HALEY & ALDRICH

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

REQUEST FOR CLOSURE

GROUNDWATER MONITORING WELL WCC-3D

To: **Mr. Brian Mossman**
Boeing Realty Corporation
3855 Lakewood Blvd.
Building 1A MC D001-0097
Long Beach, CA 90846

From: **Haley & Aldrich, Inc.**

Date: **May 7, 2002**

Re: **Request for Closure, Groundwater Monitoring Well WCC-3D, Boeing Realty Corporation, Former C-6 Facility, Los Angeles, California**

Haley & Aldrich, Inc. is herein providing this request to close groundwater monitoring well WCC-3D. Groundwater monitoring well WCC-3D is located along the northern boundary of Parcel C of the Boeing Realty Corporation's (BRC's) Former C-6 Facility in Los Angeles, California (Site). The Site location is shown on Figure 1 and groundwater monitoring well WCC-3D is shown on Figure 2.

Groundwater monitoring well WCC-3D was installed on June 27, 1989, by Woodward Clyde Consultants (WCC) as part of a Site-wide groundwater monitoring program. The purpose of groundwater monitoring well WCC-3D was to facilitate sampling and measurement of groundwater conditions at the bottom of the Bellflower Aquitard. Groundwater monitoring well WCC-3D is constructed of 4-inch diameter Schedule-40 PVC screen and casing, extended to a depth of approximately 140 feet, and has a screened interval from approximately 120 to 140 feet below ground surface (bgs). Since installation, groundwater monitoring well WCC-3D has been sampled 35 times including the most recent sampling on March 21, 2002. Over this duration of time, concentrations of trichloroethene (TCE), the primary constituent present, have ranged from 1.8 to 540 micrograms per liter (μg/L). The results from the March 21, 2002 sampling event were 1.8 μg/L TCE.

Based on lithologic logging performed during a groundwater reconnaissance program in July 2000, it appears that groundwater monitoring well WCC-3D is screened in the confining unit (Lower Bellflower Fine or LBF) below the water-bearing zones of the Bellflower Aquitard (C-Sand). The need for installation of a groundwater monitoring well for the C-sand in this area of the Site will be evaluated upon completion of the groundwater reconnaissance program, expected in late 2002.

PROPOSED WELL CLOSURE PROCEDURE

The closure of groundwater monitoring well WCC-3D will be conducted according to the following procedure:

- **Groundwater Level Measurement** - The depth to groundwater in the well will be measured from the top of casing to the nearest 0.01-foot using an electronic water level indicator. The measurement will be recorded in the field log.

- **Groundwater Sampling** -Groundwater monitoring well WCC-3D was recently sampled on March 21, 2002 as part of the Site-wide annual groundwater monitoring event. Sampling was performed in accordance with the Regional Water Quality Control Board-Los Angeles Region (RWQCB-LA)-approved Groundwater Monitoring Workplan-2002, Boeing Realty Corporation, Former C-6 Facility dated December 20, 2002. Based on this recent sampling, it is proposed that no additional groundwater sampling be performed as part of the well closure effort. The laboratory analytical results of the March 2002 sampling event will be reported in the well closure report.

- **Well Closure** -WCC-3D will be closed by pulling the PVC casing and screen from the hole using a drill rig. Once the casing and screen have been pulled, the well seal and sand pack will be over-drilled using hollow-stem augers to 140 feet bgs. The boring will then be backfilled with a with a neat cement grout via a tremie pipe. Grouting will be completed from the bottom of the borehole to within 10 feet of ground surface as the augers are retracted. The grout will be allowed to cure overnight and the top 10 feet of the borehole will be completed the second day with concrete to the ground surface. Well closure work will be performed by a California-licensed well contractor and under the oversight of a California-licensed professional engineer. Following well closure, a letter report will be submitted to the RWQCB documenting the well closure activities by December 31, 2002.

Wastes generated by the well closure process will be containerized and profiled for subsequent disposal.

Haley & Aldrich's Site-Specific Health & Safety Plan (SHSP) dated June 8, 2001 will be used for on-site personnel performing the well closure activities. The SHSP has been previously submitted to the RWQCB.

Should you have any questions concerning the contents of this memorandum or require additional information, please contact either of the undersigned.

Sincerely yours,
Haley & Aldrich, Inc.

Richard M. Farson, PE
Project Engineer

REGISTERED PROFESSIONAL ENGINEER
RICHARD M. FARSON
47269
EXPIRES 12/31/03
CIVIL
STATE OF CALIFORNIA

Scott P. Zachary
Project Manager

HALEY & ALDRICH

Attachments:
Figure 1 -Site Location Map
Figure 2-WCC-3D Location Map

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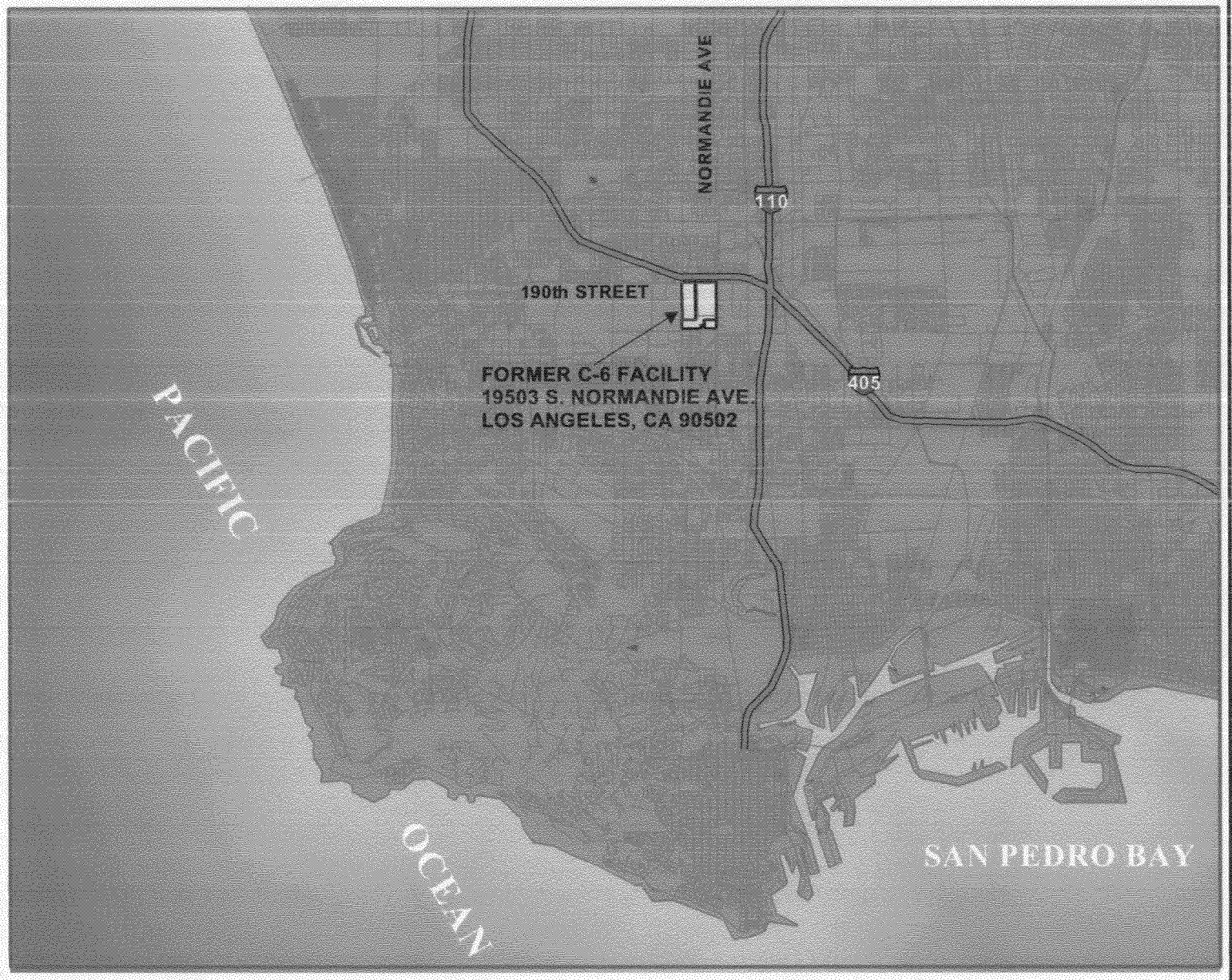
Figures

BOE-C6-0129546

FIGURES



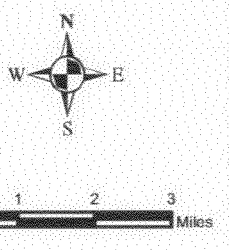


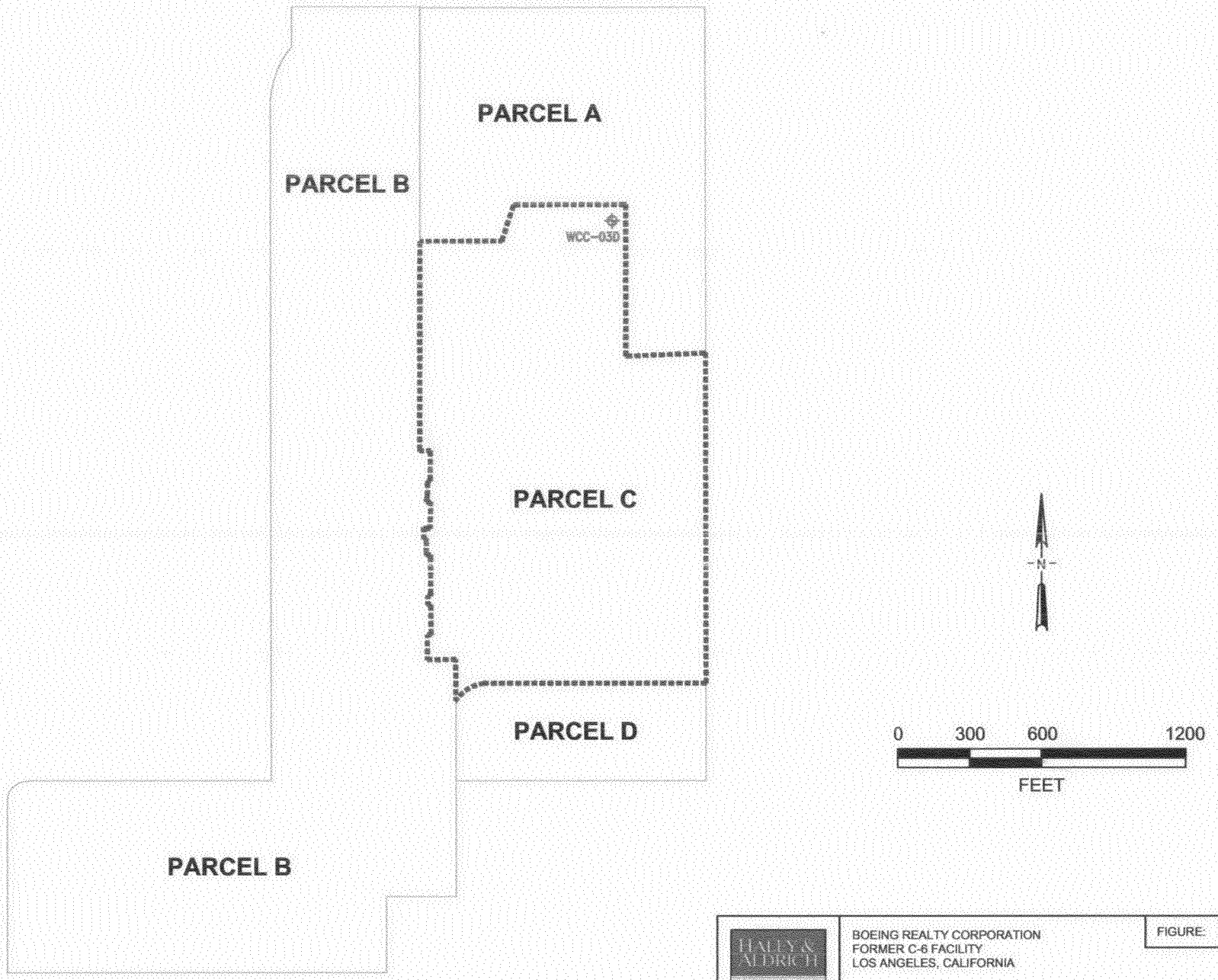
Figure 1
Site Location Map

Boeing Realty Corporation
Former C-6 Facility
Los Angeles, California

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

Scale : As Shown	QA/QC :	Project : 27285
Drawn : DFM	Reviewed : SPZ	Date : 1 March 2002

BOE-C6-0129548



SOURCE: Kennedy/Jenks Consultants, Sampling & Analysis Plan,
Boeing Realty Corporation's C-6 Facility--Parcel C, Los Angeles, California, 16 August, 2000

G:\PROJECTS\ENVIRONMENTAL\BOEING\C-6\WELL DEMO\WCC-3D\FIGURE 2

HALEY & ALDRICH
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

FIGURE: 2

PARCEL C SITE PLAN
GROUNDWATER MONITORING WELL
WCC-03D LOCATION

SCALE: AS SHOWN		PROJECT: 27285
DRAWN: SAL	REVIEWED: RLM	DATE: 7 MAY 2002