Argonaut Holdings, LLC

March 22, 2012

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6540

SUBJECT: Report Statement
Quarterly Groundwater Monitoring Report #4
Former Oakland Truck Center Site
8099 South Coliseum Way
Oakland, California
CASE # RO0001389
Facility Global ID# T0600101692

To Whom It May Concern:

Argonaut Holdings, LLC (Argonaut), is the owner of the property located at 8099 South Coliseum Way in Oakland, California. Attached please find the fourth quarterly groundwater monitoring report for the property located at 8099 South Coliseum Way in Oakland, California.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

If you have any questions please contact Marilyn Dedyne at 313-506-9461, or our authorized agent, Chuck Dittmar of ARCADIS at (810)-225-1966.

Sincerely,

Mark R. Sloan
President, Argonaut Holdings, LLC

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

Leaking Underground Storage Tank Site Quarterly Monitoring Report #4

Former Oakland Truck Center
8099 South Coliseum Way
Oakland, California 94621
Case ID RO-0001389

Field Work Dates: September 21 and 22, 2011

Prepared on Behalf of Argonaut Holdings, Inc.

Prepared for the Alameda County Health Care Services Agency

ARCADIS

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Former Oakland Truck Center
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Alameda County Health Care Services Agency

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Our Ref.:
B0064601.0000.00008

Date:
February 1, 2012

ARCADIS

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Appendices

1. Introduction

On behalf of Argonaut Holdings, Inc., ARCADIS U.S., Inc. (ARCADIS) is submitting this *Leaking Underground Storage Tank Site Quarterly Monitoring Report #4* for the Former Oakland Truck Center (hereafter referred to as the "Site") located in Oakland, California (Figure 1). One 500-gallon used oil underground storage tank (UST), one 1,000-gallon used oil UST, one 2,000-gallon unleaded gasoline UST, and one 2,000-gallon diesel fuel UST were installed in 1980 in two separate excavations west of the Main Site Building. According to previous reports (Clayton, 1993a and 1993b), the four USTs were removed on August 5, 1993. Based on analytical results from soil samples collected during UST removal activities, a UST Unauthorized Release/Contamination Site Report was filed with the Alameda County Health Care Services Agency (ACHCSA) on August 10, 1993. In June 2007, the ACHCSA approved a monitored natural attenuation approach and requested quarterly sampling and monitoring of the existing groundwater monitoring wells. The purpose of the investigation was to evaluate groundwater quality at the Site in support of the efforts to pursue closure of the open Leaking Underground Storage Tank (LUST) Case ID RO-0001389 as requested by the ACHCSA in June 2007. In October 2010, quarterly monitoring of the site monitoring wells was initiated in order to pursue closure of the LUST case. The results presented in this report represent the data collected during the fourth quarterly monitoring event.

2. Background

Site description, assessment history, geologic and hydrogeologic settings, and previous remedial activities performed at the Site are discussed in the following subsections. Please refer to Figure 2 for the locations of the monitoring wells.

2.1 Site and Surrounding Area Description

The Site is an active new and used truck dealership and service facility located at 8099 South Coliseum Way in Oakland, California. It currently consists of two buildings: the Main Site Building and the Used Truck Center Trailer, situated on approximately 6.38 acres of land. Based on historical information, one former building existed on the eastern portion of the Site. The former building was owned and occupied by the California Department of Transportation (Caltrans) and was utilized as a maintenance facility.

The Site is zoned C-36/S-4, regional commercial. It is anticipated that future use of the Site will consist of commercial facilities. The Site is bounded by South Coliseum Way to the north and by Caltrans property to the east, south, and west. Surrounding properties are comprised of commercial uses. Based on a search of local and regional water agency records performed by Environmental Data Resources (EDR), there are no public supply wells within one mile of the Site. The nearest potential receptor is the San Leandro Bay, which is located approximately 3,500 feet west of the Site.

2.2 Site Assessment History

As mentioned earlier, four USTs were installed in 1980 in two separate excavations west of the Main Site Building. According to previous reports (Clayton, 1993a), the four USTs were removed on August 5, 1993. Based on analytical results from soil samples collected during UST removal activities, a UST Unauthorized Release/Contamination Site Report was filed with ACHCSA on August 10, 1993. This report identified corroded, leaky pipes and overfilling of the USTs as the main sources of site-related constituents of concern (COCs). Impacted soils surrounding the USTs were excavated and disposed of off-site.

Several subsurface investigations, hydrogeologic evaluations, a risk assessment, and a remediation feasibility study were conducted by Fluor Daniel GTI (FD-GTI) in 1993, 1995, 1996, and 1997 (please refer to the references section for a list of previous reports for historical investigations) prior to Phase II Environmental Site Assessment (ESA) activities completed by ARCADIS (operating as Encore Environmental

Consortium, LLC, or EEC) in April 2008. Residual impacts to the soil in the vicinity of the former USTs were noted to be primarily of higher molecular weight total petroleum hydrocarbons (TPHs) and polynuclear aromatic hydrocarbons (PAHs). During the 1995 FD-GTI site investigation, several soil borings were advanced throughout the Site. Free phase hydrocarbon product was reportedly observed in soil boring SB-3, located near the oil/water separator east of the Main Site Building; consequently, a groundwater sample was not collected from this boring. However, a product sample was collected and analyzed for a hydrocarbon screen. TPH as mineral spirits was detected at 590,000 milligrams per kilogram (mg/kg) for the product sample collected from SB-3.

In addition, the investigations indicated the presence of a potential off-site source located to the east-southeast. Soil borings SB-7, SB-8, and SB-9 (installed by EEC in 2008) and SB-7A, SB-8A, SB-8A1, and SB-9A (installed by EEC in October 2010), all advanced in the southeastern portion of the Site, demonstrated that there does not appear to be an on-site source at this portion of the Site and that the impact observed in this area of the Site appears to have originated from the Caltrans property located immediately adjacent to the eastern and southeastern Site boundary. According to previous EEC reports, the Caltrans property is reported on the LUST and Contaminated Sites (CS) databases. Based on the general north-northwest groundwater flow direction at the Site (Figure 3), contaminant releases from this adjacent property would likely impact the Site.

2.3 Geology and Hydrology

2.3.1 Regional Geology

According to the United States Department of Agriculture's (USDA) Soil Conservation Service (SCS), regional data indicate that the surface soil texture in the area of the Site is variable. The soil component name is URBAN LAND. The soil hydrologic group and soil drainage classification are not reported. Soils do not meet the requirements for a hydric soil. The shallow and deeper soil types in the vicinity of the Site were not reported in the EDR report. Underlying the surface, shallow and deeper soils are bedrock deposits classified as Cenozoic Era, Quaternary System, and Quaternary Series.

2.3.2 Site Geology

During previous subsurface investigations, the soils encountered at the Site consisted primarily of fill material of sand, gravel, and clay from ground surface to approximately

9 feet below ground surface (bgs) and grayish-blue clay from approximately 9 to 20 feet bgs, with some interbedded sand and gravel layers throughout the top 20 feet.

2.3.3 Hydrology

In September 2011, groundwater elevations in the eleven (11) site monitoring wells ranged from 3.52 to 7.46 feet above mean sea level (amsl; 7.41 and 5.04 feet below the top of casing, respectively). According to the Aquifer Characterization Report prepared by FD-GTI on May 14, 1996, the aquifer material is comprised of a 4-foot thick sand and gravel bed located approximately between 12 and 18 feet bgs. These materials are most likely discontinuous stream channel deposits. Groundwater flow beneath the Site was previously reported to the north under a gradient of approximately 0.01 foot per foot (ft/ft). Based on water level measurements from the September 2011 groundwater monitoring event, the current groundwater flow is to the north-northwest under an approximate gradient of 0.01 ft/ft.

A 24-hour constant rate pumping test was conducted at monitoring well MW-2 in April 1996 by FD-GTI to determine aquifer hydraulic properties; including hydraulic conductivity, transmissivity, storability, and specific yield. The aquifer properties ranged from 317 gallons per day per square foot (gpd/ft^2) (42 feet per day [ft/d]) to 733 gpd/ft^2 (98 ft/d) for hydraulic conductivity; 1,270 gallons per day per foot (gpd/ft) (170 square feet per day [ft^2/d]) to 2,930 gpd/ft (392 ft^2/d) for transmissivity; 0.006 to 0.00006 for storability; and 4 to 5 gallons per minute (gpm) for specific yield with a 5-foot drawdown in MW-2. The relatively high hydraulic conductivity values measured during the pump test were representative of the sand and gravel layer observed at some of the groundwater monitoring well locations at the Site. FD-GTI concluded that the presence of finer grained layers would significantly affect groundwater flow at the Site.

2.4 Previously Approved Remedial Approach

The risk assessment completed by FD-GTI in January 1997 included a remedial approach for the Site that consisted of intrinsic bioremediation and monitoring (termed "monitored natural attenuation"). FD-GTI also proposed placing a deed restriction against constructing buildings in the vicinity of MW-3, based on the observed benzene concentrations that exceeded the calculated Site Specific Target Level (SSTL). In June 2007, the ACHCSA approved the monitored natural attenuation approach and requested quarterly sampling and monitoring of the eight then-existing groundwater monitoring wells (MW-1 through MW-8). Requirements included monitoring bioremediation parameters such as dissolved oxygen (DO), oxidation-reduction potential (ORP), nitrate, sulfate, alkalinity, and ferrous iron, in addition to benzene,

toluene, ethylbenzene, and xylenes (collectively known as BTEX), TPH as diesel (TPH-d), TPH as motor oil (TPH-o), and TPH as gasoline (TPH-g). ACHCSA also requested sampling at the drainage ditch located adjacent to the downgradient site boundary. In July 2009, ARCADIS collected two sediment samples, SW-2 and SW-3 from the ditch located at the northwestern portion of the Site. In addition, a surface water sample was collected from SW-3. TPH-o and TPH were detected in SW-2 at 300 mg/kg and 41 mg/kg, respectively. TPH-o was detected in SW-3 at 420 mg/kg. TPH was not detected in the surface water or sediment samples collected from SW-3. The detected concentrations did not exceed the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Commercial Soil or Surface Water Environmental Screening Levels (ESLs). Volatile organic compounds (VOCs) were not detected above laboratory reporting limits in sediment samples SW-2 and SW-3 and surface water sample SW-3. Also as part of the July 2009 site activities, three additional groundwater monitoring wells (MW-9, MW-10, and MW-11) were installed northwest of the impacted area to determine if contaminants had migrated downgradient from the former UST basins.

3. Investigation Activities

The following subsections present pre-field activities, groundwater monitoring activities, analytical results, and data evaluation.

3.1 Pre-Field Activities

Pursuant to the Code of Federal Regulations (CFR), Title 29, Section 1910.120 and the California Code of Regulations (CCR) Title 8, Section 5192; ARCADIS prepared a site-specific Health and Safety Plan (HASP) prior to the first monitoring event to address health and safety concerns related to the groundwater monitoring activities conducted at the Site (ARCADIS, 2010b). The HASP was developed to identify and control potential hazards in order to minimize exposure of workers involved in the environmental assessment activities to site-related COCs. Pre-field activities included coordinating field work with the client, analytical laboratory, and Site personnel; notifying the ACHCSA of site activities prior to commencement; and reviewing monitoring plan and the HASP prior to mobilizing to the Site.

3.1.1 Groundwater Sampling

ARCADIS mobilized to the Site on September 21 and 22, 2011 to measure depth to groundwater and to collect groundwater samples from the eleven (11) existing groundwater wells. Groundwater was encountered between 5.04 to 7.41 feet below the top of casing (7.46 and 3.52 feet amsl, respectively) in the monitoring wells during this monitoring event. Please refer to Figure 3 for a potentiometric surface map. ARCADIS prepared hydrographs depicting groundwater elevation, TPH, and MTBE (where applicable) concentration trends for each of the groundwater monitoring wells. Groundwater elevation trends generally indicate more pronounced seasonal fluctuations in the monitoring wells located in the southern portion of the Site, as compared to the wells installed at the northern portion of the Site. Groundwater elevation and select COC concentration trends in monitoring wells MW-1 through MW-11 are included in Appendix D.

Low flow sampling techniques using a peristaltic pump and dedicated polyethylene tubing were utilized to collect groundwater samples from each of the monitoring wells. Groundwater samples were collected in preserved laboratory-supplied containers, stored on ice, and shipped overnight to ESC Lab Sciences in Mt. Juliet, Tennessee for analysis. During well purging, the following groundwater measurements were recorded: depth to water, pH, temperature, ORP, DO, turbidity, and specific

conductivity. Field data of each groundwater monitoring well are summarized in Table 1.

3.1.2 Analytical Methods

Groundwater analyses were selected based on the potential source(s) of contamination (used oil, unleaded gasoline, and/or diesel fuel). All collected groundwater samples were analyzed for TPH-Low Fraction and TPH Diesel Range Organics (TPH-DRO; C10-C22, C22-C32, and C32-C40) by Environmental Protection Agency (EPA) Method 8015 and VOCs by EPA Method 8260B. In addition, groundwater samples from MW-1 through MW-11 were analyzed for alkalinity by Standard Method (SM) 2320B, sulfate and nitrogen by EPA Method 9056, phosphate by EPA Method 365.1, and ferrous iron by SM Fe-3500.

3.1.3 Quality Assurance/ Quality Control

ARCADIS employed quality assurance/quality control (QA/QC) procedures in accordance with the ARCADIS 2010 Field Health and Safety Handbook (ARCADIS, 2010a) and ARCADIS Procedures which detail standard operating procedures (SOPs) for the primary field activities. One duplicate sample, intended to assess the precision of the laboratory analyses, was collected from monitoring well MW-5. This represents a duplicate frequency of approximately 10% relative to the total number of wells sampled. The duplicate followed the same analytical protocols as the primary sample, with the exception of TPH-DRO analysis (which was a laboratory oversight). Trip blanks were also collected; however, these samples were put on hold pending the analytical results of the primary samples. Trip blank were only to be analyzed for VOCs if the primary sample data were suspected to be erroneous. Related QA/QC guidance and procedures were employed for the following activities:

- Data recording / field books,
- Groundwater sample collection for laboratory analysis,
- Sample handling and shipping,
- Usage and calibration of field instruments, and
- Equipment decontamination.

3.1.4 Decontamination Procedures

Prior to sampling, all non-disposable sampling equipment was decontaminated using a phosphate-free detergent solution, and then rinsed with tap water. Disposable sampling equipment (including Nitrile gloves, plastic bags, and groundwater sample collection polyethylene tubing) was disposed of outside the sampling area in order to prevent cross-contamination of groundwater samples.

3.1.5 Analytical Results

Laboratory analytical results for the collected groundwater samples are summarized in Table 2. Groundwater concentrations of TPH-DRO and VOCs that exceed the selected screening criteria are presented on Figure 4. Groundwater TPH concentrations were compared to the SFRWQCB ESLs. Cleanup criteria for VOCs are based on City of Oakland Risk-Based Screening Level (RSBLs), SFRWQCB ESLs, and California Department of Public Health (DPH) Maximum Contaminant Levels (MCLs) for groundwater. An MCL is defined as the highest concentration of a contaminant that is allowed in drinking water. Groundwater analytical results are discussed below.

3.2.6.1 TPH

TPH-Low Fraction was not detected above the laboratory detection limits in any of the collected groundwater samples.

TPH-DRO C10-C22 was detected at concentrations ranging between 0.10 milligrams per liter (mg/L; MW-11) and 2.1 mg/L (MW-10). TPH-DRO C10-C22 exceeded the 0.21 mg/L SFRWQCB ESL in each of the monitoring wells, with the exception of MW-2, MW-3, and MW-11. TPH-DRO C22-C32 concentrations ranged between non-detect (less than 0.033 mg/L at MW-2) and 1.4 mg/L (MW-4). TPH-DRO C22-C32 exceeded the 0.21 mg/L SFRWQCB ESL in monitoring wells MW-4, MW-5, MW-6, and MW-10. TPH-DRO C32-C40 was not detected in the groundwater samples collected from any of the monitored wells. However, the groundwater sample collected from monitoring well MW-4 was not analyzed for TPH-DRO C32-C40 because the sample container was broken at the laboratory, and one of the TPH-GRO containers (preserved with hydrochloric acid instead of sulfuric acid) was used for TPH-DRO analysis instead. TPH-DRO C10-C22 and TPH-DRO C22-C32 in monitoring well MW-4 exhibited relatively higher concentrations than the last two groundwater monitoring events; however, the detected concentrations were similar to those observed during the first monitoring event conducted approximately one year earlier. Consequently, the

elevated TPH-DRO C10-C22 and TPH-DRO C22-C32 concentrations observed in MW-4 may be due to seasonal groundwater fluctuations. TPH-DRO C10-C22 concentrations exceeding the applicable screening criteria have been detected in groundwater samples collected from well MW-10 since the initiation of quarterly monitoring in October 2010. However, during the September groundwater monitoring event, a historic high of 2.1 mg/L of TPH-DRO C10-C22 was detected in this well. In addition, a TPH-DRO C22-C32 concentration exceeding the SFRWQCB ESL was observed for the first time in MW-10 during this monitoring event. With the exception of monitoring wells MW-4 and MW-10, hydrographs depicting TPH concentrations during the past four monitoring events indicate an overall decreasing trend of TPH at the Site independent of the groundwater elevations in the monitoring wells (Appendix D).

3.2.6.2 VOCs

None of the VOCs analyzed for were detected above the laboratory detection limits in the groundwater samples collected from monitoring wells MW-1, MW-9, MW-10, or MW-11. Several VOCs; including 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), methyl tert-butyl ether (MTBE), cis-1,2-dichlorethene (cis-1,2-DCE), cyclohexane, and vinyl chloride; were detected in monitoring wells MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8. However, the measured concentrations were generally below applicable SFRWQCB ESLs, California DPH MCLs, and City of Oakland RBSLs for Ingestion of Groundwater. Exceedances of the respective screening criteria were only observed for MTBE and vinyl chloride. MTBE was detected in the groundwater sample collected from well MW-6 (located in the vicinity of the former gasoline and diesel USTs) at a concentration of 16 micrograms per liter (µg/L), which exceeds the California DPH MCL and City of Oakland RBSL of 13 µg/L. MTBE was also detected in the groundwater samples collected from MW-2 (4.9 µg/L), MW-5 (12 µg/L in both the primary and duplicate samples), MW-7 (2.0 µg/L), and MW-8 (1.3 µg/L); all below the MTBE screening criteria. Vinyl chloride was detected in one of the monitored wells (MW-2) at an estimated concentration of 0.57 µg/L, exceeding the 0.5 µg/L California DPH MCL or City of Oakland RBSL. 1,1-DCA was detected only in the groundwater sample collected from MW-2 at an estimated concentration of 0.31 µg/L, not exceeding the 5 µg/L California DPH MCL or City of Oakland RBSL. 1,1-DCE was detected in the groundwater samples collected from MW-2 and MW-3 at concentrations of 0.76 µg/L (estimated) and 1.2 µg/L, respectively; both below the 6 µg/L California DPH MCL or City of Oakland RBSL. cis-1,2-DCE was detected at an estimated concentration of 0.69 µg/L, not exceeding the 6 µg/L California DPH MCL or City of Oakland RBSL. Cyclohexane was detected in one well (MW-7) at an estimated concentration of 0.66 µg/L. No SFRWQCB ESL, California DPH MCL, or City of Oakland RBSL was established for cyclohexane.

3.2.6.3 Intrinsic Bioremediation/Natural Attenuation

As mentioned earlier, groundwater samples were also analyzed for alkalinity, sulfate, nitrogen, phosphate, and ferrous iron to determine if natural attenuation was occurring at the Site. In addition, pH, specific conductivity, ORP, turbidity, and DO were monitored during groundwater monitoring well purging. Alkalinity in the monitoring wells ranged from 490 mg/L (MW-8) to 1,600 mg/L (MW-1). Ferrous iron concentrations ranged from 0.19 mg/L (MW-2) to 41 mg/L (MW-4). Sulfate concentrations ranged from non-detect (less than 0.46 mg/L; MW-1, MW-4, MW-5, MW-6, MW-7, and MW-8) to 510 mg/L (MW-11). Phosphate concentrations ranged from 0.79 mg/L (MW-5 duplicate sample) to 6.8 mg/L (MW-9). Nitrate (as nitrogen) did not exceed the 0.041 mg/L laboratory detection limit in any of the sampled groundwater monitoring wells. DO concentrations ranged from 0.14 mg/L (MW-5) to 1.01 mg/L (MW-9). pH ranged from 6.70 (MW-6) to 7.64 (MW-2). Specific conductivity values ranged from 1.136 Siemens per meter (S/m) in MW-8 to 11.490 S/m in MW-11. Negative ORP values, ranging from -40.0 millivolts (mV) in MW-3 to -127.9 mV in MW-10, were measured in all monitoring wells. Finally, turbidity was observed to range from 0.20 Nephelometric Turbidity Units (NTU) in MW-4 to 31.52 NTUs in MW-5.

3.2 Data Evaluation

Analytical data collected during the groundwater investigation activities were compared to historical data to identify concentration trends in groundwater and to obtain an overall status of the impact to groundwater at the Site.

Historical groundwater analytical results indicated that, based on the majority of the samples which contained total dissolved solids (TDS) concentrations in excess of 3,000 mg/L, the shallow groundwater under the Site was not suitable for drinking water use. Groundwater samples collected during the four recent quarterly monitoring events were not analyzed for TDS.

The bioremediation parameter data indicated that intrinsic bioremediation is occurring at the Site. The ferrous iron data were not taken into consideration as an indication of microbial activity because the analyses were performed close to the analytical method's holding time and, therefore, there is some uncertainty in these data. Nevertheless, the relatively low nitrate, sulfate, and phosphate concentrations throughout the Site are likely due to assimilation and use to support microbial growth in the areas with previously higher impacts. In addition, the lower pH and DO concentrations in areas of higher TPH concentrations at the Site are also indicative of increased microbial activity in these areas. As the microorganisms aerobically

biodegrade organic COCs, they utilize DO (therefore lowering DO levels in the groundwater) and generate slightly acidic waste byproducts (therefore lowering the pH).

When compared to the first, second, and third quarterly groundwater monitoring events (performed during the fourth quarter of 2010 [ARCADIS, 2011a], first quarter of 2011 [ARCADIS, 2011b], and second quarter of 2011 [ARCADIS, 2011c] respectively), TPH concentrations in the groundwater samples collected during the fourth quarterly monitoring event are generally lower, indicating a decreasing trend independent of groundwater elevation in the monitoring wells. An exception to this decreasing trend was observed in monitoring wells MW-4 and MW-10, where the increase in TPH concentrations might have been due to seasonal groundwater fluctuations. MTBE concentrations exceeding the 13 mg/L screening criteria continued to exist in monitoring well MW-6; however, MTBE concentrations have been decreasing in this well. Vinyl chloride concentrations exceeding the 0.5 mg/L screening criteria were detected for the first time at the Site during this monitoring event (an estimated 0.57 mg/L in MW-2).

4. Conclusions and Recommendations

The purpose of this groundwater investigation was to assess the current groundwater conditions at the Site to support the efforts to pursue closure of open LUST Case ID RO-0001389.

4.1 Conclusions

The eleven groundwater monitoring wells at the Site were sampled for VOCs, TPH, and intrinsic bioremediation parameters. TPH and VOCs were detected in several of the groundwater monitoring wells at concentrations indicating an overall decreasing trend, with no COCs exceeding the screening criteria in MW-11 (the monitoring well located at the downgradient edge of the Site). All the VOCs analyzed for, with the exception of vinyl chloride in well MW-2 and MTBE in well MW-6, were detected at concentrations below the corresponding screening criteria. The TPH constituents, detected at low concentrations in several of the groundwater samples, are likely weathered residual components of the petroleum products released to the subsurface in the past and are an indication of intrinsic bioremediation occurring at the Site. Based on the results of this site investigation, ARCADIS concludes that intrinsic bioremediation has been occurring at the Site. The Site is capped with asphalt and concrete, and the current and future land use is commercial. No drinking water supply wells are located on-site or within one mile of the Site, and on-site TDS data previously collected in 2009 indicate that the groundwater at the Site is not suitable for potable use. All of the above findings and conclusions support the efforts to close the open LUST case.

4.2 Recommendations

Based on the results of this Site investigation and the anticipated future use of the Site for commercial or light industrial purposes, ARCADIS recommends continuing quarterly groundwater monitoring for one additional quarter to further evaluate trends in TPH and VOC concentrations, along with the bioremediation parameters monitored during this sampling event. Should the trends in TPH and VOC concentrations remain stable or decrease over the proposed quarterly monitoring period, ARCADIS will recommend applying for a “Low Risk Closure” status for the Site, and will request a “No Further Action” letter from the ACHCSA for the Site. The “Low Risk Closure” status may include a deed notice or land use restriction based on the conditions documented from previous assessments and during the quarterly groundwater monitoring at the Site.

References

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ARCADIS. 2011a. Quarterly Monitoring Report #1, Former Oakland Truck Center, 8099 South Coliseum Way, Oakland, CA 94621, Case ID RO-0001389; June 10.

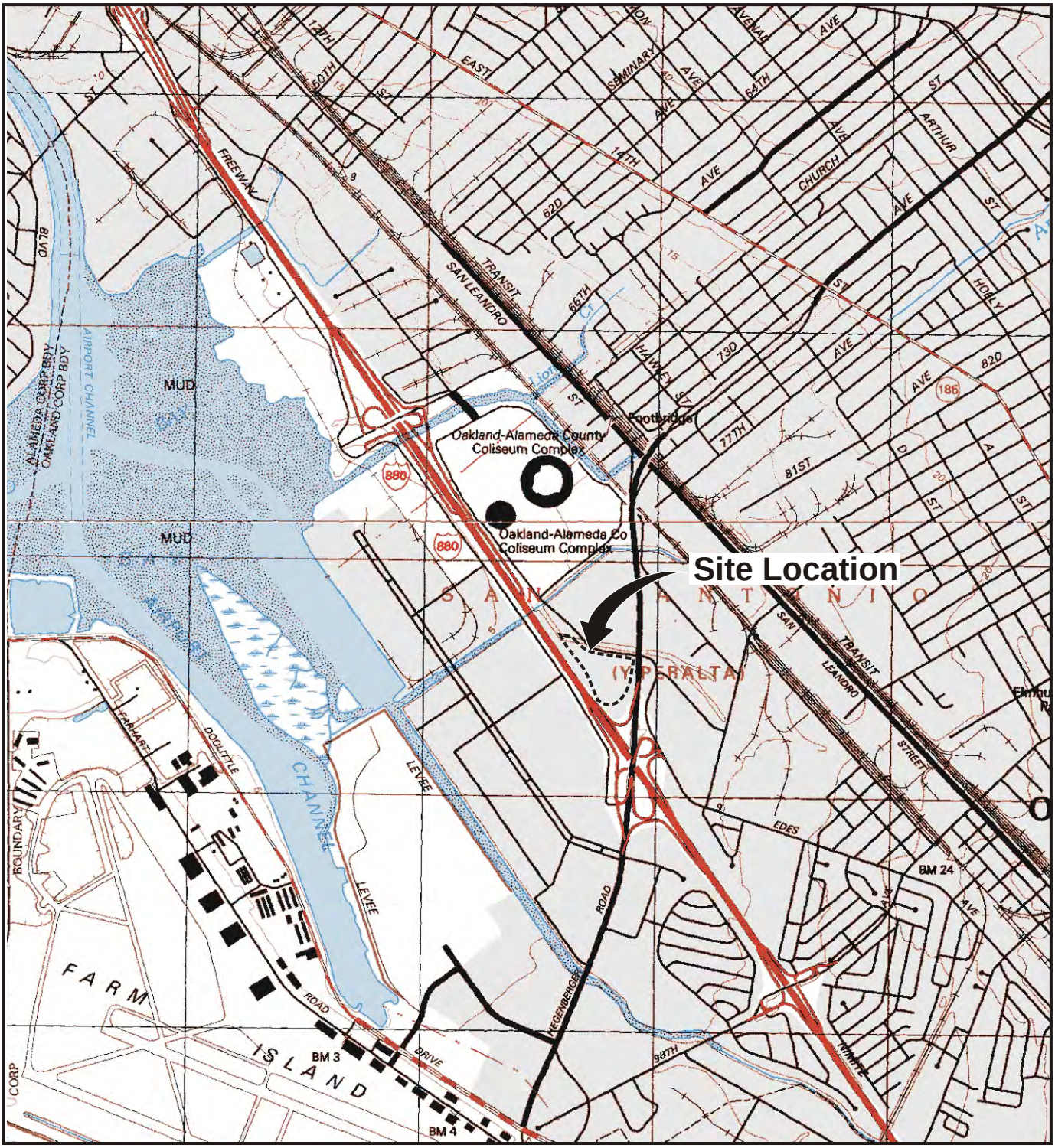
ARCADIS. 2011b. Quarterly Monitoring Report #2, Former Oakland Truck Center, 8099 South Coliseum Way, Oakland, CA 94621, Case ID RO-0001389; August 3.

ARCADIS. 2011c. Quarterly Monitoring Report #3, Former Oakland Truck Center, 8099 South Coliseum Way, Oakland, CA 94621, Case ID RO-0001389; September 26.

ARCADIS

Appendix **A**

Figures



REFERENCE: BASE MAP USGS 7.5 MIN. QUADS. OAKLAND EAST, CA. 1997, AND SAN LEANDRO, CA. 1993.

2000' 0 2000'

Approximate Scale: 1" = 2000'

Area Location

FORMER OAKLAND TRUCK CENTER
8099 SOUTH COLISEUM WAY
OAKLAND, CA 94621

SITE LOCATION MAP

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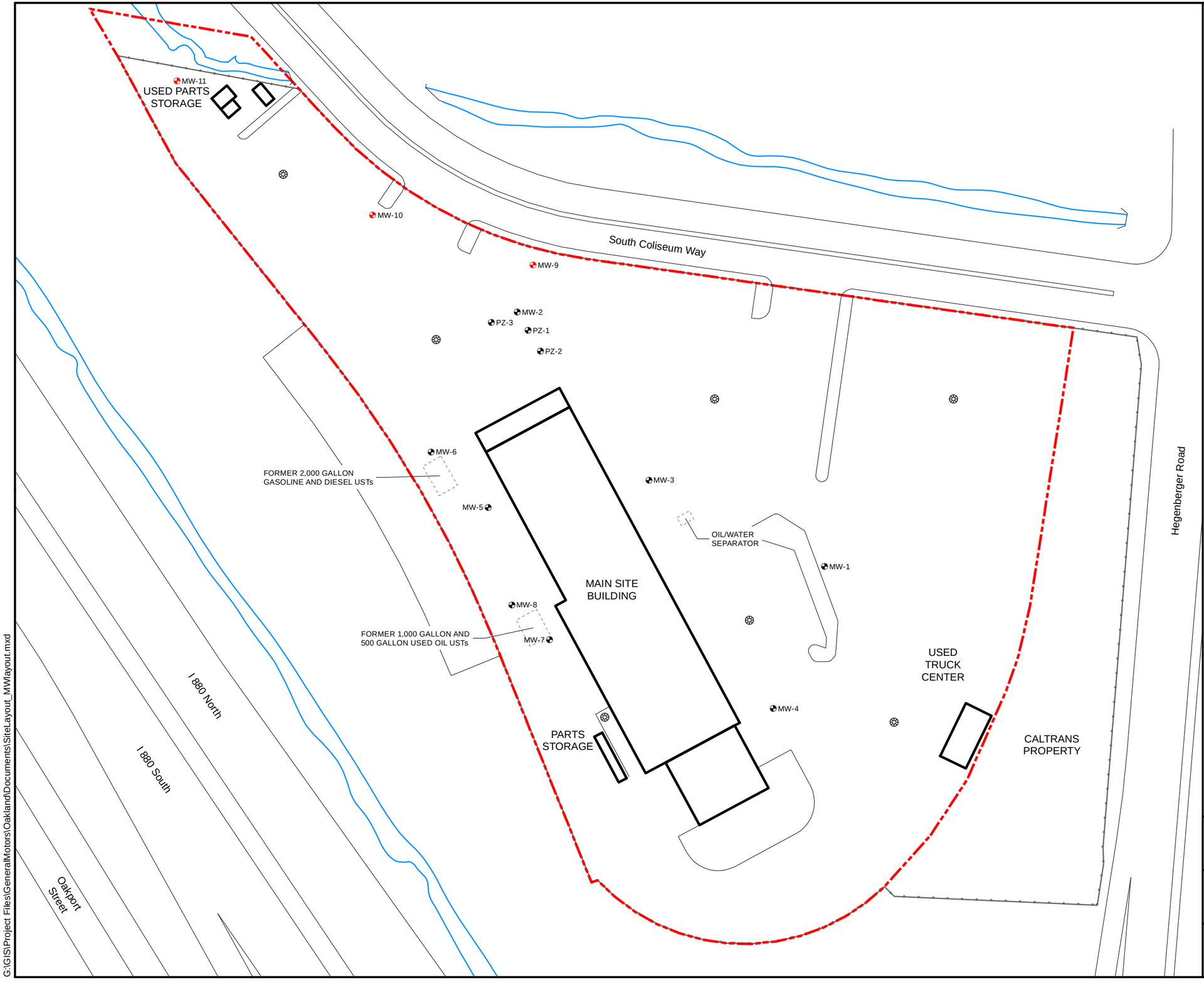
FIGURE
1

05/17/2011 SYRACUSE-141ENV-DJHOWES
B0064601/0000/00008/CDR/64601N01.CDR



LEGEND

- MONITORING WELL (ARCADIS; JULY 2009)
- MONITORING WELL LOCATION (FLUOR; MARCH 1996)
- STORMWATER DRAIN
- DITCH
- FENCE
- PROPERTY BOUNDARY

NOTE:

MONITORING WELL LOCATIONS (MW-1 THROUGH MW-11) WERE SURVEYED ON JULY 28, 2009.

0 80 160

SCALE IN FEET

FORMER OAKLAND TRUCK CENTER
8099 SOUTH COLISEUM WAY
OAKLAND, CALIFORNIA 94621

SITE MAP SHOWING MONITORING WELL LOCATIONS

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FIGURE 2

PROJECT NUMBER: B006460
CITY:NOVI DIV/GROUP:ENV DB: PIC: PM: TM: TR:
G:\GIS\Project Files\GeneralMotors\Oakland\Documents\SiteLayout_MWlayout.mxd

MW-11
3.52

USED PARTS
STORAGE

MW-10
3.6

South Coliseum Way

MW-9
3.56

MW-2
3.73

PZ-3

PZ-1

PZ-2

4.0

4.5

5.0

MW-6
5.07

FORMER 2,000 GALLON
GASOLINE AND DIESEL USTs

MW-5
5.38

5.5

MW-3
5.58

OIL/WATER
SEPARATOR

MAIN SITE
BUILDING

MW-1
6.64

6.0

MW-8
5.86

MW-7
5.67

6.5

FORMER 1,000 GALLON AND
500 GALLON USED OIL USTs

7.0

MW-4
7.46

PARTS
STORAGE

USED
TRUCK
CENTER

CALTRANS
PROPERTY

Hegenberger Road

I 880 North

I 880 South

Oakport
Street

PROJECT NUMBER: B006460
CITY:NOVI DIV/GROUP:ENV DB: PIC: PM: TM: TR:
D:\GIS\Project Files\GeneralMotors\Oakland\Documents\201109_potentiometric surface.mxd

LEGEND

- MONITORING WELL (ARCADIS; JULY 2009)
- MONITORING WELL LOCATION (FLUOR; MARCH 1996)
- STORMWATER DRAIN
- DITCH
- FENCE
- PROPERTY BOUNDARY
- 4.5 POTENTIOMETRIC ELEVATION CONTOUR
- INFERRED POTENTIOMETRIC ELEVATION CONTOUR
- 6.64 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER FLOW DIRECTION
- * ELEVATION NOT USED IN CONTOURING

NOTES:

1. SOIL BORING LOCATIONS ARE APPROXIMATE.

2. MONITORING WELL LOCATIONS (MW-1 THROUGH MW-11) WERE SURVEYED ON JULY 28, 2009.

0 80 160

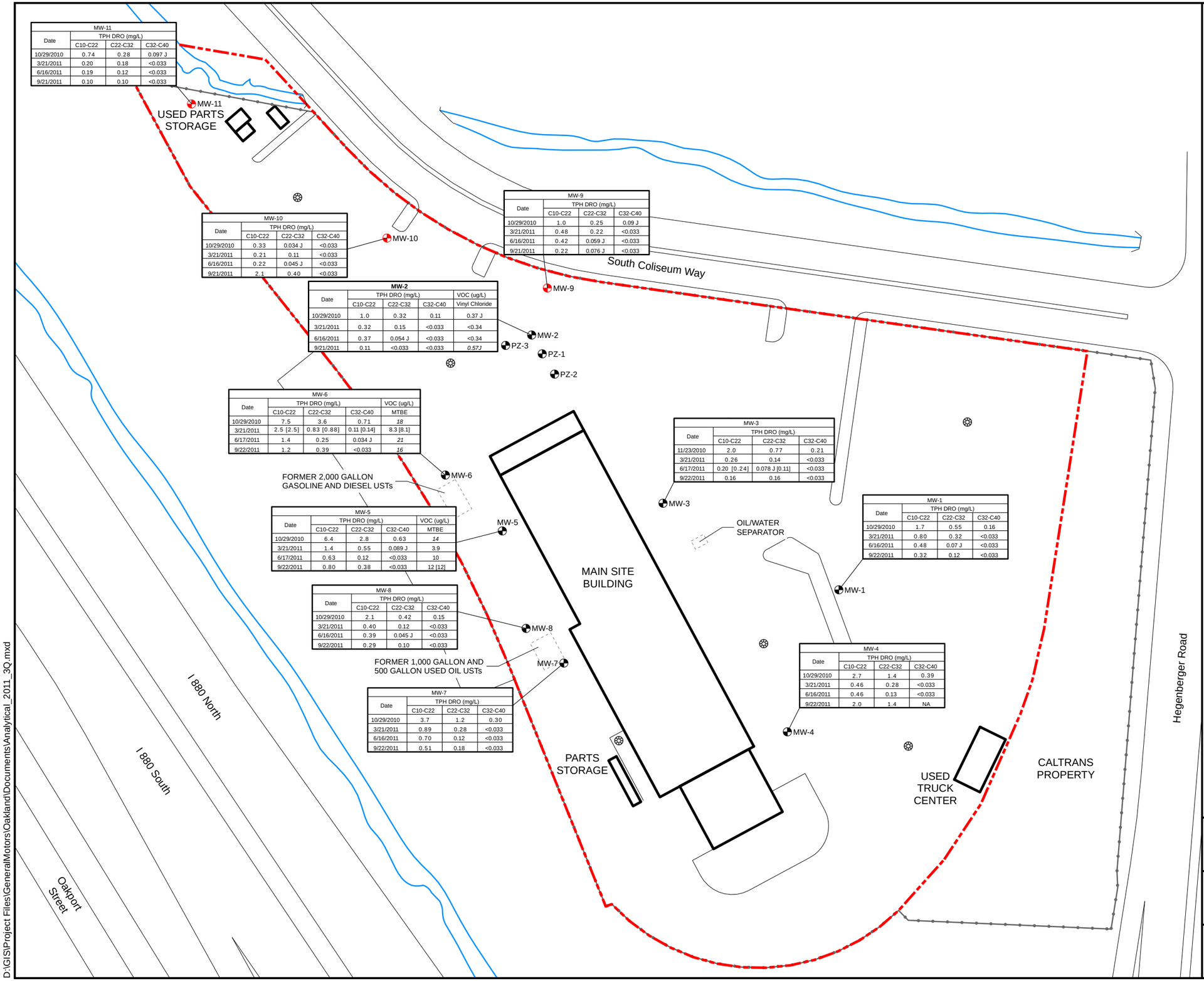
SCALE IN FEET

FORMER OAKLAND TRUCK CENTER
8099 SOUTH COLISEUM WAY
OAKLAND, CALIFORNIA 94621

POTENTIOMETRIC SURFACE MAP - SEPTEMBER 2011

ARCADIS

FIGURE
3



MW-11			
Date	TPH DRO (mg/L)		
	C10-C22	C22-C32	C32-C40
10/29/2010	0.74	0.28	0.097 J
3/21/2011	0.20	0.18	<0.033
6/16/2011	0.19	0.12	<0.033
9/21/2011	0.10	0.10	<0.033

MW-10			
Date	TPH DRO (mg/L)		
	C10-C22	C22-C32	C32-C40
10/29/2010	0.33	0.034 J	<0.033
3/21/2011	0.21	0.11	<0.033
6/16/2011	0.22	0.045 J	<0.033
9/21/2011	2.1	0.40	<0.033

MW-9			
Date	TPH DRO (mg/L)		
	C10-C22	C22-C32	C32-C40
10/29/2010	1.0	0.25	0.09 J
3/21/2011	0.48	0.22	<0.033
6/16/2011	0.42	0.059 J	<0.033
9/21/2011	0.22	0.076 J	<0.033

MW-2				
Date	TPH DRO (mg/L)			VOC (ug/L)
	C10-C22	C22-C32	C32-C40	Vinyl Chloride
10/29/2010	1.0	0.32	0.11	0.37 J
3/21/2011	0.32	0.15	<0.033	<0.34
6/16/2011	0.37	0.054 J	<0.033	<0.34
9/21/2011	0.11	<0.033	<0.033	*0.57J*

MW-6					
Date	TPH DRO (mg/L)				VOC (ug/L)
	C10-C22	C22-C32	C32-C40		MTBE
10/29/2010	7.5	3.6	0.71		*18*
3/21/2011	2.5 [2.5]	0.83 [0.88]	0.11 [0.14]		8.3 [8.1]
6/17/2011	1.4	0.25	0.034 J		*21*
9/22/2011	1.2	0.39	<0.033		*16*

MW-5				
Date	TPH DRO (mg/L)			VOC (ug/L)
	C10-C22	C22-C32	C32-C40	MTBE
10/29/2010	6.4	2.8	0.63	*14*
3/21/2011	1.4	0.55	0.089 J	3.9
6/17/2011	0.63	0.12	<0.033	10
9/22/2011	0.80	0.38	<0.033	12 [12]

MW-8			
Date	TPH DRO (mg/L)		
	C10-C22	C22-C32	C32-C40
10/29/2010	2.1	0.42	0.15
3/21/2011	0.40	0.12	<0.033
6/16/2011	0.39	0.045 J	<0.033
9/22/2011	0.29	0.10	<0.033

MW-7			
Date	TPH DRO (mg/L)		
	C10-C22	C22-C32	C32-C40
10/29/2010	3.7	1.2	0.30
3/21/2011	0.89	0.28	<0.033
6/16/2011	0.70	0.12	<0.033
9/22/2011	0.51	0.18	<0.033

MW-3			
Date	TPH DRO (mg/L)		
	C10-C22	C22-C32	C32-C40
11/23/2010	2.0	0.77	0.21
3/21/2011	0.26	0.14	<0.033
6/17/2011	0.20 [0.24]	0.078 J [0.11]	<0.033
9/22/2011	0.16	0.16	<0.033

MW-1			
Date	TPH DRO (mg/L)		
	C10-C22	C22-C32	C32-C40
10/29/2010	1.7	0.55	0.16
3/21/2011	0.80	0.32	<0.033
6/16/2011	0.48	0.07 J	<0.033
9/22/2011	0.32	0.12	<0.033

MW-4			
Date	TPH DRO (mg/L)		
	C10-C22	C22-C32	C32-C40
10/29/2010	2.7	1.4	0.39
3/21/2011	0.46	0.28	<0.033
6/16/2011	0.46	0.13	<0.033
9/22/2011	2.0	1.4	NA

LEGEND

- MONITORING WELL (ARCADIS; JULY 2009)
- MONITORING WELL (FLUOR; MARCH 1996)
- STORMWATER DRAIN
- FENCE
- PROPERTY BOUNDARY
- DITCH
- J — ESTIMATED VALUE ABOVE THE METHOD DETECTION LIMIT AND BELOW THE REPORTING LIMIT
- <0.033 — ANALYTE NOT DETECTED AT OR ABOVE THE INDICATED METHOD DETECTION LIMIT

NOTES:

1. ONLY VOCS DETECTED ABOVE SCREENING CRITERIA ARE INCLUDED

2. **BOLD** VALUES INDICATE ANALYTE CONCENTRATIONS EQUAL TO OR EXCEEDING SAN FRANCISCO BAY REGIONAL WATER QUALITY CONTROL BOARD ENVIRONMENTAL SCREENING LEVELS FOR GROUNDWATER.

3. *ITALICIZED* VALUES INDICATE ANALYTE CONCENTRATIONS EQUAL TO OR EXCEEDING CALIFORNIA DEPARTMENT OF HEALTH SERVICES DRINKING WATER MAXIMUM CONTAMINANT LEVELS AND OAKLAND TIER 1 RISK-BASED SCREENING LEVELS FOR INJECTION OF GROUNDWATER

	TPH			VOC (ug/L)	
	C10-C22	C22-C32	C32-C40	MTBE	Vinyl Chloride
San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for Groundwater	0.21	0.21	0.21	1,800	3.8
California Department of Health Services Drinking Water Maximum Contaminant Levels (MCLs)	---	---	---	13	0.5
Oakland Tier I RBSLs for Ingestion of Groundwater (Commerical/ Industrial)	---	---	---	13	0.5

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SCALE IN FEET

FORMER OAKLAND TRUCK CENTER
8099 SOUTH COLISEUM WAY
OAKLAND, CALIFORNIA 94621

TPH & VOC GROUNDWATER CONCENTRATIONS EXCEEDING SCREENING CRITERIA

ARCADIS

FIGURE 4

PROJECT NUMBER: B006460
CITY:NOVI DIV/GROUP:ENV DB: PIC: PM: TM: TR:
D:\GIS\Project Files\GeneralMotors\Oakland\Documents\Analytical_2011_3Q.mxd

ARCADIS

Appendix **B**

Tables

TABLE 1
FIELD DATA

FORMER OAKLAND TRUCK CENTER
8099 S. COLISEUM WAY
OAKLAND, CALIFORNIA 94621

Well ID	Date	TOC (ft amsl)	Depth to Groundwater (ft btoc)	Groundwater Elevation (ft amsl)	Depth to Bottom (ft btoc)	Temperature (°C)	pH	DO (mg/L)	Specific Conductivity (S/m)	Turbidity (NTU)	ORP (mV)
MW-1	10/29/2010	12.46	6.33	6.13	20.35	22.21	7.10	0.25	0.3778	NM	-111
	3/21/2011	12.46	8.60	3.86	20.03	18.42	7.63	0.19	1.010	0.00	-94
	6/16/2011	12.46	5.94	6.52	NM	21.72	7.17	0.34	3.600	5.80	-145
	9/22/2011	12.46	5.82	6.64	NM	21.75	6.96	0.19	3.408	2.75	-114.5
MW-2	10/29/2010	12.37	8.42	3.95	20.07	21.90	7.31	0.23	0.6697	NM	-133
	3/21/2011	12.37	8.60	3.77	20.03	18.42	7.63	0.19	1.010	0.00	-94
	6/16/2011	12.37	8.54	3.83	NM	20.91	7.85	0.46	13.60	0.00	-128
	9/21/2011	12.37	8.64	3.73	NM	21.42	7.64	0.30	10.60	1.21	-117.8
MW-3	10/29/2010	13.06	7.49	5.57	20.30	NM	NM	NM	NM	NM	NM
	11/22/2010	13.06	7.22	5.84	20.25	20.54	7.11	0.25	0.3769	NM	-114
	3/21/2011	13.06	6.78	6.28	20.29	18.28	7.38	0.11	0.8159	0.00	-124
	6/17/2011	13.06	7.24	5.82	NM	19.60	7.69	0.58	8.760	0.40	-124
	9/22/2011	13.06	7.48	5.58	NM	21.13	7.43	0.61	8.176	1.09	-40.0
MW-4	10/29/2010	12.50	4.15	8.35	18.00	23.03	7.00	0.19	0.2160	NM	-130
	3/21/2011	12.50	2.02	10.48	17.95	17.27	6.70	0.11	0.1192	95.82	-70
	6/16/2011	12.50	3.70	8.80	NM	22.38	7.24	0.28	2.300	1.60	-124
	9/22/2011	12.50	5.04	7.46	NM	22.51	7.03	0.42	2.768	0.20	-104.0
MW-5	10/29/2010	13.38	8.16	5.22	17.10	24.47	7.05	0.15	0.3459	NM	-89
	3/21/2011	13.38	4.71	8.67	17.12	19.04	6.75	0.11	0.1768	16.71	-46
	6/17/2011	13.38	6.83	6.55	NM	22.36	7.17	0.43	1.780	32.90	-112
	9/22/2011	13.38	8.00	5.38	NM	24.33	7.11	0.14	2.682	31.52	-102.2
MW-6	10/29/2010	12.33	7.38	4.95	17.95	22.31	6.71	0.15	0.3366	NM	-106
	3/22/2011	12.33	5.45	6.88	17.93	15.50	6.47	0.31	0.2434	0.00	-17
	6/17/2011	12.33	6.75	5.58	NM	20.63	7.00	0.37	2.840	0.00	-120
	9/22/2011	12.33	7.26	5.07	NM	23.02	6.70	0.18	3.156	1.73	-106.1
MW-7	10/29/2010	13.17	7.82	5.35	18.10	22.87	6.85	0.12	0.2251	NM	-110
	3/21/2011	13.17	6.10	7.07	18.05	18.49	6.62	0.12	0.1175	0.00	-86
	6/16/2011	13.17	6.93	6.24	NM	21.57	7.08	0.54	1.700	0.00	-130
	9/22/2011	13.17	7.50	5.67	NM	22.12	6.82	0.22	2.371	2.03	-103.5
MW-8	10/29/2010	12.64	6.74	5.90	20.22	23.08	6.93	0.18	0.1129	NM	-101
	3/21/2011	12.64	3.26	9.38	20.20	18.69	6.50	0.12	0.0461	0.00	-106
	6/16/2011	12.64	5.96	6.68	NM	21.68	7.15	0.33	0.9190	0.00	-117
	9/22/2011	12.64	6.78	5.86	NM	23.43	7.28	0.21	1.136	1.03	-90.9
MW-9	10/29/2010	12.44	8.58	3.86	20.25	21.17	7.10	0.29	0.6523	NM	-127
	3/21/2011	12.44	8.78	3.66	20.11	18.08	7.08	0.17	0.6669	0.00	-93
	6/16/2011	12.44	8.45	3.99	NM	20.36	7.40	0.40	6.970	0.90	-128
	9/21/2011	12.44	8.88	3.56	NM	21.40	7.10	1.01	6.941	5.21	-89.4
MW-10	10/29/2010	11.49	7.66	3.83	20.25	22.94	7.32	0.25	0.6652	NM	-140
	3/21/2011	11.49	7.98	3.51	19.95	18.29	7.19	0.57	0.7225	2.78	-115
	6/16/2011	11.49	8.25	3.24	NM	21.16	7.47	0.93	7.470	18.60	-182
	9/21/2011	11.49	7.89	3.60	NM	22.84	7.18	0.98	7.159	3.11	-127.9
MW-11	10/29/2010	10.93	7.21	3.72	18.30	22.02	6.81	0.25	0.8981	NM	-64
	3/21/2011	10.93	7.73	3.20	17.94	17.55	6.84	0.39	0.9718	42.21	-55
	6/16/2011	10.93	8.09	2.84	NM	20.14	7.21	0.71	10.50	21.50	-110
	9/21/2011	10.93	7.41	3.52	NM	21.27	6.89	0.43	11.49	10.25	-78.2

Notes:
Monitoring wells MW-1 through MW-11 were surveyed on July 28, 2009.
amsl = above mean sea level
btoc = below top of casing
°C = degrees Celsius
DO = dissolved oxygen
ft = feet
mg/L = milligrams per liter
mV = millivolts
NA = not available
NM = not measured
NTU = Nephelometric turbidity units
ORP = oxidation-reduction potential
S/m = Siemens per meter
TOC = top of casing

TABLE 2
GROUNDWATER ANALYTICAL RESULTS

FORMER OAKLAND TRUCK CENTER
8099 SOUTH COLISEUM WAY
OAKLAND, CALIFORNIA 94621

			TPH DRO (EPA Method 8015B)			VOCs (EPA Method 8260)									Other Parameters				
Well ID	Date Collected	TPH Low Fraction (EPA Method 8015B) mg/L	C10-C22 mg/L	C22-C32 mg/L	C32-C40 mg/L	Acetone mg/L	1,1-Dichloroethane µg/L	1,1-Dichloroethene mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methyl tert-butyl ether mg/L	1,2,4-Trimethylbenzene mg/L	Vinyl chloride mg/L	tert-Butyl alcohol mg/L	Alkalinity (SM 2320B) mg/L	Phosphate (EPA Method 365.1) mg/L	Sulfate (EPA Method 9056) mg/L	Nitrate as Nitrogen (EPA Method 9056) mg/L	Ferrous Iron (SM 3500 Fe-) mg/L
SFRWQCB ESLs for Groundwater		0.21	0.21	0.21	0.21	1,500	47	25	590	NC	1,800	NC	3.8	NC	NC	NC	NC	NC	NC
California Department of Public Health MCLs		NC	NC	NC	NC	NC	5	6	6	NC	13	NC	0.5	NC	NC	NC	NC	1	NC
Oakland Tier I RBSLs for Ingestion of Groundwater (Commercial/ Industrial)		NC	NC	NC	NC	10,000	5	6	6	NC	13	NC	0.5	NC	NC	NC	NC	NC	NC
MW-1	10/29/2010	<0.04	**1.7 Y4**	**0.55 Y4**	0.16 Y4	<16	<0.32	<0.41	<0.34	NS	<0.63	<0.18	<0.34	NS	1,800	3.7	<0.46	<0.041	74
MW-1	3/21/2011	<0.04	**0.80 Y1**	**0.32 Y1**	<0.033 Y1	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	1,700	3.6	<0.46	<0.041	19
MW-1	6/16/2011	<0.04	**0.48 Y1**	0.070 J	<0.033	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	1,900	3.0	<0.46	<0.041	24
MW-1	9/22/2011	<0.04	**0.32 Y1**	0.12 Y1	<0.033	<11	<0.29	<0.40	<0.27	<0.36	<0.27	<0.20	<0.28	<1.5	1,600	3.7	<0.46	<0.041	24
MW-2	10/29/2010	<0.04	**1.0 Y4**	**0.32 Y4**	0.11 Y4	<16	<0.32	0.56 J	<0.34	NS	4.1	<0.18	0.37 J	NS	1,300	2.2	23	<0.041	1.1
MW-2	3/21/2011	<0.04	**0.32 Y1**	0.15 Y1	<0.033 Y1	<16	<0.32	<0.41	<0.34	<0.36	1.8	<0.18	<0.34	<1.5	960	1.6	150	<0.041	1.1
MW-2	6/16/2011	<0.04	**0.37 Y1**	0.054 J	<0.033	<16	<0.32	<0.41	<0.34	<0.36	4.0	<0.18	<0.34	<1.5	1,500	2.0	55	0.14	0.22
MW-2	9/21/2011	<0.04	0.11 Y1	<0.033	<0.033	<11	0.31 J	0.76 J	<0.27	<0.36	4.9	<0.20	**0.57 J**	<1.5	1,200	1.9	22	<0.041	0.19
MW-3	11/23/2010	<0.04	**2.0 Y4**	**0.77 Y4**	**0.21 Y4**	<16	<0.32	<0.41	<0.34	NS	<0.63	<0.18	<0.34	NS	1,200	6.2	14	<0.041	0.91
MW-3	3/21/2011	<0.04	**0.26 Y1**	0.14 Y1	<0.033 Y1	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	1,300	5.5	190	<0.041	0.83
MW-3	6/17/2011	<0.04 [<0.04]	0.20 Y1	**[0.24 Y1]**	0.078 J [0.11 Y4]	<0.033 [<0.033]	<16 [<16]	<0.32 [<0.32]	0.93 J [1.2]	<0.34 [<0.34]	<0.36 [<0.36]	<0.63 [<0.63]	<0.18 [<0.18]	<0.34 [<0.34]	<1.5 [<1.5]	1,600 [1,400]	5.2 [4.9]	280 [300]	<0.041 [<0.041]	0.43 [0.51]
MW-3	9/22/2011	<0.04	0.16 Y1	0.16 Y1	<0.033	<11	<0.29	1.2	<0.27	<0.36	<0.27	<0.20	<0.28	<1.5	1,300	4.8	240	<0.041	0.28
MW-4	10/29/2010	<0.04	**2.7 Y1**	**1.4 Y4**	**0.39 Y4**	<16	<0.32	<0.41	1.0	NS	<0.63	<0.18	<0.34	NS	810	2.4	<0.46	<0.041	39
MW-4	3/21/2011	<0.04	**0.46 Y1**	**0.28 Y1**	<0.033 Y1	<16	<0.32	<0.41	<0.34	<0.36	<0.63	0.33 J	<0.34	<1.5	540	0.94	9.2	0.11	2.9
MW-4	6/16/2011	<0.04	**0.46 Y1**	0.13 Y4	<0.033	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	790	2.0	<0.46	<0.041	30
MW-4	9/22/2011	<0.04	**2.0 Y1****	**1.4 Y4****	--**	<11	<0.29	<0.40	0.69 J	<0.36	<0.27	<0.20	<0.28	<1.5	800	2.2	<0.46	<0.041	41
MW-5	10/29/2010	<0.04	**6.4 Y1**	**2.8 Y4**	**0.63 Y4**	<16	<0.32	<0.41	<0.34	NS	**14**	<0.18	<0.34	NS	1,700	1.6	<0.46	<0.041	--
MW-5	3/21/2011	<0.04	**1.4 Y1**	**0.55 Y1**	0.089 J Y1	<16	<0.32	<0.41	<0.34	<0.36	3.9	<0.18	<0.34	<1.5	870	0.29	<0.46	<0.041	5.6
MW-5	6/17/2011	<0.04	**0.63 Y1**	0.12 Y4	<0.033	<16	<0.32	<0.41	<0.34	<0.36	10	<0.18	<0.34	<1.5	980	0.52	0.60 J	0.35	10
MW-5	9/22/2011	<0.04 [<0.04]	**0.80 Y1**	**0.38 Y1**	<0.033	<11 [<11]	<0.29 [<0.29]	<0.40 [<0.40]	<0.27 [<0.27]	<0.36 [<0.36]	12 [12]	<0.20 [<0.20]	<0.28 [<0.28]	<1.5 [<1.5]	1,400 [1,400]	0.80 [0.79]	<0.46 [<0.46]	<0.041 [0.041]	13 [14]
MW-6	10/29/2010	<0.04	**7.5 Y1**	**3.6 Y4**	**0.71 Y4**	<16	<0.32	<0.41	<0.34	NS	**18**	<0.18	<0.34	NS	1,400	3.0	<0.46	<0.041	45
MW-6	3/22/2011	<0.04 [<0.04]	**2.5 Y1 [2.5 Y1]**	**0.83 Y1 [0.88 Y1]**	0.11 Y1 [0.14 Y1]	<16 [<16]	<0.32 [<0.32]	<0.41 [<0.41]	<0.34 [<0.34]	<0.36 [<0.36]	8.3 [8.1]	<0.18 [<0.18]	<0.34 [<0.34]	2.2 J [<1.5]	1,000 [1,000]	2.1 [2.1]	<0.46 [<0.46]	<0.041 [<0.041]	39 [39]
MW-6	6/17/2011	<0.04	**1.4 Y1**	**0.25 Y4**	0.034 J	<16	<0.32	<0.41	<0.34	<0.36	**21**	<0.18	<0.34	<1.5	1,300	2.6	<0.46	<0.041	38
MW-6	9/22/2011	<0.04	**1.2 Y1**	**0.39 Y1**	<0.033	<11	<0.29	<0.40	<0.27	<0.36	**16**	<0.20	<0.28	<1.5	1,200	2.8	<0.46	<0.041	39
MW-7	10/29/2010	<0.04	**3.7 Y1**	**1.2 Y4**	**0.30 Y4**	18 J	<0.32	<0.41	<0.34	NS	2.4	<0.18	<0.34	NS	1,200	2.2	<0.46	<0.041	32
MW-7	3/21/2011	<0.04	**0.89 Y1**	**0.28 Y1**	<0.033 Y1	<16	<0.32	<0.41	<0.34	0.70 J	0.65	<0.18	<0.34	<1.5	580	1.8	<0.46	<0.041	18
MW-7	6/16/2011	<0.04	**0.70 Y1**	0.12 Y4	<0.033	<16	<0.32	<0.41	<0.34	0.87 J	1.5	<0.18	<0.34	<1.5	950	2.0	<0.46	<0.041	22
MW-7	9/22/2011	<0.04	**0.51 Y1**	0.18 Y1	<0.033	<11	<0.29	<0.40	<0.27	0.66 J	2.0	<0.20	<0.28	<1.5	1,200	1.3	<0.46	<0.041	28
MW-8	10/29/2010	<0.04	**2.1 Y1**	**0.42 Y1**	0.15 Y1	<16	<0.32	<0.41	<0.34	NS	1.7	<0.18	<0.34	NS	490	0.87	<0.46	<0.041	16
MW-8	3/21/2011	<0.04	**0.40 Y1**	0.12 Y1	<0.033 Y1	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	200	0.36	13	<0.041	5.3
MW-8	6/16/2011	<0.04	**0.39 Y1**	0.045 J	<0.033	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	430	0.84	<0.46	<0.041	9.7
MW-8	9/22/2011	<0.04	**0.29 Y1**	0.10 Y1	<0.033	<11	<0.29	<0.40	<0.27	<0.36	1.3	<0.20	<0.28	<1.5	490	0.96	<0.46	<0.041	17
MW-9	10/29/2010	<0.04	**1.0 Y1**	**0.25 Y1**	0.09 J Y1	<16	<0.32	<0.41	<0.34	NS	<0.63	<0.18	<0.34	NS	970	6.2	120	<0.041	7.9
MW-9	3/21/2011	<0.04	**0.48 Y1**	**0.22 Y1**	<0.033 Y1	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	910	5.9	140	<0.041	7.9
MW-9	6/16/2011	<0.04	**0.42 Y1**	0.059 J	<0.033	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	1,100	6.0	150	<0.041	7.4
MW-9	9/21/2011	<0.04	**0.22 Y1**	0.076 J Y1	<0.033	<11	<0.29	<0.40	<0.27	<0.36	<0.27	<0.20	<0.28	<1.5	840	6.8	160	<0.041	7.5
MW-10	10/29/2010	<0.04	**0.33 Y1**	0.034 J Y1	<0.033	<16	<0.32	<0.41	<0.34	NS	<0.63	<0.18	<0.34	NS	920	6.0	120	<0.041	8
MW-10	3/21/2011	<0.04	**0.21 Y1**	0.11 Y1	<0.033 Y1	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	820	5.0	170	<0.041	8.3
MW-10	6/16/2011	<0.04	**0.22 Y1**	0.045 J Y4	<0.033	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	1,000	5.3	180	<0.041	9.5
MW-10	9/21/2011	<0.04	**2.1 Y1**	**0.40 Y1**	<0.033	<11	<0.29	<0.40	<0.27	<0.36	<0.27	<0.20	<0.28	<1.5	880	5.1	180	<0.041	8.7
MW-11	10/29/2010	<0.04	**0.74 Y4**	**0.28 Y4**	0.097 J Y4	<16	<0.32	<0.41	<0.34	NS	<0.63	<0.18	<0.34	NS	910	5.6	180	<0.041	5.7
MW-11	3/21/2011	<0.04	0.20 Y4	0.18 Y1	<0.033 Y1	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	780	4.5	260	0.20	7.5
MW-11	6/16/2011	<0.04	0.19 Y1	0.12 Y4	<0.033	<16	<0.32	<0.41	<0.34	<0.36	<0.63	<0.18	<0.34	<1.5	930	4.6	400	<0.041	7.5
MW-11	9/21/2011	<0.04	0.10 Y1	0.10 Y1	<0.033	<11	<0.29	<0.40	<0.27	<0.36	<0.27	<0.20	<0.28	<1.5	670	4.3	510	<0.041	8.9

Notes:
Cleanup Criteria Exceedances are bolded.
[<0.04] = analytical results of duplicate sample
-- = not analyzed
Cal EPA = California Environmental Protection Agency
DRO = diesel range organics
EPA = U.S. Environmental Protection Agency
ESLs = Environmental Screening Levels
J = estimated concentration, reported above the method detection limit but below the laboratory reporting limit
MCLs = Maximum Contaminant Levels
mg/L = milligram(s) per liter
µg/L = microgram(s) per liter
NA = not analyzed
No other VOCs analyzed for were detected in any of the groundwater monitoring wells.
*Groundwater Cleanup Criteria: TPH concentrations were compared to the SFRWQCB ESLs Groundwater Screening Levels for groundwater not used for drinking water. The ESLs are representative of an expansion of the EPA PRGs (and by default, the Cal EPA California Human Health Screening Levels) and the City of Oakland Screening Levels to reflect the broader Interim Final – November 2007 (revised May 2008) scope of environmental concerns put forth in the Basin Plan.
Cleanup criteria for VOCs are based on EPA Region 9 RSLs and California Department of Public Health MCLs (May 2011).
** The DRO sample container for MW-4 was broken at the laboratory and a replacement container was not available. One of the hydrochloric acid-preserved GRO vials was used to perform the DRO analysis for MW-4.

NC = criteria not available
NS = not sampled
PRGs = Preliminary Remediation Goals
RBSLs = Risk-Based Screening Levels
RSLs = Regional Screening Levels
SFRWQCB = San Francisco Bay Regional Water Quality Control Board
SM = standard method
TPH = total petroleum hydrocarbon
VOCs = volatile organic compounds
Y1 = sample most closely matches the laboratory standard for diesel
Y4 = sample most closely matches the laboratory standard for motor oil

ARCADIS

Appendix **C**

Analytical Reports

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

Report Summary

Friday September 30, 2011

Report Number: L537481
Samples Received: 09/22/11
Client Project: B0064601.0000.00007

Description: Oakland Truck Center

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

John Hawkins , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

September 30, 2011

ESC Sample # : L537481-01

Date Received : September 22, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-2

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/21/11 13:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l		9056	09/22/11	1
Sulfate	22000	460	5000	ug/l		9056	09/22/11	1
Alkalinity	1200000	25000	100000	ug/l		2320B	09/29/11	5
Ferrous Iron	190	11.	50.	ug/l	T8	3500Fe-	09/28/11	1
Phosphorus,Total	1900	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/23/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	97.9			% Rec.		8015D/G	09/23/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	110	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	88.2			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/23/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/23/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/23/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/23/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/23/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/23/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/23/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/23/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/23/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/23/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/23/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/23/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/23/11	1
1,1-Dichloroethane	0.31	0.29	1.0	ug/l	J	8260B	09/23/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/23/11	1
1,1-Dichloroethene	0.76	0.40	1.0	ug/l	JJ5	8260B	09/23/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/23/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/23/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/23/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/23/11	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 09/30/11 10:39 Printed: 09/30/11 10:40

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

September 30, 2011

ESC Sample # : L537481-01

Date Received : September 22, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-2

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/21/11 13:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/23/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/23/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/23/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/23/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/23/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/23/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/23/11	1
Methyl tert-butyl ether	4.9	0.27	1.0	ug/l		8260B	09/23/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/23/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/23/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/23/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/23/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/23/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/23/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/23/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/23/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/23/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/23/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/23/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/23/11	1
Vinyl chloride	0.57	0.28	1.0	ug/l	J	8260B	09/23/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/23/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/23/11	1
Ethanol	U	12.	100	ug/l		8260B	09/23/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/23/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/23/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/23/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/23/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/23/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/23/11	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	09/23/11	1
Dibromofluoromethane	95.6			% Rec.		8260B	09/23/11	1
4-Bromofluorobenzene	98.9			% Rec.		8260B	09/23/11	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
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Reported: 09/30/11 10:39 Printed: 09/30/11 10:40

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

September 30, 2011

ESC Sample # : L537481-02

Date Received : September 22, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-9

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/21/11 13:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l		9056	09/22/11	1
Sulfate	160000	930	10000	ug/l		9056	09/29/11	2
Alkalinity	840000	25000	100000	ug/l		2320B	09/29/11	5
Ferrous Iron	7500	110	500	ug/l	T8	3500Fe-	09/29/11	10
Phosphorus,Total	6800	52.	200	ug/l		365.1	09/29/11	2
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/23/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	97.9			% Rec.		8015D/G	09/23/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	220	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	76.	33.	100	ug/l	JY1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	91.8			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/23/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/23/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/23/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/23/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/23/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/23/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/23/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/23/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/23/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/23/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/23/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/23/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/23/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/23/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/23/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/23/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/23/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/23/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/23/11	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
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Reported: 09/30/11 10:39 Printed: 09/30/11 10:40

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

September 30, 2011

ESC Sample # : L537481-02

Date Received : September 22, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-9

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/21/11 13:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/23/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/23/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/23/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/23/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/23/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/23/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/23/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	09/23/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/23/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/23/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/23/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/23/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/23/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/23/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/23/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/23/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/23/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/23/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/23/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/23/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/23/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/23/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/23/11	1
Ethanol	U	12.	100	ug/l		8260B	09/23/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/23/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/23/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/23/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/23/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/23/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/23/11	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	09/23/11	1
Dibromofluoromethane	94.6			% Rec.		8260B	09/23/11	1
4-Bromofluorobenzene	97.6			% Rec.		8260B	09/23/11	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

September 30, 2011

ESC Sample # : L537481-03

Date Received : September 22, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-10

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/21/11 11:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l		9056	09/22/11	1
Sulfate	180000	930	10000	ug/l		9056	09/29/11	2
Alkalinity	880000	25000	100000	ug/l		2320B	09/29/11	5
Ferrous Iron	8700	110	500	ug/l	T8	3500Fe-	09/29/11	10
Phosphorus,Total	5100	52.	200	ug/l		365.1	09/29/11	2
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/23/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.4			% Rec.		8015D/G	09/23/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	2100	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	400	33.	100	ug/l	Y1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	95.9			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/23/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/23/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/23/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/23/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/23/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/23/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/23/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/23/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/23/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/23/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/23/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/23/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/23/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/23/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/23/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/23/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/23/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/23/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/23/11	1

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

September 30, 2011

ESC Sample # : L537481-03

Date Received : September 22, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-10

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/21/11 11:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/23/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/23/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/23/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/23/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/23/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/23/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/23/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	09/23/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/23/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/23/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/23/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/23/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/23/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/23/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/23/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/23/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/23/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/23/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/23/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/23/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/23/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/23/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/23/11	1
Ethanol	U	12.	100	ug/l		8260B	09/23/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/23/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/23/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/23/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/23/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/23/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/23/11	1
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	09/23/11	1
Dibromofluoromethane	96.6			% Rec.		8260B	09/23/11	1
4-Bromofluorobenzene	95.6			% Rec.		8260B	09/23/11	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

September 30, 2011

ESC Sample # : L537481-04

Date Received : September 22, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-11

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/21/11 12:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l		9056	09/22/11	1
Sulfate	510000	4600	50000	ug/l		9056	09/29/11	10
Alkalinity	670000	9900	40000	ug/l		2320B	09/29/11	2
Ferrous Iron	8900	110	500	ug/l	T8	3500Fe-	09/29/11	10
Phosphorus,Total	4300	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/23/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.3			% Rec.		8015D/G	09/23/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	100	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	100	33.	100	ug/l	Y1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	89.3			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/23/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/23/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/23/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/23/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/23/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/23/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/23/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/23/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/23/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/23/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/23/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/23/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/23/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/23/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/23/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/23/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/23/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/23/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/23/11	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

September 30, 2011

ESC Sample # : L537481-04

Date Received : September 22, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-11

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/21/11 12:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/23/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/23/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/23/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/23/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/23/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/23/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/23/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	09/23/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/23/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/23/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/23/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/23/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/23/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/23/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/23/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/23/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/23/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/23/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/23/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/23/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/23/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/23/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/23/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/23/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/23/11	1
Ethanol	U	12.	100	ug/l		8260B	09/23/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/23/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/23/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/23/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/23/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/23/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/23/11	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	09/23/11	1
Dibromofluoromethane	96.8			% Rec.		8260B	09/23/11	1
4-Bromofluorobenzene	101.			% Rec.		8260B	09/23/11	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L537481-01	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557642	SAMP	Ferrous Iron	R1875035	T8
	WG556768	SAMP	1,1-Dichloroethane	R1870833	J
	WG556768	SAMP	1,1-Dichloroethene	R1870833	JJ5
	WG556768	SAMP	Vinyl chloride	R1870833	J
L537481-02	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	JY1
	WG557876	SAMP	Ferrous Iron	R1876052	T8
L537481-03	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	Y1
	WG557876	SAMP	Ferrous Iron	R1876052	T8
L537481-04	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	Y1
	WG557876	SAMP	Ferrous Iron	R1876052	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.
Y1	This sample most closely matches the laboratory standard for Diesel

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
09/30/11 at 10:40:34

TSR Signing Reports: 341
R5 - Desired TAT

Sample: L537481-01 Account: ARCABMI Received: 09/22/11 09:00 Due Date: 09/29/11 00:00 RPT Date: 09/30/11 10:39

Sample: L537481-02 Account: ARCABMI Received: 09/22/11 09:00 Due Date: 09/29/11 00:00 RPT Date: 09/30/11 10:39

Sample: L537481-03 Account: ARCABMI Received: 09/22/11 09:00 Due Date: 09/29/11 00:00 RPT Date: 09/30/11 10:39

Sample: L537481-04 Account: ARCABMI Received: 09/22/11 09:00 Due Date: 09/29/11 00:00 RPT Date: 09/30/11 10:39

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Tax I.D. 62-0814289

Est. 1970

ARCADIS U.S. GMC
Holly M. Burger, Debra Hagerty
10559 Citation Dr, Ste 100

Brighton, MI 48116

Quality Assurance Report
Level II

L537481

September 30, 2011

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Nitrate	< .1	mg/l			WG556647	09/22/11 07:03
Sulfate	< 5	mg/l			WG556647	09/22/11 07:03
TPH (GC/FID) Low Fraction	< .1	mg/l			WG556843	09/23/11 05:06
a,a,a-Trifluorotoluene(FID)		% Rec.	98.41	62-128	WG556843	09/23/11 05:06
TPH (GC/FID) Low Fraction	< .1	mg/l			WG556895	09/23/11 18:46
a,a,a-Trifluorotoluene(FID)		% Rec.	98.91	62-128	WG556895	09/23/11 18:46
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG556768	09/23/11 04:57
1,1,1-Trichloroethane	< .001	mg/l			WG556768	09/23/11 04:57
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG556768	09/23/11 04:57
1,1,2-Trichloroethane	< .001	mg/l			WG556768	09/23/11 04:57
1,1-Dichloroethane	< .001	mg/l			WG556768	09/23/11 04:57
1,1-Dichloroethene	< .001	mg/l			WG556768	09/23/11 04:57
1,2,3-Trichlorobenzene	< .001	mg/l			WG556768	09/23/11 04:57
1,2,4-Trichlorobenzene	< .001	mg/l			WG556768	09/23/11 04:57
1,2,4-Trimethylbenzene	< .001	mg/l			WG556768	09/23/11 04:57
1,2-Dichlorobenzene	< .001	mg/l			WG556768	09/23/11 04:57
1,2-Dichloroethane	< .001	mg/l			WG556768	09/23/11 04:57
1,2-Dichloropropane	< .001	mg/l			WG556768	09/23/11 04:57
1,3,5-Trimethylbenzene	< .001	mg/l			WG556768	09/23/11 04:57
1,3-Dichlorobenzene	< .001	mg/l			WG556768	09/23/11 04:57
1,3-Dichloropropane	< .001	mg/l			WG556768	09/23/11 04:57
1,4-Dichlorobenzene	< .001	mg/l			WG556768	09/23/11 04:57
2-Butanone (MEK)	< .01	mg/l			WG556768	09/23/11 04:57
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG556768	09/23/11 04:57
Acetone	< .05	mg/l			WG556768	09/23/11 04:57
Benzene	< .001	mg/l			WG556768	09/23/11 04:57
Bromodichloromethane	< .001	mg/l			WG556768	09/23/11 04:57
Bromoform	< .001	mg/l			WG556768	09/23/11 04:57
Bromomethane	< .005	mg/l			WG556768	09/23/11 04:57
Carbon disulfide	< .001	mg/l			WG556768	09/23/11 04:57
Carbon tetrachloride	< .001	mg/l			WG556768	09/23/11 04:57
Chlorobenzene	< .001	mg/l			WG556768	09/23/11 04:57
Chloroethane	< .005	mg/l			WG556768	09/23/11 04:57
Chloroform	< .005	mg/l			WG556768	09/23/11 04:57
cis-1,2-Dichloroethene	< .001	mg/l			WG556768	09/23/11 04:57
cis-1,3-Dichloropropene	< .001	mg/l			WG556768	09/23/11 04:57
Cyclohexane	< .001	mg/l			WG556768	09/23/11 04:57
Di-isopropyl ether	< .001	mg/l			WG556768	09/23/11 04:57
Ethanol	< .1	mg/l			WG556768	09/23/11 04:57
Ethyl tert-butyl ether	< .001	mg/l			WG556768	09/23/11 04:57
Ethylbenzene	< .001	mg/l			WG556768	09/23/11 04:57
Hexachloro-1,3-butadiene	< .001	mg/l			WG556768	09/23/11 04:57
Isopropylbenzene	< .001	mg/l			WG556768	09/23/11 04:57
Methyl tert-butyl ether	< .001	mg/l			WG556768	09/23/11 04:57
Methylene Chloride	< .005	mg/l			WG556768	09/23/11 04:57
n-Hexane	< .01	mg/l			WG556768	09/23/11 04:57
Naphthalene	< .005	mg/l			WG556768	09/23/11 04:57
Styrene	< .001	mg/l			WG556768	09/23/11 04:57
tert-Amyl Methyl Ether	< .001	mg/l			WG556768	09/23/11 04:57
tert-Butyl alcohol	< .05	mg/l			WG556768	09/23/11 04:57
Tetrachloroethene	< .001	mg/l			WG556768	09/23/11 04:57
Toluene	< .005	mg/l			WG556768	09/23/11 04:57
trans-1,2-Dichloroethene	< .001	mg/l			WG556768	09/23/11 04:57

* Performance of this Analyte is outside of established criteria.
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10559 Citation Dr, Ste 100

Brighton, MI 48116

Quality Assurance Report
Level II

L537481

September 30, 2011

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
trans-1,3-Dichloropropene	< .001	mg/l			WG556768	09/23/11 04:57
Trichloroethene	< .001	mg/l			WG556768	09/23/11 04:57
Vinyl acetate	< .01	mg/l			WG556768	09/23/11 04:57
Vinyl chloride	< .001	mg/l			WG556768	09/23/11 04:57
Xylenes, Total	< .003	mg/l			WG556768	09/23/11 04:57
4-Bromofluorobenzene		% Rec.	98.10	82-120	WG556768	09/23/11 04:57
Dibromofluoromethane		% Rec.	94.50	82-126	WG556768	09/23/11 04:57
Toluene-d8		% Rec.	99.53	92-112	WG556768	09/23/11 04:57
C10-C22 Hydrocarbons	< .1	mg/l			WG557346	09/28/11 11:22
C22-C32 Hydrocarbons	< .1	mg/l			WG557346	09/28/11 11:22
C32-C40 Hydrocarbons	< .1	mg/l			WG557346	09/28/11 11:22
o-Terphenyl		% Rec.	99.76	50-150	WG557346	09/28/11 11:22
Ferrous Iron	< .05	mg/l			WG557642	09/28/11 11:56
Alkalinity	< 20	mg/l			WG557653	09/29/11 02:25
Ferrous Iron	< .05	mg/l			WG557876	09/29/11 10:41
Phosphorus,Total	< .1	mg/l			WG557102	09/29/11 10:45
Sulfate	< 5	mg/l			WG557808	09/29/11 06:55

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Nitrate	mg/l	1.00	1.00	2.96	20	L537465-01	WG556647
Nitrate	mg/l	0	0	0	20	L537448-19	WG556647
Ferrous Iron	mg/l	1.20	1.10	7.02	20	L537259-04	WG557642
Alkalinity	mg/l	190.	190.	1.59	20	L537496-02	WG557653
Alkalinity	mg/l	1200	1200	1.65	20	L537481-01	WG557653
Ferrous Iron	mg/l	7.30	7.50	2.16	20	L537510-02	WG557876
Ferrous Iron	mg/l	7.60	7.50	1.85	20	L537481-02	WG557876
Phosphorus,Total	mg/l	0	0	0	20	L537364-01	WG557102
Phosphorus,Total	mg/l	1.50	1.50	1.34	20	L537491-03	WG557102

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Nitrate	mg/l	8	8.09	101.	90-110	WG556647
Sulfate	mg/l	40	39.9	99.8	90-110	WG556647
TPH (GC/FID) Low Fraction	mg/l	5.5	6.18	112.	70-124	WG556843

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10559 Citation Dr, Ste 100

Brighton, MI 48116

Quality Assurance Report
Level II

L537481

September 30, 2011

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
a,a,a-Trifluorotoluene(FID)				100.3	62-128	
TPH (GC/FID) Low Fraction	mg/l	5.5	6.17	112.	70-124	WG556895
a,a,a-Trifluorotoluene(FID)				100.9	62-128	WG556895
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0271	109.	77-128	WG556768
1,1,1-Trichloroethane	mg/l	.025	0.0253	101.	71-126	WG556768
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0262	105.	78-130	WG556768
1,1,2-Trichloroethane	mg/l	.025	0.0262	105.	81-121	WG556768
1,1-Dichloroethane	mg/l	.025	0.0238	95.1	73-123	WG556768
1,1-Dichloroethene	mg/l	.025	0.0272	109.	54-134	WG556768
1,2,3-Trichlorobenzene	mg/l	.025	0.0274	110.	77-130	WG556768
1,2,4-Trichlorobenzene	mg/l	.025	0.0271	109.	76-127	WG556768
1,2,4-Trimethylbenzene	mg/l	.025	0.0278	111.	77-129	WG556768
1,2-Dichlorobenzene	mg/l	.025	0.0264	105.	82-121	WG556768
1,2-Dichloroethane	mg/l	.025	0.0226	90.5	69-128	WG556768
1,2-Dichloropropane	mg/l	.025	0.0248	99.4	77-121	WG556768
1,3,5-Trimethylbenzene	mg/l	.025	0.0282	113.	78-127	WG556768
1,3-Dichlorobenzene	mg/l	.025	0.0280	112.	77-127	WG556768
1,3-Dichloropropane	mg/l	.025	0.0256	102.	78-117	WG556768
1,4-Dichlorobenzene	mg/l	.025	0.0257	103.	79-117	WG556768
2-Butanone (MEK)	mg/l	.125	0.123	98.6	58-144	WG556768
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.127	102.	58-147	WG556768
Acetone	mg/l	.125	0.125	99.6	49-153	WG556768
Benzene	mg/l	.025	0.0244	97.6	72-119	WG556768
Bromodichloromethane	mg/l	.025	0.0249	99.7	75-127	WG556768
Bromoform	mg/l	.025	0.0279	112.	61-136	WG556768
Bromomethane	mg/l	.025	0.0280	112.	42-172	WG556768
Carbon disulfide	mg/l	.025	0.0247	99.0	19-150	WG556768
Carbon tetrachloride	mg/l	.025	0.0246	98.3	63-129	WG556768
Chlorobenzene	mg/l	.025	0.0266	107.	78-123	WG556768
Chloroethane	mg/l	.025	0.0277	111.	52-164	WG556768
Chloroform	mg/l	.025	0.0242	96.9	76-122	WG556768
cis-1,2-Dichloroethene	mg/l	.025	0.0246	98.6	75-121	WG556768
cis-1,3-Dichloropropene	mg/l	.025	0.0254	102.	74-124	WG556768
Di-isopropyl ether	mg/l	.025	0.0244	97.7	66-129	WG556768
Ethylbenzene	mg/l	.025	0.0270	108.	77-124	WG556768
Hexachloro-1,3-butadiene	mg/l	.025	0.0280	112.	71-134	WG556768
Isopropylbenzene	mg/l	.025	0.0280	112.	74-126	WG556768
Methyl tert-butyl ether	mg/l	.025	0.0242	96.9	67-127	WG556768
Methylene Chloride	mg/l	.025	0.0245	98.2	67-122	WG556768
n-Hexane	mg/l	.025	0.0218	87.3	41-143	WG556768
Naphthalene	mg/l	.025	0.0254	102.	70-134	WG556768
Styrene	mg/l	.025	0.0267	107.	69-145	WG556768
Tetrachloroethene	mg/l	.025	0.0284	114.	75-121	WG556768
Toluene	mg/l	.025	0.0259	103.	75-114	WG556768
trans-1,2-Dichloroethene	mg/l	.025	0.0251	100.	63-127	WG556768
trans-1,3-Dichloropropene	mg/l	.025	0.0256	102.	69-124	WG556768
Trichloroethene	mg/l	.025	0.0273	109.	69-131	WG556768
Vinyl acetate	mg/l	.125	0.117	94.0	47-161	WG556768
Vinyl chloride	mg/l	.025	0.0277	111.	55-142	WG556768
Xylenes, Total	mg/l	.075	0.0791	106.	77-123	WG556768
4-Bromofluorobenzene				99.85	82-120	WG556768
Dibromofluoromethane				95.44	82-126	WG556768
Toluene-d8				101.0	92-112	WG556768
C10-C22 Hydrocarbons	mg/l	.75	0.752	100.	70-130	WG557346
C22-C32 Hydrocarbons	mg/l	.75	0.738	98.4	70-130	WG557346

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Brighton, MI 48116

Quality Assurance Report
Level II

L537481

September 30, 2011

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
o-Terphenyl				103.3	50-150	
Ferrous Iron	mg/l	1	0.917	91.7	85-115	WG557642
Alkalinity	mg/l	40	36.7	91.8	85-115	WG557653
Ferrous Iron	mg/l	1	0.899	89.9	85-115	WG557876
Phosphorus,Total	mg/l	1	1.01	101.	85-115	WG557102
Sulfate	mg/l	40	39.7	99.3	90-110	WG557808

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Nitrate	mg/l	8.11	8.09	101.	90-110	0.247	20	WG556647
Sulfate	mg/l	40.0	39.9	100.	90-110	0.250	20	WG556647
TPH (GC/FID) Low Fraction	mg/l	6.24	6.18	113.	70-124	0.910	20	WG556843
a,a,a-Trifluorotoluene(FID)				101.0	62-128			WG556843
TPH (GC/FID) Low Fraction	mg/l	6.31	6.17	115.	70-124	2.27	20	WG556895
a,a,a-Trifluorotoluene(FID)				101.4	62-128			WG556895
1,1,1,2-Tetrachloroethane	mg/l	0.0280	0.0271	112.	77-128	2.95	20	WG556768
1,1,1-Trichloroethane	mg/l	0.0251	0.0253	100.	71-126	0.590	20	WG556768
1,1,2,2-Tetrachloroethane	mg/l	0.0257	0.0262	103.	78-130	1.94	20	WG556768
1,1,2-Trichloroethane	mg/l	0.0265	0.0262	106.	81-121	1.12	20	WG556768
1,1-Dichloroethane	mg/l	0.0240	0.0238	96.0	73-123	0.820	20	WG556768
1,1-Dichloroethene	mg/l	0.0275	0.0272	110.	54-134	1.05	20	WG556768
1,2,3-Trichlorobenzene	mg/l	0.0256	0.0274	102.	77-130	6.64	20	WG556768
1,2,4-Trichlorobenzene	mg/l	0.0267	0.0271	107.	76-127	1.76	20	WG556768
1,2,4-Trimethylbenzene	mg/l	0.0285	0.0278	114.	77-129	2.44	20	WG556768
1,2-Dichlorobenzene	mg/l	0.0264	0.0264	106.	82-121	0.170	20	WG556768
1,2-Dichloroethane	mg/l	0.0225	0.0226	90.0	69-128	0.670	20	WG556768
1,2-Dichloropropane	mg/l	0.0251	0.0248	100.	77-121	0.950	20	WG556768
1,3,5-Trimethylbenzene	mg/l	0.0289	0.0282	116.	78-127	2.58	20	WG556768
1,3-Dichlorobenzene	mg/l	0.0290	0.0280	116.	77-127	3.45	20	WG556768
1,3-Dichloropropane	mg/l	0.0251	0.0256	100.	78-117	1.97	20	WG556768
1,4-Dichlorobenzene	mg/l	0.0257	0.0257	103.	79-117	0.250	20	WG556768
2-Butanone (MEK)	mg/l	0.121	0.123	96.0	58-144	2.09	20	WG556768
4-Methyl-2-pentanone (MIBK)	mg/l	0.121	0.127	97.0	58-147	4.77	20	WG556768
Acetone	mg/l	0.119	0.125	95.0	49-153	4.68	21	WG556768
Benzene	mg/l	0.0247	0.0244	99.0	72-119	1.44	20	WG556768
Bromodichloromethane	mg/l	0.0249	0.0249	100.	75-127	0.100	20	WG556768
Bromoform	mg/l	0.0280	0.0279	112.	61-136	0.450	20	WG556768
Bromomethane	mg/l	0.0288	0.0280	115.	42-172	2.71	20	WG556768
Carbon disulfide	mg/l	0.0241	0.0247	96.0	19-150	2.48	20	WG556768
Carbon tetrachloride	mg/l	0.0253	0.0246	101.	63-129	2.84	20	WG556768
Chlorobenzene	mg/l	0.0277	0.0266	111.	78-123	3.98	20	WG556768
Chloroethane	mg/l	0.0283	0.0277	113.	52-164	2.19	20	WG556768
Chloroform	mg/l	0.0247	0.0242	99.0	76-122	1.96	20	WG556768
cis-1,2-Dichloroethene	mg/l	0.0245	0.0246	98.0	75-121	0.470	20	WG556768

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L537481

September 30, 2011

Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	RPD	Limit	Batch
cis-1,3-Dichloropropene	mg/l	0.0253	0.0254	101.	74-124	0.370	20	WG556768
Di-isopropyl ether	mg/l	0.0242	0.0244	97.0	66-129	0.720	20	WG556768
Ethylbenzene	mg/l	0.0286	0.0270	114.	77-124	5.87	20	WG556768
Hexachloro-1,3-butadiene	mg/l	0.0285	0.0280	114.	71-134	1.56	20	WG556768
Isopropylbenzene	mg/l	0.0288	0.0280	115.	74-126	2.81	20	WG556768
Methyl tert-butyl ether	mg/l	0.0244	0.0242	98.0	67-127	0.620	20	WG556768
Methylene Chloride	mg/l	0.0241	0.0245	96.0	67-122	1.66	20	WG556768
n-Hexane	mg/l	0.0224	0.0218	90.0	41-143	2.64	20	WG556768
Naphthalene	mg/l	0.0246	0.0254	98.0	70-134	3.12	20	WG556768
Styrene	mg/l	0.0276	0.0267	110.	69-145	3.30	20	WG556768
Tetrachloroethene	mg/l	0.0301	0.0284	120.	75-121	5.76	20	WG556768
Toluene	mg/l	0.0258	0.0259	103.	75-114	0.150	20	WG556768
trans-1,2-Dichloroethene	mg/l	0.0245	0.0251	98.0	63-127	2.55	20	WG556768
trans-1,3-Dichloropropene	mg/l	0.0250	0.0256	100.	69-124	2.22	20	WG556768
Trichloroethene	mg/l	0.0278	0.0273	111.	69-131	1.94	20	WG556768
Vinyl acetate	mg/l	0.113	0.117	90.0	47-161	4.19	20	WG556768
Vinyl chloride	mg/l	0.0272	0.0277	109.	55-142	1.92	20	WG556768
Xylenes, Total	mg/l	0.0835	0.0791	111.	77-123	5.41	20	WG556768
4-Bromofluorobenzene				101.1	82-120			WG556768
Dibromofluoromethane				95.85	82-126			WG556768
Toluene-d8				100.1	92-112			WG556768
C10-C22 Hydrocarbons	mg/l	0.729	0.752	97.0	70-130	3.20	20	WG557346
C22-C32 Hydrocarbons	mg/l	0.707	0.738	94.0	70-130	4.21	20	WG557346
o-Terphenyl				96.16	50-150			WG557346
Ferrous Iron	mg/l	0.888	0.917	89.0	85-115	3.21	20	WG557642
Alkalinity	mg/l	37.0	36.7	92.0	85-115	0.814	20	WG557653
Ferrous Iron	mg/l	0.955	0.899	96.0	85-115	6.04	20	WG557876
Phosphorus,Total	mg/l	1.01	1.01	101.	85-115	0	20	WG557102

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Nitrate	mg/l	4.92	0.0450	5	97.5	80-120	L537454-01	WG556647
TPH (GC/FID) Low Fraction	mg/l	5.59	0	5.5	102.	55-109	L536655-01	WG556843
a,a,a-Trifluorotoluene(FID)					103.3	62-128		WG556843
TPH (GC/FID) Low Fraction	mg/l	6.06	0	5.5	110.*	55-109	L537636-08	WG556895
a,a,a-Trifluorotoluene(FID)					99.54	62-128		WG556895
1,1,1,2-Tetrachloroethane	mg/l	0.0267	0	.025	107.	71-130	L537481-01	WG556768
1,1,1-Trichloroethane	mg/l	0.0286	0	.025	114.	58-137	L537481-01	WG556768
1,1,2,2-Tetrachloroethane	mg/l	0.0247	0	.025	98.8	64-149	L537481-01	WG556768
1,1,2-Trichloroethane	mg/l	0.0257	0	.025	103.	73-128	L537481-01	WG556768
1,1-Dichloroethane	mg/l	0.0265	0.000310	.025	105.	58-133	L537481-01	WG556768
1,1-Dichloroethene	mg/l	0.0397	0.000760	.025	156.*	32-152	L537481-01	WG556768

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Brighton, MI 48116

Quality Assurance Report
Level II

L537481

September 30, 2011

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,2,3-Trichlorobenzene	mg/l	0.0262	0	.025	105.	68-135	L537481-01	WG556768
1,2,4-Trichlorobenzene	mg/l	0.0278	0	.025	111.	67-133	L537481-01	WG556768
1,2,4-Trimethylbenzene	mg/l	0.0270	0	.025	108.	62-141	L537481-01	WG556768
1,2-Dichlorobenzene	mg/l	0.0256	0	.025	102.	75-125	L537481-01	WG556768
1,2-Dichloroethane	mg/l	0.0228	0	.025	91.0	59-135	L537481-01	WG556768
1,2-Dichloropropane	mg/l	0.0249	0	.025	99.4	68-126	L537481-01	WG556768
1,3,5-Trimethylbenzene	mg/l	0.0276	0	.025	110.	67-136	L537481-01	WG556768
1,3-Dichlorobenzene	mg/l	0.0280	0	.025	112.	69-131	L537481-01	WG556768
1,3-Dichloropropane	mg/l	0.0249	0	.025	99.6	70-122	L537481-01	WG556768
1,4-Dichlorobenzene	mg/l	0.0259	0	.025	104.	70-123	L537481-01	WG556768
2-Butanone (MEK)	mg/l	0.128	0	.125	102.	51-149	L537481-01	WG556768
4-Methyl-2-pentanone (MIBK)	mg/l	0.123	0	.125	98.5	53-154	L537481-01	WG556768
Acetone	mg/l	0.126	0	.125	100.	34-146	L537481-01	WG556768
Benzene	mg/l	0.0263	0	.025	105.	51-134	L537481-01	WG556768
Bromodichloromethane	mg/l	0.0238	0	.025	95.2	67-132	L537481-01	WG556768
Bromoform	mg/l	0.0281	0	.025	112.	59-137	L537481-01	WG556768
Bromomethane	mg/l	0.0295	0	.025	118.	23-177	L537481-01	WG556768
Carbon disulfide	mg/l	0.0341	0	.025	136.	10-165	L537481-01	WG556768
Carbon tetrachloride	mg/l	0.0278	0	.025	111.	49-140	L537481-01	WG556768
Chlorobenzene	mg/l	0.0265	0	.025	106.	69-126	L537481-01	WG556768
Chloroethane	mg/l	0.0278	0	.025	111.	32-177	L537481-01	WG556768
Chloroform	mg/l	0.0259	0	.025	103.	64-130	L537481-01	WG556768
cis-1,2-Dichloroethene	mg/l	0.0263	0	.025	105.	54-137	L537481-01	WG556768
cis-1,3-Dichloropropene	mg/l	0.0253	0	.025	101.	63-127	L537481-01	WG556768
Di-isopropyl ether	mg/l	0.0256	0	.025	102.	58-133	L537481-01	WG556768
Ethylbenzene	mg/l	0.0275	0	.025	110.	64-135	L537481-01	WG556768
Hexachloro-1,3-butadiene	mg/l	0.0269	0	.025	108.	64-140	L537481-01	WG556768
Isopropylbenzene	mg/l	0.0302	0	.025	121.	62-134	L537481-01	WG556768
Methyl tert-butyl ether	mg/l	0.0309	0.00490	.025	104.	55-136	L537481-01	WG556768
Methylene Chloride	mg/l	0.0272	0	.025	109.	52-130	L537481-01	WG556768
n-Hexane	mg/l	0.0251	0	.025	100.	16-164	L537481-01	WG556768
Naphthalene	mg/l	0.0249	0	.025	99.6	65-140	L537481-01	WG556768
Styrene	mg/l	0.0199	0	.025	79.5	58-152	L537481-01	WG556768
Tetrachloroethene	mg/l	0.0298	0	.025	119.	56-139	L537481-01	WG556768
Toluene	mg/l	0.0265	0	.025	106.	61-126	L537481-01	WG556768
trans-1,2-Dichloroethene	mg/l	0.0291	0	.025	116.	45-137	L537481-01	WG556768
trans-1,3-Dichloropropene	mg/l	0.0239	0	.025	95.6	59-130	L537481-01	WG556768
Trichloroethene	mg/l	0.0278	0	.025	111.	40-155	L537481-01	WG556768
Vinyl acetate	mg/l	0.121	0	.125	96.5	36-186	L537481-01	WG556768
Vinyl chloride	mg/l	0.0279	0.000570	.025	109.	32-159	L537481-01	WG556768
Xylenes, Total	mg/l	0.0811	0	.075	108.	64-133	L537481-01	WG556768
4-Bromofluorobenzene					98.70	82-120		WG556768
Dibromofluoromethane					96.73	82-126		WG556768
Toluene-d8					98.83	92-112		WG556768
Ferrous Iron	mg/l	1.83	0.190	1.5	109.	80-120	L537481-01	WG557642
Alkalinity	mg/l	360.	200.	200	80.0	80-120	L537496-03	WG557653
Ferrous Iron	mg/l	1.59	0.0870	1.5	100.	80-120	L537506-09	WG557876
Phosphorus,Total	mg/l	22.3	16.0	2.5	252.*	80-120	L536923-02	WG557102
Sulfate	mg/l	74.6	26.0	50	97.2	80-120	L536227-12	WG557808

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10559 Citation Dr, Ste 100

Brighton, MI 48116

Quality Assurance Report
Level II

L537481

September 30, 2011

Analyte	Units	Matrix Spike MSD	Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Nitrate	mg/l	5.20	4.92	103.	80-120	5.53	20	L537454-01	WG556647
TPH (GC/FID) Low Fraction	mg/l	5.36	5.59	97.4	55-109	4.22	20	L536655-01	WG556843
a,a,a-Trifluorotoluene(FID)				103.2	62-128				WG556843
TPH (GC/FID) Low Fraction	mg/l	6.48	6.06	118.*	55-109	6.73	20	L537636-08	WG556895
a,a,a-Trifluorotoluene(FID)				98.88	62-128				WG556895
1,1,1,2-Tetrachloroethane	mg/l	0.0256	0.0267	102.	71-130	4.40	20	L537481-01	WG556768
1,1,1-Trichloroethane	mg/l	0.0266	0.0286	106.	58-137	6.96	20	L537481-01	WG556768
1,1,2,2-Tetrachloroethane	mg/l	0.0249	0.0247	99.6	64-149	0.860	20	L537481-01	WG556768
1,1,2-Trichloroethane	mg/l	0.0253	0.0257	101.	73-128	1.71	20	L537481-01	WG556768
1,1-Dichloroethane	mg/l	0.0264	0.0265	104.	58-133	0.460	20	L537481-01	WG556768
1,1-Dichloroethene	mg/l	0.0367	0.0397	144.	32-152	7.82	20	L537481-01	WG556768
1,2,3-Trichlorobenzene	mg/l	0.0266	0.0262	106.	68-135	1.44	20	L537481-01	WG556768
1,2,4-Trichlorobenzene	mg/l	0.0293	0.0278	117.	67-133	5.07	20	L537481-01	WG556768
1,2,4-Trimethylbenzene	mg/l	0.0257	0.0270	103.	62-141	4.79	20	L537481-01	WG556768
1,2-Dichlorobenzene	mg/l	0.0251	0.0256	100.	75-125	1.93	20	L537481-01	WG556768
1,2-Dichloroethane	mg/l	0.0230	0.0228	91.8	59-135	0.860	20	L537481-01	WG556768
1,2-Dichloropropane	mg/l	0.0242	0.0249	96.6	68-126	2.82	20	L537481-01	WG556768
1,3,5-Trimethylbenzene	mg/l	0.0263	0.0276	105.	67-136	5.02	20	L537481-01	WG556768
1,3-Dichlorobenzene	mg/l	0.0284	0.0280	114.	69-131	1.33	20	L537481-01	WG556768
1,3-Dichloropropane	mg/l	0.0243	0.0249	97.0	70-122	2.59	20	L537481-01	WG556768
1,4-Dichlorobenzene	mg/l	0.0252	0.0259	101.	70-123	2.68	20	L537481-01	WG556768
2-Butanone (MEK)	mg/l	0.122	0.128	97.8	51-149	4.17	22	L537481-01	WG556768
4-Methyl-2-pentanone (MIBK)	mg/l	0.125	0.123	99.8	53-154	1.32	21	L537481-01	WG556768
Acetone	mg/l	0.119	0.126	95.2	34-146	5.39	22	L537481-01	WG556768
Benzene	mg/l	0.0254	0.0263	102.	51-134	3.18	20	L537481-01	WG556768
Bromodichloromethane	mg/l	0.0236	0.0238	94.6	67-132	0.660	20	L537481-01	WG556768
Bromoform	mg/l	0.0268	0.0281	107.	59-137	4.64	20	L537481-01	WG556768
Bromomethane	mg/l	0.0278	0.0295	111.	23-177	5.77	21	L537481-01	WG556768
Carbon disulfide	mg/l	0.0316	0.0341	126.	10-165	7.74	22	L537481-01	WG556768
Carbon tetrachloride	mg/l	0.0262	0.0278	105.	49-140	5.68	20	L537481-01	WG556768
Chlorobenzene	mg/l	0.0255	0.0265	102.	69-126	3.80	20	L537481-01	WG556768
Chloroethane	mg/l	0.0261	0.0278	104.	32-177	6.21	21	L537481-01	WG556768
Chloroform	mg/l	0.0250	0.0259	100.	64-130	3.25	20	L537481-01	WG556768
cis-1,2-Dichloroethene	mg/l	0.0257	0.0263	103.	54-137	2.53	20	L537481-01	WG556768
cis-1,3-Dichloropropene	mg/l	0.0245	0.0253	98.2	63-127	3.05	20	L537481-01	WG556768
Di-isopropyl ether	mg/l	0.0250	0.0256	99.9	58-133	2.63	20	L537481-01	WG556768
Ethylbenzene	mg/l	0.0261	0.0275	104.	64-135	5.45	20	L537481-01	WG556768
Hexachloro-1,3-butadiene	mg/l	0.0283	0.0269	113.	64-140	5.20	20	L537481-01	WG556768
Isopropylbenzene	mg/l	0.0285	0.0302	114.	62-134	5.91	20	L537481-01	WG556768
Methyl tert-butyl ether	mg/l	0.0315	0.0309	106.	55-136	2.02	20	L537481-01	WG556768
Methylene Chloride	mg/l	0.0262	0.0272	105.	52-130	3.77	20	L537481-01	WG556768
n-Hexane	mg/l	0.0241	0.0251	96.6	16-164	3.79	20	L537481-01	WG556768
Naphthalene	mg/l	0.0256	0.0249	102.	65-140	2.71	20	L537481-01	WG556768
Styrene	mg/l	0.0192	0.0199	76.6	58-152	3.69	20	L537481-01	WG556768
Tetrachloroethene	mg/l	0.0275	0.0298	110.	56-139	7.93	20	L537481-01	WG556768
Toluene	mg/l	0.0255	0.0265	102.	61-126	3.88	20	L537481-01	WG556768
trans-1,2-Dichloroethene	mg/l	0.0272	0.0291	109.	45-137	6.60	20	L537481-01	WG556768
trans-1,3-Dichloropropene	mg/l	0.0243	0.0239	97.3	59-130	1.75	20	L537481-01	WG556768
Trichloroethene	mg/l	0.0270	0.0278	108.	40-155	2.96	20	L537481-01	WG556768
Vinyl acetate	mg/l	0.121	0.121	96.4	36-186	0.0600	20	L537481-01	WG556768
Vinyl chloride	mg/l	0.0264	0.0279	103.	32-159	5.52	21	L537481-01	WG556768
Xylenes, Total	mg/l	0.0761	0.0811	101.	64-133	6.35	20	L537481-01	WG556768
4-Bromofluorobenzene				98.57	82-120				WG556768

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Quality Assurance Report
Level II

L537481

September 30, 2011

Analyte	Units	Matrix Spike MSD	Matrix Spike Ref	Matrix Spike %Rec	Limit	Duplicate RPD	Limit	Ref Samp	Batch
Dibromofluoromethane				97.20	82-126				
Toluene-d8				99.94	92-112				
Ferrous Iron	mg/l	1.69	1.83	100.	80-120	7.95	20	L537481-01	WG557642
Alkalinity	mg/l	362.	360.	81.0	80-120	0.554	20	L537496-03	WG557653
Ferrous Iron	mg/l	1.66	1.59	105.	80-120	4.31	20	L537506-09	WG557876
Phosphorus,Total	mg/l	21.4	22.3	216.*	80-120	4.12	20	L536923-02	WG557102
Sulfate	mg/l	74.8	74.6	97.6	80-120	0.268	20	L536227-12	WG557808

Batch number /Run number / Sample number cross reference

WG556647: R1868978: L537481-01 02 03 04
WG556843: R1869652: L537481-01 02 03
WG556895: R1870112: L537481-04
WG556768: R1870833: L537481-01 02 03 04
WG557346: R1874773: L537481-01 02 03 04
WG557642: R1875035: L537481-01
WG557653: R1875452: L537481-01 02 03 04
WG557876: R1876052: L537481-02 03 04
WG557102: R1876412: L537481-01 02 03 04
WG557808: R1877972: L537481-02 03 04

* * Calculations are performed prior to rounding of reported values.
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L537481

September 30, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

ARCADIS U.S. GMC

10559 Citation Dr. Ste 100
Brighton,MI 48116

Billing information:

Brad Saunders
10559 Citation Dr, Ste 100

Brighton,MI 48116

Analysis/Container/Preservative

D122

Chain of Custody
Page 1 of 1

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Report to: Holly M. Burger

Email: jhawkins@envsci.com

Project Description: Oakland Truck Center

City/State Collected: Oakland, CA

Phone: (810) 225-1904
FAX: (810) 229-8837

Client Project #: B0064601.0000.00007

Lab Project #: ARCABMI-OAKLANDCAT

Collected by (print): Karl Johnson

Site/Facility ID#: 8099 S. COLISEUM WA

P.O.#: B0064601.0000

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed: 10 day TAT

Email? ___No X Yes
FAX? ___No ___Yes

Acctnum: ARCABMI (lab use only)
Template/Prelogin: T70272/ P349991
Cooler #: 3HR
Shipped Via: FedEX Saver

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	ALK 500mlHDPE-NoPres	DROCAER 1 Amb-Acid HCl	FERUSFE 250mlAmb-HCl	GRO 40mlAmb HCl	PT 250mlHDPE-H2SO4	V8260OXY 40mlAmb-HCl	WetChem 125mlHDPE-NoPres	Remarks/Contaminant	Sample # (lab only)
MW-2		GW		9/21/11	1300	9	X	X	X	X	X	X	X		L537481-01
MW-9		GW			1345	9	X	X	X	X	X	X	X		02
MW-10		GW			1120	9	X	X	X	X	X	X	X		03
MW-11		GW			1205	9	X	X	X	X	X	X	X		04
Trip Blank - ON HOLD		W			—	1									

*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

8736 4508 1003

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	9/21/11	1500	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ ____
Temp: 3.1 °C
Bottles Received: 37
Date: 9/22/11
Time: 0900

Condition: OK (lab use only)
COC Seal Intact: ___ Y ___ N ___ NA ✓
pH Checked: <2
NCF:

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Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

Report Summary

Monday October 03, 2011

Report Number: L537780
Samples Received: 09/23/11
Client Project: B0064601.0000.00007

Description: Oakland Truck Center

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

John Hawkins , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

Case Narrative

Monday October 03, 2011

Report Number: L537780
Samples Received: 09/23/11
Client Project: B0064601.0000.00007

Description: Oakland Truck Center

Sample Receiving

The samples were received in proper containers and in good condition.

The samples were received on ice (less than or equal to 4 degrees centigrade), in properly preserved containers and in good condition.

Data

All samples were treated according to method protocol, no other treatment was necessary.

All Samples were extracted and analyzed within appropriate holding times.

QA/QC was within acceptable ranges. See Qualifiers where applicable.

I certify that, for other than the conditions detailed herein, this data package is in compliance with the terms and conditions of this Agreement, both technically and for completeness. Release of this data has been authorized by the Laboratory Manager or his designee.

Other Comments

MW-4 DROCAER (L537780-06) container Broke, do not have replacement container available for analysis. Used GRO HCL preserved vial and performed DROCAER LVI on this sample. JVH

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-01

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : DUP

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l	Q	9056	09/24/11	1
Sulfate	U	460	5000	ug/l		9056	09/24/11	1
Alkalinity	1400000	50000	200000	ug/l		2320B	09/28/11	10
Ferrous Iron	14000	280	1300	ug/l	T8	3500Fe-	09/28/11	25
Phosphorus,Total	790	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/24/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.6			% Rec.		8015D/G	09/24/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/24/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/24/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/24/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/24/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/24/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/24/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/24/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/24/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/24/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/24/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/24/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/24/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/24/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/24/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/24/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/24/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/24/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/24/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/24/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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Reported: 09/30/11 17:14 Revised: 10/03/11 10:30

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-01

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : DUP

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/24/11	1
Methyl tert-butyl ether	12.	0.27	1.0	ug/l		8260B	09/24/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/24/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/24/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/24/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/24/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/24/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/24/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/24/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/24/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/24/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/24/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/24/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/24/11	1
Ethanol	U	12.	100	ug/l		8260B	09/24/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/24/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/24/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/24/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/24/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/24/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/24/11	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	09/24/11	1
Dibromofluoromethane	115.			% Rec.		8260B	09/24/11	1
4-Bromofluorobenzene	94.0			% Rec.		8260B	09/24/11	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-03

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-7

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 11:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l		9056	09/24/11	1
Sulfate	U	460	5000	ug/l		9056	09/24/11	1
Alkalinity	1200000	50000	200000	ug/l		2320B	09/28/11	10
Ferrous Iron	28000	280	1300	ug/l	T8	3500Fe-	09/28/11	25
Phosphorus,Total	1300	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/24/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.3			% Rec.		8015D/G	09/24/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	510	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	180	33.	100	ug/l	Y1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	83.9			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/24/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/24/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/24/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/24/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/24/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/24/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/24/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/24/11	1
Cyclohexane	0.66	0.36	1.0	ug/l	J	8260B	09/24/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/24/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/24/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/24/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/24/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-03

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-7

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 11:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/24/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/24/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/24/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/24/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/24/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/24/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/24/11	1
Methyl tert-butyl ether	2.0	0.27	1.0	ug/l		8260B	09/24/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/24/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/24/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/24/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/24/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/24/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/24/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/24/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/24/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/24/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/24/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/24/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/24/11	1
Ethanol	U	12.	100	ug/l		8260B	09/24/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/24/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/24/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/24/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/24/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/24/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/24/11	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	09/24/11	1
Dibromofluoromethane	111.			% Rec.		8260B	09/24/11	1
4-Bromofluorobenzene	95.0			% Rec.		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
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Reported: 09/30/11 17:14 Revised: 10/03/11 10:30

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-04

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-8

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 11:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l		9056	09/24/11	1
Sulfate	U	460	5000	ug/l		9056	09/24/11	1
Alkalinity	490000	5000	20000	ug/l		2320B	09/28/11	1
Ferrous Iron	17000	280	1300	ug/l	T8	3500Fe-	09/28/11	25
Phosphorus,Total	960	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/24/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.6			% Rec.		8015D/G	09/24/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	290	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	100	33.	100	ug/l	Y1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	86.2			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/24/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/24/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/24/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/24/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/24/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/24/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/24/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/24/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/24/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/24/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/24/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/24/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/24/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-04

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-8

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 11:05

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/24/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/24/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/24/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/24/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/24/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/24/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/24/11	1
Methyl tert-butyl ether	1.3	0.27	1.0	ug/l		8260B	09/24/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/24/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/24/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/24/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/24/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/24/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/24/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/24/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/24/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/24/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/24/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/24/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/24/11	1
Ethanol	U	12.	100	ug/l		8260B	09/24/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/24/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/24/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/24/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/24/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/24/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/24/11	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	09/24/11	1
Dibromofluoromethane	117.			% Rec.		8260B	09/24/11	1
4-Bromofluorobenzene	88.1			% Rec.		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-05

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-1

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 09:50

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l	Q	9056	09/24/11	1
Sulfate	U	460	5000	ug/l		9056	09/24/11	1
Alkalinity	1600000	50000	200000	ug/l		2320B	09/28/11	10
Ferrous Iron	24000	280	1300	ug/l	T8	3500Fe-	09/28/11	25
Phosphorus,Total	3700	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/24/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.9			% Rec.		8015D/G	09/24/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	320	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	120	33.	100	ug/l	Y1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	70.8			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/24/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/24/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/24/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/24/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/24/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/24/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/24/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/24/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/24/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/24/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/24/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/24/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/24/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/24/11	1

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-05

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-1

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 09:50

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/24/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/24/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/24/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/24/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/24/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/24/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/24/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	09/24/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/24/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/24/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/24/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/24/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/24/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/24/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/24/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/24/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/24/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/24/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/24/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/24/11	1
Ethanol	U	12.	100	ug/l		8260B	09/24/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/24/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/24/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/24/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/24/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/24/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/24/11	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	09/24/11	1
Dibromofluoromethane	115.			% Rec.		8260B	09/24/11	1
4-Bromofluorobenzene	95.3			% Rec.		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-06

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-4

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 09:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l	Q	9056	09/24/11	1
Sulfate	U	460	5000	ug/l		9056	09/24/11	1
Alkalinity	800000	25000	100000	ug/l		2320B	09/28/11	5
Ferrous Iron	41000	280	1300	ug/l	T8	3500Fe-	09/28/11	25
Phosphorus,Total	2200	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/24/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.3			% Rec.		8015D/G	09/24/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/24/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/24/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/24/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/24/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/24/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/24/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/24/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/24/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/24/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/24/11	1
cis-1,2-Dichloroethene	0.69	0.27	1.	ug/l	J	8260B	09/24/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/24/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/24/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/24/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/24/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/24/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/24/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/24/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/24/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/24/11	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-06

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-4

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 09:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/24/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	09/24/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/24/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/24/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/24/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/24/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/24/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/24/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/24/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/24/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/24/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/24/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/24/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/24/11	1
Ethanol	U	12.	100	ug/l		8260B	09/24/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/24/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/24/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/24/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/24/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/24/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/24/11	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	09/24/11	1
Dibromofluoromethane	114.			% Rec.		8260B	09/24/11	1
4-Bromofluorobenzene	91.8			% Rec.		8260B	09/24/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	2000	33.	100	ug/l	Y1	3511/80	09/30/11	1
C22-C32 Hydrocarbons	1400	33.	100	ug/l	Y4	3511/80	09/30/11	1
Surrogate Recovery								
o-Terphenyl	113.			% Rec.		3511/80	09/30/11	1

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RDL = Reported Detection Limit = LOQ = PQL = EQL
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-07

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-3

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 08:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l	Q	9056	09/24/11	1
Sulfate	240000	2300	25000	ug/l		9056	09/28/11	5
Alkalinity	1300000	50000	200000	ug/l		2320B	09/28/11	10
Ferrous Iron	280	11.	50.	ug/l	T8	3500Fe-	09/30/11	1
Phosphorus,Total	4800	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/24/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	98.8			% Rec.		8015D/G	09/24/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	160	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	160	33.	100	ug/l	Y1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	94.8			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/24/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/24/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/24/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/24/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/24/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/24/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/24/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/24/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/24/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethene	1.2	0.40	1.0	ug/l		8260B	09/24/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/24/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/24/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/24/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-07

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-3

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 08:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/24/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/24/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/24/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/24/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/24/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/24/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/24/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	09/24/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/24/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/24/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/24/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/24/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/24/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/24/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/24/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/24/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/24/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/24/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/24/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/24/11	1
Ethanol	U	12.	100	ug/l		8260B	09/24/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/24/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/24/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/24/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/24/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/24/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/24/11	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	09/24/11	1
Dibromofluoromethane	114.			% Rec.		8260B	09/24/11	1
4-Bromofluorobenzene	95.2			% Rec.		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
RDL = Reported Detection Limit = LOQ = PQL = EQL
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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-08

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-5

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 12:35

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l		9056	09/24/11	1
Sulfate	U	460	5000	ug/l		9056	09/24/11	1
Alkalinity	1400000	50000	200000	ug/l		2320B	09/28/11	10
Ferrous Iron	13000	280	1300	ug/l	T8	3500Fe-	09/28/11	25
Phosphorus,Total	800	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/24/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.3			% Rec.		8015D/G	09/24/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	800	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	380	33.	100	ug/l	Y1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	91.5			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/24/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/24/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/24/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/24/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/24/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/24/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/24/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/24/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/24/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/24/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/24/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/24/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/24/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/24/11	1

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-08

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-5

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 12:35

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/24/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/24/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/24/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/24/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/24/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/24/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/24/11	1
Methyl tert-butyl ether	12.	0.27	1.0	ug/l		8260B	09/24/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/24/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/24/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/24/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/24/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/24/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/24/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/24/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/24/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/24/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/24/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/24/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/24/11	1
Ethanol	U	12.	100	ug/l		8260B	09/24/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/24/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/24/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/24/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/24/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/24/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/24/11	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	09/24/11	1
Dibromofluoromethane	112.			% Rec.		8260B	09/24/11	1
4-Bromofluorobenzene	92.5			% Rec.		8260B	09/24/11	1

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REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-09

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-6

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 13:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Nitrate	U	41.	100	ug/l		9056	09/24/11	1
Sulfate	U	460	5000	ug/l		9056	09/24/11	1
Alkalinity	1200000	50000	200000	ug/l		2320B	09/28/11	10
Ferrous Iron	39000	280	1300	ug/l	T8	3500Fe-	09/28/11	25
Phosphorus,Total	2800	26.	100	ug/l		365.1	09/29/11	1
TPH (GC/FID) Low Fraction	U	40.	100	ug/l		8015D/G	09/24/11	1
Surrogate Recovery-%								
a,a,a-Trifluorotoluene(FID)	99.4			% Rec.		8015D/G	09/24/11	1
Diesel Range Organics California								
C10-C22 Hydrocarbons	1200	9.7	100	ug/l	Y1	8015	09/28/11	1
C22-C32 Hydrocarbons	390	33.	100	ug/l	Y1	8015	09/28/11	1
C32-C40 Hydrocarbons	U	33.	100	ug/l		8015	09/28/11	1
Surrogate Recovery								
o-Terphenyl	89.8			% Rec.		8015	09/28/11	1
Oxygenates								
Acetone	U	11.	50.	ug/l		8260B	09/24/11	1
Benzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	09/24/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	09/24/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	09/24/11	1
Carbon disulfide	U	0.22	1.0	ug/l		8260B	09/24/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	09/24/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	09/24/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	09/24/11	1
Cyclohexane	U	0.36	1.0	ug/l		8260B	09/24/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	09/24/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	09/24/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	09/24/11	1
cis-1,2-Dichloroethene	U	0.27	1.	ug/l		8260B	09/24/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	09/24/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	09/24/11	1
cis-1,3-Dichloropropene	U	0.23	1.	ug/l		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 09/30/11 17:14 Revised: 10/03/11 10:30

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Est. 1970

REPORT OF ANALYSIS

Holly M. Burger, Debra Hagerty
ARCADIS U.S. GMC
10559 Citation Dr, Ste 100
Brighton, MI 48116

October 03, 2011

ESC Sample # : L537780-09

Date Received : September 23, 2011
Description : Oakland Truck Center

Site ID : 8099 S. COLISEUM WAY O

Sample ID : MW-6

Project # : B0064601.0000.00007

Collected By : Karl Johnson
Collection Date : 09/22/11 13:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	09/24/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	09/24/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	09/24/11	1
n-Hexane	U	0.59	10.	ug/l		8260B	09/24/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	09/24/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	09/24/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	09/24/11	1
Methyl tert-butyl ether	16.	0.27	1.0	ug/l		8260B	09/24/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	09/24/11	1
Styrene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	09/24/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	09/24/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	09/24/11	1
Toluene	U	0.16	5.0	ug/l		8260B	09/24/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	09/24/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	09/24/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	09/24/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	09/24/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	09/24/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	09/24/11	1
Vinyl acetate	U	1.2	10.	ug/l		8260B	09/24/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	09/24/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	09/24/11	1
Volatile Organics								
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	09/24/11	1
Ethanol	U	12.	100	ug/l		8260B	09/24/11	1
3,3-Dimethyl-1-butanol	U	4.6	100	ug/l		8260B	09/24/11	1
Ethyl tert-butyl ether	U	0.099	1.0	ug/l		8260B	09/24/11	1
t-Amyl Alcohol	U	1.4	5.0	ug/l		8260B	09/24/11	1
tert-Butyl alcohol	U	1.5	50.	ug/l		8260B	09/24/11	1
tert-Butyl Formate	U	2.7	20.	ug/l		8260B	09/24/11	1
tert-Amyl Methyl Ether	U	0.085	1.0	ug/l		8260B	09/24/11	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	09/24/11	1
Dibromofluoromethane	115.			% Rec.		8260B	09/24/11	1
4-Bromofluorobenzene	97.4			% Rec.		8260B	09/24/11	1

U = ND (Not Detected)ND = Non Detect Above the Method Detection Limit
RDL = Reported Detection Limit = LOQ = PQL = EQL
MDL = Minimum Detection Limit = LOD = SQL(TRRP)
Note:
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Reported: 09/30/11 17:14 Revised: 10/03/11 10:30

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L537780-01	WG557642	SAMP	Ferrous Iron	R1875035	T8
	WG556904	SAMP	Nitrate	R1872613	Q
L537780-03	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	Y1
	WG557642	SAMP	Ferrous Iron	R1875035	T8
	WG556935	SAMP	Cyclohexane	R1872533	J
L537780-04	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	Y1
	WG557642	SAMP	Ferrous Iron	R1875035	T8
L537780-05	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	Y1
	WG557642	SAMP	Ferrous Iron	R1875035	T8
	WG556904	SAMP	Nitrate	R1872613	Q
L537780-06	WG557917	SAMP	C10-C22 Hydrocarbons	R1878552	Y1
	WG557917	SAMP	C22-C32 Hydrocarbons	R1878552	Y4
	WG557642	SAMP	Ferrous Iron	R1875035	T8
	WG556904	SAMP	Nitrate	R1872613	Q
	WG556935	SAMP	cis-1,2-Dichloroethene	R1872533	J
L537780-07	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	Y1
	WG558249	SAMP	Ferrous Iron	R1878932	T8
	WG556904	SAMP	Nitrate	R1872613	Q
L537780-08	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	Y1
	WG557642	SAMP	Ferrous Iron	R1875035	T8
L537780-09	WG557346	SAMP	C10-C22 Hydrocarbons	R1874773	Y1
	WG557346	SAMP	C22-C32 Hydrocarbons	R1874773	Y1
	WG557642	SAMP	Ferrous Iron	R1875035	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
Q	(ESC) Sample held beyond the accepted holding time.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.
Y1	This sample most closely matches the laboratory standard for Diesel
Y4	This sample most closely matches the laboratory standard for Motor Oil

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Holly M. Burger, Debra Hagerty
10559 Citation Dr, Ste 100

Brighton, MI 48116

Quality Assurance Report
Level II

L537780

October 03, 2011

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
TPH (GC/FID) Low Fraction	< .1	mg/l			WG556895	09/23/11 18:46
a,a,a-Trifluorotoluene(FID)		% Rec.	98.91	62-128	WG556895	09/23/11 18:46
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG556935	09/23/11 22:34
1,1,1-Trichloroethane	< .001	mg/l			WG556935	09/23/11 22:34
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG556935	09/23/11 22:34
1,1,2-Trichloroethane	< .001	mg/l			WG556935	09/23/11 22:34
1,1-Dichloroethane	< .001	mg/l			WG556935	09/23/11 22:34
1,1-Dichloroethene	< .001	mg/l			WG556935	09/23/11 22:34
1,2,3-Trichlorobenzene	< .001	mg/l			WG556935	09/23/11 22:34
1,2,4-Trichlorobenzene	< .001	mg/l			WG556935	09/23/11 22:34
1,2,4-Trimethylbenzene	< .001	mg/l			WG556935	09/23/11 22:34
1,2-Dichlorobenzene	< .001	mg/l			WG556935	09/23/11 22:34
1,2-Dichloroethane	< .001	mg/l			WG556935	09/23/11 22:34
1,2-Dichloropropane	< .001	mg/l			WG556935	09/23/11 22:34
1,3,5-Trimethylbenzene	< .001	mg/l			WG556935	09/23/11 22:34
1,3-Dichlorobenzene	< .001	mg/l			WG556935	09/23/11 22:34
1,3-Dichloropropane	< .001	mg/l			WG556935	09/23/11 22:34
1,4-Dichlorobenzene	< .001	mg/l			WG556935	09/23/11 22:34
2-Butanone (MEK)	< .01	mg/l			WG556935	09/23/11 22:34
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG556935	09/23/11 22:34
Acetone	< .05	mg/l			WG556935	09/23/11 22:34
Benzene	< .001	mg/l			WG556935	09/23/11 22:34
Bromodichloromethane	< .001	mg/l			WG556935	09/23/11 22:34
Bromoform	< .001	mg/l			WG556935	09/23/11 22:34
Bromomethane	< .005	mg/l			WG556935	09/23/11 22:34
Carbon disulfide	< .001	mg/l			WG556935	09/23/11 22:34
Carbon tetrachloride	< .001	mg/l			WG556935	09/23/11 22:34
Chlorobenzene	< .001	mg/l			WG556935	09/23/11 22:34
Chloroethane	< .005	mg/l			WG556935	09/23/11 22:34
Chloroform	< .005	mg/l			WG556935	09/23/11 22:34
cis-1,2-Dichloroethene	< .001	mg/l			WG556935	09/23/11 22:34
cis-1,3-Dichloropropene	< .001	mg/l			WG556935	09/23/11 22:34
Cyclohexane	< .001	mg/l			WG556935	09/23/11 22:34
Di-isopropyl ether	< .001	mg/l			WG556935	09/23/11 22:34
Ethanol	< .1	mg/l			WG556935	09/23/11 22:34
Ethyl tert-butyl ether	< .001	mg/l			WG556935	09/23/11 22:34
Ethylbenzene	< .001	mg/l			WG556935	09/23/11 22:34
Hexachloro-1,3-butadiene	< .001	mg/l			WG556935	09/23/11 22:34
Isopropylbenzene	< .001	mg/l			WG556935	09/23/11 22:34
Methyl tert-butyl ether	< .001	mg/l			WG556935	09/23/11 22:34
Methylene Chloride	< .005	mg/l			WG556935	09/23/11 22:34
n-Hexane	< .01	mg/l			WG556935	09/23/11 22:34
Naphthalene	< .005	mg/l			WG556935	09/23/11 22:34
Styrene	< .001	mg/l			WG556935	09/23/11 22:34
tert-Amyl Methyl Ether	< .001	mg/l			WG556935	09/23/11 22:34
tert-Butyl alcohol	< .05	mg/l			WG556935	09/23/11 22:34
Tetrachloroethene	< .001	mg/l			WG556935	09/23/11 22:34
Toluene	< .005	mg/l			WG556935	09/23/11 22:34
trans-1,2-Dichloroethene	< .001	mg/l			WG556935	09/23/11 22:34
trans-1,3-Dichloropropene	< .001	mg/l			WG556935	09/23/11 22:34
Trichloroethene	< .001	mg/l			WG556935	09/23/11 22:34
Vinyl acetate	< .01	mg/l			WG556935	09/23/11 22:34
Vinyl chloride	< .001	mg/l			WG556935	09/23/11 22:34
Xylenes, Total	< .003	mg/l			WG556935	09/23/11 22:34
4-Bromofluorobenzene		% Rec.	101.3	82-120	WG556935	09/23/11 22:34
Dibromofluoromethane		% Rec.	108.3	82-126	WG556935	09/23/11 22:34
Toluene-d8		% Rec.	103.4	92-112	WG556935	09/23/11 22:34

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L537780

October 03, 2011

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Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Nitrate	< .1	mg/l			WG556904	09/24/11 07:44
Sulfate	< 5	mg/l			WG556904	09/24/11 07:44
Alkalinity	< 20	mg/l			WG557437	09/28/11 00:37
Alkalinity	< 20	mg/l			WG557438	09/28/11 01:45
Sulfate	< 5	mg/l			WG557689	09/28/11 07:11
C10-C22 Hydrocarbons	< .1	mg/l			WG557346	09/28/11 11:22
C22-C32 Hydrocarbons	< .1	mg/l			WG557346	09/28/11 11:22
C32-C40 Hydrocarbons	< .1	mg/l			WG557346	09/28/11 11:22
o-Terphenyl		% Rec.	99.76	50-150	WG557346	09/28/11 11:22
Ferrous Iron	< .05	mg/l			WG557642	09/28/11 11:56
Phosphorus,Total	< .1	mg/l			WG557101	09/29/11 09:17
C10-C22 Hydrocarbons	< .1	mg/l			WG557917	09/30/11 12:29
C22-C32 Hydrocarbons	< .1	mg/l			WG557917	09/30/11 12:29
o-Terphenyl		% Rec.	94.64	50-150	WG557917	09/30/11 12:29
Ferrous Iron	< .05	mg/l			WG558249	09/30/11 15:21

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Nitrate	mg/l	0	0	0	20	L537798-03	WG556904
Nitrate	mg/l	0.120	0.120	2.47	20	L537781-05	WG556904
Alkalinity	mg/l	73.0	73.0	0.274	20	L537410-02	WG557437
Alkalinity	mg/l	20.0	21.0	3.39	20	L537410-06	WG557437
Alkalinity	mg/l	30.0	32.0	7.12	20	L537448-05	WG557438
Alkalinity	mg/l	310.	320.	1.89	20	L537434-01	WG557438
Sulfate	mg/l	240.	240.	0.837	20	L537780-07	WG557689
Ferrous Iron	mg/l	1.20	1.10	7.02	20	L537259-04	WG557642
Sulfate	mg/l	5.60	5.60	0.712	20	L538564-12	WG557689
Phosphorus,Total	mg/l	2.80	2.80	0.717	20	L537780-09	WG557101
Phosphorus,Total	mg/l	3.70	3.80	2.94	20	L537289-01	WG557101

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Brighton, MI 48116

Quality Assurance Report
Level II

L537780

October 03, 2011

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Ferrous Iron	mg/l	0.280	0.280	1.44	20	L537780-07	WG558249

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
			Laboratory Control Sample			
TPH (GC/FID) Low Fraction	mg/l	5.5	6.17	112.	70-124	WG556895
a,a,a-Trifluorotoluene(FID)				100.9	62-128	WG556895
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0257	103.	77-128	WG556935
1,1,1-Trichloroethane	mg/l	.025	0.0249	99.4	71-126	WG556935
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0234	93.6	78-130	WG556935
1,1,2-Trichloroethane	mg/l	.025	0.0250	100.	81-121	WG556935
1,1-Dichloroethane	mg/l	.025	0.0262	105.	73-123	WG556935
1,1-Dichloroethene	mg/l	.025	0.0227	90.6	54-134	WG556935
1,2,3-Trichlorobenzene	mg/l	.025	0.0221	88.2	77-130	WG556935
1,2,4-Trichlorobenzene	mg/l	.025	0.0227	90.9	76-127	WG556935
1,2,4-Trimethylbenzene	mg/l	.025	0.0242	96.9	77-129	WG556935
1,2-Dichlorobenzene	mg/l	.025	0.0252	101.	82-121	WG556935
1,2-Dichloroethane	mg/l	.025	0.0237	94.6	69-128	WG556935
1,2-Dichloropropane	mg/l	.025	0.0245	98.0	77-121	WG556935
1,3,5-Trimethylbenzene	mg/l	.025	0.0248	99.3	78-127	WG556935
1,3-Dichlorobenzene	mg/l	.025	0.0240	95.9	77-127	WG556935
1,3-Dichloropropane	mg/l	.025	0.0247	99.0	78-117	WG556935
1,4-Dichlorobenzene	mg/l	.025	0.0244	97.6	79-117	WG556935
2-Butanone (MEK)	mg/l	.125	0.105	84.2	58-144	WG556935
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.118	94.5	58-147	WG556935
Acetone	mg/l	.125	0.0881	70.5	49-153	WG556935
Benzene	mg/l	.025	0.0254	101.	72-119	WG556935
Bromodichloromethane	mg/l	.025	0.0250	100.	75-127	WG556935
Bromoform	mg/l	.025	0.0241	96.3	61-136	WG556935
Bromomethane	mg/l	.025	0.0186	74.6	42-172	WG556935
Carbon disulfide	mg/l	.025	0.0219	87.7	19-150	WG556935
Carbon tetrachloride	mg/l	.025	0.0258	103.	63-129	WG556935
Chlorobenzene	mg/l	.025	0.0260	104.	78-123	WG556935
Chloroethane	mg/l	.025	0.0218	87.1	52-164	WG556935
Chloroform	mg/l	.025	0.0255	102.	76-122	WG556935
cis-1,2-Dichloroethene	mg/l	.025	0.0261	104.	75-121	WG556935
cis-1,3-Dichloropropene	mg/l	.025	0.0237	94.9	74-124	WG556935
Di-isopropyl ether	mg/l	.025	0.0256	102.	66-129	WG556935
Ethylbenzene	mg/l	.025	0.0257	103.	77-124	WG556935
Hexachloro-1,3-butadiene	mg/l	.025	0.0222	88.9	71-134	WG556935
Isopropylbenzene	mg/l	.025	0.0252	101.	74-126	WG556935
Methyl tert-butyl ether	mg/l	.025	0.0227	91.0	67-127	WG556935
Methylene Chloride	mg/l	.025	0.0233	93.1	67-122	WG556935
n-Hexane	mg/l	.025	0.0232	92.9	41-143	WG556935
Naphthalene	mg/l	.025	0.0225	90.1	70-134	WG556935
Styrene	mg/l	.025	0.0259	103.	69-145	WG556935
Tetrachloroethene	mg/l	.025	0.0237	94.8	75-121	WG556935
Toluene	mg/l	.025	0.0229	91.6	75-114	WG556935
trans-1,2-Dichloroethene	mg/l	.025	0.0224	89.7	63-127	WG556935
trans-1,3-Dichloropropene	mg/l	.025	0.0244	97.8	69-124	WG556935
Trichloroethene	mg/l	.025	0.0243	97.4	69-131	WG556935
Vinyl acetate	mg/l	.125	0.124	98.9	47-161	WG556935
Vinyl chloride	mg/l	.025	0.0233	93.4	55-142	WG556935
Xylenes, Total	mg/l	.075	0.0743	99.1	77-123	WG556935
4-Bromofluorobenzene				97.89	82-120	WG556935
Dibromofluoromethane				106.9	82-126	WG556935

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Est. 1970

ARCADIS U.S. GMC
Holly M. Burger, Debra Hagerty
10559 Citation Dr, Ste 100

Brighton, MI 48116

Quality Assurance Report
Level II

L537780

October 03, 2011

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Toluene-d8				102.3	92-112	
Nitrate	mg/l	8	8.14	102.	90-110	WG556904
Sulfate	mg/l	40	39.9	99.8	90-110	WG556904
Alkalinity	mg/l	40	37.4	93.5	85-115	WG557437
Alkalinity	mg/l	40	36.2	90.5	85-115	WG557438
Sulfate	mg/l	40	39.6	99.0	90-110	WG557689
C10-C22 Hydrocarbons	mg/l	.75	0.752	100.	70-130	WG557346
C22-C32 Hydrocarbons	mg/l	.75	0.738	98.4	70-130	WG557346
o-Terphenyl				103.3	50-150	WG557346
Ferrous Iron	mg/l	1	0.917	91.7	85-115	WG557642
Phosphorus,Total	mg/l	1	1.07	107.	85-115	WG557101
C10-C22 Hydrocarbons	mg/l	.75	0.770	103.	50-150	WG557917
C22-C32 Hydrocarbons	mg/l	.75	0.598	79.7	50-150	WG557917
o-Terphenyl				99.14*	0-0	WG557917
Ferrous Iron	mg/l	1	0.880	88.0	85-115	WG558249

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
TPH (GC/FID) Low Fraction	mg/l	6.31	6.17	115.	70-124	2.27	20	WG556895
a,a,a-Trifluorotoluene(FID)				101.4	62-128			WG556895
1,1,1,2-Tetrachloroethane	mg/l	0.0258	0.0257	103.	77-128	0.320	20	WG556935
1,1,1-Trichloroethane	mg/l	0.0241	0.0249	96.0	71-126	3.17	20	WG556935
1,1,2,2-Tetrachloroethane	mg/l	0.0236	0.0234	94.0	78-130	0.750	20	WG556935
1,1,2-Trichloroethane	mg/l	0.0257	0.0250	103.	81-121	2.63	20	WG556935
1,1-Dichloroethane	mg/l	0.0258	0.0262	103.	73-123	1.61	20	WG556935
1,1-Dichloroethene	mg/l	0.0222	0.0227	89.0	54-134	1.90	20	WG556935
1,2,3-Trichlorobenzene	mg/l	0.0223	0.0221	89.0	77-130	1.33	20	WG556935
1,2,4-Trichlorobenzene	mg/l	0.0227	0.0227	91.0	76-127	0.190	20	WG556935
1,2,4-Trimethylbenzene	mg/l	0.0246	0.0242	98.0	77-129	1.75	20	WG556935
1,2-Dichlorobenzene	mg/l	0.0248	0.0252	99.0	82-121	1.77	20	WG556935
1,2-Dichloroethane	mg/l	0.0233	0.0237	93.0	69-128	1.62	20	WG556935
1,2-Dichloropropane	mg/l	0.0252	0.0245	101.	77-121	2.74	20	WG556935
1,3,5-Trimethylbenzene	mg/l	0.0253	0.0248	101.	78-127	1.76	20	WG556935
1,3-Dichlorobenzene	mg/l	0.0245	0.0240	98.0	77-127	2.04	20	WG556935
1,3-Dichloropropane	mg/l	0.0250	0.0247	100.	78-117	1.21	20	WG556935
1,4-Dichlorobenzene	mg/l	0.0241	0.0244	96.0	79-117	1.27	20	WG556935
2-Butanone (MEK)	mg/l	0.103	0.105	82.0	58-144	2.15	20	WG556935
4-Methyl-2-pentanone (MIBK)	mg/l	0.117	0.118	93.0	58-147	1.18	20	WG556935
Acetone	mg/l	0.0843	0.0881	67.0	49-153	4.34	21	WG556935
Benzene	mg/l	0.0247	0.0254	99.0	72-119	2.49	20	WG556935

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Brighton, MI 48116

Quality Assurance Report
Level II

L537780

October 03, 2011

Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	Duplicate RPD	Limit	Batch
Bromodichloromethane	mg/l	0.0249	0.0250	100.	75-127	0.500	20	WG556935
Bromoform	mg/l	0.0237	0.0241	95.0	61-136	1.79	20	WG556935
Bromomethane	mg/l	0.0182	0.0186	73.0	42-172	2.35	20	WG556935
Carbon disulfide	mg/l	0.0214	0.0219	86.0	19-150	2.37	20	WG556935
Carbon tetrachloride	mg/l	0.0254	0.0258	102.	63-129	1.42	20	WG556935
Chlorobenzene	mg/l	0.0259	0.0260	104.	78-123	0.260	20	WG556935
Chloroethane	mg/l	0.0218	0.0218	87.0	52-164	0.0100	20	WG556935
Chloroform	mg/l	0.0250	0.0255	100.	76-122	1.73	20	WG556935
cis-1,2-Dichloroethene	mg/l	0.0256	0.0261	102.	75-121	1.70	20	WG556935
cis-1,3-Dichloropropene	mg/l	0.0237	0.0237	95.0	74-124	0.0400	20	WG556935
Di-isopropyl ether	mg/l	0.0252	0.0256	101.	66-129	1.44	20	WG556935
Ethylbenzene	mg/l	0.0256	0.0257	102.	77-124	0.450	20	WG556935
Hexachloro-1,3-butadiene	mg/l	0.0218	0.0222	87.0	71-134	1.82	20	WG556935
Isopropylbenzene	mg/l	0.0253	0.0252	101.	74-126	0.230	20	WG556935
Methyl tert-butyl ether	mg/l	0.0223	0.0227	89.0	67-127	1.99	20	WG556935
Methylene Chloride	mg/l	0.0228	0.0233	91.0	67-122	1.86	20	WG556935
n-Hexane	mg/l	0.0228	0.0232	91.0	41-143	2.01	20	WG556935
Naphthalene	mg/l	0.0225	0.0225	90.0	70-134	0	20	WG556935
Styrene	mg/l	0.0262	0.0259	105.	69-145	1.22	20	WG556935
Tetrachloroethene	mg/l	0.0244	0.0237	97.0	75-121	2.76	20	WG556935
Toluene	mg/l	0.0233	0.0229	93.0	75-114	1.70	20	WG556935
trans-1,2-Dichloroethene	mg/l	0.0220	0.0224	88.0	63-127	2.15	20	WG556935
trans-1,3-Dichloropropene	mg/l	0.0241	0.0244	96.0	69-124	1.20	20	WG556935
Trichloroethene	mg/l	0.0253	0.0243	101.	69-131	3.91	20	WG556935
Vinyl acetate	mg/l	0.113	0.124	90.0	47-161	9.24	20	WG556935
Vinyl chloride	mg/l	0.0228	0.0233	91.0	55-142	2.53	20	WG556935
Xylenes, Total	mg/l	0.0754	0.0743	100.	77-123	1.45	20	WG556935
4-Bromofluorobenzene				98.35	82-120			WG556935
Dibromofluoromethane				105.7	82-126			WG556935
Toluene-d8				104.1	92-112			WG556935
Nitrate	mg/l	8.13	8.14	102.	90-110	0.123	20	WG556904
Sulfate	mg/l	40.0	39.9	100.	90-110	0.250	20	WG556904
Alkalinity	mg/l	37.0	37.4	92.0	85-115	1.08	20	WG557437
Alkalinity	mg/l	38.2	36.2	96.0	85-115	5.38	20	WG557438
Sulfate	mg/l	39.7	39.6	99.0	90-110	0.252	20	WG557689
C10-C22 Hydrocarbons	mg/l	0.729	0.752	97.0	70-130	3.20	20	WG557346
C22-C32 Hydrocarbons	mg/l	0.707	0.738	94.0	70-130	4.21	20	WG557346
o-Terphenyl				96.16	50-150			WG557346
Ferrous Iron	mg/l	0.888	0.917	89.0	85-115	3.21	20	WG557642
Phosphorus,Total	mg/l	1.04	1.07	104.	85-115	2.84	20	WG557101
C10-C22 Hydrocarbons	mg/l	0.800	0.770	107.	50-150	3.76	20	WG557917
C22-C32 Hydrocarbons	mg/l	0.633	0.598	84.0	50-150	5.79	20	WG557917
o-Terphenyl				92.81*	0-0			WG557917

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Quality Assurance Report
Level II

L537780

October 03, 2011

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Ferrous Iron	mg/l	0.927	0.880	93.0	85-115	5.20	20	WG558249

		Matrix Spike						
Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
TPH (GC/FID) Low Fraction	mg/l	6.06	0	5.5	110.*	55-109	L537636-08	WG556895
a,a,a-Trifluorotoluene(FID)					99.54	62-128		WG556895
1,1,1,2-Tetrachloroethane	mg/l	0.0236	0	.025	94.4	71-130	L537780-07	WG556935
1,1,1-Trichloroethane	mg/l	0.0251	0	.025	100.	58-137	L537780-07	WG556935
1,1,2,2-Tetrachloroethane	mg/l	0.0211	0	.025	84.4	64-149	L537780-07	WG556935
1,1,2-Trichloroethane	mg/l	0.0233	0	.025	93.3	73-128	L537780-07	WG556935
1,1-Dichloroethane	mg/l	0.0273	0	.025	109.	58-133	L537780-07	WG556935
1,1-Dichloroethene	mg/l	0.0305	0.00120	.025	117.	32-152	L537780-07	WG556935
1,2,3-Trichlorobenzene	mg/l	0.0204	0	.025	81.8	68-135	L537780-07	WG556935
1,2,4-Trichlorobenzene	mg/l	0.0228	0	.025	91.2	67-133	L537780-07	WG556935
1,2,4-Trimethylbenzene	mg/l	0.0225	0	.025	90.0	62-141	L537780-07	WG556935
1,2-Dichlorobenzene	mg/l	0.0229	0	.025	91.5	75-125	L537780-07	WG556935
1,2-Dichloroethane	mg/l	0.0227	0	.025	90.7	59-135	L537780-07	WG556935
1,2-Dichloropropane	mg/l	0.0232	0	.025	92.8	68-126	L537780-07	WG556935
1,3,5-Trimethylbenzene	mg/l	0.0240	0	.025	96.1	67-136	L537780-07	WG556935
1,3-Dichlorobenzene	mg/l	0.0234	0	.025	93.5	69-131	L537780-07	WG556935
1,3-Dichloropropane	mg/l	0.0237	0	.025	94.7	70-122	L537780-07	WG556935
1,4-Dichlorobenzene	mg/l	0.0236	0	.025	94.6	70-123	L537780-07	WG556935
2-Butanone (MEK)	mg/l	0.102	0	.125	81.5	51-149	L537780-07	WG556935
4-Methyl-2-pentanone (MIBK)	mg/l	0.103	0	.125	82.5	53-154	L537780-07	WG556935
Acetone	mg/l	0.0882	0	.125	70.6	34-146	L537780-07	WG556935
Benzene	mg/l	0.0254	0	.025	102.	51-134	L537780-07	WG556935
Bromodichloromethane	mg/l	0.0222	0	.025	88.7	67-132	L537780-07	WG556935
Bromoform	mg/l	0.0223	0	.025	89.2	59-137	L537780-07	WG556935
Bromomethane	mg/l	0.0189	0	.025	75.5	23-177	L537780-07	WG556935
Carbon disulfide	mg/l	0.0297	0	.025	119.	10-165	L537780-07	WG556935
Carbon tetrachloride	mg/l	0.0256	0	.025	102.	49-140	L537780-07	WG556935
Chlorobenzene	mg/l	0.0245	0	.025	97.9	69-126	L537780-07	WG556935
Chloroethane	mg/l	0.0216	0	.025	86.5	32-177	L537780-07	WG556935
Chloroform	mg/l	0.0251	0	.025	100.	64-130	L537780-07	WG556935
cis-1,2-Dichloroethene	mg/l	0.0261	0	.025	104.	54-137	L537780-07	WG556935
cis-1,3-Dichloropropene	mg/l	0.0223	0	.025	89.3	63-127	L537780-07	WG556935
Di-isopropyl ether	mg/l	0.0253	0	.025	101.	58-133	L537780-07	WG556935
Ethylbenzene	mg/l	0.0247	0	.025	98.9	64-135	L537780-07	WG556935
Hexachloro-1,3-butadiene	mg/l	0.0192	0	.025	76.8	64-140	L537780-07	WG556935
Isopropylbenzene	mg/l	0.0259	0	.025	104.	62-134	L537780-07	WG556935
Methyl tert-butyl ether	mg/l	0.0231	0	.025	92.3	55-136	L537780-07	WG556935
Methylene Chloride	mg/l	0.0252	0	.025	101.	52-130	L537780-07	WG556935
n-Hexane	mg/l	0.0246	0	.025	98.4	16-164	L537780-07	WG556935
Naphthalene	mg/l	0.0198	0	.025	79.0	65-140	L537780-07	WG556935
Styrene	mg/l	0.0180	0	.025	72.1	58-152	L537780-07	WG556935
Tetrachloroethene	mg/l	0.0241	0	.025	96.6	56-139	L537780-07	WG556935
Toluene	mg/l	0.0220	0	.025	88.2	61-126	L537780-07	WG556935
trans-1,2-Dichloroethene	mg/l	0.0247	0	.025	98.8	45-137	L537780-07	WG556935
trans-1,3-Dichloropropene	mg/l	0.0227	0	.025	90.7	59-130	L537780-07	WG556935
Trichloroethene	mg/l	0.0237	0	.025	94.6	40-155	L537780-07	WG556935
Vinyl acetate	mg/l	0.113	0	.125	90.4	36-186	L537780-07	WG556935
Vinyl chloride	mg/l	0.0225	0	.025	90.1	32-159	L537780-07	WG556935
Xylenes, Total	mg/l	0.0723	0	.075	96.4	64-133	L537780-07	WG556935
4-Bromofluorobenzene					98.59	82-120		WG556935
Dibromofluoromethane					108.4	82-126		WG556935
Toluene-d8					103.4	92-112		WG556935

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Quality Assurance Report
Level II

L537780

October 03, 2011

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Nitrate	mg/l	4.88	0	5	97.6	80-120	L537798-04	WG556904
Alkalinity	mg/l	313.	120.	200	96.5	80-120	L537410-04	WG557437
Alkalinity	mg/l	230.	28.0	200	101.	80-120	L537448-01	WG557438
Ferrous Iron	mg/l	1.83	0.190	1.5	109.	80-120	L537481-01	WG557642
Phosphorus,Total	mg/l	3.78	1.50	2.5	91.2	80-120	L537289-02	WG557101
Ferrous Iron	mg/l	1.80	0.280	1.5	101.	80-120	L538564-07	WG558249

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
TPH (GC/FID) Low Fraction	mg/l	6.48	6.06	118.*	55-109	6.73	20	L537636-08	WG556895
a,a,a-Trifluorotoluene(FID)				98.88	62-128				WG556895
1,1,1,2-Tetrachloroethane	mg/l	0.0253	0.0236	101.	71-130	7.01	20	L537780-07	WG556935
1,1,1-Trichloroethane	mg/l	0.0254	0.0251	102.	58-137	1.38	20	L537780-07	WG556935
1,1,2,2-Tetrachloroethane	mg/l	0.0236	0.0211	94.2	64-149	11.0	20	L537780-07	WG556935
1,1,2-Trichloroethane	mg/l	0.0263	0.0233	105.	73-128	11.9	20	L537780-07	WG556935
1,1-Dichloroethane	mg/l	0.0283	0.0273	113.	58-133	3.29	20	L537780-07	WG556935
1,1-Dichloroethene	mg/l	0.0314	0.0305	121.	32-152	2.99	20	L537780-07	WG556935
1,2,3-Trichlorobenzene	mg/l	0.0218	0.0204	87.2	68-135	6.43	20	L537780-07	WG556935
1,2,4-Trichlorobenzene	mg/l	0.0241	0.0228	96.2	67-133	5.33	20	L537780-07	WG556935
1,2,4-Trimethylbenzene	mg/l	0.0244	0.0225	97.4	62-141	7.92	20	L537780-07	WG556935
1,2-Dichlorobenzene	mg/l	0.0239	0.0229	95.4	75-125	4.22	20	L537780-07	WG556935
1,2-Dichloroethane	mg/l	0.0240	0.0227	95.9	59-135	5.62	20	L537780-07	WG556935
1,2-Dichloropropane	mg/l	0.0249	0.0232	99.7	68-126	7.20	20	L537780-07	WG556935
1,3,5-Trimethylbenzene	mg/l	0.0255	0.0240	102.	67-136	6.06	20	L537780-07	WG556935
1,3-Dichlorobenzene	mg/l	0.0250	0.0234	100.	69-131	6.78	20	L537780-07	WG556935
1,3-Dichloropropane	mg/l	0.0256	0.0237	102.	70-122	7.95	20	L537780-07	WG556935
1,4-Dichlorobenzene	mg/l	0.0245	0.0236	97.8	70-123	3.39	20	L537780-07	WG556935
2-Butanone (MEK)	mg/l	0.116	0.102	92.8	51-149	13.0	22	L537780-07	WG556935
4-Methyl-2-pentanone (MIBK)	mg/l	0.119	0.103	94.8	53-154	13.9	21	L537780-07	WG556935
Acetone	mg/l	0.0948	0.0882	75.9	34-146	7.27	22	L537780-07	WG556935
Benzene	mg/l	0.0266	0.0254	106.	51-134	4.39	20	L537780-07	WG556935
Bromodichloromethane	mg/l	0.0236	0.0222	94.5	67-132	6.34	20	L537780-07	WG556935
Bromoform	mg/l	0.0240	0.0223	96.2	59-137	7.51	20	L537780-07	WG556935
Bromomethane	mg/l	0.0201	0.0189	80.4	23-177	6.30	21	L537780-07	WG556935
Carbon disulfide	mg/l	0.0301	0.0297	120.	10-165	1.48	22	L537780-07	WG556935
Carbon tetrachloride	mg/l	0.0272	0.0256	109.	49-140	6.07	20	L537780-07	WG556935
Chlorobenzene	mg/l	0.0264	0.0245	106.	69-126	7.48	20	L537780-07	WG556935
Chloroethane	mg/l	0.0230	0.0216	92.1	32-177	6.24	21	L537780-07	WG556935
Chloroform	mg/l	0.0257	0.0251	103.	64-130	2.44	20	L537780-07	WG556935
cis-1,2-Dichloroethene	mg/l	0.0275	0.0261	110.	54-137	5.23	20	L537780-07	WG556935
cis-1,3-Dichloropropene	mg/l	0.0241	0.0223	96.4	63-127	7.73	20	L537780-07	WG556935
Di-isopropyl ether	mg/l	0.0263	0.0253	105.	58-133	4.08	20	L537780-07	WG556935
Ethylbenzene	mg/l	0.0259	0.0247	104.	64-135	4.63	20	L537780-07	WG556935
Hexachloro-1,3-butadiene	mg/l	0.0201	0.0192	80.4	64-140	4.61	20	L537780-07	WG556935
Isopropylbenzene	mg/l	0.0278	0.0259	111.	62-134	6.92	20	L537780-07	WG556935
Methyl tert-butyl ether	mg/l	0.0248	0.0231	99.2	55-136	7.11	20	L537780-07	WG556935

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Est. 1970

ARCADIS U.S. GMC
Holly M. Burger, Debra Hagerty
10559 Citation Dr, Ste 100

Brighton, MI 48116

Quality Assurance Report
Level II

L537780

October 03, 2011

Analyte	Units	Matrix Spike MSD	Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Methylene Chloride	mg/l	0.0262	0.0252	105.	52-130	3.97	20	L537780-07	WG556935
n-Hexane	mg/l	0.0264	0.0246	106.	16-164	7.00	20	L537780-07	WG556935
Naphthalene	mg/l	0.0217	0.0198	86.6	65-140	9.11	20	L537780-07	WG556935
Styrene	mg/l	0.0192	0.0180	76.7	58-152	6.10	20	L537780-07	WG556935
Tetrachloroethene	mg/l	0.0257	0.0241	103.	56-139	6.20	20	L537780-07	WG556935
Toluene	mg/l	0.0236	0.0220	94.3	61-126	6.75	20	L537780-07	WG556935
trans-1,2-Dichloroethene	mg/l	0.0255	0.0247	102.	45-137	3.26	20	L537780-07	WG556935
trans-1,3-Dichloropropene	mg/l	0.0236	0.0227	94.4	59-130	4.05	20	L537780-07	WG556935
Trichloroethene	mg/l	0.0250	0.0237	100.	40-155	5.51	20	L537780-07	WG556935
Vinyl acetate	mg/l	0.124	0.113	99.4	36-186	9.58	20	L537780-07	WG556935
Vinyl chloride	mg/l	0.0230	0.0225	91.9	32-159	1.96	21	L537780-07	WG556935
Xylenes, Total	mg/l	0.0771	0.0723	103.	64-133	6.38	20	L537780-07	WG556935
4-Bromofluorobenzene				102.4	82-120				WG556935
Dibromofluoromethane				107.8	82-126				WG556935
Toluene-d8				104.7	92-112				WG556935
Nitrate	mg/l	4.74	4.88	94.8	80-120	2.91	20	L537798-04	WG556904
Alkalinity	mg/l	313.	313.	96.5	80-120	0	20	L537410-04	WG557437
Alkalinity	mg/l	231.	230.	102.	80-120	0.434	20	L537448-01	WG557438
Ferrous Iron	mg/l	1.69	1.83	100.	80-120	7.95	20	L537481-01	WG557642
Phosphorus,Total	mg/l	3.80	3.78	92.0	80-120	0.528	20	L537289-02	WG557101
Ferrous Iron	mg/l	1.84	1.80	104.	80-120	2.20	20	L538564-07	WG558249

Batch number /Run number / Sample number cross reference

WG556895: R1870112: L537780-01 03 04 05 06 07 08 09
WG556935: R1872533: L537780-01 03 04 05 06 07 08 09
WG556904: R1872613: L537780-01 03 04 05 06 07 08 09
WG557437: R1873492: L537780-01
WG557438: R1873512: L537780-03 04 05 06 07 08 09
WG557689: R1874272: L537780-07
WG557346: R1874773: L537780-03 04 05 07 08 09
WG557642: R1875035: L537780-01 03 04 05 06 07 08 09
WG557101: R1875876: L537780-01 03 04 05 06 07 08 09
WG557917: R1878552: L537780-06
WG558249: R1878932: L537780-07

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
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ARCADIS U.S. GMC
Holly M. Burger, Debra Hagerty
10559 Citation Dr, Ste 100

Brighton, MI 48116

Quality Assurance Report
Level II

L537780

October 03, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

ARCADIS U.S. GMC

10559 Citation Dr. Ste 100
Brighton,MI 48116

Billing information:

Brad Saunders
10559 Citation Dr, Ste 100

Brighton,MI 48116

Chain of Custody
Page 1 of 1

F029

ESC LAB SCIENCES
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Report to: Holly M. Burger

Email: jhawkins@envsci.com

Project Description: Oakland Truck Center

City/State Collected: Oakland, CA

Phone: (810) 225-1904
FAX: (810) 229-8837

Client Project #: B0064601.0000.00007

Lab Project #: ARCABMI-OAKLANDCAT

Collected by (print): Karl Johnson

Site/Facility ID#: 8099 S. COLISEUM WA

P.O #: B0064601.0000

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed: 10 day TAT

Email? ___No X Yes
FAX? ___No ___Yes

Acctnum: ARCABMI (lab use only)
Template/Prelogin: T70272/ P349991
Cooler #: 3108
Shipped Via: FedEX Saver

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	ALK 500mlHDPE-NoPres	DROCAER 1L-Amb-Add HCl	FERUSFE 250mlAmb-HCl	GRO 40mlAmb HCl	PT 250mlHDPE-H2SO4	V8260OXY 40mlAmb-HCl	WetChem 125mlHDPE-NoPres	Remarks/Contaminant	Sample # (lab only)
DUP		GW		—	—	9	X	X	X	X	X	X	X		L537780-01
Trip Blank - ON HOLD		GW		—	—	10	X	X	X	X	X	X	X		-02
MW-7		GW		9/22/11	1145	9	X	X	X	X	X	X	X		-03
MW-8		GW			1105	9	X	X	X	X	X	X	X		-04
MW-1		GW			0950	9	X	X	X	X	X	X	X		-05
MW-4		GW			0900	3/5x0	X	X	X	X	X	X	X		-06
MW-3		GW			0800	9	X	X	X	X	X	X	X		-07
MW-5		GW			1235	9	X	X	X	X	X	X	X		-08
MW-6		GW		↓	1330	9	X	X	X	X	X	X	X		-09

*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

8736 4508 0973
7957 5906 2970

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐UPS ☒FedEx ☐Courier ☐	Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.4° Bottles Received: 7 2+1 TB	COC Seal Intact: ___Y ___N ___NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9-23-11 Time: 09:00	pH Checked: NCF: YES

9/22/11 1530

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Appendix **D**

Hydrographs

TPH DRO and Groundwater Elevation Trend in MW-1

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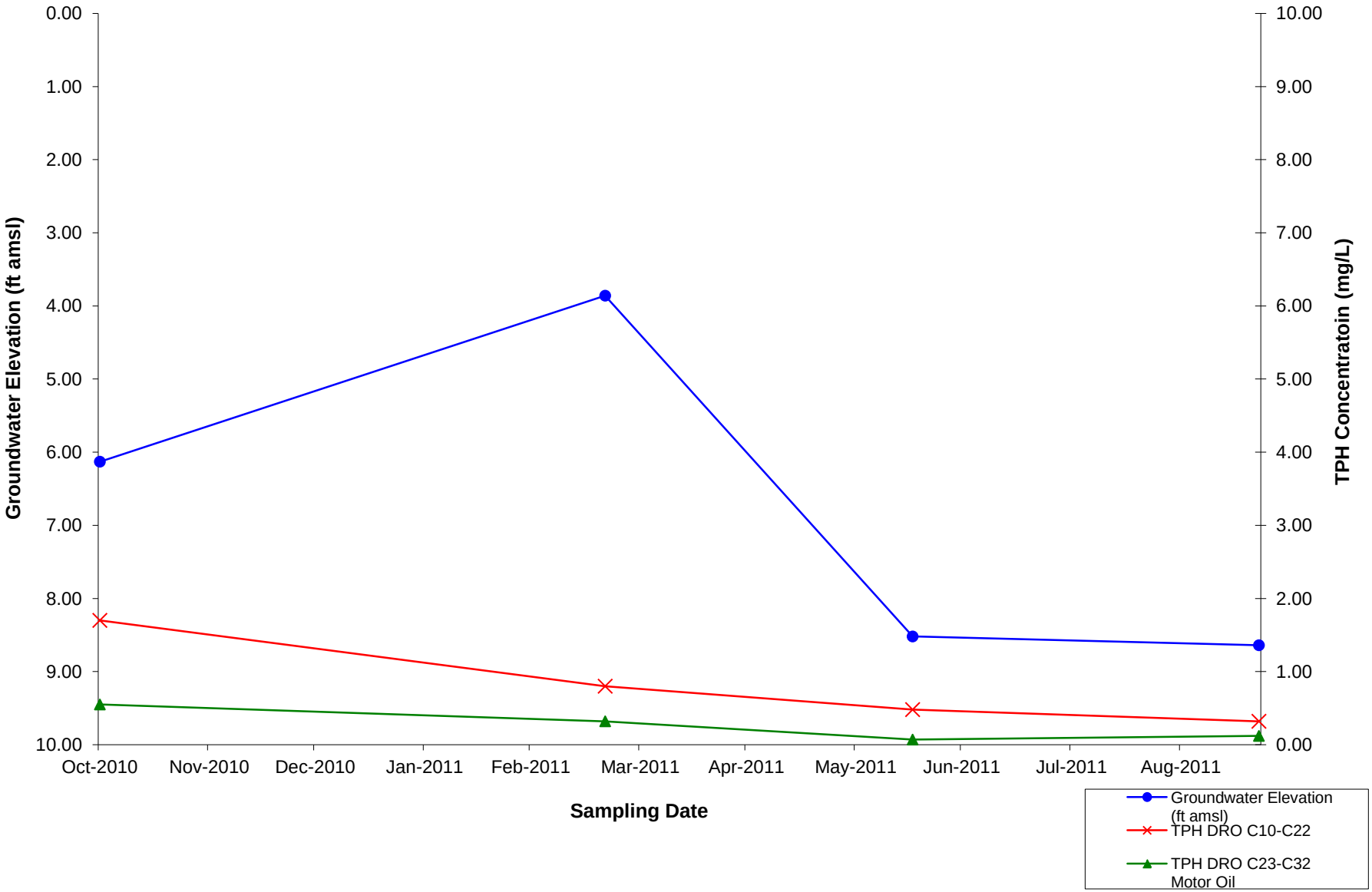
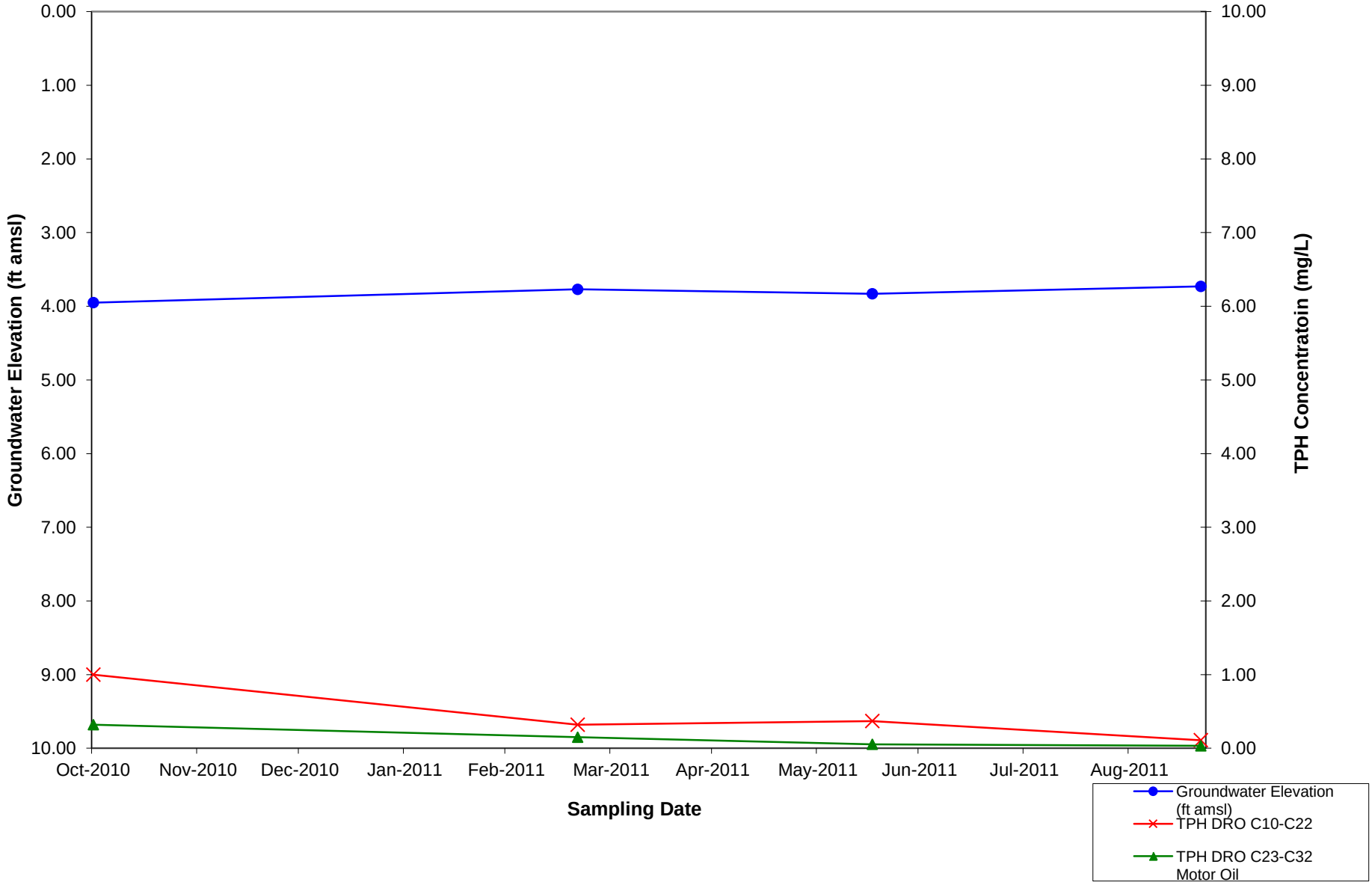


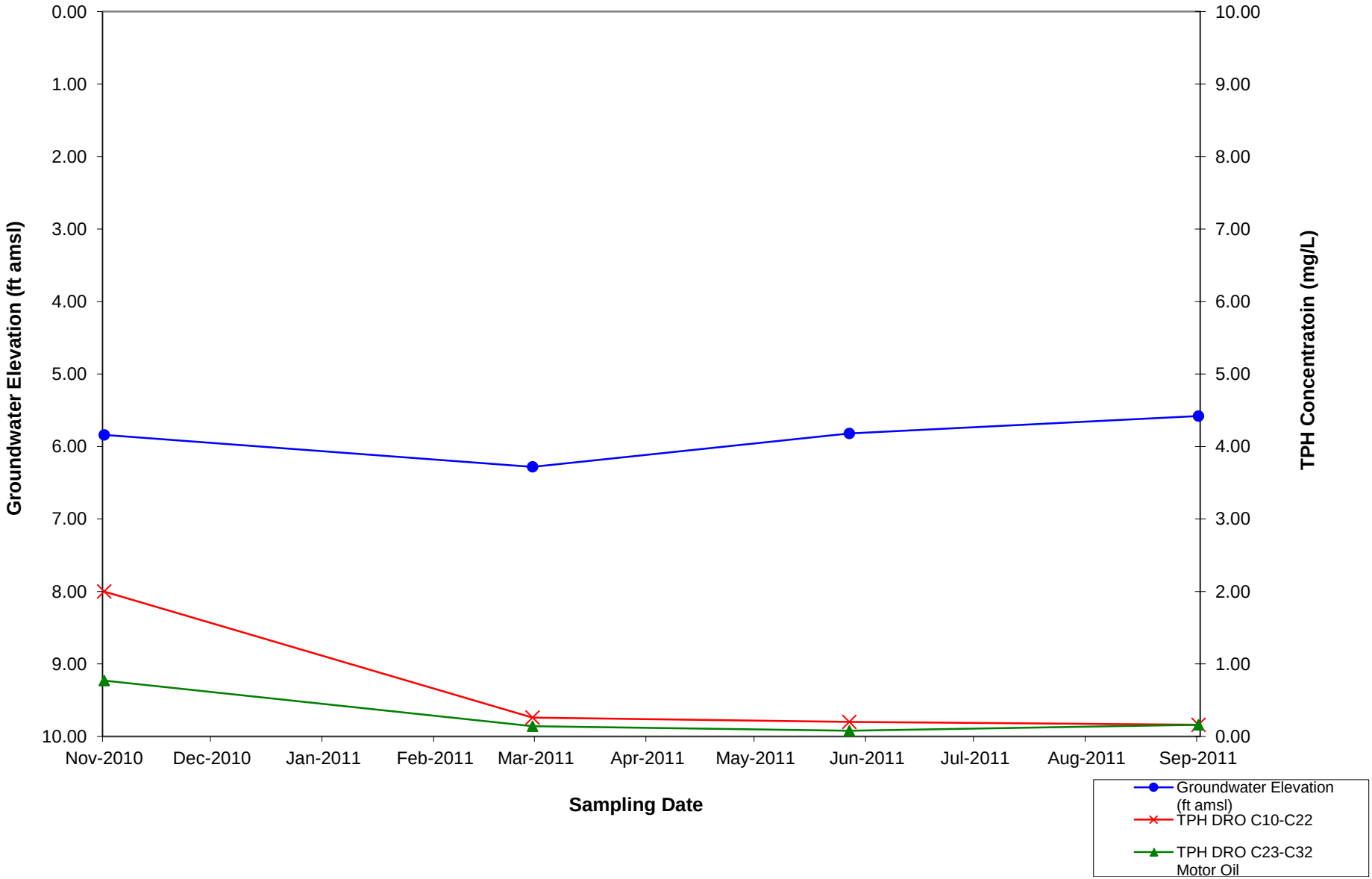
TPH DRO and Groundwater Elevation Trend in MW-2

ARCADIS



TPH DRO and Groundwater Elevation Trend in MW-3

ARCADIS



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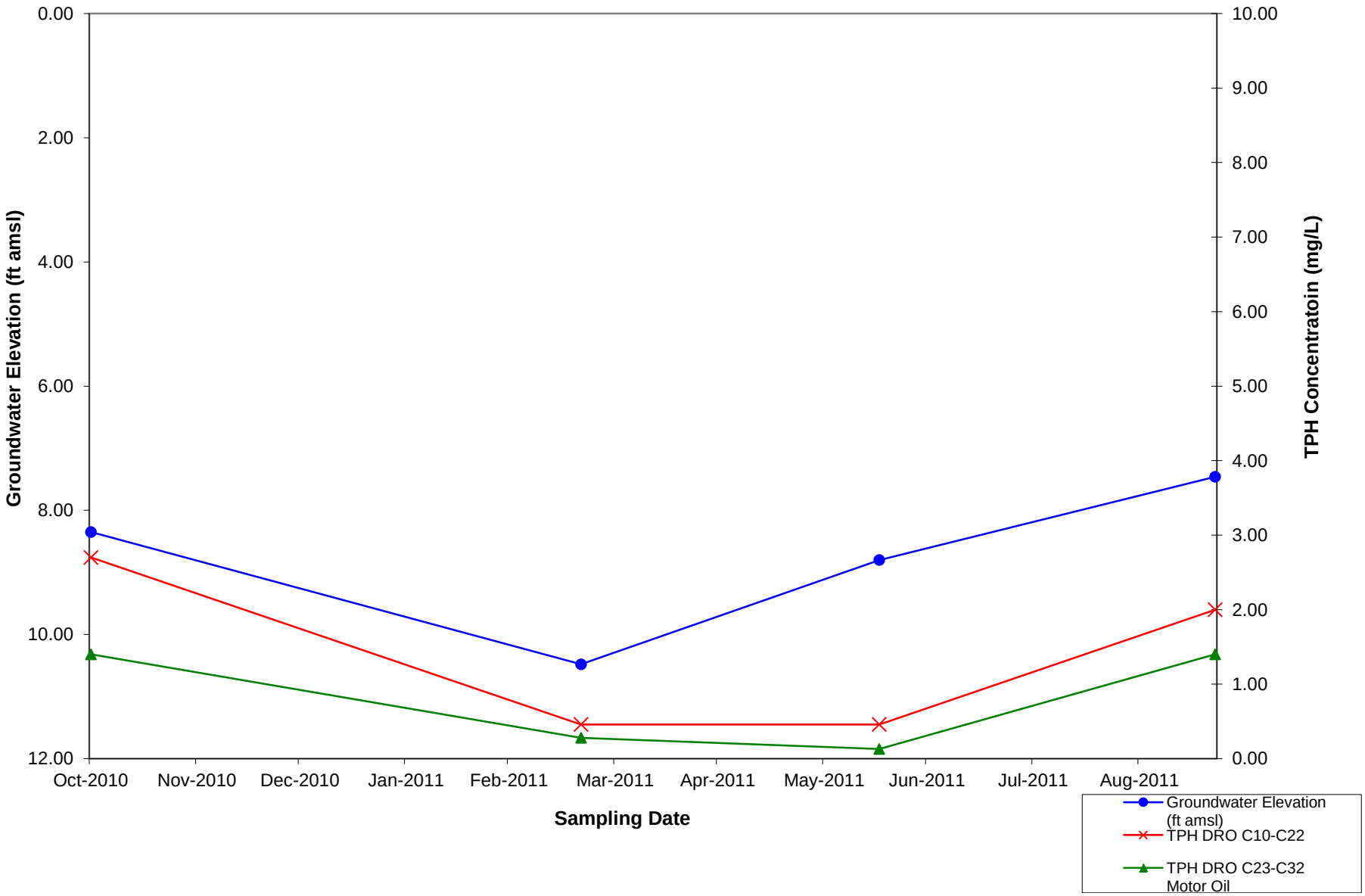
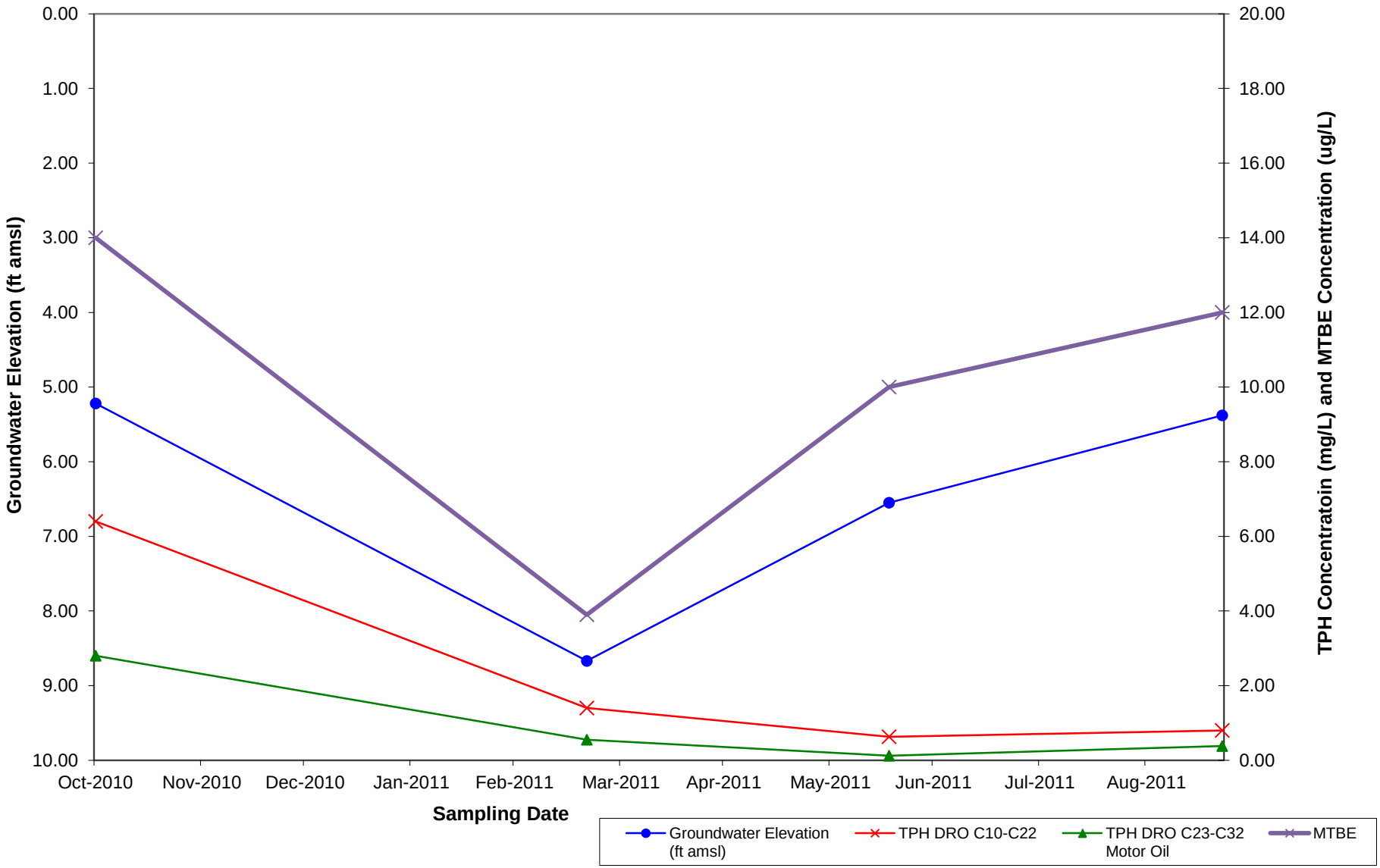
TPH DRO and Groundwater Elevation Trend in MW-4



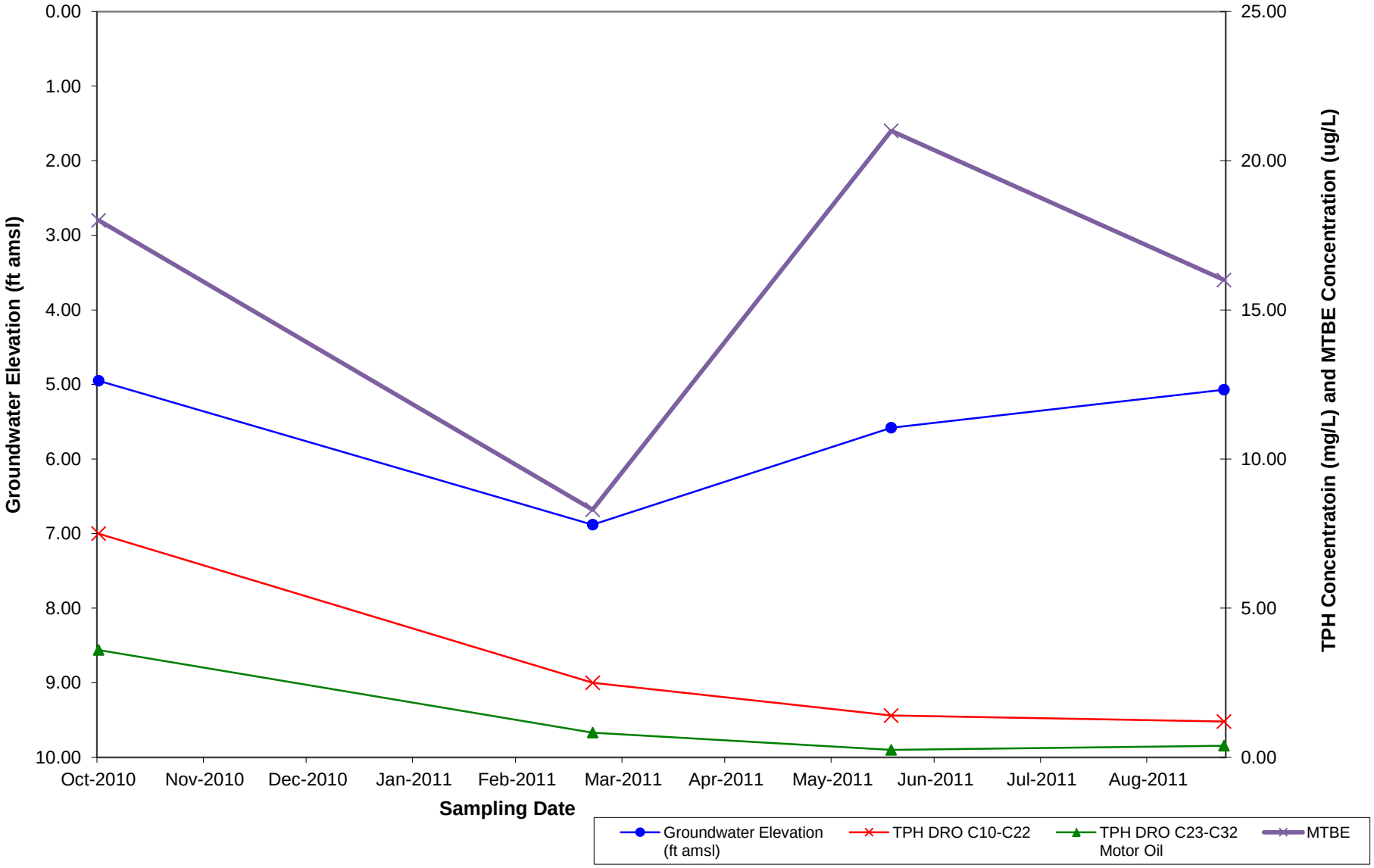
TPH DRO, MTBE, and Groundwater Elevation Trend in MW-5

ARCADIS



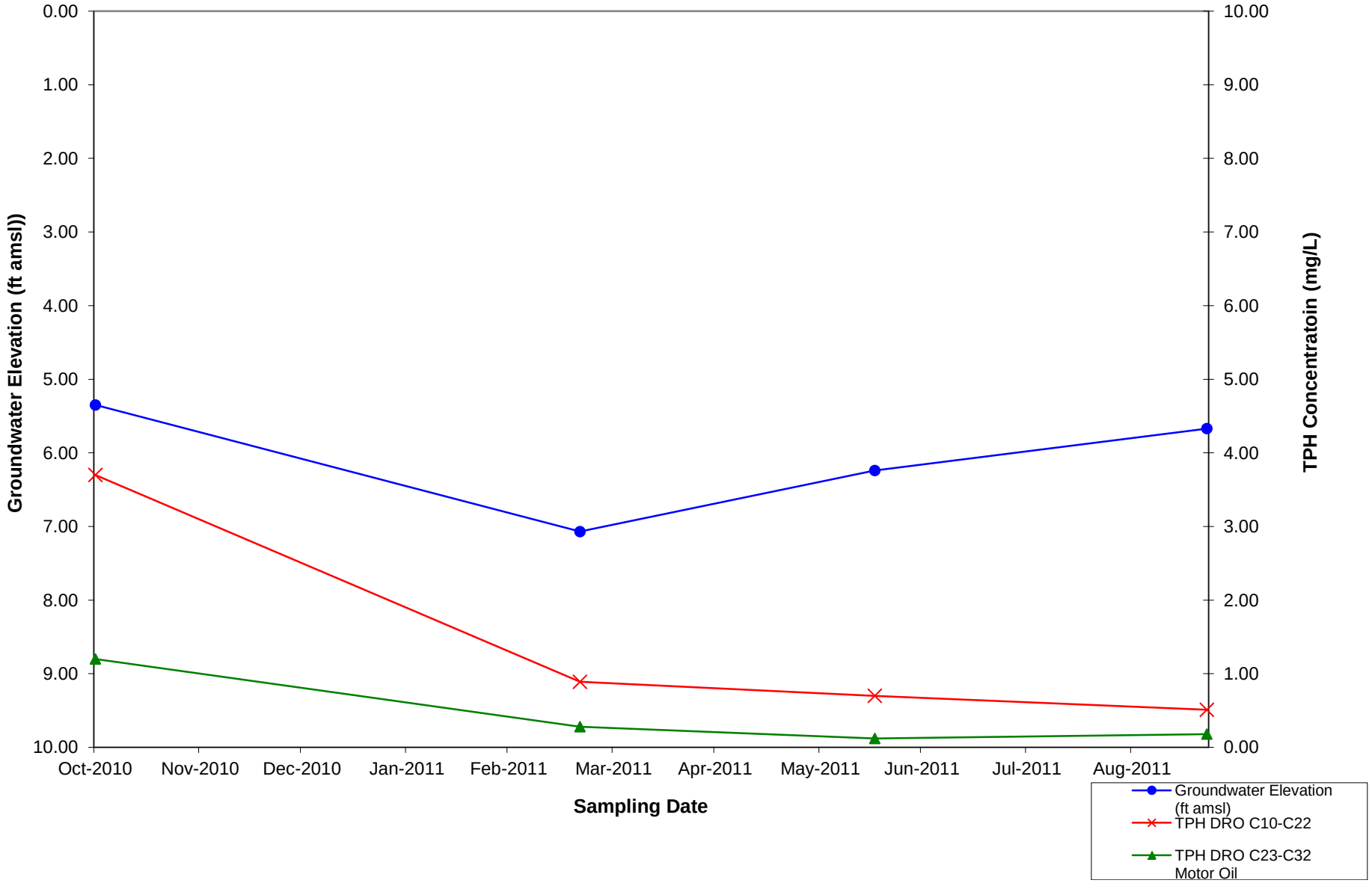
TPH DRO, MTBE, and Groundwater Elevation Trend in MW-6

ARCADIS



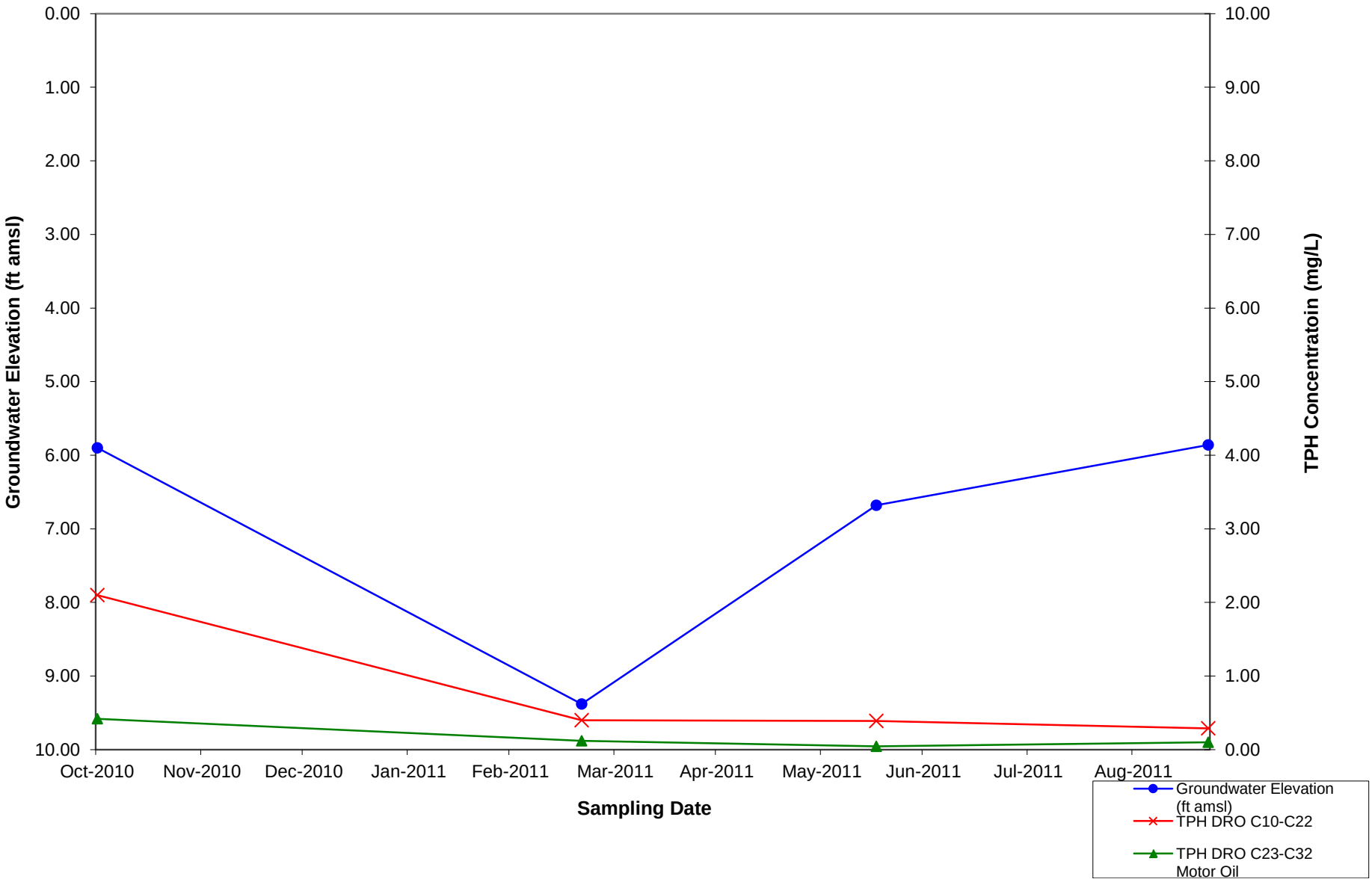
TPH DRO and Groundwater Elevation Trend in MW-7

ARCADIS



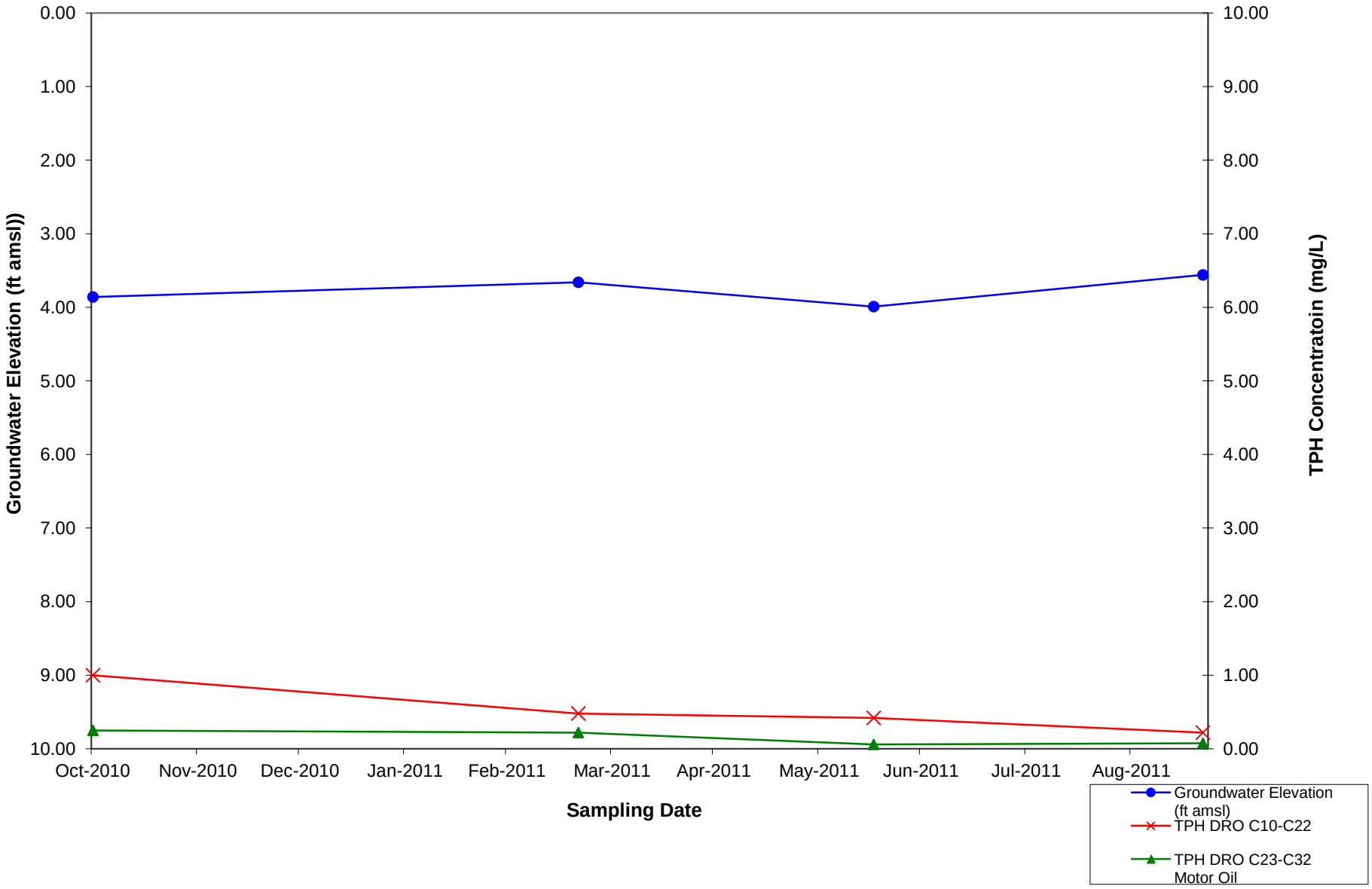
TPH DRO and Groundwater Elevation Trend in MW-8

ARCADIS



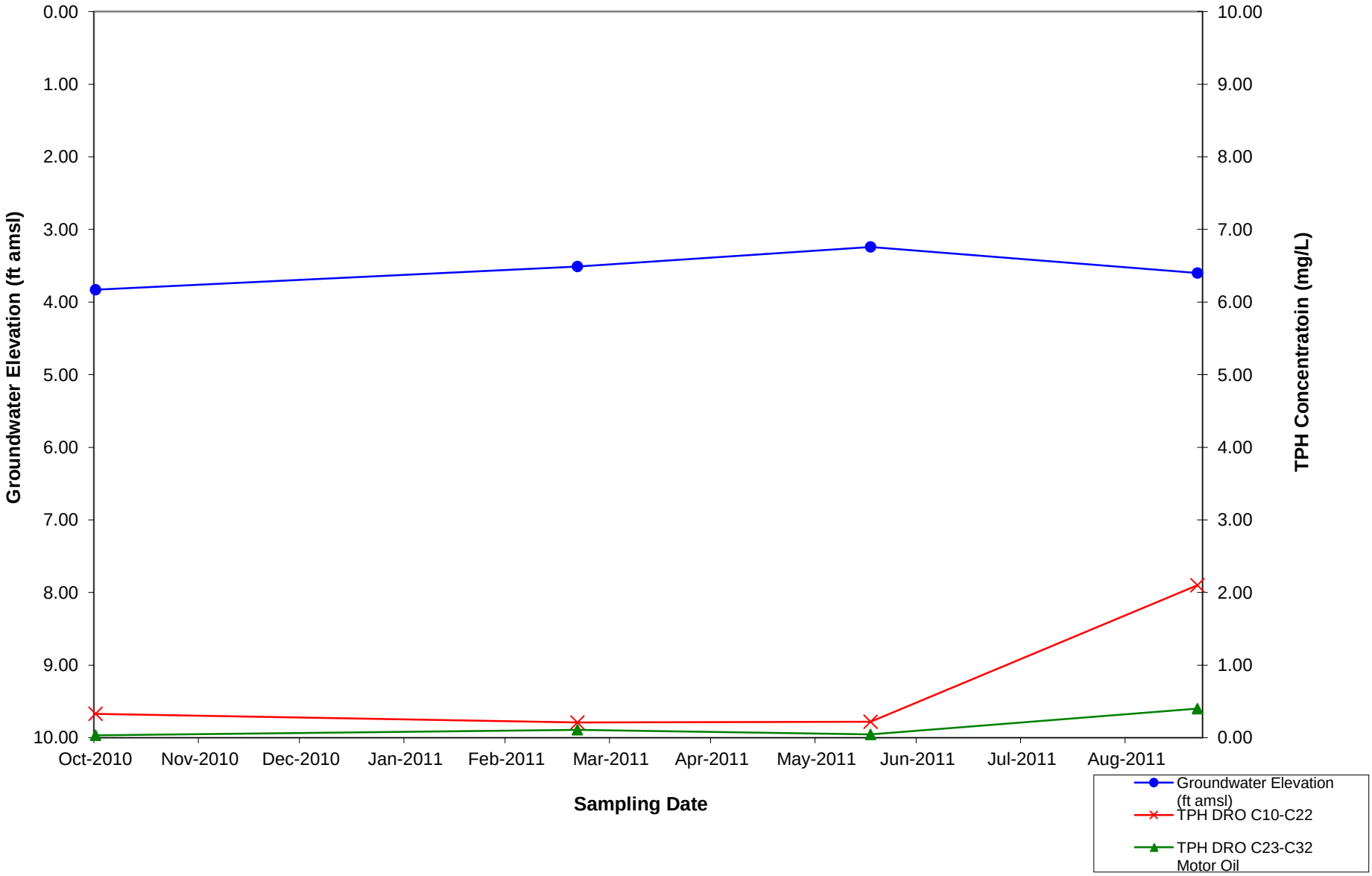
TPH DRO and Groundwater Elevation Trend in MW-9

ARCADIS



TPH DRO and Groundwater Elevation Trend in MW-10

ARCADIS



TPH DRO and Groundwater Elevation Trend in MW-11

ARCADIS