SFPP REMEDIATION SYSTEM EFFECTIVENESS EVALUATION REPORT

DEFENSE FUEL SUPPORT POINT NORWALK
NORWALK, CALIFORNIA

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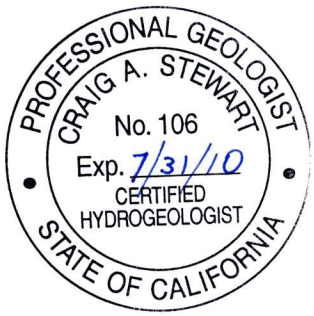

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Defense Fuel Support Point Norwalk
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1.0 INTRODUCTION

AMEC Geomatrix, Inc. (AMEC), is submitting this report on behalf of SFPP, L.P. (SFPP), an operating partnership of Kinder Morgan Energy Partners, L.P. (KMEP), to describe the evaluation of the effectiveness of SFPP's remediation systems at the Defense Fuel Support Point Norwalk facility (DFSP) located at 15306 Norwalk Boulevard in Norwalk, California (the site; Figure 1). The evaluation was initiated in response to the California Regional Water Quality Control Board, Los Angeles Region (RWQCB)'s letter dated March 30, 2010 for SFPP, which requested that KMEP evaluate the effectiveness of the current remedial measures. The following sections provide an overview of SFPP's remediation systems and remedial objectives, an evaluation of the current remedial measures, and steps being implemented by SFPP for remediation system optimization. Also included is a discussion of recent increases in dissolved benzene concentrations in well GMW-O-14.

2.0 OVERVIEW OF REMEDIATION SYSTEMS

The SFPP remediation systems are currently being operated in accordance with the following remedial action plan documents:

- Remedial Action Plan for the South Central Portion of the Norwalk Defense Fuel Supply Point (RAP; Geomatrix, 1994);
- Santa Fe Pacific Pipelines 24-Inch Block Valve Interim Remediation Work Plan (IR Work Plan; Geomatrix, 1995);
- Risk-Based Corrective Action, Western 1,2-DCA and MTBE Plumes (RBCA Report; Geomatrix, 1999); and
- Second Addendum to Remedial Action Plan (Second Addendum; Geomatrix, 2006b).

The objectives of the remedial measures described in these documents include containing and removing light non-aqueous phase liquids (LNAPL), described herein as residual fuel hydrocarbons in soil and free product, in the south-central and southeastern portions of the site and providing hydraulic control and reducing the potential for further migration of chemicals of potential concern (COPCs) in SFPP remediation areas. To meet these

objectives, soil vapor extraction (SVE), total fluids extraction (TFE), and groundwater extraction (GWE) are being conducted at the site.

A summary of SFPP remediation wells is presented in Table 1. Table 1 includes well identifications, well construction details, and well use. A layout of the remediation systems is shown on Figure 2.

2.1 SOIL VAPOR EXTRACTION AND TREATMENT

The SVE system was designed to reduce the volume and extent of LNAPL in the south-central and southeastern areas by extracting soil vapor containing volatile fuel hydrocarbons. The SVE system is currently connected to 24 on-site and 6 off-site SVE wells in the south-central area and 2 off-site SVE wells in the southeastern off-site area. The vapor treatment system consists of a 3,000 cubic feet per minute (cfm) capacity, natural gas-fired oxidizer, currently operating in catalytic mode, with a fully modulated automatic temperature control system. The extracted vapors are conveyed by above- and below-ground piping to a knock-out tank that separates entrained moisture from the soil vapors. Accumulated moisture in the knock-out tank is treated by the main groundwater treatment system described below. The soil vapors are then pre-heated in a heat exchanger and treated in a catalytic oxidizer where volatile organic compounds (VOCs) are converted to carbon dioxide and water prior to being discharged to the atmosphere. Operation of the SVE and treatment system is conducted in accordance with Permit to Operate No. F13759 issued by the South Coast Air Quality Management District (SCAQMD).

2.2 TOTAL FLUIDS AND GROUNDWATER EXTRACTION AND TREATMENT

The total fluids extraction system removes LNAPL in the form of free product and dissolved-phase fuel hydrocarbons, enhances SVE by lowering the groundwater table and exposing more soil to SVE, and provides hydraulic control of dissolved COPCs in groundwater. The groundwater extraction system provides hydraulic control of dissolved COPCs in areas without free product. Free product and groundwater are extracted from wells with total fluids or groundwater extraction pumps operated using compressed air. The extraction well network currently includes 14 on-site wells and 6 off-site TFE or GWE wells in the south-central area and 1 on-site and 2 off-site TFE wells in the southeastern area. At several well locations, SVE is coupled with TFE or GWE in a process referred to as dual-phase extraction (DPE). The extracted liquids are conveyed by above-and below-ground piping to the main groundwater treatment system. This treatment system consists of an oil/water separator, a product storage tank for free product, polypropylene bag filters, and three polishing granular activated carbon (GAC) vessels in series. Treated water is routed through an on-site, 8,000-galllon effluent storage tank prior to discharge under a National

Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0063509, CI No. 7497).

The West Side Barrier (WSB) system was installed in 1996 to provide hydraulic control and reduce the potential for further migration of dissolved COPCs off-site. This system consists of eight groundwater extraction wells installed near the western boundary of the site. The groundwater extraction pumps in these wells are also operated using compressed air. The extracted liquids are conveyed by below-ground piping to a treatment system separate from the main groundwater treatment system that treats liquids from the south-central and southeastern areas. The WSB groundwater treatment system includes three GAC vessels in series. Treated water from this system is also routed through the above-described 8,000-gallon effluent storage tank prior to discharge. As described in previously submitted quarterly remediation progress reports, the WSB system has been shut down since August 2008 based on low concentrations of MTBE and 1,2-DCA west of the site.

Since 2009, certain extraction wells from the south-central and southeastern areas have been temporarily shut down due to elevated selenium concentrations detected in extracted groundwater. As described in the Selenium Management Summary Report dated April 1, 2010 (Selenium Report; AMEC, 2010c), AMEC and SFPP are evaluating several selenium management options including one option that involves blending treated groundwater with groundwater extracted from the WSB area. Recent groundwater data collected from the WSB wells indicated selenium was not detected or was detected at low concentrations in selected WSB wells. Operation of these WSB wells would potentially produce a water source that could be blended with groundwater extracted from the south-central and southeastern areas to lower the selenium concentration in the effluent and allow operation of more wells in the south-central and southeastern areas. Therefore, a portion of the WSB system will be restarted to evaluate this selenium management option.

3.0 EVALUATION OF REMEDIATION SYSTEMS

Soil vapor extraction and total fluids extraction have been effective in reducing the volume and extent of LNAPL at the site and are considered to be appropriate technologies for continuing to remove LNAPL. In an effort to further improve site conditions and accelerate progress toward site closure, SFPP implemented remediation system enhancements in 2007 and 2008 in accordance with the Second Addendum dated November 30, 2006 and approved by the RWQCB in April 2007. The remediation system enhancements included expanding the SVE and TFE systems into areas where residual LNAPL appeared to remain. Based on groundwater data collected from May 2005 through November 2006, most of the residual LNAPL appeared to be on-site, and therefore the additional wells for residual LNAPL recovery were primarily installed on-site. In addition, increased groundwater extraction from the south-

central onsite area enhanced hydraulic gradients that promote flow of groundwater from the southern off-site area toward the site.

The extent of residual LNAPL has further decreased since the Second Addendum was implemented and the enhanced remediation system is continuing to remove LNAPL and its volatile and soluble constituents. As discussed below, SFPP is currently evaluating the effectiveness of the TFE and GWE system in providing hydraulic control of the dissolved COPCs. The following sections further discuss the effectiveness of the remediation systems.

3.1 EVALUATION OF SOIL VAPOR EXTRACTION SYSTEM

The SVE system was designed to reduce the volume and extent of LNAPL in the south-central and southeastern areas by extracting soil vapor containing volatile fuel hydrocarbons. Since September 1995, when the remediation system was started, approximately 454,700 equivalent gallons of fuel have been removed by SVE and destroyed by thermal or catalytic oxidation. A graph showing the cumulative mass of fuel hydrocarbons removed by SVE is shown on Figure 3. As shown on Figure 3, SVE is continuing to remove mass of fuel hydrocarbons although the rate of mass removal has decreased as influent hydrocarbon concentrations have decreased.

In 2007, the SVE system was enhanced in the south-central area to provide additional remediation in areas where residual LNAPL appeared to remain. Seven additional SVE wells were installed to provide more extraction of soil vapors from areas overlying free product based on groundwater monitoring well gauging conducted in 2006 as shown on Figure 5 of the First Semi-Annual 2006 Groundwater Monitoring Report (Geomatrix, 2006a; Appendix A). The recent extent of free product (based on groundwater monitoring well gauging conducted in 2009) is shown on Figure 5 of the First Semi-Annual 2009 Groundwater Monitoring Report (Geomatrix, 2006a; Appendix B). As shown on these figures (Appendixes A and B), the extent of free product in the south-central area has decreased since the Second Addendum was implemented. Figure 4 shows the cumulative mass of fuel hydrocarbons removed by SVE since implementation of the Second Addendum began in 2007.

In the southeastern area, SVE is currently being performed at wells GMW-O-15 and GMW-O-18 but not at GMW-36, where free product has been detected historically. LNAPL recovery is currently being performed at well GMW-36 using TFE only. Therefore, LNAPL recovery may be enhanced in the southeastern area by expanding SVE to well GMW-36.

To optimize the volatile hydrocarbon mass removal efficiency, the SVE system is shut down after total VOC concentrations in the influent vapor decreases and remains at low asymptotic levels. The SVE system is then restarted after VOC concentrations rebound. As shown on Figure 4, SVE mass removal rates generally increase following periods of rebound testing.

The reduction in mass removal rates over time indicates that the SVE system has been effective in removing volatile fuel hydrocarbons.

In 2006, a human health risk assessment (HHRA; Geomatrix, 2006c) was conducted to assess potential vapor intrusion in properties south of the site. Soil gas samples, sub-slab samples, and crawl space samples were collected from various areas including areas overlying free product and dissolved-phase plumes. The sample locations were discussed with and approved by the RWQCB and considered to be representative of subsurface conditions. The Office of Environmental Health Hazard Assessment (OEHHA) agreed with the risk assessment methodology, verified the calculations, and estimated a risk of 1E-6 which is in the lower end of the risk management range (1E-6 to 1E-4). In addition, they indicated the approach taken was more conservative than necessary.

As described in SFPP's letter dated April 19, 2010, a soil vapor monitoring network will be proposed to monitor current soil vapor concentrations in the southern off-site area. Soil vapor concentrations will be compared to California Human Health Screening Levels (CHHSLs) and the HHRA will be updated if the new soil gas data exceed the CHHSLs. Additional SVE wells or other remedial measures can be proposed to address potential vapor intrusion issues if necessary.

3.2 EVALUATION OF TOTAL FLUIDS AND GROUNDWATER EXTRACTION SYSTEM

Operation of the TFE and GWE systems is conducted to achieve the following objectives:

1. contain and reduce the extent of LNAPL and dissolved-phase fuel hydrocarbons;
2. enhance SVE by lowering the groundwater table to expose more soil for SVE; and
3. provide hydraulic capture of dissolved COPCs.

Since September 1995, approximately 41 million gallons of groundwater have been extracted and 8,900 gallons of free product have been recovered from the south-central and southeastern areas. Since 1996, more than 26 million gallons of groundwater have been extracted from the WSB wells. Groundwater extraction was discontinued in the West Side Barrier region during third quarter 2008 based on the reduced lateral extent and low concentrations of MTBE and 1,2-DCA west of the site. Detected concentrations of MTBE and 1,2-DCA in wells west of the site have been below the conservative, site-specific, Risk-Based Corrective Action (RBCA) goals (Geomatrix, 1999) since August 2005. The lower (more conservative) RBCA goals for MTBE and 1,2-DCA are 40 micrograms per liter (ug/L) and 70 ug/L, respectively. 1,2-DCA and MTBE concentrations in the western area continue to be monitored and the WSB system will be restarted to address 1,2-DCA and MTBE in

groundwater if necessary. In addition, a portion of the WSB will be restarted for addressing selenium in the effluent water as discussed above in Section 2.2.

The cumulative volumes of groundwater extracted from each remediation area and cumulative volume of free product recovered are shown on Figure 5. As shown on Figure 5, free product recovery rates have decreased to low levels and become asymptotic. The decrease in free product extraction rate appears to correspond to the significant decreases in the extent and thickness of LNAPL in the south-central and southeastern remediation areas.

In an effort to enhance LNAPL recovery, twelve additional TFE pumps were installed in the south-central area and phased into operation during 2007 and 2008. Five TFE pumps were installed in wells where LNAPL had been detected in one or more occasions since May 2005. After the new SVE wells were installed in 2007, seven additional TFE pumps were installed to address the free product detected in the new wells. In addition to enhancing free product recovery, the additional TFE wells also improved the SVE effectiveness by lowering the LNAPL surface (where present) and groundwater table and exposing more soil for soil vapor extraction.

As shown on Figure 5, groundwater extraction rates in the south-central area have increased since initiating implementation of the Second Addendum in 2007. The increased groundwater extraction combined with a regional trend of declining shallow groundwater table elevations also contributed to decreases in product thicknesses and groundwater elevations in the south-central area as summarized in Table 2. In addition, the increased pumping in the south-central area appears to have been effective in providing hydraulic control of dissolved COPCs as indicated by the stable or decreasing extents of dissolved COPCs. This is exemplified in the figures included in Appendixes A and B which show the decrease in the lateral extent of benzene during 2006 to 2009.

As discussed above and in previously submitted quarterly remediation progress reports, certain extraction wells are temporarily shut down due to elevated selenium concentrations detected in extracted groundwater. To compensate for pumping from fewer wells, SFPP has recently performed several well maintenance activities to improve the performance and increase the flow rates of extraction wells. Based on March 2010 operations data, pumping from nine wells produced a combined flow rate of approximately 16 to 18 gallons per minute (gpm). A capture zone analysis to evaluate the effectiveness of the current pumping configuration in the south-central area is in progress. If the results of the capture analysis indicate this pumping configuration will provide adequate capture of LNAPL and dissolved hydrocarbons, the current pumping configuration may be appropriate as an interim solution or potentially as a longer-term solution. Meanwhile, AMEC and SFPP are also evaluating the selenium management option that involves blending treated groundwater with groundwater

extracted from the WSB area. Therefore, a portion of the WSB system will be restarted for blending evaluation purposes.

3.3 EVALUATION OF DISSOLVED BENZENE IN WELL GMW-O-14 AND OTHER WELLS

The decrease in groundwater elevations may have resulted in increased concentrations of dissolved COPCs in some areas. As reported in the Second Semiannual 2009 Groundwater Monitoring Report, benzene was detected in the groundwater sample collected from GMW-O-14 at a concentration of 14,000 micrograms per liter (µg/L) in October 2009 (Parsons, 2010). While this concentration represents an increase compared to that observed in the same well during the previous monitoring event, it appears to reflect a concentration similar to several values detected in 2004 (13,000, 11,000, and 13,000 µg/L), prior to a significant rise in groundwater level that occurred during late 2004 and 2005, rather than a new release. The increased benzene concentration observed at GMW-O-14 in October 2009 may be attributed to the continued decline of groundwater level since 2005. As shown on Figure 6, the benzene concentration and groundwater level in GMW-O-14 have shown a generally inverse relationship and the higher concentration detected in October 2009 may be a result of the lower groundwater level at that time. In response to the increased benzene concentrations observed at GMW-O-14, the RWQCB has requested that SFPP conduct soil gas sampling in this area (RWQCB, 2010b). SFPP is currently in the process of obtaining access to the necessary off-site properties and preparing a soil vapor monitoring plan for submittal to the RWQCB by June 1, 2010.

In 2009, increased concentrations of dissolved COPCs were also observed in the southeastern offsite area (in Holifield Park), particularly in wells PZ-5 and GMW-O-18. In response to the increased concentrations, AMEC and SFPP have taken the following corrective actions:

- reviewed the operational status of the southeastern portion of the TFE system;
- identified the temporary interruption of TFE from GMW-O-15 as a potential cause for the observed concentration increases;
- implemented additional measures to verify pump operation and increased the frequency of several maintenance activities;
- initiated a capture zone analysis using a groundwater flow model to assess the expected performance of the TFE system for the southeastern area;
- expanded the TFE system to include well GMW-O-18;

- implemented monthly sampling at six wells in the southeastern area (PZ-5, GMW-O-18, GMW-36, GMW-O-15, GMW-O-16, and GMW-O-19); and

- submitted a work plan to delineate the extent of impact in groundwater northeast of GMW-O-18.

Evaluation of the remediation system effectiveness for the southeastern area is in progress. The southeastern area capture zone analysis is currently being updated to include pumping at GMW-O-18. Pending the results of the additional delineation of COPCs in groundwater near GMW-O-18, the capture zone analysis may be updated again if adjustments to the current pumping configuration are needed to provide adequate hydraulic control based on results of the additional delineation. A field verification of the capture zone will be performed after at least six months of pumping. The results of the capture zone analyses will be presented in future semi-annual groundwater monitoring reports as requested by the RWQCB.

4.0 REMEDIATION SYSTEM OPTIMIZATION

Activities being conducted for optimizing recovery and containment of LNAPL and dissolved fuel hydrocarbons are presented below.

4.1 REMEDIATION SYSTEM OPTIMIZATION FOR RECOVERY OF LNAPL AND DISSOLVED FUEL HYDROCARBONS

The TFE, GWE, and SVE systems for the south-central and southeastern areas will continue to operate. To optimize the efficiency of mass removal by SVE, TFE and GWE wells will be operated to lower the groundwater table and expose more soil for SVE. As discussed in Section 3.1, LNAPL recovery may be enhanced in the southeastern area by expanding SVE to well GMW-36.

Total fluids extraction will also continue to operate in wells with selenium concentrations that do not cause the effluent selenium concentration to exceed the effluent limitation for selenium. Total fluids extraction will be focused in areas where LNAPL and dissolved fuel hydrocarbons remain as indicated by free product level measurements and groundwater sampling results.

4.2 REMEDIATION SYSTEM OPTIMIZATION FOR HYDRAULIC CONTROL OF DISSOLVED COPCS

Concentrations of 1,2-DCA and MTBE in the western area will continue to be monitored and the WSB system will be restarted if necessary. In addition, a portion of the WSB system will also be restarted for blending with groundwater extracted from the south-central and southeastern areas to allow more extraction wells from the south-central and southeastern areas to operate.

In order to confirm that the current pumping configuration is adequate for the south-central and southeastern areas, the following will be performed:

- continue conducting additional modeling of the south-central and southeastern areas to conceptually evaluate the capture zones of the current pumping configurations;
- collect field measurements to evaluate the conceptual capture zones;
- review future water quality data for water quality improvements; and
- adjust pumping configurations as appropriate to achieve adequate hydraulic control.

The results of the ongoing capture zone evaluations will be presented in semi-annual groundwater monitoring reports as requested by the RWQCB.

5.0 SUMMARY OF REMEDIATION SYSTEM EFFECTIVENESS

The remediation systems in place and operational at the site have:

- removed approximately 454,700 equivalent gallons of fuel hydrocarbons from the subsurface using SVE,
- extracted approximately 41 million gallons of impacted groundwater and recovered approximately 8,900 gallons of free product from the south-central and southeastern areas through the TFE and GWE systems,
- reduced the extent of LNAPL,
- reduced the extent and concentrations of dissolved phase impacts in groundwater,
- reduced the mass of residual hydrocarbons present as LNAPL, and
- provided hydraulic control of groundwater impacted by dissolved-phase COPCs.

By doing so, the systems have addressed the remedial action objectives established in the RAP, IR Work Plan, RBCA Report, and the Second Addendum. The technologies being implemented by the existing systems are appropriate for continuing to address these objectives. Where appropriate, SFPP is taking steps to further evaluate or optimize the systems to enhance their effectiveness and efficiency in meeting project objectives. SFPP and its team will continue to monitor and evaluate remediation system operations and effectiveness at the site and will identify and evaluate additional potential system refinements and enhancements if appropriate.

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TABLES

TABLE 1
REMEDIATION WELL CONSTRUCTION

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Remediation Area	Remediation Well ID	Installation Date	Top of Well Casing Elevation (ft msl)	Well Screen Interval (ft bgs)	Remediation Well Function
South-Central	MW-SF-1	6/18/1990	78.93	25 - 40	SVE
	MW-SF-2	6/18/1990	78.53	25 - 40	SVE; TFE
	MW-SF-3	6/18/1990	78.12	25 - 40	SVE; TFE
	MW-SF-4	6/19/1990	79.38	25 - 40	SVE
	MW-SF-5	9/19/1990	79.74	23 - 38	SVE
	MW-SF-6	9/19/1990	76.80	25 - 40	SVE; TFE
	MW-SF-9	6/15/1995	74.10	--	SVE
	MW-SF-10	9/23/2003	76.53	10 - 30	SVE
	MW-SF-11	6/19/2007	78.56	20 - 40	SVE; TFE
	MW-SF-12	6/18/2007	78.07	20 - 40	SVE; TFE
	MW-SF-13	6/19/2007	73.40	20 - 40	SVE; TFE
	MW-SF-14	6/21/2007	78.16	20 - 40	SVE; TFE
	MW-SF-15	6/21/2007	78.27	20 - 40	SVE; TFE
	MW-SF-16	6/20/2007	78.21	20 - 40	SVE; TFE
	GMW-9	7/8/1991	74.44	20 - 50	SVE; TFE
	GMW-10	7/8/1991	74.67	25 - 50	SVE
	GMW-22	8/2/1991	74.17	25 - 60	SVE; TFE
	GMW-24	8/5/1991	74.04	25 - 60	SVE; TFE
	GMW-25	1/10/1992	74.29	20 - 50	SVE; GWE
	GWR-3	1/10/1992	74.93	20 - 50	SVE; GWE
	VEW-1	--	--	--	SVE
	VEW-2	--	--	--	SVE
	MW-O-1	1/22/1991	75.48	25 - 40	SVE; TFE
	MW-O-2	1/23/1991	71.90	25 - 40	SVE; TFE
	GMW-O-11	5/20/1992	74.17	20 - 50	SVE; TFE
	GMW-O-12	5/21/1992	73.49	20 - 50	SVE
	GMW-O-20	6/15/1995	73.32	--	SVE; TFE
	GMW-O-21	10/1/1997	71.43	26 - 46	TFE
	GMW-O-23	6/25/2007	73.63	20 - 40	SVE; TFE
	MW-18 (MID)	6/10/1991	75.67	50 - 60	SVE
	HW-2	--	--	--	SVE
Southeastern	GMW-O-15	4/19/1994	74.23	20 - 50	SVE; TFE
	GMW-O-18	7/25/1994	74.36	21 - 40	SVE; TFE
	GMW-36	4/11/1994	74.53	20 - 50	TFE
	GMW-SF-9	4/1/2003	73.00	37 - 46	GWE
	GMW-SF-10	4/2/2003	75.77	37 - 46	GWE
West Side Barrier	BW-2	5/20/1996	73.57	27 - 47	GWE
	BW-3	5/17/1996	74.16	31 - 50	GWE
	BW-4	5/20/1996	74.61	28 - 47	GWE
	BW-5	5/23/1996	73.59	27 - 46	GWE
	BW-6	5/22/1996	73.48	28 - 47	GWE
	BW-7	5/22/1996	74.65	27 - 46	GWE
	BW-8	5/21/1996	75.08	27 - 46	GWE
	BW-9	5/21/1996	76.19	27 - 46	GWE

Abbreviations
-- = information not available
ft msl = feet above mean sea level based on the National Geodetic Vertical Datum of 1929.
ft bgs = feet below ground surface
GWE = groundwater extraction
SVE = soil vapor extraction
TFE = total fluids extraction

TABLE 2

GROUNDWATER AND PRODUCT MEASUREMENTS AND ELEVATIONS

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID[1]	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft bTOC)	Measured Depth to Product (ft bTOC)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GMW-1	8/28/2007	74.77	19.70	---	---	55.07	Stantec
	2/19/2008	74.77	25.20	---	---	49.57	Stantec
	3/21/2008	74.77	25.23	---	---	49.54	Envent
	4/14/2008	74.77	25.12	---	---	49.65	Stantec
	10/13/2008	74.77	25.84	---	---	48.93	Stantec
	4/20/2009	74.77	26.18	---	---	48.59	Blaine Tech
	10/19/2009	74.77	27.52	---	---	47.25	Blaine Tech
GMW-9	8/8/2008	74.44	28.01	27.96	0.05	---	Envent
	10/16/2008	74.44	28.36	28.35	0.01	---	Envent
	12/17/2008	74.44	27.61	---	---	46.83	Envent
	1/15/2009	74.44	28.91	---	---	45.53	Envent
	3/27/2009	74.44	29.04	---	---	45.40	Envent
	4/21/2009	74.44	28.16	---	---	46.28	Envent
	7/21/2009	74.44	28.31	---	---	46.13	Envent
GMW-22	11/12/2007	74.17	26.45	25.91	0.54	---	Stantec
	8/12/2008	74.17	26.70	---	---	47.47	Envent
	10/31/2008	74.17	28.25	27.04	1.21	---	Envent
	11/4/2008	74.17	26.97	---	---	47.20	Envent
	12/17/2008	74.17	26.65	---	---	47.52	Envent
	1/15/2009	74.17	27.18	---	---	46.99	Envent
	3/27/2009	74.17	27.86	---	---	46.31	Envent
	4/21/2009	74.17	27.30	27.20	0.10	---	Envent
	7/21/2009	74.17	27.70	---	---	46.47	Envent
	11/6/2009	74.17	28.12	---	---	46.05	Kinder Morgan
GMW-23	11/12/2007	74.85	25.41	---	---	49.44	Stantec
	12/28/2007	74.85	26.20	---	---	48.65	Geomatrix
	4/14/2008	74.85	25.62	---	---	49.23	Stantec
	10/13/2008	74.85	26.21	---	---	48.64	Stantec
	4/20/2009	74.85	26.29	---	---	48.56	Blaine Tech
	7/21/2009	74.85	27.33	---	---	47.52	Envent
	10/19/2009	74.85	27.51	---	---	47.34	Blaine Tech
GMW-24	11/12/2007	74.04	27.50	27.46	0.04	---	Stantec
	8/19/2008	74.04	29.34	28.24	1.10	---	Envent
	10/17/2008	74.04	30.88	29.90	0.98	---	Envent
	10/21/2008	74.04	29.64	28.30	1.34	---	Envent
	12/18/2008	74.04	29.04	---	---	45.00	Envent
	1/15/2009	74.04	30.56	29.80	0.76	---	Envent
	3/20/2009	74.04	31.28	---	---	42.76	Envent
	3/27/2009	74.04	30.45	---	---	43.59	Envent
	4/21/2009	74.04	29.91	---	---	44.13	Envent
	7/21/2009	74.04	32.78	---	---	41.26	Envent
	2/4/2010	74.04	29.67	29.40	0.27	---	Kinder Morgan
GMW-25	11/12/2007	74.29	27.30	27.25	0.05	---	Stantec
	8/12/2008	74.29	27.81	---	---	46.48	Envent
	10/17/2008	74.29	28.26	---	---	46.03	Envent
	12/18/2008	74.29	29.01	---	---	45.28	Envent
	1/15/2009	74.29	28.62	---	---	45.67	Envent
	3/24/2009	74.29	28.79	---	---	45.50	Envent
	4/21/2009	74.29	28.35	---	---	45.94	Envent
	7/21/2009	74.29	29.80	---	---	44.49	Envent
	10/19/2009	74.29	30.28	---	---	44.01	Blaine Tech

TABLE 2

GROUNDWATER AND PRODUCT MEASUREMENTS AND ELEVATIONS

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID[1]	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft bTOC)	Measured Depth to Product (ft bTOC)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GMW-27	11/12/2007	74.41	24.90	---	---	49.51	Stantec
	12/21/2007	74.41	25.59	---	---	48.82	Geomatrix
	4/14/2008	74.41	25.21	---	---	49.20	Stantec
	8/11/2008	74.41	29.68	---	---	44.73	Stantec
	10/13/2008	74.41	25.81	---	---	48.60	Stantec
	11/21/2008	74.41	26.20	---	---	48.21	Stantec
	4/20/2009	74.41	26.04	---	---	48.37	Blaine Tech
	10/19/2009	74.41	27.39	---	---	47.02	Blaine Tech
GMW-30	8/21/2007	74.91	23.81	---	---	51.10	Geomatrix
	8/28/2007	74.91	24.65	---	---	50.26	Stantec
	9/11/2007	74.91	24.63	---	---	50.28	Geomatrix
	10/5/2007	74.91	25.13	---	---	49.78	Geomatrix
	11/2/2007	74.91	27.45	---	---	47.46	Geomatrix
	11/12/2007	74.91	25.38	---	---	49.53	Stantec
	4/14/2008	74.91	25.65	---	---	49.26	Stantec
	11/4/2008	74.91	26.52	---	---	48.39	Stantec
	4/20/2009	74.91	26.30	---	---	48.61	Blaine Tech
	10/19/2009	74.91	27.40	---	---	47.51	Blaine Tech
GMW-36	8/28/2007	74.53	24.31	---	---	50.22	Stantec
	11/12/2007	74.53	24.86	24.85	0.01	---	Stantec
	2/19/2008	74.53	25.50	---	---	49.27	Stantec
	4/14/2008	74.53	24.61	---	---	50.16	Stantec
	8/8/2008	74.53	26.20	26.14	0.06	---	Envent
	10/16/2008	74.53	26.11	26.09	0.02	---	Envent
	12/18/2008	74.53	28.70	28.65	0.05	---	Envent
	1/15/2009	74.53	27.73	27.45	0.28	---	Envent
	2/20/2009	74.53	26.39	26.35	0.04	---	Envent
	2/23/2009	74.53	26.13	25.80	0.33	---	Blaine Tech
	3/24/2009	74.53	29.83	---	---	44.70	Envent
	4/20/2009	74.53	25.63	25.59	0.04	---	Blaine Tech
	7/17/2009	74.53	27.40	---	---	47.13	Envent
	7/21/2009	74.53	26.03	---	---	48.50	Envent
	7/22/2009	74.53	25.90	---	---	48.63	Blaine Tech
	10/19/2009	74.53	26.56	26.45	0.11	---	Blaine Tech
	2/4/2010	74.53	26.93	26.80	0.13	---	Kinder Morgan
	3/15/2010	74.53	26.80	---	---	47.73	Blaine Tech
GMW-O-11	11/12/2007	74.17	24.40	---	---	49.77	Stantec
	8/15/2008	74.17	29.30	---	---	44.87	Envent
	10/17/2008	74.17	24.45	---	---	49.72	Envent
	12/19/2008	74.17	24.85	---	---	49.32	Envent
	1/15/2009	74.17	26.87	24.38	2.49	---	Envent
	2/24/2009	74.17	24.31	24.21	0.10	---	Envent
	3/27/2009	74.17	31.08	---	---	43.09	Envent
	4/21/2009	74.17	25.36	25.34	0.02	---	Envent
	7/21/2009	74.17	26.18	---	---	47.99	Envent
	11/6/2009	74.17	26.33	26.18	0.15	---	Kinder Morgan
GMW-O-12	11/12/2007	73.49	23.13	---	---	50.36	Stantec
	4/14/2008	73.49	23.36	---	---	50.13	Stantec
	10/13/2008	73.49	24.20	---	---	49.29	Stantec
	4/20/2009	73.49	24.21	---	---	49.28	Blaine Tech
	10/19/2009	73.49	25.08	---	---	48.41	Blaine Tech

TABLE 2

GROUNDWATER AND PRODUCT MEASUREMENTS AND ELEVATIONS

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID[1]	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft bTOC)	Measured Depth to Product (ft bTOC)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GMW-O-15	11/12/2007	74.23	23.95	23.85	0.10	---	Stantec
	4/14/2008	74.23	23.64	---	---	50.59	Stantec
	8/8/2008	74.23	24.60	---	---	50.59	Envent
	8/11/2008	74.23	24.40	24.34	0.06	---	Stantec
	10/16/2008	74.23	24.53	---	---	49.70	Envent
	12/18/2008	74.23	24.86	---	---	49.37	Envent
	1/2/2009	74.23	24.82	---	---	49.41	Envent
	1/15/2009	74.23	26.01	---	---	48.22	Envent
	2/20/2009	74.23	24.80	---	---	49.43	Envent
	2/23/2009	74.23	24.76	24.74	0.02	---	Blaine Tech
	3/24/2009	74.23	25.55	---	---	48.68	Envent
	4/20/2009	74.23	24.66	24.61	0.05	---	Blaine Tech
	7/17/2009	74.23	25.01	---	---	49.22	Envent
	7/22/2009	74.23	24.99	24.94	0.05	---	Blaine Tech
	10/19/2009	74.23	25.55	25.43	0.12	---	Blaine Tech
	2/4/2010	74.23	25.50	25.48	0.02	---	Kinder Morgan
GMW-O-20	8/15/2008	73.32	25.90	---	---	47.42	Envent
	10/17/2008	73.32	25.82	---	---	47.50	Envent
	12/19/2008	73.32	27.15	---	---	46.17	Envent
	1/15/2009	73.32	26.53	26.09	0.44	---	Envent
	2/24/2009	73.32	27.85	---	---	45.47	Envent
	3/20/2009	73.32	28.81	---	---	44.51	Envent
	3/27/2009	73.32	27.84	---	---	45.48	Envent
	4/21/2009	73.32	28.70	---	---	44.62	Envent
	7/21/2009	73.32	24.10	---	---	49.22	Envent
	11/9/2009	73.32	25.60	25.40	0.20	---	Kinder Morgan
GMW-O-21	12/28/2007	71.43	27.67	---	---	43.76	Geomatrix
	10/17/2008	71.43	26.00	---	---	45.43	Envent
	12/19/2008	71.43	24.82	---	---	46.61	Envent
	3/27/2009	71.43	26.41	---	---	45.02	Envent
	7/21/2009	71.43	24.88	---	---	46.55	Envent
	11/9/2009	71.43	25.02	---	---	46.41	Kinder Morgan
GMW-O-23	8/14/2007	73.63	23.33	---	---	50.30	Geomatrix
	8/21/2007	73.63	23.31	---	---	50.32	Geomatrix
	8/28/2007	73.63	23.00	---	---	50.63	Stantec
	9/11/2007	73.63	23.42	---	---	50.21	Geomatrix
	10/5/2007	73.63	27.79	---	---	45.84	Geomatrix
	11/2/2007	73.63	25.15	---	---	48.48	Geomatrix
	11/13/2007	73.63	23.90	---	---	49.73	Stantec
	12/28/2007	73.63	24.91	---	---	48.72	Geomatrix
	8/15/2008	73.63	26.28	---	---	47.35	Envent
	10/17/2008	73.63	27.16	---	---	46.47	Envent
	12/19/2008	73.63	27.60	---	---	46.03	Envent
	1/15/2009	73.63	27.54	---	---	46.09	Envent
	2/24/2009	73.63	26.19	---	---	47.44	Envent
	3/27/2009	73.63	23.74	---	---	49.89	Envent
	4/21/2009	73.63	27.30	---	---	46.33	Envent
	11/9/2009	73.63	27.50	---	---	46.13	Kinder Morgan
GWR-1	11/12/2007	73.65	24.05	---	---	49.60	Stantec
	12/21/2007	73.65	24.91	---	---	48.74	Geomatrix
	4/14/2008	73.65	24.40	---	---	49.25	Stantec
	10/13/2008	73.65	25.06	---	---	48.59	Stantec
	4/20/2009	77.40	28.78	---	---	48.62	Blaine Tech
	10/19/2009	77.40	29.98	---	---	47.42	Blaine Tech

TABLE 2

GROUNDWATER AND PRODUCT MEASUREMENTS AND ELEVATIONS

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID[1]	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft bTOC)	Measured Depth to Product (ft bTOC)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
GWR-3	11/12/2007	74.93	27.90	---	---	47.03	Stantec
	10/17/2008	74.93	29.88	---	---	45.05	Envent
	12/17/2008	74.93	19.71	---	---	55.22	Envent
	1/15/2009	74.93	29.27	29.26	0.26	---	Envent
	3/27/2009	74.93	27.18	---	---	47.75	Envent
	4/21/2009	74.93	29.97	---	---	44.96	Envent
	7/21/2009	74.93	28.77	---	---	46.16	Envent
MW-O-1	8/14/2007	75.48	25.31	23.78	1.53	---	Geomatrix
	8/21/2007	75.48	23.84	23.58	0.26	---	Geomatrix
	8/28/2007	75.48	23.07	23.06	0.01	---	Stantec
	9/11/2007	75.48	23.86	23.48	0.38	---	Geomatrix
	10/5/2007	75.48	24.67	---	---	50.81	Geomatrix
	11/2/2007	75.48	24.25	---	---	51.23	Geomatrix
	11/12/2007	75.48	24.27	24.25	0.02	---	Stantec
	12/28/2007	75.48	25.54	25.51	0.03	---	Geomatrix
	8/19/2008	75.48	25.18	25.13	0.05	---	Envent
	10/17/2008	75.48	25.30	---	---	50.18	Envent
	12/19/2008	75.48	26.31	---	---	49.17	Envent
	1/15/2009	75.48	25.84	---	---	49.64	Envent
	4/21/2009	75.48	25.41	---	---	50.07	Envent
	10/19/2009	75.48	26.30	---	---	49.18	Blaine Tech
MW-O-2	11/12/2007	71.90	23.10	---	---	48.80	Stantec
	10/17/2008	71.90	24.85	---	---	47.05	Envent
	12/19/2008	71.90	25.51	---	---	46.39	Envent
	3/27/2009	71.90	25.22	---	---	46.68	Envent
	7/21/2009	71.90	23.63	---	---	48.27	Envent
	11/9/2009	71.90	25.39	---	---	46.51	Kinder Morgan
MW-SF-1	8/28/2007	78.93	27.94	---	---	50.99	Stantec
	11/12/2007	78.93	28.76	---	---	50.17	Stantec
	2/19/2008	78.93	29.50	---	---	49.43	Stantec
	4/14/2008	78.93	29.16	---	---	49.77	Stantec
	8/11/2008	78.93	29.75	---	---	49.18	Stantec
	10/13/2008	78.93	29.86	---	---	49.07	Stantec
	2/23/2009	78.93	30.00	---	---	48.93	Blaine Tech
	4/20/2009	78.93	29.97	---	---	48.96	Blaine Tech
	7/22/2009	78.93	30.98	---	---	47.95	Blaine Tech
	10/19/2009	78.93	31.11	---	---	47.82	Blaine Tech
	3/15/2010	78.93	31.74	---	---	47.19	Blaine Tech
MW-SF-2	11/12/2007	78.53	29.18	28.71	0.47	---	Stantec
	8/12/2008	78.53	31.11	---	---	47.42	Envent
	10/17/2008	78.53	31.55	31.50	0.05	---	Envent
	12/18/2008	78.53	32.75	32.55	0.20	---	Envent
	1/15/2009	78.53	30.84	30.57	0.27	---	Envent
	3/24/2009	78.53	28.85	---	---	49.68	Envent
	4/21/2009	78.53	29.98	---	---	48.55	Envent
	7/21/2009	78.53	29.85	---	---	48.68	Envent
	12/9/2009	78.53	31.45	---	---	47.08	Kinder Morgan
MW-SF-3	11/12/2007	78.12	29.34	28.28	1.06	---	Stantec
	8/12/2008	78.12	30.30	29.05	1.25	---	Envent
	10/17/2008	78.12	29.45	---	---	48.67	Envent
	12/18/2008	78.12	31.08	30.82	0.26	---	Envent
	1/15/2009	78.12	29.96	29.94	0.02	---	Envent
	3/20/2009	78.12	31.10	---	---	47.02	Envent
	3/24/2009	78.12	27.82	---	---	50.30	Envent
	4/21/2009	78.12	29.51	29.50	0.01	---	Envent
	7/21/2009	78.12	30.07	---	---	48.05	Envent
	11/6/2009	78.12	30.37	30.35	0.02	---	Kinder Morgan
	12/9/2009	78.12	30.53	---	---	48.05	Kinder Morgan

TABLE 2

GROUNDWATER AND PRODUCT MEASUREMENTS AND ELEVATIONS

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID[1]	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft bTOC)	Measured Depth to Product (ft bTOC)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-4	8/14/2007	79.38	30.34	28.38	1.96	---	Geomatrix
	8/28/2007	79.38	29.95	28.30	1.65	---	Stantec
	9/11/2007	79.38	29.98	28.43	1.55	---	Geomatrix
	10/5/2007	79.38	30.68	28.85	1.83	---	Geomatrix
	10/12/2007	79.38	30.27	29.96	0.31	---	Geomatrix
	10/19/2007	79.38	30.28	---	---	49.10	Geomatrix
	10/26/2007	79.38	30.52	---	---	48.86	Geomatrix
	11/2/2007	79.38	30.68	---	---	48.70	Geomatrix
	11/12/2007	79.38	29.70	29.69	0.01	---	Stantec
	12/21/2007	79.38	30.69	---	---	48.69	Geomatrix
	2/19/2008	79.38	30.22	---	---	49.16	Stantec
	3/21/2008	79.38	30.07	---	---	49.31	Envent
	4/14/2008	79.38	29.95	---	---	49.43	Stantec
	8/8/2008	79.38	30.51	---	---	48.87	Envent
	8/11/2008	79.38	30.57	---	---	48.81	Stantec
	10/16/2008	79.38	30.77	---	---	48.61	Envent
	1/15/2009	79.38	31.14	---	---	48.24	Envent
	2/20/2009	79.38	30.84	---	---	48.54	Envent
	3/15/2010	79.38	31.95	31.91	0.04	---	Blaine Tech
MW-SF-4	2/23/2009	79.38	30.96	---	---	48.42	Blaine Tech
	4/20/2009	79.38	30.02	29.94	0.08	---	Blaine Tech
	4/28/2009	79.38	30.78	---	---	48.60	Envent
MW-SF-4	7/17/2009	79.38	31.85	---	---	47.53	Envent
	7/22/2009	79.38	31.65	31.61	0.04	---	Blaine Tech
	10/19/2009	79.38	31.93	31.90	0.03	---	Blaine Tech
MW-SF-5	8/21/2007	79.74	28.36	---	---	51.38	Geomatrix
	8/28/2007	79.74	28.84	---	---	50.90	Stantec
	10/5/2007	79.74	29.50	---	---	50.24	Geomatrix
	11/2/2007	79.74	31.50	---	---	48.24	Geomatrix
	11/12/2007	79.74	29.93	---	---	49.81	Stantec
	12/21/2007	79.74	31.00	---	---	48.74	Geomatrix
	4/14/2008	79.74	30.20	---	---	49.54	Stantec
	8/11/2008	79.74	30.85	---	---	48.89	Stantec
	10/13/2008	79.74	30.93	---	---	48.81	Stantec
	4/20/2009	79.74	30.99	---	---	48.75	Blaine Tech
MW-SF-6	11/12/2007	76.80	27.14	---	---	49.66	Stantec
	8/12/2008	76.80	29.82	---	---	46.98	Envent
	10/17/2008	76.80	29.75	---	---	47.05	Envent
	12/18/2008	76.80	30.73	---	---	46.07	Envent
	1/15/2009	76.80	31.35	---	---	45.45	Envent
	3/24/2009	76.80	30.50	---	---	46.30	Envent
	4/21/2009	76.80	28.45	---	---	48.35	Envent
	7/21/2009	76.80	27.22	---	---	49.58	Envent
	11/6/2009	76.80	29.10	---	---	47.70	Kinder Morgan
	12/9/2009	76.80	31.35	---	---	45.45	Kinder Morgan
MW-SF-9	8/14/2007	74.10	28.73	28.61	0.12	---	Geomatrix
	8/28/2007	74.10	20.55	---	---	53.55	Stantec
	8/21/2007	74.10	26.55	---	---	47.55	Geomatrix
	9/11/2007	74.10	19.40	---	---	54.70	Geomatrix
	10/5/2007	74.10	26.84	---	---	47.26	Geomatrix
	11/2/2007	74.10	22.76	---	---	51.34	Geomatrix
	11/12/2007	74.10	22.96	---	---	51.14	Stantec
	12/21/2007	74.10	24.05	---	---	50.05	Geomatrix
	4/14/2008	74.10	24.23	---	---	49.87	Stantec
	10/13/2008	74.10	24.83	---	---	49.27	Stantec
	4/20/2009	74.10	25.27	---	---	48.83	Blaine Tech
	10/19/2009	74.10	26.45	---	---	47.65	Blaine Tech

TABLE 2

GROUNDWATER AND PRODUCT MEASUREMENTS AND ELEVATIONS

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID[1]	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft bTOC)	Measured Depth to Product (ft bTOC)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-11	8/14/2007	78.56	28.58	28.30	0.28	---	Geomatrix
	8/21/2007	78.56	28.76	28.63	0.13	---	Geomatrix
	8/28/2007	78.56	28.22	---	---	50.34	Stantec
	9/11/2007	78.56	26.90	---	---	51.66	Geomatrix
	10/5/2007	78.56	28.43	---	---	50.13	Geomatrix
	11/2/2007	78.56	29.48	29.38	0.10	---	Geomatrix
	11/12/2007	78.56	29.03	---	---	49.53	Stantec
	8/15/2008	78.56	30.13	---	---	48.43	Envent
	10/17/2008	78.56	30.50	---	---	48.06	Envent
	12/18/2008	78.56	29.92	---	---	48.64	Envent
	1/15/2009	78.56	30.32	---	---	48.24	Envent
	3/24/2009	78.56	31.05	---	---	47.51	Envent
	4/21/2009	78.56	30.03	---	---	48.53	Envent
	7/21/2009	78.56	30.89	---	---	47.67	Envent
	11/9/2009	78.56	31.00	---	---	47.56	Kinder Morgan
MW-SF-12	8/14/2007	78.07	27.76	---	---	50.31	Geomatrix
	8/21/2007	78.07	27.43	---	---	50.64	Geomatrix
	8/28/2007	78.07	27.58	---	---	50.49	Stantec
	9/11/2007	78.07	27.73	---	---	50.34	Geomatrix
	10/5/2007	78.07	28.06	---	---	50.01	Geomatrix
	11/2/2007	78.07	29.59	---	---	48.48	Geomatrix
	11/12/2007	78.07	28.33	---	---	49.74	Stantec
	8/12/2008	78.07	30.02	---	---	48.05	Envent
	10/17/2008	78.07	30.42	---	---	47.65	Envent
MW-SF-12	12/18/2008	78.07	31.55	---	---	46.52	Envent
	1/15/2009	78.07	30.11	---	---	47.96	Envent
	3/24/2009	78.07	29.41	---	---	48.66	Envent
	4/21/2009	78.07	29.52	---	---	48.55	Envent
	7/21/2009	78.07	28.58	---	---	49.49	Envent
	11/4/2009	78.07	30.36	---	---	47.71	Kinder Morgan
	2/4/2010	78.07	29.20	---	---	48.87	Kinder Morgan
MW-SF-13	8/14/2007	73.40	22.98	---	---	50.42	Geomatrix
	8/21/2007	73.40	23.11	---	---	50.29	Geomatrix
	8/28/2007	73.40	22.85	---	---	50.55	Stantec
	9/11/2007	73.40	23.10	---	---	50.30	Geomatrix
	10/5/2007	73.40	28.11	---	---	45.29	Geomatrix
	11/2/2007	73.40	25.43	25.41	0.02	---	Geomatrix
	11/12/2007	73.40	23.70	---	---	49.70	Stantec
	12/21/2007	73.40	24.45	24.42	0.03	---	Geomatrix
	8/15/2008	73.40	27.38	24.11	3.27	---	Envent
	10/17/2008	73.40	27.28	24.33	2.95	---	Envent
	10/21/2008	73.40	27.14	24.26	2.88	---	Envent
	12/17/2008	73.40	26.21	24.70	1.51	---	Envent
	1/15/2009	73.40	26.90	24.80	2.10	---	Envent
	3/27/2009	73.40	26.46	25.49	0.97	---	Envent
	4/21/2009	73.40	24.86	24.78	0.08	---	Envent
	7/21/2009	73.40	25.72	25.48	0.24	---	Envent
	11/6/2009	73.40	25.72	---	---	47.68	Kinder Morgan
	2/4/2010	73.40	25.43	25.30	0.13	---	Kinder Morgan

TABLE 2

GROUNDWATER AND PRODUCT MEASUREMENTS AND ELEVATIONS

SFPP, L.P.
Defense Fuel Support Point Norwalk
Norwalk, California

Well ID[1]	Date Gauged	Top of Well Casing Elevation (ft msl)	Measured Depth to Groundwater (ft bTOC)	Measured Depth to Product (ft bTOC)	Apparent Product Thickness (feet)	Groundwater Elevation (ft msl)	Gauged By
MW-SF-14	8/14/2007	78.16	27.68	---	---	50.48	Geomatrix
	8/21/2007	78.16	27.60	---	---	50.56	Geomatrix
	8/28/2007	78.16	27.53	---	---	50.63	Stantec
	9/11/2007	78.16	27.66	---	---	50.50	Geomatrix
	10/5/2007	78.16	27.75	---	---	50.41	Geomatrix
	11/2/2007	78.16	29.83	---	---	48.33	Geomatrix
	8/15/2008	78.16	29.77	29.24	0.53	---	Envent
	10/17/2008	78.16	29.52	29.50	0.02	---	Envent
	12/18/2008	78.16	30.62	---	---	47.54	Envent
	1/15/2009	78.16	30.08	---	---	48.08	Envent
	3/24/2009	78.16	29.73	---	---	48.43	Envent
	4/21/2009	78.16	29.61	---	---	48.55	Envent
	7/21/2009	78.16	29.20	---	---	48.96	Envent
	11/6/2009	78.16	30.48	---	---	47.68	Kinder Morgan
	12/9/2009	78.16	30.68	---	---	47.48	Kinder Morgan
MW-SF-15	8/14/2007	78.27	27.78	27.75	0.03	---	Geomatrix
	8/21/2007	78.27	27.69	27.65	0.04	---	Geomatrix
	8/28/2007	78.27	27.65	27.61	0.04		Stantec
	9/11/2007	78.27	27.62	---	---	50.65	Geomatrix
	10/5/2007	78.27	28.15	---	---	50.12	Geomatrix
	11/2/2007	78.27	30.45	30.20	0.25	---	Geomatrix
	11/12/2007	78.27	28.75	---	---	49.52	Stantec
	8/15/2008	78.27	30.12	29.35	0.77	---	Envent
	10/17/2008	78.27	30.80	29.44	1.36	---	Envent
	10/21/2008	78.27	30.80	29.31	1.49	---	Envent
	12/18/2008	78.27	32.11	30.56	1.55	---	Envent
	1/15/2009	78.27	31.75	29.70	2.05	---	Envent
	3/24/2009	78.27	30.32	29.93	0.39	---	Envent
	4/21/2009	78.27	29.96	29.60	0.36	---	Envent
	7/21/2009	78.27	30.45	---	---	47.82	Envent
	11/4/2009	78.27	31.10	30.45	0.36	---	Kinder Morgan
	12/9/2009	78.27	30.87	---	---	47.40	Kinder Morgan
MW-SF-16	8/14/2007	78.21	27.68	---	---	50.53	Geomatrix
	8/21/2007	78.21	27.33	---	---	50.88	Geomatrix
	8/28/2007	78.21	27.51	---	---	50.70	Stantec
	9/11/2007	78.21	27.59	---	---	50.62	Geomatrix
	10/5/2007	78.21	28.10	---	---	50.11	Geomatrix
	11/2/2007	78.21	29.81	---	---	48.40	Geomatrix
	11/12/2007	78.21	28.40	---	---	49.81	Stantec
	8/15/2008	78.21	29.36	---	---	48.85	Envent
	10/17/2008	78.21	29.51	---	---	48.70	Envent
	12/18/2008	78.21	30.94	---	---	47.27	Envent
	1/15/2009	78.21	30.01	30.00	0.01	---	Envent
	3/24/2009	78.21	29.82	---	---	48.39	Envent
	4/21/2009	78.21	29.60	---	---	48.61	Envent
	7/21/2009	78.21	30.36	---	---	47.85	Envent
	11/4/2009	78.21	30.58	---	---	47.63	Kinder Morgan
	2/4/2010	78.21	30.36	---	---	47.85	Kinder Morgan

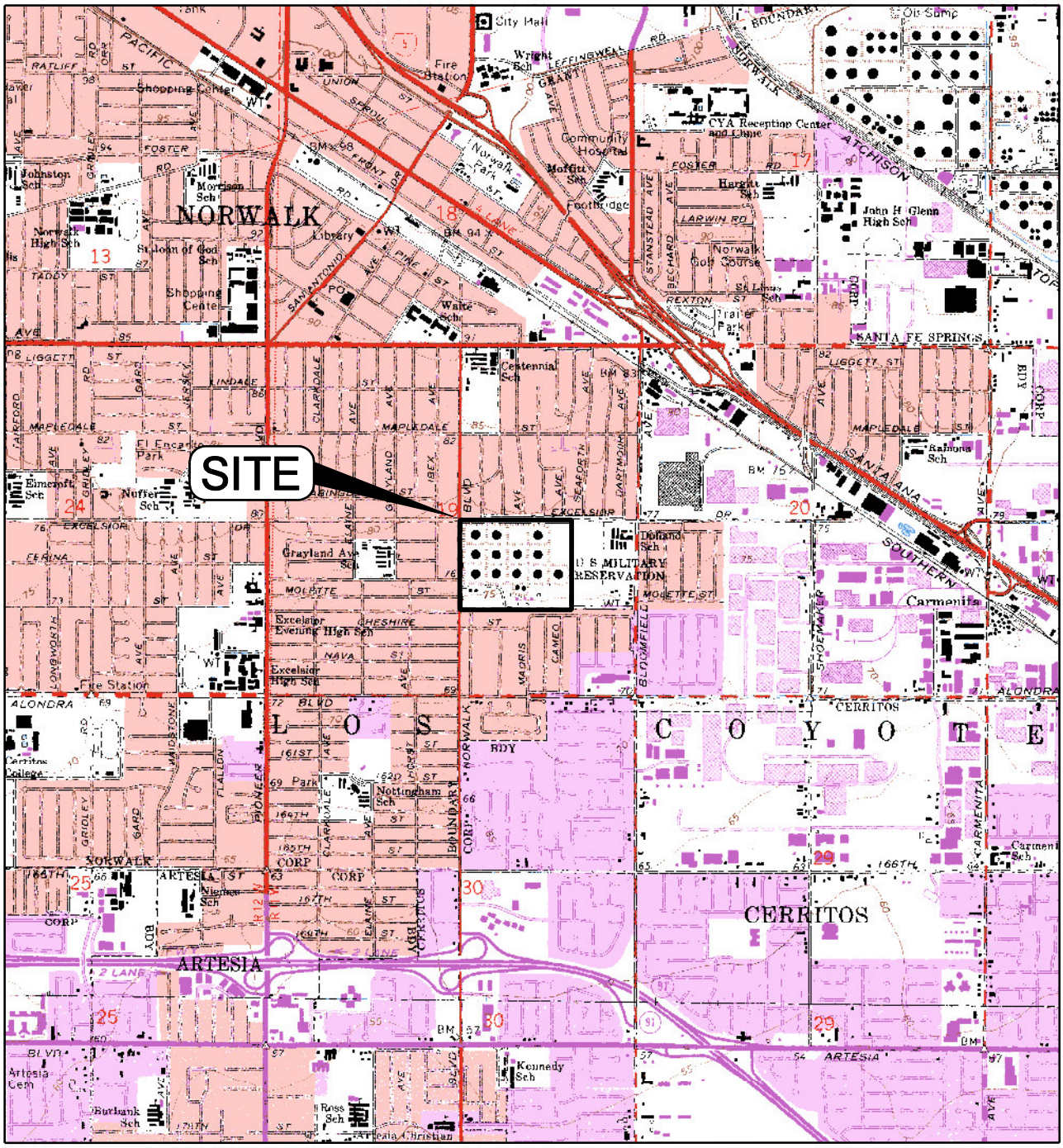
Abbreviations:

ft msl = feet above mean sea level based on the National Geodetic Vertical Datum of 1929.

ft bTOC = feet below top of casing.

--- = not detected or not applicable.

FIGURES



BASEMAP MODIFIED FROM U.S.G.S. 7.5 MINUTE QUADRANGLE MAP
LOS ALAMITOS 1964, CALIFORNIA. PHOTO-REVISED 1981.
WHITTIER 1965, CALIFORNIA. PHOTO-REVISED 1981.

N

Approximate Scale in Feet

0 1200 2400

0 0 0

Approximate Scale in Meters

SITE LOCATION MAP

DFSP NORWALK
Norwalk, California

By: kle	Date: 07/19/07	Project No: 1603.044
AMEC Geomatrix		Figure 1

P:\S1603\gis\dgnv8\site_location_v9.dgn

Explanation

- GMW-27 — Existing groundwater monitoring well
- GMW-25 — Existing remediation well
- SFPP remediation piping layout (aboveground and belowground)
- Approximate location of air compressor shed

TANK 80005
TANK 80006
TANK 80007
TANK 80008
TANK 80009
TANK 80013
TANK 55003
TANK 55004
TANK 80017
TANK

BW-9, MW-22(MID), MW-25, BW-8, BW-7, MW-6, MW-20(MID), BW-6, BW-5, MW-19(MID), MW-7, BW-4, BW-3, PW-1, PW-2, BW-2, PW-3, BW-1, GWR-1, HL-5, HL-4, HL-3, HL-2, HL-1, GWR-3, GWR-2, GW-7, MW-26, MW-11, TF-8, TF-25, PZ-3, GMW-31, PZ-4, TF-9, MW-27, GMW-17, TF-11, GMW-42, TF-10, GMW-34, GMW-54, GMW-55, GMW-40, GMW-41, MW-28, GMW-20, GMW-8, MW-12, GMW-11, GMW-7, TF-13, GMW-19, GMW-18, TF-14, GMW-43, TF-15, GMW-44, MW-21(MID), GMW-2, PZ-1, PZ-2, GMW-10, GMW-26, GMW-27, GMW-25, GMW-22, PZ-6, GMW-28, GMW-23, GMW-9, MW-SF-11, GMW-29, GMW-30, GMW-24, MW-SF-12, MW-18(MID), PZ-10, MW-SF-13, MW-SF-5, VEW-2, MW-SF-1, MW-SF-10, MW-SF-4, MW-SF-14, MW-SF-3, MW-SF-16, MW-SF-6, MW-SF-2, MW-SF-15, VEW-1, MW-SF-9, MW-O-1, MW-O-2, GMW-O-11, GMW-O-10, GMW-O-1, GMW-O-20, GMW-O-21, GMW-O-9, GMW-O-12, GMW-O-14, GMW-O-5, GMW-1, GMW-4, GMW-3, MW-9, MW-15, GMW-14, GMW-13, GMW-38, PZ-8B, PZ-8A, GMW-SF-9, GMW-SF-7, EXP-3, GMW-37, MW-8, PZ-7B, PZ-7A, GMW-SF-8, GMW-36, GMW-O-15, GMW-O-16, GMW-O-19, GMW-O-18, PZ-5, GMW-39, PZ-9B, PZ-9A, GMW-SF-10, GMW-47, TF-23, GMW-35, TF-22, TF-16, GW-14, TF-21, GMW-48, GMW-50, GMW-51, TF-17, TF-20, GMW-59, EXP-1, MW-17, MW-29, TF-18, TF-19, GMW-33, GMW-32, GMW-12, GMW-52, MW-16, GMW-53

ADMINISTRATION BUILDING
LABORATORY BUILDING
OIL-WATER SEPARATOR
TRUCK FILL STANDS
SUMP
Treatment Compounds
MORNLAKE AVE.
CHESHIRE STREE

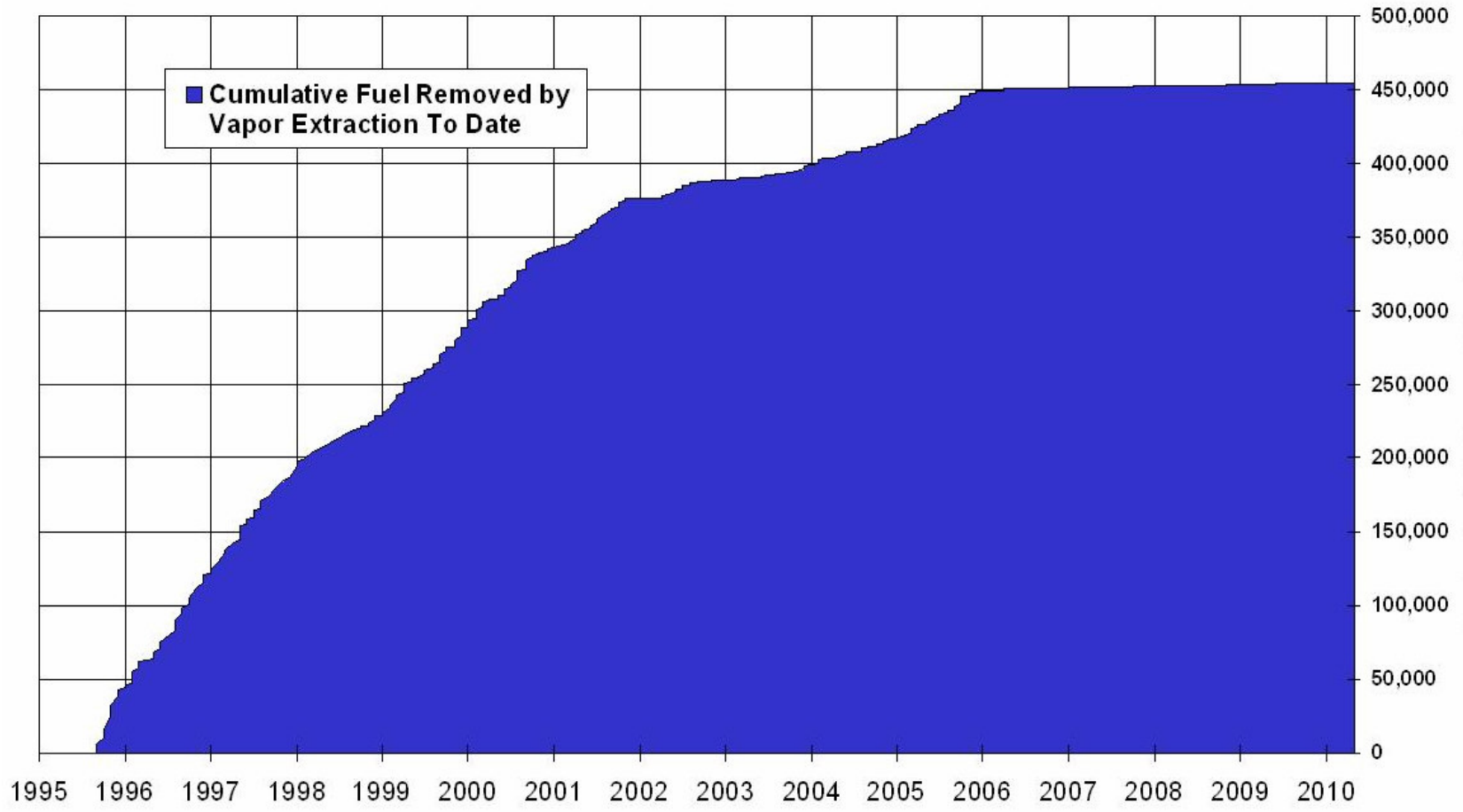
N

0 60 120
Approximate Scale in Feet

SFPP REMEDIATION SYSTEMS LAYOUT
DFSP NORWALK
Norwalk, California

By: pah	Date: 05/14/10	Project No:1603.044
AMEC Geomatrix		Figure 2

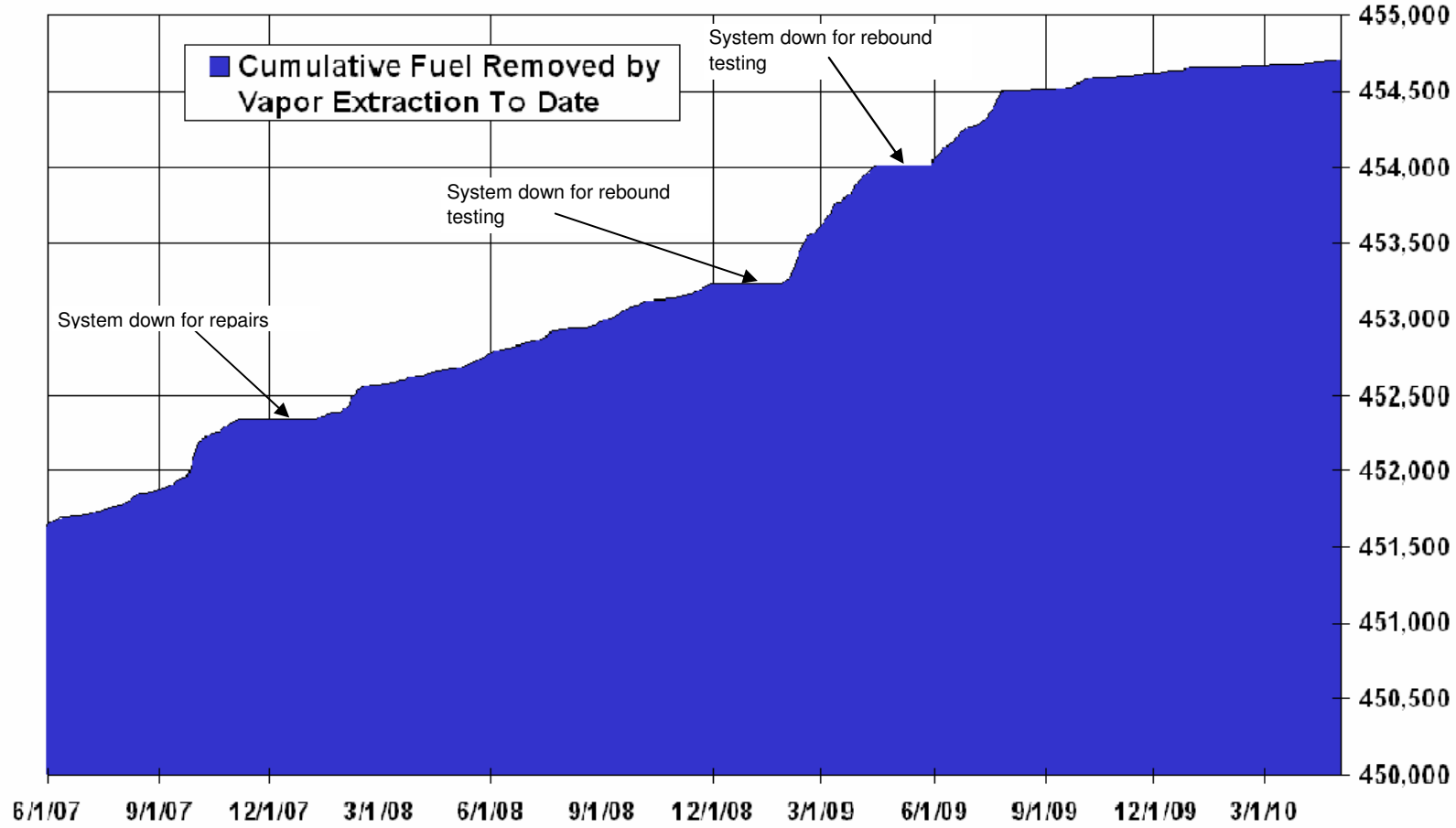
P:\51603\gis\dgnv8\RemediationSystemLvolLetter_figures.dgn



CUMULATIVE FUEL REMOVED BY VAPOR EXTRACTION TO DATE
SFPP Norwalk
Norwalk, California

By: SBB	Date: 5/11/10	Project No.: 0016030440
AMEC Geomatrix		Figure **3**

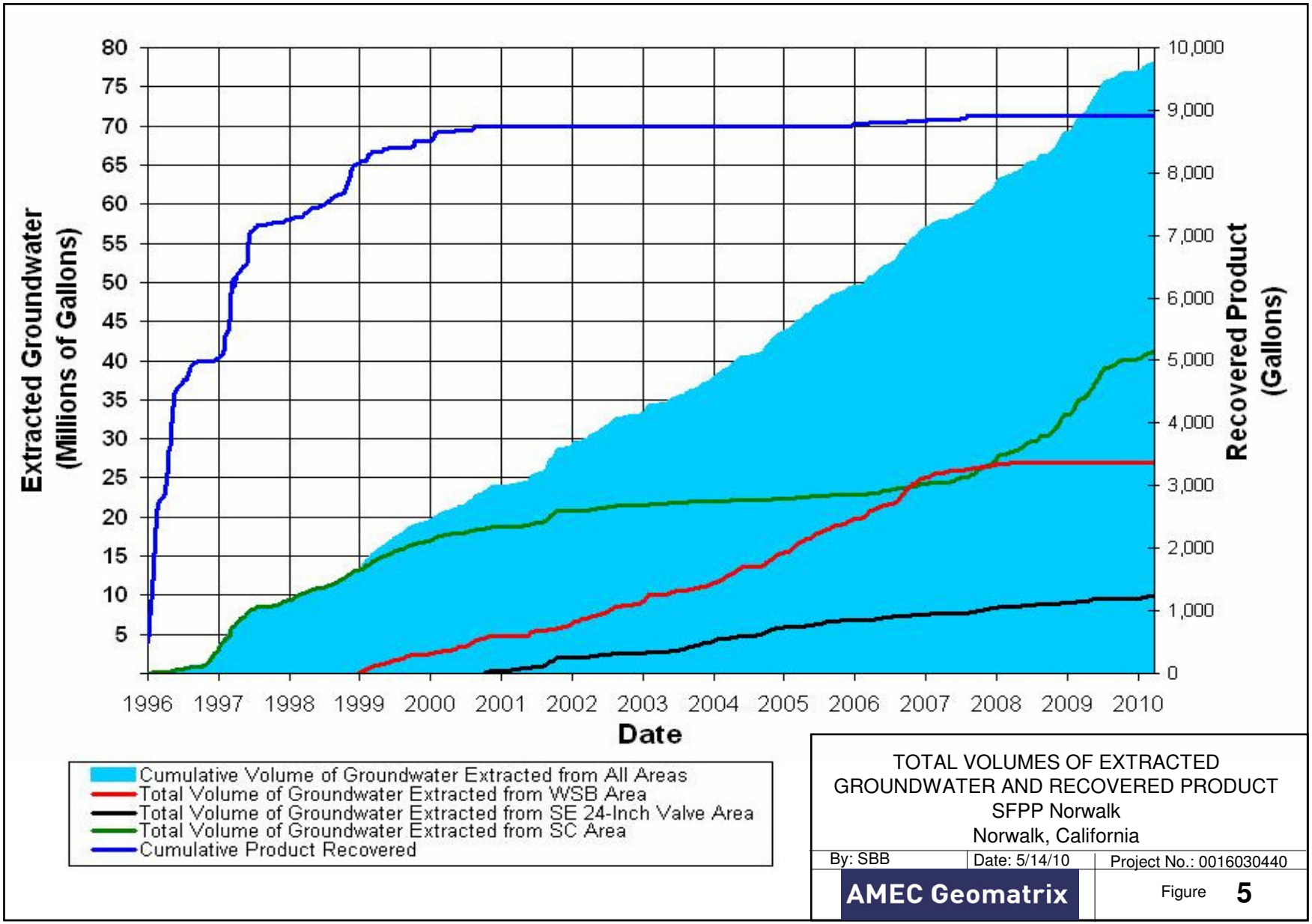
K:\S1603\System Evaluation Report\Figures\Figures 3,4,5,6.xls



CUMULATIVE FUEL REMOVED BY VAPOR EXTRACTION SINCE JUNE 2007
SFPP Norwalk
Norwalk, California

By: SBB	Date: 5/11/10	Project No.: 0016030440
AMEC Geomatrix		Figure 4

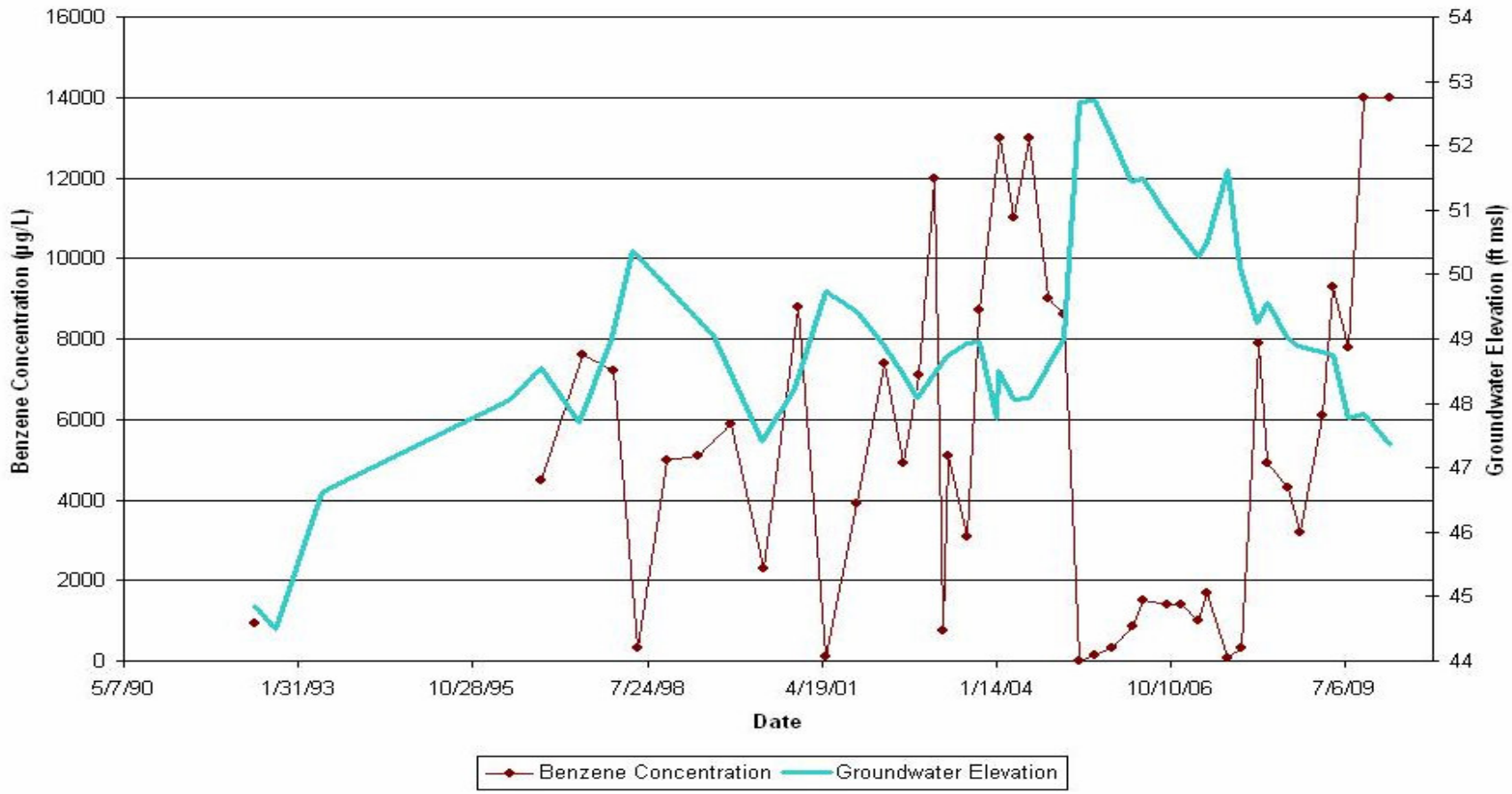
K:\S1603\System Evaluation Report\Figures\Figures 3,4,5,6.xls



TOTAL VOLUMES OF EXTRACTED GROUNDWATER AND RECOVERED PRODUCT
SFPP Norwalk
Norwalk, California

By: SBB	Date: 5/14/10	Project No.: 0016030440
AMEC Geomatrix		Figure 5

K:\S1603\System Evaluation Report\Figures\Figures 3,4,5,6.xls



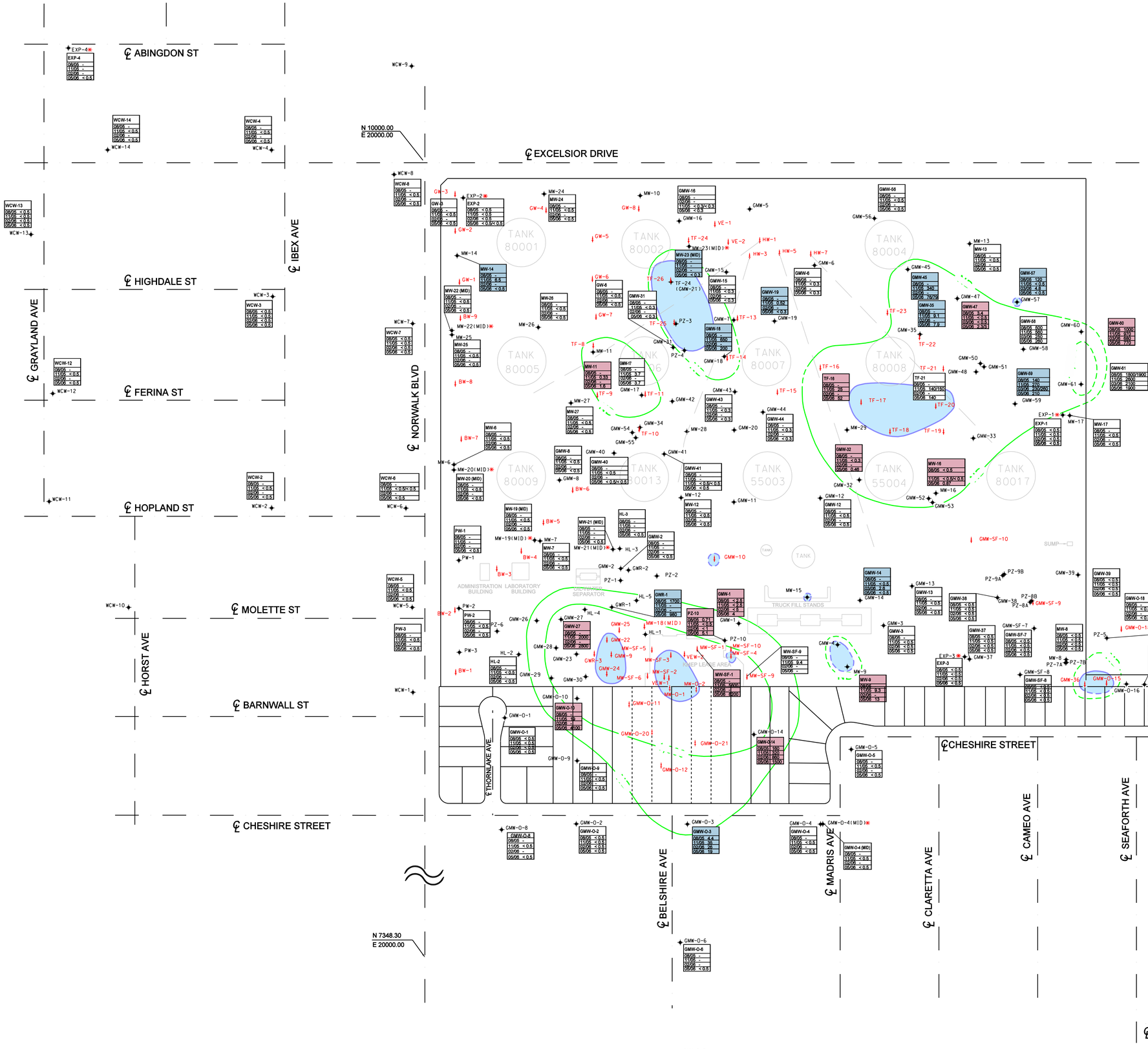
BENZENE CONCENTRATIONS AND
GROUNDWATER ELEVATIONS VS TIME
GMW-O-14
SFPP Norwalk
Norwalk, California

By: SBB	Date: 5/11/10	Project No.: 0016030440
AMEC Geomatrix		Figure 6

K:\S1603\System Evaluation Report\Figures\Figures 3,4,5,6.xls

APPENDIX A

BENZENE IN UPPERMOST GROUNDWATER ZONE – MAY 2006



EXPLANATION

GMW-5 ✦ MONITORING WELL AND DESIGNATION

VE-1 ↓ VAPOR EXTRACTION, GROUNDWATER EXTRACTION, TOTAL FLUIDS, OR FREE PRODUCT EXTRACTION WELL USED FOR SITE REMEDIATION

GMW-60 08/05 <5 11/05 <5 02/06 <5 05/06 <5 — SAMPLING EVENTS AND BENZENE CONCENTRATIONS IN MICROGRAMS PER LITER (µg/l); SAMPLING EVENTS INCLUDE THE TWO MOST RECENT SEMI-ANNUAL AND SENTRY EVENTS

GMW-60 08/05 1000 11/05 970 02/06 880 05/06 770 — WHERE THE DATABOX IS SHOWN IN RED THE CONCENTRATION OF BENZENE HAS INCREASED BY 10% OR MORE AT THAT LOCATION SINCE THE PREVIOUS MONITORING EVENT

GMW-57 08/05 120 11/05 <0.5 02/06 4.6 05/06 <0.5 — WHERE THE DATABOX IS SHOWN IN BLUE THE CONCENTRATION OF BENZENE HAS DECREASED BY 10% OR MORE AT THAT LOCATION SINCE THE PREVIOUS MONITORING EVENT

<0.5 NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMIT

\- NOT SAMPLED/NOT ANALYZED

<0.5 / <0.5 PRIMARY SAMPLE ANALYTICAL RESULT / DUPLICATE SAMPLE ANALYTICAL RESULT (ug/l)

MW-22(MID) ✳✦ WELLS SCREENED IN THE EXPOSITION AQUIFER OR NEAR THE BOTTOM OF THE UPPERMOST AQUIFER ARE NOT USED IN CONTOURING

ND ESTIMATED EXTENT OF DETECTED DISSOLVED BENZENE IN GROUNDWATER (CONCENTRATION DEPENDENT ON LABORATORY REPORTING LIMIT); DASHED WHERE INFERRED

1,000 LINES OF EQUAL BENZENE CONCENTRATION (µg/l) IN GROUNDWATER; DASHED WHERE INFERRED

ESTIMATED EXTENT OF MEASURABLE LIGHT NONAQUEOUS PHASE HYDROCARBONS (LNAPL, FREE PRODUCT) ON GROUNDWATER; DASHED WHERE INFERRED

SURVEY NOTES:

1. BASE MAP PREPARED FROM DATA PROVIDED BY FLUOR DANIEL GTI, DULIN & BOYNTON, AND GEOMATRIX.
2. EXCEPT AS NOTED BELOW, WELL LOCATIONS SURVEYED BY DULIN & BOYNTON.
3. LOCATIONS OF WELLS HL-1, HL-3, AND HL-4 BASED ON FIELD MEASUREMENTS BY FLUOR DANIEL GTI AND WOODWARD-CLYDE.
4. LOCATIONS OF WELLS BW-1 THROUGH BW-9 SURVEYED BY GEOMATRIX BASED ON REFERENCE TO OTHER WELLS SURVEYED BY DULIN & BOYNTON.

N

Approximate Scale in Feet

120 0 120

BENZENE IN UPPERMOST GROUNDWATER ZONE MAY 2006

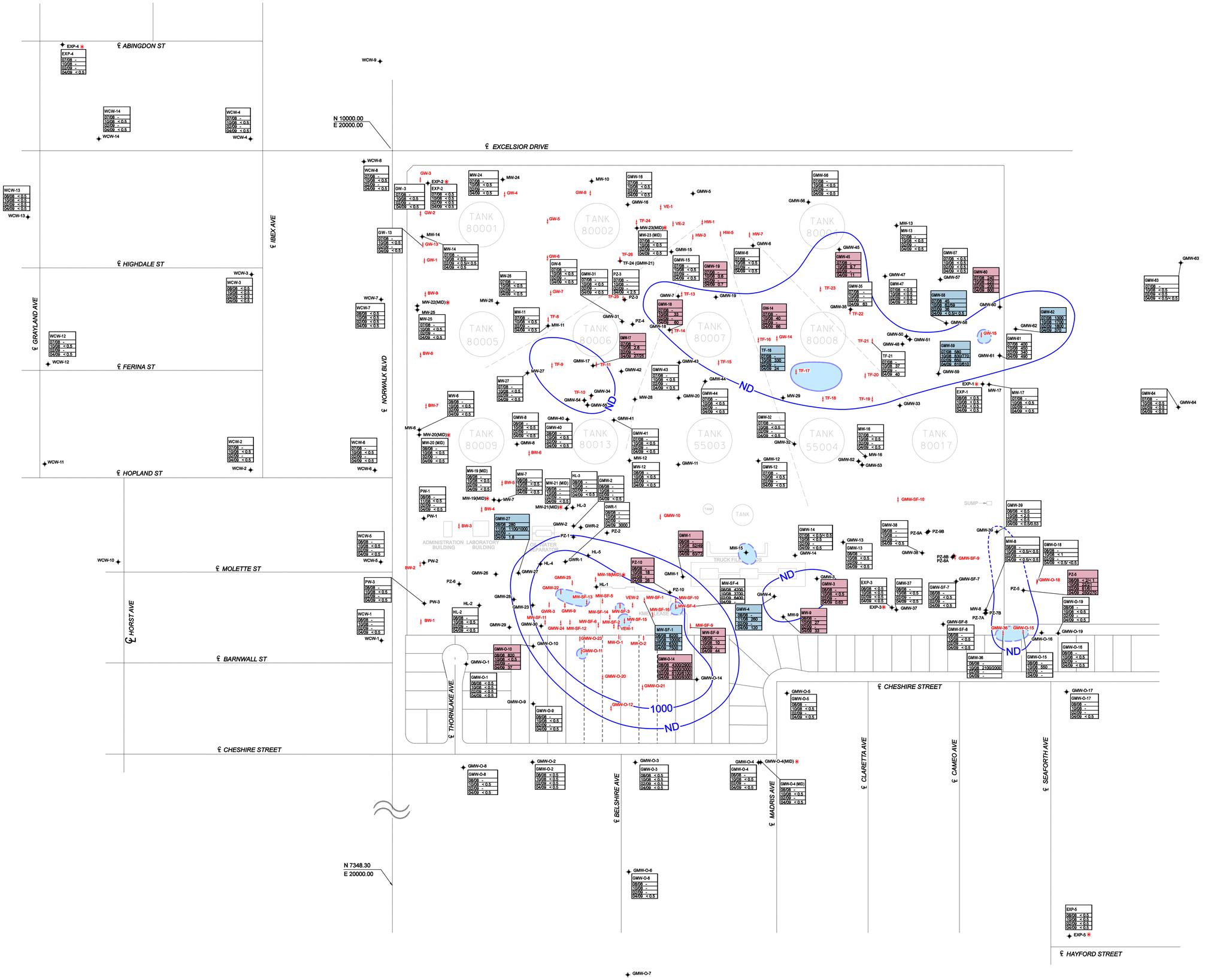
DFSP NORWALK
Norwalk, California

By: ddw	Date: 7/20/06	Project No: 1603.044
Geomatrix		Figure 5

APPENDIX B

BENZENE IN UPPERMOST GROUNDWATER ZONE – APRIL 2009

P:\51603\gis\dgn\B\0509_gw_monitor\0509_benz_tb.dgn



Explanation

- GMW-5 ✦ Monitoring well and designation
- VE-1 ↓ Vapor extraction, groundwater extraction, total fluids, or free product extraction well used for site remediation
- GMW-56: 07/08 -; 10/08 < 0.5; 02/09 -; 04/09 < 0.5 — Benzene results in micrograms per liter (µg/L) for the two most recent semi-annual and sentry events; where the databox is shown in white, the concentration of Benzene has remained similar (concentration change is less than 10%) at that location since the previous semi-annual monitoring event or the dataset shown does not provide a basis for comparison
- GMW-60: 07/08 240; 10/08 260; 02/09 400; 04/09 800 — Where the databox is shown in red, the concentration of Benzene has increased by 10% or more at that location since the previous semi-annual monitoring event
- GMW-62: 07/08 1300; 10/08 1100; 02/09 1800; 04/09 970 — Where the databox is shown in blue, the concentration of Benzene has decreased by 10% or more at that location since the previous semi-annual monitoring event
- <0.5 — Not detected at or above laboratory reporting limit shown
- - — Not sampled/not analyzed
- <0.5 / <0.5 — Primary sample analytical result / duplicate sample analytical result (µg/L)
- MW-22(MID) ✳ ✦ — Wells screened in the Exposition aquifer or near the bottom of the uppermost aquifer are not used in contouring
- ND — Estimated extent of detected dissolved Benzene in groundwater (concentration dependent on laboratory reporting limit); dashed where inferred
- 1000 — Lines of equal Benzene concentration (µg/L) in groundwater; dashed where inferred
- Estimated extent of measurable light nonaqueous phase hydrocarbons (LNAPL, free product) on groundwater; dashed where inferred

Survey Notes:

1. Base map prepared from data provided by Fluor Daniel GTI, Dulin & Boynton, Geomatrix, and Parsons.
2. Except as noted below, well locations surveyed by Dulin & Boynton.
3. Locations of wells HL-1, HL-3, and HL-4 based on field measurements by Fluor Daniel GTE and Woodward-Clyde.
4. Locations of wells BW-1 through BW-9 surveyed by Geomatrix based on reference to other wells surveyed by Dulin & Boynton.

120 0 120
Approximate Scale in Feet

BENZENE IN UPPERMOST GROUNDWATER ZONE APRIL 2009

DFSP NORWALK
Norwalk, California

By: pah	Date: 07/24/09	Project No: 1603.044
AMEC Geomatrix	Figure 5	