0.0014

MW-2 (+22.32 EST.)

DATE	12/22/99	03/21/00	06/28/00	10/18/00
VC	0.0094	ND	ND	0.0088
1,1,2-DCE	0.00078	ND	ND	0.0012
c-1,2-DCE	0.064	0.0029	ND	0.039
TCE	0.029	0.043	ND	0.052
PCE	0.530	0.780	0.880	1.00
1,2-DCA	ND	ND	ND	0.0037
OTHER	0.0018	0.0042	ND	0.0068

MW-3 (+22.61)

DATE	12/22/99	03/21/00	06/28/00	10/18/00
VC	0.014	ND	ND	0.019
1,1,2-DCE	0.030	ND	ND	0.050
c-1,2-DCE	1.2	1.1	ND	0.650
TCE	0.300	0.270	ND	0.380
PCE	18.0	24.0	210.0	17.0
1,2-DCA	ND	ND	ND	ND
OTHER	0.0085	ND	ND	0.0058

↙ - GROUNDWATER MONITORING WELL (DECEMBER 1999)

GROUNDWATER GRADIENT = 0.011 FT/FT

ALL UNITS IN MG/L (PARTS PER MILLION)

DESIGNED BY:	CHECKED BY:
DRAWN BY: JG	SCALE:
PROJECT NO: 182-01-01	

GROUNDWATER GRADIENT &
 HVOC RESULTS - 10/18/00
 CALVEST PROPERTY
 1266 68TH STREET
 EMERYVILLE, CALIFORNIA

DATE: 01/22/01 FIGURE: 3
GRIBI Associates