CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Los Angeles Regional Water Quality Control Board

April 20, 2012

Ms. Teresa P. Olmsted
ITT Corporation
1054 N. Tustin Avenue
Anaheim, CA 92807

REVISED MONITORING AND REPORTING PROGRAM NO. CI-9652 – FORMER ITT CORPORATION HUMBOLDT STREET PROPERTY, 3209 HUMBOLDT STREET, LOS ANGELES, CALIFORNIA (FILE NO. 09-172, WDR ORDER NO. R4-2007-0019, SERIES NO. 155; CI-9652, GLOBAL ID WDR100001502)

Dear Ms. Olmsted:

On March 11, 2011, ITT Corporation (ITT) was enrolled under Regional Board Order No. R4-2007-0019, "General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel, Volatile Organic Compound and/or Hexavalent Chromium Impacted Sites," adopted by this Regional Board on March 1, 2007, for the injection of emulsified vegetable oil (EVO) into existing injection wells. Upon enrollment, ITT was required to implement Monitoring and Reporting Program (MRP) No. CI-9652.

On April 4, 2012, ARCADIS, on behalf of ITT, proposed to modify Monitoring and Reporting Program No. CI-9652 due to the following reasons:

1) There is no EPA Method 8015 analysis appropriate for detecting EVO.

2) In addition to the fluorescein dye, ARCADIS plans to add Rhodamine WT to the tracer testing program. The fluorescein and Rhodamine WT will allow visual determination of the arrival of the injection solution using multiple wells that have similar well screen intervals for the shallow injection wells and overall well proximity.

Based on Regional Board staff's review, the MRP No. CI-9652 is therefore modified as follows:

1) Remove the requirement to collect groundwater samples and analyze for EVO by EPA Method 8015 to monitor EVO concentration and distribution.

   The dissolved organic carbon (DOC) analysis proposed and approved for the injection program will allow the determination of the amount of carbon provided by the EVO once it has been distributed in the subsurface during and following the injection event. A combination of tracer dye (described below) and DOC testing will provide sufficient information on the EVO distribution.

2) In addition to the fluorescein dye, Rhodamine WT is added to the groundwater monitoring program as one of the constituents to be analyzed on a weekly basis.

The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP, including groundwater monitoring data, discharge location data, and pdf monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100001502. ESI training video is available at: https://waterboards.webex.com/waterboards/ldr.php?AT=pb&SP=MC&rID=44145287&rKey=7dad4352c990334b

Please see Paperless Office Notice for GeoTracker Users, dated December 12, 2011 for further details at: http://www.waterboards.ca.gov/losangeles/resources/Paperless/Paperless%20Office%20for%20GT%20Users.pdf

To avoid paying future annual fees, please submit a written request for termination of your enrollment under the general permit in a separate letter if your facility is connected to a sewer and the permit is no longer needed. Be aware that the annual fee covers the fiscal year billing period beginning July 1 and ending June 30, the following year. You will pay the full annual fee if your request for termination is made after the beginning of the new fiscal year beginning July 1.

If you have any additional questions, please contact the Project Manager, Mr. David Koo at (213) 620-6155 (dkoo@waterboards.ca.gov) or the Unit Chief, Dr. Eric Wu at (213) 576-6683 (ewu@waterboards.ca.gov) regarding this matter.

Sincerely,

Samuel Unger

Samuel Unger, P.E.
Executive Officer

Enclosure: Monitoring and Reporting Program No. CI-9652 revised on April 20, 2012

cc: Mr. Alberto Valdimiano, Department of Toxic Substances Control
Mr. Patrick Nejadian, Department of Health Services, County of Los Angeles
Mr. Thomas Gertmenian, G.A. Gertmenian & Sons
Ms. Lisa Hall, ITT Corporation
Ms. Kristen Stevens, ARCADIS

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. CI-9652
FOR
FORMER ITT CORPORATION HUMBOLDT STREET PROPERTY

ENROLLMENT UNDER REGIONAL BOARD
ORDER NO. R4-2007-0019 (SERIES NO. 155)
FILE NO. 09-172

I. REPORTING REQUIREMENTS

A. Former ITT Corporation Humboldt Street Property (hereinafter Discharger) shall implement this revised Monitoring and Reporting Program under Regional Board Order No. R4-2007-0019. Monitoring reports shall be received by the dates in the following schedule:

Monitoring Period	Report Due
January – March	April 30
April – June	July 30
July – September	October 30
October – December	January 30

B. If there is no discharge or injection during any reporting period, the report shall so state.

C. By January 30th of each year, beginning January 30, 2013, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken, or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements.

D. Laboratory analyses – all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP). The one exception is for the Dissolved Gasses (ethene, ethane, methane) that will be analyzed by Microseeps, Inc. of Pittsburgh, Pennsylvania which is certified by the National Environmental Laboratory Accreditation Program (NELAP). A copy of the laboratory certifications shall be provided each time a new and/or renewal is obtained from ELAP and/or NELAP.

E. The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer. At least once a year, the Discharger shall

submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC) procedures.

F. All QA/QC samples must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.

Proper chain of custody procedures must be followed and a copy of the chain of custody documentation shall be submitted with the report.

G. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health, and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.

H. For every item where the requirements are not met, the Discharger shall submit a statement of the cause(s), and actions undertaken or proposed which will bring the discharge into full compliance with waste discharge requirements at the earliest possible time, including a timetable for implementation of those actions.

I. The Discharger shall maintain all sampling and analytical results, including strip charts, date, exact place, and time of sampling, dates analyses were performed, analyst's name, analytical techniques used, and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

J. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.

K. Any mitigation/remedial activity including any pre-discharge treatment conducted at the site must be reported in the quarterly monitoring report.

L. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs. This section shall be located at the front of the report and shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.

M. The Discharger shall comply with requirements contained in Section G of Order No. R4-2007-0019 "*Monitoring and Reporting Requirements*" in addition to the aforementioned requirements.

II. INJECTION MONITORING REQUIREMENTS

Reagent Injections - An injection test will be performed at the site at three well locations. A minimum of one injection is planned followed by up to two years of performance monitoring. The initial injection will contain a reagent solution with an electron donor and two non-toxic tracers. Emulsified vegetable oil (EVO) will serve as the electron donor and fluorescein dye and Rhodamine WT dye will serve as the tracers. The EVO solution will contain food grade soybean oil, sodium lactate, a surfactant (to stabilize the emulsion), a buffering agent and water.

The quarterly reports shall contain the following information regarding the injection activities. If there is no injection, during any reporting period, the report shall so state:

1. Location Map showing injection wells for the electron donors.

2. Written summary defining:
   - Depth of injection;
   - Volume and concentration of the electron donor and non-toxic tracers injected per injection well; and
   - Total mass of electron donors injected at site.

3. Monthly visual inspection at each injection well shall be conducted to evaluate the well casing integrity for a period of three months after each injection. The quarterly report shall include a summary of the visual inspection.

III. GROUNDWATER MONITORING PROGRAM FOR THE REMEDIATION PROJECT

A comprehensive baseline monitoring program has been approved for the site by the Department of Toxic Substances Control. The attached Table 1 identifies the wells that will be sampled and the constituents that will be analyzed during the baseline sampling event prior to injection and subsequent groundwater monitoring events during the monitoring period for the purpose of evaluating the effectiveness of the injection.

The objective of this Monitoring and Reporting Program is to detect and evaluate impacts associated with the injection activities. The following shall constitute the Monitoring and Reporting Program for wells MW-23 (S/D), MW-27 (S/D), MW-28 (S/D), MW-29 (S/D), and MW-5R (Figure 1 attached), where "S" represents a shallow screened interval and "D" represents a deep screened interval. These sampling stations shall not be changed and any proposed change of monitoring locations shall be identified and approved by the Regional Board Executive Officer (Executive Officer) prior to their use.

CONSTITUENT	UNITS[1]	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Water Temperature[2]	°C	Low-flow sample	Quarterly[3]/Semi-annually[4]
Specific Conductance[2]	µS/cm	Low-flow sample	Quarterly[3]/Semi-annually[4]
Dissolved Oxygen[2]	mg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
pH[2]	pH units	Grab or low-flow sample	Quarterly[3]/Semi-annually[4]
Oxidation Reduction Potential[2]	mV	Low-flow sample	Quarterly[3]/Semi-annually[4]
Volatile Organic Compounds (VOCs) – complete suite (EPA Method 8260B)	µg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
Dissolved Gases (ethene, ethane, methane) (Method AM20GAX or RSK 175)	µg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
Chloride (EPA Method 300)	mg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
Sulfate (EPA Method 300)	mg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
Nitrate (EPA Method 300)	mg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
Boron (EPA Method 6010B)	mg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
Dissolved Iron (EPA Method 6010B)	mg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
Alkalinity (SM2320B)	mg/L	Low-flow sample	Quarterly[3]/Semi-annually[4]
Dissolved Organic Carbon (DOC) (EPA Method 5310D and field filtered with 0.45 micron filter)	mg/L	Grab or low-flow sample	Quarterly[3]/Semi-annually[4]
Fluorescein[6]	µg/L	Grab or low-flow sample	Weekly[5]
Rhodamine WT[6]	µg/L	Grab or low-flow sample	Weekly[5]

Notes:

[1] mg/L: milligrams per liter; µg/L: micrograms per liter; µS/cm: microsiemens per centimeter; mV: milivolts; °C: degree Celsius.

[2] Field instrument will be used to test for this constituent.

[3] Quarterly sampling events are required for the first year from the injection date or until concentrations have stabilized, whichever is later.

[4] Semi-annual sampling events are required after the first year until completion of the injection test.

[5] Analysis is required during baseline sampling. Subsequent analysis is considered optional and will be based on initial results.

[6] Grab samples will be collected on a minimum frequency of weekly for up to two months after the injection event with fluorescein dye. Samples will be inspected for visual fluorescence. Select samples may be submitted to the laboratory for analysis based on the visual screening results.

All groundwater monitoring reports must include, at a minimum, the following:

a. Well identification, date and time of sampling;
b. Sampler identification, and laboratory identification;
c. Quarterly observation of groundwater levels, recorded to 0.01 feet mean sea level and groundwater flow direction.

IV. MONITORING FREQUENCIES

Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted to a less frequent basis or parameters and locations dropped by the Executive Officer if the Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

V. CERTIFICATION STATEMENT

Each report shall contain the following declaration:

"I certify under penalty of law that this document, including all attachments and supple-mental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the _____day of _____at_____.

_____(Signature)

_____(Title)"

VI. ELECTRONIC SUBMITTAL OF INFORMATION (ESI) TO GEOTRACKER

The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP, including groundwater monitoring data, discharge location data, and pdf monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100001502.

All records and reports submitted in compliance with this Order are public documents and will be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region, upon request by interested parties. Only proprietary information, and only at the request of the Discharger, will be treated as confidential.

Ordered by: Samuel Unger

Samuel Unger, P.E.
Executive Officer

Date: April 20, 2012

ARCADIS

Table 1. Baseline Groundwater Monitoring Plan
Former ITT Cannon Facility
Los Angeles, California

Well ID	Well Type	Field Parameters (a)	VOCs (b)	TPH-g/ TPH-cc (c)	PCBs (Filtered/ Unfiltered) (d)	Hexavalent Chromium (Unfiltered) (e)	Dissolved Gasses (f)	Dissolved Organic Carbon (g)	Biogeo-chemical (h)
Monitoring Wells									
MW-1	offsite	X	X						
MW-2	offsite	X	X						
MW-3	offsite	X	X	X		X			
MW-5R	offsite	X	X	X	X	X	X	X	X
MW-17	offsite	X	X	X		X			
MW-19	offsite	X	X			X			
MW-20	offsite	X	X						
MW-21	offsite	X	X	X		X			
MW-22	offsite	X	X	X	X				
MW-23S	onsite	X	X	X	X		X	X	X
MW-23D	onsite	X	X	X	X		X	X	X
MW-24	onsite	X	X	X	X	X			
MW-25S	onsite	X	X	X	X	X			
MW-25D	onsite	X	X	X	X	X			
MW-26S	onsite	X	X	X		X			
MW-26D	onsite	X	X	X		X			
MW-27S	onsite	X	X	X		X	X	X	X
MW-27D	onsite	X	X	X		X	X	X	X
MW-28S	onsite	X	X	X		X	X	X	X
MW-28D	onsite	X	X	X	X	X	X	X	X
MW-29S	onsite	X	X	X		X	X	X	X
MW-29D	onsite	X	X	X	X	X	X	X	X
MW-30	onsite	X	X	X		X			
Injection Wells									
IS-1	onsite	X	X				X	X	X
IS-2	onsite	X	X						
IS-3	onsite	X	X				X	X	X
IS-4	onsite	X	X						
IS-5	onsite	X	X				X	X	X
IS-6	onsite	X	X						
IS-7	onsite	X	X				X	X	X
IS-8	onsite	X	X						

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Table 1. Baseline Groundwater Monitoring Plan
Former ITT Cannon Facility
Los Angeles, California

Well ID	Well Type	Field Parameters (a)	VOCs (b)	TPH-g/ TPH-cc (c)	PCBs (Filtered/ Unfiltered) (d)	Hexavalent Chromium (Unfiltered) (e)	Dissolved Gasses (f)	Dissolved Organic Carbon (g)	Biogeo-chemical (h)
IS-9	onsite	X	X				X	X	X
IS-10	onsite	X	X						
IS-11	onsite	X	X				X	X	X
IS-12	onsite	X	X						
IS-13	onsite	X	X				X	X	X
IS-14	onsite	X	X						
IS-15	onsite	X	X				X	X	X
IS-16	onsite	X	X						
IS-17	onsite	X	X				X	X	X
IS-18	onsite	X	X						
IS-19	onsite	X	X				X	X	X
ID-1	onsite	X	X				X	X	X
ID-2	onsite	X	X						
ID-3	onsite	X	X				X	X	X
ID-4	onsite	X	X						
ID-5	onsite	X	X				X	X	X
ID-6	onsite	X	X						
ID-8	onsite	X	X				X	X	X
ID-9	onsite	X	X						
Totals		50	50	19	9	17	23	23	23

Notes:

(a) Field parameters (pH, temperature, specific conductance, dissolved oxygen, and oxidation-reduction potential) will be recorded during groundwater sampling

(b) VOCs (Volatile Organic Compounds) will be analyzed by EPA Method 8260B

(c) TPH (Total Petroleum Hydrocarbons) will be analyzed by EPA Method 8015M; g (gasoline range), cc (carbon chain [C7-C36])

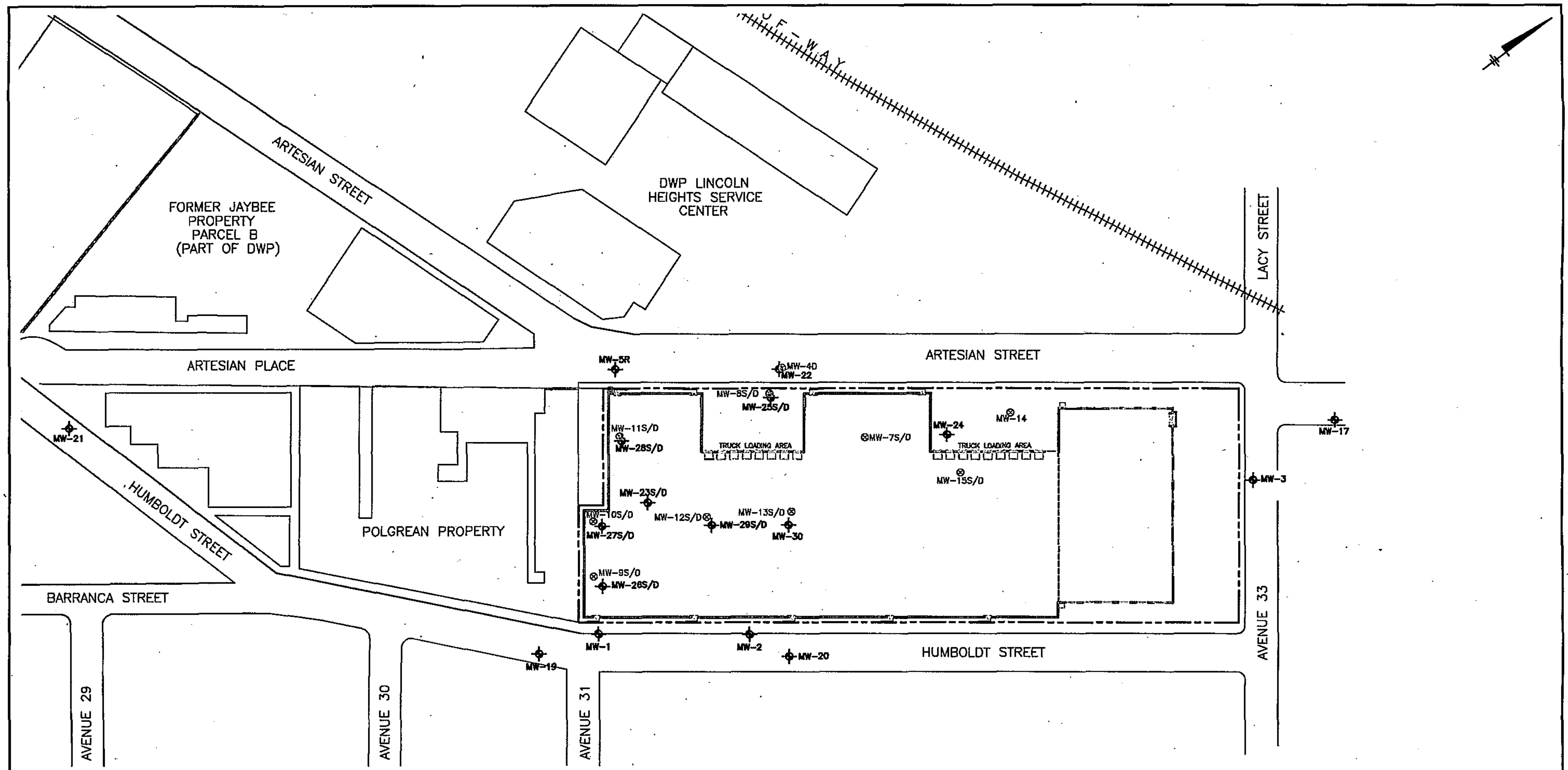
(d) PCBs (Polychlorinated Biphenyls) will be analyzed by EPA Method 8082 and lab filtered with a 0.7 micron filter

(e) Hexavalent Chromium will be analyzed by EPA Method 7199

(f) Dissolved gasses (ethene, ethane, methane) will be analyzed by Method AM20GAX or RSK175

(g) Dissolved Organic Carbon will be analyzed by EPA Method 5310D and field filtered with 0.45 micron filter

(h) Biogeochemical parameters include nitrate and sulfate (EPA Method 300), dissolved iron (EPA Method 6010B), and alkalinity (SM2320B). Dissolved iron will be field filtered with a 0.45 micron filter



LEGEND

MW-26 MONITORING WELL

S/D SHALLOW AND DEEP WELL PAIR

MW-13 ⊗ ABANDONED MONITORING WELL

METROLINK RAILROAD

SITE PERIMETER

APPROXIMATE BUILDING OUTLINE

ADAPTED FROM FIGURE 1 ENTITLED "OVER-EXCAVATION DEPTH EXHIBIT FOR 3209 HUMBOLDT STREET", EXIBITOX1.DWG. PRODUCED BY THIENES ENGINEERING, INC., LA MIRADA, CALIFORNIA FOR GA GERTMENIAN & SONS, LOS ANGELES. WELLS SURVEYED ON 12-22-1995, 3-1-2004, AND 11-25-2008 BY CALVADA SURVEYING.

NOT A SURVEYED MAP

0 100' 200' 300'

GRAPHIC SCALE

FORMER ITT CANNON-HUMBOLDT STREET PROPERTY
3209 HUMBOLDT STREET
LOS ANGELES, CALIFORNIA

SITE LAYOUT WITH WELL LOCATIONS

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FIGURE 1