

**Pinellas County, Florida, Site  
Environmental Restoration Project**

**Sitewide Environmental Monitoring  
Semiannual Progress Report for the  
Young - Rainey STAR Center**

**December 2015 Through May 2016**

**June 2016**



U.S. DEPARTMENT OF  
**ENERGY**

Legacy  
Management

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## Abbreviations

1,1-DCE	1,1-dichloroethene
cDCE	<i>cis</i> -1,2-dichloroethene
COPC	contaminant of potential concern
CTL	cleanup target level
DOE	U.S. Department of Energy
DRC	Declaration of Restrictive Covenant
EPA	U.S. Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
HSWA	Hazardous and Solid Waste Amendments
IC	institutional control
µg/L	micrograms per liter
RBCA	Risk-Based Corrective Action
RCRA	Resource Conservation and Recovery Act
RPD	relative percent difference
STAR Center	Young - Rainey Science, Technology, and Research Center
SWMU	solid-waste management unit
TCE	trichloroethene
TCOPC	total contaminants of potential concern
tDCE	<i>trans</i> -1,2-dichloroethene
VC	vinyl chloride
WWNA	Wastewater Neutralization Area/Building 200 Area

## 1.0 Introduction

The Young - Rainey STAR Center (Science, Technology, and Research Center) at the Pinellas County, Florida, Site is a former U.S. Department of Energy (DOE) facility constructed in the mid-1950s. The 99-acre STAR Center is located in Largo, Florida, and lies in the northeast quarter of Section 13, Township 30 South, Range 15 East (Figure 1). While it was owned by DOE, the facility primarily manufactured neutron generators for nuclear weapons. Other products manufactured at the STAR Center were radioisotope-powered thermoelectric generators, thermal batteries, specialty capacitors, crystal resonators, neutron detectors, lightning-arrestor connectors, and vacuum-switch tubes. In 1987, the U.S. Environmental Protection Agency (EPA) performed a Resource Conservation and Recovery Act (RCRA) Facility Assessment (EPA 1988) at the site to gather information on potential releases of hazardous materials. In February of 1990, EPA issued a Hazardous and Solid Waste Amendments (HSWA) permit to DOE, requiring DOE to investigate and perform remediation activities in those areas designated as solid-waste management units (SWMUs) contaminated by hazardous materials resulting from DOE operations.

On March 17, 1995, DOE sold the facility to the Pinellas County Industrial Council. The sales contract included clauses to ensure continued compliance with federal, state, and local regulations while DOE remediates the site. On July 1, 1999, the Pinellas County Industrial Council was disestablished, and ownership of the STAR Center changed to the Pinellas County Industrial Development Authority. In November 2000, the State of Florida received HSWA authorization from EPA. The Florida Department of Environmental Protection (FDEP) issued a new HSWA permit to DOE in January 2002. The permit was reissued on August 21, 2007, and was modified under the provisions of *Florida Statutes* Section 403.722 and *Florida Administrative Code* Sections 62-4, 62-160, 62-730, 62-777, and 62-780 to incorporate the Global Risk-Based Corrective Action (RBCA) regulations. The permit was revised and reissued again on January 9, 2012.

The EPA RCRA Facility Assessment Report and the HSWA permit identified 15 sites at the former DOE facility that might have had environmental contamination as a result of past activities. Upon completion of the RCRA Facility Investigation (DOE 1991), 11 of the 15 SWMUs were recommended by DOE and approved by EPA Region 4 and FDEP for no further action (DOE 1994). A 12th site, the Former Pistol Range Site, was remediated in 1993; it was recommended by DOE and approved by EPA Region 4 and FDEP for no further action.

Two additional SWMUs, the West Fenceline Site and the Wastewater Neutralization Area/Building 200 Area (WWNA), were identified after the HSWA permit was issued, bringing the total to 17 SWMUs that have been identified and investigated at the STAR Center. Remediation of the West Fenceline Site was completed in 1997, and DOE recommended—and EPA Region 4 and FDEP approved—no further action, for a total of 13 SWMUs remediated. A Corrective Measures Study/Corrective Measures Implementation Plan was prepared and submitted in 1997 to EPA Region 4 and FDEP to address the contamination at the WWNA.

Therefore, four active SWMUs currently remain at the STAR Center. These four SWMUs are the Old Drum Storage Site (PIN06), the Industrial Drain Leaks/Building 100 Area (PIN12), the Northeast Site (PIN15), and the WWNA (PIN18). Two of the SWMUs, PIN06 and PIN12, are collectively known as the Building 100 Area. Figure 2 depicts the location of the four SWMUs.

DOE is working with the STAR Center landowner (Pinellas County Economic Development Authority) to establish institutional controls (ICs) in the form of Declarations of Restrictive Covenant (DRCs) between FDEP and the landowners at the STAR Center and the adjacent properties affected by the Building 100 Area groundwater plume. Specifically, DOE is coordinating with the STAR Center, other affected property owners, and FDEP to develop a DRC for all affected properties. DRCs for the Northeast Site, WWNA, and Building 100 Area were finalized in September 2015. Three of the offsite property owners, Pinellas County Schools, Bank of Tampa, and BCH-1, have executed a DRC for their properties. DOE is coordinating with Pinellas County to develop a layered IC for the two impacted road rights-of-way, consisting of a County ordinance accompanied by a Site Rehabilitation Agreement. DOE is also negotiating with the remaining offsite property owner to develop a DRC for their property. The proposed ICs will serve to minimize the possibility of human and environmental exposure to contaminated media. These ICs will then become part of DOE's Long-Term Surveillance and Maintenance Plan at this site.

Additional background information relative to each SWMU is briefly described below. This document serves as the semiannual progress report for each SWMU by providing the results of recent monitoring activities and a summary of ongoing and projected work.

## **1.1 Building 100 Area**

The Building 100 Area is made up of two SWMUs: the Industrial Drain Leaks/Building 100 (PIN12) and the Old Drum Storage Site (PIN06). The Old Drum Storage Site lies beneath and adjacent to the northwest corner of the main building that covers approximately 11 acres, located near the southeast corner of the STAR Center (Figure 2). Building 100 is the most notable feature of the STAR Center, having housed the majority of the laboratory and production facilities during DOE ownership of the facility. One source of contamination at the Building 100 Area is leaks from a liquid-waste drain system composed of individual drainage systems previously used for health physics, chemical, sanitary, and storm-water systems. The drain systems were flushed, grouted, and abandoned by 1997, and some of the chemical drain systems were replaced by an aboveground system (DOE 1997).

The Old Drum Storage Site is the former location of a concrete storage pad. This area was equipped with a drain and containment system and was once used to store hazardous waste. The waste stored at this location included methylene chloride, ignitable liquids, arsenic, and calcium chromate solids. Empty drums containing residual waste solvents were also stored in this area.

Several campaigns for the characterization and remediation of contaminants of potential concern (COPCs) in groundwater beneath and adjacent to the building commenced in the mid-1990s and ceased in 2012. Prior to the start of the Pinellas County water line and road projects on Belcher and Bryan Dairy Roads in 2011, DOE installed new monitoring wells at the property boundary along the two roads in October 2007 and in January and February 2008 to further define the contaminant plume. This investigation confirmed that the plume was offsite south of Bryan Dairy Road, on the county right-of-way. DOE performed the required notification to FDEP regarding the offsite plume. Additional plume delineation was then conducted on the properties south of Bryan Dairy Road and also on the property east of the STAR Center across Belcher Road.

The *Building 100 Area Site Assessment Report* (DOE 2012) summarized the results of the plume delineation work conducted at the Building 100 Area and the adjacent properties from 2007 to 2012. The action proposed in that document was to conduct plume stability monitoring of both the onsite and offsite plumes. The Plume Stability Monitoring Plan for the Building 100 Area is included in the Site Monitoring Plan, which is an appendix to the *Long-Term Surveillance and Maintenance Plan for the Pinellas Site* (DOE 2015).

Plume stability monitoring began with the March 2013 sampling event. After the fourth plume stability monitoring event in September 2014, DOE determined that contaminant concentrations in the south plume were increasing and that remediation to treat both the south and east plumes should be implemented. The *Interim Corrective Measure Work Plan for Source and Plume Treatment at the Building 100 Area* (DOE 2014) was submitted to FDEP on October 2, 2014. The objective of this work was to inject emulsified soybean oil and the microorganism *Dehalococcoides mccartyi* (formerly known as *Dehalococcoides ethenogenes*) to enhance contaminant biodegradation in (1) the dissolved-phase contaminant plumes downgradient from the building on the STAR Center property, (2) the dissolved-phase contaminant plumes located on the offsite properties, and (3) the contaminant source areas and the high-concentration dissolved-phase contaminant plumes beneath the building.

The injection of emulsified soybean oil and *Dehalococcoides mccartyi* in the dissolved-phase plumes on the STAR Center property was conducted in October and November 2014. Injection of these same amendments was conducted on three offsite properties in February 2015. The onsite and offsite injection locations are shown in Figure 3.

The last phase of this project, amendment injection beneath the building, was implemented in summer and fall 2015. Eight horizontal wells were installed beneath the building in July, August, and September 2015. Amendment injection using the horizontal wells was conducted in November 2015. The injection areas beneath the building are shown in Figure 3.

With the implementation of enhanced bioremediation at the Building 100 Area, plume stability monitoring was suspended and replaced with performance monitoring of the remediation project. The March 2015 sampling event was the first performance monitoring sampling event.

## 1.2 Northeast Site

The Northeast Site is located in the northeast corner of the STAR Center (Figure 2). In the late 1960s, before construction of the East Pond in 1968, drums of waste and construction debris were disposed of in the swampy area of the Northeast Site. In 1986, an expansion of the East Pond was initiated to create additional storm-water retention capacity, but excavation activities ceased when contamination was detected directly west of the pond.

A series of characterization and remedial actions was completed, including groundwater recovery and treatment, debris and soil source material excavation in 1995, anaerobic bioremediation and rotary steam-stripping pilot testing in 1997, two nonaqueous-phase liquid removal projects utilizing a thermal remediation method from 2002 to 2006, and soil removal using large-diameter augers in 2009.

As a follow-up to all of this work, emulsified soybean oil and the *Dehalococcoides mccartyi* microorganism were injected into the subsurface at 75 points at the site in January and February 2010. This project resulted in a significant decrease in contaminant mass and concentration around the former contaminant source areas and in the downgradient contaminant plume.

With the completion of remedial action and confirmatory groundwater monitoring, DOE is proceeding to close the Northeast Site under the FDEP's RBCA rules (*Florida Administrative Code* Section 62-780.680). Closure monitoring was implemented starting with the September 2009 sampling event and was completed in September 2012. COPCs concentrations decreased significantly over this time period. DOE submitted the *Site Rehabilitation Completion Report with No Further Action Proposal for the Northeast Site* (DOE 2013) to FDEP in May 2013. That document proposes a risk-based closure for the Northeast Site under the State's RBCA regulations. FDEP approved site closure pending establishment of a DRC for the site. The DRC for the Northeast Site was recorded on September 18, 2015, so the site can now proceed to closure.

### **1.3 WWNA**

The WWNA (PIN18) includes the industrial wastewater neutralization facility, the area south of the industrial wastewater neutralization facility (including the parking lot), and Building 200 (Figure 2). The WWNA and the Building 200 Area were identified as potential SWMUs in 1993. Following extensive characterization and remedial action, a No Further Action with Controls proposal was submitted to FDEP on March 14, 2007. FDEP approved the document on May 24, 2007, pending the finalization of ICs at the STAR Center. Closure of the site can now be finalized, as ICs were formally implemented with the recording of the DRC on September 18, 2015.

### **1.4 Site Update**

The following tasks were accomplished during the December 2015 through May 2016 period.

- An interim sampling event was conducted at 14 monitoring wells at the Building 100 Area January 1–14 and January 19 to collect biogeochemical data to supplement performance monitoring.
- The sitewide semiannual sampling event was conducted March 1–10, 2016. This event consisted of collection of water samples from 99 monitoring wells at the Building 100 Area. Water-level measurements were obtained from all accessible monitoring wells and ponds on March 2.

### **1.5 Waste Minimization**

The following materials were recycled at the Pinellas site from December 2015 to May 2016:

- 43 pounds of paper
- 23 pounds of cardboard
- 7 pounds of plastic



- 21 pounds of magazines
- 1 pound of aluminum
- 3 pounds of glass

## **2.0 Water-Level Elevations**

Depth-to-water measurements were taken at all accessible monitoring wells, piezometers, and ponds (including two offsite ponds) at the STAR Center on March 2, 2016. The water levels were measured with an electronic water-level indicator or directly from a staff gauge. Groundwater elevations are listed in Table 1.

### **2.1 Groundwater Flow**

Groundwater and surface water elevations were used to construct sitewide groundwater contour maps of the shallow and deep surficial aquifers (Plates 1 and 2, respectively). Individual contour maps were also constructed for the shallow and deep surficial aquifers at the Building 100 Area (Figures 4 and 5).

For the past several years, shallow groundwater beneath Building 100 has been observed to flow to the southeast under a very slight gradient, and this flow pattern was observed again in March 2016 (Figure 4). A similar flow pattern was observed in the deep surficial aquifer (Figure 5). The hydraulic gradient in the Building 100 Area in March 2016 was about 0.002 foot/foot onsite and about 0.004 foot/foot offsite to the south. On the basis of calculations using Darcy's law, along with approximations of 1 foot/day for hydraulic conductivity and 0.3 for effective porosity, groundwater velocity in this area is estimated to be about 2.4 feet/year onsite and about 5 feet/year offsite to the south.

An aquifer test conducted in July 2009 in the area around recovery well RW03 indicated that the hydraulic conductivity of the surficial aquifer around well RW03 might be higher than that observed in other parts of the STAR Center. Analysis of the aquifer test yielded an estimated hydraulic conductivity of 6.7–7.4 feet/day, which is higher than that of previous tests conducted in other areas of the STAR Center, where estimated hydraulic conductivities were closer to 1 foot/day.

Surface water elevations were recorded in March 2016 from the East, South, Southwest, and West Ponds, Pond 5, and the pond just east of Belcher Road (Table 2). All the ponds are hydraulically connected to the shallow surficial aquifer system (Plate 1).

## **3.0 Groundwater Sampling**

### **3.1 Work Performed**

During the semiannual sampling event at the STAR Center in March 2016, groundwater samples were collected from 99 monitoring wells at the Building 100 Area. Volatile organic compounds were analyzed in these samples using EPA SW-846 method 8260B, and 1,4-dioxane was

analyzed in the same samples using EPA method 8260B SIM. Laboratory reports for March 2016 are provided in Appendix A. An interim sampling event was conducted at 14 monitoring wells at the Building 100 Area January 12–14 and January 19, 2016, to collect biogeochemical data to supplement a performance review of enhanced bioremediation. All analytical results are discussed in Section 4.

Figures 6–14 are plume maps for the Building 100 Area for March 2016. Figures 6 and 7 show the total COPCs (TCOPCs) concentrations. TCOPCs is the sum of the individual COPC concentrations for each well. The Building 100 Area COPCs are trichloroethene (TCE), *cis*-1,2-dichloroethene (cDCE), *trans*-1,2-dichloroethene (tDCE), 1,1-dichloroethene (1,1-DCE), vinyl chloride (VC), and 1,4-dioxane. Figures 8–14 show the plumes for the individual COPCs; plume maps for tDCE and 1,1-DCE are not shown because these COPCs rarely exceed the cleanup target level. Question marks are shown on the maps at locations where insufficient information is available to define the extent of the plumes.

All samples were collected in accordance with the *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites (LMS/PRO/S04351)*, using FDEP procedures. All samples were submitted to TestAmerica Laboratories in Denver, Colorado, for analysis. TestAmerica Denver is accredited by the Florida Department of Health in accordance with the National Environmental Laboratory Accreditation Conference (certification number E87667). Sampling was performed when the field measurements stabilized, in accordance with FDEP procedures.

A new FDEP-approved sampling technique (allowing water to pass through the pump head before sample collection), first implemented with the September 2014 sampling event, was used at all wells. All monitoring wells were micropurged using high-density polyethylene tubing or dedicated Teflon tubing in the well and a peristaltic pump at the surface, and sampling was performed when the field measurements stabilized.

Table 3 lists field measurements of temperature, specific conductance, turbidity, pH, oxidation–reduction potential, and dissolved oxygen recorded at the time the samples were collected. Measurements were made using a calibrated multiparameter meter with a flow cell, and turbidity was measured using a nephelometer.

### **3.2 Quality Assurance/Quality Control**

The results from the analytical laboratory, TestAmerica Denver, were checked for quality assurance/quality control through duplicate samples, trip blanks, and equipment blanks. The duplicate sample results were compared, and the relative percent differences (RPDs) between the results were calculated (Table 4).

VC and 1,4-dioxane in well PIN12-0576-2 and toluene in well PIN12-0585-2 had RPD values that exceeded the EPA-recommended laboratory duplicate criterion of less than 20 RPD for results that are greater than 5 times the method detection limit. There is no explanation for these poor RPD values. These results were “J” qualified as estimated values due to the poor RPD value.

As specified in the *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites*, duplicate samples should be collected at a frequency of 1 duplicate for every 20 or fewer samples. For the STAR Center, 99 samples and 5 duplicates were collected for both volatiles and 1,4-dioxane analysis. The duplicate requirements for this sampling event were met. Four trip blanks and four equipment blanks also were collected during this event.

A data validation software module for identifying and tracking anomalous groundwater data was used to generate a report of analytical results that fall outside of historical minimum or maximum values. No anomalous results were identified.

## 4.0 Performance Monitoring

As described in Section 1.1, the injection of emulsified soybean oil and the *Dehalococcoides mccartyi* microorganism was conducted in the onsite plumes in October and November 2014, in the offsite plumes in February 2015, and beneath the building in November 2015 (Figure 3). Due to the amendment injections, performance monitoring of enhanced bioremediation at the Building 100 Area has replaced plume stability monitoring, starting with the March 2015 sampling event. COPC concentrations and Cleanup Target Levels (CTLs) are provided in Table 5.

A sampling event for a subset of 14 wells was conducted in January 2016 to provide biogeochemical data to aid performance monitoring. These additional data are presented in Tables 6 and 7.

Figures 15–18 are time-concentration plots for wells in or near the centerline of the south plume. Significant concentration decreases after soybean oil injection are evident in all four wells. Figures 19–21 are time-concentration plots for wells in or near the centerline of the east plume. Well 0580-2 is about 40 feet from the nearest soybean oil injection point and no decrease in COPC concentrations is observed in this well, probably because the effects created by the injection have not yet reached this well. Well 0582-2 is about 25 feet from the nearest injection point, and cDCE and VC concentrations decreased in this well. Well 0576-2 is close to the injection points, but no concentration decrease is evident. Performance monitoring will continue with the next sampling event in September 2016.

## 5.0 Upcoming Tasks

The following major task is planned for the next semiannual period (June through November 2016):

- A total of 25 monitoring wells will be abandoned in June. This includes all 20 remaining wells at the WWNA and Northeast Site (in preparation for RBCA closure) and 5 wells that are no longer needed at the Building 100 Area. Well PIN15-0513, screened in the Floridan aquifer at the Northeast Site, will remain in place, and its ownership will be transferred from DOE to the STAR Center.
- Emulsified soybean oil and the microorganism *Dehalococcoides mccartyi* will be injected using temporary injection points on the Essentra property in summer or fall. This is a

continuation of the work proposed in the *Interim Corrective Measure Work Plan for Source and Plume Treatment at the Building 100 Area* (DOE 2014).

- Performance monitoring at the Building 100 Area will continue with the semiannual sampling event in September.

## 6.0 References

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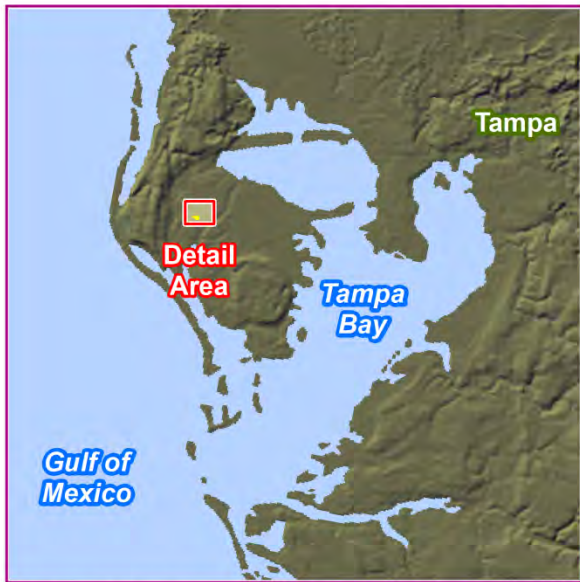
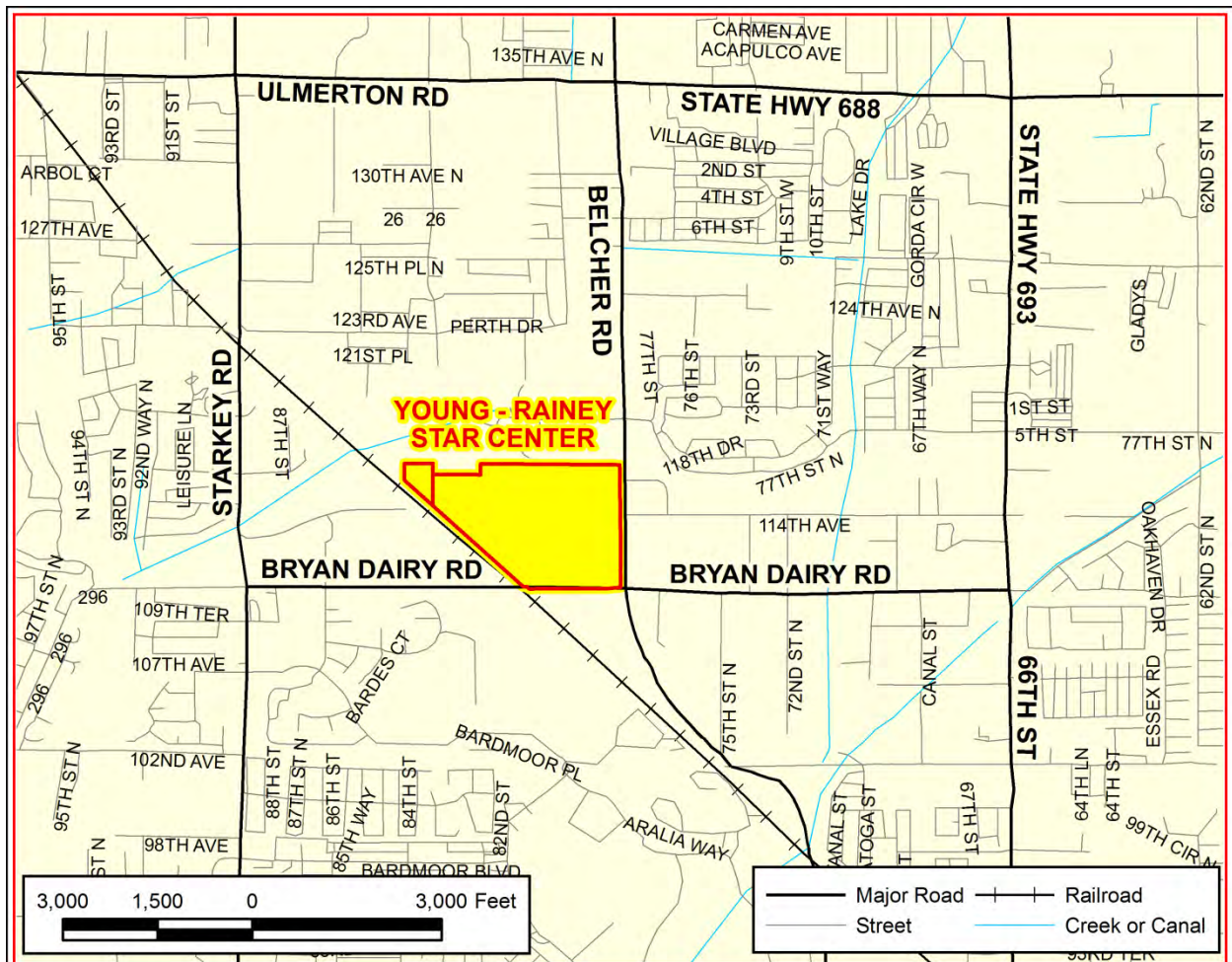
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*Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites*, LMS/PRO/S04351, continually updated, prepared by Navarro Research and Engineering, Inc., for the U.S. Department of Energy Office of Legacy Management.



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Figure 1. Young - Rainey STAR Center Location



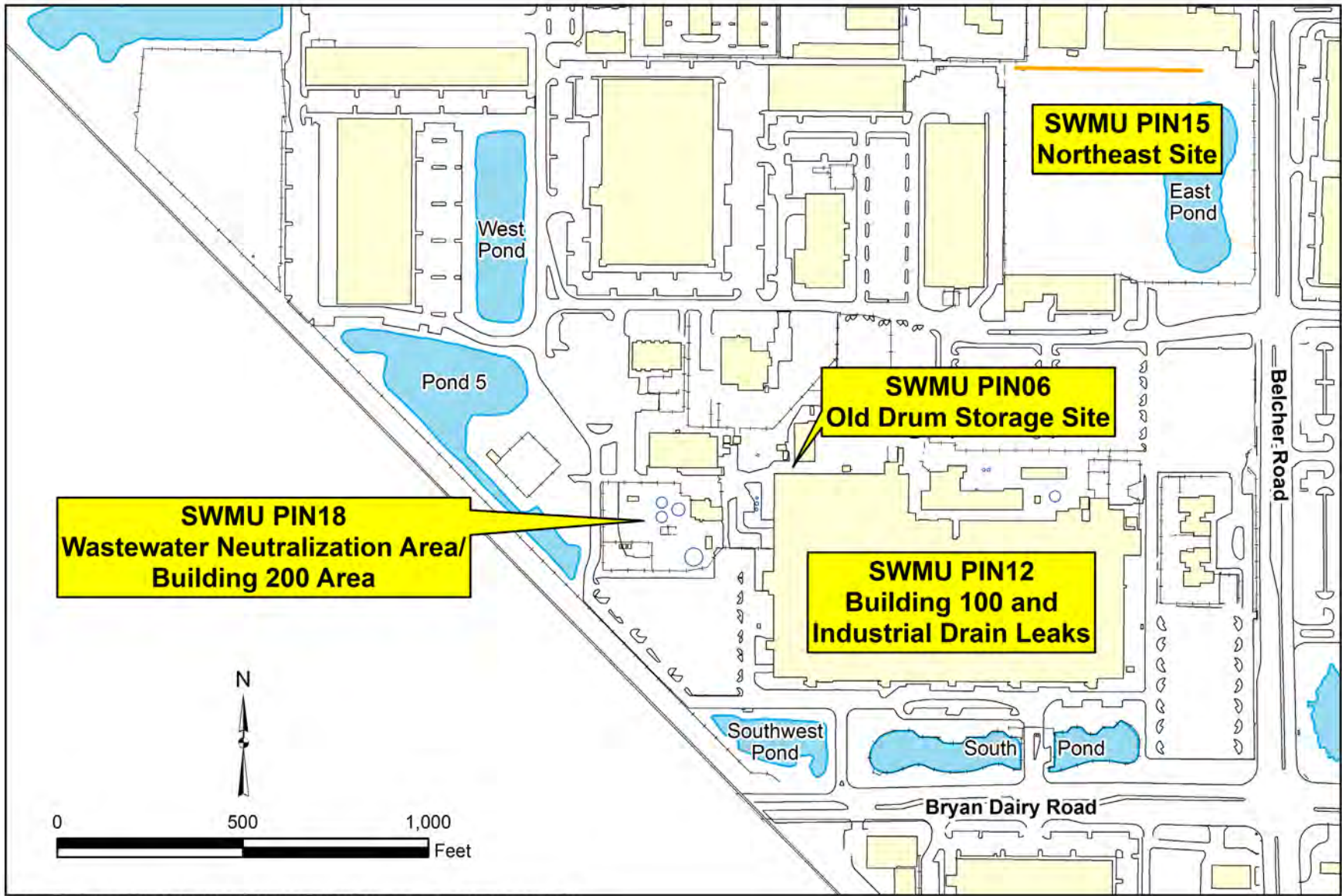


Figure 2. Location of STAR Center Solid-Waste Management Units

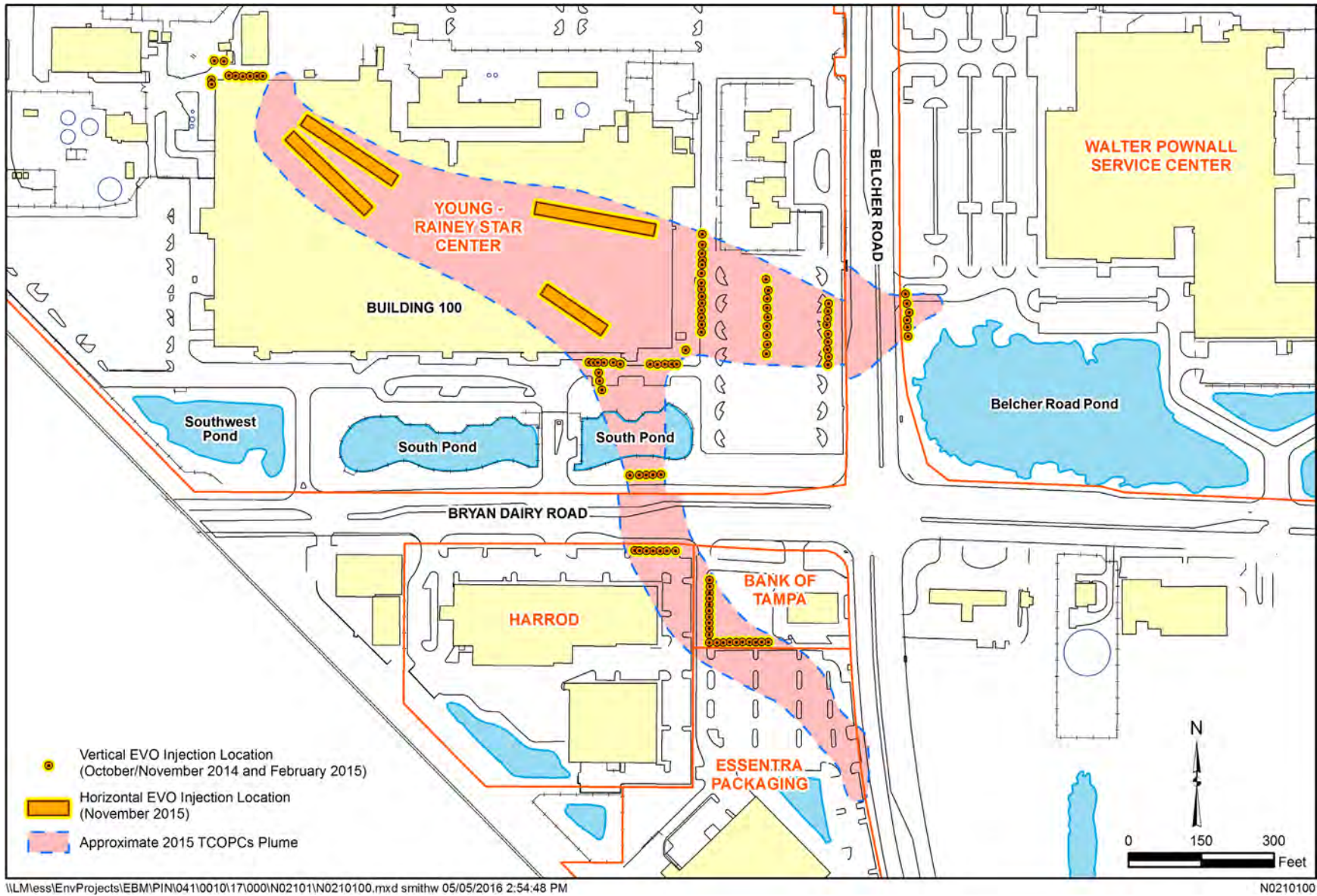


Figure 3. Emulsified Soybean Oil Injection Locations



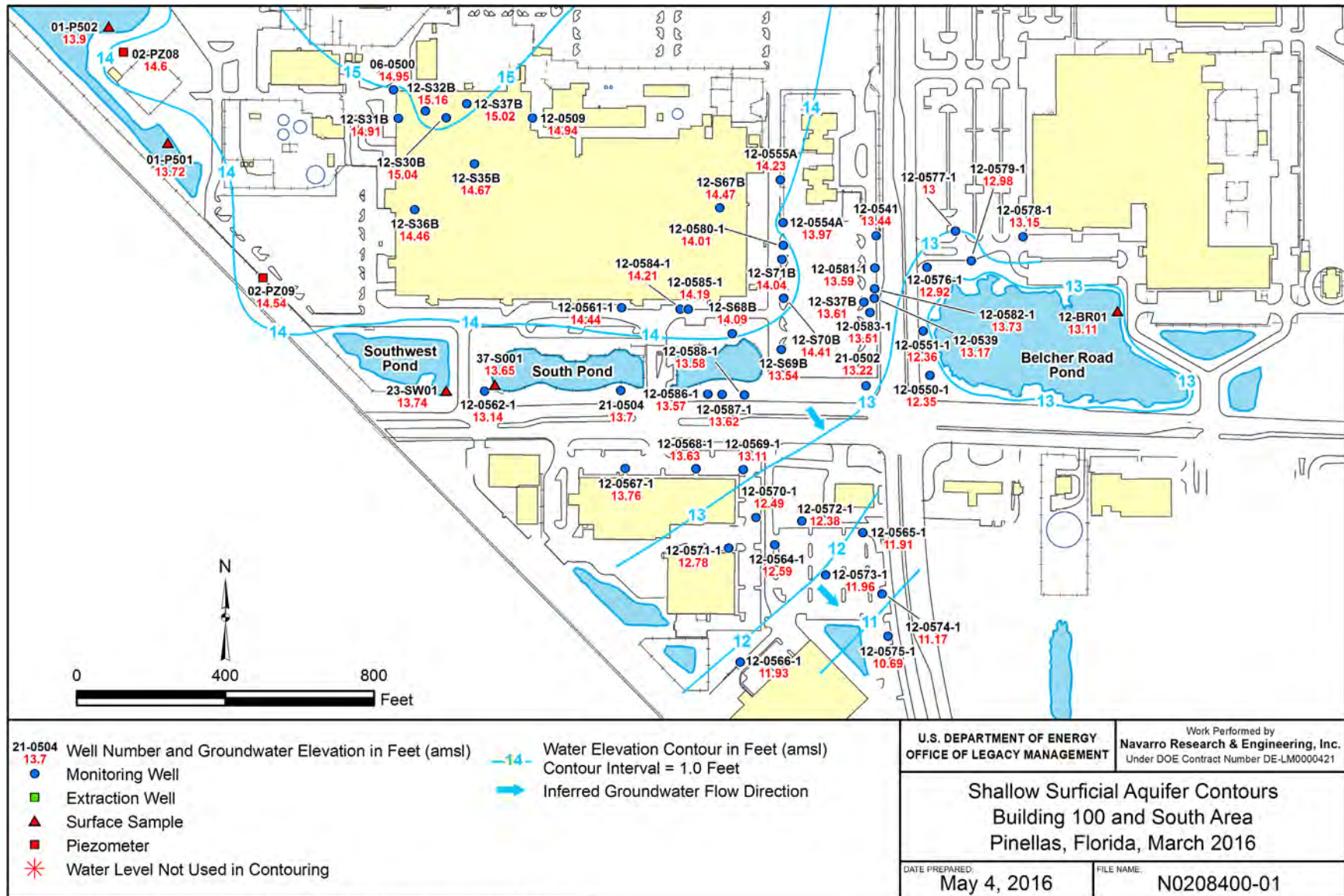
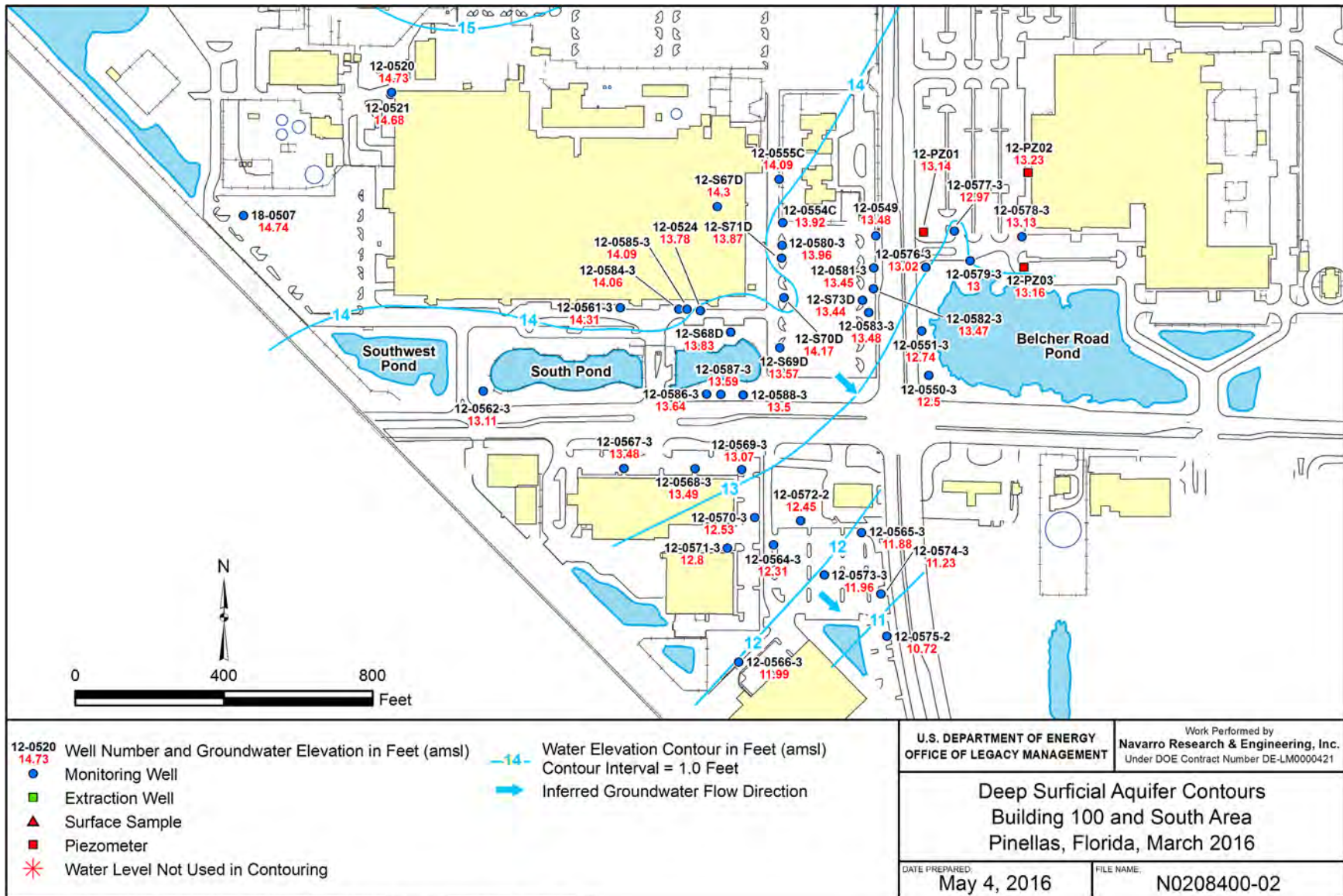


Figure 4. Building 100 Area Shallow Surficial Aquifer Flow, March 2016





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Figure 5. Building 100 Area Deep Surficial Aquifer Flow, March 2016

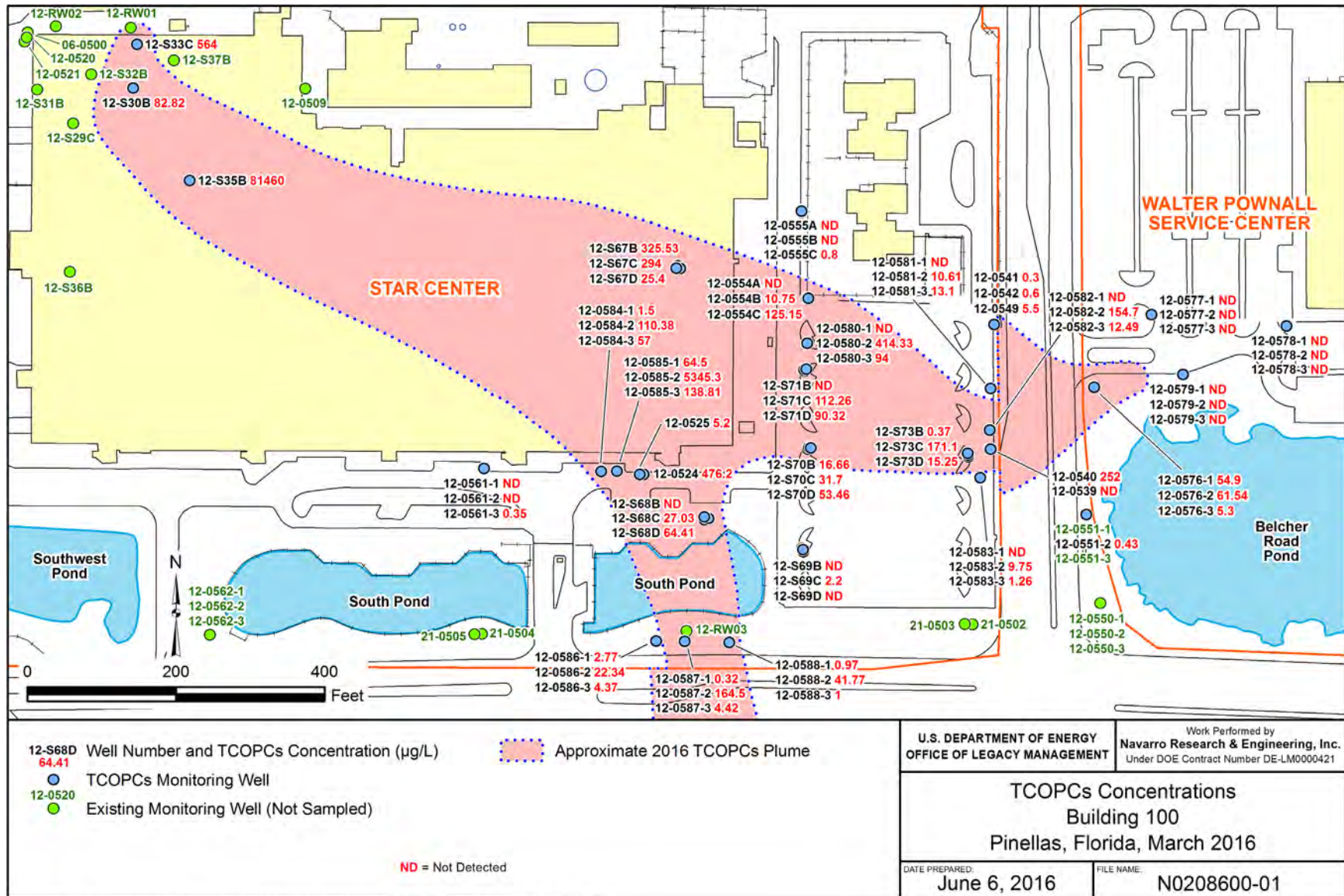
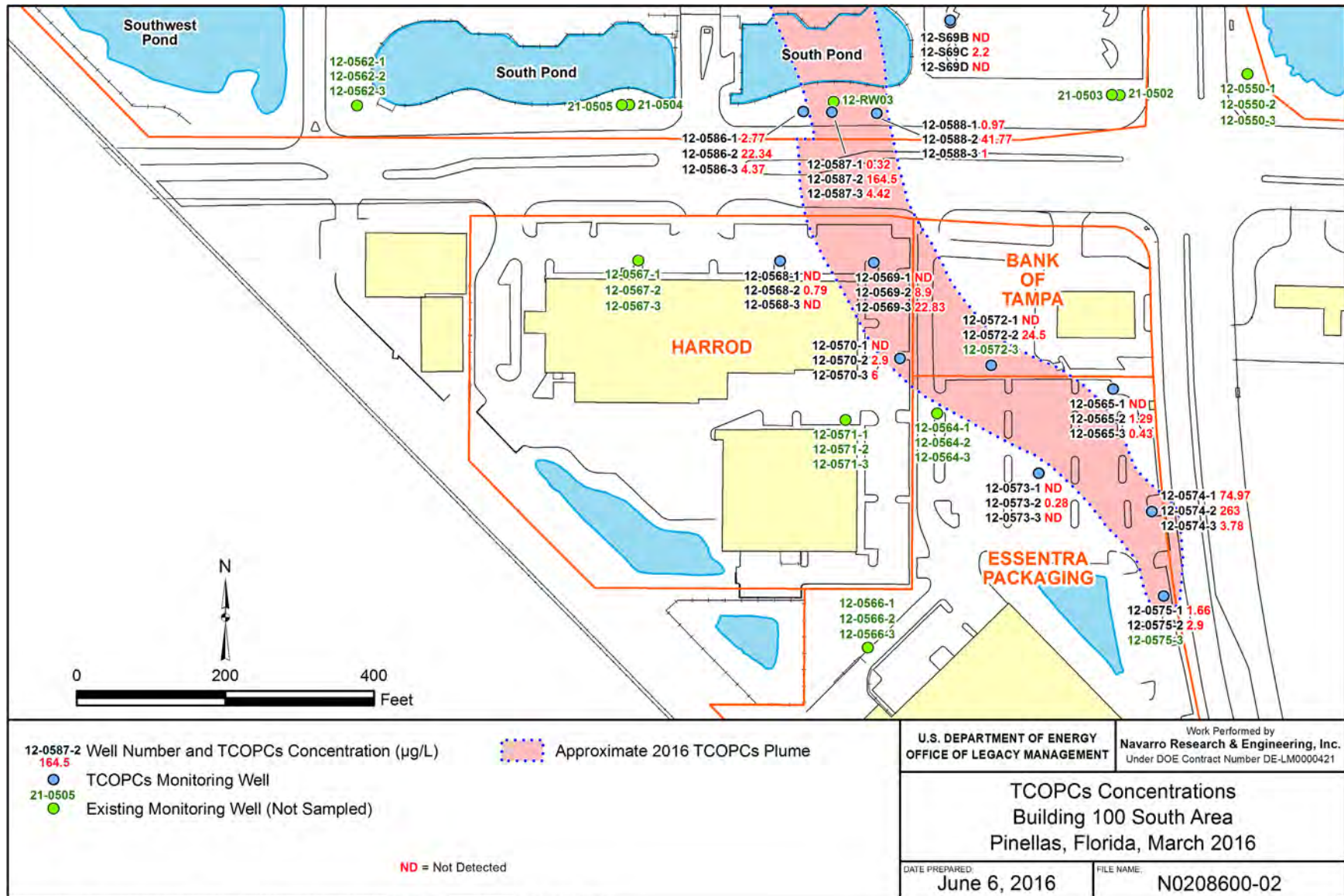


Figure 6. Building 100 Area TCOPCs Concentrations, March 2016

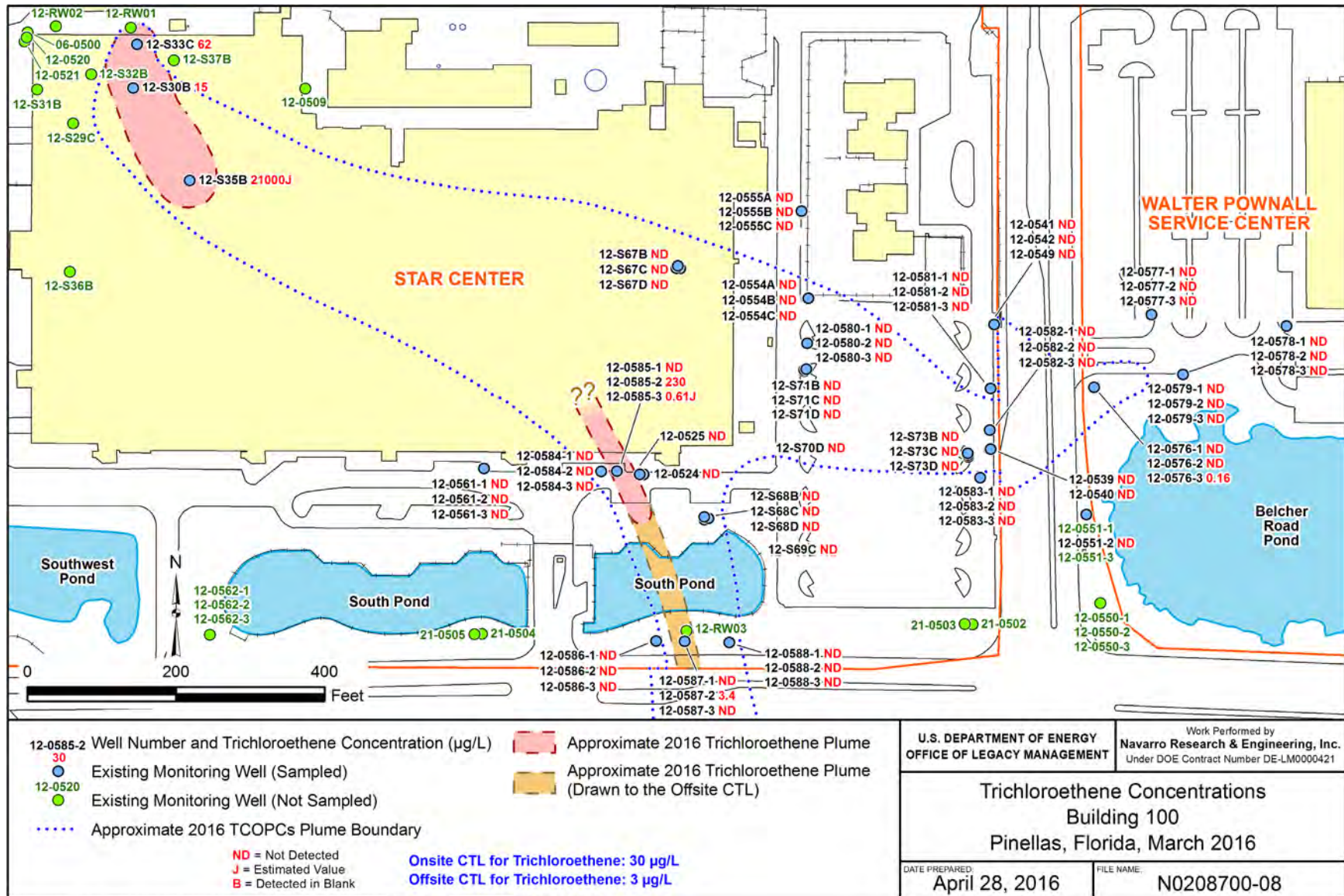
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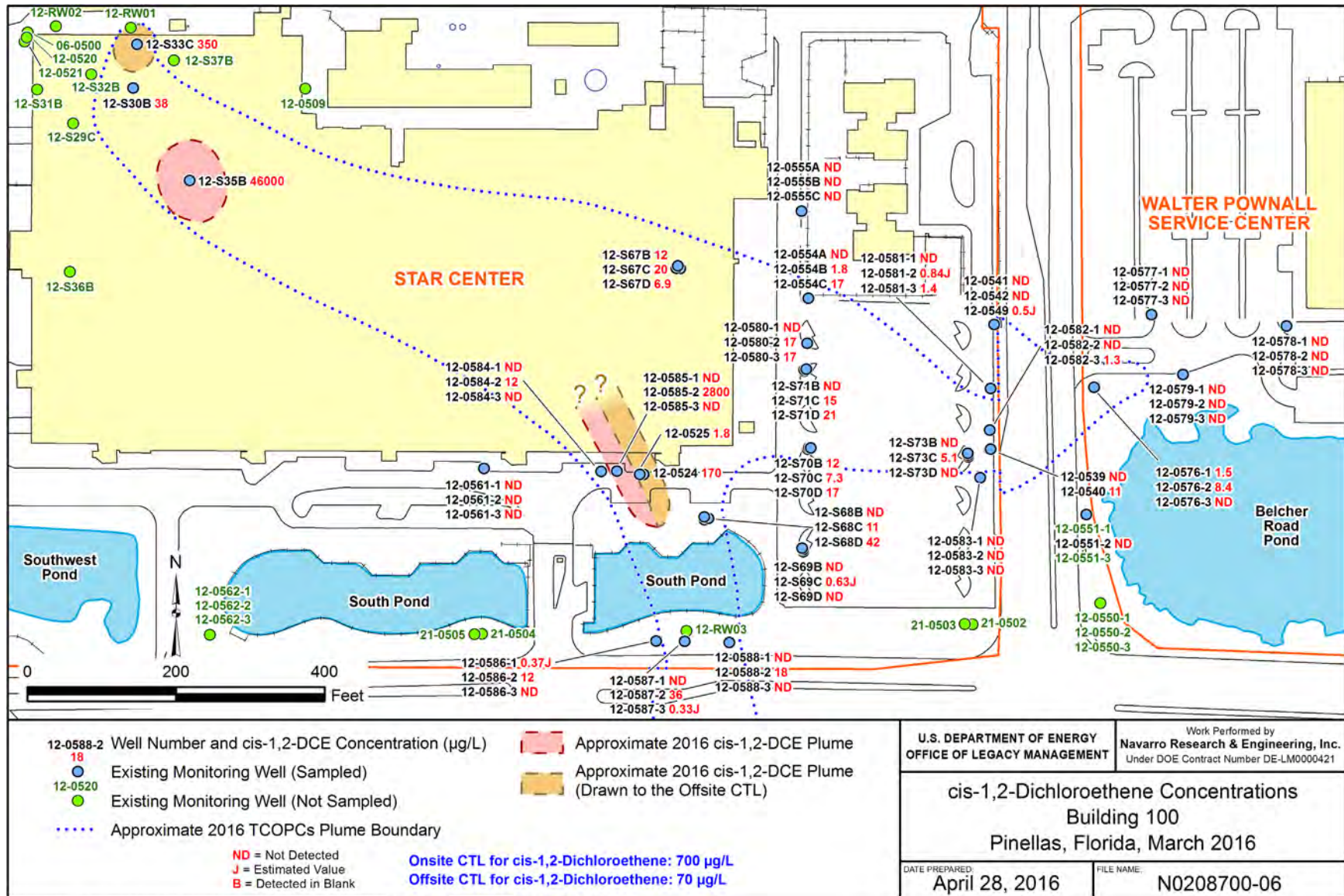
Figure 7. Building 100 Area South TCOPCs Concentrations, March 2016



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Figure 8. Building 100 Area TCE Concentrations, March 2016





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Figure 9. Building 100 Area cDCE Concentrations, March 2016

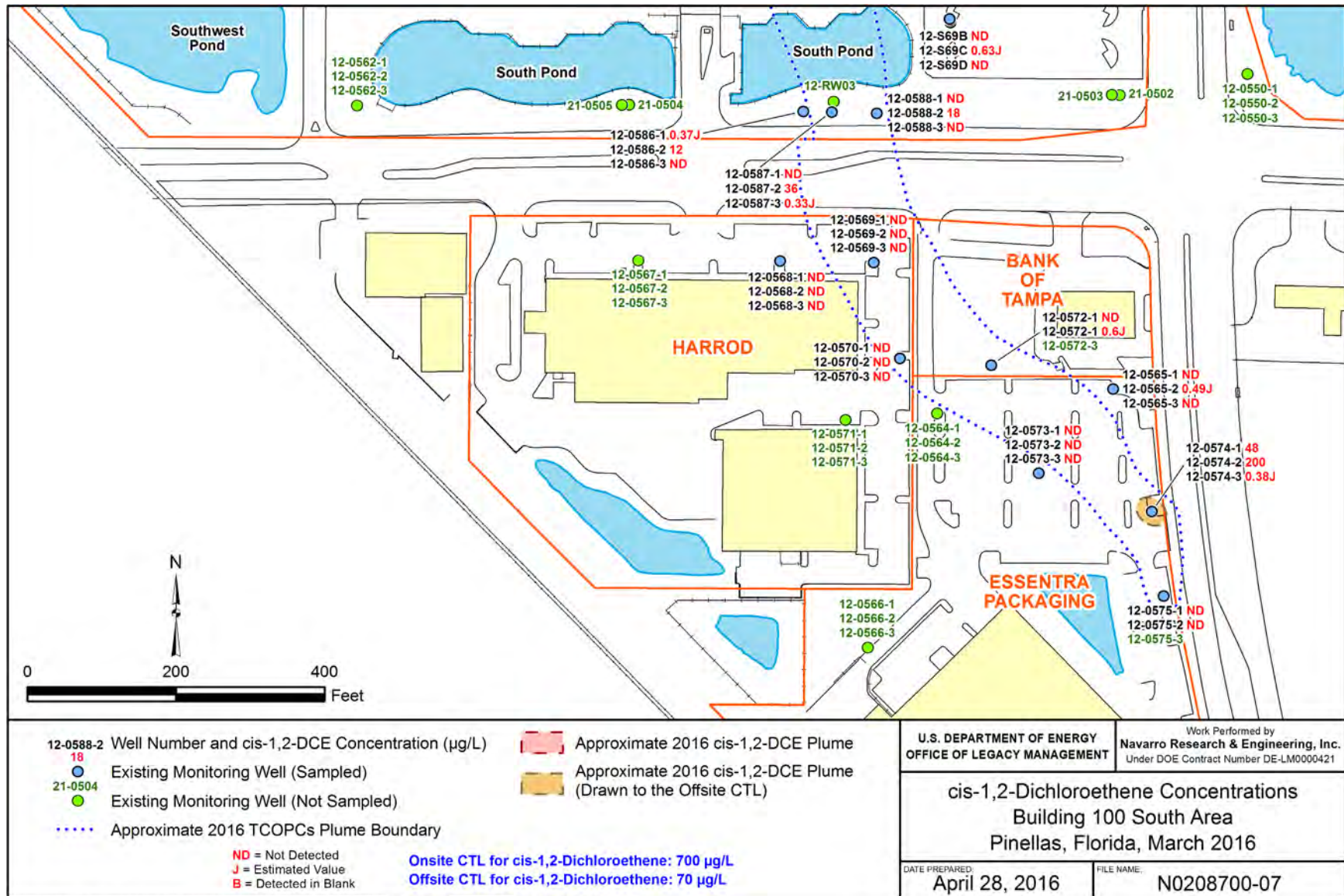
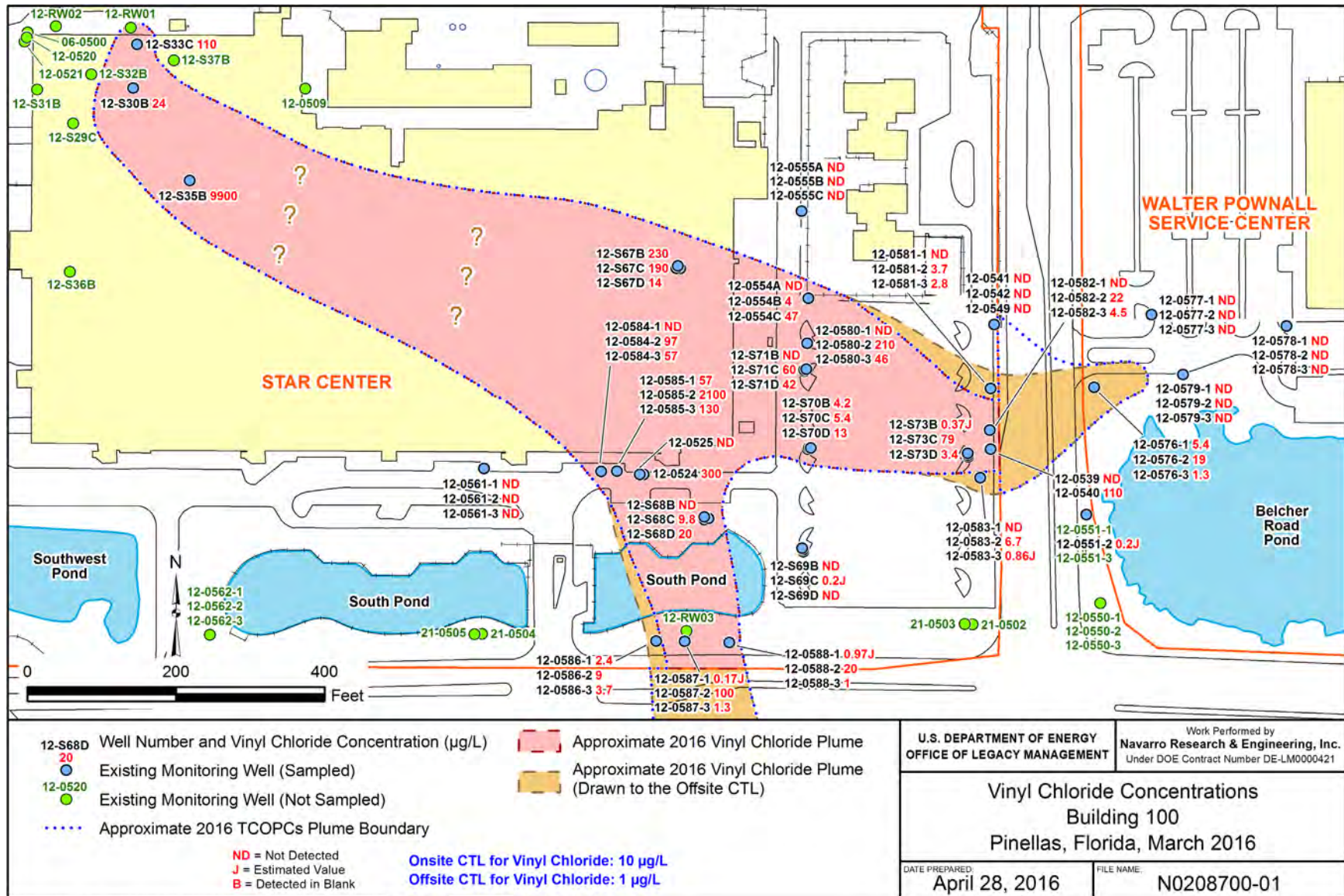


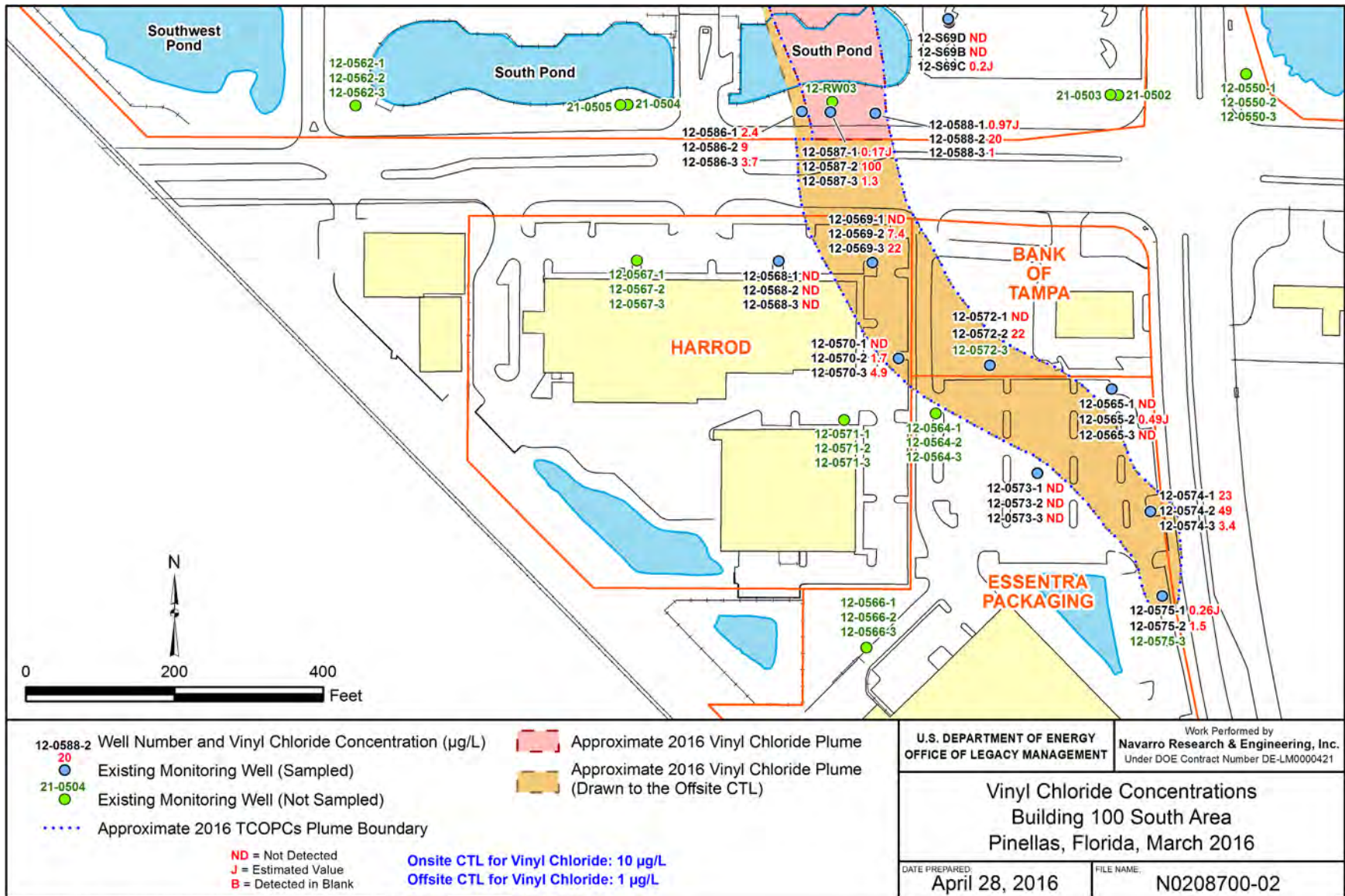
Figure 10. Building 100 Area South cDCE Concentrations, March 2016





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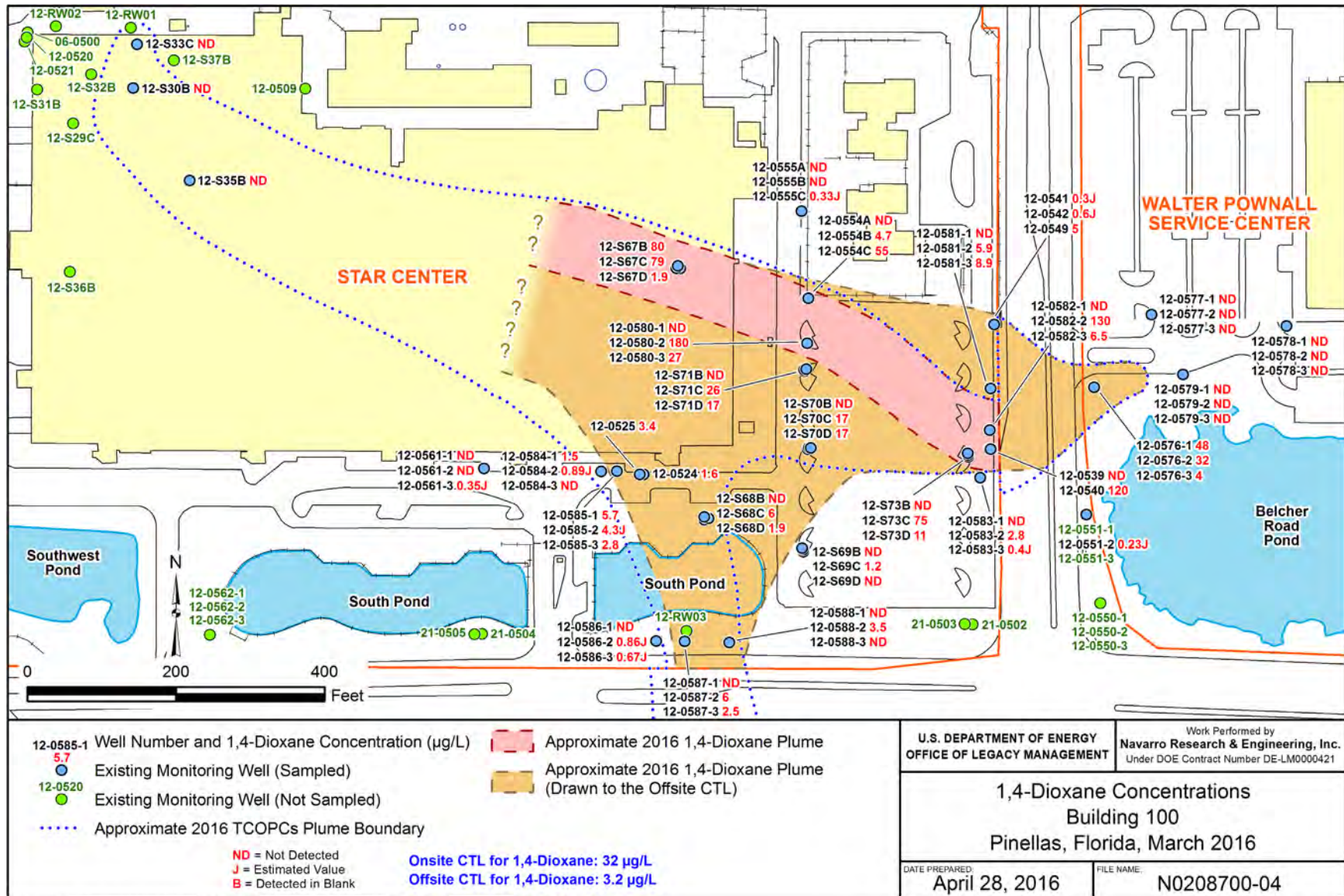
Figure 11. Building 100 Area VC Concentrations, March 2016



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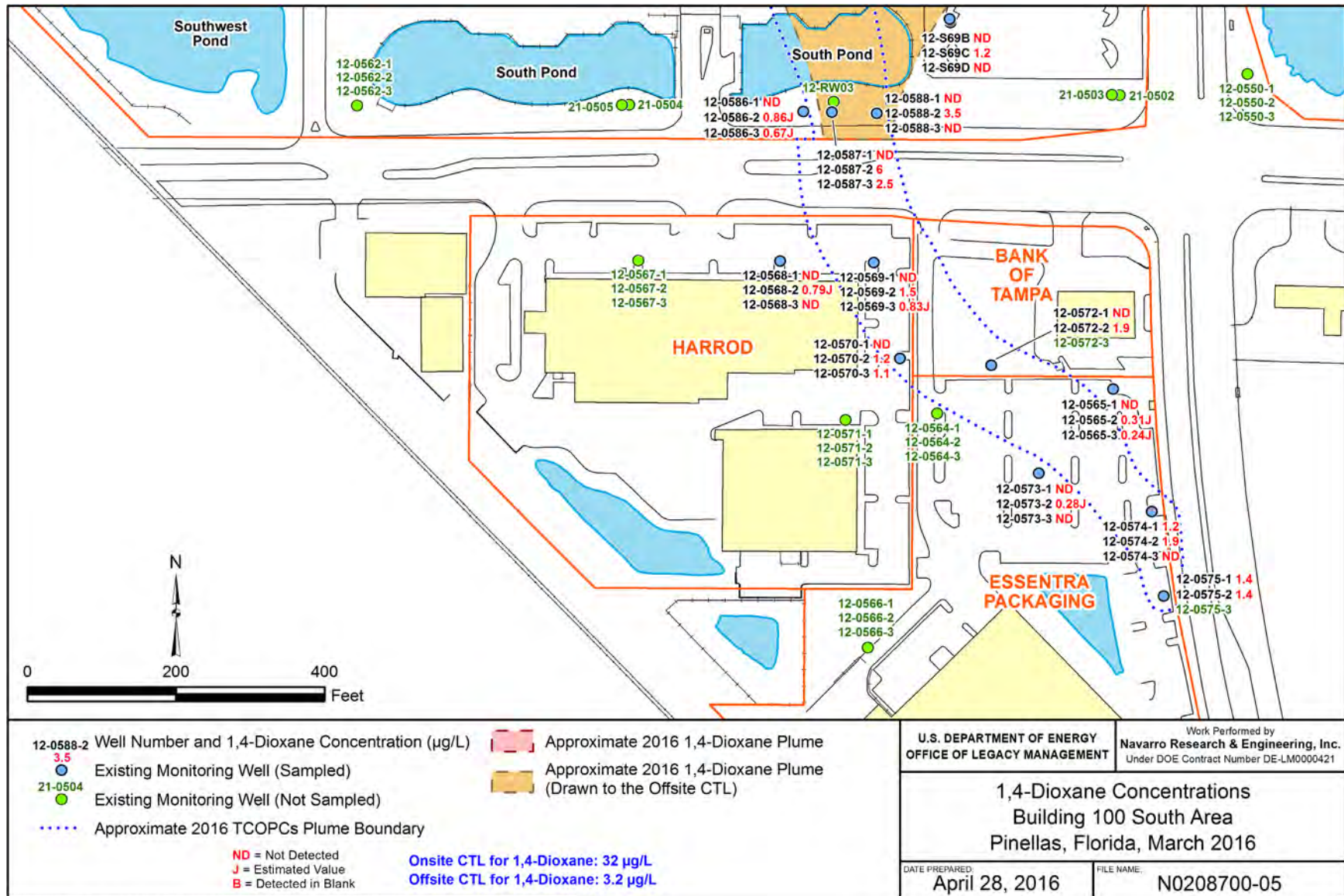
Figure 12. Building 100 Area South VC Concentrations, March 2016





\\LM\ess\Env\Projects\EBM\PIN\0411\0010117\000\N02087\N0208700-04.mxd smithw 04/28/2016 12:30:41 PM

Figure 13. Building 100 Area 1,4-Dioxane Concentrations, March 2016



\\LMless\EnvProjects\EBM\PIN\041\001017\000\N02087\N0208700-05.mxd smithw 04/28/2016 12:35:58 PM

Figure 14. Building 100 Area South 1,4-Dioxane Concentrations, March 2016



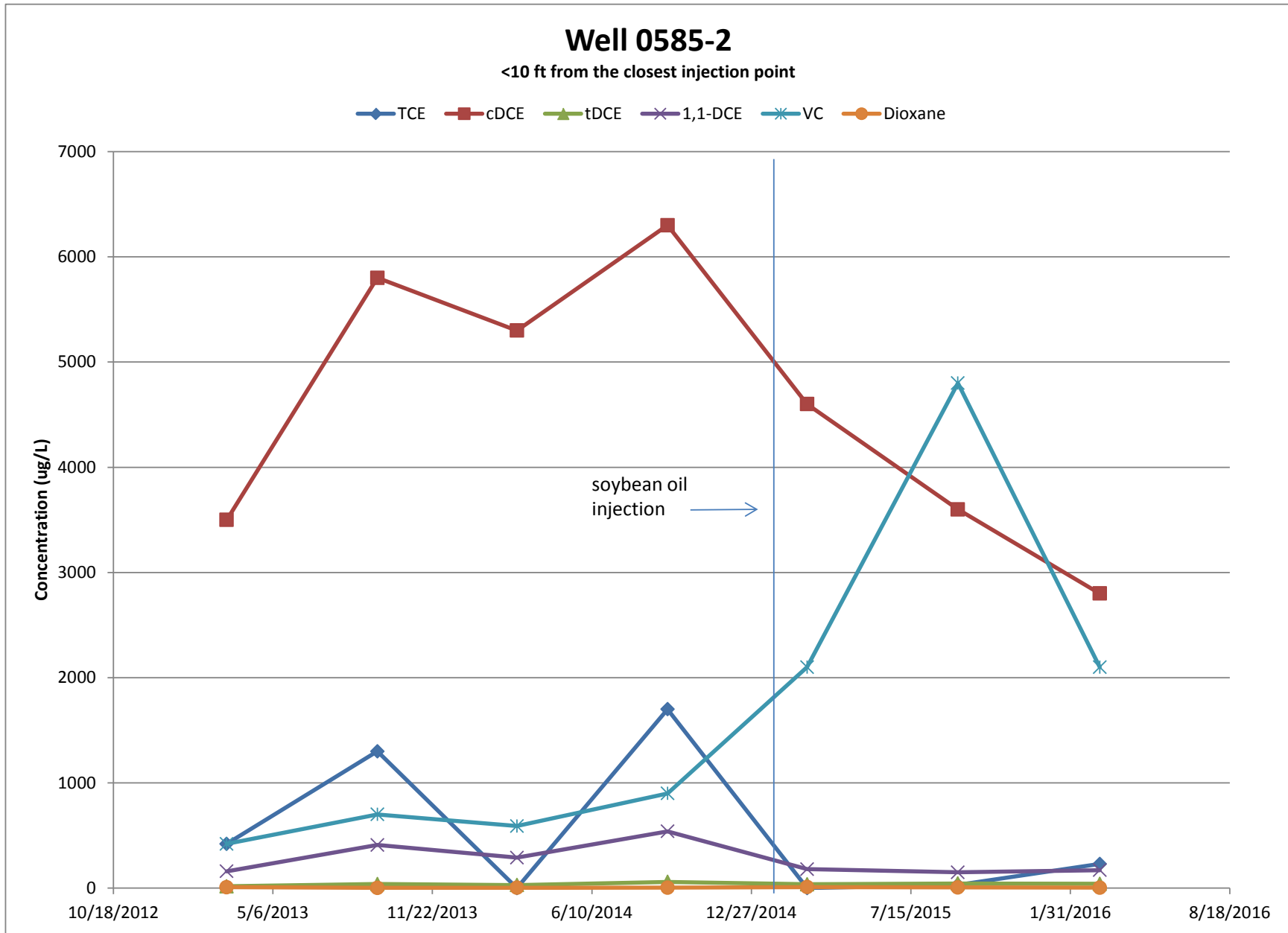


Figure 15. COPC Trends in Well PIN12-0585-2

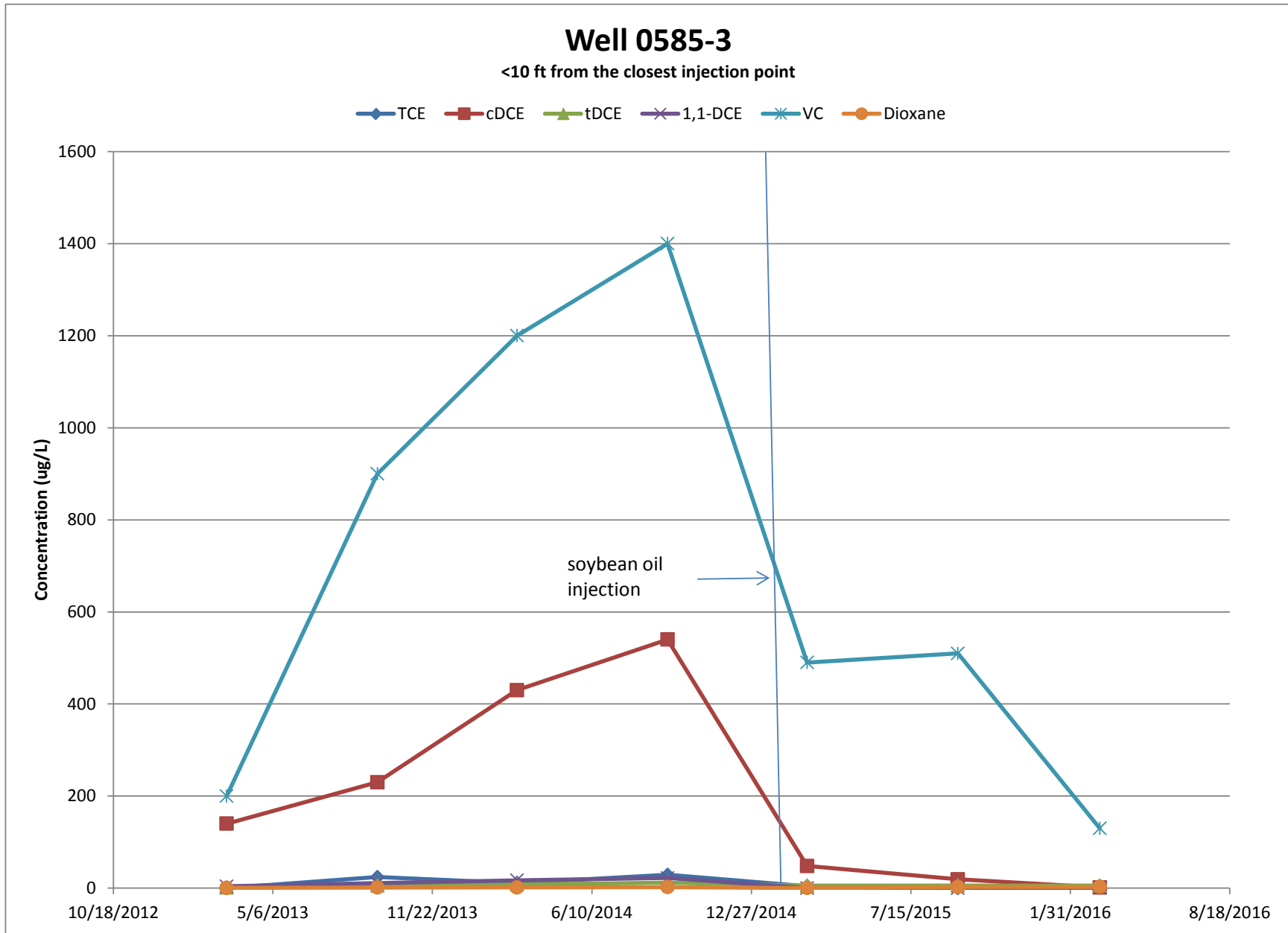


Figure 16. COPC Trends in Well PIN12-0585-3

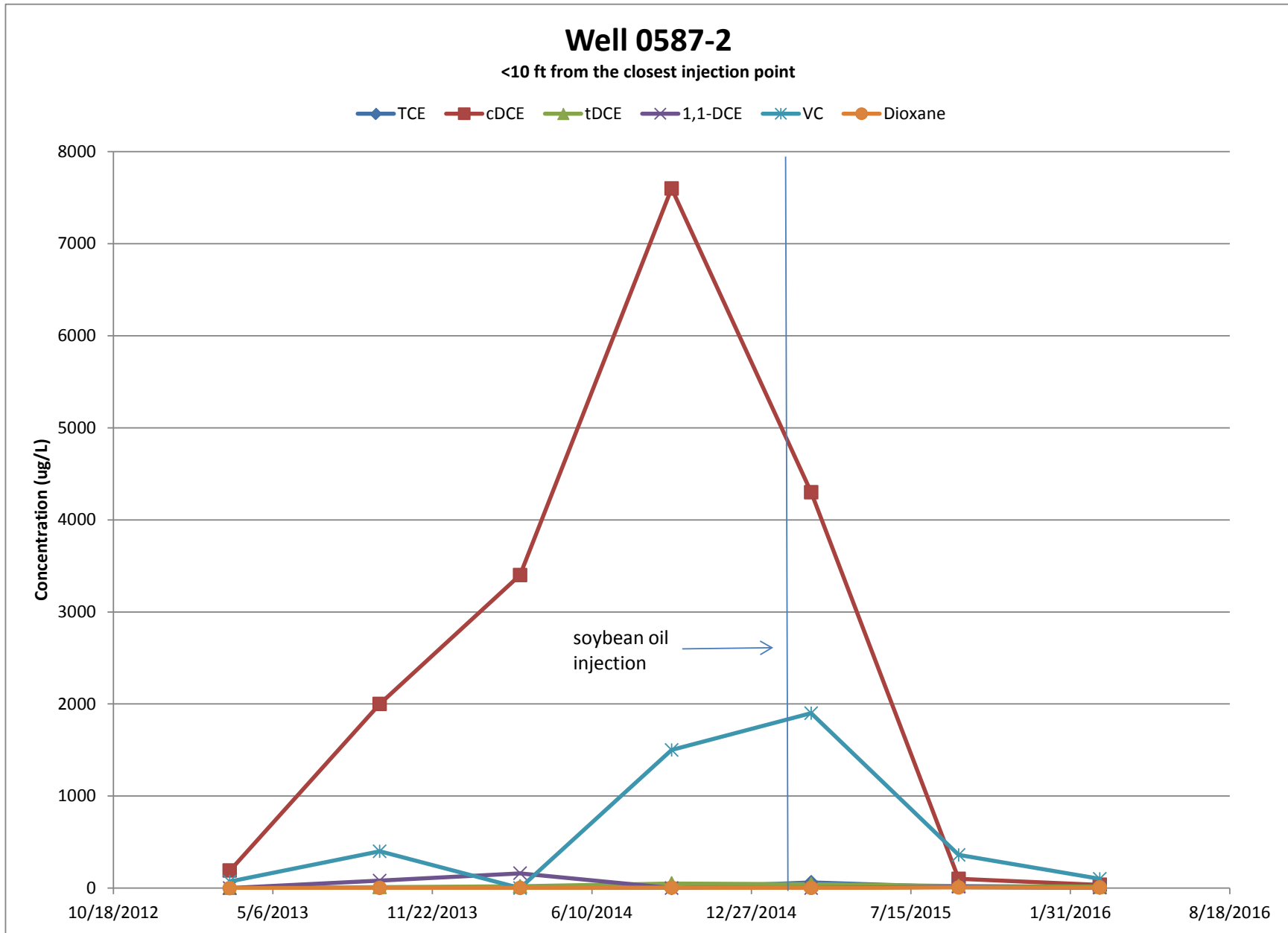


Figure 17. COPC Trends in Well PIN12-0587-2

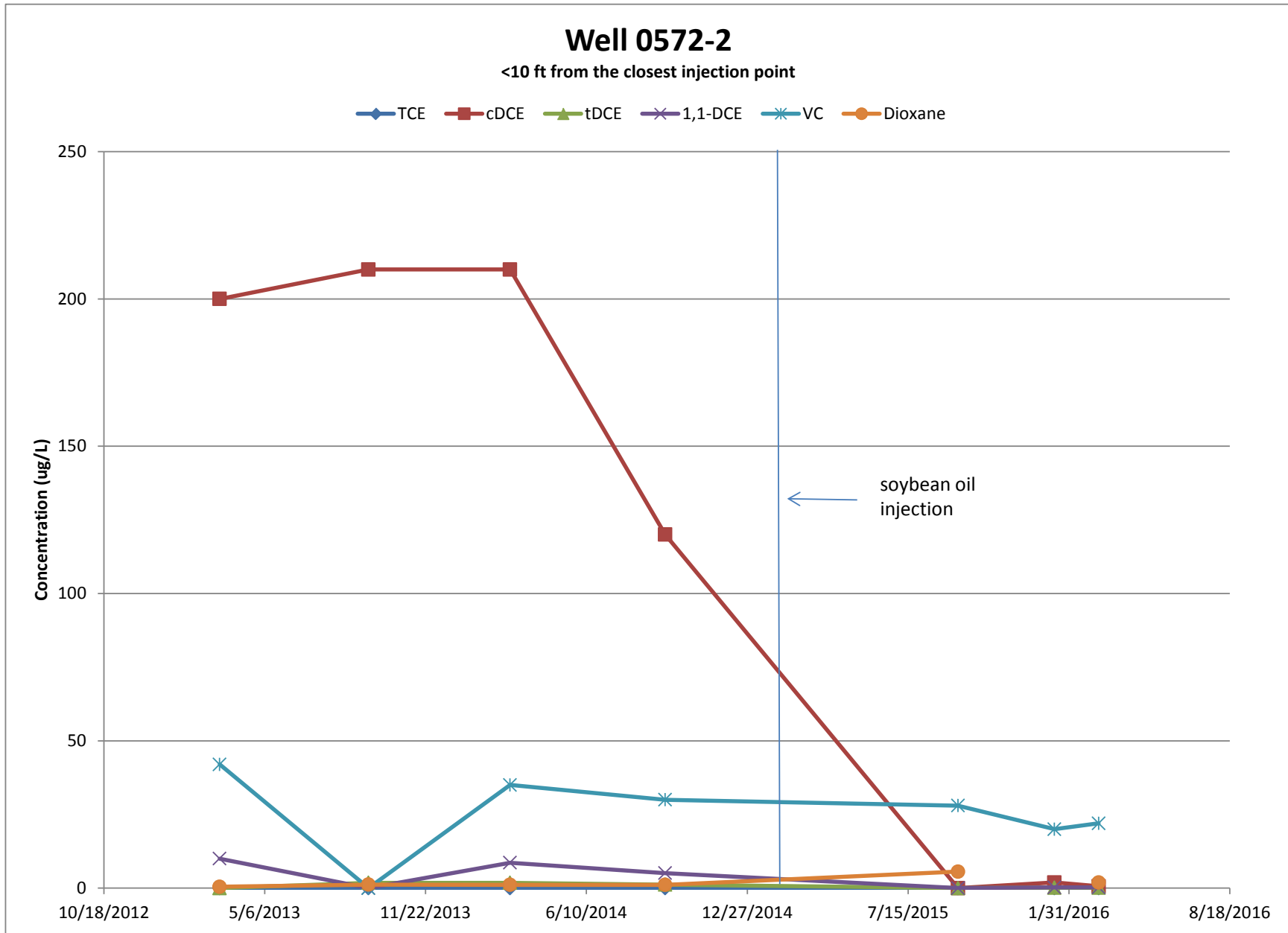


Figure 18. COPC Trends in Well PIN12-0572-2

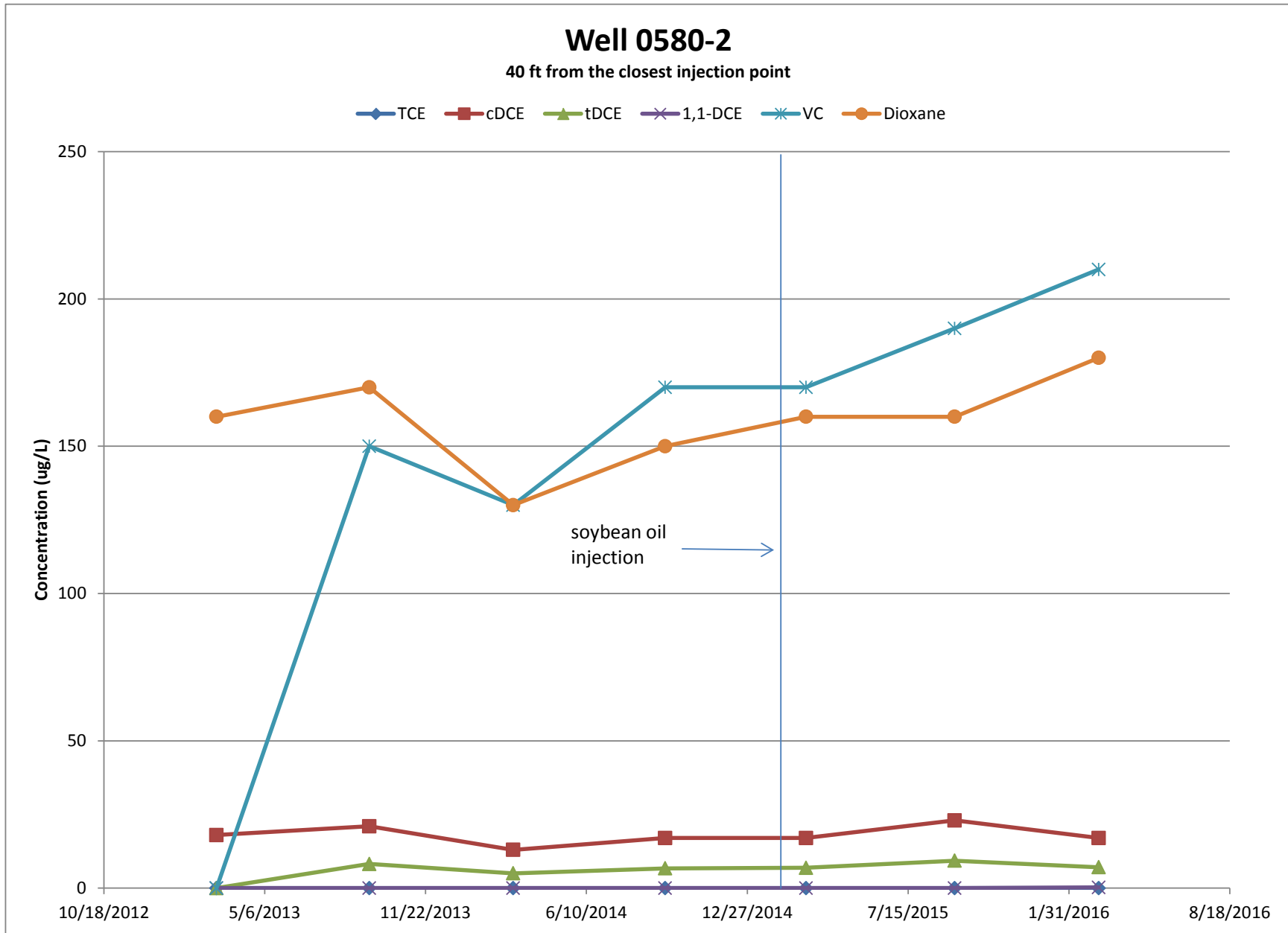


Figure 19. COPC Trends in Well PIN12-0580-2

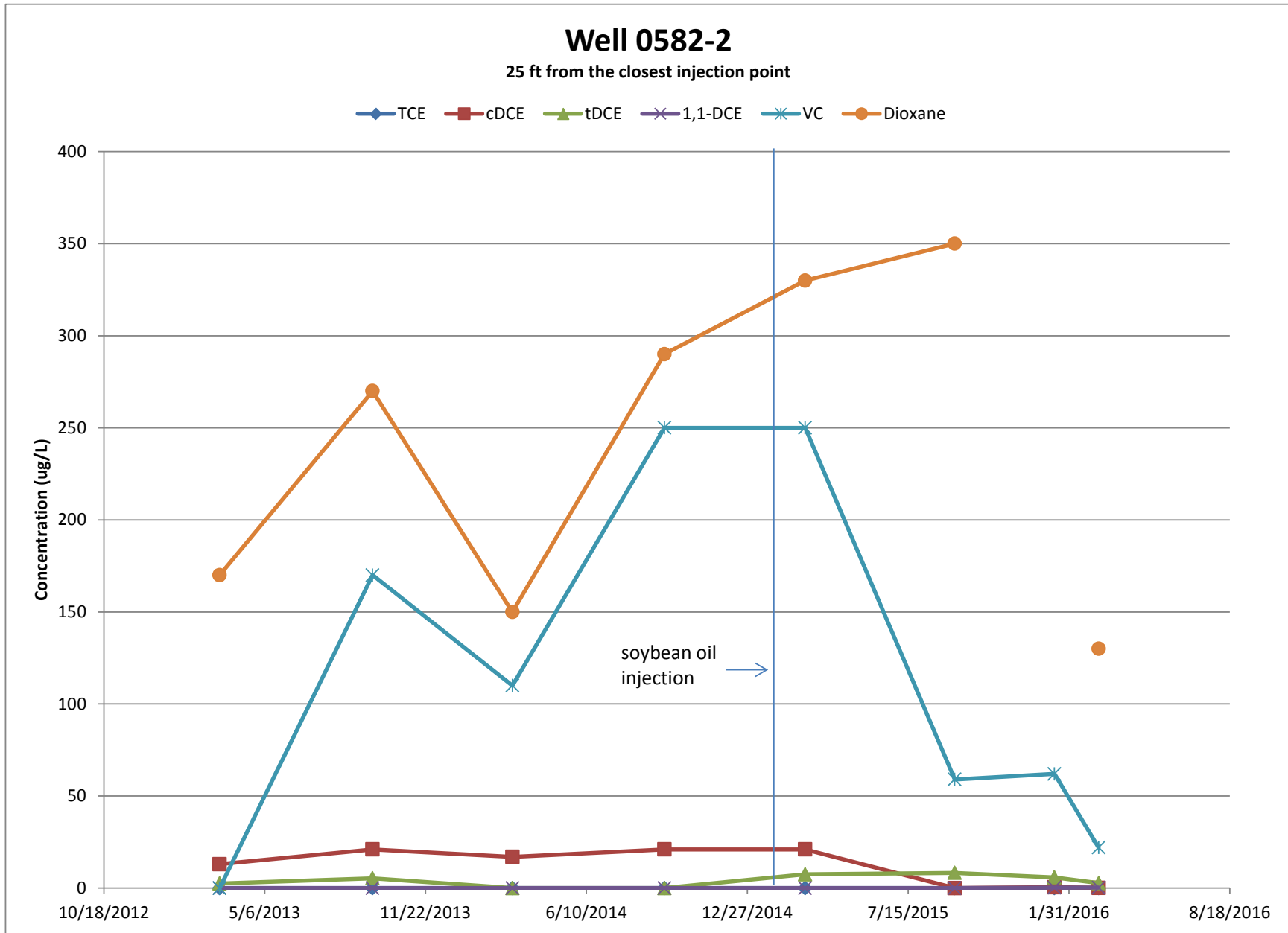


Figure 20. COPC Trends in Well PIN12-0582-2



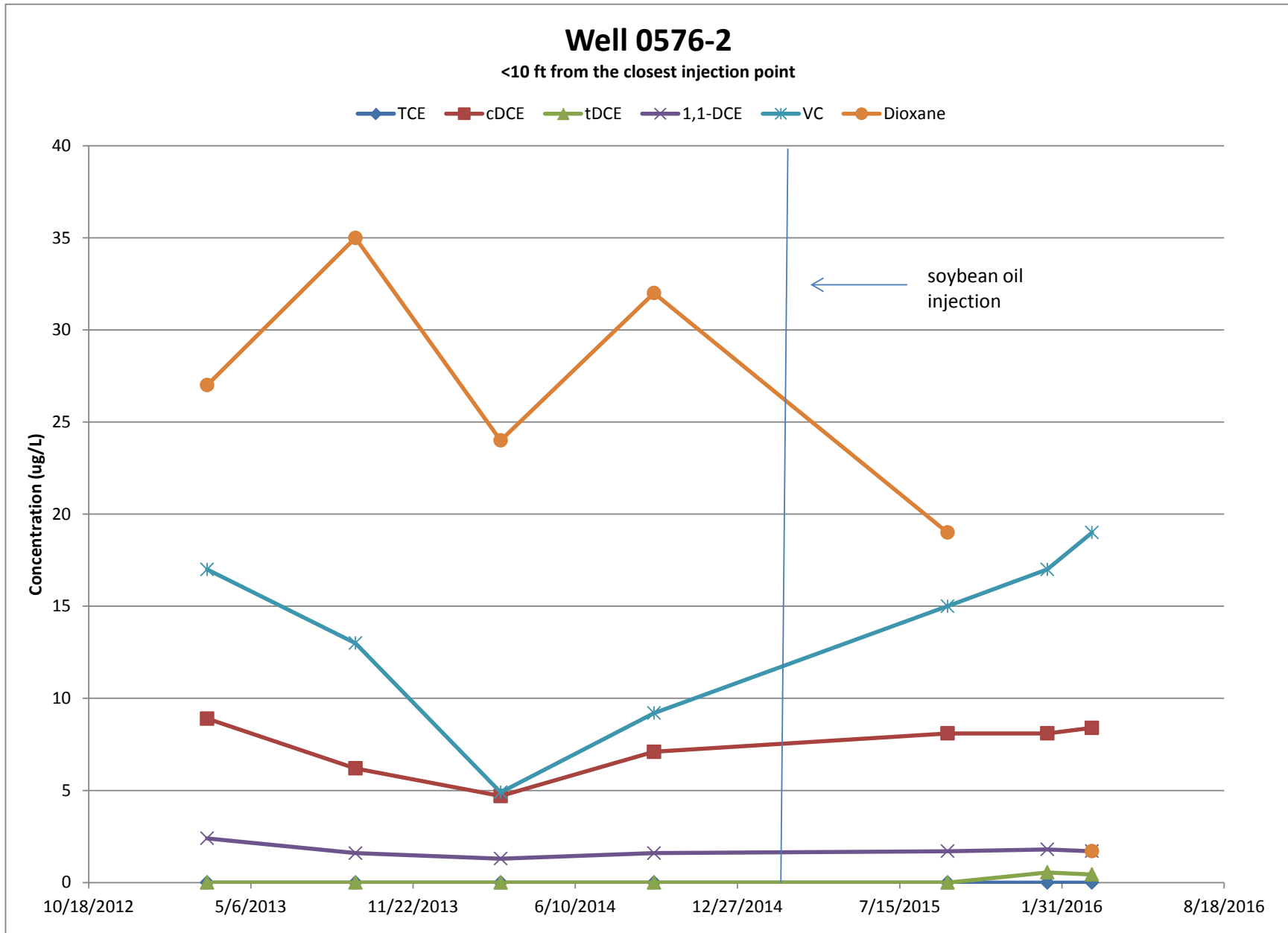


Figure 21. COPC Trends in Well PIN12-0576-2

Table 1. Groundwater-Level Data at the STAR Center, March 2016

Location	Measurement		Water Depth (ft bls)	Groundwater Elevation (ft amsl)
	Date	Time		
<b>PIN02</b>	<b>Sitewide Piezometers</b>			
PZ03	3/2/2016	10:15	3.82	15.88
PZ04	3/2/2016	10:24	2.29	15.91
PZ05	3/2/2016	10:33	2.54	15.56
PZ08	3/2/2016	10:46	3.80	14.60
PZ09	3/2/2016	15:59	3.46	14.54
PZ10	3/2/2016	09:54	3.90	14.98
PZ11	3/2/2016	10:12	4.54	14.34
<b>PIN06</b>	<b>Building 100 Area</b>			
0500	3/2/2016	10:30	3.05	14.95
<b>PIN12</b>				
0509	3/2/2016	11:03	3.10	14.94
0520	3/2/2016	10:41	3.28	14.73
0521	3/2/2016	11:00	3.37	14.68
0524	3/2/2016	15:25	3.63	13.78
0525	3/2/2016	15:11	3.32	14.10
0527	3/2/2016	10:39	11.58	6.49
0528	3/2/2016	15:12	10.90	6.70
0539	3/2/2016	14:27	3.43	13.17
0540	3/2/2016	14:44	2.69	13.41
0541	3/2/2016	14:25	4.22	13.44
0542	3/2/2016	14:24	4.18	13.52
0549	3/2/2016	14:23	4.18	13.48
0550-1	3/2/2016	11:11	2.35	12.35
0550-2	3/2/2016	11:12	2.23	12.47
0550-3	3/2/2016	11:13	2.20	12.50
0551-1	3/2/2016	13:33	3.04	12.36
0551-2	3/2/2016	13:47	3.06	12.34
0551-3	3/2/2016	13:50	2.66	12.74
0554A	3/2/2016	14:08	4.27	13.97
0554B	3/2/2016	14:09	4.32	13.92
0554C	3/2/2016	14:10	4.32	13.92
0555A	3/2/2016	13:57	3.66	14.23
0555B	3/2/2016	13:56	3.83	14.06
0555C	3/2/2016	13:55	3.80	14.09
0561-1	3/2/2016	15:19	3.78	14.44
0561-2	3/2/2016	15:20	3.89	14.33
0561-3	3/2/2016	15:21	3.91	14.31
0562-1	3/2/2016	15:09	5.12	13.14
0562-2	3/2/2016	15:10	5.01	13.25

Table 1 (continued). Groundwater-Level Data at the STAR Center, March 2016

Location	Measurement		Water Depth (ft bls)	Groundwater Elevation (ft amsl)
	Date	Time		
0562-3	3/2/2016	15:11	5.15	13.11
0564-1	3/2/2016	09:18	2.91	12.59
0564-2	3/2/2016	09:24	3.01	12.49
0564-3	3/2/2016	09:25	3.19	12.31
0565-1	3/2/2016	09:02	3.79	11.91
0565-2	3/2/2016	09:08	3.82	11.88
0565-3	3/2/2016	09:09	3.82	11.88
0566-1	3/2/2016	08:19	3.67	11.93
0566-2	3/2/2016	08:40	3.65	11.95
0566-3	3/2/2016	08:41	3.61	11.99
0567-1	3/2/2016	10:13	4.50	13.76
0567-2	3/2/2016	10:20	4.61	13.65
0567-3	3/2/2016	10:21	4.78	13.48
0568-1	3/2/2016	10:04	4.63	13.63
0568-2	3/2/2016	10:10	4.83	13.43
0568-3	3/2/2016	10:12	4.77	13.49
0569-1	3/2/2016	09:54	5.00	13.11
0569-2	3/2/2016	17:02	4.99	13.12
0569-3	3/2/2016	10:03	5.04	13.07
0570-1	3/2/2016	09:38	5.31	12.49
0570-2	3/2/2016	09:51	5.30	12.50
0570-3	3/2/2016	09:52	5.27	12.53
0571-1	3/2/2016	09:27	5.42	12.78
0571-2	3/2/2016	09:34	5.48	12.72
0571-3	3/2/2016	09:37	5.40	12.80
0572-1	3/2/2016	10:23	3.22	12.38
0572-2	3/2/2016	10:32	3.15	12.45
0573-1	3/2/2016	09:10	3.04	11.96
0573-2	3/2/2016	09:16	3.06	11.94
0573-3	3/2/2016	09:17	3.04	11.96
0574-1	3/2/2016	08:54	5.13	11.17
0574-2	3/2/2016	09:01	5.03	11.27
0574-3	3/2/2016	09:02	5.07	11.23
0575-1	3/2/2016	08:42	4.61	10.69
0575-2	3/2/2016	08:52	4.58	10.72
0576-1	3/2/2016	11:02	4.58	12.92
0576-2	3/2/2016	11:03	4.47	13.03
0576-3	3/2/2016	11:04	4.48	13.02
0577-1	3/2/2016	12:42	4.90	13.00
0577-2	3/2/2016	12:43	4.87	13.03
0577-3	3/2/2016	12:44	4.93	12.97

Table 1 (continued). Groundwater-Level Data at the STAR Center, March 2016

Location	Measurement		Water Depth (ft bls)	Groundwater Elevation (ft amsl)
	Date	Time		
0578-1	3/2/2016	12:54	4.65	13.15
0578-2	3/2/2016	12:55	4.66	13.14
0578-3	3/2/2016	12:56	4.67	13.13
0579-1	3/2/2016	13:08	4.42	12.98
0579-2	3/2/2016	13:09	4.41	12.99
0579-3	3/2/2016	13:10	4.40	13.00
0580-1	3/2/2016	13:46	4.49	14.01
0580-2	3/2/2016	13:47	4.59	13.91
0580-3	3/2/2016	13:48	4.54	13.96
0581-1	3/2/2016	14:37	3.77	13.59
0581-2	3/2/2016	14:38	3.88	13.48
0581-3	3/2/2016	14:39	3.91	13.45
0582-1	3/2/2016	14:37	3.00	13.73
0582-2	3/2/2016	14:38	3.24	13.49
0582-3	3/2/2016	14:39	3.26	13.47
0583-1	3/2/2016	14:03	3.00	13.51
0583-2	3/2/2016	14:19	3.02	13.49
0583-3	3/2/2016	14:26	3.03	13.48
0584-1	3/2/2016	15:28	3.39	14.21
0584-2	3/2/2016	15:47	3.50	14.10
0584-3	3/2/2016	15:48	3.54	14.06
0585-1	3/2/2016	15:50	3.30	14.19
0585-2	3/2/2016	15:51	3.40	14.09
0585-3	3/2/2016	15:52	3.40	14.09
0586-1	3/2/2016	14:47	3.83	13.57
0586-2	3/2/2016	14:56	3.74	13.66
0586-3	3/2/2016	14:56	3.76	13.64
0587-1	3/2/2016	14:57	3.88	13.62
0587-2	3/2/2016	15:06	3.90	13.60
0587-3	3/2/2016	15:03	3.91	13.59
0588-1	3/2/2016	15:07	3.82	13.58
0588-2	3/2/2016	15:10	3.88	13.52
0588-3	3/2/2016	15:11	3.90	13.50
PZ01	3/2/2016	12:38	4.36	13.14
PZ02	3/2/2016	12:51	5.67	13.23
PZ03	3/2/2016	12:58	3.74	13.16
S29C	3/2/2016	10:01	3.52	14.99
S30B	3/2/2016	10:09	3.47	15.04
S31B	3/2/2016	09:35	3.60	14.91
S32B	3/2/2016	09:05	3.35	15.16
S33C	3/2/2016	09:56	3.36	15.15

Table 1 (continued). Groundwater-Level Data at the STAR Center, March 2016

Location	Measurement		Water Depth (ft bls)	Groundwater Elevation (ft amsl)
	Date	Time		
S35B	3/2/2016	10:15	3.84	14.67
S36B	3/2/2016	08:08	4.05	14.46
S37B	3/2/2016	09:49	3.49	15.02
S67B	3/2/2016	09:13	4.00	14.47
S67C	3/2/2016	09:33	4.06	14.41
S67D	3/2/2016	09:34	4.18	14.30
S68B	3/2/2016	14:56	3.81	14.09
S68C	3/2/2016	15:06	3.95	13.95
S68D	3/2/2016	15:08	4.07	13.83
S69B	3/2/2016	13:25	2.46	13.54
S69C	3/2/2016	13:27	2.38	13.62
S69D	3/2/2016	13:28	2.43	13.57
S70B	3/2/2016	13:34	2.29	14.41
S70C	3/2/2016	13:32	2.78	13.92
S70D	3/2/2016	13:30	2.53	14.17
S71B	3/2/2016	13:42	4.36	14.04
S71C	3/2/2016	13:41	4.51	13.89
S71D	3/2/2016	13:40	4.53	13.87
S73B	3/2/2016	15:53	3.39	13.61
S73C	3/2/2016	14:39	3.54	13.46
S73D	3/2/2016	15:53	3.56	13.44
<b>PIN21</b>				
0502	3/2/2016	14:52	1.98	13.22
0503	3/2/2016	14:55	2.20	13.00
0504	3/2/2016	15:04	3.90	13.70
0505	3/2/2016	15:02	3.69	13.71
<b>PIN15</b>	<b>Northeast Site</b>			
0506	3/2/2016	12:28	2.98	14.02
0507	3/2/2016	12:34	3.03	13.97
0513	3/2/2016	12:44	11.01	6.59
0520	3/2/2016	12:35	2.93	14.17
0530	3/2/2016	13:04	2.73	14.67
0534	3/2/2016	12:41	2.41	14.69
0535	3/2/2016	13:12	2.70	14.90
0537	3/2/2016	13:44	3.32	15.28
0568	3/2/2016	12:21	4.18	14.32
0569	3/2/2016	12:27	4.08	14.30
0573	3/2/2016	13:13	2.94	15.44
0574	3/2/2016	13:21	3.25	15.17
0594	3/2/2016	15:28	3.15	15.35
0595	3/2/2016	13:31	3.25	15.35

Table 1 (continued). Groundwater-Level Data at the STAR Center, March 2016

Location	Measurement		Water Depth (ft bls)	Groundwater Elevation (ft amsl)
	Date	Time		
M16D	3/2/2016	13:22	2.75	15.45
M16S	3/2/2016	13:29	2.76	15.44
M24D	3/2/2016	12:56	2.63	15.17
M33D	3/2/2016	13:02	1.68	15.92
<b>PIN18</b>	<b>WWNA</b>			
0503	3/2/2016	07:00	3.15	14.53
0507	3/2/2016	06:50	2.99	14.74
0526	3/2/2016	08:07	4.13	14.47

**Abbreviations:**

ft amsl = feet above mean sea level

ft bls = feet below land surface

Table 2. Surface Water Elevations, March 2016

Location	Measurement		Surface Water Elevation (ft amsl)
	Date	Time	
<b>PIN01</b>	<b>Pond 5</b>		
P501	3/2/2016	13:51	13.72
P502	3/2/2016	14:12	13.90
<b>PIN02</b>	<b>West Pond</b>		
W005	3/2/2016	14:15	14.14
<b>PIN12</b>	<b>Belcher Road Pond</b>		
BR01	3/2/2016	11:16	13.11
<b>PIN15</b>	<b>East Pond</b>		
E001	3/2/2016	14:32	10.85
<b>PIN23</b>	<b>Southwest Pond</b>		
SW01	3/2/2016	14:46	13.74
<b>PIN37</b>	<b>South Pond</b>		
S001	3/2/2016	14:42	13.65
S002	3/2/2016	14:38	13.71

**Abbreviation:**

ft amsl = feet above mean sea level

Table 3. Field Measurements of Samples Collected at the STAR Center, March 2016

Location	Screen Depth (ft bis)	Sample Date	Temperature (°C)	Specific Conductance (µmho/cm) <sup>a</sup>	Turbidity (NTU)	pH	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)
0524	27-37	3/5/2016	23.3	1,218	5	6.78	1	1.0
0525	12-22	3/5/2016	23.4	670	5	6.97	-38	0.9
0539	9.5-19.5	3/9/2016	26.9	694	18	6.70	-89	0.8
0540	20-30	3/9/2016	-	-	20	-	-	-
0541	10-20	3/9/2016	23.8	905	2	6.37	-53	1.0
0542	20-30	3/9/2016	25.5	908	8	6.45	-47	0.9
0549	30-40	3/9/2016	25.6	1,124	13	6.73	-63	1.1
0551-2	20-29	3/8/2016	24.8	1,105	8	6.63	-49	1.1
0554A	3-13	3/8/2016	24.5	716	4	6.41	4	1.2
0554B	13-23	3/8/2016	25.6	596	13	6.83	-39	1.1
0554C	23-33	3/8/2016	26.0	804	15	6.92	-66	1.0
0555A	2.5-12.5	3/7/2016	23.9	351	4	6.60	-10	1.0
0555B	13-23	3/7/2016	25.4	383	4	7.14	-44	0.9
0555C	23-33	3/7/2016	25.6	524	14	6.95	-65	1.1
0561-1	9-18	3/5/2016	21.8	518	3	7.04	-76	1.1
0561-2	20-29	3/5/2016	23.6	535	3	6.97	-85	0.8
0561-3	31-40	3/5/2016	23.9	1,186	2	6.79	-132	0.9
0565-1	9-18	3/3/2016	24.5	969	3	6.89	-66	0.9
0565-2	20-29	3/3/2016	24.7	1,093	1	6.79	-68	0.8
0565-3	31-40	3/5/2016	25.7	1,397	2	6.71	-64	0.7
0568-1	9-18	3/7/2016	21.8	1,618	1	6.81	-79	1.1
0568-2	20-29	3/7/2016	23.1	1,436	2	6.79	-73	0.9
0568-3	31-40	3/7/2016	23.2	1,643	2	6.86	-83	0.9
0569-1	9-18	3/5/2016	22.4	2,153	7	6.66	-79	1.2
0569-2	20-29	1/14/2016	23.5	1,037	25	6.76	-41	0.1
		3/5/2016	23.6	975	21	6.75	-64	0.8
0569-3	31-40	3/5/2016	24.4	1,453	11	6.78	-101	0.7
0570-1	9-18	3/7/2016	22.4	1,906	8	6.78	-73	1.1
0570-2	20-29	3/7/2016	24.2	1,517	1	6.79	-75	0.9
0570-3	31-40	3/7/2016	24.5	1,242	2	6.76	-70	0.8
0572-1	9-18	3/8/2016	23.5	1,725	6	6.65	-65	0.7
0572-2	20-29	1/14/2016	-	-	19	-	-	-
		3/8/2016	23.9	1,167	20	6.42	-95	0.8
0573-1	9-18	3/3/2016	26.2	1,670	4	6.58	-73	0.8
0573-2	20-29	3/3/2016	26.5	1,282	1	6.71	-62	0.7
0573-3	31-40	3/3/2016	26.3	1,451	1	6.74	-45	0.8



Table 3 (continued). Field Measurements of Samples Collected at the STAR Center, March 2016

Location	Screen Depth (ft bls)	Sample Date	Temperature (°C)	Specific Conductance (µmho/cm) <sup>a</sup>	Turbidity (NTU)	pH	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)
0574-1	9-18	1/13/2016	24.3	1,279	2	6.52J	-18	0.3
		3/3/2016	23.6	1,194	3	6.81	-63	0.9
0574-2	20-29	1/13/2016	23.9	1,314	3	6.47J	-48	0.3
		3/3/2016	25.1	1,227	4	6.78	-55	1.0
0574-3	31-40	1/13/2016	24.4	1,578	1	6.41J	-27	0.3
		3/3/2016	26.0	1,496	2	6.78	-39	1.0
0575-1	9-18	1/14/2016	22.8	1,373	2	6.77	-10	0.4
		3/3/2016	25.8	1,288	4	6.75	-53	0.9
0575-2	20-29	1/14/2016	23.0	1,504	4	6.74	-7	0.3
		3/3/2016	26.4	1,421	6	6.74	-60	0.7
0576-1	4-13	3/8/2016	22.8	1,077	11	6.37	-160	1.2
0576-2	15-24	1/13/2016	-	-	2	-	-	-
		3/8/2016	24.8	934	10	6.69	-100	0.8
0576-3	26-35	3/8/2016	24.9	1,572	103	6.66	-79	0.9
0577-1	4-13	3/7/2016	24.8	980	8	6.56	-8	1.6
0577-2	15-24	3/8/2016	24.8	983	9	6.55	-64	1.0
0577-3	26-35	3/8/2016	26.2	1,329	2	6.70	-69	0.8
0578-1	4-13	3/8/2016	24.9	325	16	6.37	32	1.5
0578-2	15-24	3/8/2016	26.3	920	5	6.43	-45	1.0
0578-3	26-35	3/8/2016	27.1	1,126	6	6.61	-43	0.8
0579-1	4-13	3/7/2016	22.9	3,465	8	6.35	-128	0.9
0579-2	15-24	3/7/2016	24.5	1,071	7	6.61	-68	0.8
0579-3	26-35	3/7/2016	24.6	1,511	6	6.75	-72	0.8
0580-1	9-18	3/8/2016	25.5	559	1	6.99	-58	1.3
0580-2	20-29	1/19/2016	23.3	1,152	1	6.79	-62	0.5
		3/8/2016	27.3	1,104	1	6.83	-59	0.9
0580-3	31-40	3/8/2016	25.7	1,421	3	6.82	-37	1.4
0581-1	9-18	3/9/2016	25.2	409	13	6.99	-29	1.2
0581-2	20-29	3/9/2016	25.8	1,072	5	6.62	-176	0.8
0581-3	31-40	3/9/2016	26.4	1,378	10	6.74	-95	0.8
0582-1	9-18	3/9/2016	25.9	1,183	2	6.70	-79	0.9
0582-2	20-29	1/14/2016	26.5	1,487	4	6.62	-95	0.1
		3/9/2016	26.7	992	3	6.69	-86	0.8
0582-3	31-40	3/9/2016	26.8	1,419	4	6.63	-66	0.7
0583-1	9-18	3/9/2016	27.3	833	16	6.54	-50	1.4
0583-2	20-29	3/9/2016	27.4	1,582	2	6.60	-59	1.2
0583-3	31-40	3/9/2016	28.1	1,530	7	6.62	-57	0.9
0584-1	9-18	3/5/2016	-	-	15	-	-	-
0584-2	20-29	3/5/2016	25.3	1,048	2	6.84	-45	1.0
0584-3	31-40	3/5/2016	25.4	1,432	3	6.79	-25	1.0

Table 3 (continued). Field Measurements of Samples Collected at the STAR Center, March 2016

Location	Screen Depth (ft bls)	Sample Date	Temperature (°C)	Specific Conductance (µmho/cm) <sup>a</sup>	Turbidity (NTU)	pH	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)
0585-1	9-18	3/5/2016	-	-	4	-	-	-
0585-2	20-29	1/19/2016	21.7	1,227	13	6.57	-110	0.3
		3/5/2016	-	-	14	-	-	-
0585-3	31-40	3/5/2016	-	-	98	-	-	-
0586-1	8-17	3/4/2016	22.0	568	3	7.08	-22	0.8
0586-2	19-28	1/19/2016	23.6	748	2	6.88	-59	0.3
		3/4/2016	23.3	698	2	6.88	-34	0.9
0586-3	30-39	3/4/2016	22.7	1,318	2	6.92	-47	1.1
0587-1	9-18	3/4/2016	22.2	1,051	4	6.72	-32	1.4
0587-2	20-29	1/19/2016	-	-	19	-	-	-
		3/4/2016	23.2	1,017	13	5.86	-117	1.4
0587-3	31-40	3/4/2016	-	-	9	-	-	-
0588-1	9-18	3/7/2016	21.2	762	2	7.02	-38	1.2
0588-2	20-29	3/7/2016	22.4	904	1	6.89	-25	1.5
0588-3	31-40	3/7/2016	23.4	799	2	7.01	-54	1.0
S30B	5-15	3/4/2016	22.4	846	5	7.01	-102	0.7
S33C	11-21	3/4/2016	22.4	592	12	6.95	-86	0.8
S35B	5-15	1/13/2016	22.6	1,862	4	6.25J	40	0.4
		3/4/2016	22.8	1,705	7	6.58	26	0.9
S67B	10-19.83	3/4/2016	22.6	1,019	3	6.75	-65	0.8
S67C	20-29.83	3/4/2016	22.6	820	5	6.71	-75	0.7
S67D	30-39.83	3/4/2016	22.6	831	16	6.83	-77	0.8
S68B	10-20	3/7/2016	24.4	733	12	6.95	-63	1.2
S68C	18-28	3/7/2016	24.4	1,013	11	6.81	-23	0.9
S68D	30-40	3/7/2016	24.9	1,356	729	6.77	-32	0.6
S69B	10-20	3/9/2016	26.5	624	12	6.95	-73	0.8
S69C	20-30	3/9/2016	26.6	765	4	6.78	-42	0.9
S69D	30-40	3/9/2016	26.8	783	17	6.96	2	1.3
S70B	10-20	3/8/2016	26.2	778	30	6.98	-52	1.1
S70C	20-30	3/9/2016	25.8	1,276	39	6.69	-44	1.4
S70D	30-40	3/9/2016	26.1	1,399	27	6.69	-42	1.3
S71B	10-20	3/8/2016	26.2	629	34	6.89	-56	1.1
S71C	20-30	3/8/2016	26.9	1,219	11	6.76	-45	1.1
S71D	30-40	3/8/2016	27.4	1,450	14	6.79	-51	1.5
S73B	10-20	3/9/2016	-	-	44	-	-	-
S73C	20-30	3/9/2016	28.2	1,631	7	6.63	-80	1.3
S73D	30-40	3/9/2016	-	-	15	-	-	-

**Note:**

<sup>a</sup> Temperature corrected to 25 °C.

**Abbreviations:**

- = not measured  
mg/L = milligrams per liter

ft bls = feet below land surface  
mV = millivolts

µmho/cm = micromhos per centimeter  
NTU = nephelometric turbidity units

Table 4. Relative Percent Difference for Duplicate Samples, March 2016 (results in µg/L)

Sample ID	Duplicate ID	Analyte	Result	Duplicate Result	MDL	RPD
PIN12-0569-3	PIN12-2450	Vinyl chloride	22	24	0.10	9
PIN12-0572-2	PIN12-2451	1,4-Dioxane	1.9	2.0	0.22	5
		Vinyl chloride	22	21	0.10	5
PIN12-0576-2	PIN12-2452	1,1-Dichloroethane	15	13	0.22	14
		1,1-Dichloroethene	1.7	1.7	0.23	0
		1,4-Dioxane	32	25	0.44	25
		<i>cis</i> -1,2-Dichloroethene	8.4	7.2	0.15	15
		Vinyl chloride	19	15	0.10	24
PIN12-0582-2	PIN12-2453	1,1-Dichloroethane	10	12	0.22	18
		1,4-Dioxane	130	120	2.2	8
		Vinyl chloride	22	25	0.10	13
PIN12-0585-2	PIN12-2454	1,1-Dichloroethane	1.6	1.7	0.22	6
		1,1-Dichloroethene	170	170	23	0
		Benzene	1.0	1.1	0.16	10
		<i>cis</i> -1,2-Dichloroethene	2800	2900	15	4
		Toluene	2.2	1.8	0.17	20
		<i>trans</i> -1,2-Dichloroethene	41	41	0.15	0
		Trichloroethene	230	240	16	4
		Vinyl chloride	2100	2100	10	0

**Abbreviations:**

MDL = method detection limit

µg/L = micrograms per liter

Table 5. COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
<b>PIN12</b>									
0524	27–37	3/9/2013	<0.32	570	7.1	16	600	<0.88	1,193.1
		9/14/2013	<0.64	640	6.7	18	420	1.4J	1,086.1
		3/8/2014	<0.32	650	5.9	13	450	0.92J	1,119.82
		9/13/2014	<0.32	500J	4.4J	9.8J	370J	1.6	885.8
		3/7/2015	<0.32	370	2.8	7	340	<0.44	719.8
		9/12/2015	<0.16	260	1.7	4.2	260	1.4	527.3
		3/5/2016	<0.16	170	1.5	3.1	300	1.6	476.2
0525	12–22	3/9/2013	<0.16	1.3	<0.15	<0.23	<0.1	<0.44	1.3
		9/14/2013	<0.16	1.3	<0.15	<0.23	<0.1	1.9J	3.2
		3/8/2014	<0.16	1.1	<0.15	<0.23	<0.1	2J	3.1
		9/13/2014	<0.16	1.1J	<0.15	<0.23	<0.1	3	4.1
		3/7/2015	<0.16	1.3	<0.15	<0.23	0.13J	4	5.43
		9/12/2015	<0.16	1.1	<0.15	<0.23	0.12J	3.4	4.62
		3/5/2016	<0.16	1.8	<0.15	<0.23	<0.1	3.4J	5.2
0539	9.5–19.5	3/8/2013	<0.16	1.6	1.3	<0.23	53	38	93.9
		9/17/2013	<0.16	1.1	0.72J	<0.23	6.7	1.8	10.32
		3/11/2014	<0.16	0.26J	0.29J	<0.23	2.3	<1.2B	2.85
		9/16/2014	<0.16	<0.15	0.16J	<0.23	<0.1	<0.22	0.16
		3/9/2015	<0.16	0.29J	0.52J	<0.23	15	10	25.81
		9/15/2015	<0.16	0.16J	0.35J	<0.23	3.2	2.5	6.21
		3/9/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0540	20–30	3/8/2013	<0.16	12	6.8	<0.23	230	170J	418.8
		9/17/2013	<0.32	21	14	0.53J	300	260	595.53
		3/11/2014	<0.16	30J	13J	0.44J	270J	200BJ	513.44
		9/16/2014	<0.16	18	11	0.41J	260	190	479.41
		3/9/2015	<0.16	25	13	0.37J	250	190	478.37
		9/15/2015	<0.16	<0.15	7.7	<0.23	28	150	185.7
		3/9/2016	<0.16	11	11	<0.23	110	120	252
0541	10–20	3/8/2013	<0.16	0.2J	<0.15	<0.23	<0.1	<0.22	0.2
		9/16/2013	<0.16	0.32J	<0.15	<0.23	<0.1	1.1	1.42
		3/7/2014	<0.16	0.21J	<0.15	<0.23	<0.1	1.4J	1.61
		9/15/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.67J	0.67
		3/9/2015	<0.16	0.31J	<0.15	<0.23	<0.1	2.2	2.51
		9/15/2015	<0.16	0.37J	<0.15	<0.23	<0.1	1.5	1.87
		3/9/2016	<0.16	<0.15	<0.15	<0.23	<0.1	0.3J	0.3

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0542	20–30	3/8/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.44	ND
		9/16/2013	<0.16	0.62J	<0.15	<0.23	<0.1	2.5	3.12
		3/7/2014	<0.16	0.31J	<0.15	<0.23	<0.1	1.7J	2.01
		9/15/2014	<0.16	0.32J	<0.15	<0.23	<0.1	1.7	2.02
		3/9/2015	<0.16	0.44J	<0.15	<0.23	<0.1	2.6	3.04
		9/16/2015	<0.16	0.82J	<0.15	<0.23	<0.1	2.9	3.72
0549	30–40	3/9/2016	<0.16	<0.15	<0.15	<0.23	<0.1	0.6J	0.6
		3/8/2013	<0.16	0.17J	<0.15	<0.23	<0.1	<0.44	0.17
		9/16/2013	<0.16	0.23J	<0.15	<0.23	<0.1	2.1	2.33
		3/7/2014	<0.16	0.26J	<0.15	<0.23	<0.1	3.5J	3.76
		9/15/2014	<0.16	0.27J	<0.15	<0.23	<0.1	4.7	4.97
		3/9/2015	<0.16	0.28J	<0.15	<0.23	<0.1	3.2	3.48
0551–1 <sup>d</sup>	9–18	9/16/2015	<0.16	0.31J	<0.15	<0.23	<0.1	3.2	3.51
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
0551–2	20–29	9/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/18/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.9	1.9
		3/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/8/2016	<0.16	<0.15	<0.15	<0.23	0.2J	0.23J	0.43
0554A <sup>e</sup>	3–13	3/8/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/6/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/6/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0554B <sup>e</sup>	13–23	3/8/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/13/2013	<0.16	2.5	0.39J	0.27J	6.4	7.8	17.36
		3/6/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2014	<0.16	0.35J	<0.15	<0.23	<0.1	1.8	2.15
		3/6/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
3/8/2016	<0.16	1.8	0.25J	<0.23	4	4.7	10.75		

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0554C <sup>e</sup>	23–33	3/8/2013	<0.16	16	5.5	1	88	76	186.5
		9/13/2013	<0.16	17	7.1	1	69	73J	167.1
		3/7/2014	<0.16	19	6.6	0.81J	84	87	197.41
		9/15/2014	<0.16	15	4.8	0.67J	51	49	120.47
		3/6/2015	<0.16	16	4.7	0.59J	54	67	142.29
		3/8/2016	<0.16	17	5.4	0.75J	47	55	125.15
0555A	2.5–12.5	3/7/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/6/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/6/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0555B	13–23	3/7/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/6/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/6/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0555C	23–33	3/7/2013	<0.16	1.1	0.43J	<0.23	<0.1	<0.22	1.53
		9/13/2013	<0.16	1.2	0.55J	<0.23	<0.1	<0.22	1.75
		3/6/2014	<0.16	1	0.44J	<0.23	<0.1	0.35J	1.79
		9/12/2014	<0.16	1	0.37J	<0.23	<0.1	<0.22	1.37
		3/6/2015	<0.16	0.96J	0.32J	<0.23	<0.1	<0.22	1.28
		9/16/2015	<0.16	1	0.34J	<0.23	<0.1	0.27J	1.61
		3/7/2016	<0.16	<1.3	0.47J	<0.23	<0.1	0.33J	0.8
0561–1	9–18	4/4/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/14/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/8/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/13/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/5/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0561-2	20-29	4/4/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/14/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/8/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/13/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/5/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0561-3	31-40	4/4/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/14/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/8/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.83J	0.83
		9/13/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.6J	0.6
		3/5/2016	<0.16	<0.15	<0.15	<0.23	<0.1	0.35J	0.35
0565-1	9-18	3/6/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.22	ND
		9/16/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/5/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/11/2014	<0.16	0.18J	<0.15	<0.23	<0.1	<0.22	0.18
		3/5/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/14/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/3/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0565-2	20-29	3/6/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.22	ND
		9/16/2013	<0.16	0.37J	<0.15	<0.23	0.2J	<0.22	0.57
		3/5/2014	<0.16	0.37J	<0.15	<0.23	0.21J	<0.22	0.58
		9/11/2014	<0.16	0.57J	<0.15	<0.23	0.38J	0.51J	1.46
		3/5/2015	<0.16	0.32J	<0.15	<0.23	0.16J	<0.22	0.48
		9/14/2015	<0.16	0.38J	<0.15	<0.23	<0.1	1.7	2.08
		3/3/2016	<0.16	0.49J	<0.15	<0.23	0.49J	0.31J	1.29
0565-3	31-40	3/6/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.22	ND
		9/16/2013	<0.16	0.4J	<0.15	<0.23	<0.1	<0.22	0.4
		3/5/2014	<0.16	0.46J	<0.15	<0.23	0.17J	<0.22	0.63
		9/11/2014	<0.16	0.62J	0.2J	<0.23	<0.1	0.25J	1.07
		3/5/2015	<0.16	0.5J	0.18J	<0.23	0.19J	<0.22	0.87
		9/14/2015	<0.16	0.49J	0.16J	<0.23	<0.1	0.42J	1.07
		3/5/2016	<0.16	<0.55J	0.19J	<0.23	<0.1	0.24J	0.43



Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0568-1	9-18	3/11/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.44	ND
		9/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0568-2	20-29	3/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	1.4	1.4
		3/7/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.4J	1.4
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.5	1.5
		3/9/2015	<0.16	<0.15	<0.15	<0.23	<0.1	1.5	1.5
		9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	1.2	1.2
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	0.79J	0.79
0568-3	31-40	3/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0569-1	9-18	3/8/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2015	<0.16	<0.15	<0.15	<0.23	0.14J	<0.22	0.14
		9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.52J	0.52
		3/5/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0569-2	20-29	3/8/2013	<0.64	2.2J	<0.6	<0.92	<0.4	1.6J	3.8
		9/13/2013	<0.16	1.1	<0.15	<0.23	5.9	1.8	8.8
		3/10/2014	<0.16	0.83J	<0.15	<0.23	5	1.7	7.53
		9/16/2014	<0.16	1.1	<0.15	<0.23	5.2	1.8	8.1
		3/9/2015	<0.16	0.79J	<0.15	<0.23	4.1	1.9	6.79
		9/15/2015	<0.16	1	<0.15	<0.23	4.2	1.5J	6.7
		1/14/2016	<0.16	1.9	<0.15	<0.23	4.9	-	-
		3/5/2016	<0.16	<1.5	<0.15	<0.23	7.4	1.5	8.9

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0569-3	31-40	3/8/2013	<0.64	54	<0.6	2.5J	37	1.3J	94.8
		9/13/2013	<0.16	39	0.54J	1.4	35	<0.22	75.94
		3/10/2014	<0.16	41	0.6J	1.6	37	2	82.2
		9/16/2014	<0.16	28	0.37J	1	37	1.8	68.17
		3/9/2015	<0.16	18	0.25J	0.65J	27	1.8	47.7
		9/15/2015	<0.16	21	0.38J	0.93J	33	1.8J	57.11
		3/5/2016	<0.16	<0.15	<0.15	<0.23	22	0.83J	22.83
0570-1	9-18	3/8/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/17/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND		
0570-2	20-29	3/11/2013	<0.16	<0.15	<0.15	<0.23	0.55J	<0.44	0.55
		9/13/2013	<0.16	<0.15	<0.15	<0.23	0.56J	1J	1.56
		3/7/2014	<0.16	<0.15	<0.15	<0.23	0.4J	0.88J	1.28
		9/17/2014	<0.16	<0.15	<0.15	<0.23	<0.1	2.4	2.4
		3/9/2015	<0.16	<0.15	<0.15	<0.23	0.66J	1.4	2.06
		9/15/2015	<0.16	<0.15	<0.15	<0.23	0.71J	1.2J	1.91
3/7/2016	<0.16	<0.15	<0.15	<0.23	1.7	1.2	2.9		
0570-3	31-40	3/13/2013	<0.16	<0.15	<0.15	<0.23	3.4	<0.44	3.4
		9/13/2013	<0.16	<0.15	<0.15	<0.23	3.7	1.7J	5.4
		3/7/2014	<0.16	<0.15	<0.15	<0.23	3.6	1.7J	5.3
		9/17/2014	<0.16	<0.15	<0.15	<0.23	2.2	3	5.2
		3/9/2015	<0.16	<0.15	<0.15	<0.23	3.6	2.2	5.8
		9/15/2015	<0.16	0.19J	<0.15	<0.23	3.5	1.6J	5.29
		3/7/2016	<0.16	<0.17J	<0.15	<0.23	4.9	1.1	6
0572-1	9-18	3/11/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.44	ND
		9/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.45J	0.45
		9/15/2015	<0.16	0.18J	<0.15	<0.23	<0.1	<0.22	0.18
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0572-2	20-29	3/11/2013	<0.8	200	1.7J	10	42	<0.44	253.7
		9/12/2013	<0.16	210	1.8	11J	59J	1.2	283
		3/7/2014	<0.16	210	1.8	8.6	35	1.1J	256.5
		9/16/2014	<0.16	120	1.2	5.1	30	1.1	157.4
		9/15/2015	<0.16	0.62J	<0.15	<0.23	28	5.6J	34.22
		1/14/2016	<0.16	1.9	<0.15	<0.23	20	-	-
		3/8/2016	<0.16	0.6J	<0.15	<0.23	22	1.9	24.5
0573-1	9-18	3/6/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.22	ND
		9/16/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/5/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/5/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0573-2	20-29	3/3/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/6/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.22	ND
		9/16/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/5/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.25J	0.25
		3/5/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0573-3	31-40	9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.5J	0.5
		3/3/2016	<0.16	<0.15	<0.15	<0.23	<0.1	0.28J	0.28
		3/6/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.22	ND
		9/16/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/5/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.35J	0.35
		9/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.22J	0.22
		3/5/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0574-1	9-18	9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.55J	0.55
		3/3/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2013	<0.64	7.3	<0.6	<0.92	12	<0.44	19.3
		9/17/2013	<0.16	5.9	<0.15	<0.23	14	1.3	21.2
		3/5/2014	<0.16	7.2	<0.15	<0.23	12	1.4	20.6
		9/11/2014	<0.16	11	0.15J	<0.23	14	1.2	26.35
		3/5/2015	<0.16	11	0.15J	<0.23	11	1.8	23.95
		9/14/2015	<0.16	21	0.26J	0.31J	22	1.1	44.67
1/13/2016	<0.16	38	0.46J	1.6	22	-	-		
3/3/2016	<0.16	48	0.57J	2.2	23	1.2	74.97		

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0574-2	20-29	3/11/2013	<0.16	17	0.28J	<0.23	18	<0.44	35.28
		9/17/2013	<0.16	13	0.2J	<0.23	26	<0.22	39.2
		3/5/2014	<0.16	14	0.22J	<0.23	20	1.2	35.42
		9/11/2014	<0.16	22	0.31J	0.47J	23	1.4	47.18
		3/5/2015	<0.16	30	0.42J	1	18	1.8	51.22
		9/14/2015	<0.16	77	1.2	4.9	46	1.5	130.6
		1/13/2016	<0.16	190	2.4	11	54	-	-
		3/3/2016	<0.16	200	2.1	10	49	1.9	263
0574-3	31-40	3/11/2013	<0.16	0.59J	<0.15	<0.23	1	<0.44	1.59
		9/17/2013	<0.16	5.4	<0.15	<0.23	14	0.97J	20.37
		3/5/2014	<0.16	0.41J	<0.15	<0.23	1	<0.22	1.41
		9/11/2014	<0.16	0.2J	<0.15	<0.23	0.7J	<0.22	0.9
		3/5/2015	<0.16	0.23J	<0.15	<0.23	0.71J	<0.22	0.94
		9/14/2015	<0.16	0.27J	<0.15	<0.23	2.1	0.49J	2.86
		1/13/2016	<0.16	0.47J	<0.15	<0.23	2.2	-	-
		3/3/2016	<0.16	0.38J	<0.15	<0.23	3.4	<0.22	3.78
0575-1	9-18	3/6/2013	<0.64	<0.6	<0.6	<0.92	<0.4	1.9	1.9
		9/16/2013	<0.16	<0.15	<0.15	<0.23	<0.1	1.5	1.5
		3/5/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.8	1.8
		9/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.4	1.4
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	2.4	2.4
		9/14/2015	<0.16	<0.15	<0.15	<0.23	<0.1	1.3	1.3
		1/14/2016	<0.16	<0.15	<0.15	<0.23	0.42J	-	-
		3/3/2016	<0.16	<0.15	<0.15	<0.23	0.26J	1.4	1.66
0575-2	20-29	3/6/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.22	ND
		9/16/2013	<0.16	<0.15	<0.15	<0.23	0.89J	<0.22	0.89
		3/5/2014	<0.16	<0.15	<0.15	<0.23	1.2	0.67J	1.87
		9/11/2014	<0.16	<0.15	<0.15	<0.23	1.2	0.75J	1.95
		3/10/2015	<0.16	<0.15	<0.15	<0.23	1.3	<0.22	1.3
		9/14/2015	<0.16	0.16J	<0.15	<0.23	1.6	<0.22	1.76
		1/14/2016	<0.16	0.16J	<0.15	<0.23	1.7	-	-
		3/3/2016	<0.16	<0.15	<0.15	<0.23	1.5	1.4	2.9
0576-1	4-13	3/13/2013	<0.16	7.4	0.17J	2	15	36	60.57
		9/12/2013	<0.16	5.3	<0.15	1.4	12	33	51.7
		3/10/2014	<0.16	4.4	<0.15	1.1	4.9	22J	32.4
		9/15/2014	<0.16	6.4	0.25J	2	9.5	33	51.15
		3/11/2015	<0.16	4.9	0.16J	1.1	8	36	50.16
		9/12/2015	<0.16	4.1	0.16J	0.54J	6.7	64B	75.5
		3/8/2016	<0.16	1.5	<0.15	<0.23	5.4	48	54.9

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0576-2	15-24	3/13/2013	<0.16	8.9	0.21J	2.4	17	27J	55.51
		9/12/2013	<0.16	6.2	<0.15	1.6	13	35	55.8
		3/10/2014	<0.16	4.7	<0.15	1.3	4.9	24J	34.9
		9/15/2014	<0.16	7.1	0.28J	1.6	9.2	32	50.18
		9/12/2015	<0.16	8.1	0.4J	1.7	15	19B	44.2
		1/13/2016	<0.16	8.1	0.55J	1.8	17	-	-
		3/8/2016	<0.16	8.4	0.44J	1.7	19J	32J	61.54
0576-3	26-35	3/13/2013	<0.16	0.46J	<0.15	<0.23	1.2	<0.88	1.66
		9/12/2013	<0.16	0.23J	<0.15	<0.23	0.67J	<0.22	0.9
		3/11/2014	<0.16	0.35J	<0.15	<0.23	0.68J	<0.22	1.03
		9/15/2014	<0.16	0.54J	<0.15	<0.23	0.93J	<0.22	1.47
		3/11/2015	<0.16	0.34J	<0.15	<0.23	0.62J	<0.22	0.96
		9/12/2015	<0.16	0.22J	<0.15	<0.23	0.5J	<0.22	0.72
		3/8/2016	<0.16H	<0.72JH	<0.15H	<0.23H	1.3H	4	5.3
0577-1	4-13	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.8JB	ND
		9/15/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	-	ND
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0577-2	15-24	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.66JB	ND
		9/15/2014	0.49J	<0.15	<0.15	<0.23	<0.1	<0.22	0.49
		3/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.39JB	ND
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0577-3	26-35	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.61JB	ND
		9/15/2014	0.42J	<0.15	<0.15	<0.23	<0.1	<0.22	0.42
		3/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44JB	ND
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND



Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0578-1	4-13	3/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.3JHJ	0.3
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0578-2	15-24	3/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.6B	1.6
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.35J	0.35
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.6J	0.6
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0578-3	26-35	3/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.43JB	ND
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.46J	0.46
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0579-1	4-13	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2014	0.29J	<0.15	<0.15	<0.23	<0.1	<0.22	0.29
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0579-2	15-24	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.26J	0.26
		9/15/2014	0.27J	<0.15	<0.15	<0.23	<0.1	<0.22	0.27
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.54JB	ND
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0579-3	26-35	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/11/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2014	<0.64	<0.6	<0.6	<0.92	<0.4	<0.22	ND
		9/15/2014	0.25J	<0.15	<0.15	<0.23	<0.1	<0.22	0.25
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/12/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.37JB	ND
		3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0580-1	9-18	3/7/2013	<0.16	0.54J	<0.15	<0.23	4.2	4	8.74
		9/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0580-2	20-29	3/7/2013	<0.16	18	5J	<0.23	150J	160	333
		9/13/2013	<0.16	21	8.2	0.38J	150	170J	349.58
		3/11/2014	<0.16	13	5	<0.23	130	130B	278
		9/16/2014	<0.16	17	6.7	<0.23	170	150	343.7
		3/10/2015	<0.16	17	6.9	<0.23	170	160	353.9
		9/11/2015	<0.16	23	9.3	0.31J	190	160	382.61
		1/19/2016	<0.32	18	7.8	<0.46	200	-	-
3/8/2016	<0.16	17	7.1	0.23J	210	180	414.33		
0580-3	31-40	3/7/2013	<0.16	12	0.88J	<0.23	23	28	63.88
		9/13/2013	<0.16	16	3.2	0.39J	33	30J	82.59
		3/11/2014	<0.16	18	3.4	0.28J	40	31B	92.68
		9/16/2014	<0.16	16	3.4	0.23J	45	34	98.63
		3/10/2015	<0.16	18	3.8	0.23J	38	35	95.03
		9/11/2015	<0.16	18	4	0.31J	45	39	106.31
		3/8/2016	<0.16	17	3.7	0.3J	46	27	94
0581-1	9-18	3/11/2013	<0.16	0.26J	<0.15	<0.23	0.5J	<0.44	0.76
		9/16/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0581-2	20-29	3/11/2013	<0.16	3.6	<0.15	0.47J	7.3J	<0.44	11.37
		9/16/2013	<0.16	7.2	0.61J	1.1	20	30	58.91
		3/10/2014	<0.16	7.6J	0.58J	0.99J	14J	27J	50.17
		9/15/2014	<0.16	1.7	<0.15	<0.23	3.4	9.5	14.6
		3/9/2015	<0.16	2.6	0.26J	0.27J	7.2	10	20.33
		9/11/2015	<0.16	6.3	0.84J	0.69J	22	34J	63.83
		3/9/2016	<0.16	0.84J	0.17J	<0.23	3.7	5.9	10.61
0581-3	31-40	3/11/2013	<0.32	<0.3	<0.3	<0.46	<0.2	<0.44	ND
		9/16/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2014	<0.16	0.47J	<0.15	<0.23	0.48J	1.5	2.45
		9/15/2014	<0.16	0.63J	<0.15	<0.23	<0.1	4.2	4.83
		3/9/2015	<0.16	0.55J	<0.15	<0.23	0.56J	2.3	3.41
		9/11/2015	<0.16	0.46J	<0.15	<0.23	1	1.9	3.36
		3/9/2016	<0.16	1.4	<0.15	<0.23	2.8	8.9	13.1
0582-1	9-18	3/11/2013	<0.16	<0.15	<0.15	<0.23	1.2	<0.44	1.2
		9/17/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/15/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0582-2	20-29	3/11/2013	<0.16	13	2.5	0.72J	130J	170J	316.22
		9/17/2013	<0.16	21	5.3	0.8J	170	270	467.1
		3/10/2014	<0.16	17	4.9J	0.63J	110	150J	282.53
		9/15/2014	<0.16	21	5.3J	0.35J	250	290J	566.65
		3/9/2015	<0.16	21	7.5	0.39J	250	330	608.89
		9/11/2015	<0.16	0.59J	8.3	<0.23	59	350	417.89
		1/14/2016	<0.16	0.51J	5.8	<0.23	62	-	-
		3/9/2016	<0.16	<0.15	2.7	<0.23	22	130	154.7
0582-3	31-40	3/11/2013	<0.16	0.2J	<0.15	<0.23	1.2	<0.44	1.4
		9/17/2013	<0.16	0.22J	<0.15	<0.23	0.63J	<0.22	0.85
		3/10/2014	<0.16	0.56J	<0.15	<0.23	2.2	0.98J	3.74
		9/15/2014	<0.16	0.89J	<0.15	<0.23	3.3	3.3	7.49
		3/9/2015	<0.16	1.7	0.41J	<0.23	11	3.5	16.61
		9/11/2015	<0.16	0.91J	0.2J	<0.23	3.3	2.9	7.31
		3/9/2016	<0.16	1.3	0.19J	<0.23	4.5	6.5	12.49

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0583-1	9-18	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/18/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.71JB	ND
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
0583-2	20-29	3/12/2013	<0.16	0.25J	2.2	<0.23	16	<4.4	18.45
		9/18/2013	<0.16	0.38J	2.5	<0.23	13	4.1	19.98
		3/11/2014	<0.16	0.22J	2.4	<0.23	21	8.6B	32.22
		9/16/2014	<0.16	0.29J	0.72J	<0.23	6	3	10.01
		3/10/2015	<0.16	0.26J	0.37J	<0.23	5.7	3.7	10.03
		9/11/2015	<0.16	<0.15	0.34J	<0.23	3.7	2.2	6.24
		3/9/2016	<0.16	<0.15	0.25J	<0.23	6.7	2.8	9.75
0583-3	31-40	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.88	ND
		9/18/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	0.17J	<0.23	0.76J	<0.88JB	0.93
		9/16/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/10/2015	<0.16	<0.15	<0.15	<0.23	0.16J	<0.22	0.16
		9/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2016	<0.16	<0.15	<0.15	<0.23	0.86J	0.4J	1.26
0584-1	9-18	3/9/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/14/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/8/2014	<0.16	<0.15	<0.15	<0.23	0.25J	2.1	2.35
		9/13/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.8	1.8
		3/7/2015	<0.16	<0.15	<0.15	<0.23	<0.1	2.4	2.4
		9/12/2015	<0.16	<0.15	<0.15	<0.23	0.14J	0.8J	0.94
		3/5/2016	<0.16	<0.15	<0.15	<0.23	<0.1	1.5	1.5
0584-2	20-29	3/9/2013	<0.16	0.35J	<0.15	<0.23	<0.1	<0.44	0.35
		9/14/2013	<0.16	0.34J	<0.15	<0.23	2.7	<0.22	3.04
		3/8/2014	<0.16	0.34J	<0.15	<0.23	4	0.98J	5.32
		9/13/2014	<0.16	0.76J	<0.15	<0.23	5.2	0.89J	6.85
		3/7/2015	<0.16	1.8	<0.15	<0.23	11	0.89J	13.69
		9/12/2015	<0.16	2.5	<0.15	<0.23	34	<0.22	36.5
		3/5/2016	<0.16	12	0.49J	<0.23	97	0.89J	110.38

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0584-3	31-40	3/9/2013	<0.32	<0.3	<0.3	<0.46	1J	<0.44	1
		9/14/2013	<0.16	0.27J	<0.15	<0.23	3.3	<0.22	3.57
		3/8/2014	<0.16	0.35J	<0.15	<0.23	4.8	<0.22	5.15
		9/13/2014	<0.16	0.53J	<0.15	<0.23	7.8	<0.22	8.33
		3/7/2015	<0.16	0.96J	<0.15	<0.23	10	<0.22	10.96
		9/12/2015	<0.16	1	<0.15	<0.23	23	0.33J	24.33
		3/5/2016	<0.16	<0.94J	<0.15	<0.23	57	<0.22	57
0585-1	9-18	3/9/2013	5.3	59	0.41J	2.7	9.8	<0.44	77.21
		9/14/2013	4.2	36	0.41J	2.4	5.4	2.4J	50.81
		3/8/2014	0.17J	1.2	<0.15	<0.23	0.55J	2.3	4.22
		9/13/2014	<0.16	1.2	<0.15	<0.23	<0.1	3.8	5
		3/7/2015	1.4	24	0.45J	1.7	14	5.1	46.65
		9/12/2015	0.23J	3.9	0.24J	0.34J	1.9	4.2B	10.81
		3/5/2016	<0.16	<1.6	1.8	<0.23	57	5.7	64.5
0585-2	20-29	3/9/2013	420	3,500	17	160	420	<8.8	4,517
		9/14/2013	1,300	5,800	39	410	700	<2.2	8,249
		3/8/2014	1,400J	5,300	29	290	590	3.1J	7,612.1
		9/13/2014	1,700	6,300	59	540	900	4.6	9,503.6
		3/7/2015	<3.2	4,600	36	180	2,100	9.1	6,925.1
		9/12/2015	30	3,600	44	150	4,800	5.9BJ	8,629.9
		1/19/2016	29J	2,900	75	130	3,400	-	-
3/5/2016	230	2,800	41	170	2,100	4.3J	5,345.3		
0585-3	31-40	3/9/2013	0.71J	140	1.1	4	200	<0.44	345.81
		9/14/2013	24	230	5.6	11	900	1.3J	1,171.9
		3/8/2014	11	430	8.2	17	1,200	1.5	1,667.7
		9/13/2014	29	540	12	22	1,400	2.3	2,005.3
		3/7/2015	4.1	48	5.5	1.6J	490	<0.22	549.2
		9/12/2015	<0.64	19	5.7	<0.92	510J	2.4BJ	537.1
		3/5/2016	0.61J	<1.5	5.4	<0.23	130	2.8	138.81
0586-1	8-17	3/13/2013	<0.16	0.36J	<0.15	<0.23	<0.1	<0.44	0.36
		9/17/2013	<0.16	0.35J	<0.15	<0.23	0.13J	<0.22	0.48
		3/7/2014	<0.16	0.34J	<0.15	<0.23	<0.1	0.62J	0.96
		9/18/2014	<0.16	0.28J	<0.15	<0.23	<0.1	10	10.28
		3/12/2015	<0.16	0.55J	<0.15	<0.23	0.68J	1.2	2.43
		9/15/2015	<0.16	0.67J	<0.15	<0.23	2	0.57J	3.24
		3/4/2016	<0.16	0.37J	<0.15	<0.23	2.4	<0.22	2.77



Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0586-2	19-28	3/13/2013	<0.16	3	<0.15	<0.23	2.9	<0.44	5.9
		9/17/2013	<0.16	10	<0.15	0.39J	5.6	0.91J	16.9
		3/10/2014	<0.16	13	<0.15	0.44J	5.8	1	20.24
		9/18/2014	<0.16	10	<0.15	0.52J	5	3.6	19.12
		3/12/2015	<0.16	11	<0.15	0.42J	6.4	1.8	19.62
		9/15/2015	<0.16	11	<0.15	0.33J	8.3	1.5J	21.13
		1/19/2016	<0.16	15	<0.15	0.52J	8.6	-	-
		3/4/2016	<0.16	12	<0.15	0.48J	9	0.86J	22.34
0586-3	30-39	3/13/2013	<0.16	0.53J	<0.15	<0.23	1.5	<0.44	2.03
		9/17/2013	<0.16	<0.15	<0.15	<0.23	2.9	<0.22	2.9
		3/10/2014	<0.16	<0.15	<0.15	<0.23	2.8	0.46J	3.26
		9/18/2014	<0.16	<0.15	<0.15	<0.23	5.2	0.47J	5.67
		3/12/2015	<0.16	<0.15	<0.15	<0.23	5.7	1.7	7.4
		9/15/2015	<0.16	<0.15	<0.15	<0.23	5.5	1.2J	6.7
		3/4/2016	<0.16	<0.15	<0.15	<0.23	3.7	0.67J	4.37
0587-1	9-18	3/13/2013	<0.16	50	0.3J	1.3	13	<0.44	64.6
		9/17/2013	<0.32	510	4.4	22	250	<0.22	786.4
		3/12/2014	1.4J	670	5.6	30	310	0.74J	1,017.74
		9/18/2014	<0.16	60	0.94J	2.2	86	0.7J	149.84
		3/12/2015	<0.16	2	0.27J	<0.23	4.4	<0.22	6.67
		9/13/2015	<0.16	0.2J	<0.15	<0.23	<0.1	<0.22	0.2
		3/4/2016	<0.16	<0.15	0.15J	<0.23	0.17J	<0.22	0.32
0587-2	20-29	3/13/2013	<0.16	190	1.4	7.9J	71	<0.44	270.3
		9/17/2013	<1.6	2,000	11	81	400	2.6	2,494.6
		3/12/2014	66J	3,400	19	160	480J	2.2J	4,127.2
		9/18/2014	360J	7,600	50	400J	1,500	5.2	9,915.2
		3/12/2015	62	4,300	43	210J	1,900	<0.88	6,515
		9/13/2015	10	100J	23	15	360	7.5B	515.5
		1/19/2016	4.5	60	14	6.2	110	-	-
		3/4/2016	3.4	36	15	4.1	100	6	164.5
0587-3	31-40	3/13/2013	<0.16	280	2.2	16	130	<0.44	428.2
		9/18/2013	<0.16	0.4J	<0.15	<0.23	42	1.2	43.6
		3/12/2014	1.1	23	0.65J	2.5	93	1.3J	121.55
		9/18/2014	0.81J	260	3.9	13	550	3.2	830.91
		3/12/2015	0.27J	13	0.37J	0.29J	73	<0.88	86.93
		9/13/2015	<0.16	7.9	0.43J	<0.23	40	3B	51.33
		3/4/2016	<0.16	0.33J	0.29J	<0.23	1.3	2.5	4.42

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
0588-1	9-18	3/14/2013	<0.64	<0.6	<0.6	<0.92	<0.4	<0.44	ND
		9/18/2013	<0.16	0.63J	<0.15	<0.23	0.57J	<0.22	1.2
		3/12/2014	<0.16	0.42J	<0.15	<0.23	<0.1	<0.22	0.42
		9/18/2014	<0.16	0.23J	<0.15	<0.23	0.26J	<0.22	0.49
		3/12/2015	<0.16	0.16J	<0.15	<0.23	0.89J	9.8	10.85
		9/13/2015	<0.16	0.2J	<0.15	<0.23	1.5	1.5B	3.2
		3/7/2016	<0.16	<0.15	<0.15	<0.23	0.97J	<0.22	0.97
0588-2	20-29	3/14/2013	<0.16	12	<0.15	<0.23	16	6.6	34.6
		9/18/2013	<0.16	6.2	<0.15	<0.23	7.8	6.7	20.7
		3/12/2014	<0.16	3.2	<0.15	<0.23	4.8	6.9J	14.9
		9/18/2014	<0.16	1.3	<0.15	<0.23	2.6	8.7	12.6
		3/12/2015	<0.16	2.8	<0.15	<0.23	3.5	12	18.3
		9/13/2015	<0.16	4.8	<0.15	<0.23	5.2	6.5B	16.5
		3/7/2016	<0.16	18	0.27J	<0.23	20	3.5	41.77
0588-3	31-40	3/14/2013	<0.16	0.87J	<0.15	<0.23	1.4	<0.44	2.27
		9/18/2013	<0.16	0.54J	<0.15	<0.23	2.4	<0.22	2.94
		3/12/2014	<0.16	0.33J	<0.15	<0.23	2.7	0.92J	3.95
		9/18/2014	<0.16	0.24J	<0.15	<0.23	0.62J	1.2	2.06
		3/12/2015	<0.16	0.2J	<0.15	<0.23	0.82J	3	4.02
		9/13/2015	<0.16	0.26J	<0.15	<0.23	1.4	0.75JB	2.41
		3/7/2016	<0.16	<0.15	<0.15	<0.23	1	<0.22	1
S30B <sup>e</sup>	5-15	3/8/2013	23	43	4.5	0.54J	10	<0.44	81.04
		9/13/2013	6.7	15	1.6	<0.23	5.2	0.82J	29.32
		3/6/2014	15	34	3.9	0.35J	4.7	1	58.95
		9/12/2014	12	23	2.8	0.28J	5.7	<0.22	43.78
		3/6/2015	18	53	6.3	0.62J	12	<0.22	89.92
		3/4/2016	15	38	5.2	0.62J	24	<0.22	82.82
S33C <sup>e</sup>	11-21	3/8/2013	180	920	48	33	150	<0.44	1,331
		9/13/2013	19	260	4.8	7.2	340	<0.22	631
		3/6/2014	210	1,000	61	33	180	<0.22	1,484
		9/12/2014	86J	280J	17J	11J	68J	<0.22	462
		3/6/2015	550	2,400	130	73	280	<2.2	3,433
		3/4/2016	62	350	28	14	110	<0.22	564
S35B <sup>e</sup>	5-15	3/8/2013	5,500	40,000	5,100	940	12,000	<0.44	63,540
		9/13/2013	7,000	63,000	7,000	1,100	19,000	3.5	97,103.5
		3/6/2014	6,400	44,000	5,900	860	11,000	<4.4	68,160
		9/12/2014	10,000	48,000	6,000	830	9,900	<2.2	74,730
		3/6/2015	11,000	54,000	6,700	930	10,000	<22	82,630
		1/13/2016	19,000	45,000	4,600	780	9,300	-	-
		3/4/2016	21,000J	46,000	3,900	660	9,900	<44	81,460

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 (µg/L)<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
S67B <sup>e</sup>	10–19.83	3/7/2013	<0.16	13	3.3	<0.23	250	91	357.3
		9/13/2013	<0.16	13	3.3	<0.23	230	89J	335.3
		3/6/2014	<0.16	13	3	<0.23	230	84	330
		9/12/2014	0.2J	12J	3.3J	0.24J	180J	72J	267.74
		3/6/2015	<0.16	12	3	<0.23	220	87	322
		3/4/2016	<0.16	12	3.3	0.23J	230	80	325.53
S67C <sup>e</sup>	20–29.83	3/7/2013	<0.16	48	9.7	0.64J	65	<0.88	123.34
		9/13/2013	<0.16	43	8.3	0.52J	110	45J	206.82
		3/6/2014	<0.16	57	10	0.61J	120	49	236.61
		9/12/2014	0.64J	62J	12J	0.69J	210J	120J	405.33
		3/6/2015	<0.16	73	14	0.75J	65	25	177.75
		3/4/2016	<0.16	20	4.7	0.3J	190	79	294
S67D <sup>e</sup>	30–39.83	3/7/2013	<0.16	6.2	1.9	<0.23	11	<0.22	19.1
		9/13/2013	<0.16	6	1.9	<0.23	9.1	1.3	18.3
		3/6/2014	<0.16	6.1	2.1	<0.23	10	1.5	19.7
		9/12/2014	0.27J	7.5	2.6	<0.23	7.7	2.1	20.17
		3/6/2015	<0.16	5.9	2	<0.23	8.4	2	18.3
		3/4/2016	<0.16	6.9	2.6	<0.23	14	1.9	25.4
S68B	10–20	3/13/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.44	ND
		9/18/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/12/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.48J	0.48
		9/17/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	2.1	2.1
		9/15/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.36J	0.36
S68C	18–28	3/7/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/13/2013	<0.64	5.3	<0.6	<0.92	<0.4	4.5	9.8
		9/18/2013	<0.16	22	0.32J	<0.23	16	4.9	43.22
		3/12/2014	<0.16	14	0.23J	<0.23	11	2.7J	27.93
		9/17/2014	<0.16	18	0.37J	<0.23	6.6	5.8	30.77
		3/11/2015	<0.16	11	0.32J	<0.23	7.5	6.9	25.72
		9/15/2015	<0.16	11	0.22J	<0.23	6.8	7.2J	25.22
S68D	30–40	3/7/2016	<0.16	11	0.23J	<0.23	9.8	6	27.03
		3/13/2013	<0.64	41	<0.6	<0.92	16	3.3	60.3
		9/18/2013	<0.16	70	0.92J	<0.23	52	1.5	124.42
		3/12/2014	<0.16	57	0.78J	<0.23	44	2.1	103.88
		9/17/2014	<0.16	54	0.81J	<0.23	27	1.9	83.71
		3/11/2015	<0.16	52	0.94J	<0.23	32	3.3	88.24
		9/15/2015	<0.16	47	0.54J	<0.23	16	2.1	65.64
3/7/2016	<0.16	42	0.51J	<0.23	20	1.9	64.41		

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
S69B	10–20	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.88	ND
		9/18/2013	<0.16	0.21J	<0.15	<0.23	<0.1	<0.22	0.21
		3/12/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.9J	0.9
		9/18/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.5	1.5
		3/11/2015	<0.16	0.19J	<0.15	<0.23	<0.1	1.4	1.59
		9/16/2015	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/9/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
S69C	20–30	3/12/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.88	ND
		9/18/2013	<0.16	0.57J	0.2J	<0.23	0.3J	<0.22	1.07
		3/19/2014	<0.16	<0.15	<0.15	<0.23	<0.1	0.53J	0.53
		9/18/2014	<0.16	0.56J	0.16J	<0.23	0.34J	1	2.06
		3/11/2015	<0.16	0.8J	0.25J	<0.23	<0.1	3.3	4.35
		9/16/2015	<0.16	0.6J	0.18J	<0.23	0.18J	6.9	7.86
		3/9/2016	<0.16	0.63J	0.17J	<0.23	0.2J	1.2	2.2
S69D	30–40	3/12/2013	<0.16	0.3J	<0.15	<0.23	<0.1	<0.88	0.3
		9/18/2013	<0.16	0.33J	<0.15	<0.23	0.3J	<0.22	0.63
		3/12/2014	<0.16	0.34J	<0.15	<0.23	0.4J	0.22J	0.96
		9/18/2014	<0.16	0.45J	<0.15	<0.23	0.44J	0.65J	1.54
		3/11/2015	<0.16	0.5J	<0.15	<0.23	0.35J	1.3	2.15
		9/16/2015	<0.16	0.4J	<0.15	<0.23	0.32J	0.9J	1.62
		3/9/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
S70B	10–20	3/12/2013	<0.16	15	0.47J	<0.23	7.5	<0.22	22.97
		9/14/2013	<0.16	13	0.44J	<0.23	4.7	<0.22	18.14
		3/12/2014	<0.16	12	0.37J	<0.23	5.3	0.5J	18.17
		9/13/2014	<0.16	14J	0.55J	<0.23	5.6J	<0.22	20.15
		3/7/2015	<0.16	12	0.54J	<0.23	4.8	<0.22	17.34
		9/16/2015	<0.16	14	0.5J	<0.23	4.4	0.99J	19.89
		3/8/2016	<0.16	12	0.46J	<0.23	4.2	<0.22	16.66
S70C	20–30	3/12/2013	<0.16	19	7.2	0.47J	22	15	63.67
		9/14/2013	<0.16	13	4.2	<0.23	11	15J	43.2
		3/12/2014	<0.16	12	3.6	0.26J	13	19B	47.86
		9/13/2014	<0.16	12J	3.6J	<0.23	10J	15	40.6
		3/7/2015	<0.16	10	2.8	<0.23	6.9	12	31.7
		9/16/2015	<0.16	10	2.7	<0.23	6.2	17	35.9
		3/9/2016	<0.16	7.3	2	<0.23	5.4	17	31.7

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
S70D	30–40	3/12/2013	<0.16	23	9.2	0.68J	19	12	63.88
		9/14/2013	<0.16	18	6.4	0.4J	12	15J	51.8
		3/12/2014	<0.16	18	6.5	0.46J	15	13B	52.96
		9/13/2014	<0.16	20J	7.4J	0.49J	14J	15	56.89
		3/7/2015	<0.16	19	6.6	0.6J	12	16	54.2
		9/16/2015	<0.16	19	6.8	0.44J	12	18	56.24
		3/9/2016	<0.16	17	6	0.46J	13	17	53.46
S71B	10–20	3/9/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/16/2013	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		3/11/2014	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
		9/17/2014	<0.16	<0.15	<0.15	<0.23	<0.1	1.2	1.2
		3/11/2015	<0.16	<0.15	<0.15	<0.23	<0.1	1.2	1.2
		9/16/2015	<0.16	<0.15	<0.15	<0.23	<0.1	0.82J	0.82
		3/8/2016	<0.16	<0.15	<0.15	<0.23	<0.1	<0.22	ND
S71C	20–30	3/9/2013	<0.16	18	10	0.29J	44	34	106.29
		9/16/2013	<0.16	32	17	0.44J	58	46	153.44
		3/12/2014	<0.16	19	11	0.27J	57	22J	109.27
		9/17/2014	<0.16	5.8	3.5	<0.23	12	13	34.3
		3/11/2015	<0.16	13	8	<0.23	35	21	77
		9/16/2015	<0.16	19	11	<0.23	48	31	109
		3/8/2016	<0.16	15	11	0.26J	60	26	112.26
S71D	30–40	3/9/2013	<0.16	29	17	0.6J	60	<0.44	106.6
		9/16/2013	<0.16	25	12	0.4J	48	17	102.4
		3/12/2014	<0.16	24	10	0.3J	48	17J	99.3
		9/17/2014	<0.16	22	9.4	0.29J	29	18	78.69
		3/11/2015	<0.16	27	12	0.5J	42	30	111.5
		9/16/2015	<0.16	27	12	0.35J	39	23EJ	101.35
		3/8/2016	<0.16	21	10	0.32J	42	17	90.32
S73B	10–20	3/11/2013	<0.16	1.4	0.5J	<0.23	11	<0.44	12.9
		9/17/2013	<0.16	0.35J	0.16J	<0.23	0.96J	<0.22	1.47
		3/10/2014	<0.16	<0.15	<0.15	<0.23	0.88J	<0.22	0.88
		9/16/2014	<0.16	<0.15	<0.15	<0.23	0.36J	<0.22	0.36
		3/10/2015	<0.16	0.24J	0.16J	<0.23	0.81J	<0.22	1.21
		9/15/2015	<0.16	<0.15	<0.15	<0.23	0.71J	6.7	7.41
		3/9/2016	<0.16	<0.15	<0.15	<0.23	0.37J	<0.22	0.37

Table 5 (continued). COPCs Concentrations at the Building 100 Area Since March 2013 ( $\mu\text{g/L}$ )<sup>a</sup>

Location	Screen Depth (ft)	Date Sampled	TCE	cDCE	tDCE	1,1-DCE	VC	1,4-Dioxane	TCOPCs <sup>b</sup>
<b>Cleanup Target Level<sup>c</sup></b>			<b>30</b>	<b>700</b>	<b>1000</b>	<b>70</b>	<b>10</b>	<b>32</b>	
S73C	20–30	3/11/2013	<0.16	18	17	0.47J	230	130	395.47
		9/17/2013	<0.16	4.7	6.3	<0.23	74	67	152
		3/10/2014	<0.16	5.1	6.5	<0.23	110	60	181.6
		9/16/2014	<0.16	11	14	<0.23	110	100	235
		3/10/2015	<0.16	11	14	0.27J	130	130	285.27
		9/15/2015	<0.16	7.2	17	<0.23	110	88	222.2
		3/9/2016	<0.16	5.1	12	<0.23	79	75	171.1
S73D	30–40	3/11/2013	<0.16	0.21J	<0.15	<0.23	0.47J	<0.88	0.68
		9/17/2013	<0.16	0.16J	<0.15	<0.23	1.1	2.3	3.56
		3/10/2014	<0.16	0.16J	0.4J	<0.23	2.8	4.8	8.16
		9/16/2014	<0.16	<0.15	0.72J	<0.23	5.9	8	14.62
		3/10/2015	<0.16	<0.15	0.43J	<0.23	2.9	8.6J	11.93
		9/11/2015	<0.16	<0.15	0.62J	<0.23	4.4	9.7	14.72
		3/9/2016	<0.16	<0.15	0.85J	<0.23	3.4	11	15.25

**Notes:**

<sup>a</sup> Micrograms per liter.

<sup>b</sup> Some TCOPCs values are rounded.

<sup>c</sup> The offsite cleanup target level is a factor of 10 lower than the listed onsite (poor water quality) cleanup target level.

<sup>d</sup> Not sampled in September 2015 and March 2016.

<sup>e</sup> Not sampled in September 2015.

Values preceded by "<" are method detection limits.

**Abbreviations:**

– = not measured

B = analyte present in associated method blank

ft bls = feet below land surface

E = Analyte exceeded calibration range of the instrument.

H = missed holding time

J = estimated value

ND = not detected



Table 6. Supplemental Geochemical Data from January 2016

Location	Screen Depth (ft bls)	Date Sampled	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Nitrate (mg/L)	Ferrous Iron (mg/L)	Total Iron (mg/L)	Sulfate (mg/L)	Manganese (mg/L)	Total Organic Carbon (mg/L)	Alkalinity (mg/L)
<b>PIN12</b>												
0569-2	20–29	1/14/2016	9,400	<0.57J	<0.4	<0.019	2.4	2.5	3.7J	0.012	43	380B
0572-2	20–29	1/14/2016	14,000	<0.57	11	<0.019	2.45	2.52	2.6J	0.027	65	420B
0574-1	9–18	1/13/2016	1,200	<0.57	1.1J	<0.019	2.7	3.5	18	0.018	51	390B
0574-2	20–29	1/13/2016	2,400	<0.57	1.3J	<0.019	0.6	1.1	12	0.014	61	420B
0574-3	31–40	1/13/2016	4,000	<0.57	<0.4	<0.019	1.07	1.1	<0.23	0.12	70	470B
0575-1	9–18	1/14/2016	2,700	<0.57	<0.4	<0.019	3.6	3.8	1.1J	0.023	66	420B
0575-2	20–29	1/14/2016	3,400	<0.57	<0.4	<0.019	2.6	3.8	<0.23	0.0095	70	480B
0576-2	15–24	1/13/2016	6,300	<0.57	<0.4	<0.019	2.61	2.71	50	0.0056	44	340B
0580-2	20–29	1/19/2016	1,100	2.2J	1.1J	<0.019	2.3	5	71	0.0093	53	360B
0582-2	20–29	1/14/2016	6,500	5.9J	41	<0.019	4.5	6.1	260	0.013	48	340B
0585-2	20–29	1/19/2016	13,000	<10J	2,000	<0.019	1.7	3.8	3.1J	0.014	70	400B
0586-2	19–28	1/19/2016	1,500	<0.57J	<0.4	<0.019	0.1	3.1	4.9J	0.013	34	310B
0587-2	20–29	1/19/2016	17,000	<2.3J	1,400	<0.019	0.9	1.6	<.51J	0.012	210	260B
S30B	5–15	3/4/2016	260J	3.6J	0.64J	–	–	–	–	–	–	–
S35B	5–15	1/13/2016	2,500	9.5	320	0.16	1.81	2.04	160	0.038	48	380B
S35B	5–15	3/4/2016	2,000	13	240	–	–	–	–	–	–	–
S67B	10–19.83	3/4/2016	1,200	49	1.4J	–	–	–	–	–	–	–
S67C	20–29.83	3/4/2016	620	9.7	0.85J	–	–	–	–	–	–	–
S67D	30–39.83	3/4/2016	380	<0.57	<0.4	–	–	–	–	–	–	–

**Abbreviations:**

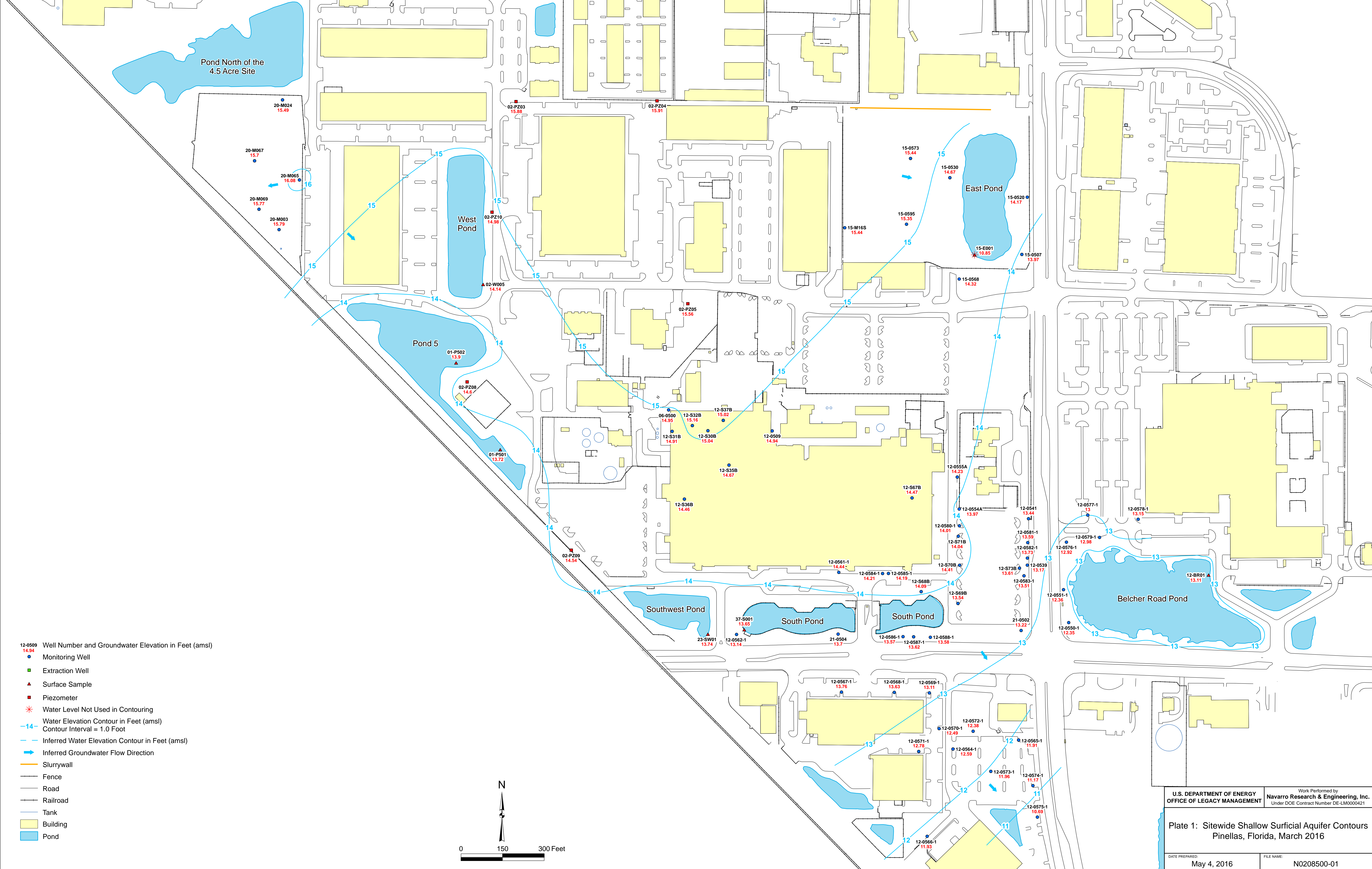
- = not measured
- B = result is between the instrument detection limit and the contract required detection limit
- ft bls = feet below land surface
- J = estimated value
- µg/L = micrograms per liter
- mg/L = milligrams/liter

Table 7. Supplemental Microorganism Data from January 2016

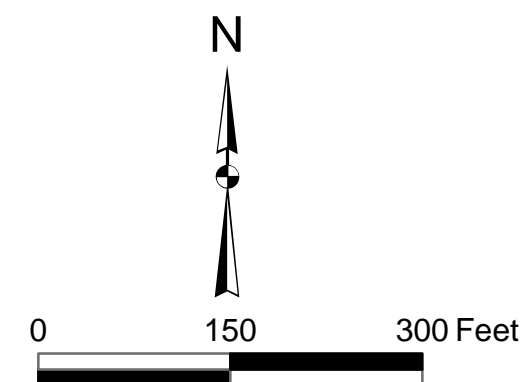
Location	Screen Depth (ft bls)	Date Sampled	<i>Dehalococcoides mccartyi</i> (cells/liter)	BAV1 Vinyl Chloride Reductase (cells/liter)	Vinyl Chloride Reductase (cells/liter)	tceA Reductase (cells/liter)
<b>PIN12</b>						
0569-2	20–29	1/14/2016	9.88E+05	3.31E+05	5.00E+02	5.00E+02
0572-2	20–29	1/14/2016	1.18E+07	5.99E+06	4.79E+04	8.37E+04
0574-1	9–18	1/13/2016	4.12E+05	1.28E+05	5.00E+02	5.00E+02
0574-2	20–29	1/13/2016	6.89E+05	1.12E+05	5.00E+02	1.00E+02
0574-3	31–40	1/13/2016	1.06E+07	3.89E+06	5.00E+02	5.00E+02
0575-1	9–18	1/14/2016	2.32E+04	5.00E+02	5.00E+02	5.00E+02
0575-2	20–29	1/14/2016	5.59E+04	5.00E+02	5.00E+02	5.00E+02
0576-2	15–24	1/13/2016	2.12E+05	3.00E+03	1.30E+03	4.10E+03
0580-2	20–29	1/19/2016	4.37E+05	1.30E+03	5.00E+02	7.00E+02
0582-2	20–29	1/14/2016	1.04E+07	5.00E+02	1.21E+06	5.91E+05
0585-2	20–29	1/19/2016	1.70E+09	2.07E+08	4.70E+08	4.38E+07
0586-2	19–28	1/19/2016	8.96E+05	1.88E+05	5.00E+02	4.00E+02
0587-2	20–29	1/19/2016	1.21E+08	5.23E+07	5.27E+06	2.72E+06
S35B	5–15	1/13/2016	6.91E+05	6.48E+04	5.00E+02	2.00E+02

**Abbreviation:**

ft bls = feet below land surface



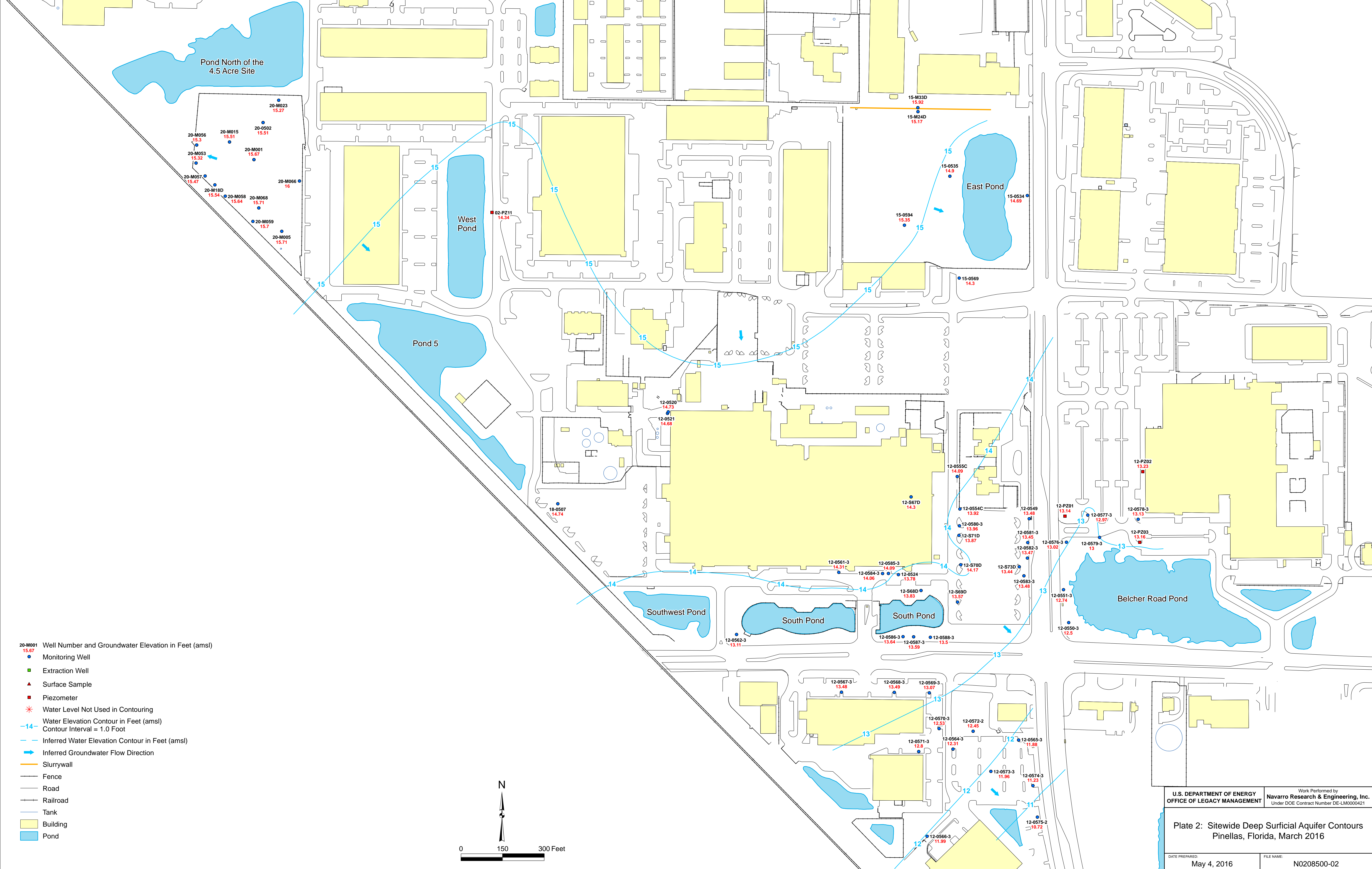
- 12-0509 Well Number and Groundwater Elevation in Feet (amsl)  
14.94
- Monitoring Well
- Extraction Well
- ▲ Surface Sample
- Piezometer
- \* Water Level Not Used in Contouring
- 14- Water Elevation Contour in Feet (amsl)  
Contour Interval = 1.0 Foot
- - - Inferred Water Elevation Contour in Feet (amsl)
- ➔ Inferred Groundwater Flow Direction
- Slurrywall
- Fence
- Road
- Railroad
- Tank
- Building
- Pond



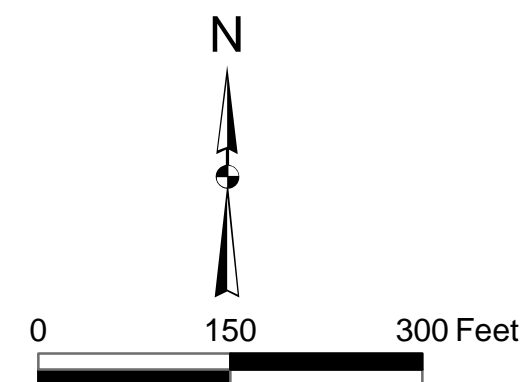
U.S. DEPARTMENT OF ENERGY OFFICE OF LEGACY MANAGEMENT	Work Performed by <b>Navarro Research &amp; Engineering, Inc.</b> Under DOE Contract Number DE-LM0000421
<b>Plate 1: Sitewide Shallow Surficial Aquifer Contours</b> Pinellas, Florida, March 2016	
DATE PREPARED:	FILE NAME:
May 4, 2016	N0208500-01

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- 20-M001 15.67 Well Number and Groundwater Elevation in Feet (amsl)
- Monitoring Well
- Extraction Well
- ▲ Surface Sample
- Piezometer
- \* Water Level Not Used in Contouring
- 14- Water Elevation Contour in Feet (amsl)  
Contour Interval = 1.0 Foot
- - - Inferred Water Elevation Contour in Feet (amsl)
- ➔ Inferred Groundwater Flow Direction
- Slurrywall
- Fence
- Road
- Railroad
- Tank
- Building
- Pond



U.S. DEPARTMENT OF ENERGY OFFICE OF LEGACY MANAGEMENT	Work Performed by <b>Navarro Research &amp; Engineering, Inc.</b> <small>Under DOE Contract Number DE-LM0000421</small>
<b>Plate 2: Sitewide Deep Surficial Aquifer Contours</b> Pinellas, Florida, March 2016	
DATE PREPARED:	FILE NAME:
May 4, 2016	N0208500-02

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**Appendix A**

**Laboratory Reports**

**March 2016 Semiannual Monitoring**

## ANALYTICAL REPORT

Job Number: 280-80508-1  
SDG Number: 16027653  
Job Description: Pinellas Monitoring

For:  
Navarro Research and Engineering, Inc  
2597 Legacy Way  
Grand Junction, CO 81503  
Attention: Mr. Steve Donovan



Approved for release.  
DiLea R Bindel  
Project Manager I  
3/29/2016 5:49 AM

---

DiLea R Bindel, Project Manager I  
4955 Yarrow Street, Arvada, CO, 80002  
(303)736-0173  
dilea.bindel@testamericainc.com  
03/29/2016

The test results in this report relate only to the samples in this report and meet all requirements of NELAP, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

**TestAmerica Laboratories, Inc.**

TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002  
Tel (303) 736-0100 Fax (303) 431-7171 [www.testamericainc.com](http://www.testamericainc.com)





Pages have been deleted from this laboratory report file to reduce file size. The deleted pages contain raw data and instrument calibrations. If the full laboratory report is needed, contact [Scott.Surovchak@lm.doe.gov](mailto:Scott.Surovchak@lm.doe.gov)

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## CASE NARRATIVE

**Client: Navarro Research and Engineering, Inc**

**Project: PINELLAS MONITORING - 16027653**

**Report Number: 280-80508-1**

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits, with any exceptions noted. Calculations are performed before rounding to avoid round-off errors in calculated results.

This report includes reporting limits (RLs) less than TestAmerica Denver's practical quantitation limits. These reporting limits are being used specifically at the client's request to meet the needs of this project. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

Results between the method detection limit (MDL) and reporting limit (RL) are flagged with a "J" qualifier to indicate an estimated value. These results are statistically less reliable than results greater than or equal to the RL and should be considered a qualitative value.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **RECEIPT**

The samples were received on 3/8/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.6° C and 3.8° C.

One of three vials submitted for sample PIN12-0565-1 (ODX 945) was received at the laboratory broken. Sufficient volume remained for the requested analyses.

### **GC/MS VOLATILES - SW846 8260B**

In some cases, due to high concentrations of target analytes, samples had to be analyzed using reduced aliquot sizes. The reporting limits have been elevated accordingly. To provide the lowest possible detection limits, multiple runs are reported.

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene and Styrene were detected in the method blank associated with batch 280-316976 at levels that were above the method detection limit but not greater than half the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated samples reported a result above the MDL and/or RL, the result has been "B" flagged.

The LCS associated with batches 280-316867 and 280-316976 exhibited a percent recovery outside the QC control limits, biased high, for Dichlorodifluoromethane. This is not a spike compound of interest. Therefore, data was not affected.

The MSD aliquot of the MS/MSD performed on sample PIN12-S35B (ODY 025) exhibited recoveries outside control limits, biased low, for Trichloroethene. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

A Continuing Calibration Verification (CCV) standard associated with batch 280-317297 exhibited the %Difference (%D) value >35%, for 1,2-Dichloroethane and 2,2-Dichloropropane. All CCC and SPCC compounds are in control; therefore, method criteria have been met.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### **GC/MS VOLATILES - SW846 8260B SIM - 1,4-Dioxane**

Due to high concentrations of target analytes, samples PIN12-S67B (ODX 985) and PIN12-S67C (ODX 986) had to be analyzed using reduced aliquot sizes. The reporting limits have been elevated accordingly.

Due to high concentrations of non-target analytes, sample PIN12-S35B (ODY 025) had to be analyzed using a reduced aliquot size. The reporting limits have been elevated accordingly.

The MS/MSD samples associated with batch 280-316701 exhibited recoveries and RPD values outside control limits for 1,4-Dioxane. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### **DISSOLVED GASES - RSK-175**

The MS/MSD performed on sample PIN12-S30B (ODY 023) exhibited recoveries outside control limits, biased low, for Ethane. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

unnecessary.

The RPD between the primary and confirmation columns exceeded 40% for Ethylene in the sample duplicate performed on sample PIN12-S30B (ODY 023). The result was reported from the secondary column due to matrix interference on the primary column. Where matrix interference is not evident, the higher of the two values is reported and the result is flagged with "P".

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



## DATA REPORTING QUALIFIERS

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD is outside acceptance limits.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	F2	MS/MSD RPD exceeds control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	P	The %RPD between the primary and confirmation column/detector is >40%. The higher value has been reported

# SAMPLE SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-80508-1	PIN12-0565-1	Water	03/03/2016 1630	03/08/2016 0940
280-80508-1MS	PIN12-0565-1	Water	03/03/2016 1630	03/08/2016 0940
280-80508-1MSD	PIN12-0565-1	Water	03/03/2016 1630	03/08/2016 0940
280-80508-2	PIN12-0565-2	Water	03/03/2016 1705	03/08/2016 0940
280-80508-3	PIN12-0573-1	Water	03/03/2016 1450	03/08/2016 0940
280-80508-4	PIN12-0573-2	Water	03/03/2016 1520	03/08/2016 0940
280-80508-5	PIN12-0573-3	Water	03/03/2016 1550	03/08/2016 0940
280-80508-6	PIN12-0574-1	Water	03/03/2016 0925	03/08/2016 0940
280-80508-7	PIN12-0574-2	Water	03/03/2016 0955	03/08/2016 0940
280-80508-8	PIN12-0574-3	Water	03/03/2016 1025	03/08/2016 0940
280-80508-9	PIN12-0575-1	Water	03/03/2016 1055	03/08/2016 0940
280-80508-10	PIN12-0575-2	Water	03/03/2016 1405	03/08/2016 0940
280-80508-11	PIN12-0586-1	Water	03/04/2016 0840	03/08/2016 0940
280-80508-12	PIN12-0586-2	Water	03/04/2016 0910	03/08/2016 0940
280-80508-13	PIN12-0586-3	Water	03/04/2016 0945	03/08/2016 0940
280-80508-14	PIN12-0587-1	Water	03/04/2016 1055	03/08/2016 0940
280-80508-15	PIN12-0587-2	Water	03/04/2016 1145	03/08/2016 0940
280-80508-16	PIN12-0587-3	Water	03/04/2016 1300	03/08/2016 0940
280-80508-17	PIN12-2198	Water	03/03/2016 0905	03/08/2016 0940
280-80508-18	PIN12-2689	Water	03/04/2016 0800	03/08/2016 0940
280-80508-19	PIN12-S30B	Water	03/04/2016 0945	03/08/2016 0940
280-80508-19MS	PIN12-S30B	Water	03/04/2016 0945	03/08/2016 0940
280-80508-19MSD	PIN12-S30B	Water	03/04/2016 0945	03/08/2016 0940
280-80508-20	PIN12-S33C	Water	03/04/2016 0905	03/08/2016 0940
280-80508-21	PIN12-S35B	Water	03/04/2016 1025	03/08/2016 0940
280-80508-22	PIN12-S67B	Water	03/04/2016 1155	03/08/2016 0940
280-80508-23	PIN12-S67C	Water	03/04/2016 1225	03/08/2016 0940
280-80508-24	PIN12-S67D	Water	03/04/2016 1305	03/08/2016 0940

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80508-1</b>	<b>PIN12-0565-1</b>					
Bromobenzene		0.26	J	1.0	ug/L	8260B
1,2-Dichlorobenzene		1.6		1.0	ug/L	8260B
1,3-Dichlorobenzene		0.35	J	1.0	ug/L	8260B
1,4-Dichlorobenzene		0.34	J	1.0	ug/L	8260B
1,2,3-Trichlorobenzene		1.9		1.0	ug/L	8260B
1,2,4-Trichlorobenzene		9.9		1.0	ug/L	8260B
<b>280-80508-2</b>	<b>PIN12-0565-2</b>					
1,2-Dichlorobenzene		0.34	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.49	J	1.0	ug/L	8260B
1,2,3-Trichlorobenzene		0.65	J	1.0	ug/L	8260B
1,2,4-Trichlorobenzene		2.4		1.0	ug/L	8260B
Vinyl chloride		0.49	J	1.0	ug/L	8260B
1,4-Dioxane		0.31	J	1.0	ug/L	8260B SIM
<b>280-80508-3</b>	<b>PIN12-0573-1</b>					
1,2,4-Trichlorobenzene		1.2		1.0	ug/L	8260B
<b>280-80508-4</b>	<b>PIN12-0573-2</b>					
1,2,3-Trichlorobenzene		0.29	J	1.0	ug/L	8260B
1,2,4-Trichlorobenzene		1.1		1.0	ug/L	8260B
1,4-Dioxane		0.28	J	1.0	ug/L	8260B SIM
<b>280-80508-5</b>	<b>PIN12-0573-3</b>					
1,2,4-Trichlorobenzene		0.46	J	1.0	ug/L	8260B
<b>280-80508-6</b>	<b>PIN12-0574-1</b>					
Acetone		5.6	J	10	ug/L	8260B
cis-1,2-Dichloroethene		48		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.57	J	1.0	ug/L	8260B
1,1-Dichloroethene		2.2		1.0	ug/L	8260B
Vinyl chloride		23		1.0	ug/L	8260B
1,4-Dioxane		1.2		1.0	ug/L	8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80508-7</b>	<b>PIN12-0574-2</b>					
1,1-Dichloroethane		0.30	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		200		10	ug/L	8260B
trans-1,2-Dichloroethene		2.1		1.0	ug/L	8260B
1,1-Dichloroethene		10		1.0	ug/L	8260B
Vinyl chloride		49		1.0	ug/L	8260B
1,4-Dioxane		1.9		1.0	ug/L	8260B SIM
<b>280-80508-8</b>	<b>PIN12-0574-3</b>					
Acetone		6.2	J	10	ug/L	8260B
cis-1,2-Dichloroethene		0.38	J	1.0	ug/L	8260B
Vinyl chloride		3.4		1.0	ug/L	8260B
<b>280-80508-9</b>	<b>PIN12-0575-1</b>					
Vinyl chloride		0.26	J	1.0	ug/L	8260B
1,4-Dioxane		1.4		1.0	ug/L	8260B SIM
<b>280-80508-10</b>	<b>PIN12-0575-2</b>					
Acetone		9.7	J	10	ug/L	8260B
Vinyl chloride		1.5		1.0	ug/L	8260B
1,4-Dioxane		1.4		1.0	ug/L	8260B SIM
<b>280-80508-11</b>	<b>PIN12-0586-1</b>					
cis-1,2-Dichloroethene		0.37	J	1.0	ug/L	8260B
Vinyl chloride		2.4		1.0	ug/L	8260B
<b>280-80508-12</b>	<b>PIN12-0586-2</b>					
1,1-Dichloroethane		0.23	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		12		1.0	ug/L	8260B
1,1-Dichloroethene		0.48	J	1.0	ug/L	8260B
Vinyl chloride		9.0		1.0	ug/L	8260B
1,4-Dioxane		0.86	J	1.0	ug/L	8260B SIM
<b>280-80508-13</b>	<b>PIN12-0586-3</b>					
Acetone		9.1	J	10	ug/L	8260B
Vinyl chloride		3.7		1.0	ug/L	8260B
1,4-Dioxane		0.67	J	1.0	ug/L	8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80508-14</b>	<b>PIN12-0587-1</b>					
trans-1,2-Dichloroethene		0.15	J	1.0	ug/L	8260B
Vinyl chloride		0.17	J	1.0	ug/L	8260B
<b>280-80508-15</b>	<b>PIN12-0587-2</b>					
Benzene		0.92	J	1.0	ug/L	8260B
1,1-Dichloroethane		1.3		1.0	ug/L	8260B
cis-1,2-Dichloroethene		36		1.0	ug/L	8260B
trans-1,2-Dichloroethene		15		1.0	ug/L	8260B
1,1-Dichloroethene		4.1		1.0	ug/L	8260B
Toluene		0.98	J	1.0	ug/L	8260B
Trichloroethene		3.4		1.0	ug/L	8260B
Vinyl chloride		100		4.0	ug/L	8260B
1,4-Dioxane		6.0		1.0	ug/L	8260B SIM
<b>280-80508-16</b>	<b>PIN12-0587-3</b>					
Benzene		0.21	J	1.0	ug/L	8260B
1,1-Dichloroethane		0.34	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.33	J	1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.29	J	1.0	ug/L	8260B
Toluene		0.26	J	1.0	ug/L	8260B
Vinyl chloride		1.3		1.0	ug/L	8260B
1,4-Dioxane		2.5		1.0	ug/L	8260B SIM
<b>280-80508-19</b>	<b>PIN12-S30B</b>					
1,3-Dichlorobenzene		0.14	J	1.0	ug/L	8260B
1,1-Dichloroethane		0.45	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		38		1.0	ug/L	8260B
trans-1,2-Dichloroethene		5.2		1.0	ug/L	8260B
1,1-Dichloroethene		0.62	J	1.0	ug/L	8260B
Styrene		0.22	J B	1.0	ug/L	8260B
1,2,3-Trichlorobenzene		0.28	J B	1.0	ug/L	8260B
1,2,4-Trichlorobenzene		0.25	J B	1.0	ug/L	8260B
Trichloroethene		15		1.0	ug/L	8260B
Vinyl chloride		24		1.0	ug/L	8260B
Methane		260		5.0	ug/L	RSK-175
Ethylene		0.64	J P	5.0	ug/L	RSK-175
Ethane		3.6	J F1	5.0	ug/L	RSK-175

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80508-20</b>	<b>PIN12-S33C</b>					
Acetone		12	J	20	ug/L	8260B
cis-1,2-Dichloroethene		350		20	ug/L	8260B
trans-1,2-Dichloroethene		28		2.0	ug/L	8260B
1,1-Dichloroethene		14		2.0	ug/L	8260B
Trichloroethene		62		2.0	ug/L	8260B
Vinyl chloride		110		2.0	ug/L	8260B
<b>280-80508-21</b>	<b>PIN12-S35B</b>					
cis-1,2-Dichloroethene		46000		2000	ug/L	8260B
trans-1,2-Dichloroethene		3900		200	ug/L	8260B
1,1-Dichloroethene		660		200	ug/L	8260B
Trichloroethene		21000	F1	2000	ug/L	8260B
Vinyl chloride		9900		2000	ug/L	8260B
Methane		2000		5.0	ug/L	RSK-175
Ethylene		240		5.0	ug/L	RSK-175
Ethane		13		5.0	ug/L	RSK-175
<b>280-80508-22</b>	<b>PIN12-S67B</b>					
Acetone		13		10	ug/L	8260B
1,1-Dichloroethane		23		1.0	ug/L	8260B
cis-1,2-Dichloroethene		12		1.0	ug/L	8260B
trans-1,2-Dichloroethene		3.3		1.0	ug/L	8260B
1,1-Dichloroethene		0.23	J	1.0	ug/L	8260B
Vinyl chloride		230		10	ug/L	8260B
1,4-Dioxane		80		5.0	ug/L	8260B SIM
Methane		1200		5.0	ug/L	RSK-175
Ethylene		1.4	J	5.0	ug/L	RSK-175
Ethane		49		5.0	ug/L	RSK-175
<b>280-80508-23</b>	<b>PIN12-S67C</b>					
1,1-Dichloroethane		14		1.0	ug/L	8260B
cis-1,2-Dichloroethene		20		1.0	ug/L	8260B
trans-1,2-Dichloroethene		4.7		1.0	ug/L	8260B
1,1-Dichloroethene		0.30	J	1.0	ug/L	8260B
Vinyl chloride		190		10	ug/L	8260B
1,4-Dioxane		79		10	ug/L	8260B SIM
Methane		620		5.0	ug/L	RSK-175
Ethylene		0.85	J	5.0	ug/L	RSK-175
Ethane		9.7		5.0	ug/L	RSK-175

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80508-24</b>	<b>PIN12-S67D</b>					
1,1-Dichloroethane		1.0		1.0	ug/L	8260B
cis-1,2-Dichloroethene		6.9		1.0	ug/L	8260B
trans-1,2-Dichloroethene		2.6		1.0	ug/L	8260B
Vinyl chloride		14		1.0	ug/L	8260B
1,4-Dioxane		1.9		1.0	ug/L	8260B SIM
Methane		380		5.0	ug/L	RSK-175



## METHOD SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Volatile Organic Compounds (GC/MS-SIM)	TAL DEN	SW846 8260B SIM	
Purge and Trap	TAL DEN		SW846 5030B
Dissolved Gases (GC)	TAL DEN	RSK RSK-175	

### Lab References:

TAL DEN = TestAmerica Denver

### Method References:

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260B	Contreras, Evan	EMC
SW846 8260B	Moan, Matthew R	MRM
SW846 8260B	Wickham, Tom A	TAW
SW846 8260B SIM	Moan, Matthew R	MRM
RSK RSK-175	Smith, Matthew P	MPS

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0565-1**

Lab Sample ID: 280-80508-1

Date Sampled: 03/03/2016 1630

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2535.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/15/2016 0953		Final Weight/Volume: 20 mL	
Prep Date: 03/15/2016 0953			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.26	J	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	1.6	U	0.15	1.0
1,3-Dichlorobenzene	0.35	J	0.13	1.0
1,4-Dichlorobenzene	0.34	J	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0565-1

Lab Sample ID: 280-80508-1

Date Sampled: 03/03/2016 1630

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2535.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0953		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0953		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	1.9		0.21	1.0
1,2,4-Trichlorobenzene	9.9		0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0565-2**

Lab Sample ID: 280-80508-2

Date Sampled: 03/03/2016 1705

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2536.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1017		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1017		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.34	J	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.49	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0565-2

Lab Sample ID: 280-80508-2

Date Sampled: 03/03/2016 1705

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2536.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1017		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1017		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.65	J	0.21	1.0
1,2,4-Trichlorobenzene	2.4		0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.49	J	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 127
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0573-1**

Lab Sample ID: 280-80508-3

Date Sampled: 03/03/2016 1450

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2537.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/15/2016 1041		Final Weight/Volume: 20 mL	
Prep Date: 03/15/2016 1041			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0573-1

Lab Sample ID: 280-80508-3

Date Sampled: 03/03/2016 1450

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2537.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1041		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1041		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	1.2		0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0573-2**

Lab Sample ID: 280-80508-4

Date Sampled: 03/03/2016 1520

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2538.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1104		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1104		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0573-2

Lab Sample ID: 280-80508-4

Date Sampled: 03/03/2016 1520

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2538.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1104		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1104		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.29	J	0.21	1.0
1,2,4-Trichlorobenzene	1.1		0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	107		78 - 120
Dibromofluoromethane (Surr)	107		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0573-3

Lab Sample ID: 280-80508-5

Date Sampled: 03/03/2016 1550

Client Matrix: Water

Date Received: 03/08/2016 0940

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-316867	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2539.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1128			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1128				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0573-3

Lab Sample ID: 280-80508-5

Date Sampled: 03/03/2016 1550

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316867	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2539.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1128		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1128		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.46	J	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 127
Toluene-d8 (Surr)	101		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0574-1**

Lab Sample ID: 280-80508-6

Date Sampled: 03/03/2016 0925

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5772.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1236		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1236		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	5.6	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	48		0.15	1.0
trans-1,2-Dichloroethene	0.57	J	0.15	1.0
1,1-Dichloroethene	2.2		0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0574-1

Lab Sample ID: 280-80508-6

Date Sampled: 03/03/2016 0925

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5772.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1236		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1236		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	23		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 127
Toluene-d8 (Surr)	104		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0574-2

Lab Sample ID: 280-80508-7

Date Sampled: 03/03/2016 0955

Client Matrix: Water

Date Received: 03/08/2016 0940

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-316868	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z5773.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1259			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1259				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.30	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	2.1		0.15	1.0
1,1-Dichloroethene	10		0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0574-2

Lab Sample ID: 280-80508-7

Client Matrix: Water

Date Sampled: 03/03/2016 0955

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5773.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1259		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1259		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	49		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112		70 - 127
Toluene-d8 (Surr)	109		80 - 125
4-Bromofluorobenzene (Surr)	108		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0574-2**

Lab Sample ID: 280-80508-7

Date Sampled: 03/03/2016 0955

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5774.D
Dilution: 1.0		Initial Weight/Volume: 2 mL
Analysis Date: 03/15/2016 1322	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1322		

Analyte	Result (ug/L)	Qualifier	MDL	RL
cis-1,2-Dichloroethene	200		1.5	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 127
Toluene-d8 (Surr)	108		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0574-3**

Lab Sample ID: 280-80508-8

Date Sampled: 03/03/2016 1025

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5775.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/15/2016 1345		Final Weight/Volume: 20 mL	
Prep Date: 03/15/2016 1345			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	6.2	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.38	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0574-3**

Lab Sample ID: 280-80508-8

Date Sampled: 03/03/2016 1025

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5775.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/15/2016 1345		Final Weight/Volume: 20 mL	
Prep Date: 03/15/2016 1345			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	3.4		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 127
Toluene-d8 (Surr)	108		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0575-1**

Lab Sample ID: 280-80508-9

Date Sampled: 03/03/2016 1055

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5776.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1408		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1408		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0575-1**

Lab Sample ID: 280-80508-9

Date Sampled: 03/03/2016 1055

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5776.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1408		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1408		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.26	J	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 127
Toluene-d8 (Surr)	111		80 - 125
4-Bromofluorobenzene (Surr)	110		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0575-2

Lab Sample ID: 280-80508-10

Client Matrix: Water

Date Sampled: 03/03/2016 1405

Date Received: 03/08/2016 0940

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-316868	Instrument ID:	VMS_Z
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	Z5777.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1431			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1431				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	9.7	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0575-2**

Lab Sample ID: 280-80508-10

Date Sampled: 03/03/2016 1405

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5777.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1431		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1431		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	1.5		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 127
Toluene-d8 (Surr)	108		80 - 125
4-Bromofluorobenzene (Surr)	107		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0586-1**

Lab Sample ID: 280-80508-11

Date Sampled: 03/04/2016 0840

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5778.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1453		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1453		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.37	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0586-1**

Lab Sample ID: 280-80508-11

Date Sampled: 03/04/2016 0840

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5778.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1453		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1453		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	2.4		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 127
Toluene-d8 (Surr)	107		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0586-2**

Lab Sample ID: 280-80508-12

Date Sampled: 03/04/2016 0910

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5779.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1516		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1516		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.23	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	12		0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.48	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0586-2

Lab Sample ID: 280-80508-12

Client Matrix: Water

Date Sampled: 03/04/2016 0910

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5779.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1516		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1516		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	9.0		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 127
Toluene-d8 (Surr)	108		80 - 125
4-Bromofluorobenzene (Surr)	109		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0586-3**

Lab Sample ID: 280-80508-13

Date Sampled: 03/04/2016 0945

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5780.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1539		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1539		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	9.1	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0586-3**

Lab Sample ID: 280-80508-13

Date Sampled: 03/04/2016 0945

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5780.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1539		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1539		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	3.7		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111		70 - 127
Toluene-d8 (Surr)	111		80 - 125
4-Bromofluorobenzene (Surr)	109		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0587-1**

Lab Sample ID: 280-80508-14

Date Sampled: 03/04/2016 1055

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5781.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1602		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1602		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0587-1

Lab Sample ID: 280-80508-14

Client Matrix: Water

Date Sampled: 03/04/2016 1055

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5781.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1602		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1602		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.17	J	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 127
Toluene-d8 (Surr)	108		80 - 125
4-Bromofluorobenzene (Surr)	108		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0587-2**

Lab Sample ID: 280-80508-15

Date Sampled: 03/04/2016 1145

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5782.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1625		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1625		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.92	J	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	1.3		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	36		0.15	1.0
trans-1,2-Dichloroethene	15		0.15	1.0
1,1-Dichloroethene	4.1		0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-0587-2

Lab Sample ID: 280-80508-15

Client Matrix: Water

Date Sampled: 03/04/2016 1145

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5782.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1625		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1625		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.98	J	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	3.4		0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112		70 - 127
Toluene-d8 (Surr)	109		80 - 125
4-Bromofluorobenzene (Surr)	110		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0587-2

Lab Sample ID: 280-80508-15

Client Matrix: Water

Date Sampled: 03/04/2016 1145

Date Received: 03/08/2016 0940

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5783.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 03/15/2016 1647	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1647		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	100		0.40	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 127
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0587-3**

Lab Sample ID: 280-80508-16

Date Sampled: 03/04/2016 1300

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5784.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1710		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1710		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.21	J	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.34	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.33	J	0.15	1.0
trans-1,2-Dichloroethene	0.29	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0587-3**

Lab Sample ID: 280-80508-16

Date Sampled: 03/04/2016 1300

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5784.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1710		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1710		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.26	J	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	1.3		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 127
Toluene-d8 (Surr)	107		80 - 125
4-Bromofluorobenzene (Surr)	116		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2198**

Lab Sample ID: 280-80508-17

Date Sampled: 03/03/2016 0905

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5785.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1732		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1732		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-2198

Lab Sample ID: 280-80508-17

Date Sampled: 03/03/2016 0905

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5785.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1732		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1732		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	101		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2689**

Lab Sample ID: 280-80508-18

Date Sampled: 03/04/2016 0800

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5786.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1755		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1755		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-2689

Lab Sample ID: 280-80508-18

Date Sampled: 03/04/2016 0800

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Z5786.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1755		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1755		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		70 - 127
Toluene-d8 (Surr)	107		80 - 125
4-Bromofluorobenzene (Surr)	107		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S30B**

Lab Sample ID: 280-80508-19

Date Sampled: 03/04/2016 0945

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2567.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 2350		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 2350		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U F1	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.14	J	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.45	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	38		0.15	1.0
trans-1,2-Dichloroethene	5.2		0.15	1.0
1,1-Dichloroethene	0.62	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S30B**

Lab Sample ID: 280-80508-19

Date Sampled: 03/04/2016 0945

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2567.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 2350		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 2350		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.22	J B	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.28	J B	0.21	1.0
1,2,4-Trichlorobenzene	0.25	J B	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	15		0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U F1	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	24		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S33C**

Lab Sample ID: 280-80508-20

Date Sampled: 03/04/2016 0905

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2574.D	
Dilution: 1.0		Initial Weight/Volume: 10 mL	
Analysis Date: 03/16/2016 0235		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 0235			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	12	J	3.8	20
Benzene	0.32	U	0.32	2.0
Bromobenzene	0.34	U	0.34	2.0
Bromochloromethane	0.20	U	0.20	2.0
Bromodichloromethane	0.34	U	0.34	2.0
Bromoform	0.38	U	0.38	2.0
Bromomethane	0.42	U	0.42	2.0
2-Butanone (MEK)	4.0	U	4.0	10
n-Butylbenzene	0.64	U	0.64	2.0
sec-Butylbenzene	0.34	U	0.34	2.0
tert-Butylbenzene	0.32	U	0.32	2.0
Carbon disulfide	0.90	U	0.90	2.0
Carbon tetrachloride	0.38	U	0.38	2.0
Chlorobenzene	0.34	U	0.34	2.0
Dibromochloromethane	0.34	U	0.34	2.0
Chloroethane	0.82	U	0.82	2.0
Chloroform	0.32	U	0.32	2.0
Chloromethane	0.60	U	0.60	2.0
2-Chlorotoluene	0.34	U	0.34	2.0
4-Chlorotoluene	0.42	U	0.42	2.0
1,2-Dibromo-3-Chloropropane	0.94	U	0.94	2.0
Dibromomethane	0.34	U	0.34	2.0
1,2-Dichlorobenzene	0.30	U	0.30	2.0
1,3-Dichlorobenzene	0.26	U	0.26	2.0
1,4-Dichlorobenzene	0.32	U	0.32	2.0
Dichlorodifluoromethane	0.62	U *	0.62	2.0
1,1-Dichloroethane	0.44	U	0.44	2.0
1,2-Dichloroethane	0.26	U	0.26	2.0
trans-1,2-Dichloroethene	28		0.30	2.0
1,1-Dichloroethene	14		0.46	2.0
1,2-Dichloropropane	0.36	U	0.36	2.0
1,3-Dichloropropane	0.44	U	0.44	2.0
2,2-Dichloropropane	0.36	U	0.36	2.0
cis-1,3-Dichloropropene	0.32	U	0.32	2.0
trans-1,3-Dichloropropene	0.38	U	0.38	2.0
1,1-Dichloropropene	0.38	U	0.38	2.0
Ethylbenzene	0.32	U	0.32	2.0
Hexachlorobutadiene	0.72	U	0.72	2.0
2-Hexanone	3.4	U	3.4	10
Isopropylbenzene	0.38	U	0.38	2.0
4-Isopropyltoluene	0.40	U	0.40	2.0
Methylene Chloride	0.64	U	0.64	2.0
4-Methyl-2-pentanone	2.0	U	2.0	10
Naphthalene	0.44	U	0.44	2.0
n-Propylbenzene	0.32	U	0.32	2.0
Styrene	0.34	U	0.34	2.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-S33C

Lab Sample ID: 280-80508-20

Date Sampled: 03/04/2016 0905

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2574.D
Dilution: 1.0		Initial Weight/Volume: 10 mL
Analysis Date: 03/16/2016 0235		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0235		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	0.42	U	0.42	2.0
1,1,2,2-Tetrachloroethane	0.42	U	0.42	2.0
Tetrachloroethene	0.40	U	0.40	2.0
Toluene	0.34	U	0.34	2.0
1,2,3-Trichlorobenzene	0.42	U	0.42	2.0
1,2,4-Trichlorobenzene	0.42	U	0.42	2.0
1,1,1-Trichloroethane	0.32	U	0.32	2.0
1,1,2-Trichloroethane	0.54	U	0.54	2.0
Trichloroethene	62		0.32	2.0
Trichlorofluoromethane	0.58	U	0.58	2.0
1,2,3-Trichloropropane	0.66	U	0.66	2.0
1,2,4-Trimethylbenzene	0.30	U	0.30	2.0
1,3,5-Trimethylbenzene	0.32	U	0.32	2.0
Vinyl chloride	110		0.20	2.0
Xylenes, Total	0.38	U	0.38	2.0
1,2-Dibromoethane	0.36	U	0.36	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S33C**

Lab Sample ID: 280-80508-20

Date Sampled: 03/04/2016 0905

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2575.D
Dilution: 1.0		Initial Weight/Volume: 1 mL
Analysis Date: 03/16/2016 0259	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0259		

Analyte	Result (ug/L)	Qualifier	MDL	RL
cis-1,2-Dichloroethene	350		3.0	20

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	105		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S35B**

Lab Sample ID: 280-80508-21

Date Sampled: 03/04/2016 1025

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2576.D	
Dilution: 1.0		Initial Weight/Volume: 0.1 mL	
Analysis Date: 03/16/2016 0323		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 0323			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	380	U	380	2000
Benzene	32	U	32	200
Bromobenzene	34	U	34	200
Bromochloromethane	20	U	20	200
Bromodichloromethane	34	U	34	200
Bromoform	38	U	38	200
Bromomethane	42	U	42	200
2-Butanone (MEK)	400	U	400	1000
n-Butylbenzene	64	U	64	200
sec-Butylbenzene	34	U	34	200
tert-Butylbenzene	32	U	32	200
Carbon disulfide	90	U	90	200
Carbon tetrachloride	38	U	38	200
Chlorobenzene	34	U	34	200
Dibromochloromethane	34	U	34	200
Chloroethane	82	U	82	200
Chloroform	32	U	32	200
Chloromethane	60	U	60	200
2-Chlorotoluene	34	U	34	200
4-Chlorotoluene	42	U	42	200
1,2-Dibromo-3-Chloropropane	94	U	94	200
Dibromomethane	34	U	34	200
1,2-Dichlorobenzene	30	U	30	200
1,3-Dichlorobenzene	26	U	26	200
1,4-Dichlorobenzene	32	U	32	200
Dichlorodifluoromethane	62	U *	62	200
1,1-Dichloroethane	44	U	44	200
1,2-Dichloroethane	26	U	26	200
trans-1,2-Dichloroethene	3900		30	200
1,1-Dichloroethene	660		46	200
1,2-Dichloropropane	36	U	36	200
1,3-Dichloropropane	44	U	44	200
2,2-Dichloropropane	36	U	36	200
cis-1,3-Dichloropropene	32	U	32	200
trans-1,3-Dichloropropene	38	U	38	200
1,1-Dichloropropene	38	U	38	200
Ethylbenzene	32	U	32	200
Hexachlorobutadiene	72	U	72	200
2-Hexanone	340	U	340	1000
Isopropylbenzene	38	U	38	200
4-Isopropyltoluene	40	U	40	200
Methylene Chloride	64	U	64	200
4-Methyl-2-pentanone	200	U	200	1000
Naphthalene	44	U	44	200
n-Propylbenzene	32	U	32	200
Styrene	34	U	34	200

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

Client Sample ID: PIN12-S35B

Lab Sample ID: 280-80508-21

Date Sampled: 03/04/2016 1025

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2576.D
Dilution: 1.0		Initial Weight/Volume: 0.1 mL
Analysis Date: 03/16/2016 0323		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0323		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	42	U	42	200
1,1,2,2-Tetrachloroethane	42	U	42	200
Tetrachloroethene	40	U	40	200
Toluene	34	U	34	200
1,2,3-Trichlorobenzene	42	U	42	200
1,2,4-Trichlorobenzene	42	U	42	200
1,1,1-Trichloroethane	32	U	32	200
1,1,2-Trichloroethane	54	U	54	200
Trichlorofluoromethane	58	U	58	200
1,2,3-Trichloropropane	66	U	66	200
1,2,4-Trimethylbenzene	30	U	30	200
1,3,5-Trimethylbenzene	32	U	32	200
Xylenes, Total	38	U	38	200
1,2-Dibromoethane	36	U	36	200

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 127
Toluene-d8 (Surr)	105		80 - 125
4-Bromofluorobenzene (Surr)	101		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S35B**

Lab Sample ID: 280-80508-21

Date Sampled: 03/04/2016 1025

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317297	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5898.D
Dilution: 1.0		Initial Weight/Volume: 0.01 mL
Analysis Date: 03/17/2016 2226	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 2226		

Analyte	Result (ug/L)	Qualifier	MDL	RL
cis-1,2-Dichloroethene	46000		300	2000
Trichloroethene	21000	F1	320	2000
Vinyl chloride	9900		200	2000

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114		70 - 127
Toluene-d8 (Surr)	125		80 - 125
4-Bromofluorobenzene (Surr)	113		78 - 120
Dibromofluoromethane (Surr)	120		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67B**

Lab Sample ID: 280-80508-22

Date Sampled: 03/04/2016 1155

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2578.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/16/2016 0410		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 0410			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	13		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	23		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	12		0.15	1.0
trans-1,2-Dichloroethene	3.3		0.15	1.0
1,1-Dichloroethene	0.23	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67B**

Lab Sample ID: 280-80508-22

Date Sampled: 03/04/2016 1155

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2578.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0410		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0410		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 127
Toluene-d8 (Surr)	104		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67B**

Lab Sample ID: 280-80508-22

Date Sampled: 03/04/2016 1155

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2579.D
Dilution: 1.0		Initial Weight/Volume: 2 mL
Analysis Date: 03/16/2016 0433	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0433		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	230		1.0	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	101		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67C**

Lab Sample ID: 280-80508-23

Date Sampled: 03/04/2016 1225

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2580.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/16/2016 0457		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 0457			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	14		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	20		0.15	1.0
trans-1,2-Dichloroethene	4.7		0.15	1.0
1,1-Dichloroethene	0.30	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67C**

Lab Sample ID: 280-80508-23

Date Sampled: 03/04/2016 1225

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2580.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0457		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0457		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67C**

Lab Sample ID: 280-80508-23

Date Sampled: 03/04/2016 1225

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2581.D
Dilution: 1.0		Initial Weight/Volume: 2 mL
Analysis Date: 03/16/2016 0520	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0520		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	190		1.0	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	99		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67D**

Lab Sample ID: 280-80508-24

Date Sampled: 03/04/2016 1305

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2582.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/16/2016 0544		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 0544			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	1.0		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	6.9		0.15	1.0
trans-1,2-Dichloroethene	2.6		0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67D**

Lab Sample ID: 280-80508-24

Date Sampled: 03/04/2016 1305

Client Matrix: Water

Date Received: 03/08/2016 0940

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316976	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2582.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0544		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0544		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	14		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0565-1

Lab Sample ID: 280-80508-1

Date Sampled: 03/03/2016 1630

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2280.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1247			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1247				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	114		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0565-2**

Lab Sample ID: 280-80508-2

Date Sampled: 03/03/2016 1705

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2281.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1306			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1306				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.31	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	120		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0573-1

Lab Sample ID: 280-80508-3

Date Sampled: 03/03/2016 1450

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2284.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1407			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1407				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	116		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0573-2**

Lab Sample ID: 280-80508-4

Date Sampled: 03/03/2016 1520

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2285.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1426			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1426				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.28	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	121		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0573-3**

Lab Sample ID: 280-80508-5

Date Sampled: 03/03/2016 1550

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2286.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1444			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1444				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	127		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0574-1

Lab Sample ID: 280-80508-6

Client Matrix: Water

Date Sampled: 03/03/2016 0925

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2287.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1503			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1503				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.2		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	123		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0574-2

Lab Sample ID: 280-80508-7

Client Matrix: Water

Date Sampled: 03/03/2016 0955

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316701	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2320.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/14/2016 1131			Final Weight/Volume:	20 mL
Prep Date:	03/14/2016 1131				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.9		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0574-3**

Lab Sample ID: 280-80508-8

Date Sampled: 03/03/2016 1025

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2289.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1541			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1541				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	122		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0575-1**

Lab Sample ID: 280-80508-9

Date Sampled: 03/03/2016 1055

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2290.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1600			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1600				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.4		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	127		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0575-2**

Lab Sample ID: 280-80508-10

Client Matrix: Water

Date Sampled: 03/03/2016 1405

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316701	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2321.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/14/2016 1153			Final Weight/Volume:	20 mL
Prep Date:	03/14/2016 1153				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.4		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	94		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0586-1**

Lab Sample ID: 280-80508-11

Date Sampled: 03/04/2016 0840

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2292.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1637			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1637				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	122		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0586-2**

Lab Sample ID: 280-80508-12

Date Sampled: 03/04/2016 0910

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2293.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1656			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1656				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.86	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	117		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0586-3**

Lab Sample ID: 280-80508-13

Date Sampled: 03/04/2016 0945

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2294.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1715			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1715				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.67	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	126		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0587-1

Lab Sample ID: 280-80508-14

Client Matrix: Water

Date Sampled: 03/04/2016 1055

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2295.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1734			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1734				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	123		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0587-2**

Lab Sample ID: 280-80508-15

Date Sampled: 03/04/2016 1145

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2296.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1921			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1921				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	6.0		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0587-3

Lab Sample ID: 280-80508-16

Client Matrix: Water

Date Sampled: 03/04/2016 1300

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2297.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1940			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1940				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	2.5		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	109		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S30B**

Lab Sample ID: 280-80508-19

Date Sampled: 03/04/2016 0945

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2298.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/11/2016 1958			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 1958				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	111		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S33C**

Lab Sample ID: 280-80508-20

Date Sampled: 03/04/2016 0905

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-316568	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2299.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/11/2016 2017		Final Weight/Volume: 20 mL
Prep Date: 03/11/2016 2017		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	115		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S35B**

Lab Sample ID: 280-80508-21

Date Sampled: 03/04/2016 1025

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316568	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2300.D
Dilution:	1.0			Initial Weight/Volume:	0.1 mL
Analysis Date:	03/11/2016 2036			Final Weight/Volume:	20 mL
Prep Date:	03/11/2016 2036				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	44	U	44	200
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	115		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67B**

Lab Sample ID: 280-80508-22

Date Sampled: 03/04/2016 1155

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316701	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2322.D
Dilution:	1.0			Initial Weight/Volume:	4 mL
Analysis Date:	03/14/2016 1212			Final Weight/Volume:	20 mL
Prep Date:	03/14/2016 1212				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	80		1.1	5.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67C**

Lab Sample ID: 280-80508-23

Date Sampled: 03/04/2016 1225

Client Matrix: Water

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316701	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2344.D
Dilution:	1.0			Initial Weight/Volume:	2 mL
Analysis Date:	03/14/2016 1931			Final Weight/Volume:	20 mL
Prep Date:	03/14/2016 1931				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	79		2.2	10
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-S67D

Lab Sample ID: 280-80508-24

Client Matrix: Water

Date Sampled: 03/04/2016 1305

Date Received: 03/08/2016 0940

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316701	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2330.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/14/2016 1441			Final Weight/Volume:	20 mL
Prep Date:	03/14/2016 1441				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.9		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S30B**

Lab Sample ID: 280-80508-19

Date Sampled: 03/04/2016 0945

Client Matrix: Water

Date Received: 03/08/2016 0940

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### RSK-175 Dissolved Gases (GC)

Analysis Method: RSK-175

Analysis Batch: 280-317252

Instrument ID: VGC\_J

N/A

N/A

Initial Weight/Volume: 18 mL

Dilution: 1.0

Final Weight/Volume: 18 mL

Analysis Date: 03/17/2016 1950

Injection Volume: 5 mL

Prep Date: N/A

Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	260		0.22	5.0
Ethylene	0.64	J P	0.40	5.0
Ethane	3.6	J F1	0.57	5.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S35B**

Lab Sample ID: 280-80508-21

Date Sampled: 03/04/2016 1025

Client Matrix: Water

Date Received: 03/08/2016 0940

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### RSK-175 Dissolved Gases (GC)

Analysis Method: RSK-175

Analysis Batch: 280-317252

Instrument ID: VGC\_J

N/A

N/A

Initial Weight/Volume: 18 mL

Dilution: 1.0

Final Weight/Volume: 18 mL

Analysis Date: 03/17/2016 2105

Injection Volume: 5 mL

Prep Date: N/A

Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	2000		0.22	5.0
Ethylene	240		0.40	5.0
Ethane	13		0.57	5.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67B**

Lab Sample ID: 280-80508-22

Date Sampled: 03/04/2016 1155

Client Matrix: Water

Date Received: 03/08/2016 0940

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### RSK-175 Dissolved Gases (GC)

Analysis Method: RSK-175

Analysis Batch: 280-317252

Instrument ID: VGC\_J

N/A

N/A

Initial Weight/Volume: 18 mL

Dilution: 1.0

Final Weight/Volume: 18 mL

Analysis Date: 03/17/2016 2115

Injection Volume: 5 mL

Prep Date: N/A

Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	1200		0.22	5.0
Ethylene	1.4	J	0.40	5.0
Ethane	49		0.57	5.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67C**

Lab Sample ID: 280-80508-23

Date Sampled: 03/04/2016 1225

Client Matrix: Water

Date Received: 03/08/2016 0940

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### RSK-175 Dissolved Gases (GC)

Analysis Method: RSK-175

Analysis Batch: 280-317252

Instrument ID: VGC\_J

N/A

N/A

Initial Weight/Volume: 18 mL

Dilution: 1.0

Final Weight/Volume: 18 mL

Analysis Date: 03/17/2016 2126

Injection Volume: 5 mL

Prep Date: N/A

Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	620		0.22	5.0
Ethylene	0.85	J	0.40	5.0
Ethane	9.7		0.57	5.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S67D**

Lab Sample ID: 280-80508-24

Date Sampled: 03/04/2016 1305

Client Matrix: Water

Date Received: 03/08/2016 0940

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### RSK-175 Dissolved Gases (GC)

Analysis Method: RSK-175

Analysis Batch: 280-317252

Instrument ID: VGC\_J

N/A

N/A

Initial Weight/Volume: 18 mL

Dilution: 1.0

Final Weight/Volume: 18 mL

Analysis Date: 03/17/2016 2136

Injection Volume: 5 mL

Prep Date: N/A

Result Type: PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	380		0.22	5.0
Ethylene	0.40	U	0.40	5.0
Ethane	0.57	U	0.57	5.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B Volatile Organic Compounds (GC/MS)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-80508-1	PIN12-0565-1	105	99	100	103
280-80508-2	PIN12-0565-2	106	101	98	102
280-80508-3	PIN12-0573-1	106	99	97	105
280-80508-4	PIN12-0573-2	107	100	102	107
280-80508-5	PIN12-0573-3	105	103	101	100
280-80508-6	PIN12-0574-1	102	106	104	104
280-80508-7	PIN12-0574-2	105	112	109	108
280-80508-7 DL	PIN12-0574-2 DL	104	104	108	106
280-80508-8	PIN12-0574-3	101	103	108	106
280-80508-9	PIN12-0575-1	103	104	111	110
280-80508-10	PIN12-0575-2	104	108	108	107
280-80508-11	PIN12-0586-1	102	103	107	106
280-80508-12	PIN12-0586-2	104	109	108	109
280-80508-13	PIN12-0586-3	106	111	111	109
280-80508-14	PIN12-0587-1	103	109	108	108
280-80508-15	PIN12-0587-2	106	112	109	110
280-80508-15 DL	PIN12-0587-2 DL	99	105	98	100
280-80508-16	PIN12-0587-3	104	109	107	116
280-80508-17	PIN12-2198	100	102	100	101
280-80508-18	PIN12-2689	103	107	107	107
280-80508-19	PIN12-S30B	103	97	96	96
280-80508-20	PIN12-S33C	103	91	103	100
280-80508-20 DL	PIN12-S33C DL	104	91	105	104
280-80508-21	PIN12-S35B	104	94	105	101
280-80508-21 DL	PIN12-S35B DL	120	114	125	113
280-80508-22	PIN12-S67B	103	97	104	105
280-80508-22 DL	PIN12-S67B DL	101	93	98	101
280-80508-23	PIN12-S67C	103	93	102	103
280-80508-23 DL	PIN12-S67C DL	101	92	100	99

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B Volatile Organic Compounds (GC/MS)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-80508-24	PIN12-S67D	104	93	102	102
MB 280-316867/6		104	96	101	102
MB 280-316868/6		105	110	105	104
MB 280-316976/8		102	92	102	101
MB 280-317297/8		99	95	102	98
LCS 280-316867/4		102	94	113	98
LCS 280-316868/4		97	100	108	99
LCS 280-316976/6		100	92	110	104
LCS 280-317297/4		99	97	104	93
280-80508-19 MS	PIN12-S30B MS	105	103	108	96
280-80508-21 MS	PIN12-S35B MS	104	101	106	96
280-80551-B-1 MS		101	102	105	104
280-80461-E-2 MS		103	105	115	115
280-80508-19 MSD	PIN12-S30B MSD	104	105	107	95
280-80508-21 MSD	PIN12-S35B MSD	105	97	109	95
280-80551-B-1 MSD		106	106	111	100
280-80461-E-2 MSD		103	109	109	102

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

# Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

## Surrogate Recovery Report

### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

#### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec
280-80508-1	PIN12-0565-1	114
280-80508-2	PIN12-0565-2	120
280-80508-3	PIN12-0573-1	116
280-80508-4	PIN12-0573-2	121
280-80508-5	PIN12-0573-3	127
280-80508-6	PIN12-0574-1	123
280-80508-7	PIN12-0574-2	101
280-80508-8	PIN12-0574-3	122
280-80508-9	PIN12-0575-1	127
280-80508-10	PIN12-0575-2	94
280-80508-11	PIN12-0586-1	122
280-80508-12	PIN12-0586-2	117
280-80508-13	PIN12-0586-3	126
280-80508-14	PIN12-0587-1	123
280-80508-15	PIN12-0587-2	100
280-80508-16	PIN12-0587-3	109
280-80508-19	PIN12-S30B	111
280-80508-20	PIN12-S33C	115
280-80508-21	PIN12-S35B	115
280-80508-22	PIN12-S67B	107
280-80508-23	PIN12-S67C	104
280-80508-24	PIN12-S67D	101
MB 280-316568/8		124
MB 280-316701/4		104
LCS 280-316568/7		119
LCS 280-316701/3		97
280-80508-1 MS	PIN12-0565-1 MS	125
280-80610-AI-1 MS		97
280-80508-1 MSD	PIN12-0565-1 MSD	122

Surrogate

Acceptance Limits

DCA = 1,2-Dichloroethane-d4 (Surr)

70-127

**Quality Control Results**

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Surrogate Recovery Report**

**8260B SIM Volatile Organic Compounds (GC/MS-SIM)**

**Client Matrix: Water**

Lab Sample ID	Client Sample ID	DCA %Rec
280-80610-AI-1 MSD		117

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127



# Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Method Blank - Batch: 280-316867**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-316867/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/15/2016 0842  
 Prep Date: 03/15/2016 0842  
 Leach Date: N/A

Analysis Batch: 280-316867  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2532.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Method Blank - Batch: 280-316867**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-316867/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/15/2016 0842  
 Prep Date: 03/15/2016 0842  
 Leach Date: N/A

Analysis Batch: 280-316867  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2532.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	70 - 127
Toluene-d8 (Surr)	101	80 - 125
4-Bromofluorobenzene (Surr)	102	78 - 120
Dibromofluoromethane (Surr)	104	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-316867**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-316867/4	Analysis Batch: 280-316867	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2530.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0754	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0754		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	4.96	99	65 - 135	
Bromodichloromethane	5.00	4.89	98	65 - 135	
Carbon tetrachloride	5.00	5.24	105	65 - 135	
Chlorobenzene	5.00	4.94	99	65 - 135	
Chloroform	5.00	5.06	101	65 - 135	
1,3-Dichlorobenzene	5.00	4.57	91	65 - 135	
1,1-Dichloroethane	5.00	4.86	97	65 - 135	
trans-1,2-Dichloroethene	5.00	5.03	101	65 - 135	
1,1-Dichloroethene	5.00	4.85	97	65 - 136	
1,2-Dichloropropane	5.00	5.16	103	64 - 135	
Ethylbenzene	5.00	4.90	98	65 - 135	
Methylene Chloride	5.00	4.24	85	54 - 141	
Tetrachloroethene	5.00	4.90	98	65 - 135	
Toluene	5.00	5.22	104	65 - 135	
1,1,1-Trichloroethane	5.00	5.14	103	65 - 135	
Trichloroethene	5.00	5.07	101	65 - 135	
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Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		94		70 - 127	
Toluene-d8 (Surr)		113		80 - 125	
4-Bromofluorobenzene (Surr)		98		78 - 120	
Dibromofluoromethane (Surr)		102		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316867**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80551-B-1 MS	Analysis Batch: 280-316867	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2541.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1215		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1215		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80551-B-1 MSD	Analysis Batch: 280-316867	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2542.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1239		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1239		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	104	102	65 - 135	2	20		
Bromodichloromethane	102	104	65 - 135	2	20		
Carbon tetrachloride	105	105	65 - 135	1	21		
Chlorobenzene	96	99	65 - 135	3	20		
Chloroform	102	105	65 - 135	2	20		
1,3-Dichlorobenzene	95	94	65 - 135	2	20		
1,1-Dichloroethane	98	103	65 - 135	5	21		
trans-1,2-Dichloroethene	100	105	65 - 135	4	24		
1,1-Dichloroethene	95	97	65 - 136	2	20		
1,2-Dichloropropane	105	109	64 - 135	3	20		
Ethylbenzene	96	99	65 - 135	3	20		
Methylene Chloride	87	88	54 - 141	1	26		
Tetrachloroethene	93	96	65 - 135	2	20		
Toluene	104	106	65 - 135	3	20		
1,1,1-Trichloroethane	102	105	65 - 135	3	20		
Trichloroethene	103	104	65 - 135	1	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	106	70 - 127
Toluene-d8 (Surr)	105	111	80 - 125
4-Bromofluorobenzene (Surr)	104	100	78 - 120
Dibromofluoromethane (Surr)	101	106	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316867**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80551-B-1 MS      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/15/2016 1215  
Prep Date: 03/15/2016 1215  
Leach Date: N/A

MSD Lab Sample ID: 280-80551-B-1 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/15/2016 1239  
Prep Date: 03/15/2016 1239  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.31	J	5.00	5.00	5.51	5.43
Bromodichloromethane	0.17	U	5.00	5.00	5.08	5.20
Carbon tetrachloride	0.19	U	5.00	5.00	5.25	5.27
Chlorobenzene	0.17	U	5.00	5.00	4.78	4.94
Chloroform	0.16	U	5.00	5.00	5.11	5.23
1,3-Dichlorobenzene	0.13	U	5.00	5.00	4.76	4.68
1,1-Dichloroethane	0.22	U	5.00	5.00	4.89	5.15
trans-1,2-Dichloroethene	1.0		5.00	5.00	5.99	6.23
1,1-Dichloroethene	0.23	U	5.00	5.00	4.76	4.87
1,2-Dichloropropane	0.18	U	5.00	5.00	5.27	5.44
Ethylbenzene	0.16	U	5.00	5.00	4.80	4.93
Methylene Chloride	0.32	U	5.00	5.00	4.36	4.42
Tetrachloroethene	0.20	U	5.00	5.00	4.67	4.79
Toluene	0.17	U	5.00	5.00	5.18	5.32
1,1,1-Trichloroethane	0.16	U	5.00	5.00	5.11	5.24
Trichloroethene	0.16	U	5.00	5.00	5.13	5.18

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Method Blank - Batch: 280-316868**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-316868/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/15/2016 0838  
 Prep Date: 03/15/2016 0838  
 Leach Date: N/A

Analysis Batch: 280-316868  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_Z  
 Lab File ID: Z5762.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Method Blank - Batch: 280-316868**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-316868/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/15/2016 0838  
 Prep Date: 03/15/2016 0838  
 Leach Date: N/A

Analysis Batch: 280-316868  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_Z  
 Lab File ID: Z5762.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110	70 - 127
Toluene-d8 (Surr)	105	80 - 125
4-Bromofluorobenzene (Surr)	104	78 - 120
Dibromofluoromethane (Surr)	105	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-316868**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-316868/4	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Z5761.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0747	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0747		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	4.78	96	65 - 135	
Bromodichloromethane	5.00	4.57	91	65 - 135	
Carbon tetrachloride	5.00	5.33	107	65 - 135	
Chlorobenzene	5.00	5.23	105	65 - 135	
Chloroform	5.00	4.77	95	65 - 135	
1,3-Dichlorobenzene	5.00	4.92	98	65 - 135	
1,1-Dichloroethane	5.00	4.95	99	65 - 135	
trans-1,2-Dichloroethene	5.00	4.81	96	65 - 135	
1,1-Dichloroethene	5.00	4.61	92	65 - 136	
1,2-Dichloropropane	5.00	4.57	91	64 - 135	
Ethylbenzene	5.00	5.36	107	65 - 135	
Methylene Chloride	5.00	3.16	63	54 - 141	
Tetrachloroethene	5.00	5.51	110	65 - 135	
Toluene	5.00	4.88	98	65 - 135	
1,1,1-Trichloroethane	5.00	5.12	102	65 - 135	
Trichloroethene	5.00	5.19	104	65 - 135	
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Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100		70 - 127	
Toluene-d8 (Surr)		108		80 - 125	
4-Bromofluorobenzene (Surr)		99		78 - 120	
Dibromofluoromethane (Surr)		97		77 - 120	



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316868**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80461-E-2 MS	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Z5765.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0951		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0951		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80461-E-2 MSD	Analysis Batch: 280-316868	Instrument ID: VMS_Z
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Z5766.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1014		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1014		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	94	92	65 - 135	2	20		
Bromodichloromethane	88	93	65 - 135	5	20		
Carbon tetrachloride	102	98	65 - 135	4	21		
Chlorobenzene	100	99	65 - 135	1	20		
Chloroform	94	95	65 - 135	1	20		
1,3-Dichlorobenzene	102	99	65 - 135	2	20		
1,1-Dichloroethane	99	98	65 - 135	1	21		
trans-1,2-Dichloroethene	91	91	65 - 135	0	24		
1,1-Dichloroethene	89	86	65 - 136	3	20		
1,2-Dichloropropane	90	92	64 - 135	2	20		
Ethylbenzene	99	98	65 - 135	2	20		
Methylene Chloride	62	63	54 - 141	2	26		
Tetrachloroethene	103	99	65 - 135	4	20		
Toluene	97	97	65 - 135	0	20		
1,1,1-Trichloroethane	99	96	65 - 135	2	20		
Trichloroethene	100	98	65 - 135	2	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		105	109			70 - 127	
Toluene-d8 (Surr)		115	109			80 - 125	
4-Bromofluorobenzene (Surr)		115	102			78 - 120	
Dibromofluoromethane (Surr)		103	103			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316868**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80461-E-2 MS                      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/15/2016 0951  
Prep Date: 03/15/2016 0951  
Leach Date: N/A

MSD Lab Sample ID: 280-80461-E-2 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/15/2016 1014  
Prep Date: 03/15/2016 1014  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	4.68	4.60
Bromodichloromethane	0.17	U	5.00	5.00	4.42	4.64
Carbon tetrachloride	0.19	U	5.00	5.00	5.10	4.90
Chlorobenzene	0.17	U	5.00	5.00	5.00	4.95
Chloroform	0.16	U	5.00	5.00	4.71	4.77
1,3-Dichlorobenzene	0.13	U	5.00	5.00	5.08	4.97
1,1-Dichloroethane	0.22	U	5.00	5.00	4.94	4.90
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	4.57	4.55
1,1-Dichloroethene	0.23	U	5.00	5.00	4.45	4.31
1,2-Dichloropropane	0.18	U	5.00	5.00	4.51	4.61
Ethylbenzene	0.16	U	5.00	5.00	4.97	4.88
Methylene Chloride	0.32	U	5.00	5.00	3.10	3.17
Tetrachloroethene	0.20	U	5.00	5.00	5.16	4.95
Toluene	0.17	U	5.00	5.00	4.85	4.83
1,1,1-Trichloroethane	0.16	U	5.00	5.00	4.93	4.82
Trichloroethene	0.16	U	5.00	5.00	4.99	4.91

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Method Blank - Batch: 280-316976**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-316976/8  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/15/2016 2104  
 Prep Date: 03/15/2016 2104  
 Leach Date: N/A

Analysis Batch: 280-316976  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2560.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Method Blank - Batch: 280-316976**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-316976/8  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/15/2016 2104  
 Prep Date: 03/15/2016 2104  
 Leach Date: N/A

Analysis Batch: 280-316976  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2560.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.187	J	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.283	J	0.21	1.0
1,2,4-Trichlorobenzene	0.227	J	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	70 - 127
Toluene-d8 (Surr)	102	80 - 125
4-Bromofluorobenzene (Surr)	101	78 - 120
Dibromofluoromethane (Surr)	102	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-316976**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-316976/6	Analysis Batch: 280-316976	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2559.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 2041	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 2041		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	5.27	105	65 - 135	
Bromodichloromethane	5.00	5.08	102	65 - 135	
Carbon tetrachloride	5.00	5.52	110	65 - 135	
Chlorobenzene	5.00	5.16	103	65 - 135	
Chloroform	5.00	5.17	103	65 - 135	
1,3-Dichlorobenzene	5.00	4.92	98	65 - 135	
1,1-Dichloroethane	5.00	5.01	100	65 - 135	
trans-1,2-Dichloroethene	5.00	5.39	108	65 - 135	
1,1-Dichloroethene	5.00	5.19	104	65 - 136	
1,2-Dichloropropane	5.00	5.18	104	64 - 135	
Ethylbenzene	5.00	5.36	107	65 - 135	
Methylene Chloride	5.00	4.41	88	54 - 141	
Tetrachloroethene	5.00	5.37	107	65 - 135	
Toluene	5.00	5.46	109	65 - 135	
1,1,1-Trichloroethane	5.00	5.38	108	65 - 135	
Trichloroethene	5.00	5.41	108	65 - 135	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		92		70 - 127	
Toluene-d8 (Surr)		110		80 - 125	
4-Bromofluorobenzene (Surr)		104		78 - 120	
Dibromofluoromethane (Surr)		100		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316976**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80508-19	Analysis Batch: 280-316976	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2568.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0014		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0014		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80508-19	Analysis Batch: 280-316976	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2569.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0037		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0037		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	106	107	65 - 135	1	20		
Bromodichloromethane	107	104	65 - 135	2	20		
Carbon tetrachloride	109	109	65 - 135	0	21		
Chlorobenzene	101	104	65 - 135	2	20		
Chloroform	106	106	65 - 135	0	20		
1,3-Dichlorobenzene	100	102	65 - 135	2	20		
1,1-Dichloroethane	99	100	65 - 135	0	21		
trans-1,2-Dichloroethene	109	96	65 - 135	6	24		
1,1-Dichloroethene	101	101	65 - 136	0	20		
1,2-Dichloropropane	105	106	64 - 135	1	20		
Ethylbenzene	98	100	65 - 135	2	20		
Methylene Chloride	90	93	54 - 141	3	26		
Tetrachloroethene	96	99	65 - 135	2	20		
Toluene	108	110	65 - 135	2	20		
1,1,1-Trichloroethane	106	106	65 - 135	0	20		
Trichloroethene	105	87	65 - 135	5	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		103	105			70 - 127	
Toluene-d8 (Surr)		108	107			80 - 125	
4-Bromofluorobenzene (Surr)		96	95			78 - 120	
Dibromofluoromethane (Surr)		105	104			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316976**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80508-19                      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/16/2016 0014  
Prep Date: 03/16/2016 0014  
Leach Date: N/A

MSD Lab Sample ID: 280-80508-19  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/16/2016 0037  
Prep Date: 03/16/2016 0037  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	5.31	5.36
Bromodichloromethane	0.17	U	5.00	5.00	5.33	5.21
Carbon tetrachloride	0.19	U	5.00	5.00	5.45	5.47
Chlorobenzene	0.17	U	5.00	5.00	5.06	5.19
Chloroform	0.16	U	5.00	5.00	5.32	5.31
1,3-Dichlorobenzene	0.14	J	5.00	5.00	5.15	5.25
1,1-Dichloroethane	0.45	J	5.00	5.00	5.41	5.43
trans-1,2-Dichloroethene	5.2		5.00	5.00	10.6	10.0
1,1-Dichloroethene	0.62	J	5.00	5.00	5.68	5.68
1,2-Dichloropropane	0.18	U	5.00	5.00	5.23	5.28
Ethylbenzene	0.16	U	5.00	5.00	4.90	4.99
Methylene Chloride	0.32	U	5.00	5.00	4.51	4.66
Tetrachloroethene	0.20	U	5.00	5.00	4.82	4.93
Toluene	0.17	U	5.00	5.00	5.39	5.51
1,1,1-Trichloroethane	0.16	U	5.00	5.00	5.29	5.29
Trichloroethene	15		5.00	5.00	20.0	19.1

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317297**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317297/8  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/17/2016 2206  
 Prep Date: 03/17/2016 2206  
 Leach Date: N/A

Analysis Batch: 280-317297  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_P  
 Lab File ID: P5897.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317297**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317297/8  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/17/2016 2206  
 Prep Date: 03/17/2016 2206  
 Leach Date: N/A

Analysis Batch: 280-317297  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_P  
 Lab File ID: P5897.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	70 - 127
Toluene-d8 (Surr)	102	80 - 125
4-Bromofluorobenzene (Surr)	98	78 - 120
Dibromofluoromethane (Surr)	99	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-317297**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-317297/4	Analysis Batch: 280-317297	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P5896.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 2146	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 2146		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	4.68	94	65 - 135	
Bromodichloromethane	5.00	5.21	104	65 - 135	
Carbon tetrachloride	5.00	5.84	117	65 - 135	
Chlorobenzene	5.00	4.48	90	65 - 135	
Chloroform	5.00	5.31	106	65 - 135	
1,3-Dichlorobenzene	5.00	4.39	88	65 - 135	
1,1-Dichloroethane	5.00	4.97	99	65 - 135	
trans-1,2-Dichloroethene	5.00	4.82	96	65 - 135	
1,1-Dichloroethene	5.00	4.72	94	65 - 136	
1,2-Dichloropropane	5.00	4.81	96	64 - 135	
Ethylbenzene	5.00	4.61	92	65 - 135	
Methylene Chloride	5.00	4.80	96	54 - 141	
Tetrachloroethene	5.00	4.88	98	65 - 135	
Toluene	5.00	5.06	101	65 - 135	
1,1,1-Trichloroethane	5.00	5.84	117	65 - 135	
Trichloroethene	5.00	5.05	101	65 - 135	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		97		70 - 127	
Toluene-d8 (Surr)		104		80 - 125	
4-Bromofluorobenzene (Surr)		93		78 - 120	
Dibromofluoromethane (Surr)		99		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317297**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80508-21	Analysis Batch: 280-317297	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P5899.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 0.01 mL
Analysis Date: 03/17/2016 2246		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 2246		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80508-21	Analysis Batch: 280-317297	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P5900.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 0.01 mL
Analysis Date: 03/17/2016 2306		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 2306		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	95	91	65 - 135	4	20		
Bromodichloromethane	110	105	65 - 135	5	20		
Carbon tetrachloride	120	113	65 - 135	6	21		
Chlorobenzene	91	90	65 - 135	1	20		
Chloroform	108	104	65 - 135	3	20		
1,3-Dichlorobenzene	89	85	65 - 135	5	20		
1,1-Dichloroethane	99	95	65 - 135	4	21		
trans-1,2-Dichloroethene	89	86	65 - 135	3	24		
1,1-Dichloroethene	88	84	65 - 136	4	20		
1,2-Dichloropropane	95	93	64 - 135	2	20		
Ethylbenzene	91	88	65 - 135	3	20		
Methylene Chloride	100	97	54 - 141	4	26		
Tetrachloroethene	93	91	65 - 135	2	20		
Toluene	102	96	65 - 135	6	20		
1,1,1-Trichloroethane	116	115	65 - 135	1	20		
Trichloroethene	75	64	65 - 135	4	20		F1
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		101	97			70 - 127	
Toluene-d8 (Surr)		106	109			80 - 125	
4-Bromofluorobenzene (Surr)		96	95			78 - 120	
Dibromofluoromethane (Surr)		104	105			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317297**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80508-21                      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 2246  
Prep Date: 03/17/2016 2246  
Leach Date: N/A

MSD Lab Sample ID: 280-80508-21  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 2306  
Prep Date: 03/17/2016 2306  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual	
Benzene	320	U	10000	10000	9450	9090	
Bromodichloromethane	340	U	10000	10000	11000	10500	
Carbon tetrachloride	380	U	10000	10000	12000	11300	
Chlorobenzene	340	U	10000	10000	9090	8960	
Chloroform	320	U	10000	10000	10800	10400	
1,3-Dichlorobenzene	260	U	10000	10000	8930	8460	
1,1-Dichloroethane	440	U	10000	10000	9910	9480	
trans-1,2-Dichloroethene	4200		10000	10000	13100	12700	
1,1-Dichloroethene	620	J	10000	10000	9370	9030	
1,2-Dichloropropane	360	U	10000	10000	9530	9330	
Ethylbenzene	320	U	10000	10000	9080	8810	
Methylene Chloride	640	U	10000	10000	10000	9670	
Tetrachloroethene	400	U	10000	10000	9310	9140	
Toluene	340	U	10000	10000	10200	9620	
1,1,1-Trichloroethane	320	U	10000	10000	11600	11500	
Trichloroethene	21000		10000	10000	28000	27000	F1

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-316568**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-316568/8	Analysis Batch: 280-316568	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2279.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/11/2016 1153	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/11/2016 1153		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	124		70 - 127	

**Lab Control Sample - Batch: 280-316568**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-316568/7	Analysis Batch: 280-316568	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2278.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/11/2016 1134	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/11/2016 1134		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	4.95	99	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		119		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316568**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80508-1	Analysis Batch: 280-316568	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2282.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/11/2016 1324		Final Weight/Volume: 20 mL
Prep Date: 03/11/2016 1324		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80508-1	Analysis Batch: 280-316568	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2283.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/11/2016 1348		Final Weight/Volume: 20 mL
Prep Date: 03/11/2016 1348		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	111	99	25 - 141	11	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		125	122			70 - 127	

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316568**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80508-1	Units: ug/L	MSD Lab Sample ID: 280-80508-1
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 03/11/2016 1324		Analysis Date: 03/11/2016 1348
Prep Date: 03/11/2016 1324		Prep Date: 03/11/2016 1348
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	0.22 U	5.00	5.00	5.53	4.94

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-316701**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-316701/4	Analysis Batch: 280-316701	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2318.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/14/2016 1040	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/14/2016 1040		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		70 - 127	

**Lab Control Sample - Batch: 280-316701**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-316701/3	Analysis Batch: 280-316701	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2317.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/14/2016 1021	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/14/2016 1021		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	4.89	98	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		97		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316701**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80610-AI-1 MS	Analysis Batch: 280-316701	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2324.D
Dilution: 2000	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/14/2016 1249		Final Weight/Volume: 20 mL
Prep Date: 03/14/2016 1249		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80610-AI-1 MSD	Analysis Batch: 280-316701	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2325.D
Dilution: 2000	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/14/2016 1308		Final Weight/Volume: 20 mL
Prep Date: 03/14/2016 1308		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	23	145	25 - 141	48	20	F1	F1 F2
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
1,2-Dichloroethane-d4 (Surr)	97		117	70 - 127			

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316701**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80610-AI-1 MS	Units: ug/L
Client Matrix: Water	
Dilution: 2000	
Analysis Date: 03/14/2016 1249	
Prep Date: 03/14/2016 1249	
Leach Date: N/A	

MSD Lab Sample ID: 280-80610-AI-1 MSD
Client Matrix: Water
Dilution: 2000
Analysis Date: 03/14/2016 1308
Prep Date: 03/14/2016 1308
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	17000	10000	10000	19200 F1	31400 F1 F2



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-317252**

**Method: RSK-175**

**Preparation: N/A**

Lab Sample ID: MB 280-317252/5	Analysis Batch: 280-317252	Instrument ID: VGC_J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 16031705.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 18 mL
Analysis Date: 03/17/2016 1637	Units: ug/L	Final Weight/Volume: 18 mL
Prep Date: N/A		Injection Volume: 5 mL
Leach Date: N/A		Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Methane	0.22	U	0.22	5.0
Ethylene	0.40	U	0.40	5.0
Ethane	0.57	U	0.57	5.0

**Lab Control Sample - Batch: 280-317252**

**Method: RSK-175**

**Preparation: N/A**

Lab Sample ID: LCS 280-317252/6	Analysis Batch: 280-317252	Instrument ID: VGC_J
Client Matrix: Water	Prep Batch: N/A	Lab File ID: 16031706.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 18 mL
Analysis Date: 03/17/2016 1657	Units: ug/L	Final Weight/Volume: 18 mL
Prep Date: N/A		Injection Volume: 5 mL
Leach Date: N/A		Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Methane	146	136	93	75 - 125	
Ethylene	255	234	92	75 - 125	
Ethane	274	253	92	75 - 125	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317252**

**Method: RSK-175  
Preparation: N/A**

MS Lab Sample ID: 280-80508-19  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 2020  
Prep Date: N/A  
Leach Date: N/A

Analysis Batch: 280-317252  
Prep Batch: N/A  
Leach Batch: N/A

Instrument ID: VGC\_J  
Lab File ID: 16031717.D  
Initial Weight/Volume: 18 mL  
Final Weight/Volume: 18 mL  
Injection Volume: 5 mL  
Column ID: PRIMARY

MSD Lab Sample ID: 280-80508-19  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 2030  
Prep Date: N/A  
Leach Date: N/A

Analysis Batch: 280-317252  
Prep Batch: N/A  
Leach Batch: N/A

Instrument ID: VGC\_J  
Lab File ID: 16031718.D  
Initial Weight/Volume: 18 mL  
Final Weight/Volume: 18 mL  
Injection Volume: 5 mL  
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Methane	103	124	52 - 145	7	20		
Ethylene	96	100	75 - 131	4	20		
Ethane	71	73	75 - 125	3	20	F1	F1

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317252**

**Method: RSK-175  
Preparation: N/A**

MS Lab Sample ID: 280-80508-19  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 2020  
Prep Date: N/A  
Leach Date: N/A

Units: ug/L

MSD Lab Sample ID: 280-80508-19  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 2030  
Prep Date: N/A  
Leach Date: N/A

Analyte	Sample		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual		
	Result/Qual							
Methane	260		146	146	410	440		
Ethylene	0.64	J	255	255	246	255		
Ethane	3.6	J	274	274	197	203	F1	F1

# Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1  
Sdg Number: 16027653

**Duplicate - Batch: 280-317252**

**Method: RSK-175**  
**Preparation: N/A**

Lab Sample ID:	280-80508-19	Analysis Batch:	280-317252	Instrument ID:	VGC_J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	16031716.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	18 mL
Analysis Date:	03/17/2016 2005	Units:	ug/L	Final Weight/Volume:	18 mL
Prep Date:	N/A			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Methane	260	269	4	20	
Ethylene	0.64 J	0.647	2	20	J P
Ethane	3.6 J	3.65	1	20	J

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-316568</b>					
LCS 280-316568/7	Lab Control Sample	T	Water	8260B SIM	
MB 280-316568/8	Method Blank	T	Water	8260B SIM	
280-80508-1	PIN12-0565-1	T	Water	8260B SIM	
280-80508-1MS	Matrix Spike	T	Water	8260B SIM	
280-80508-1MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
280-80508-2	PIN12-0565-2	T	Water	8260B SIM	
280-80508-3	PIN12-0573-1	T	Water	8260B SIM	
280-80508-4	PIN12-0573-2	T	Water	8260B SIM	
280-80508-5	PIN12-0573-3	T	Water	8260B SIM	
280-80508-6	PIN12-0574-1	T	Water	8260B SIM	
280-80508-8	PIN12-0574-3	T	Water	8260B SIM	
280-80508-9	PIN12-0575-1	T	Water	8260B SIM	
280-80508-11	PIN12-0586-1	T	Water	8260B SIM	
280-80508-12	PIN12-0586-2	T	Water	8260B SIM	
280-80508-13	PIN12-0586-3	T	Water	8260B SIM	
280-80508-14	PIN12-0587-1	T	Water	8260B SIM	
280-80508-15	PIN12-0587-2	T	Water	8260B SIM	
280-80508-16	PIN12-0587-3	T	Water	8260B SIM	
280-80508-19	PIN12-S30B	T	Water	8260B SIM	
280-80508-20	PIN12-S33C	T	Water	8260B SIM	
280-80508-21	PIN12-S35B	T	Water	8260B SIM	
<b>Analysis Batch:280-316701</b>					
LCS 280-316701/3	Lab Control Sample	T	Water	8260B SIM	
MB 280-316701/4	Method Blank	T	Water	8260B SIM	
280-80508-7	PIN12-0574-2	T	Water	8260B SIM	
280-80508-10	PIN12-0575-2	T	Water	8260B SIM	
280-80508-22	PIN12-S67B	T	Water	8260B SIM	
280-80508-23	PIN12-S67C	T	Water	8260B SIM	
280-80508-24	PIN12-S67D	T	Water	8260B SIM	
280-80610-AI-1 MS	Matrix Spike	T	Water	8260B SIM	
280-80610-AI-1 MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
<b>Analysis Batch:280-316867</b>					
LCS 280-316867/4	Lab Control Sample	T	Water	8260B	
MB 280-316867/6	Method Blank	T	Water	8260B	
280-80508-1	PIN12-0565-1	T	Water	8260B	
280-80508-2	PIN12-0565-2	T	Water	8260B	
280-80508-3	PIN12-0573-1	T	Water	8260B	
280-80508-4	PIN12-0573-2	T	Water	8260B	
280-80508-5	PIN12-0573-3	T	Water	8260B	
280-80551-B-1 MS	Matrix Spike	T	Water	8260B	
280-80551-B-1 MSD	Matrix Spike Duplicate	T	Water	8260B	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-316868</b>					
LCS 280-316868/4	Lab Control Sample	T	Water	8260B	
MB 280-316868/6	Method Blank	T	Water	8260B	
280-80461-E-2 MS	Matrix Spike	T	Water	8260B	
280-80461-E-2 MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80508-6	PIN12-0574-1	T	Water	8260B	
280-80508-7	PIN12-0574-2	T	Water	8260B	
280-80508-7DL	PIN12-0574-2	T	Water	8260B	
280-80508-8	PIN12-0574-3	T	Water	8260B	
280-80508-9	PIN12-0575-1	T	Water	8260B	
280-80508-10	PIN12-0575-2	T	Water	8260B	
280-80508-11	PIN12-0586-1	T	Water	8260B	
280-80508-12	PIN12-0586-2	T	Water	8260B	
280-80508-13	PIN12-0586-3	T	Water	8260B	
280-80508-14	PIN12-0587-1	T	Water	8260B	
280-80508-15	PIN12-0587-2	T	Water	8260B	
280-80508-15DL	PIN12-0587-2	T	Water	8260B	
280-80508-16	PIN12-0587-3	T	Water	8260B	
280-80508-17	PIN12-2198	T	Water	8260B	
280-80508-18	PIN12-2689	T	Water	8260B	
<b>Analysis Batch:280-316976</b>					
LCS 280-316976/6	Lab Control Sample	T	Water	8260B	
MB 280-316976/8	Method Blank	T	Water	8260B	
280-80508-19	PIN12-S30B	T	Water	8260B	
280-80508-19MS	Matrix Spike	T	Water	8260B	
280-80508-19MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80508-20	PIN12-S33C	T	Water	8260B	
280-80508-20DL	PIN12-S33C	T	Water	8260B	
280-80508-21	PIN12-S35B	T	Water	8260B	
280-80508-22	PIN12-S67B	T	Water	8260B	
280-80508-22DL	PIN12-S67B	T	Water	8260B	
280-80508-23	PIN12-S67C	T	Water	8260B	
280-80508-23DL	PIN12-S67C	T	Water	8260B	
280-80508-24	PIN12-S67D	T	Water	8260B	
<b>Analysis Batch:280-317297</b>					
LCS 280-317297/4	Lab Control Sample	T	Water	8260B	
MB 280-317297/8	Method Blank	T	Water	8260B	
280-80508-21DL	PIN12-S35B	T	Water	8260B	
280-80508-21MS	Matrix Spike	T	Water	8260B	
280-80508-21MSD	Matrix Spike Duplicate	T	Water	8260B	

**Report Basis**

T = Total

TestAmerica Denver

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80508-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC VOA</b>					
<b>Analysis Batch:280-317252</b>					
LCS 280-317252/6	Lab Control Sample	T	Water	RSK-175	
MB 280-317252/5	Method Blank	T	Water	RSK-175	
280-80508-19	PIN12-S30B	T	Water	RSK-175	
280-80508-19DU	Duplicate	T	Water	RSK-175	
280-80508-19MS	Matrix Spike	T	Water	RSK-175	
280-80508-19MSD	Matrix Spike Duplicate	T	Water	RSK-175	
280-80508-21	PIN12-S35B	T	Water	RSK-175	
280-80508-22	PIN12-S67B	T	Water	RSK-175	
280-80508-23	PIN12-S67C	T	Water	RSK-175	
280-80508-24	PIN12-S67D	T	Water	RSK-175	

#### Report Basis

T = Total

## ANALYTICAL REPORT

Job Number: 280-80605-1

SDG Number: 16027653

Job Description: Pinellas Monitoring

For:

Navarro Research and Engineering, Inc

2597 Legacy Way

Grand Junction, CO 81503

Attention: Mr. Steve Donovan



Approved for release.  
DiLea R Bindel  
Project Manager I  
3/29/2016 5:57 AM

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03/29/2016

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The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

**TestAmerica Laboratories, Inc.**

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Pages have been deleted from this laboratory report file to reduce file size. The deleted pages contain raw data and instrument calibrations. If the full laboratory report is needed, contact [Scott.Surovchak@lm.doe.gov](mailto:Scott.Surovchak@lm.doe.gov)



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## CASE NARRATIVE

**Client: Navarro Research and Engineering, Inc**

**Project: PINELLAS MONITORING - 16027653**

**Report Number: 280-80605-1**

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits, with any exceptions noted. Calculations are performed before rounding to avoid round-off errors in calculated results.

This report includes reporting limits (RLs) less than TestAmerica Denver's practical quantitation limits. These reporting limits are being used specifically at the client's request to meet the needs of this project. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

Results between the method detection limit (MDL) and reporting limit (RL) are flagged with a "J" qualifier to indicate an estimated value. These results are statistically less reliable than results greater than or equal to the RL and should be considered a qualitative value.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **RECEIPT**

The samples were received on 3/9/2016 12:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.5° C.

### **GC/MS VOLATILES - SW846 8260B**

In some cases, due to high concentrations of target analytes, samples had to be analyzed using reduced aliquot sizes. The reporting limits have been elevated accordingly. To provide the lowest possible detection limits, multiple runs are reported.

The LCS associated with batches 280-317161 and 280-317162 exhibited a percent recovery outside the QC control limits, biased high, for Dichlorodifluoromethane. This is not a spike compound of interest. Therefore, data was not affected.

The LCS associated with batch 280-316991 exhibited a percent recovery outside the QC control limits, biased high, for 2-Hexanone. This is not a spike compound of interest. Therefore, data was not affected.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### **GC/MS VOLATILES - SW846 8260B SIM - 1,4-Dioxane**

Due to high concentrations of non-target analytes, samples PIN12-0585-2 (ODX 967), PIN12-2454 (ODY 035), had to be analyzed using reduced aliquot sizes. The reporting limits have been elevated accordingly. To provide the lowest possible detection limits, multiple runs are reported.

Sample PIN12-0561-2 (ODY 037) exhibited surrogate recoveries outside the control limits, biased high. As no detectable concentrations are present at levels greater than the reporting limits in the samples, corrective action is deemed unnecessary.

The MS aliquot of the MS/MSD performed on sample PIN12-0525 (ODX 934) exhibited recoveries outside control limits, biased high, for 1,4-Dioxane. In addition, the MS/MSD RPD values were exceeded. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## DATA REPORTING QUALIFIERS

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD is outside acceptance limits.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	F2	MS/MSD RPD exceeds control limits
	E	Result exceeded calibration range.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits

## SAMPLE SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-80605-1	PIN12-0524	Water	03/05/2016 0835	03/09/2016 1210
280-80605-1MS	PIN12-0524	Water	03/05/2016 0835	03/09/2016 1210
280-80605-1MSD	PIN12-0524	Water	03/05/2016 0835	03/09/2016 1210
280-80605-2	PIN12-0525	Water	03/05/2016 0905	03/09/2016 1210
280-80605-2MS	PIN12-0525	Water	03/05/2016 0905	03/09/2016 1210
280-80605-2MSD	PIN12-0525	Water	03/05/2016 0905	03/09/2016 1210
280-80605-3	PIN12-0555A	Water	03/07/2016 1435	03/09/2016 1210
280-80605-4	PIN12-0555B	Water	03/07/2016 1505	03/09/2016 1210
280-80605-5	PIN12-0555C	Water	03/07/2016 1530	03/09/2016 1210
280-80605-6	PIN12-0561-1	Water	03/05/2016 0835	03/09/2016 1210
280-80605-7	PIN12-0561-2	Water	03/05/2016 0910	03/09/2016 1210
280-80605-8	PIN12-0561-3	Water	03/05/2016 0950	03/09/2016 1210
280-80605-9	PIN12-0565-3	Water	03/05/2016 1505	03/09/2016 1210
280-80605-10	PIN12-0568-1	Water	03/07/2016 1040	03/09/2016 1210
280-80605-11	PIN12-0568-2	Water	03/07/2016 1110	03/09/2016 1210
280-80605-12	PIN12-0568-3	Water	03/07/2016 1145	03/09/2016 1210
280-80605-13	PIN12-0569-1	Water	03/05/2016 1040	03/09/2016 1210
280-80605-14	PIN12-0569-2	Water	03/05/2016 1145	03/09/2016 1210
280-80605-15	PIN12-0569-3	Water	03/05/2016 1415	03/09/2016 1210
280-80605-16	PIN12-0570-1	Water	03/07/2016 0850	03/09/2016 1210
280-80605-17	PIN12-0570-2	Water	03/07/2016 0920	03/09/2016 1210
280-80605-18	PIN12-0570-3	Water	03/07/2016 1000	03/09/2016 1210
280-80605-19	PIN12-0577-1	Water	03/07/2016 1540	03/09/2016 1210
280-80605-20	PIN12-0579-1	Water	03/07/2016 1405	03/09/2016 1210
280-80605-21	PIN12-0579-2	Water	03/07/2016 1430	03/09/2016 1210
280-80605-22	PIN12-0579-3	Water	03/07/2016 1510	03/09/2016 1210
280-80605-23	PIN12-0584-1	Water	03/05/2016 1155	03/09/2016 1210
280-80605-24	PIN12-0584-2	Water	03/05/2016 1420	03/09/2016 1210
280-80605-25	PIN12-0584-3	Water	03/05/2016 1435	03/09/2016 1210
280-80605-26	PIN12-0585-1	Water	03/05/2016 0945	03/09/2016 1210
280-80605-27	PIN12-0585-2	Water	03/05/2016 1025	03/09/2016 1210
280-80605-28	PIN12-0585-3	Water	03/05/2016 1155	03/09/2016 1210
280-80605-29	PIN12-0588-1	Water	03/07/2016 0850	03/09/2016 1210
280-80605-30	PIN12-0588-2	Water	03/07/2016 0925	03/09/2016 1210
280-80605-31	PIN12-0588-3	Water	03/07/2016 0950	03/09/2016 1210
280-80605-32	PIN12-2199	Water	03/05/2016 0830	03/09/2016 1210
280-80605-33	PIN12-2450	Water	03/05/2016 1015	03/09/2016 1210
280-80605-34	PIN12-2454	Water	03/05/2016 1000	03/09/2016 1210
280-80605-35	PIN12-2523	Water	03/05/2016 0800	03/09/2016 1210
280-80605-36	PIN12-S68B	Water	03/07/2016 1355	03/09/2016 1210
280-80605-37	PIN12-S68C	Water	03/07/2016 1035	03/09/2016 1210
280-80605-38	PIN12-S68D	Water	03/07/2016 1145	03/09/2016 1210

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80605-1</b>	<b>PIN12-0524</b>					
Acetone		18		10	ug/L	8260B
Benzene		1.1		1.0	ug/L	8260B
1,1-Dichloroethane		0.29	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		170		10	ug/L	8260B
trans-1,2-Dichloroethene		1.5		1.0	ug/L	8260B
1,1-Dichloroethene		3.1		1.0	ug/L	8260B
Vinyl chloride		300		10	ug/L	8260B
1,4-Dioxane		1.6		1.0	ug/L	8260B SIM
<b>280-80605-2</b>	<b>PIN12-0525</b>					
Acetone		19		10	ug/L	8260B
cis-1,2-Dichloroethene		1.8		1.0	ug/L	8260B
1,4-Dioxane		3.4	F1 F2	1.0	ug/L	8260B SIM
<b>280-80605-3</b>	<b>PIN12-0555A</b>					
Acetone		11		10	ug/L	8260B
<b>280-80605-5</b>	<b>PIN12-0555C</b>					
cis-1,2-Dichloroethene		1.3		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.47	J	1.0	ug/L	8260B
1,4-Dioxane		0.33	J	1.0	ug/L	8260B SIM
<b>280-80605-6</b>	<b>PIN12-0561-1</b>					
Acetone		10		10	ug/L	8260B
<b>280-80605-7</b>	<b>PIN12-0561-2</b>					
Acetone		13		10	ug/L	8260B
<b>280-80605-8</b>	<b>PIN12-0561-3</b>					
Acetone		16		10	ug/L	8260B
1,4-Dioxane		0.35	J	1.0	ug/L	8260B SIM
<b>280-80605-9</b>	<b>PIN12-0565-3</b>					
Acetone		11		10	ug/L	8260B
cis-1,2-Dichloroethene		0.55	J	1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.19	J	1.0	ug/L	8260B
1,4-Dioxane		0.24	J	1.0	ug/L	8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80605-10</b> Acetone	<b>PIN12-0568-1</b>	8.7	J	10	ug/L	8260B
<b>280-80605-11</b> Acetone 1,4-Dioxane	<b>PIN12-0568-2</b>	13 0.79	J	10 1.0	ug/L ug/L	8260B 8260B SIM
<b>280-80605-13</b> Acetone	<b>PIN12-0569-1</b>	12		10	ug/L	8260B
<b>280-80605-14</b> Acetone cis-1,2-Dichloroethene Vinyl chloride 1,4-Dioxane	<b>PIN12-0569-2</b>	13 1.5 7.4 1.5		10 1.0 1.0 1.0	ug/L ug/L ug/L ug/L	8260B 8260B 8260B 8260B SIM
<b>280-80605-15</b> Acetone 1,1-Dichloroethane Methylene Chloride Toluene 1,2,3-Trichloropropane Vinyl chloride 1,4-Dioxane	<b>PIN12-0569-3</b>	16 0.22 0.46 0.21 3.2 22 0.83	J J J	10 1.0 1.0 1.0 1.0 1.0	ug/L ug/L ug/L ug/L ug/L ug/L	8260B 8260B 8260B 8260B 8260B 8260B SIM
<b>280-80605-16</b> Acetone Methylene Chloride	<b>PIN12-0570-1</b>	11 0.36	J	10 1.0	ug/L ug/L	8260B 8260B
<b>280-80605-17</b> Acetone Vinyl chloride 1,4-Dioxane	<b>PIN12-0570-2</b>	10 1.7 1.2		10 1.0 1.0	ug/L ug/L ug/L	8260B 8260B 8260B SIM
<b>280-80605-18</b> Acetone cis-1,2-Dichloroethene Vinyl chloride 1,4-Dioxane	<b>PIN12-0570-3</b>	11 0.17 4.9 1.1	J	10 1.0 1.0 1.0	ug/L ug/L ug/L ug/L	8260B 8260B 8260B 8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80605-20</b> Acetone	<b>PIN12-0579-1</b>	11		10	ug/L	8260B
<b>280-80605-22</b> Acetone	<b>PIN12-0579-3</b>	18		10	ug/L	8260B
<b>280-80605-23</b> Acetone 1,4-Dioxane	<b>PIN12-0584-1</b>	11 1.5		10 1.0	ug/L ug/L	8260B 8260B SIM
<b>280-80605-24</b> Acetone cis-1,2-Dichloroethene trans-1,2-Dichloroethene Vinyl chloride 1,4-Dioxane	<b>PIN12-0584-2</b>	9.1 12 0.49 97 0.89	 J  J  J	10 1.0 1.0 5.0 1.0	ug/L ug/L ug/L ug/L ug/L	8260B 8260B 8260B 8260B 8260B SIM
<b>280-80605-25</b> Acetone cis-1,2-Dichloroethene Vinyl chloride	<b>PIN12-0584-3</b>	13 0.94 57	 J  	10 1.0 1.0	ug/L ug/L ug/L	8260B 8260B 8260B
<b>280-80605-26</b> cis-1,2-Dichloroethene trans-1,2-Dichloroethene Vinyl chloride 1,4-Dioxane	<b>PIN12-0585-1</b>	1.6 1.8 57 5.7		1.0 1.0 1.0 1.0	ug/L ug/L ug/L ug/L	8260B 8260B 8260B 8260B SIM
<b>280-80605-27</b> Benzene 1,1-Dichloroethane cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,1-Dichloroethene Toluene Trichloroethene Vinyl chloride 1,4-Dioxane	<b>PIN12-0585-2</b>	1.0 1.6 2800 41 170 2.2 230 2100 4.3	       J	1.0 1.0 100 1.0 100 1.0 100 100 10	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	8260B 8260B 8260B 8260B 8260B 8260B 8260B 8260B 8260B SIM



## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80605-28</b>	<b>PIN12-0585-3</b>					
Acetone		3.8	J	10	ug/L	8260B
Benzene		0.26	J	1.0	ug/L	8260B
2-Butanone (MEK)		20		5.0	ug/L	8260B
1,1-Dichloroethane		0.42	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		1.5		1.0	ug/L	8260B
trans-1,2-Dichloroethene		5.4		1.0	ug/L	8260B
Toluene		0.51	J	1.0	ug/L	8260B
Trichloroethene		0.61	J	1.0	ug/L	8260B
Vinyl chloride		130		4.0	ug/L	8260B
1,4-Dioxane		2.8		1.0	ug/L	8260B SIM
<b>280-80605-29</b>	<b>PIN12-0588-1</b>					
Acetone		11		10	ug/L	8260B
Vinyl chloride		0.97	J	1.0	ug/L	8260B
<b>280-80605-30</b>	<b>PIN12-0588-2</b>					
Acetone		15		10	ug/L	8260B
Benzene		0.21	J	1.0	ug/L	8260B
1,1-Dichloroethane		1.1		1.0	ug/L	8260B
cis-1,2-Dichloroethene		18		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.27	J	1.0	ug/L	8260B
Vinyl chloride		20		1.0	ug/L	8260B
1,4-Dioxane		3.5		1.0	ug/L	8260B SIM
<b>280-80605-31</b>	<b>PIN12-0588-3</b>					
Acetone		11		10	ug/L	8260B
Vinyl chloride		1.0		1.0	ug/L	8260B
<b>280-80605-32</b>	<b>PIN12-2199</b>					
Acetone		10		10	ug/L	8260B
<b>280-80605-33</b>	<b>PIN12-2450</b>					
Acetone		8.5	J	10	ug/L	8260B
Vinyl chloride		24		1.0	ug/L	8260B
1,4-Dioxane		0.98	J	1.0	ug/L	8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80605-34</b>	<b>PIN12-2454</b>					
Benzene		1.1		1.0	ug/L	8260B
1,1-Dichloroethane		1.7		1.0	ug/L	8260B
cis-1,2-Dichloroethene		2900		100	ug/L	8260B
trans-1,2-Dichloroethene		41		1.0	ug/L	8260B
1,1-Dichloroethene		170		100	ug/L	8260B
Toluene		1.8		1.0	ug/L	8260B
Trichloroethene		240		100	ug/L	8260B
Vinyl chloride		2100		100	ug/L	8260B
1,4-Dioxane		7.4	J	10	ug/L	8260B SIM
<b>280-80605-35</b>	<b>PIN12-2523</b>					
Acetone		5.6	J	10	ug/L	8260B
cis-1,2-Dichloroethene		0.35	J	1.0	ug/L	8260B
<b>280-80605-37</b>	<b>PIN12-S68C</b>					
Acetone		4.1	J	10	ug/L	8260B
1,1-Dichloroethane		1.9		1.0	ug/L	8260B
cis-1,2-Dichloroethene		11		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.23	J	1.0	ug/L	8260B
Vinyl chloride		9.8		1.0	ug/L	8260B
1,4-Dioxane		6.0		1.0	ug/L	8260B SIM
<b>280-80605-38</b>	<b>PIN12-S68D</b>					
Acetone		5.1	J	10	ug/L	8260B
Benzene		0.30	J	1.0	ug/L	8260B
1,1-Dichloroethane		0.75	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		42		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.51	J	1.0	ug/L	8260B
Vinyl chloride		20		1.0	ug/L	8260B
1,4-Dioxane		1.9		1.0	ug/L	8260B SIM

## METHOD SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Volatile Organic Compounds (GC/MS-SIM)	TAL DEN	SW846 8260B SIM	
Purge and Trap	TAL DEN		SW846 5030B

### Lab References:

TAL DEN = TestAmerica Denver

### Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260B	Berger, Brent B	BBB
SW846 8260B	Dobransky, Michael E	MD
SW846 8260B	Wickham, Tom A	TAW
SW846 8260B SIM	Moan, Matthew R	MRM

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0524**

Lab Sample ID: 280-80605-1

Date Sampled: 03/05/2016 0835

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5159.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0938		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0938		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	18		1.9	10
Benzene	1.1		0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U F1	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U F1	0.31	1.0
1,1-Dichloroethane	0.29	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	1.5		0.15	1.0
1,1-Dichloroethene	3.1		0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U F1 *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0524**

Lab Sample ID: 280-80605-1

Date Sampled: 03/05/2016 0835

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5159.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0938		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0938		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115		70 - 127
Toluene-d8 (Surr)	108		80 - 125
4-Bromofluorobenzene (Surr)	89		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0524**

Lab Sample ID: 280-80605-1

Date Sampled: 03/05/2016 0835

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5160.D
Dilution: 1.0		Initial Weight/Volume: 2 mL
Analysis Date: 03/16/2016 0959	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0959		

Analyte	Result (ug/L)	Qualifier	MDL	RL
cis-1,2-Dichloroethene	170		1.5	10
Vinyl chloride	300		1.0	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0525**

Lab Sample ID: 280-80605-2

Date Sampled: 03/05/2016 0905

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5163.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1101		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1101		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	19		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.8		0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0525**

Lab Sample ID: 280-80605-2

Date Sampled: 03/05/2016 0905

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5163.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1101		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1101		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555A**

Lab Sample ID: 280-80605-3

Date Sampled: 03/07/2016 1435

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2619.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 2232		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 2232		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555A**

Lab Sample ID: 280-80605-3

Date Sampled: 03/07/2016 1435

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2619.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 2232		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 2232		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 127
Toluene-d8 (Surr)	104		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555B**

Lab Sample ID: 280-80605-4

Date Sampled: 03/07/2016 1505

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2624.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0031		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0031			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555B**

Lab Sample ID: 280-80605-4

Date Sampled: 03/07/2016 1505

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2624.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0031		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0031		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	99		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555C**

Lab Sample ID: 280-80605-5

Date Sampled: 03/07/2016 1530

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2625.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0055		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0055			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.3		0.15	1.0
trans-1,2-Dichloroethene	0.47	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555C**

Lab Sample ID: 280-80605-5

Date Sampled: 03/07/2016 1530

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2625.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0055		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0055		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0561-1**

Lab Sample ID: 280-80605-6

Date Sampled: 03/05/2016 0835

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5164.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/16/2016 1121		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 1121			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0561-1

Lab Sample ID: 280-80605-6

Date Sampled: 03/05/2016 0835

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5164.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1121		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1121		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115		70 - 127
Toluene-d8 (Surr)	105		80 - 125
4-Bromofluorobenzene (Surr)	93		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0561-2**

Lab Sample ID: 280-80605-7

Date Sampled: 03/05/2016 0910

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5165.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1142		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1142		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	13		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0561-2

Lab Sample ID: 280-80605-7

Date Sampled: 03/05/2016 0910

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5165.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1142		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1142		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	112		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0561-3**

Lab Sample ID: 280-80605-8

Date Sampled: 03/05/2016 0950

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5166.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/16/2016 1203		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 1203			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	16		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0561-3**

Lab Sample ID: 280-80605-8

Date Sampled: 03/05/2016 0950

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5166.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1203		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1203		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	123		70 - 127
Toluene-d8 (Surr)	111		80 - 125
4-Bromofluorobenzene (Surr)	90		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0565-3**

Lab Sample ID: 280-80605-9

Date Sampled: 03/05/2016 1505

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5167.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1223		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1223		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.55	J	0.15	1.0
trans-1,2-Dichloroethene	0.19	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0565-3**

Lab Sample ID: 280-80605-9

Date Sampled: 03/05/2016 1505

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5167.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1223		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1223		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	120		70 - 127
Toluene-d8 (Surr)	108		80 - 125
4-Bromofluorobenzene (Surr)	89		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0568-1**

Lab Sample ID: 280-80605-10

Date Sampled: 03/07/2016 1040

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2626.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0118		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0118		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	8.7	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0568-1

Lab Sample ID: 280-80605-10

Client Matrix: Water

Date Sampled: 03/07/2016 1040

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317161	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2626.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/17/2016 0118			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 0118				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0568-2**

Lab Sample ID: 280-80605-11

Date Sampled: 03/07/2016 1110

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2627.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0142		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0142		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	13		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0568-2

Lab Sample ID: 280-80605-11

Date Sampled: 03/07/2016 1110

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2627.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0142		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0142		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	101		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0568-3**

Lab Sample ID: 280-80605-12

Date Sampled: 03/07/2016 1145

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2628.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0206		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0206			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0568-3**

Lab Sample ID: 280-80605-12

Date Sampled: 03/07/2016 1145

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2628.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0206		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0206		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0569-1**

Lab Sample ID: 280-80605-13

Date Sampled: 03/05/2016 1040

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5168.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1244		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1244		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	12		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0569-1**

Lab Sample ID: 280-80605-13

Date Sampled: 03/05/2016 1040

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5168.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1244		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1244		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	123		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	92		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0569-2**

Lab Sample ID: 280-80605-14

Date Sampled: 03/05/2016 1145

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5169.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1305		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1305		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	13		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.5		0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0569-2

Lab Sample ID: 280-80605-14

Client Matrix: Water

Date Sampled: 03/05/2016 1145

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5169.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1305		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1305		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	7.4		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	123		70 - 127
Toluene-d8 (Surr)	104		80 - 125
4-Bromofluorobenzene (Surr)	89		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0569-3**

Lab Sample ID: 280-80605-15

Date Sampled: 03/05/2016 1415

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2629.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0229		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0229			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	16		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.46	J	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0569-3

Lab Sample ID: 280-80605-15

Client Matrix: Water

Date Sampled: 03/05/2016 1415

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2629.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0229		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0229		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.21	J	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	3.2		0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	22		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	101		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0570-1**

Lab Sample ID: 280-80605-16

Date Sampled: 03/07/2016 0850

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2630.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0253		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0253		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.36	J	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0570-1**

Lab Sample ID: 280-80605-16

Date Sampled: 03/07/2016 0850

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2630.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0253		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0253		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	101		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0570-2**

Lab Sample ID: 280-80605-17

Date Sampled: 03/07/2016 0920

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2631.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0317		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0317			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0570-2**

Lab Sample ID: 280-80605-17

Date Sampled: 03/07/2016 0920

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2631.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0317		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0317		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	1.7		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	104		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0570-3**

Lab Sample ID: 280-80605-18

Date Sampled: 03/07/2016 1000

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2632.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0340		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0340		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.17	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0570-3**

Lab Sample ID: 280-80605-18

Date Sampled: 03/07/2016 1000

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2632.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0340		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0340		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	4.9		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0577-1**

Lab Sample ID: 280-80605-19

Date Sampled: 03/07/2016 1540

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2633.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0404		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0404			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0577-1

Lab Sample ID: 280-80605-19

Client Matrix: Water

Date Sampled: 03/07/2016 1540

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2633.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0404		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0404		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	104		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0579-1**

Lab Sample ID: 280-80605-20

Date Sampled: 03/07/2016 1405

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2634.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0427		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0427		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0579-1

Lab Sample ID: 280-80605-20

Client Matrix: Water

Date Sampled: 03/07/2016 1405

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2634.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0427		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0427		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	99		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0579-2**

Lab Sample ID: 280-80605-21

Date Sampled: 03/07/2016 1430

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2635.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0451		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0451			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0579-2

Lab Sample ID: 280-80605-21

Date Sampled: 03/07/2016 1430

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2635.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0451		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0451		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	105		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0579-3**

Lab Sample ID: 280-80605-22

Date Sampled: 03/07/2016 1510

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2636.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0514		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0514		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	18		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0579-3**

Lab Sample ID: 280-80605-22

Date Sampled: 03/07/2016 1510

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2636.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0514		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0514		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0584-1**

Lab Sample ID: 280-80605-23

Date Sampled: 03/05/2016 1155

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5170.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1325		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1325		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0584-1**

Lab Sample ID: 280-80605-23

Date Sampled: 03/05/2016 1155

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5170.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1325		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1325		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	120		70 - 127
Toluene-d8 (Surr)	104		80 - 125
4-Bromofluorobenzene (Surr)	92		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0584-2**

Lab Sample ID: 280-80605-24

Date Sampled: 03/05/2016 1420

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5171.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1346		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1346		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	9.1	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	12		0.15	1.0
trans-1,2-Dichloroethene	0.49	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0584-2

Lab Sample ID: 280-80605-24

Client Matrix: Water

Date Sampled: 03/05/2016 1420

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B      Analysis Batch: 280-316991      Instrument ID: VMS\_Q  
Prep Method: 5030B      Prep Batch: N/A      Lab File ID: Q5171.D  
Dilution: 1.0      Initial Weight/Volume: 20 mL  
Analysis Date: 03/16/2016 1346      Final Weight/Volume: 20 mL  
Prep Date: 03/16/2016 1346

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	108		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0584-2

Lab Sample ID: 280-80605-24

Client Matrix: Water

Date Sampled: 03/05/2016 1420

Date Received: 03/09/2016 1210

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317325	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2675.D
Dilution: 1.0		Initial Weight/Volume: 4 mL
Analysis Date: 03/18/2016 1208	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1208		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	97		0.50	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	101		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0584-3**

Lab Sample ID: 280-80605-25

Date Sampled: 03/05/2016 1435

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5172.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/16/2016 1407		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 1407			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	13		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.94	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0584-3**

Lab Sample ID: 280-80605-25

Date Sampled: 03/05/2016 1435

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5172.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1407		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1407		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	57		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	119		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	94		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-1**

Lab Sample ID: 280-80605-26

Date Sampled: 03/05/2016 0945

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5173.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1428		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1428		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.6		0.15	1.0
trans-1,2-Dichloroethene	1.8		0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-1**

Lab Sample ID: 280-80605-26

Date Sampled: 03/05/2016 0945

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5173.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1428		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1428		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	57		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	121		70 - 127
Toluene-d8 (Surr)	112		80 - 125
4-Bromofluorobenzene (Surr)	90		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-2**

Lab Sample ID: 280-80605-27

Date Sampled: 03/05/2016 1025

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5174.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1448		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1448		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	1.0		0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	1.6		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	41		0.15	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-2**

Lab Sample ID: 280-80605-27

Date Sampled: 03/05/2016 1025

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5174.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1448		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1448		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	2.2		0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	121		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	94		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0585-2

Lab Sample ID: 280-80605-27

Client Matrix: Water

Date Sampled: 03/05/2016 1025

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317325	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2676.D
Dilution: 1.0		Initial Weight/Volume: 0.2 mL
Analysis Date: 03/18/2016 1232	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1232		

Analyte	Result (ug/L)	Qualifier	MDL	RL
cis-1,2-Dichloroethene	2800		15	100
1,1-Dichloroethene	170		23	100
Trichloroethene	230		16	100
Vinyl chloride	2100		10	100

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	81		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-3**

Lab Sample ID: 280-80605-28

Date Sampled: 03/05/2016 1155

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317325	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2677.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1255		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1255		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	3.8	J	1.9	10
Benzene	0.26	J	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	20		2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.42	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.5		0.15	1.0
trans-1,2-Dichloroethene	5.4		0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-3**

Lab Sample ID: 280-80605-28

Date Sampled: 03/05/2016 1155

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317325	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2677.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1255		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1255		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.51	J	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.61	J	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	108		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-3**

Lab Sample ID: 280-80605-28

Date Sampled: 03/05/2016 1155

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317325	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2678.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 03/18/2016 1319	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1319		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	130		0.40	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0588-1**

Lab Sample ID: 280-80605-29

Date Sampled: 03/07/2016 0850

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2637.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0538		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0538			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0588-1

Lab Sample ID: 280-80605-29

Date Sampled: 03/07/2016 0850

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2637.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0538		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0538		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.97	J	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	101		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0588-2**

Lab Sample ID: 280-80605-30

Date Sampled: 03/07/2016 0925

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2638.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0602		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0602		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	15		1.9	10
Benzene	0.21	J	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	1.1		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	18		0.15	1.0
trans-1,2-Dichloroethene	0.27	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0588-2

Lab Sample ID: 280-80605-30

Date Sampled: 03/07/2016 0925

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2638.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0602		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0602		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	20		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0588-3**

Lab Sample ID: 280-80605-31

Date Sampled: 03/07/2016 0950

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2639.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0625		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0625		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	11		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-0588-3

Lab Sample ID: 280-80605-31

Date Sampled: 03/07/2016 0950

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2639.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0625		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0625		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	1.0		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2199**

Lab Sample ID: 280-80605-32

Date Sampled: 03/05/2016 0830

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5176.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/16/2016 1530		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 1530			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-2199

Lab Sample ID: 280-80605-32

Date Sampled: 03/05/2016 0830

Client Matrix: Water

Date Received: 03/09/2016 1210

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5176.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1530		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1530		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2450**

Lab Sample ID: 280-80605-33

Date Sampled: 03/05/2016 1015

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5177.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1550		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1550		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	8.5	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

Client Sample ID: PIN12-2450

Lab Sample ID: 280-80605-33

Date Sampled: 03/05/2016 1015

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5177.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1550		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1550		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	24		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	117		70 - 127
Toluene-d8 (Surr)	111		80 - 125
4-Bromofluorobenzene (Surr)	86		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2454**

Lab Sample ID: 280-80605-34

Date Sampled: 03/05/2016 1000

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5178.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/16/2016 1611		Final Weight/Volume: 20 mL	
Prep Date: 03/16/2016 1611			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	1.1		0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	1.7		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
trans-1,2-Dichloroethene	41		0.15	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2454**

Lab Sample ID: 280-80605-34

Date Sampled: 03/05/2016 1000

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5178.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1611		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1611		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	1.8		0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	122		70 - 127
Toluene-d8 (Surr)	108		80 - 125
4-Bromofluorobenzene (Surr)	88		78 - 120
Dibromofluoromethane (Surr)	109		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2454**

Lab Sample ID: 280-80605-34

Date Sampled: 03/05/2016 1000

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317325	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2679.D
Dilution: 1.0		Initial Weight/Volume: 0.2 mL
Analysis Date: 03/18/2016 1343	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1343		

Analyte	Result (ug/L)	Qualifier	MDL	RL
cis-1,2-Dichloroethene	2900		15	100
1,1-Dichloroethene	170		23	100
Trichloroethene	240		16	100
Vinyl chloride	2100		10	100

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	79		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2523**

Lab Sample ID: 280-80605-35

Date Sampled: 03/05/2016 0800

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5179.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1632		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1632		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	5.6	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.35	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U *	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2523**

Lab Sample ID: 280-80605-35

Date Sampled: 03/05/2016 0800

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: Q5179.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1632		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1632		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113		70 - 127
Toluene-d8 (Surr)	106		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68B**

Lab Sample ID: 280-80605-36

Date Sampled: 03/07/2016 1355

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2640.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0649		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0649			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68B**

Lab Sample ID: 280-80605-36

Date Sampled: 03/07/2016 1355

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317161	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2640.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0649		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0649		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68C**

Lab Sample ID: 280-80605-37

Date Sampled: 03/07/2016 1035

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2233.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0923		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0923		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	4.1	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	1.9		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	11		0.15	1.0
trans-1,2-Dichloroethene	0.23	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68C**

Lab Sample ID: 280-80605-37

Date Sampled: 03/07/2016 1035

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2233.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0923		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0923		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	9.8		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		70 - 127
Toluene-d8 (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68D**

Lab Sample ID: 280-80605-38

Date Sampled: 03/07/2016 1145

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317162	Instrument ID: VMS_MS9	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2234.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/17/2016 0944		Final Weight/Volume: 20 mL	
Prep Date: 03/17/2016 0944			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	5.1	J	1.9	10
Benzene	0.30	J	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U *	0.31	1.0
1,1-Dichloroethane	0.75	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	42		0.15	1.0
trans-1,2-Dichloroethene	0.51	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68D**

Lab Sample ID: 280-80605-38

Date Sampled: 03/07/2016 1145

Client Matrix: Water

Date Received: 03/09/2016 1210

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2234.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0944		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0944		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	20		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114		70 - 127
Toluene-d8 (Surr)	103		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	109		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0524**

Lab Sample ID: 280-80605-1

Date Sampled: 03/05/2016 0835

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-316869	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2367.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0905		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0905		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.6		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0525**

Lab Sample ID: 280-80605-2

Date Sampled: 03/05/2016 0905

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-316869	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2366.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0846		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0846		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	3.4	F1 F2	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	89		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555A**

Lab Sample ID: 280-80605-3

Date Sampled: 03/07/2016 1435

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-316869	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2380.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1331		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1331		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555B**

Lab Sample ID: 280-80605-4

Date Sampled: 03/07/2016 1505

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2371.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1028			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1028				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	102		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0555C**

Lab Sample ID: 280-80605-5

Date Sampled: 03/07/2016 1530

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-316869	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2372.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1046		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1046		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.33	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	108		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0561-1

Lab Sample ID: 280-80605-6

Client Matrix: Water

Date Sampled: 03/05/2016 0835

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2373.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1117			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1117				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0561-2

Lab Sample ID: 280-80605-7

Date Sampled: 03/05/2016 0910

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2374.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1136			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1136				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	130	X	70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0561-3

Lab Sample ID: 280-80605-8

Client Matrix: Water

Date Sampled: 03/05/2016 0950

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2375.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1154			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1154				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.35	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	103		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0565-3**

Lab Sample ID: 280-80605-9

Date Sampled: 03/05/2016 1505

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2391.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1635			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1635				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.24	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	102		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0568-1

Lab Sample ID: 280-80605-10

Client Matrix: Water

Date Sampled: 03/07/2016 1040

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2397.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1828			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1828				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	102		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0568-2**

Lab Sample ID: 280-80605-11

Date Sampled: 03/07/2016 1110

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2398.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1853			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1853				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.79	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0568-3**

Lab Sample ID: 280-80605-12

Date Sampled: 03/07/2016 1145

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2399.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1912			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1912				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0569-1

Lab Sample ID: 280-80605-13

Client Matrix: Water

Date Sampled: 03/05/2016 1040

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2377.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1232			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1232				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0569-2

Lab Sample ID: 280-80605-14

Client Matrix: Water

Date Sampled: 03/05/2016 1145

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2378.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1250			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1250				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.5		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0569-3**

Lab Sample ID: 280-80605-15

Date Sampled: 03/05/2016 1415

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2379.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1309			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1309				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.83	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	102		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0570-1

Lab Sample ID: 280-80605-16

Client Matrix: Water

Date Sampled: 03/07/2016 0850

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2400.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1931			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1931				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0570-2**

Lab Sample ID: 280-80605-17

Date Sampled: 03/07/2016 0920

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2401.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1949			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1949				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.2		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0570-3**

Lab Sample ID: 280-80605-18

Date Sampled: 03/07/2016 1000

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2402.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2008			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2008				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.1		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	107		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0577-1

Lab Sample ID: 280-80605-19

Client Matrix: Water

Date Sampled: 03/07/2016 1540

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2403.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2027			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2027				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	103		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0579-1

Lab Sample ID: 280-80605-20

Client Matrix: Water

Date Sampled: 03/07/2016 1405

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2404.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2046			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2046				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	105		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0579-2**

Lab Sample ID: 280-80605-21

Date Sampled: 03/07/2016 1430

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2405.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2104			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2104				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0579-3**

Lab Sample ID: 280-80605-22

Date Sampled: 03/07/2016 1510

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2406.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2123			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2123				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	98		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0584-1

Lab Sample ID: 280-80605-23

Client Matrix: Water

Date Sampled: 03/05/2016 1155

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2381.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1350			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1350				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.5		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	94		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0584-2

Lab Sample ID: 280-80605-24

Client Matrix: Water

Date Sampled: 03/05/2016 1420

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2382.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1409			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1409				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.89	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	99		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0584-3**

Lab Sample ID: 280-80605-25

Date Sampled: 03/05/2016 1435

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2383.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1428			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1428				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0585-1

Lab Sample ID: 280-80605-26

Client Matrix: Water

Date Sampled: 03/05/2016 0945

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2384.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1447			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1447				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	5.7		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-2**

Lab Sample ID: 280-80605-27

Date Sampled: 03/05/2016 1025

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316869	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2385.D
Dilution:	1.0			Initial Weight/Volume:	2 mL
Analysis Date:	03/15/2016 1506			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1506				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	4.3	J	2.2	10
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0585-3**

Lab Sample ID: 280-80605-28

Date Sampled: 03/05/2016 1155

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2394.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1731			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1731				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	2.8		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	98		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0588-1

Lab Sample ID: 280-80605-29

Client Matrix: Water

Date Sampled: 03/07/2016 0850

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2407.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2142			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2142				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0588-2

Lab Sample ID: 280-80605-30

Client Matrix: Water

Date Sampled: 03/07/2016 0925

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2408.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2201			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2201				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	3.5		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0588-3

Lab Sample ID: 280-80605-31

Client Matrix: Water

Date Sampled: 03/07/2016 0950

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2409.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2220			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2220				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2450**

Lab Sample ID: 280-80605-33

Date Sampled: 03/05/2016 1015

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2395.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 1750			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1750				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.98	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2454**

Lab Sample ID: 280-80605-34

Date Sampled: 03/05/2016 1000

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2396.D
Dilution:	1.0			Initial Weight/Volume:	2 mL
Analysis Date:	03/15/2016 1809			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 1809				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	7.4	J	2.2	10
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	90		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68B**

Lab Sample ID: 280-80605-36

Date Sampled: 03/07/2016 1355

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2410.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2238			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2238				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68C**

Lab Sample ID: 280-80605-37

Date Sampled: 03/07/2016 1035

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2411.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2257			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2257				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	6.0		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	94		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S68D**

Lab Sample ID: 280-80605-38

Date Sampled: 03/07/2016 1145

Client Matrix: Water

Date Received: 03/09/2016 1210

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316950	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2412.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/15/2016 2316			Final Weight/Volume:	20 mL
Prep Date:	03/15/2016 2316				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.9		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B Volatile Organic Compounds (GC/MS)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-80605-1	PIN12-0524	101	115	108	89
280-80605-1 DL	PIN12-0524 DL	103	114	102	96
280-80605-2	PIN12-0525	98	114	100	98
280-80605-3	PIN12-0555A	98	86	104	103
280-80605-4	PIN12-0555B	103	91	102	99
280-80605-5	PIN12-0555C	102	90	103	100
280-80605-6	PIN12-0561-1	99	115	105	93
280-80605-7	PIN12-0561-2	97	115	100	112
280-80605-8	PIN12-0561-3	104	123	111	90
280-80605-9	PIN12-0565-3	103	120	108	89
280-80605-10	PIN12-0568-1	103	90	103	100
280-80605-11	PIN12-0568-2	104	93	99	101
280-80605-12	PIN12-0568-3	106	96	103	103
280-80605-13	PIN12-0569-1	106	123	103	92
280-80605-14	PIN12-0569-2	103	123	104	89
280-80605-15	PIN12-0569-3	103	93	102	101
280-80605-16	PIN12-0570-1	103	91	101	103
280-80605-17	PIN12-0570-2	103	91	104	102
280-80605-18	PIN12-0570-3	105	96	100	104
280-80605-19	PIN12-0577-1	105	93	104	104
280-80605-20	PIN12-0579-1	106	96	99	99
280-80605-21	PIN12-0579-2	105	96	100	102
280-80605-22	PIN12-0579-3	104	91	103	104
280-80605-23	PIN12-0584-1	103	120	104	92
280-80605-24 DL	PIN12-0584-2 DL	103	86	102	101
280-80605-24	PIN12-0584-2	95	115	100	108
280-80605-25	PIN12-0584-3	98	119	97	94
280-80605-26	PIN12-0585-1	103	121	112	90
280-80605-27 DL	PIN12-0585-2 DL	104	81	103	97

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B Volatile Organic Compounds (GC/MS)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-80605-27	PIN12-0585-2	103	121	102	94
280-80605-28	PIN12-0585-3	108	91	102	104
280-80605-28 DL	PIN12-0585-3 DL	103	84	100	97
280-80605-29	PIN12-0588-1	103	91	101	100
280-80605-30	PIN12-0588-2	101	89	103	102
280-80605-31	PIN12-0588-3	102	90	103	102
280-80605-32	PIN12-2199	103	116	102	98
280-80605-33	PIN12-2450	100	117	111	86
280-80605-34 DL	PIN12-2454 DL	102	79	102	98
280-80605-34	PIN12-2454	109	122	108	88
280-80605-35	PIN12-2523	97	113	106	96
280-80605-36	PIN12-S68B	103	88	103	102
280-80605-37	PIN12-S68C	102	106	97	98
280-80605-38	PIN12-S68D	109	114	103	103
MB 280-316991/6		106	115	101	95
MB 280-317161/6		104	92	101	100
MB 280-317162/6		103	104	99	95
MB 280-317325/6		103	83	103	100
LCS 280-316991/4		105	115	104	91
LCS 280-317161/4		101	94	109	96
LCS 280-317162/4		99	104	95	93
LCS 280-317325/4		102	87	110	102
LCSD 280-317162/5		104	106	99	97
LCSD 280-317325/5		104	90	111	94
280-80605-1 MS	PIN12-0524 MS	104	122	108	87
280-80605-3 MS	PIN12-0555A MS	103	93	111	98
280-80625-C-6 MS		97	101	93	91
160-16465-O-1 MS		115	124	109	105
280-80654-M-4 MS		101	84	115	99
280-80605-1 MSD	PIN12-0524 MSD	106	122	109	86

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B Volatile Organic Compounds (GC/MS)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-80605-3 MSD	PIN12-0555A MSD	101	93	111	96
280-80625-C-6 MSD		99	102	94	94
160-16465-O-1 MSD		104	112	99	94
280-80654-P-4 MSD		102	86	109	103

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec
280-80605-1	PIN12-0524	104
280-80605-2	PIN12-0525	89
280-80605-3	PIN12-0555A	97
280-80605-4	PIN12-0555B	102
280-80605-5	PIN12-0555C	108
280-80605-6	PIN12-0561-1	100
280-80605-7	PIN12-0561-2	130X
280-80605-8	PIN12-0561-3	103
280-80605-9	PIN12-0565-3	102
280-80605-10	PIN12-0568-1	102
280-80605-11	PIN12-0568-2	107
280-80605-12	PIN12-0568-3	104
280-80605-13	PIN12-0569-1	104
280-80605-14	PIN12-0569-2	107
280-80605-15	PIN12-0569-3	102
280-80605-16	PIN12-0570-1	101
280-80605-17	PIN12-0570-2	101
280-80605-18	PIN12-0570-3	107
280-80605-19	PIN12-0577-1	103
280-80605-20	PIN12-0579-1	105
280-80605-21	PIN12-0579-2	95
280-80605-22	PIN12-0579-3	98
280-80605-23	PIN12-0584-1	94
280-80605-24	PIN12-0584-2	99
280-80605-25	PIN12-0584-3	104
280-80605-26	PIN12-0585-1	101
280-80605-27	PIN12-0585-2	97
280-80605-28	PIN12-0585-3	98
280-80605-29	PIN12-0588-1	104

Surrogate

Acceptance Limits

DCA = 1,2-Dichloroethane-d4 (Surr)

70-127

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec
280-80605-30	PIN12-0588-2	97
280-80605-31	PIN12-0588-3	95
280-80605-33	PIN12-2450	100
280-80605-34	PIN12-2454	90
280-80605-36	PIN12-S68B	95
280-80605-37	PIN12-S68C	94
280-80605-38	PIN12-S68D	97
MB 280-316869/4		97
MB 280-316950/4		95
LCS 280-316869/3		103
LCS 280-316950/3		100
280-80605-2 MS	PIN12-0525 MS	98
280-80605-9 MS	PIN12-0565-3 MS	96
280-80605-2 MSD	PIN12-0525 MSD	104
280-80605-9 MSD	PIN12-0565-3 MSD	108

Surrogate

Acceptance Limits

DCA = 1,2-Dichloroethane-d4 (Surr)

70-127

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Method Blank - Batch: 280-316991**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-316991/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/16/2016 0835  
 Prep Date: 03/16/2016 0835  
 Leach Date: N/A

Analysis Batch: 280-316991  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_Q  
 Lab File ID: Q5157.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Method Blank - Batch: 280-316991**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-316991/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/16/2016 0835  
 Prep Date: 03/16/2016 0835  
 Leach Date: N/A

Analysis Batch: 280-316991  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_Q  
 Lab File ID: Q5157.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115	70 - 127
Toluene-d8 (Surr)	101	80 - 125
4-Bromofluorobenzene (Surr)	95	78 - 120
Dibromofluoromethane (Surr)	106	77 - 120



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-316991**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-316991/4	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Q5156.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0814	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0814		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	4.75	95	65 - 135	
Bromodichloromethane	5.00	4.58	92	65 - 135	
Carbon tetrachloride	5.00	4.84	97	65 - 135	
Chlorobenzene	5.00	4.84	97	65 - 135	
Chloroform	5.00	5.07	101	65 - 135	
1,3-Dichlorobenzene	5.00	4.74	95	65 - 135	
1,1-Dichloroethane	5.00	4.92	98	65 - 135	
trans-1,2-Dichloroethene	5.00	4.57	91	65 - 135	
1,1-Dichloroethene	5.00	4.24	85	65 - 136	
1,2-Dichloropropane	5.00	5.08	102	64 - 135	
Ethylbenzene	5.00	4.83	97	65 - 135	
Methylene Chloride	5.00	4.57	91	54 - 141	
Tetrachloroethene	5.00	4.46	89	65 - 135	
Toluene	5.00	4.14	83	65 - 135	
1,1,1-Trichloroethane	5.00	4.77	95	65 - 135	
Trichloroethene	5.00	4.45	89	65 - 135	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115	70 - 127
Toluene-d8 (Surr)	104	80 - 125
4-Bromofluorobenzene (Surr)	91	78 - 120
Dibromofluoromethane (Surr)	105	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316991**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80605-1	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Q5161.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1019		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1019		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80605-1	Analysis Batch: 280-316991	Instrument ID: VMS_Q
Client Matrix: Water	Prep Batch: N/A	Lab File ID: Q5162.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1040		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1040		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	97	98	65 - 135	1	20		
Bromodichloromethane	96	95	65 - 135	1	20		
Carbon tetrachloride	101	105	65 - 135	3	21		
Chlorobenzene	99	100	65 - 135	0	20		
Chloroform	104	106	65 - 135	1	20		
1,3-Dichlorobenzene	98	98	65 - 135	0	20		
1,1-Dichloroethane	102	103	65 - 135	1	21		
trans-1,2-Dichloroethene	92	95	65 - 135	2	24		
1,1-Dichloroethene	86	94	65 - 136	5	20		
1,2-Dichloropropane	106	107	64 - 135	1	20		
Ethylbenzene	102	103	65 - 135	1	20		
Methylene Chloride	94	96	54 - 141	2	26		
Tetrachloroethene	101	102	65 - 135	1	20		
Toluene	86	86	65 - 135	1	20		
1,1,1-Trichloroethane	99	102	65 - 135	3	20		
Trichloroethene	97	97	65 - 135	0	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		122	122			70 - 127	
Toluene-d8 (Surr)		108	109			80 - 125	
4-Bromofluorobenzene (Surr)		87	86			78 - 120	
Dibromofluoromethane (Surr)		104	106			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316991**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80605-1                      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/16/2016 1019  
Prep Date: 03/16/2016 1019  
Leach Date: N/A

MSD Lab Sample ID: 280-80605-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/16/2016 1040  
Prep Date: 03/16/2016 1040  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	1.1		5.00	5.00	5.91	5.97
Bromodichloromethane	0.17	U	5.00	5.00	4.81	4.74
Carbon tetrachloride	0.19	U	5.00	5.00	5.06	5.24
Chlorobenzene	0.17	U	5.00	5.00	4.97	4.98
Chloroform	0.16	U	5.00	5.00	5.22	5.29
1,3-Dichlorobenzene	0.13	U	5.00	5.00	4.90	4.90
1,1-Dichloroethane	0.29	J	5.00	5.00	5.39	5.44
trans-1,2-Dichloroethene	1.5		5.00	5.00	6.04	6.19
1,1-Dichloroethene	3.1		5.00	5.00	7.43	7.83
1,2-Dichloropropane	0.18	U	5.00	5.00	5.32	5.35
Ethylbenzene	0.16	U	5.00	5.00	5.10	5.17
Methylene Chloride	0.32	U	5.00	5.00	4.72	4.80
Tetrachloroethene	0.20	U	5.00	5.00	5.06	5.11
Toluene	0.17	U	5.00	5.00	4.28	4.31
1,1,1-Trichloroethane	0.16	U	5.00	5.00	4.93	5.10
Trichloroethene	0.16	U	5.00	5.00	4.84	4.84

# Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317161**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317161/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/16/2016 2209  
 Prep Date: 03/16/2016 2209  
 Leach Date: N/A

Analysis Batch: 280-317161  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2618.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317161**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317161/6	Analysis Batch: 280-317161	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2618.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 2209	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 2209		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	70 - 127
Toluene-d8 (Surr)	101	80 - 125
4-Bromofluorobenzene (Surr)	100	78 - 120
Dibromofluoromethane (Surr)	104	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-317161**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-317161/4	Analysis Batch: 280-317161	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2616.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 2121	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 2121		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	5.24	105	65 - 135	
Bromodichloromethane	5.00	4.92	98	65 - 135	
Carbon tetrachloride	5.00	5.33	107	65 - 135	
Chlorobenzene	5.00	5.06	101	65 - 135	
Chloroform	5.00	5.06	101	65 - 135	
1,3-Dichlorobenzene	5.00	5.11	102	65 - 135	
1,1-Dichloroethane	5.00	4.95	99	65 - 135	
trans-1,2-Dichloroethene	5.00	5.32	106	65 - 135	
1,1-Dichloroethene	5.00	5.09	102	65 - 136	
1,2-Dichloropropane	5.00	5.28	106	64 - 135	
Ethylbenzene	5.00	5.14	103	65 - 135	
Methylene Chloride	5.00	4.66	93	54 - 141	
Tetrachloroethene	5.00	5.19	104	65 - 135	
Toluene	5.00	5.45	109	65 - 135	
1,1,1-Trichloroethane	5.00	5.22	104	65 - 135	
Trichloroethene	5.00	5.36	107	65 - 135	
<hr/>					
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		94		70 - 127	
Toluene-d8 (Surr)		109		80 - 125	
4-Bromofluorobenzene (Surr)		96		78 - 120	
Dibromofluoromethane (Surr)		101		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317161**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80605-3	Analysis Batch: 280-317161	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2620.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 2256		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 2256		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80605-3	Analysis Batch: 280-317161	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2621.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 2320		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 2320		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	106	103	65 - 135	3	20		
Bromodichloromethane	96	95	65 - 135	2	20		
Carbon tetrachloride	108	106	65 - 135	1	21		
Chlorobenzene	102	101	65 - 135	1	20		
Chloroform	100	101	65 - 135	0	20		
1,3-Dichlorobenzene	104	100	65 - 135	4	20		
1,1-Dichloroethane	101	98	65 - 135	3	21		
trans-1,2-Dichloroethene	109	105	65 - 135	3	24		
1,1-Dichloroethene	104	101	65 - 136	3	20		
1,2-Dichloropropane	101	103	64 - 135	3	20		
Ethylbenzene	103	103	65 - 135	0	20		
Methylene Chloride	112	111	54 - 141	1	26		
Tetrachloroethene	104	103	65 - 135	1	20		
Toluene	110	107	65 - 135	3	20		
1,1,1-Trichloroethane	105	103	65 - 135	2	20		
Trichloroethene	106	105	65 - 135	1	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		93	93			70 - 127	
Toluene-d8 (Surr)		111	111			80 - 125	
4-Bromofluorobenzene (Surr)		98	96			78 - 120	
Dibromofluoromethane (Surr)		103	101			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317161**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80605-3                      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/16/2016 2256  
Prep Date: 03/16/2016 2256  
Leach Date: N/A

MSD Lab Sample ID: 280-80605-3  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/16/2016 2320  
Prep Date: 03/16/2016 2320  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	5.32	5.15
Bromodichloromethane	0.17	U	5.00	5.00	4.82	4.74
Carbon tetrachloride	0.19	U	5.00	5.00	5.38	5.32
Chlorobenzene	0.17	U	5.00	5.00	5.09	5.04
Chloroform	0.16	U	5.00	5.00	5.01	5.03
1,3-Dichlorobenzene	0.13	U	5.00	5.00	5.22	4.99
1,1-Dichloroethane	0.22	U	5.00	5.00	5.04	4.90
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	5.44	5.27
1,1-Dichloroethene	0.23	U	5.00	5.00	5.21	5.05
1,2-Dichloropropane	0.18	U	5.00	5.00	5.04	5.17
Ethylbenzene	0.16	U	5.00	5.00	5.16	5.17
Methylene Chloride	0.32	U	5.00	5.00	5.62	5.54
Tetrachloroethene	0.20	U	5.00	5.00	5.19	5.13
Toluene	0.17	U	5.00	5.00	5.50	5.36
1,1,1-Trichloroethane	0.16	U	5.00	5.00	5.23	5.13
Trichloroethene	0.16	U	5.00	5.00	5.31	5.27



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317162**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317162/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/17/2016 0820  
 Prep Date: 03/17/2016 0820  
 Leach Date: N/A

Analysis Batch: 280-317162  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_MS9  
 Lab File ID: MS9\_2230.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317162**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317162/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/17/2016 0820  
 Prep Date: 03/17/2016 0820  
 Leach Date: N/A

Analysis Batch: 280-317162  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_MS9  
 Lab File ID: MS9\_2230.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104	70 - 127
Toluene-d8 (Surr)	99	80 - 125
4-Bromofluorobenzene (Surr)	95	78 - 120
Dibromofluoromethane (Surr)	103	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Lab Control Sample/**

**Lab Control Sample Duplicate Recovery Report - Batch: 280-317162**

**Method: 8260B**

**Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317162/4	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2228.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0724	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0724		20 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-317162/5	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2229.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0746	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0746		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	84	91	65 - 135	9	20		
Bromodichloromethane	92	100	65 - 135	8	20		
Carbon tetrachloride	94	103	65 - 135	9	21		
Chlorobenzene	84	92	65 - 135	9	20		
Chloroform	90	97	65 - 135	7	20		
1,3-Dichlorobenzene	82	88	65 - 135	6	20		
1,1-Dichloroethane	84	91	65 - 135	8	21		
trans-1,2-Dichloroethene	82	91	65 - 135	10	24		
1,1-Dichloroethene	77	85	65 - 136	9	20		
1,2-Dichloropropane	85	93	64 - 135	8	20		
Ethylbenzene	84	91	65 - 135	9	20		
Methylene Chloride	83	90	54 - 141	8	26		
Tetrachloroethene	83	91	65 - 135	10	20		
Toluene	85	94	65 - 135	11	20		
1,1,1-Trichloroethane	90	97	65 - 135	8	20		
Trichloroethene	87	93	65 - 135	7	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104	106	70 - 127
Toluene-d8 (Surr)	95	99	80 - 125
4-Bromofluorobenzene (Surr)	93	97	78 - 120
Dibromofluoromethane (Surr)	99	104	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 280-317162**

**Method: 8260B  
Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317162/4      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 0724  
Prep Date: 03/17/2016 0724  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-317162/5  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 0746  
Prep Date: 03/17/2016 0746  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Benzene	5.00	5.00	4.19	4.56
Bromodichloromethane	5.00	5.00	4.62	5.01
Carbon tetrachloride	5.00	5.00	4.71	5.17
Chlorobenzene	5.00	5.00	4.19	4.60
Chloroform	5.00	5.00	4.49	4.83
1,3-Dichlorobenzene	5.00	5.00	4.11	4.38
1,1-Dichloroethane	5.00	5.00	4.19	4.53
trans-1,2-Dichloroethene	5.00	5.00	4.12	4.57
1,1-Dichloroethene	5.00	5.00	3.87	4.24
1,2-Dichloropropane	5.00	5.00	4.27	4.63
Ethylbenzene	5.00	5.00	4.18	4.57
Methylene Chloride	5.00	5.00	4.15	4.48
Tetrachloroethene	5.00	5.00	4.14	4.57
Toluene	5.00	5.00	4.24	4.72
1,1,1-Trichloroethane	5.00	5.00	4.48	4.86
Trichloroethene	5.00	5.00	4.33	4.65

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317162**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80625-C-6 MS	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2235.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 1005		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 1005		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80625-C-6 MSD	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2236.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 1027		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 1027		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	80	87	65 - 135	9	20		
Bromodichloromethane	84	94	65 - 135	11	20		
Carbon tetrachloride	95	102	65 - 135	7	21		
Chlorobenzene	78	84	65 - 135	7	20		
Chloroform	82	91	65 - 135	8	20		
1,3-Dichlorobenzene	77	85	65 - 135	10	20		
1,1-Dichloroethane	80	86	65 - 135	7	21		
trans-1,2-Dichloroethene	79	87	65 - 135	9	24		
1,1-Dichloroethene	78	83	65 - 136	6	20		
1,2-Dichloropropane	77	86	64 - 135	11	20		
Ethylbenzene	78	84	65 - 135	7	20		
Methylene Chloride	71	79	54 - 141	10	26		
Tetrachloroethene	81	86	65 - 135	6	20		
Toluene	81	89	65 - 135	9	20		
1,1,1-Trichloroethane	92	97	65 - 135	6	20		
Trichloroethene	80	88	65 - 135	10	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		101	102			70 - 127	
Toluene-d8 (Surr)		93	94			80 - 125	
4-Bromofluorobenzene (Surr)		91	94			78 - 120	
Dibromofluoromethane (Surr)		97	99			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317162**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 160-16465-O-1 MS	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2254.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 1648		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 1648		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 160-16465-O-1 MSD	Analysis Batch: 280-317162	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2255.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 1709		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 1709		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	91	85	65 - 135	8	20		
Bromodichloromethane	102	95	65 - 135	8	20		
Carbon tetrachloride	106	99	65 - 135	7	21		
Chlorobenzene	92	83	65 - 135	10	20		
Chloroform	100	92	65 - 135	8	20		
1,3-Dichlorobenzene	89	80	65 - 135	10	20		
1,1-Dichloroethane	91	87	65 - 135	5	21		
trans-1,2-Dichloroethene	90	84	65 - 135	7	24		
1,1-Dichloroethene	84	80	65 - 136	5	20		
1,2-Dichloropropane	93	86	64 - 135	7	20		
Ethylbenzene	88	81	65 - 135	8	20		
Methylene Chloride	88	83	54 - 141	6	26		
Tetrachloroethene	88	83	65 - 135	7	20		
Toluene	95	86	65 - 135	10	20		
1,1,1-Trichloroethane	102	94	65 - 135	8	20		
Trichloroethene	95	86	65 - 135	9	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		124	112			70 - 127	
Toluene-d8 (Surr)		109	99			80 - 125	
4-Bromofluorobenzene (Surr)		105	94			78 - 120	
Dibromofluoromethane (Surr)		115	104			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317162**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80625-C-6 MS      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 1005  
Prep Date: 03/17/2016 1005  
Leach Date: N/A

MSD Lab Sample ID: 280-80625-C-6 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 1027  
Prep Date: 03/17/2016 1027  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	3.99	4.35
Bromodichloromethane	0.17	U	5.00	5.00	4.19	4.69
Carbon tetrachloride	0.19	U	5.00	5.00	4.75	5.09
Chlorobenzene	0.17	U	5.00	5.00	3.89	4.19
Chloroform	0.86	J	5.00	5.00	4.97	5.40
1,3-Dichlorobenzene	0.13	U	5.00	5.00	3.83	4.25
1,1-Dichloroethane	0.22	U	5.00	5.00	4.00	4.28
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	3.95	4.34
1,1-Dichloroethene	0.23	U	5.00	5.00	3.92	4.16
1,2-Dichloropropane	0.18	U	5.00	5.00	3.87	4.32
Ethylbenzene	0.16	U	5.00	5.00	3.92	4.20
Methylene Chloride	0.32	U	5.00	5.00	3.56	3.93
Tetrachloroethene	0.20	U	5.00	5.00	4.07	4.30
Toluene	0.20	J	5.00	5.00	4.24	4.62
1,1,1-Trichloroethane	0.16	U	5.00	5.00	4.60	4.87
Trichloroethene	0.16	U	5.00	5.00	4.01	4.41

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317162**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 160-16465-O-1 MS      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 1648  
Prep Date: 03/17/2016 1648  
Leach Date: N/A

MSD Lab Sample ID: 160-16465-O-1 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/17/2016 1709  
Prep Date: 03/17/2016 1709  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	4.57	4.23
Bromodichloromethane	0.17	U	5.00	5.00	5.10	4.74
Carbon tetrachloride	0.19	U	5.00	5.00	5.31	4.93
Chlorobenzene	0.17	U	5.00	5.00	4.59	4.16
Chloroform	0.16	U	5.00	5.00	4.98	4.59
1,3-Dichlorobenzene	0.13	U	5.00	5.00	4.43	4.02
1,1-Dichloroethane	0.22	U	5.00	5.00	4.55	4.34
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	4.50	4.21
1,1-Dichloroethene	0.23	U	5.00	5.00	4.18	3.99
1,2-Dichloropropane	0.18	U	5.00	5.00	4.64	4.32
Ethylbenzene	0.16	U	5.00	5.00	4.40	4.05
Methylene Chloride	0.32	U	5.00	5.00	4.39	4.14
Tetrachloroethene	0.20	U	5.00	5.00	4.41	4.13
Toluene	0.17	U	5.00	5.00	4.74	4.29
1,1,1-Trichloroethane	0.16	U	5.00	5.00	5.11	4.70
Trichloroethene	0.76	J	5.00	5.00	5.51	5.05



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317325**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317325/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/18/2016 0859  
 Prep Date: 03/18/2016 0859  
 Leach Date: N/A

Analysis Batch: 280-317325  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2667.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317325**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317325/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/18/2016 0859  
 Prep Date: 03/18/2016 0859  
 Leach Date: N/A

Analysis Batch: 280-317325  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2667.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83	70 - 127
Toluene-d8 (Surr)	103	80 - 125
4-Bromofluorobenzene (Surr)	100	78 - 120
Dibromofluoromethane (Surr)	103	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Lab Control Sample/**

**Method: 8260B**

**Lab Control Sample Duplicate Recovery Report - Batch: 280-317325**

**Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317325/4	Analysis Batch: 280-317325	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2664.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 0748	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 0748		20 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-317325/5	Analysis Batch: 280-317325	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2665.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 0812	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 0812		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	99	100	65 - 135	1	20		
Bromodichloromethane	87	92	65 - 135	6	20		
Carbon tetrachloride	91	94	65 - 135	3	21		
Chlorobenzene	96	99	65 - 135	2	20		
Chloroform	91	94	65 - 135	2	20		
1,3-Dichlorobenzene	97	90	65 - 135	8	20		
1,1-Dichloroethane	90	93	65 - 135	3	21		
trans-1,2-Dichloroethene	100	100	65 - 135	1	24		
1,1-Dichloroethene	95	99	65 - 136	4	20		
1,2-Dichloropropane	98	100	64 - 135	2	20		
Ethylbenzene	93	98	65 - 135	5	20		
Methylene Chloride	90	94	54 - 141	4	26		
Tetrachloroethene	92	96	65 - 135	3	20		
Toluene	99	102	65 - 135	3	20		
1,1,1-Trichloroethane	94	95	65 - 135	1	20		
Trichloroethene	97	99	65 - 135	2	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87	90	70 - 127
Toluene-d8 (Surr)	110	111	80 - 125
4-Bromofluorobenzene (Surr)	102	94	78 - 120
Dibromofluoromethane (Surr)	102	104	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 280-317325**

**Method: 8260B  
Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317325/4      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/18/2016 0748  
Prep Date: 03/18/2016 0748  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-317325/5  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/18/2016 0812  
Prep Date: 03/18/2016 0812  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Benzene	5.00	5.00	4.96	5.00
Bromodichloromethane	5.00	5.00	4.34	4.61
Carbon tetrachloride	5.00	5.00	4.56	4.68
Chlorobenzene	5.00	5.00	4.81	4.93
Chloroform	5.00	5.00	4.57	4.68
1,3-Dichlorobenzene	5.00	5.00	4.86	4.50
1,1-Dichloroethane	5.00	5.00	4.51	4.63
trans-1,2-Dichloroethene	5.00	5.00	4.98	5.02
1,1-Dichloroethene	5.00	5.00	4.73	4.94
1,2-Dichloropropane	5.00	5.00	4.89	5.01
Ethylbenzene	5.00	5.00	4.67	4.88
Methylene Chloride	5.00	5.00	4.50	4.69
Tetrachloroethene	5.00	5.00	4.62	4.78
Toluene	5.00	5.00	4.96	5.10
1,1,1-Trichloroethane	5.00	5.00	4.69	4.74
Trichloroethene	5.00	5.00	4.85	4.97

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317325**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80654-M-4 MS	Analysis Batch: 280-317325	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2673.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1121		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1121		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80654-P-4 MSD	Analysis Batch: 280-317325	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2674.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1144		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1144		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	100	99	65 - 135	2	20		
Bromodichloromethane	90	92	65 - 135	2	20		
Carbon tetrachloride	99	95	65 - 135	4	21		
Chlorobenzene	102	97	65 - 135	5	20		
Chloroform	95	95	65 - 135	0	20		
1,3-Dichlorobenzene	96	101	65 - 135	5	20		
1,1-Dichloroethane	92	90	65 - 135	2	21		
trans-1,2-Dichloroethene	107	99	65 - 135	8	24		
1,1-Dichloroethene	102	96	65 - 136	4	20		
1,2-Dichloropropane	99	98	64 - 135	1	20		
Ethylbenzene	104	97	65 - 135	7	20		
Methylene Chloride	84	84	54 - 141	0	26		
Tetrachloroethene	105	94	65 - 135	9	20		
Toluene	104	103	65 - 135	1	20		
1,1,1-Trichloroethane	97	93	65 - 135	4	20		
Trichloroethene	105	96	65 - 135	6	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		84	86			70 - 127	
Toluene-d8 (Surr)		115	109			80 - 125	
4-Bromofluorobenzene (Surr)		99	103			78 - 120	
Dibromofluoromethane (Surr)		101	102			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317325**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80654-M-4 MS      Units: ug/L  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/18/2016 1121  
 Prep Date: 03/18/2016 1121  
 Leach Date: N/A

MSD Lab Sample ID: 280-80654-P-4 MSD  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/18/2016 1144  
 Prep Date: 03/18/2016 1144  
 Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	5.01	4.93
Bromodichloromethane	0.17	U	5.00	5.00	4.51	4.60
Carbon tetrachloride	0.19	U	5.00	5.00	4.93	4.75
Chlorobenzene	0.17	U	5.00	5.00	5.09	4.84
Chloroform	0.16	U	5.00	5.00	4.77	4.76
1,3-Dichlorobenzene	0.13	U	5.00	5.00	4.79	5.04
1,1-Dichloroethane	0.85	J	5.00	5.00	5.46	5.35
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	5.36	4.96
1,1-Dichloroethene	2.3		5.00	5.00	7.40	7.08
1,2-Dichloropropane	0.18	U	5.00	5.00	4.94	4.91
Ethylbenzene	0.16	U	5.00	5.00	5.20	4.84
Methylene Chloride	0.32	U	5.00	5.00	4.18	4.19
Tetrachloroethene	0.98	J	5.00	5.00	6.24	5.68
Toluene	0.17	U	5.00	5.00	5.18	5.13
1,1,1-Trichloroethane	0.26	J	5.00	5.00	5.08	4.89
Trichloroethene	1.8		5.00	5.00	7.03	6.60

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-316869**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-316869/4	Analysis Batch: 280-316869	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2364.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0805	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0805		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		70 - 127	

**Lab Control Sample - Batch: 280-316869**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-316869/3	Analysis Batch: 280-316869	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2363.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0746	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0746		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	5.23	105	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		103		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316869**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80605-2	Analysis Batch: 280-316869	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2368.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0931		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0931		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80605-2	Analysis Batch: 280-316869	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2369.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 0950		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 0950		20 mL
Leach Date: N/A		

Analyte	<u>% Rec.</u>		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	167	102	25 - 141	32	20	F1	F2
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		98	104			70 - 127	

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316869**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80605-2	Units: ug/L	MSD Lab Sample ID: 280-80605-2
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 03/15/2016 0931		Analysis Date: 03/15/2016 0950
Prep Date: 03/15/2016 0931		Prep Date: 03/15/2016 0950
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	3.4	5.00	5.00	11.7 F1	8.48 F2



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-316950**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-316950/4	Analysis Batch: 280-316950	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2390.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1616	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1616		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		70 - 127	

**Lab Control Sample - Batch: 280-316950**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-316950/3	Analysis Batch: 280-316950	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2389.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1557	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1557		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	4.77	95	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316950**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80605-9	Analysis Batch: 280-316950	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2392.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1654		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1654		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80605-9	Analysis Batch: 280-316950	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2393.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/15/2016 1713		Final Weight/Volume: 20 mL
Prep Date: 03/15/2016 1713		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	102	100	25 - 141	2	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		96	108			70 - 127	

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316950**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80605-9	Units: ug/L	MSD Lab Sample ID: 280-80605-9
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 03/15/2016 1654		Analysis Date: 03/15/2016 1713
Prep Date: 03/15/2016 1654		Prep Date: 03/15/2016 1713
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	0.24 J	5.00	5.00	5.32	5.24

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-316869</b>					
LCS 280-316869/3	Lab Control Sample	T	Water	8260B SIM	
MB 280-316869/4	Method Blank	T	Water	8260B SIM	
280-80605-1	PIN12-0524	T	Water	8260B SIM	
280-80605-2	PIN12-0525	T	Water	8260B SIM	
280-80605-2MS	Matrix Spike	T	Water	8260B SIM	
280-80605-2MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
280-80605-3	PIN12-0555A	T	Water	8260B SIM	
280-80605-4	PIN12-0555B	T	Water	8260B SIM	
280-80605-5	PIN12-0555C	T	Water	8260B SIM	
280-80605-6	PIN12-0561-1	T	Water	8260B SIM	
280-80605-7	PIN12-0561-2	T	Water	8260B SIM	
280-80605-8	PIN12-0561-3	T	Water	8260B SIM	
280-80605-13	PIN12-0569-1	T	Water	8260B SIM	
280-80605-14	PIN12-0569-2	T	Water	8260B SIM	
280-80605-15	PIN12-0569-3	T	Water	8260B SIM	
280-80605-23	PIN12-0584-1	T	Water	8260B SIM	
280-80605-24	PIN12-0584-2	T	Water	8260B SIM	
280-80605-25	PIN12-0584-3	T	Water	8260B SIM	
280-80605-26	PIN12-0585-1	T	Water	8260B SIM	
280-80605-27	PIN12-0585-2	T	Water	8260B SIM	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-316950</b>					
LCS 280-316950/3	Lab Control Sample	T	Water	8260B SIM	
MB 280-316950/4	Method Blank	T	Water	8260B SIM	
280-80605-9	PIN12-0565-3	T	Water	8260B SIM	
280-80605-9MS	Matrix Spike	T	Water	8260B SIM	
280-80605-9MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
280-80605-10	PIN12-0568-1	T	Water	8260B SIM	
280-80605-11	PIN12-0568-2	T	Water	8260B SIM	
280-80605-12	PIN12-0568-3	T	Water	8260B SIM	
280-80605-16	PIN12-0570-1	T	Water	8260B SIM	
280-80605-17	PIN12-0570-2	T	Water	8260B SIM	
280-80605-18	PIN12-0570-3	T	Water	8260B SIM	
280-80605-19	PIN12-0577-1	T	Water	8260B SIM	
280-80605-20	PIN12-0579-1	T	Water	8260B SIM	
280-80605-21	PIN12-0579-2	T	Water	8260B SIM	
280-80605-22	PIN12-0579-3	T	Water	8260B SIM	
280-80605-28	PIN12-0585-3	T	Water	8260B SIM	
280-80605-29	PIN12-0588-1	T	Water	8260B SIM	
280-80605-30	PIN12-0588-2	T	Water	8260B SIM	
280-80605-31	PIN12-0588-3	T	Water	8260B SIM	
280-80605-33	PIN12-2450	T	Water	8260B SIM	
280-80605-34	PIN12-2454	T	Water	8260B SIM	
280-80605-36	PIN12-S68B	T	Water	8260B SIM	
280-80605-37	PIN12-S68C	T	Water	8260B SIM	
280-80605-38	PIN12-S68D	T	Water	8260B SIM	

# Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

## QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-316991</b>					
LCS 280-316991/4	Lab Control Sample	T	Water	8260B	
MB 280-316991/6	Method Blank	T	Water	8260B	
280-80605-1	PIN12-0524	T	Water	8260B	
280-80605-1DL	PIN12-0524	T	Water	8260B	
280-80605-1MS	Matrix Spike	T	Water	8260B	
280-80605-1MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80605-2	PIN12-0525	T	Water	8260B	
280-80605-6	PIN12-0561-1	T	Water	8260B	
280-80605-7	PIN12-0561-2	T	Water	8260B	
280-80605-8	PIN12-0561-3	T	Water	8260B	
280-80605-9	PIN12-0565-3	T	Water	8260B	
280-80605-13	PIN12-0569-1	T	Water	8260B	
280-80605-14	PIN12-0569-2	T	Water	8260B	
280-80605-23	PIN12-0584-1	T	Water	8260B	
280-80605-24	PIN12-0584-2	T	Water	8260B	
280-80605-25	PIN12-0584-3	T	Water	8260B	
280-80605-26	PIN12-0585-1	T	Water	8260B	
280-80605-27	PIN12-0585-2	T	Water	8260B	
280-80605-32	PIN12-2199	T	Water	8260B	
280-80605-33	PIN12-2450	T	Water	8260B	
280-80605-34	PIN12-2454	T	Water	8260B	
280-80605-35	PIN12-2523	T	Water	8260B	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-317161</b>					
LCS 280-317161/4	Lab Control Sample	T	Water	8260B	
MB 280-317161/6	Method Blank	T	Water	8260B	
280-80605-3	PIN12-0555A	T	Water	8260B	
280-80605-3MS	Matrix Spike	T	Water	8260B	
280-80605-3MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80605-4	PIN12-0555B	T	Water	8260B	
280-80605-5	PIN12-0555C	T	Water	8260B	
280-80605-10	PIN12-0568-1	T	Water	8260B	
280-80605-11	PIN12-0568-2	T	Water	8260B	
280-80605-12	PIN12-0568-3	T	Water	8260B	
280-80605-15	PIN12-0569-3	T	Water	8260B	
280-80605-16	PIN12-0570-1	T	Water	8260B	
280-80605-17	PIN12-0570-2	T	Water	8260B	
280-80605-18	PIN12-0570-3	T	Water	8260B	
280-80605-19	PIN12-0577-1	T	Water	8260B	
280-80605-20	PIN12-0579-1	T	Water	8260B	
280-80605-21	PIN12-0579-2	T	Water	8260B	
280-80605-22	PIN12-0579-3	T	Water	8260B	
280-80605-29	PIN12-0588-1	T	Water	8260B	
280-80605-30	PIN12-0588-2	T	Water	8260B	
280-80605-31	PIN12-0588-3	T	Water	8260B	
280-80605-36	PIN12-S68B	T	Water	8260B	
<b>Analysis Batch:280-317162</b>					
LCS 280-317162/4	Lab Control Sample	T	Water	8260B	
LCSD 280-317162/5	Lab Control Sample Duplicate	T	Water	8260B	
MB 280-317162/6	Method Blank	T	Water	8260B	
160-16465-O-1 MS	Matrix Spike	T	Water	8260B	
160-16465-O-1 MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80605-37	PIN12-S68C	T	Water	8260B	
280-80605-38	PIN12-S68D	T	Water	8260B	
280-80625-C-6 MS	Matrix Spike	T	Water	8260B	
280-80625-C-6 MSD	Matrix Spike Duplicate	T	Water	8260B	
<b>Analysis Batch:280-317325</b>					
LCS 280-317325/4	Lab Control Sample	T	Water	8260B	
LCSD 280-317325/5	Lab Control Sample Duplicate	T	Water	8260B	
MB 280-317325/6	Method Blank	T	Water	8260B	
280-80605-24DL	PIN12-0584-2	T	Water	8260B	
280-80605-27DL	PIN12-0585-2	T	Water	8260B	
280-80605-28	PIN12-0585-3	T	Water	8260B	
280-80605-28DL	PIN12-0585-3	T	Water	8260B	
280-80605-34DL	PIN12-2454	T	Water	8260B	
280-80654-M-4 MS	Matrix Spike	T	Water	8260B	
280-80654-P-4 MSD	Matrix Spike Duplicate	T	Water	8260B	

TestAmerica Denver

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80605-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
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#### Report Basis

T = Total

## ANALYTICAL REPORT

Job Number: 280-80735-1

SDG Number: 16027653

Job Description: Pinellas Monitoring

For:

Navarro Research and Engineering, Inc  
2597 Legacy Way  
Grand Junction, CO 81503  
Attention: Mr. Steve Donovan



Approved for release.  
DiLea R Bindel  
Project Manager I  
3/31/2016 4:11 PM

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DiLea R Bindel, Project Manager I  
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03/31/2016

The test results in this report relate only to the samples in this report and meet all requirements of NELAP, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

**TestAmerica Laboratories, Inc.**

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Pages have been deleted from this laboratory report file to reduce file size. The deleted pages contain raw data and instrument calibrations. If the full laboratory report is needed, contact [Scott.Surovchak@lm.doe.gov](mailto:Scott.Surovchak@lm.doe.gov)

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## CASE NARRATIVE

**Client: Navarro Research and Engineering, Inc**

**Project: PINELLAS MONITORING - 16027653**

**Report Number: 280-80735-1**

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits, with any exceptions noted. Calculations are performed before rounding to avoid round-off errors in calculated results.

This report includes reporting limits (RLs) less than TestAmerica Denver's practical quantitation limits. These reporting limits are being used specifically at the client's request to meet the needs of this project. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

Results between the method detection limit (MDL) and reporting limit (RL) are flagged with a "J" qualifier to indicate an estimated value. These results are statistically less reliable than results greater than or equal to the RL and should be considered a qualitative value.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **RECEIPT**

The samples were received on 3/11/2016 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C.

It was noted that the 40mL VOA vials submitted for sample PIN12-2200 (ODY 027) were not individually labeled. The laboratory was able to accurately determine the identity of these vials as labels were affixed to the bubble bags in which they were packaged. The client was notified on 3/15/2016.

### **GC/MS VOLATILES - SW846 8260B**

In some cases, due to high concentrations of target analytes, samples had to be analyzed using reduced aliquot sizes. The reporting limits have been elevated accordingly. To provide the lowest possible detection limits, multiple runs are reported.

The preservative used in the sample containers provided is not compatible with one of the method 8260 analytes requested. Sample PIN12-0576-3 (ODY 002) was received preserved with hydrochloric acid. The requested target analyte list includes 2-chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Due to a QC failure, the analysis of sample PIN12-0576-3 (ODY 002) was performed outside the recommended 14 day sample holding time. The associated sample result has been flagged "H".

Methylene Chloride, a common laboratory contaminant, was detected in the method blanks associated with batches 280-317694 and 280-317723 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated samples reported a result above the MDL and/or RL, the result has been "B" flagged.

A Continuing Calibration Verification (CCV) standard associated with samples in batch 280-317699 recovered above the upper control limit for Dichlorodifluoromethane. No detectable concentrations of Dichlorodifluoromethane are present in the associated samples; therefore, corrective action is deemed unnecessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

### **GC/MS VOLATILES - SW846 8260B SIM - 1,4-Dioxane**

In some cases, due to high concentrations of target analytes, samples had to be analyzed using reduced aliquot sizes. The reporting limits have been elevated accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## DATA REPORTING QUALIFIERS

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

<b>Lab Section</b>	<b>Qualifier</b>	<b>Description</b>
GC/MS VOA	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	F1	MS and/or MSD Recovery is outside acceptance limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	H	Sample was prepped or analyzed beyond the specified holding time

# SAMPLE SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-80735-1	PIN12-0539	Water	03/09/2016 1530	03/11/2016 1030
280-80735-1MS	PIN12-0539	Water	03/09/2016 1530	03/11/2016 1030
280-80735-1MSD	PIN12-0539	Water	03/09/2016 1530	03/11/2016 1030
280-80735-2	PIN12-0540	Water	03/09/2016 1615	03/11/2016 1030
280-80735-2MS	PIN12-0540	Water	03/09/2016 1615	03/11/2016 1030
280-80735-2MSD	PIN12-0540	Water	03/09/2016 1615	03/11/2016 1030
280-80735-3	PIN12-0541	Water	03/09/2016 0835	03/11/2016 1030
280-80735-4	PIN12-0542	Water	03/09/2016 0910	03/11/2016 1030
280-80735-5	PIN12-0549	Water	03/09/2016 0945	03/11/2016 1030
280-80735-6	PIN12-0551-2	Water	03/08/2016 1555	03/11/2016 1030
280-80735-7	PIN12-0554A	Water	03/08/2016 0850	03/11/2016 1030
280-80735-8	PIN12-0554B	Water	03/08/2016 0925	03/11/2016 1030
280-80735-9	PIN12-0554C	Water	03/08/2016 1005	03/11/2016 1030
280-80735-10	PIN12-0572-1	Water	03/08/2016 1650	03/11/2016 1030
280-80735-11	PIN12-0572-2	Water	03/08/2016 1720	03/11/2016 1030
280-80735-12	PIN12-0576-1	Water	03/08/2016 1400	03/11/2016 1030
280-80735-13	PIN12-0576-2	Water	03/08/2016 1430	03/11/2016 1030
280-80735-14	PIN12-0576-3	Water	03/08/2016 1510	03/11/2016 1030
280-80735-15	PIN12-0577-2	Water	03/08/2016 0915	03/11/2016 1030
280-80735-16	PIN12-0577-3	Water	03/08/2016 0950	03/11/2016 1030
280-80735-17	PIN12-0578-1	Water	03/08/2016 1025	03/11/2016 1030
280-80735-18	PIN12-0578-2	Water	03/08/2016 1055	03/11/2016 1030
280-80735-19	PIN12-0578-3	Water	03/08/2016 1125	03/11/2016 1030
280-80735-20	PIN12-0580-1	Water	03/08/2016 1135	03/11/2016 1030
280-80735-21	PIN12-0580-2	Water	03/08/2016 1345	03/11/2016 1030
280-80735-22	PIN12-0580-3	Water	03/08/2016 1110	03/11/2016 1030
280-80735-23	PIN12-0581-1	Water	03/09/2016 1040	03/11/2016 1030
280-80735-24	PIN12-0581-2	Water	03/09/2016 1105	03/11/2016 1030
280-80735-25	PIN12-0581-3	Water	03/09/2016 1140	03/11/2016 1030
280-80735-26	PIN12-0582-1	Water	03/09/2016 1330	03/11/2016 1030
280-80735-27	PIN12-0582-2	Water	03/09/2016 1400	03/11/2016 1030
280-80735-28	PIN12-0582-3	Water	03/09/2016 1435	03/11/2016 1030
280-80735-29	PIN12-0583-1	Water	03/09/2016 1245	03/11/2016 1030
280-80735-30	PIN12-0583-2	Water	03/09/2016 1320	03/11/2016 1030
280-80735-31	PIN12-0583-3	Water	03/09/2016 1345	03/11/2016 1030
280-80735-32	PIN12-2200	Water	03/08/2016 0800	03/11/2016 1030
280-80735-33	PIN12-2203	Water	03/08/2016 0800	03/11/2016 1030
280-80735-34	PIN12-2451	Water	03/08/2016 1445	03/11/2016 1030
280-80735-35	PIN12-2452	Water	03/08/2016 1345	03/11/2016 1030
280-80735-36	PIN12-2453	Water	03/09/2016 1320	03/11/2016 1030
280-80735-37	PIN12-S69B	Water	03/09/2016 1015	03/11/2016 1030
280-80735-38	PIN12-S69C	Water	03/09/2016 1040	03/11/2016 1030
280-80735-39	PIN12-S69D	Water	03/09/2016 1120	03/11/2016 1030
280-80735-40	PIN12-S70B	Water	03/08/2016 1700	03/11/2016 1030
280-80735-41	PIN12-S70C	Water	03/09/2016 0900	03/11/2016 1030
280-80735-42	PIN12-S70D	Water	03/09/2016 0940	03/11/2016 1030
280-80735-43	PIN12-S71B	Water	03/08/2016 1610	03/11/2016 1030
280-80735-44	PIN12-S71C	Water	03/08/2016 1540	03/11/2016 1030
280-80735-45	PIN12-S71D	Water	03/08/2016 1500	03/11/2016 1030
280-80735-46	PIN12-S73B	Water	03/09/2016 1505	03/11/2016 1030
280-80735-47	PIN12-S73C	Water	03/09/2016 1435	03/11/2016 1030
280-80735-48	PIN12-S73D	Water	03/09/2016 1615	03/11/2016 1030

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80735-1</b> Methylene Chloride	<b>PIN12-0539</b>	0.33	J B	1.0	ug/L	8260B
<b>280-80735-2</b> 1,1-Dichloroethane	<b>PIN12-0540</b>	6.1		1.0	ug/L	8260B
cis-1,2-Dichloroethene		11		1.0	ug/L	8260B
trans-1,2-Dichloroethene		11		1.0	ug/L	8260B
Methylene Chloride		0.38	J B	1.0	ug/L	8260B
1,2,3-Trichlorobenzene		0.36	J	1.0	ug/L	8260B
1,2,4-Trichlorobenzene		0.28	J	1.0	ug/L	8260B
Vinyl chloride		110		4.0	ug/L	8260B
1,4-Dioxane		120		20	ug/L	8260B SIM
<b>280-80735-3</b> Methylene Chloride	<b>PIN12-0541</b>	0.36	J B	1.0	ug/L	8260B
1,4-Dioxane		0.30	J	1.0	ug/L	8260B SIM
<b>280-80735-4</b> Methylene Chloride	<b>PIN12-0542</b>	0.34	J B	1.0	ug/L	8260B
1,4-Dioxane		0.60	J	1.0	ug/L	8260B SIM
<b>280-80735-5</b> 1,1-Dichloroethane	<b>PIN12-0549</b>	0.70	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.50	J	1.0	ug/L	8260B
Methylene Chloride		0.35	J B	1.0	ug/L	8260B
1,4-Dioxane		5.0		1.0	ug/L	8260B SIM
<b>280-80735-6</b> Acetone	<b>PIN12-0551-2</b>	2.3	J	10	ug/L	8260B
Vinyl chloride		0.20	J	1.0	ug/L	8260B
1,4-Dioxane		0.23	J	1.0	ug/L	8260B SIM
<b>280-80735-8</b> Acetone	<b>PIN12-0554B</b>	2.6	J	10	ug/L	8260B
1,1-Dichloroethane		2.6		1.0	ug/L	8260B
cis-1,2-Dichloroethene		1.8		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.25	J	1.0	ug/L	8260B
Vinyl chloride		4.0		1.0	ug/L	8260B
1,4-Dioxane		4.7		1.0	ug/L	8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80735-9</b>	<b>PIN12-0554C</b>					
1,1-Dichloroethane		58		1.0	ug/L	8260B
cis-1,2-Dichloroethene		17		1.0	ug/L	8260B
trans-1,2-Dichloroethene		5.4		1.0	ug/L	8260B
1,1-Dichloroethene		0.75	J	1.0	ug/L	8260B
Vinyl chloride		47		4.0	ug/L	8260B
1,4-Dioxane		55		10	ug/L	8260B SIM
<b>280-80735-11</b>	<b>PIN12-0572-2</b>					
Acetone		2.1	J	10	ug/L	8260B
1,1-Dichloroethane		0.28	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.60	J	1.0	ug/L	8260B
Vinyl chloride		22		1.0	ug/L	8260B
1,4-Dioxane		1.9		1.0	ug/L	8260B SIM
<b>280-80735-12</b>	<b>PIN12-0576-1</b>					
Chloroethane		1.7		1.0	ug/L	8260B
1,1-Dichloroethane		3.5		1.0	ug/L	8260B
cis-1,2-Dichloroethene		1.5		1.0	ug/L	8260B
Toluene		0.31	J	1.0	ug/L	8260B
Vinyl chloride		5.4		1.0	ug/L	8260B
1,4-Dioxane		48		5.0	ug/L	8260B SIM
<b>280-80735-13</b>	<b>PIN12-0576-2</b>					
1,1-Dichloroethane		15		1.0	ug/L	8260B
cis-1,2-Dichloroethene		8.4		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.44	J	1.0	ug/L	8260B
1,1-Dichloroethene		1.7		1.0	ug/L	8260B
Vinyl chloride		19		1.0	ug/L	8260B
1,4-Dioxane		32		4.0	ug/L	8260B SIM
<b>280-80735-14</b>	<b>PIN12-0576-3</b>					
Acetone		3.5	J H	10	ug/L	8260B
1,1-Dichloroethane		1.1	H	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.72	J H	1.0	ug/L	8260B
Vinyl chloride		1.3	H	1.0	ug/L	8260B
1,4-Dioxane		4.0		1.0	ug/L	8260B SIM
<b>280-80735-16</b>	<b>PIN12-0577-3</b>					
Acetone		2.7	J	10	ug/L	8260B



## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80735-17</b> Acetone	<b>PIN12-0578-1</b>	2.7	J	10	ug/L	8260B
<b>280-80735-18</b> Acetone	<b>PIN12-0578-2</b>	2.6	J	10	ug/L	8260B
<b>280-80735-21</b> 1,1-Dichloroethane	<b>PIN12-0580-2</b>	3.3		1.0	ug/L	8260B
cis-1,2-Dichloroethene		17		1.0	ug/L	8260B
trans-1,2-Dichloroethene		7.1		1.0	ug/L	8260B
1,1-Dichloroethene		0.23	J	1.0	ug/L	8260B
Methylene Chloride		0.35	J B	1.0	ug/L	8260B
Vinyl chloride		210		10	ug/L	8260B
1,4-Dioxane		180		20	ug/L	8260B SIM
<b>280-80735-22</b> 1,1-Dichloroethane	<b>PIN12-0580-3</b>	3.4		1.0	ug/L	8260B
cis-1,2-Dichloroethene		17		1.0	ug/L	8260B
trans-1,2-Dichloroethene		3.7		1.0	ug/L	8260B
1,1-Dichloroethene		0.30	J	1.0	ug/L	8260B
Methylene Chloride		0.33	J B	1.0	ug/L	8260B
Vinyl chloride		46		1.0	ug/L	8260B
1,4-Dioxane		27		2.0	ug/L	8260B SIM
<b>280-80735-23</b> Acetone	<b>PIN12-0581-1</b>	21		10	ug/L	8260B
Methylene Chloride		0.56	J B	1.0	ug/L	8260B
<b>280-80735-24</b> Acetone	<b>PIN12-0581-2</b>	3.1	J	10	ug/L	8260B
1,1-Dichloroethane		3.0		1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.84	J	1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.17	J	1.0	ug/L	8260B
Methylene Chloride		0.52	J B	1.0	ug/L	8260B
Vinyl chloride		3.7		1.0	ug/L	8260B
1,4-Dioxane		5.9		1.0	ug/L	8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80735-25</b>	<b>PIN12-0581-3</b>					
Acetone		2.8	J	10	ug/L	8260B
1,1-Dichloroethane		2.8		1.0	ug/L	8260B
cis-1,2-Dichloroethene		1.4		1.0	ug/L	8260B
Methylene Chloride		0.49	J B	1.0	ug/L	8260B
Vinyl chloride		2.8		1.0	ug/L	8260B
1,4-Dioxane		8.9		1.0	ug/L	8260B SIM
<b>280-80735-26</b>	<b>PIN12-0582-1</b>					
Acetone		5.8	J	10	ug/L	8260B
Methylene Chloride		0.46	J B	1.0	ug/L	8260B
<b>280-80735-27</b>	<b>PIN12-0582-2</b>					
1,1-Dichloroethane		10		1.0	ug/L	8260B
trans-1,2-Dichloroethene		2.7		1.0	ug/L	8260B
Vinyl chloride		22		1.0	ug/L	8260B
1,4-Dioxane		130		10	ug/L	8260B SIM
<b>280-80735-28</b>	<b>PIN12-0582-3</b>					
Acetone		10		10	ug/L	8260B
1,1-Dichloroethane		0.81	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		1.3		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.19	J	1.0	ug/L	8260B
Methylene Chloride		0.52	J B	1.0	ug/L	8260B
Vinyl chloride		4.5		1.0	ug/L	8260B
1,4-Dioxane		6.5		1.0	ug/L	8260B SIM
<b>280-80735-29</b>	<b>PIN12-0583-1</b>					
Acetone		5.1	J	10	ug/L	8260B
Methylene Chloride		0.44	J B	1.0	ug/L	8260B
<b>280-80735-30</b>	<b>PIN12-0583-2</b>					
1,1-Dichloroethane		0.38	J	1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.25	J	1.0	ug/L	8260B
Methylene Chloride		0.41	J B	1.0	ug/L	8260B
Vinyl chloride		6.7		1.0	ug/L	8260B
1,4-Dioxane		2.8		1.0	ug/L	8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80735-31</b>	<b>PIN12-0583-3</b>					
Acetone		23		10	ug/L	8260B
Methylene Chloride		0.45	J B	1.0	ug/L	8260B
Vinyl chloride		0.86	J	1.0	ug/L	8260B
1,4-Dioxane		0.40	J	1.0	ug/L	8260B SIM
<b>280-80735-32</b>	<b>PIN12-2200</b>					
Methylene Chloride		0.34	J B	1.0	ug/L	8260B
<b>280-80735-34</b>	<b>PIN12-2451</b>					
Acetone		5.8	J	10	ug/L	8260B
1,1-Dichloroethane		0.28	J	1.0	ug/L	8260B
cis-1,2-Dichloroethene		0.78	J	1.0	ug/L	8260B
Vinyl chloride		21		1.0	ug/L	8260B
1,4-Dioxane		2.0		1.0	ug/L	8260B SIM
<b>280-80735-35</b>	<b>PIN12-2452</b>					
Acetone		4.3	J	10	ug/L	8260B
1,1-Dichloroethane		13		1.0	ug/L	8260B
cis-1,2-Dichloroethene		7.2		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.41	J	1.0	ug/L	8260B
1,1-Dichloroethene		1.7		1.0	ug/L	8260B
Vinyl chloride		15		1.0	ug/L	8260B
1,4-Dioxane		25		2.0	ug/L	8260B SIM
<b>280-80735-36</b>	<b>PIN12-2453</b>					
Acetone		4.0	J	10	ug/L	8260B
1,1-Dichloroethane		12		1.0	ug/L	8260B
trans-1,2-Dichloroethene		3.5		1.0	ug/L	8260B
Vinyl chloride		25		1.0	ug/L	8260B
1,4-Dioxane		120		10	ug/L	8260B SIM
<b>280-80735-38</b>	<b>PIN12-S69C</b>					
Acetone		3.0	J	10	ug/L	8260B
cis-1,2-Dichloroethene		0.63	J	1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.17	J	1.0	ug/L	8260B
Vinyl chloride		0.20	J	1.0	ug/L	8260B
1,4-Dioxane		1.2		1.0	ug/L	8260B SIM

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80735-40</b>	<b>PIN12-S70B</b>					
Acetone		4.6	J	10	ug/L	8260B
cis-1,2-Dichloroethene		12		1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.46	J	1.0	ug/L	8260B
Vinyl chloride		4.2		1.0	ug/L	8260B
<b>280-80735-41</b>	<b>PIN12-S70C</b>					
1,1-Dichloroethane		4.3		1.0	ug/L	8260B
cis-1,2-Dichloroethene		7.3		1.0	ug/L	8260B
trans-1,2-Dichloroethene		2.0		1.0	ug/L	8260B
Vinyl chloride		5.4		1.0	ug/L	8260B
1,4-Dioxane		17		1.0	ug/L	8260B SIM
<b>280-80735-42</b>	<b>PIN12-S70D</b>					
1,1-Dichloroethane		7.1		1.0	ug/L	8260B
cis-1,2-Dichloroethene		17		1.0	ug/L	8260B
trans-1,2-Dichloroethene		6.0		1.0	ug/L	8260B
1,1-Dichloroethene		0.46	J	1.0	ug/L	8260B
Vinyl chloride		13		1.0	ug/L	8260B
1,4-Dioxane		17		1.0	ug/L	8260B SIM
<b>280-80735-44</b>	<b>PIN12-S71C</b>					
1,1-Dichloroethane		3.4		1.0	ug/L	8260B
cis-1,2-Dichloroethene		15		1.0	ug/L	8260B
trans-1,2-Dichloroethene		11		1.0	ug/L	8260B
1,1-Dichloroethene		0.26	J	1.0	ug/L	8260B
Vinyl chloride		60		1.0	ug/L	8260B
1,4-Dioxane		26		2.0	ug/L	8260B SIM
<b>280-80735-45</b>	<b>PIN12-S71D</b>					
1,1-Dichloroethane		1.9		1.0	ug/L	8260B
cis-1,2-Dichloroethene		21		1.0	ug/L	8260B
trans-1,2-Dichloroethene		10		1.0	ug/L	8260B
1,1-Dichloroethene		0.32	J	1.0	ug/L	8260B
Vinyl chloride		42		1.0	ug/L	8260B
1,4-Dioxane		17		1.0	ug/L	8260B SIM
<b>280-80735-46</b>	<b>PIN12-S73B</b>					
Toluene		0.24	J	1.0	ug/L	8260B
Vinyl chloride		0.37	J	1.0	ug/L	8260B

## EXECUTIVE SUMMARY - Detections

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Lab Sample ID	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>280-80735-47</b>	<b>PIN12-S73C</b>					
Chloroethane		0.41	J	1.0	ug/L	8260B
1,1-Dichloroethane		3.6		1.0	ug/L	8260B
cis-1,2-Dichloroethene		5.1		1.0	ug/L	8260B
trans-1,2-Dichloroethene		12		1.0	ug/L	8260B
Toluene		0.17	J	1.0	ug/L	8260B
Vinyl chloride		79		4.0	ug/L	8260B
1,4-Dioxane		75		4.0	ug/L	8260B SIM
<b>280-80735-48</b>	<b>PIN12-S73D</b>					
1,1-Dichloroethane		0.60	J	1.0	ug/L	8260B
trans-1,2-Dichloroethene		0.85	J	1.0	ug/L	8260B
Vinyl chloride		3.4		1.0	ug/L	8260B
1,4-Dioxane		11		1.0	ug/L	8260B SIM

## METHOD SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

<b>Description</b>	<b>Lab Location</b>	<b>Method</b>	<b>Preparation Method</b>
<b>Matrix: Water</b>			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Volatile Organic Compounds (GC/MS-SIM)	TAL DEN	SW846 8260B SIM	
Purge and Trap	TAL DEN		SW846 5030B

### Lab References:

TAL DEN = TestAmerica Denver

### Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

<b>Method</b>	<b>Analyst</b>	<b>Analyst ID</b>
SW846 8260B	Berger, Brent B	BBB
SW846 8260B	Contreras, Evan	EMC
SW846 8260B	Dobransky, Michael E	MD
SW846 8260B	Ilczyszyn, Dennis P	DPI
SW846 8260B	Lines, Jeremy N	JNL
SW846 8260B	Wickham, Tom A	TAW
SW846 8260B SIM	Berger, Brent B	BBB
SW846 8260B SIM	Moan, Matthew R	MRM

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0539**

Lab Sample ID: 280-80735-1

Date Sampled: 03/09/2016 1530

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2753.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/21/2016 2256		Final Weight/Volume: 20 mL
Prep Date: 03/21/2016 2256		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.33	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0539**

Lab Sample ID: 280-80735-1

Date Sampled: 03/09/2016 1530

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2753.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/21/2016 2256		Final Weight/Volume: 20 mL
Prep Date: 03/21/2016 2256		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 127
Toluene-d8 (Surr)	93		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0540

Lab Sample ID: 280-80735-2

Date Sampled: 03/09/2016 1615

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317694	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2756.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/22/2016 0007			Final Weight/Volume:	20 mL
Prep Date:	03/22/2016 0007				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	6.1		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	11		0.15	1.0
trans-1,2-Dichloroethene	11		0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.38	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0540

Lab Sample ID: 280-80735-2

Date Sampled: 03/09/2016 1615

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2756.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0007		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0007		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.36	J	0.21	1.0
1,2,4-Trichlorobenzene	0.28	J	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 127
Toluene-d8 (Surr)	88		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0540**

Lab Sample ID: 280-80735-2

Date Sampled: 03/09/2016 1615

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2775.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 03/22/2016 0735	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0735		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	110		0.40	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	94		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0541

Lab Sample ID: 280-80735-3

Date Sampled: 03/09/2016 0835

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317694	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2757.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/22/2016 0031			Final Weight/Volume:	20 mL
Prep Date:	03/22/2016 0031				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.36	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0541**

Lab Sample ID: 280-80735-3

Date Sampled: 03/09/2016 0835

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2757.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0031		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0031		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0542

Lab Sample ID: 280-80735-4

Date Sampled: 03/09/2016 0910

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317694	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2758.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/22/2016 0054			Final Weight/Volume:	20 mL
Prep Date:	03/22/2016 0054				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.34	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0542**

Lab Sample ID: 280-80735-4

Date Sampled: 03/09/2016 0910

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2758.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0054		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0054		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		70 - 127
Toluene-d8 (Surr)	93		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0549**

Lab Sample ID: 280-80735-5

Date Sampled: 03/09/2016 0945

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2759.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0118		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0118		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.70	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.50	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.35	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0549**

Lab Sample ID: 280-80735-5

Date Sampled: 03/09/2016 0945

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2759.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0118		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0118		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 127
Toluene-d8 (Surr)	90		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0551-2

Lab Sample ID: 280-80735-6

Date Sampled: 03/08/2016 1555

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B      Analysis Batch: 280-317515      Instrument ID: VMS\_P  
Prep Method: 5030B      Prep Batch: N/A      Lab File ID: P5985.D  
Dilution: 1.0      Initial Weight/Volume: 20 mL  
Analysis Date: 03/19/2016 1727      Final Weight/Volume: 20 mL  
Prep Date: 03/19/2016 1727

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.3	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0551-2

Lab Sample ID: 280-80735-6

Client Matrix: Water

Date Sampled: 03/08/2016 1555

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5985.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1727		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1727		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.20	J	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	107		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0554A

Lab Sample ID: 280-80735-7

Date Sampled: 03/08/2016 0850

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317515	Instrument ID:	VMS_P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P5986.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/19/2016 1747			Final Weight/Volume:	20 mL
Prep Date:	03/19/2016 1747				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554A**

Lab Sample ID: 280-80735-7

Date Sampled: 03/08/2016 0850

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5986.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1747		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1747		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 127
Toluene-d8 (Surr)	110		80 - 125
4-Bromofluorobenzene (Surr)	99		78 - 120
Dibromofluoromethane (Surr)	96		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554B**

Lab Sample ID: 280-80735-8

Date Sampled: 03/08/2016 0925

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5987.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1807		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1807		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.6	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	2.6		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.8		0.15	1.0
trans-1,2-Dichloroethene	0.25	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554B**

Lab Sample ID: 280-80735-8

Date Sampled: 03/08/2016 0925

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5987.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1807		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1807		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	4.0		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 127
Toluene-d8 (Surr)	119		80 - 125
4-Bromofluorobenzene (Surr)	114		78 - 120
Dibromofluoromethane (Surr)	112		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554C**

Lab Sample ID: 280-80735-9

Date Sampled: 03/08/2016 1005

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5988.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1826		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1826		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	58		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	17		0.15	1.0
trans-1,2-Dichloroethene	5.4		0.15	1.0
1,1-Dichloroethene	0.75	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554C**

Lab Sample ID: 280-80735-9

Date Sampled: 03/08/2016 1005

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5988.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1826		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1826		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 127
Toluene-d8 (Surr)	113		80 - 125
4-Bromofluorobenzene (Surr)	116		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554C**

Lab Sample ID: 280-80735-9

Date Sampled: 03/08/2016 1005

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2774.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 03/22/2016 0712	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0712		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	47		0.40	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 127
Toluene-d8 (Surr)	92		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	94		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0572-1**

Lab Sample ID: 280-80735-10

Date Sampled: 03/08/2016 1650

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5989.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1846		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1846		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0572-1**

Lab Sample ID: 280-80735-10

Date Sampled: 03/08/2016 1650

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5989.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1846		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1846		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 127
Toluene-d8 (Surr)	105		80 - 125
4-Bromofluorobenzene (Surr)	99		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0572-2**

Lab Sample ID: 280-80735-11

Date Sampled: 03/08/2016 1720

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5990.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1905		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1905		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.1	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.28	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.60	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0572-2

Lab Sample ID: 280-80735-11

Date Sampled: 03/08/2016 1720

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5990.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1905		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1905		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	22		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	91		78 - 120
Dibromofluoromethane (Surr)	89		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0576-1**

Lab Sample ID: 280-80735-12

Date Sampled: 03/08/2016 1400

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2416.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0236		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0236		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	1.7		0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	3.5		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.5		0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0576-1**

Lab Sample ID: 280-80735-12

Date Sampled: 03/08/2016 1400

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2416.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0236		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0236		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.31	J	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	5.4		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	99		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0576-2**

Lab Sample ID: 280-80735-13

Date Sampled: 03/08/2016 1430

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2417.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0258		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0258		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	15		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	8.4		0.15	1.0
trans-1,2-Dichloroethene	0.44	J	0.15	1.0
1,1-Dichloroethene	1.7		0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0576-2**

Lab Sample ID: 280-80735-13

Date Sampled: 03/08/2016 1430

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2417.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0258		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0258		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	19		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 127
Toluene-d8 (Surr)	107		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	109		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0576-3**

Lab Sample ID: 280-80735-14

Date Sampled: 03/08/2016 1510

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-318092	Instrument ID: VMS_P	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P6247.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/25/2016 0438		Final Weight/Volume: 20 mL	
Prep Date: 03/25/2016 0438			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	3.5	JH	1.9	10
Benzene	0.16	UH	0.16	1.0
Bromobenzene	0.17	UH	0.17	1.0
Bromochloromethane	0.10	UH	0.10	1.0
Bromodichloromethane	0.17	UH	0.17	1.0
Bromoform	0.19	UH	0.19	1.0
Bromomethane	0.21	UH	0.21	1.0
2-Butanone (MEK)	2.0	UH	2.0	5.0
n-Butylbenzene	0.32	UH	0.32	1.0
sec-Butylbenzene	0.17	UH	0.17	1.0
tert-Butylbenzene	0.16	UH	0.16	1.0
Carbon disulfide	0.45	UH	0.45	1.0
Carbon tetrachloride	0.19	UH	0.19	1.0
Chlorobenzene	0.17	UH	0.17	1.0
Dibromochloromethane	0.17	UH	0.17	1.0
Chloroethane	0.41	UH	0.41	1.0
Chloroform	0.16	UH	0.16	1.0
Chloromethane	0.30	UH	0.30	1.0
2-Chlorotoluene	0.17	UH	0.17	1.0
4-Chlorotoluene	0.21	UH	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	UH	0.47	1.0
Dibromomethane	0.17	UH	0.17	1.0
1,2-Dichlorobenzene	0.15	UH	0.15	1.0
1,3-Dichlorobenzene	0.13	UH	0.13	1.0
1,4-Dichlorobenzene	0.16	UH	0.16	1.0
Dichlorodifluoromethane	0.31	UH	0.31	1.0
1,1-Dichloroethane	1.1	H	0.22	1.0
1,2-Dichloroethane	0.13	UH	0.13	1.0
cis-1,2-Dichloroethene	0.72	JH	0.15	1.0
trans-1,2-Dichloroethene	0.15	UH	0.15	1.0
1,1-Dichloroethene	0.23	UH	0.23	1.0
1,2-Dichloropropane	0.18	UH	0.18	1.0
1,3-Dichloropropane	0.22	UH	0.22	1.0
2,2-Dichloropropane	0.18	UH	0.18	1.0
cis-1,3-Dichloropropene	0.16	UH	0.16	1.0
trans-1,3-Dichloropropene	0.19	UH	0.19	1.0
1,1-Dichloropropene	0.19	UH	0.19	1.0
Ethylbenzene	0.16	UH	0.16	1.0
Hexachlorobutadiene	0.36	UH	0.36	1.0
2-Hexanone	1.7	UH	1.7	5.0
Isopropylbenzene	0.19	UH	0.19	1.0
4-Isopropyltoluene	0.20	UH	0.20	1.0
Methylene Chloride	0.32	UH	0.32	1.0
4-Methyl-2-pentanone	0.98	UH	0.98	5.0
Naphthalene	0.22	UH	0.22	1.0
n-Propylbenzene	0.16	UH	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0576-3**

Lab Sample ID: 280-80735-14

Date Sampled: 03/08/2016 1510

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-318092	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P6247.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/25/2016 0438		Final Weight/Volume: 20 mL
Prep Date: 03/25/2016 0438		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U H	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U H	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U H	0.21	1.0
Tetrachloroethene	0.20	U H	0.20	1.0
Toluene	0.17	U H	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U H	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U H	0.21	1.0
1,1,1-Trichloroethane	0.16	U H	0.16	1.0
1,1,2-Trichloroethane	0.27	U H	0.27	1.0
Trichloroethene	0.16	U H	0.16	1.0
Trichlorofluoromethane	0.29	U H	0.29	1.0
1,2,3-Trichloropropane	0.33	U H	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U H	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U H	0.16	1.0
Vinyl chloride	1.3	H	0.10	1.0
Xylenes, Total	0.19	U H	0.19	1.0
1,2-Dibromoethane	0.18	U H	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		70 - 127
Toluene-d8 (Surr)	111		80 - 125
4-Bromofluorobenzene (Surr)	119		78 - 120
Dibromofluoromethane (Surr)	104		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0577-2**

Lab Sample ID: 280-80735-15

Date Sampled: 03/08/2016 0915

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5994.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 2024		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 2024		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0577-2

Lab Sample ID: 280-80735-15

Client Matrix: Water

Date Sampled: 03/08/2016 0915

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5994.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 2024		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 2024		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 127
Toluene-d8 (Surr)	106		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	96		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0577-3**

Lab Sample ID: 280-80735-16

Date Sampled: 03/08/2016 0950

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2418.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0319		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0319		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0577-3**

Lab Sample ID: 280-80735-16

Date Sampled: 03/08/2016 0950

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2418.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0319		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0319		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 127
Toluene-d8 (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	98		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0578-1**

Lab Sample ID: 280-80735-17

Date Sampled: 03/08/2016 1025

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5970.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/19/2016 1233		Final Weight/Volume: 20 mL	
Prep Date: 03/19/2016 1233			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.7	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0578-1

Lab Sample ID: 280-80735-17

Client Matrix: Water

Date Sampled: 03/08/2016 1025

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317515	Instrument ID: VMS_P
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: P5970.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1233		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1233		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	76		70 - 127
Toluene-d8 (Surr)	110		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	90		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0578-2**

Lab Sample ID: 280-80735-18

Date Sampled: 03/08/2016 1055

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2419.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0340		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0340		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.6	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0578-2**

Lab Sample ID: 280-80735-18

Date Sampled: 03/08/2016 1055

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: MS9_2419.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0340		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0340		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 127
Toluene-d8 (Surr)	101		80 - 125
4-Bromofluorobenzene (Surr)	102		78 - 120
Dibromofluoromethane (Surr)	107		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0578-3**

Lab Sample ID: 280-80735-19

Date Sampled: 03/08/2016 1125

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2760.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0141		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0141		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0578-3

Lab Sample ID: 280-80735-19

Date Sampled: 03/08/2016 1125

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2760.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0141		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0141		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 127
Toluene-d8 (Surr)	89		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0580-1

Lab Sample ID: 280-80735-20

Date Sampled: 03/08/2016 1135

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2761.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0205		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0205		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0580-1

Lab Sample ID: 280-80735-20

Date Sampled: 03/08/2016 1135

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2761.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0205		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0205		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	93		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0580-2**

Lab Sample ID: 280-80735-21

Date Sampled: 03/08/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2762.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0228		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0228		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	3.3		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	17		0.15	1.0
trans-1,2-Dichloroethene	7.1		0.15	1.0
1,1-Dichloroethene	0.23	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.35	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0580-2

Lab Sample ID: 280-80735-21

Date Sampled: 03/08/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2762.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0228		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0228		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		70 - 127
Toluene-d8 (Surr)	89		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0580-2**

Lab Sample ID: 280-80735-21

Date Sampled: 03/08/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2763.D
Dilution: 1.0		Initial Weight/Volume: 2 mL
Analysis Date: 03/22/2016 0252	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0252		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	210		1.0	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	94		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0580-3**

Lab Sample ID: 280-80735-22

Date Sampled: 03/08/2016 1110

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2764.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0316		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0316		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	3.4		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	17		0.15	1.0
trans-1,2-Dichloroethene	3.7		0.15	1.0
1,1-Dichloroethene	0.30	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.33	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0580-3**

Lab Sample ID: 280-80735-22

Date Sampled: 03/08/2016 1110

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2764.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0316		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0316		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	46		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0581-1**

Lab Sample ID: 280-80735-23

Date Sampled: 03/09/2016 1040

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2798.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1644		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1644		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	21		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.56	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0581-1

Lab Sample ID: 280-80735-23

Date Sampled: 03/09/2016 1040

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2798.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1644		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1644		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 127
Toluene-d8 (Surr)	87		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0581-2**

Lab Sample ID: 280-80735-24

Date Sampled: 03/09/2016 1105

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2799.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1708		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1708		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	3.1	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	3.0		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.84	J	0.15	1.0
trans-1,2-Dichloroethene	0.17	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.52	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0581-2**

Lab Sample ID: 280-80735-24

Date Sampled: 03/09/2016 1105

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2799.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1708		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1708		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	3.7		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0581-3**

Lab Sample ID: 280-80735-25

Date Sampled: 03/09/2016 1140

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2800.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1732		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1732		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	2.8	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	2.8		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.4		0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.49	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0581-3**

Lab Sample ID: 280-80735-25

Date Sampled: 03/09/2016 1140

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2800.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1732		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1732		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	2.8		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 127
Toluene-d8 (Surr)	88		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0582-1**

Lab Sample ID: 280-80735-26

Date Sampled: 03/09/2016 1330

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2801.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1756		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1756		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	5.8	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.46	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0582-1**

Lab Sample ID: 280-80735-26

Date Sampled: 03/09/2016 1330

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2801.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1756		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1756		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	90		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0582-2

Lab Sample ID: 280-80735-27

Date Sampled: 03/09/2016 1400

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B      Analysis Batch: 280-317886      Instrument ID: VMS\_R1  
Prep Method: 5030B      Prep Batch: N/A      Lab File ID: R0120.D  
Dilution: 1.0      Initial Weight/Volume: 20 mL  
Analysis Date: 03/23/2016 1137      Final Weight/Volume: 20 mL  
Prep Date: 03/23/2016 1137

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	10		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	2.7		0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0582-2

Lab Sample ID: 280-80735-27

Date Sampled: 03/09/2016 1400

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317886	Instrument ID: VMS_R1
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: R0120.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 1137		Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 1137		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	22		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 127
Toluene-d8 (Surr)	88		80 - 125
4-Bromofluorobenzene (Surr)	86		78 - 120
Dibromofluoromethane (Surr)	92		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0582-3**

Lab Sample ID: 280-80735-28

Date Sampled: 03/09/2016 1435

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2803.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1844		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1844		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	10		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.81	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	1.3		0.15	1.0
trans-1,2-Dichloroethene	0.19	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.52	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0582-3

Lab Sample ID: 280-80735-28

Date Sampled: 03/09/2016 1435

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2803.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1844		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1844		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	4.5		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 127
Toluene-d8 (Surr)	89		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0583-1

Lab Sample ID: 280-80735-29

Date Sampled: 03/09/2016 1245

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2804.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1908		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1908		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	5.1	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.44	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0583-1

Lab Sample ID: 280-80735-29

Date Sampled: 03/09/2016 1245

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2804.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1908		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1908		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	107		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0583-2**

Lab Sample ID: 280-80735-30

Date Sampled: 03/09/2016 1320

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2805.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1932		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1932		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.38	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.25	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.41	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0583-2

Lab Sample ID: 280-80735-30

Date Sampled: 03/09/2016 1320

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2805.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1932		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1932		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	6.7		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		70 - 127
Toluene-d8 (Surr)	90		80 - 125
4-Bromofluorobenzene (Surr)	108		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0583-3

Lab Sample ID: 280-80735-31

Date Sampled: 03/09/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317723	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2806.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/22/2016 1955			Final Weight/Volume:	20 mL
Prep Date:	03/22/2016 1955				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	23		1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.45	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-0583-3

Lab Sample ID: 280-80735-31

Client Matrix: Water

Date Sampled: 03/09/2016 1345

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317723	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2806.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1955		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1955		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.86	J	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	98		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2200**

Lab Sample ID: 280-80735-32

Date Sampled: 03/08/2016 0800

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2765.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0339		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0339		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.34	J B	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-2200

Lab Sample ID: 280-80735-32

Date Sampled: 03/08/2016 0800

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2765.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0339		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0339		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	83		70 - 127
Toluene-d8 (Surr)	90		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	93		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-2203

Lab Sample ID: 280-80735-33

Date Sampled: 03/08/2016 0800

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317323	Instrument ID:	VMS_G2
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G2_2329.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/18/2016 1323			Final Weight/Volume:	20 mL
Prep Date:	03/18/2016 1323				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-2203

Lab Sample ID: 280-80735-33

Date Sampled: 03/08/2016 0800

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2329.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1323		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1323		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	94		80 - 125
4-Bromofluorobenzene (Surr)	91		78 - 120
Dibromofluoromethane (Surr)	96		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2451**

Lab Sample ID: 280-80735-34

Date Sampled: 03/08/2016 1445

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2330.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1343		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1343		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	5.8	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.28	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.78	J	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2451**

Lab Sample ID: 280-80735-34

Date Sampled: 03/08/2016 1445

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2330.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1343		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1343		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	21		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	118		70 - 127
Toluene-d8 (Surr)	111		80 - 125
4-Bromofluorobenzene (Surr)	111		78 - 120
Dibromofluoromethane (Surr)	117		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2452**

Lab Sample ID: 280-80735-35

Date Sampled: 03/08/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2331.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1403		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1403		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	4.3	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	13		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	7.2		0.15	1.0
trans-1,2-Dichloroethene	0.41	J	0.15	1.0
1,1-Dichloroethene	1.7		0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2452**

Lab Sample ID: 280-80735-35

Date Sampled: 03/08/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2331.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1403		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1403		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	15		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 127
Toluene-d8 (Surr)	93		80 - 125
4-Bromofluorobenzene (Surr)	92		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2453**

Lab Sample ID: 280-80735-36

Date Sampled: 03/09/2016 1320

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2332.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1423		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1423		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	4.0	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	12		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	3.5		0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-2453

Lab Sample ID: 280-80735-36

Date Sampled: 03/09/2016 1320

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2332.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1423		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1423		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	25		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	100		78 - 120
Dibromofluoromethane (Surr)	103		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-S69B

Lab Sample ID: 280-80735-37

Date Sampled: 03/09/2016 1015

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B      Analysis Batch: 280-317323      Instrument ID: VMS\_G2  
Prep Method: 5030B      Prep Batch: N/A      Lab File ID: G2\_2333.D  
Dilution: 1.0      Initial Weight/Volume: 20 mL  
Analysis Date: 03/18/2016 1443      Final Weight/Volume: 20 mL  
Prep Date: 03/18/2016 1443

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S69B**

Lab Sample ID: 280-80735-37

Date Sampled: 03/09/2016 1015

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2333.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1443		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1443		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		70 - 127
Toluene-d8 (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	96		78 - 120
Dibromofluoromethane (Surr)	101		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S69C**

Lab Sample ID: 280-80735-38

Date Sampled: 03/09/2016 1040

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2334.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1503		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1503		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	3.0	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.63	J	0.15	1.0
trans-1,2-Dichloroethene	0.17	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S69C**

Lab Sample ID: 280-80735-38

Date Sampled: 03/09/2016 1040

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2334.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1503		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1503		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.20	J	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		70 - 127
Toluene-d8 (Surr)	100		80 - 125
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	102		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S69D**

Lab Sample ID: 280-80735-39

Date Sampled: 03/09/2016 1120

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2335.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1531		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1531		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S69D**

Lab Sample ID: 280-80735-39

Date Sampled: 03/09/2016 1120

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2335.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1531		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1531		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 127
Toluene-d8 (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	97		78 - 120
Dibromofluoromethane (Surr)	106		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S70B**

Lab Sample ID: 280-80735-40

Date Sampled: 03/08/2016 1700

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2336.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1550		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1550		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	4.6	J	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	12		0.15	1.0
trans-1,2-Dichloroethene	0.46	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S70B**

Lab Sample ID: 280-80735-40

Date Sampled: 03/08/2016 1700

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: G2_2336.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1550		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1550		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	4.2		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		70 - 127
Toluene-d8 (Surr)	96		80 - 125
4-Bromofluorobenzene (Surr)	93		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-S70C

Lab Sample ID: 280-80735-41

Date Sampled: 03/09/2016 0900

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317694	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2766.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/22/2016 0403			Final Weight/Volume:	20 mL
Prep Date:	03/22/2016 0403				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	4.3		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	7.3		0.15	1.0
trans-1,2-Dichloroethene	2.0		0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S70C**

Lab Sample ID: 280-80735-41

Date Sampled: 03/09/2016 0900

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2766.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0403		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0403		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	5.4		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87		70 - 127
Toluene-d8 (Surr)	89		80 - 125
4-Bromofluorobenzene (Surr)	104		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S70D**

Lab Sample ID: 280-80735-42

Date Sampled: 03/09/2016 0940

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2767.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0427		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0427		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	7.1		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	17		0.15	1.0
trans-1,2-Dichloroethene	6.0		0.15	1.0
1,1-Dichloroethene	0.46	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S70D**

Lab Sample ID: 280-80735-42

Date Sampled: 03/09/2016 0940

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2767.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0427		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0427		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	13		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 127
Toluene-d8 (Surr)	88		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	96		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71B**

Lab Sample ID: 280-80735-43

Date Sampled: 03/08/2016 1610

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2768.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0450		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0450		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71B**

Lab Sample ID: 280-80735-43

Date Sampled: 03/08/2016 1610

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2768.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0450		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0450		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 127
Toluene-d8 (Surr)	90		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	92		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71C**

Lab Sample ID: 280-80735-44

Date Sampled: 03/08/2016 1540

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2769.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/22/2016 0514		Final Weight/Volume: 20 mL	
Prep Date: 03/22/2016 0514			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	3.4		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	15		0.15	1.0
trans-1,2-Dichloroethene	11		0.15	1.0
1,1-Dichloroethene	0.26	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71C**

Lab Sample ID: 280-80735-44

Date Sampled: 03/08/2016 1540

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2769.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0514		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0514		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	60		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 127
Toluene-d8 (Surr)	90		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	99		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71D**

Lab Sample ID: 280-80735-45

Date Sampled: 03/08/2016 1500

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H	
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2770.D	
Dilution: 1.0		Initial Weight/Volume: 20 mL	
Analysis Date: 03/22/2016 0537		Final Weight/Volume: 20 mL	
Prep Date: 03/22/2016 0537			

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	1.9		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	21		0.15	1.0
trans-1,2-Dichloroethene	10		0.15	1.0
1,1-Dichloroethene	0.32	J	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71D**

Lab Sample ID: 280-80735-45

Date Sampled: 03/08/2016 1500

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2770.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0537		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0537		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	42		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 127
Toluene-d8 (Surr)	91		80 - 125
4-Bromofluorobenzene (Surr)	103		78 - 120
Dibromofluoromethane (Surr)	94		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-S73B

Lab Sample ID: 280-80735-46

Date Sampled: 03/09/2016 1505

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317694	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2771.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/22/2016 0601			Final Weight/Volume:	20 mL
Prep Date:	03/22/2016 0601				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S73B**

Lab Sample ID: 280-80735-46

Date Sampled: 03/09/2016 1505

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2771.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0601		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0601		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.24	J	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.37	J	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 127
Toluene-d8 (Surr)	90		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	100		77 - 120

# Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-S73C

Lab Sample ID: 280-80735-47

Date Sampled: 03/09/2016 1435

Client Matrix: Water

Date Received: 03/11/2016 1030

## 8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-317694	Instrument ID:	VMS_H
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	H2772.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/22/2016 0624			Final Weight/Volume:	20 mL
Prep Date:	03/22/2016 0624				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	J	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	3.6		0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	5.1		0.15	1.0
trans-1,2-Dichloroethene	12		0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S73C**

Lab Sample ID: 280-80735-47

Date Sampled: 03/09/2016 1435

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2772.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0624		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0624		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	J	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		70 - 127
Toluene-d8 (Surr)	92		80 - 125
4-Bromofluorobenzene (Surr)	107		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S73C**

Lab Sample ID: 280-80735-47

Date Sampled: 03/09/2016 1435

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2776.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 03/22/2016 0759	Run Type: DL	Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0759		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	79		0.40	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	84		70 - 127
Toluene-d8 (Surr)	92		80 - 125
4-Bromofluorobenzene (Surr)	105		78 - 120
Dibromofluoromethane (Surr)	95		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S73D**

Lab Sample ID: 280-80735-48

Date Sampled: 03/09/2016 1615

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2773.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0648		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0648		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.60	J	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.85	J	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0
n-Propylbenzene	0.16	U	0.16	1.0

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

Client Sample ID: PIN12-S73D

Lab Sample ID: 280-80735-48

Date Sampled: 03/09/2016 1615

Client Matrix: Water

Date Received: 03/11/2016 1030

### 8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-317694	Instrument ID: VMS_H
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: H2773.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0648		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0648		

Analyte	Result (ug/L)	Qualifier	MDL	RL
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	3.4		0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 127
Toluene-d8 (Surr)	93		80 - 125
4-Bromofluorobenzene (Surr)	106		78 - 120
Dibromofluoromethane (Surr)	97		77 - 120

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0539**

Lab Sample ID: 280-80735-1

Date Sampled: 03/09/2016 1530

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2448.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1627			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1627				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	92		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0540**

Lab Sample ID: 280-80735-2

Date Sampled: 03/09/2016 1615

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2449.D
Dilution:	1.0			Initial Weight/Volume:	1 mL
Analysis Date:	03/16/2016 1646			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1646				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	120		4.4	20
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	85		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0541**

Lab Sample ID: 280-80735-3

Date Sampled: 03/09/2016 0835

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2456.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1857			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1857				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.30	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	87		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0542**

Lab Sample ID: 280-80735-4

Date Sampled: 03/09/2016 0910

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-317093	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2457.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1916		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1916		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.60	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0549**

Lab Sample ID: 280-80735-5

Date Sampled: 03/09/2016 0945

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2458.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1935			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1935				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	5.0		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0551-2

Lab Sample ID: 280-80735-6

Client Matrix: Water

Date Sampled: 03/08/2016 1555

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2428.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1022			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1022				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.23	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	103		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554A**

Lab Sample ID: 280-80735-7

Date Sampled: 03/08/2016 0850

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2429.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1040			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1040				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554B**

Lab Sample ID: 280-80735-8

Date Sampled: 03/08/2016 0925

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2430.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1059			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1059				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	4.7		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0554C**

Lab Sample ID: 280-80735-9

Date Sampled: 03/08/2016 1005

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2439.D
Dilution:	1.0			Initial Weight/Volume:	2 mL
Analysis Date:	03/16/2016 1349			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1349				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	55		2.2	10
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	92		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0572-1**

Lab Sample ID: 280-80735-10

Date Sampled: 03/08/2016 1650

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-316985	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2432.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1137		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1137		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	101		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0572-2**

Lab Sample ID: 280-80735-11

Date Sampled: 03/08/2016 1720

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2433.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1156			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1156				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.9		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	96		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0576-1

Lab Sample ID: 280-80735-12

Client Matrix: Water

Date Sampled: 03/08/2016 1400

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2440.D
Dilution:	1.0			Initial Weight/Volume:	4 mL
Analysis Date:	03/16/2016 1414			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1414				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	48		1.1	5.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	92		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0576-2**

Lab Sample ID: 280-80735-13

Date Sampled: 03/08/2016 1430

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2441.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/16/2016 1433			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1433				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	32		0.88	4.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	94		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0576-3**

Lab Sample ID: 280-80735-14

Date Sampled: 03/08/2016 1510

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2436.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1253			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1253				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	4.0		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	96		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0577-2

Lab Sample ID: 280-80735-15

Client Matrix: Water

Date Sampled: 03/08/2016 0915

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2459.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1954			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1954				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	93		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0577-3

Lab Sample ID: 280-80735-16

Client Matrix: Water

Date Sampled: 03/08/2016 0950

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2460.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 2012			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 2012				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	90		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0578-1**

Lab Sample ID: 280-80735-17

Date Sampled: 03/08/2016 1025

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2461.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 2031			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 2031				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	89		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0578-2

Lab Sample ID: 280-80735-18

Client Matrix: Water

Date Sampled: 03/08/2016 1055

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2462.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 2050			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 2050				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	86		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0578-3**

Lab Sample ID: 280-80735-19

Date Sampled: 03/08/2016 1125

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2437.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1312			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1312				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	89		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0580-1**

Lab Sample ID: 280-80735-20

Date Sampled: 03/08/2016 1135

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-316985	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2438.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 1330			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 1330				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	95		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0580-2**

Lab Sample ID: 280-80735-21

Date Sampled: 03/08/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2473.D
Dilution:	1.0			Initial Weight/Volume:	1 mL
Analysis Date:	03/17/2016 0020			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 0020				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	180		4.4	20
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	80		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0580-3**

Lab Sample ID: 280-80735-22

Date Sampled: 03/08/2016 1110

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-317093	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2474.D
Dilution: 1.0		Initial Weight/Volume: 10 mL
Analysis Date: 03/17/2016 0039		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0039		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	27		0.44	2.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	78		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0581-1**

Lab Sample ID: 280-80735-23

Date Sampled: 03/09/2016 1040

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317163	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2502.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/17/2016 1252			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 1252				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	121		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0581-2

Lab Sample ID: 280-80735-24

Client Matrix: Water

Date Sampled: 03/09/2016 1105

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317163	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2503.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/17/2016 1311			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 1311				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	5.9		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	112		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0581-3**

Lab Sample ID: 280-80735-25

Date Sampled: 03/09/2016 1140

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-317163	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2504.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 1330		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 1330		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	8.9		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	115		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0582-1

Lab Sample ID: 280-80735-26

Date Sampled: 03/09/2016 1330

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317163	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2505.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/17/2016 1349			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 1349				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	111		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0582-2

Lab Sample ID: 280-80735-27

Client Matrix: Water

Date Sampled: 03/09/2016 1400

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317163	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2512.D
Dilution:	1.0			Initial Weight/Volume:	2 mL
Analysis Date:	03/17/2016 1606			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 1606				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	130		2.2	10
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	113		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0582-3**

Lab Sample ID: 280-80735-28

Date Sampled: 03/09/2016 1435

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-317163	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2507.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 1427		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 1427		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	6.5		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	111		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-0583-1

Lab Sample ID: 280-80735-29

Date Sampled: 03/09/2016 1245

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317163	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2508.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/17/2016 1445			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 1445				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	116		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0583-2**

Lab Sample ID: 280-80735-30

Date Sampled: 03/09/2016 1320

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317163	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2509.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/17/2016 1504			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 1504				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	2.8		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	114		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-0583-3**

Lab Sample ID: 280-80735-31

Date Sampled: 03/09/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317163	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2510.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/17/2016 1523			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 1523				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.40	J	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	119		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2451**

Lab Sample ID: 280-80735-34

Date Sampled: 03/08/2016 1445

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-317093	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2465.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 2147		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 2147		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	2.0		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	90		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2452**

Lab Sample ID: 280-80735-35

Date Sampled: 03/08/2016 1345

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2475.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	03/17/2016 0057			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 0057				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	25		0.44	2.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	76		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-2453**

Lab Sample ID: 280-80735-36

Date Sampled: 03/09/2016 1320

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317163	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2513.D
Dilution:	1.0			Initial Weight/Volume:	2 mL
Analysis Date:	03/17/2016 1628			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 1628				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	120		2.2	10
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	114		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S69B**

Lab Sample ID: 280-80735-37

Date Sampled: 03/09/2016 1015

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317277	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2535.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/18/2016 0026			Final Weight/Volume:	20 mL
Prep Date:	03/18/2016 0026				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	117		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S69C**

Lab Sample ID: 280-80735-38

Date Sampled: 03/09/2016 1040

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-317277	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2536.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 0045		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 0045		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.2		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	112		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S69D**

Lab Sample ID: 280-80735-39

Date Sampled: 03/09/2016 1120

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317277	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2537.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/18/2016 0104			Final Weight/Volume:	20 mL
Prep Date:	03/18/2016 0104				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	111		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S70B**

Lab Sample ID: 280-80735-40

Date Sampled: 03/08/2016 1700

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2467.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 2224			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 2224				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	82		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S70C**

Lab Sample ID: 280-80735-41

Date Sampled: 03/09/2016 0900

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317277	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2539.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/18/2016 0141			Final Weight/Volume:	20 mL
Prep Date:	03/18/2016 0141				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	17		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	115		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S70D**

Lab Sample ID: 280-80735-42

Date Sampled: 03/09/2016 0940

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-317277	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2540.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 0200		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 0200		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	17		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	120		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71B**

Lab Sample ID: 280-80735-43

Date Sampled: 03/08/2016 1610

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2468.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 2243			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 2243				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	79		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71C**

Lab Sample ID: 280-80735-44

Date Sampled: 03/08/2016 1540

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2476.D
Dilution:	1.0			Initial Weight/Volume:	10 mL
Analysis Date:	03/17/2016 0116			Final Weight/Volume:	20 mL
Prep Date:	03/17/2016 0116				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	26		0.44	2.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	79		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S71D**

Lab Sample ID: 280-80735-45

Date Sampled: 03/08/2016 1500

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317093	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2470.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/16/2016 2320			Final Weight/Volume:	20 mL
Prep Date:	03/16/2016 2320				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	17		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	83		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S73B**

Lab Sample ID: 280-80735-46

Date Sampled: 03/09/2016 1505

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method: 8260B SIM	Analysis Batch: 280-317884	Instrument ID: VMS_E
Prep Method: 5030B	Prep Batch: N/A	Lab File ID: E2603.D
Dilution: 1.0		Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 0909		Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 0909		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	104		70 - 127	

## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID: PIN12-S73C**

Lab Sample ID: 280-80735-47

Date Sampled: 03/09/2016 1435

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317331	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2554.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/18/2016 0837			Final Weight/Volume:	20 mL
Prep Date:	03/18/2016 0837				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	75		0.88	4.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	123		70 - 127	



## Analytical Data

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Client Sample ID:** PIN12-S73D

Lab Sample ID: 280-80735-48

Date Sampled: 03/09/2016 1615

Client Matrix: Water

Date Received: 03/11/2016 1030

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### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

Analysis Method:	8260B SIM	Analysis Batch:	280-317277	Instrument ID:	VMS_E
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	E2542.D
Dilution:	1.0			Initial Weight/Volume:	20 mL
Analysis Date:	03/18/2016 0238			Final Weight/Volume:	20 mL
Prep Date:	03/18/2016 0238				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	11		0.22	1.0
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	119		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B Volatile Organic Compounds (GC/MS)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-80735-1	PIN12-0539	98	92	93	106
280-80735-2	PIN12-0540	95	89	88	102
280-80735-2 DL	PIN12-0540 DL	94	84	91	103
280-80735-3	PIN12-0541	97	90	91	104
280-80735-4	PIN12-0542	97	91	93	106
280-80735-5	PIN12-0549	95	89	90	105
280-80735-6	PIN12-0551-2	98	93	107	106
280-80735-7	PIN12-0554A	96	89	110	99
280-80735-8	PIN12-0554B	112	100	119	114
280-80735-9 DL	PIN12-0554C DL	94	86	92	103
280-80735-9	PIN12-0554C	103	97	113	116
280-80735-10	PIN12-0572-1	97	92	105	99
280-80735-11	PIN12-0572-2	89	86	91	91
280-80735-12	PIN12-0576-1	103	98	100	99
280-80735-13	PIN12-0576-2	109	102	107	105
280-80735-14	PIN12-0576-3	104	107	111	119
280-80735-15	PIN12-0577-2	96	94	106	100
280-80735-16	PIN12-0577-3	102	100	98	98
280-80735-17	PIN12-0578-1	90	76	110	102
280-80735-18	PIN12-0578-2	107	104	101	102
280-80735-19	PIN12-0578-3	95	89	89	104
280-80735-20	PIN12-0580-1	93	84	91	105
280-80735-21	PIN12-0580-2	95	89	89	103
280-80735-21 DL	PIN12-0580-2 DL	94	85	91	103
280-80735-22	PIN12-0580-3	99	95	91	105
280-80735-23	PIN12-0581-1	99	94	87	103
280-80735-24	PIN12-0581-2	98	90	91	105
280-80735-25	PIN12-0581-3	100	97	88	103
280-80735-26	PIN12-0582-1	98	93	90	104

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

# Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

## Surrogate Recovery Report

### 8260B Volatile Organic Compounds (GC/MS)

#### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
280-80735-27	PIN12-0582-2	92	94	88	86
280-80735-28	PIN12-0582-3	98	96	89	105
280-80735-29	PIN12-0583-1	98	102	91	107
280-80735-30	PIN12-0583-2	101	116	90	108
280-80735-31	PIN12-0583-3	98	109	91	106
280-80735-32	PIN12-2200	93	83	90	106
280-80735-33	PIN12-2203	96	93	94	91
280-80735-34	PIN12-2451	117	118	111	111
280-80735-35	PIN12-2452	99	100	93	92
280-80735-36	PIN12-2453	103	103	100	100
280-80735-37	PIN12-S69B	101	97	99	96
280-80735-38	PIN12-S69C	102	98	100	97
280-80735-39	PIN12-S69D	106	104	102	97
280-80735-40	PIN12-S70B	100	95	96	93
280-80735-41	PIN12-S70C	95	87	89	104
280-80735-42	PIN12-S70D	96	93	88	106
280-80735-43	PIN12-S71B	92	84	90	103
280-80735-44	PIN12-S71C	99	92	90	103
280-80735-45	PIN12-S71D	94	88	91	103
280-80735-46	PIN12-S73B	100	90	90	106
280-80735-47	PIN12-S73C	97	88	92	107
280-80735-47 DL	PIN12-S73C DL	95	84	92	105
280-80735-48	PIN12-S73D	97	92	93	106
MB 280-317323/5		109	109	110	106
MB 280-317515/8		92	79	102	96
MB 280-317694/6		96	86	90	104
MB 280-317699/6		98	93	95	95
MB 280-317723/6		95	85	93	104
MB 280-317886/6		92	92	89	85
MB 280-318092/8		99	96	111	111

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B Volatile Organic Compounds (GC/MS)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
LCS 280-317323/4		92	89	94	90
LCS 280-317515/4		93	79	104	94
LCS 280-317694/4		94	90	101	103
LCS 280-317699/4		100	93	95	95
LCS 280-317723/4		95	90	95	97
LCS 280-317886/4		94	95	92	86
LCS 280-318092/4		89	89	103	94
LCSD 280-317723/5		95	89	98	98
LCSD 280-317886/5		96	97	92	88
280-80735-1 MS	PIN12-0539 MS	95	89	98	100
280-80735-17 MS	PIN12-0578-1 MS	91	80	102	94
280-80690-B-9 MS		103	99	98	90
160-16480-M-1 MS		100	93	97	96
280-80719-B-1 MS		94	85	97	98
160-16560-B-8 MS		93	97	88	84
280-80754-L-2 MS		98	97	110	105
280-80735-1 MSD	PIN12-0539 MSD	94	92	98	97
280-80735-17 MSD	PIN12-0578-1 MSD	82	70	91	82
280-80690-B-9 MSD		93	89	85	79
160-16480-M-1 MSD		101	92	100	98
280-80719-B-1 MSD		94	85	98	97
160-16560-B-8 MSD		94	95	88	84
280-80754-L-2 MSD		101	99	112	107

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	77-120
DCA = 1,2-Dichloroethane-d4 (Surr)	70-127
TOL = Toluene-d8 (Surr)	80-125
BFB = 4-Bromofluorobenzene (Surr)	78-120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec
280-80735-1	PIN12-0539	92
280-80735-2	PIN12-0540	85
280-80735-3	PIN12-0541	87
280-80735-4	PIN12-0542	100
280-80735-5	PIN12-0549	95
280-80735-6	PIN12-0551-2	103
280-80735-7	PIN12-0554A	97
280-80735-8	PIN12-0554B	97
280-80735-9	PIN12-0554C	92
280-80735-10	PIN12-0572-1	101
280-80735-11	PIN12-0572-2	96
280-80735-12	PIN12-0576-1	92
280-80735-13	PIN12-0576-2	94
280-80735-14	PIN12-0576-3	96
280-80735-15	PIN12-0577-2	93
280-80735-16	PIN12-0577-3	90
280-80735-17	PIN12-0578-1	89
280-80735-18	PIN12-0578-2	86
280-80735-19	PIN12-0578-3	89
280-80735-20	PIN12-0580-1	95
280-80735-21	PIN12-0580-2	80
280-80735-22	PIN12-0580-3	78
280-80735-23	PIN12-0581-1	121
280-80735-24	PIN12-0581-2	112
280-80735-25	PIN12-0581-3	115
280-80735-26	PIN12-0582-1	111
280-80735-27	PIN12-0582-2	113
280-80735-28	PIN12-0582-3	111
280-80735-29	PIN12-0583-1	116

Surrogate

Acceptance Limits

DCA = 1,2-Dichloroethane-d4 (Surr)

70-127

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec
280-80735-30	PIN12-0583-2	114
280-80735-31	PIN12-0583-3	119
280-80735-34	PIN12-2451	90
280-80735-35	PIN12-2452	76
280-80735-36	PIN12-2453	114
280-80735-37	PIN12-S69B	117
280-80735-38	PIN12-S69C	112
280-80735-39	PIN12-S69D	111
280-80735-40	PIN12-S70B	82
280-80735-41	PIN12-S70C	115
280-80735-42	PIN12-S70D	120
280-80735-43	PIN12-S71B	79
280-80735-44	PIN12-S71C	79
280-80735-45	PIN12-S71D	83
280-80735-46	PIN12-S73B	104
280-80735-47	PIN12-S73C	123
280-80735-48	PIN12-S73D	119
MB 280-316985/4		100
MB 280-317093/4		97
MB 280-317163/8		119
MB 280-317277/8		122
MB 280-317331/4		126
MB 280-317884/5		100
LCS 280-316985/3		95
LCS 280-317093/3		91
LCS 280-317163/7		116
LCS 280-317277/5		118
LCS 280-317331/3		121
LCS 280-317884/3		102
LCSD 280-317884/4		96

Surrogate

Acceptance Limits

DCA = 1,2-Dichloroethane-d4 (Surr)

70-127

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### Surrogate Recovery Report

#### 8260B SIM Volatile Organic Compounds (GC/MS-SIM)

##### Client Matrix: Water

Lab Sample ID	Client Sample ID	DCA %Rec
280-80735-2 MS	PIN12-0540 MS	89
160-16436-N-2 MS		100
160-16480-P-1 MS		118
280-80856-F-1 MS		121
160-16505-O-5 MS		125
160-16588-R-5 MS		104
280-80735-2 MSD	PIN12-0540 MSD	86
160-16436-N-2 MSD		104
160-16480-P-1 MSD		119
280-80856-F-1 MSD		120
160-16505-O-5 MSD		126
160-16588-R-5 MSD		99

Surrogate

Acceptance Limits

DCA = 1,2-Dichloroethane-d4 (Surr)

70-127

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317323**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317323/5  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/18/2016 0704  
 Prep Date: 03/18/2016 0704  
 Leach Date: N/A

Analysis Batch: 280-317323  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_G2  
 Lab File ID: G2\_2310.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317323**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317323/5  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/18/2016 0704  
 Prep Date: 03/18/2016 0704  
 Leach Date: N/A

Analysis Batch: 280-317323  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_G2  
 Lab File ID: G2\_2310.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109	70 - 127
Toluene-d8 (Surr)	110	80 - 125
4-Bromofluorobenzene (Surr)	106	78 - 120
Dibromofluoromethane (Surr)	109	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-317323**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-317323/4  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/18/2016 0644  
 Prep Date: 03/18/2016 0644  
 Leach Date: N/A

Analysis Batch: 280-317323  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_G2  
 Lab File ID: G2\_2309.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	4.66	93	65 - 135	
Bromodichloromethane	5.00	4.57	91	65 - 135	
Carbon tetrachloride	5.00	4.90	98	65 - 135	
Chlorobenzene	5.00	4.64	93	65 - 135	
Chloroform	5.00	4.75	95	65 - 135	
1,3-Dichlorobenzene	5.00	4.83	97	65 - 135	
1,1-Dichloroethane	5.00	4.54	91	65 - 135	
trans-1,2-Dichloroethene	5.00	4.78	96	65 - 135	
1,1-Dichloroethene	5.00	4.73	95	65 - 136	
1,2-Dichloropropane	5.00	4.59	92	64 - 135	
Ethylbenzene	5.00	4.72	94	65 - 135	
Methylene Chloride	5.00	4.18	84	54 - 141	
Tetrachloroethene	5.00	4.94	99	65 - 135	
Toluene	5.00	4.91	98	65 - 135	
1,1,1-Trichloroethane	5.00	4.87	97	65 - 135	
Trichloroethene	5.00	4.80	96	65 - 135	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		89		70 - 127	
Toluene-d8 (Surr)		94		80 - 125	
4-Bromofluorobenzene (Surr)		90		78 - 120	
Dibromofluoromethane (Surr)		92		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317323**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80690-B-9 MS	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: G2_2323.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1125		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1125		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80690-B-9 MSD	Analysis Batch: 280-317323	Instrument ID: VMS_G2
Client Matrix: Water	Prep Batch: N/A	Lab File ID: G2_2324.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 1145		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 1145		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	98	89	65 - 135	10	20		
Bromodichloromethane	101	91	65 - 135	10	20		
Carbon tetrachloride	100	92	65 - 135	8	21		
Chlorobenzene	96	85	65 - 135	13	20		
Chloroform	106	97	65 - 135	9	20		
1,3-Dichlorobenzene	94	81	65 - 135	13	20		
1,1-Dichloroethane	96	89	65 - 135	8	21		
trans-1,2-Dichloroethene	101	91	65 - 135	10	24		
1,1-Dichloroethene	97	90	65 - 136	7	20		
1,2-Dichloropropane	98	89	64 - 135	10	20		
Ethylbenzene	92	81	65 - 135	14	20		
Methylene Chloride	88	81	54 - 141	8	26		
Tetrachloroethene	97	84	65 - 135	14	20		
Toluene	100	89	65 - 135	11	20		
1,1,1-Trichloroethane	100	93	65 - 135	7	20		
Trichloroethene	99	80	65 - 135	12	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		99	89			70 - 127	
Toluene-d8 (Surr)		98	85			80 - 125	
4-Bromofluorobenzene (Surr)		90	79			78 - 120	
Dibromofluoromethane (Surr)		103	93			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317323**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80690-B-9 MS      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/18/2016 1125  
Prep Date: 03/18/2016 1125  
Leach Date: N/A

MSD Lab Sample ID: 280-80690-B-9 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/18/2016 1145  
Prep Date: 03/18/2016 1145  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	4.92	4.43
Bromodichloromethane	0.17	U	5.00	5.00	5.04	4.54
Carbon tetrachloride	0.19	U	5.00	5.00	4.98	4.60
Chlorobenzene	0.17	U	5.00	5.00	4.82	4.23
Chloroform	0.16	U	5.00	5.00	5.32	4.87
1,3-Dichlorobenzene	0.20	J	5.00	5.00	4.88	4.27
1,1-Dichloroethane	0.22	U	5.00	5.00	4.81	4.45
trans-1,2-Dichloroethene	0.20	J	5.00	5.00	5.26	4.77
1,1-Dichloroethene	0.23	U	5.00	5.00	4.84	4.52
1,2-Dichloropropane	0.18	U	5.00	5.00	4.91	4.44
Ethylbenzene	0.16	U	5.00	5.00	4.62	4.03
Methylene Chloride	0.32	U	5.00	5.00	4.39	4.04
Tetrachloroethene	0.23	J	5.00	5.00	5.06	4.41
Toluene	0.17	U	5.00	5.00	4.98	4.46
1,1,1-Trichloroethane	0.16	U	5.00	5.00	5.00	4.65
Trichloroethene	3.8		5.00	5.00	8.72	7.74

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317515**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317515/8  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/19/2016 1213  
 Prep Date: 03/19/2016 1213  
 Leach Date: N/A

Analysis Batch: 280-317515  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_P  
 Lab File ID: P5969.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317515**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317515/8	Analysis Batch: 280-317515	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P5969.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1213	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1213		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	79	70 - 127
Toluene-d8 (Surr)	102	80 - 125
4-Bromofluorobenzene (Surr)	96	78 - 120
Dibromofluoromethane (Surr)	92	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-317515**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-317515/4	Analysis Batch: 280-317515	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P5968.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1153	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1153		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	4.44	89	65 - 135	
Bromodichloromethane	5.00	4.33	87	65 - 135	
Carbon tetrachloride	5.00	4.80	96	65 - 135	
Chlorobenzene	5.00	4.16	83	65 - 135	
Chloroform	5.00	4.61	92	65 - 135	
1,3-Dichlorobenzene	5.00	4.10	82	65 - 135	
1,1-Dichloroethane	5.00	4.42	88	65 - 135	
trans-1,2-Dichloroethene	5.00	4.73	95	65 - 135	
1,1-Dichloroethene	5.00	4.53	91	65 - 136	
1,2-Dichloropropane	5.00	4.32	86	64 - 135	
Ethylbenzene	5.00	4.19	84	65 - 135	
Methylene Chloride	5.00	4.86	97	54 - 141	
Tetrachloroethene	5.00	4.56	91	65 - 135	
Toluene	5.00	4.60	92	65 - 135	
1,1,1-Trichloroethane	5.00	4.83	97	65 - 135	
Trichloroethene	5.00	4.64	93	65 - 135	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		79		70 - 127	
Toluene-d8 (Surr)		104		80 - 125	
4-Bromofluorobenzene (Surr)		94		78 - 120	
Dibromofluoromethane (Surr)		93		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317515**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80735-17	Analysis Batch: 280-317515	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P5971.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1252		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1252		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80735-17	Analysis Batch: 280-317515	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P5972.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/19/2016 1312		Final Weight/Volume: 20 mL
Prep Date: 03/19/2016 1312		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	87	87	65 - 135	0	20		
Bromodichloromethane	84	90	65 - 135	7	20		
Carbon tetrachloride	94	96	65 - 135	2	21		
Chlorobenzene	82	85	65 - 135	3	20		
Chloroform	89	92	65 - 135	3	20		
1,3-Dichlorobenzene	81	82	65 - 135	2	20		
1,1-Dichloroethane	86	90	65 - 135	5	21		
trans-1,2-Dichloroethene	92	92	65 - 135	0	24		
1,1-Dichloroethene	87	88	65 - 136	2	20		
1,2-Dichloropropane	86	89	64 - 135	4	20		
Ethylbenzene	84	85	65 - 135	1	20		
Methylene Chloride	81	88	54 - 141	8	26		
Tetrachloroethene	89	87	65 - 135	3	20		
Toluene	91	92	65 - 135	1	20		
1,1,1-Trichloroethane	95	97	65 - 135	2	20		
Trichloroethene	91	91	65 - 135	0	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		80	70			70 - 127	
Toluene-d8 (Surr)		102	91			80 - 125	
4-Bromofluorobenzene (Surr)		94	82			78 - 120	
Dibromofluoromethane (Surr)		91	82			77 - 120	



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317515**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80735-17                      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/19/2016 1252  
Prep Date: 03/19/2016 1252  
Leach Date: N/A

MSD Lab Sample ID: 280-80735-17  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/19/2016 1312  
Prep Date: 03/19/2016 1312  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	4.33	4.35
Bromodichloromethane	0.17	U	5.00	5.00	4.22	4.51
Carbon tetrachloride	0.19	U	5.00	5.00	4.69	4.78
Chlorobenzene	0.17	U	5.00	5.00	4.11	4.24
Chloroform	0.16	U	5.00	5.00	4.47	4.61
1,3-Dichlorobenzene	0.13	U	5.00	5.00	4.05	4.11
1,1-Dichloroethane	0.22	U	5.00	5.00	4.30	4.51
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	4.58	4.60
1,1-Dichloroethene	0.23	U	5.00	5.00	4.34	4.41
1,2-Dichloropropane	0.18	U	5.00	5.00	4.30	4.47
Ethylbenzene	0.16	U	5.00	5.00	4.18	4.24
Methylene Chloride	0.32	U	5.00	5.00	4.04	4.38
Tetrachloroethene	0.20	U	5.00	5.00	4.46	4.33
Toluene	0.17	U	5.00	5.00	4.55	4.59
1,1,1-Trichloroethane	0.16	U	5.00	5.00	4.74	4.83
Trichloroethene	0.16	U	5.00	5.00	4.55	4.53

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317694**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317694/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/21/2016 2233  
 Prep Date: 03/21/2016 2233  
 Leach Date: N/A

Analysis Batch: 280-317694  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2752.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.907	J	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317694**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317694/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/21/2016 2233  
 Prep Date: 03/21/2016 2233  
 Leach Date: N/A

Analysis Batch: 280-317694  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2752.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	70 - 127
Toluene-d8 (Surr)	90	80 - 125
4-Bromofluorobenzene (Surr)	104	78 - 120
Dibromofluoromethane (Surr)	96	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-317694**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-317694/4	Analysis Batch: 280-317694	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2749.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/21/2016 2121	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/21/2016 2121		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	5.47	109	65 - 135	
Bromodichloromethane	5.00	5.18	104	65 - 135	
Carbon tetrachloride	5.00	5.83	117	65 - 135	
Chlorobenzene	5.00	5.63	113	65 - 135	
Chloroform	5.00	5.31	106	65 - 135	
1,3-Dichlorobenzene	5.00	5.98	120	65 - 135	
1,1-Dichloroethane	5.00	5.11	102	65 - 135	
trans-1,2-Dichloroethene	5.00	5.30	106	65 - 135	
1,1-Dichloroethene	5.00	5.33	107	65 - 136	
1,2-Dichloropropane	5.00	5.29	106	64 - 135	
Ethylbenzene	5.00	5.81	116	65 - 135	
Methylene Chloride	5.00	5.37	107	54 - 141	
Tetrachloroethene	5.00	5.87	117	65 - 135	
Toluene	5.00	5.66	113	65 - 135	
1,1,1-Trichloroethane	5.00	5.48	110	65 - 135	
Trichloroethene	5.00	5.38	108	65 - 135	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		90		70 - 127	
Toluene-d8 (Surr)		101		80 - 125	
4-Bromofluorobenzene (Surr)		103		78 - 120	
Dibromofluoromethane (Surr)		94		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317694**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80735-1	Analysis Batch: 280-317694	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2754.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/21/2016 2320		Final Weight/Volume: 20 mL
Prep Date: 03/21/2016 2320		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80735-1	Analysis Batch: 280-317694	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2755.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/21/2016 2343		Final Weight/Volume: 20 mL
Prep Date: 03/21/2016 2343		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	107	105	65 - 135	2	20		
Bromodichloromethane	103	104	65 - 135	1	20		
Carbon tetrachloride	114	111	65 - 135	2	21		
Chlorobenzene	108	106	65 - 135	2	20		
Chloroform	107	105	65 - 135	2	20		
1,3-Dichlorobenzene	106	118	65 - 135	10	20		
1,1-Dichloroethane	103	100	65 - 135	3	21		
trans-1,2-Dichloroethene	110	106	65 - 135	4	24		
1,1-Dichloroethene	104	99	65 - 136	4	20		
1,2-Dichloropropane	100	101	64 - 135	1	20		
Ethylbenzene	108	107	65 - 135	2	20		
Methylene Chloride	93	91	54 - 141	2	26		
Tetrachloroethene	110	107	65 - 135	3	20		
Toluene	111	107	65 - 135	4	20		
1,1,1-Trichloroethane	107	104	65 - 135	3	20		
Trichloroethene	104	103	65 - 135	2	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		89	92			70 - 127	
Toluene-d8 (Surr)		98	98			80 - 125	
4-Bromofluorobenzene (Surr)		100	97			78 - 120	
Dibromofluoromethane (Surr)		95	94			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317694**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80735-1                      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/21/2016 2320  
Prep Date: 03/21/2016 2320  
Leach Date: N/A

MSD Lab Sample ID: 280-80735-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/21/2016 2343  
Prep Date: 03/21/2016 2343  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	5.34	5.23
Bromodichloromethane	0.17	U	5.00	5.00	5.17	5.20
Carbon tetrachloride	0.19	U	5.00	5.00	5.69	5.55
Chlorobenzene	0.17	U	5.00	5.00	5.38	5.30
Chloroform	0.16	U	5.00	5.00	5.34	5.23
1,3-Dichlorobenzene	0.13	U	5.00	5.00	5.32	5.88
1,1-Dichloroethane	0.22	U	5.00	5.00	5.15	5.01
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	5.49	5.28
1,1-Dichloroethene	0.23	U	5.00	5.00	5.18	4.97
1,2-Dichloropropane	0.18	U	5.00	5.00	4.98	5.03
Ethylbenzene	0.16	U	5.00	5.00	5.42	5.34
Methylene Chloride	0.33	J	5.00	5.00	4.98	4.90
Tetrachloroethene	0.20	U	5.00	5.00	5.50	5.36
Toluene	0.17	U	5.00	5.00	5.57	5.36
1,1,1-Trichloroethane	0.16	U	5.00	5.00	5.34	5.20
Trichloroethene	0.16	U	5.00	5.00	5.22	5.13

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317699**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317699/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/21/2016 2223  
 Prep Date: 03/21/2016 2223  
 Leach Date: N/A

Analysis Batch: 280-317699  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_MS9  
 Lab File ID: MS9\_2404.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317699**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317699/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/21/2016 2223  
 Prep Date: 03/21/2016 2223  
 Leach Date: N/A

Analysis Batch: 280-317699  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_MS9  
 Lab File ID: MS9\_2404.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93	70 - 127
Toluene-d8 (Surr)	95	80 - 125
4-Bromofluorobenzene (Surr)	95	78 - 120
Dibromofluoromethane (Surr)	98	77 - 120



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-317699**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-317699/4	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2403.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/21/2016 2201	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/21/2016 2201		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	5.06	101	65 - 135	
Bromodichloromethane	5.00	4.86	97	65 - 135	
Carbon tetrachloride	5.00	4.88	98	65 - 135	
Chlorobenzene	5.00	4.61	92	65 - 135	
Chloroform	5.00	4.95	99	65 - 135	
1,3-Dichlorobenzene	5.00	4.57	91	65 - 135	
1,1-Dichloroethane	5.00	4.77	95	65 - 135	
trans-1,2-Dichloroethene	5.00	5.09	102	65 - 135	
1,1-Dichloroethene	5.00	4.87	97	65 - 136	
1,2-Dichloropropane	5.00	5.09	102	64 - 135	
Ethylbenzene	5.00	4.67	93	65 - 135	
Methylene Chloride	5.00	5.09	102	54 - 141	
Tetrachloroethene	5.00	4.51	90	65 - 135	
Toluene	5.00	5.23	105	65 - 135	
1,1,1-Trichloroethane	5.00	4.74	95	65 - 135	
Trichloroethene	5.00	5.01	100	65 - 135	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		93		70 - 127	
Toluene-d8 (Surr)		95		80 - 125	
4-Bromofluorobenzene (Surr)		95		78 - 120	
Dibromofluoromethane (Surr)		100		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317699**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 160-16480-M-1 MS	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2409.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0008		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0008		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 160-16480-M-1 MSD	Analysis Batch: 280-317699	Instrument ID: VMS_MS9
Client Matrix: Water	Prep Batch: N/A	Lab File ID: MS9_2410.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0029		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0029		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	104	105	65 - 135	1	20		
Bromodichloromethane	99	99	65 - 135	1	20		
Carbon tetrachloride	106	103	65 - 135	3	21		
Chlorobenzene	94	97	65 - 135	3	20		
Chloroform	101	101	65 - 135	0	20		
1,3-Dichlorobenzene	94	95	65 - 135	1	20		
1,1-Dichloroethane	100	100	65 - 135	1	21		
trans-1,2-Dichloroethene	105	104	65 - 135	2	24		
1,1-Dichloroethene	102	99	65 - 136	2	20		
1,2-Dichloropropane	102	105	64 - 135	3	20		
Ethylbenzene	95	98	65 - 135	3	20		
Methylene Chloride	96	95	54 - 141	1	26		
Tetrachloroethene	96	96	65 - 135	1	20		
Toluene	108	109	65 - 135	0	20		
1,1,1-Trichloroethane	104	102	65 - 135	2	20		
Trichloroethene	104	105	65 - 135	1	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		93	92			70 - 127	
Toluene-d8 (Surr)		97	100			80 - 125	
4-Bromofluorobenzene (Surr)		96	98			78 - 120	
Dibromofluoromethane (Surr)		100	101			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317699**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 160-16480-M-1 MS      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/22/2016 0008  
Prep Date: 03/22/2016 0008  
Leach Date: N/A

MSD Lab Sample ID: 160-16480-M-1 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/22/2016 0029  
Prep Date: 03/22/2016 0029  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	5.22	5.25
Bromodichloromethane	0.17	U	5.00	5.00	4.95	4.97
Carbon tetrachloride	0.19	U	5.00	5.00	5.29	5.13
Chlorobenzene	0.17	U	5.00	5.00	4.72	4.87
Chloroform	0.16	U	5.00	5.00	5.05	5.07
1,3-Dichlorobenzene	0.13	U	5.00	5.00	4.71	4.76
1,1-Dichloroethane	0.22	U	5.00	5.00	4.98	5.01
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	5.27	5.19
1,1-Dichloroethene	0.23	U	5.00	5.00	5.08	4.97
1,2-Dichloropropane	0.18	U	5.00	5.00	5.09	5.27
Ethylbenzene	0.16	U	5.00	5.00	4.77	4.92
Methylene Chloride	0.32	U	5.00	5.00	4.80	4.76
Tetrachloroethene	0.20	U	5.00	5.00	4.78	4.81
Toluene	0.17	U	5.00	5.00	5.42	5.44
1,1,1-Trichloroethane	0.16	U	5.00	5.00	5.21	5.08
Trichloroethene	0.16	U	5.00	5.00	5.21	5.24

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317723**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317723/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/22/2016 1108  
 Prep Date: 03/22/2016 1108  
 Leach Date: N/A

Analysis Batch: 280-317723  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_H  
 Lab File ID: H2784.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.531	J	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317723**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317723/6	Analysis Batch: 280-317723	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2784.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1108	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1108		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85	70 - 127
Toluene-d8 (Surr)	93	80 - 125
4-Bromofluorobenzene (Surr)	104	78 - 120
Dibromofluoromethane (Surr)	95	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Lab Control Sample/**

**Method: 8260B**

**Lab Control Sample Duplicate Recovery Report - Batch: 280-317723**

**Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317723/4	Analysis Batch: 280-317723	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2781.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 0957	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 0957		20 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-317723/5	Analysis Batch: 280-317723	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2782.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1021	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1021		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	95	96	65 - 135	1	20		
Bromodichloromethane	95	98	65 - 135	4	20		
Carbon tetrachloride	91	89	65 - 135	2	21		
Chlorobenzene	94	99	65 - 135	5	20		
Chloroform	94	94	65 - 135	0	20		
1,3-Dichlorobenzene	97	100	65 - 135	3	20		
1,1-Dichloroethane	89	89	65 - 135	0	21		
trans-1,2-Dichloroethene	95	94	65 - 135	1	24		
1,1-Dichloroethene	87	86	65 - 136	0	20		
1,2-Dichloropropane	96	98	64 - 135	2	20		
Ethylbenzene	92	95	65 - 135	3	20		
Methylene Chloride	99	97	54 - 141	2	26		
Tetrachloroethene	89	90	65 - 135	1	20		
Toluene	99	98	65 - 135	0	20		
1,1,1-Trichloroethane	89	89	65 - 135	0	20		
Trichloroethene	93	92	65 - 135	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90	89	70 - 127
Toluene-d8 (Surr)	95	98	80 - 125
4-Bromofluorobenzene (Surr)	97	98	78 - 120
Dibromofluoromethane (Surr)	95	95	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 280-317723**

**Method: 8260B  
Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317723/4      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/22/2016 0957  
Prep Date: 03/22/2016 0957  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-317723/5  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/22/2016 1021  
Prep Date: 03/22/2016 1021  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Benzene	5.00	5.00	4.76	4.81
Bromodichloromethane	5.00	5.00	4.73	4.92
Carbon tetrachloride	5.00	5.00	4.54	4.46
Chlorobenzene	5.00	5.00	4.70	4.93
Chloroform	5.00	5.00	4.68	4.70
1,3-Dichlorobenzene	5.00	5.00	4.85	4.99
1,1-Dichloroethane	5.00	5.00	4.45	4.44
trans-1,2-Dichloroethene	5.00	5.00	4.75	4.68
1,1-Dichloroethene	5.00	5.00	4.33	4.31
1,2-Dichloropropane	5.00	5.00	4.82	4.91
Ethylbenzene	5.00	5.00	4.58	4.73
Methylene Chloride	5.00	5.00	4.93	4.83
Tetrachloroethene	5.00	5.00	4.47	4.52
Toluene	5.00	5.00	4.94	4.92
1,1,1-Trichloroethane	5.00	5.00	4.45	4.45
Trichloroethene	5.00	5.00	4.67	4.60

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317723**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80719-B-1 MS	Analysis Batch: 280-317723	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2789.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1308		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1308		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80719-B-1 MSD	Analysis Batch: 280-317723	Instrument ID: VMS_H
Client Matrix: Water	Prep Batch: N/A	Lab File ID: H2790.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/22/2016 1332		Final Weight/Volume: 20 mL
Prep Date: 03/22/2016 1332		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	100	100	65 - 135	0	20		
Bromodichloromethane	91	95	65 - 135	4	20		
Carbon tetrachloride	96	97	65 - 135	1	21		
Chlorobenzene	102	103	65 - 135	1	20		
Chloroform	95	96	65 - 135	0	20		
1,3-Dichlorobenzene	100	97	65 - 135	3	20		
1,1-Dichloroethane	91	93	65 - 135	1	21		
trans-1,2-Dichloroethene	98	97	65 - 135	1	24		
1,1-Dichloroethene	92	94	65 - 136	2	20		
1,2-Dichloropropane	96	95	64 - 135	1	20		
Ethylbenzene	99	100	65 - 135	1	20		
Methylene Chloride	88	92	54 - 141	4	26		
Tetrachloroethene	99	99	65 - 135	0	20		
Toluene	99	99	65 - 135	0	20		
1,1,1-Trichloroethane	93	92	65 - 135	1	20		
Trichloroethene	95	96	65 - 135	1	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		85	85			70 - 127	
Toluene-d8 (Surr)		97	98			80 - 125	
4-Bromofluorobenzene (Surr)		98	97			78 - 120	
Dibromofluoromethane (Surr)		94	94			77 - 120	



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317723**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80719-B-1 MS      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/22/2016 1308  
Prep Date: 03/22/2016 1308  
Leach Date: N/A

MSD Lab Sample ID: 280-80719-B-1 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/22/2016 1332  
Prep Date: 03/22/2016 1332  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	4.99	4.98
Bromodichloromethane	0.17	U	5.00	5.00	4.55	4.73
Carbon tetrachloride	0.19	U	5.00	5.00	4.81	4.85
Chlorobenzene	0.17	U	5.00	5.00	5.09	5.13
Chloroform	0.16	U	5.00	5.00	4.77	4.78
1,3-Dichlorobenzene	0.13	U	5.00	5.00	5.02	4.85
1,1-Dichloroethane	0.22	U	5.00	5.00	4.57	4.63
trans-1,2-Dichloroethene	0.28	J	5.00	5.00	5.18	5.13
1,1-Dichloroethene	0.23	U	5.00	5.00	4.62	4.69
1,2-Dichloropropane	0.18	U	5.00	5.00	4.78	4.74
Ethylbenzene	0.16	U	5.00	5.00	4.94	5.01
Methylene Chloride	0.55	J	5.00	5.00	4.95	5.13
Tetrachloroethene	0.20	U	5.00	5.00	4.97	4.96
Toluene	0.17	U	5.00	5.00	4.97	4.96
1,1,1-Trichloroethane	0.16	U	5.00	5.00	4.65	4.61
Trichloroethene	1.1		5.00	5.00	5.78	5.86

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317886**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317886/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/23/2016 1036  
 Prep Date: 03/23/2016 1036  
 Leach Date: N/A

Analysis Batch: 280-317886  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_R1  
 Lab File ID: R0117.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-317886**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-317886/6  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/23/2016 1036  
 Prep Date: 03/23/2016 1036  
 Leach Date: N/A

Analysis Batch: 280-317886  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_R1  
 Lab File ID: R0117.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	70 - 127
Toluene-d8 (Surr)	89	80 - 125
4-Bromofluorobenzene (Surr)	85	78 - 120
Dibromofluoromethane (Surr)	92	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Lab Control Sample/**

**Lab Control Sample Duplicate Recovery Report - Batch: 280-317886**

**Method: 8260B**

**Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317886/4	Analysis Batch: 280-317886	Instrument ID: VMS_R1
Client Matrix: Water	Prep Batch: N/A	Lab File ID: R0116.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 0953	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 0953		1 uL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-317886/5	Analysis Batch: 280-317886	Instrument ID: VMS_R1
Client Matrix: Water	Prep Batch: N/A	Lab File ID: R0118.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 1056	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 1056		1 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Benzene	73	78	65 - 135	6	20		
Bromodichloromethane	77	80	65 - 135	4	20		
Carbon tetrachloride	79	90	65 - 135	13	21		
Chlorobenzene	76	80	65 - 135	5	20		
Chloroform	77	82	65 - 135	6	20		
1,3-Dichlorobenzene	77	83	65 - 135	8	20		
1,1-Dichloroethane	75	78	65 - 135	4	21		
trans-1,2-Dichloroethene	72	78	65 - 135	9	24		
1,1-Dichloroethene	69	76	65 - 136	10	20		
1,2-Dichloropropane	74	77	64 - 135	3	20		
Ethylbenzene	74	79	65 - 135	7	20		
Methylene Chloride	76	78	54 - 141	3	26		
Tetrachloroethene	73	81	65 - 135	10	20		
Toluene	79	83	65 - 135	5	20		
1,1,1-Trichloroethane	76	85	65 - 135	11	20		
Trichloroethene	77	82	65 - 135	7	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	97	70 - 127
Toluene-d8 (Surr)	92	92	80 - 125
4-Bromofluorobenzene (Surr)	86	88	78 - 120
Dibromofluoromethane (Surr)	94	96	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 280-317886**

**Method: 8260B  
Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317886/4      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/23/2016 0953  
Prep Date: 03/23/2016 0953  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-317886/5  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/23/2016 1056  
Prep Date: 03/23/2016 1056  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Benzene	5.00	5.00	3.67	3.90
Bromodichloromethane	5.00	5.00	3.84	3.99
Carbon tetrachloride	5.00	5.00	3.94	4.49
Chlorobenzene	5.00	5.00	3.79	3.99
Chloroform	5.00	5.00	3.85	4.08
1,3-Dichlorobenzene	5.00	5.00	3.83	4.13
1,1-Dichloroethane	5.00	5.00	3.74	3.91
trans-1,2-Dichloroethene	5.00	5.00	3.58	3.91
1,1-Dichloroethene	5.00	5.00	3.44	3.79
1,2-Dichloropropane	5.00	5.00	3.72	3.84
Ethylbenzene	5.00	5.00	3.68	3.94
Methylene Chloride	5.00	5.00	3.80	3.92
Tetrachloroethene	5.00	5.00	3.66	4.06
Toluene	5.00	5.00	3.96	4.16
1,1,1-Trichloroethane	5.00	5.00	3.81	4.27
Trichloroethene	5.00	5.00	3.83	4.10

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317886**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 160-16560-B-8 MS	Analysis Batch: 280-317886	Instrument ID: VMS_R1
Client Matrix: Water	Prep Batch: N/A	Lab File ID: R0122.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 1216		Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 1216		1 uL
Leach Date: N/A		

MSD Lab Sample ID: 160-16560-B-8 MSD	Analysis Batch: 280-317886	Instrument ID: VMS_R1
Client Matrix: Water	Prep Batch: N/A	Lab File ID: R0123.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 1236		Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 1236		1 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	81	76	65 - 135	6	20		
Bromodichloromethane	86	81	65 - 135	6	20		
Carbon tetrachloride	97	87	65 - 135	11	21		
Chlorobenzene	84	80	65 - 135	6	20		
Chloroform	89	82	65 - 135	7	20		
1,3-Dichlorobenzene	86	80	65 - 135	8	20		
1,1-Dichloroethane	84	76	65 - 135	10	21		
trans-1,2-Dichloroethene	82	76	65 - 135	8	24		
1,1-Dichloroethene	76	71	65 - 136	8	20		
1,2-Dichloropropane	81	76	64 - 135	6	20		
Ethylbenzene	83	76	65 - 135	8	20		
Methylene Chloride	73	70	54 - 141	5	26		
Tetrachloroethene	83	77	65 - 135	8	20		
Toluene	88	82	65 - 135	6	20		
1,1,1-Trichloroethane	92	84	65 - 135	8	20		
Trichloroethene	87	81	65 - 135	7	20		
Surrogate		MS % Rec	MSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)		97	95		70 - 127		
Toluene-d8 (Surr)		88	88		80 - 125		
4-Bromofluorobenzene (Surr)		84	84		78 - 120		
Dibromofluoromethane (Surr)		93	94		77 - 120		

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317886**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 160-16560-B-8 MS      Units: ug/L  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/23/2016 1216  
 Prep Date: 03/23/2016 1216  
 Leach Date: N/A

MSD Lab Sample ID: 160-16560-B-8 MSD  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/23/2016 1236  
 Prep Date: 03/23/2016 1236  
 Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	4.05	3.81
Bromodichloromethane	0.17	U	5.00	5.00	4.32	4.06
Carbon tetrachloride	0.19	U	5.00	5.00	4.85	4.34
Chlorobenzene	0.17	U	5.00	5.00	4.22	3.99
Chloroform	0.16	U	5.00	5.00	4.43	4.11
1,3-Dichlorobenzene	0.13	U	5.00	5.00	4.32	3.99
1,1-Dichloroethane	0.22	U	5.00	5.00	4.21	3.82
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	4.10	3.78
1,1-Dichloroethene	0.23	U	5.00	5.00	3.82	3.54
1,2-Dichloropropane	0.18	U	5.00	5.00	4.03	3.79
Ethylbenzene	0.16	U	5.00	5.00	4.15	3.82
Methylene Chloride	0.32	U	5.00	5.00	3.66	3.48
Tetrachloroethene	0.20	U	5.00	5.00	4.17	3.86
Toluene	0.17	U	5.00	5.00	4.38	4.11
1,1,1-Trichloroethane	0.16	U	5.00	5.00	4.59	4.22
Trichloroethene	0.16	U	5.00	5.00	4.35	4.06

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-318092**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-318092/8  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/24/2016 2323  
 Prep Date: 03/24/2016 2323  
 Leach Date: N/A

Analysis Batch: 280-318092  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_P  
 Lab File ID: P6231.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
Acetone	1.9	U	1.9	10
Benzene	0.16	U	0.16	1.0
Bromobenzene	0.17	U	0.17	1.0
Bromochloromethane	0.10	U	0.10	1.0
Bromodichloromethane	0.17	U	0.17	1.0
Bromoform	0.19	U	0.19	1.0
Bromomethane	0.21	U	0.21	1.0
2-Butanone (MEK)	2.0	U	2.0	5.0
n-Butylbenzene	0.32	U	0.32	1.0
sec-Butylbenzene	0.17	U	0.17	1.0
tert-Butylbenzene	0.16	U	0.16	1.0
Carbon disulfide	0.45	U	0.45	1.0
Carbon tetrachloride	0.19	U	0.19	1.0
Chlorobenzene	0.17	U	0.17	1.0
Dibromochloromethane	0.17	U	0.17	1.0
Chloroethane	0.41	U	0.41	1.0
Chloroform	0.16	U	0.16	1.0
Chloromethane	0.30	U	0.30	1.0
2-Chlorotoluene	0.17	U	0.17	1.0
4-Chlorotoluene	0.21	U	0.21	1.0
1,2-Dibromo-3-Chloropropane	0.47	U	0.47	1.0
Dibromomethane	0.17	U	0.17	1.0
1,2-Dichlorobenzene	0.15	U	0.15	1.0
1,3-Dichlorobenzene	0.13	U	0.13	1.0
1,4-Dichlorobenzene	0.16	U	0.16	1.0
Dichlorodifluoromethane	0.31	U	0.31	1.0
1,1-Dichloroethane	0.22	U	0.22	1.0
1,2-Dichloroethane	0.13	U	0.13	1.0
cis-1,2-Dichloroethene	0.15	U	0.15	1.0
trans-1,2-Dichloroethene	0.15	U	0.15	1.0
1,1-Dichloroethene	0.23	U	0.23	1.0
1,2-Dichloropropane	0.18	U	0.18	1.0
1,3-Dichloropropane	0.22	U	0.22	1.0
2,2-Dichloropropane	0.18	U	0.18	1.0
cis-1,3-Dichloropropene	0.16	U	0.16	1.0
trans-1,3-Dichloropropene	0.19	U	0.19	1.0
1,1-Dichloropropene	0.19	U	0.19	1.0
Ethylbenzene	0.16	U	0.16	1.0
Hexachlorobutadiene	0.36	U	0.36	1.0
2-Hexanone	1.7	U	1.7	5.0
Isopropylbenzene	0.19	U	0.19	1.0
4-Isopropyltoluene	0.20	U	0.20	1.0
Methylene Chloride	0.32	U	0.32	1.0
4-Methyl-2-pentanone	0.98	U	0.98	5.0
Naphthalene	0.22	U	0.22	1.0



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Method Blank - Batch: 280-318092**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: MB 280-318092/8  
 Client Matrix: Water  
 Dilution: 1.0  
 Analysis Date: 03/24/2016 2323  
 Prep Date: 03/24/2016 2323  
 Leach Date: N/A

Analysis Batch: 280-318092  
 Prep Batch: N/A  
 Leach Batch: N/A  
 Units: ug/L

Instrument ID: VMS\_P  
 Lab File ID: P6231.D  
 Initial Weight/Volume: 20 mL  
 Final Weight/Volume: 20 mL

Analyte	Result	Qual	MDL	RL
n-Propylbenzene	0.16	U	0.16	1.0
Styrene	0.17	U	0.17	1.0
1,1,1,2-Tetrachloroethane	0.21	U	0.21	1.0
1,1,2,2-Tetrachloroethane	0.21	U	0.21	1.0
Tetrachloroethene	0.20	U	0.20	1.0
Toluene	0.17	U	0.17	1.0
1,2,3-Trichlorobenzene	0.21	U	0.21	1.0
1,2,4-Trichlorobenzene	0.21	U	0.21	1.0
1,1,1-Trichloroethane	0.16	U	0.16	1.0
1,1,2-Trichloroethane	0.27	U	0.27	1.0
Trichloroethene	0.16	U	0.16	1.0
Trichlorofluoromethane	0.29	U	0.29	1.0
1,2,3-Trichloropropane	0.33	U	0.33	1.0
1,2,4-Trimethylbenzene	0.15	U	0.15	1.0
1,3,5-Trimethylbenzene	0.16	U	0.16	1.0
Vinyl chloride	0.10	U	0.10	1.0
Xylenes, Total	0.19	U	0.19	1.0
1,2-Dibromoethane	0.18	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	70 - 127
Toluene-d8 (Surr)	111	80 - 125
4-Bromofluorobenzene (Surr)	111	78 - 120
Dibromofluoromethane (Surr)	99	77 - 120

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Lab Control Sample - Batch: 280-318092**

**Method: 8260B**

**Preparation: 5030B**

Lab Sample ID: LCS 280-318092/4	Analysis Batch: 280-318092	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P6225.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/24/2016 2123	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/24/2016 2123		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	5.00	4.28	86	65 - 135	
Bromodichloromethane	5.00	4.94	99	65 - 135	
Carbon tetrachloride	5.00	5.49	110	65 - 135	
Chlorobenzene	5.00	4.48	90	65 - 135	
Chloroform	5.00	4.93	99	65 - 135	
1,3-Dichlorobenzene	5.00	4.42	88	65 - 135	
1,1-Dichloroethane	5.00	4.55	91	65 - 135	
trans-1,2-Dichloroethene	5.00	4.25	85	65 - 135	
1,1-Dichloroethene	5.00	4.00	80	65 - 136	
1,2-Dichloropropane	5.00	4.39	88	64 - 135	
Ethylbenzene	5.00	4.43	89	65 - 135	
Methylene Chloride	5.00	4.51	90	54 - 141	
Tetrachloroethene	5.00	4.47	89	65 - 135	
Toluene	5.00	4.75	95	65 - 135	
1,1,1-Trichloroethane	5.00	5.46	109	65 - 135	
Trichloroethene	5.00	4.67	93	65 - 135	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		89		70 - 127	
Toluene-d8 (Surr)		103		80 - 125	
4-Bromofluorobenzene (Surr)		94		78 - 120	
Dibromofluoromethane (Surr)		89		77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-318092**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80754-L-2 MS	Analysis Batch: 280-318092	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P6229.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/24/2016 2243		Final Weight/Volume: 20 mL
Prep Date: 03/24/2016 2243		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80754-L-2 MSD	Analysis Batch: 280-318092	Instrument ID: VMS_P
Client Matrix: Water	Prep Batch: N/A	Lab File ID: P6230.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/24/2016 2303		Final Weight/Volume: 20 mL
Prep Date: 03/24/2016 2303		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Benzene	89	90	65 - 135	1	20		
Bromodichloromethane	109	109	65 - 135	0	20		
Carbon tetrachloride	114	116	65 - 135	1	21		
Chlorobenzene	93	93	65 - 135	1	20		
Chloroform	105	106	65 - 135	1	20		
1,3-Dichlorobenzene	95	95	65 - 135	0	20		
1,1-Dichloroethane	96	98	65 - 135	2	21		
trans-1,2-Dichloroethene	88	91	65 - 135	3	24		
1,1-Dichloroethene	80	83	65 - 136	4	20		
1,2-Dichloropropane	94	94	64 - 135	0	20		
Ethylbenzene	97	94	65 - 135	3	20		
Methylene Chloride	85	90	54 - 141	6	26		
Tetrachloroethene	91	90	65 - 135	0	20		
Toluene	99	99	65 - 135	0	20		
1,1,1-Trichloroethane	113	115	65 - 135	1	20		
Trichloroethene	97	97	65 - 135	1	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		97	99			70 - 127	
Toluene-d8 (Surr)		110	112			80 - 125	
4-Bromofluorobenzene (Surr)		105	107			78 - 120	
Dibromofluoromethane (Surr)		98	101			77 - 120	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-318092**

**Method: 8260B  
Preparation: 5030B**

MS Lab Sample ID: 280-80754-L-2 MS                      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/24/2016 2243  
Prep Date: 03/24/2016 2243  
Leach Date: N/A

MSD Lab Sample ID: 280-80754-L-2 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/24/2016 2303  
Prep Date: 03/24/2016 2303  
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Benzene	0.16	U	5.00	5.00	4.44	4.50
Bromodichloromethane	0.17	U	5.00	5.00	5.43	5.43
Carbon tetrachloride	0.19	U	5.00	5.00	5.71	5.79
Chlorobenzene	0.17	U	5.00	5.00	4.67	4.64
Chloroform	0.16	U	5.00	5.00	5.25	5.30
1,3-Dichlorobenzene	0.13	U	5.00	5.00	4.75	4.75
1,1-Dichloroethane	0.22	U	5.00	5.00	4.81	4.91
trans-1,2-Dichloroethene	0.15	U	5.00	5.00	4.39	4.54
1,1-Dichloroethene	0.23	U	5.00	5.00	4.00	4.14
1,2-Dichloropropane	0.18	U	5.00	5.00	4.71	4.68
Ethylbenzene	0.16	U	5.00	5.00	4.86	4.72
Methylene Chloride	0.32	U	5.00	5.00	4.24	4.50
Tetrachloroethene	0.20	U	5.00	5.00	4.54	4.52
Toluene	0.17	U	5.00	5.00	4.96	4.96
1,1,1-Trichloroethane	0.16	U	5.00	5.00	5.66	5.74
Trichloroethene	0.16	U	5.00	5.00	4.83	4.86

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-316985**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-316985/4	Analysis Batch: 280-316985	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2420.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0733	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0733		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		70 - 127	

**Lab Control Sample - Batch: 280-316985**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-316985/3	Analysis Batch: 280-316985	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2419.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0714	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0714		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	4.48	90	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		95		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316985**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 160-16436-N-2 MS	Analysis Batch: 280-316985	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2422.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0828		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0828		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 160-16436-N-2 MSD	Analysis Batch: 280-316985	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2423.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 0847		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 0847		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	92	93	25 - 141	1	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		100	104			70 - 127	

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-316985**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 160-16436-N-2 MS	Units: ug/L	MSD Lab Sample ID: 160-16436-N-2 MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 03/16/2016 0828		Analysis Date: 03/16/2016 0847
Prep Date: 03/16/2016 0828		Prep Date: 03/16/2016 0847
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	1.4	5.00	5.00	6.04	6.08

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-317093**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-317093/4	Analysis Batch: 280-317093	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2446.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1549	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1549		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	97		70 - 127	

**Lab Control Sample - Batch: 280-317093**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-317093/3	Analysis Batch: 280-317093	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2445.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/16/2016 1530	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1530		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	5.32	106	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		91		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317093**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80735-2	Analysis Batch: 280-317093	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2450.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 1 mL
Analysis Date: 03/16/2016 1704		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1704		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 280-80735-2	Analysis Batch: 280-317093	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2451.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 1 mL
Analysis Date: 03/16/2016 1723		Final Weight/Volume: 20 mL
Prep Date: 03/16/2016 1723		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	66	85	25 - 141	9	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		89	86			70 - 127	

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317093**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80735-2	Units: ug/L	MSD Lab Sample ID: 280-80735-2
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 03/16/2016 1704		Analysis Date: 03/16/2016 1723
Prep Date: 03/16/2016 1704		Prep Date: 03/16/2016 1723
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	120	100	100	189	208



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-317163**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-317163/8	Analysis Batch: 280-317163	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2489.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0847	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0847		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	119		70 - 127	

**Lab Control Sample - Batch: 280-317163**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-317163/7	Analysis Batch: 280-317163	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2488.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0828	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0828		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	4.04	81	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		116		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317163**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 160-16480-P-1 MS	Analysis Batch: 280-317163	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2491.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0925		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0925		20 mL
Leach Date: N/A		

MSD Lab Sample ID: 160-16480-P-1 MSD	Analysis Batch: 280-317163	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2492.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 0944		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 0944		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	97	93	25 - 141	4	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		118	119			70 - 127	

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317163**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 160-16480-P-1 MS	Units: ug/L	MSD Lab Sample ID: 160-16480-P-1 MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 03/17/2016 0925		Analysis Date: 03/17/2016 0944
Prep Date: 03/17/2016 0925		Prep Date: 03/17/2016 0944
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	0.22 U	5.00	5.00	4.85	4.65

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-317277**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-317277/8	Analysis Batch: 280-317277	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2521.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 2003	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 2003		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	122		70 - 127	

**Lab Control Sample - Batch: 280-317277**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-317277/5	Analysis Batch: 280-317277	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2519.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 1925	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 1925		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	5.54	111	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		118		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317277**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80856-F-1 MS	Analysis Batch: 280-317277	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2523.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 2040		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 2040		
Leach Date: N/A		

MSD Lab Sample ID: 280-80856-F-1 MSD	Analysis Batch: 280-317277	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2524.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/17/2016 2059		Final Weight/Volume: 20 mL
Prep Date: 03/17/2016 2059		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	95	93	25 - 141	1	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		121	120			70 - 127	

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317277**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 280-80856-F-1 MS	Units: ug/L	MSD Lab Sample ID: 280-80856-F-1 MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 03/17/2016 2040		Analysis Date: 03/17/2016 2059
Prep Date: 03/17/2016 2040		Prep Date: 03/17/2016 2059
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	0.74 J	5.00	5.00	5.48	5.40

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-317331**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-317331/4	Analysis Batch: 280-317331	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2552.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 0800	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 0800		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	126		70 - 127	

**Lab Control Sample - Batch: 280-317331**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: LCS 280-317331/3	Analysis Batch: 280-317331	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2551.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 0741	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 0741		
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,4-Dioxane	5.00	4.58	92	25 - 141	
Surrogate		% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		121		70 - 127	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317331**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 160-16505-O-5 MS	Analysis Batch: 280-317331	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2555.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 0856		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 0856		
Leach Date: N/A		

MSD Lab Sample ID: 160-16505-O-5 MSD	Analysis Batch: 280-317331	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2556.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/18/2016 0915		Final Weight/Volume: 20 mL
Prep Date: 03/18/2016 0915		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	80	91	25 - 141	12	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		125	126			70 - 127	

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317331**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 160-16505-O-5 MS	Units: ug/L	MSD Lab Sample ID: 160-16505-O-5 MSD
Client Matrix: Water		Client Matrix: Water
Dilution: 1.0		Dilution: 1.0
Analysis Date: 03/18/2016 0856		Analysis Date: 03/18/2016 0915
Prep Date: 03/18/2016 0856		Prep Date: 03/18/2016 0915
Leach Date: N/A		Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	0.22 U	5.00	5.00	4.01	4.53

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Method Blank - Batch: 280-317884**

**Method: 8260B SIM**  
**Preparation: 5030B**

Lab Sample ID: MB 280-317884/5	Analysis Batch: 280-317884	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2599.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 0754	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 0754		
Leach Date: N/A		

Analyte	Result	Qual	MDL	RL
1,4-Dioxane	0.22	U	0.22	1.0
Surrogate	% Rec		Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)	100		70 - 127	

**Lab Control Sample/**

**Method: 8260B SIM**  
**Preparation: 5030B**

**Lab Control Sample Duplicate Recovery Report - Batch: 280-317884**

LCS Lab Sample ID: LCS 280-317884/3	Analysis Batch: 280-317884	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2600.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 0813	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 0813		20 mL
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-317884/4	Analysis Batch: 280-317884	Instrument ID: VMS_E
Client Matrix: Water	Prep Batch: N/A	Lab File ID: E2598.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 20 mL
Analysis Date: 03/23/2016 0735	Units: ug/L	Final Weight/Volume: 20 mL
Prep Date: 03/23/2016 0735		20 mL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
1,4-Dioxane	101	113	25 - 141	11	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)	102	96			70 - 127		

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Laboratory Control/  
Laboratory Duplicate Data Report - Batch: 280-317884**

**Method: 8260B SIM  
Preparation: 5030B**

LCS Lab Sample ID: LCS 280-317884/3      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/23/2016 0813  
Prep Date: 03/23/2016 0813  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 280-317884/4  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/23/2016 0735  
Prep Date: 03/23/2016 0735  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
1,4-Dioxane	5.00	5.00	5.05	5.65

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317884**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 160-16588-R-5 MS  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/23/2016 0948  
Prep Date: 03/23/2016 0948  
Leach Date: N/A

Analysis Batch: 280-317884  
Prep Batch: N/A  
Leach Batch: N/A

Instrument ID: VMS\_E  
Lab File ID: E2605.D  
Initial Weight/Volume: 20 mL  
Final Weight/Volume: 20 mL  
20 mL

MSD Lab Sample ID: 160-16588-R-5 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/23/2016 1006  
Prep Date: 03/23/2016 1006  
Leach Date: N/A

Analysis Batch: 280-317884  
Prep Batch: N/A  
Leach Batch: N/A

Instrument ID: VMS\_E  
Lab File ID: E2606.D  
Initial Weight/Volume: 20 mL  
Final Weight/Volume: 20 mL  
20 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
1,4-Dioxane	100	97	25 - 141	3	20		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
1,2-Dichloroethane-d4 (Surr)		104	99			70 - 127	



## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1  
Sdg Number: 16027653

**Matrix Spike/  
Matrix Spike Duplicate Recovery Report - Batch: 280-317884**

**Method: 8260B SIM  
Preparation: 5030B**

MS Lab Sample ID: 160-16588-R-5 MS      Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/23/2016 0948  
Prep Date: 03/23/2016 0948  
Leach Date: N/A

MSD Lab Sample ID: 160-16588-R-5 MSD  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 03/23/2016 1006  
Prep Date: 03/23/2016 1006  
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,4-Dioxane	0.22    U	5.00	5.00	4.98	4.83

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-316985</b>					
LCS 280-316985/3	Lab Control Sample	T	Water	8260B SIM	
MB 280-316985/4	Method Blank	T	Water	8260B SIM	
160-16436-N-2 MS	Matrix Spike	T	Water	8260B SIM	
160-16436-N-2 MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
280-80735-6	PIN12-0551-2	T	Water	8260B SIM	
280-80735-7	PIN12-0554A	T	Water	8260B SIM	
280-80735-8	PIN12-0554B	T	Water	8260B SIM	
280-80735-9	PIN12-0554C	T	Water	8260B SIM	
280-80735-10	PIN12-0572-1	T	Water	8260B SIM	
280-80735-11	PIN12-0572-2	T	Water	8260B SIM	
280-80735-12	PIN12-0576-1	T	Water	8260B SIM	
280-80735-13	PIN12-0576-2	T	Water	8260B SIM	
280-80735-14	PIN12-0576-3	T	Water	8260B SIM	
280-80735-19	PIN12-0578-3	T	Water	8260B SIM	
280-80735-20	PIN12-0580-1	T	Water	8260B SIM	
<b>Analysis Batch:280-317093</b>					
LCS 280-317093/3	Lab Control Sample	T	Water	8260B SIM	
MB 280-317093/4	Method Blank	T	Water	8260B SIM	
280-80735-1	PIN12-0539	T	Water	8260B SIM	
280-80735-2	PIN12-0540	T	Water	8260B SIM	
280-80735-2MS	Matrix Spike	T	Water	8260B SIM	
280-80735-2MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
280-80735-3	PIN12-0541	T	Water	8260B SIM	
280-80735-4	PIN12-0542	T	Water	8260B SIM	
280-80735-5	PIN12-0549	T	Water	8260B SIM	
280-80735-15	PIN12-0577-2	T	Water	8260B SIM	
280-80735-16	PIN12-0577-3	T	Water	8260B SIM	
280-80735-17	PIN12-0578-1	T	Water	8260B SIM	
280-80735-18	PIN12-0578-2	T	Water	8260B SIM	
280-80735-21	PIN12-0580-2	T	Water	8260B SIM	
280-80735-22	PIN12-0580-3	T	Water	8260B SIM	
280-80735-34	PIN12-2451	T	Water	8260B SIM	
280-80735-35	PIN12-2452	T	Water	8260B SIM	
280-80735-40	PIN12-S70B	T	Water	8260B SIM	
280-80735-43	PIN12-S71B	T	Water	8260B SIM	
280-80735-44	PIN12-S71C	T	Water	8260B SIM	
280-80735-45	PIN12-S71D	T	Water	8260B SIM	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-317163</b>					
LCS 280-317163/7	Lab Control Sample	T	Water	8260B SIM	
MB 280-317163/8	Method Blank	T	Water	8260B SIM	
160-16480-P-1 MS	Matrix Spike	T	Water	8260B SIM	
160-16480-P-1 MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
280-80735-23	PIN12-0581-1	T	Water	8260B SIM	
280-80735-24	PIN12-0581-2	T	Water	8260B SIM	
280-80735-25	PIN12-0581-3	T	Water	8260B SIM	
280-80735-26	PIN12-0582-1	T	Water	8260B SIM	
280-80735-27	PIN12-0582-2	T	Water	8260B SIM	
280-80735-28	PIN12-0582-3	T	Water	8260B SIM	
280-80735-29	PIN12-0583-1	T	Water	8260B SIM	
280-80735-30	PIN12-0583-2	T	Water	8260B SIM	
280-80735-31	PIN12-0583-3	T	Water	8260B SIM	
280-80735-36	PIN12-2453	T	Water	8260B SIM	
<b>Analysis Batch:280-317277</b>					
LCS 280-317277/5	Lab Control Sample	T	Water	8260B SIM	
MB 280-317277/8	Method Blank	T	Water	8260B SIM	
280-80735-37	PIN12-S69B	T	Water	8260B SIM	
280-80735-38	PIN12-S69C	T	Water	8260B SIM	
280-80735-39	PIN12-S69D	T	Water	8260B SIM	
280-80735-41	PIN12-S70C	T	Water	8260B SIM	
280-80735-42	PIN12-S70D	T	Water	8260B SIM	
280-80735-48	PIN12-S73D	T	Water	8260B SIM	
280-80856-F-1 MS	Matrix Spike	T	Water	8260B SIM	
280-80856-F-1 MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
<b>Analysis Batch:280-317323</b>					
LCS 280-317323/4	Lab Control Sample	T	Water	8260B	
MB 280-317323/5	Method Blank	T	Water	8260B	
280-80690-B-9 MS	Matrix Spike	T	Water	8260B	
280-80690-B-9 MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80735-33	PIN12-2203	T	Water	8260B	
280-80735-34	PIN12-2451	T	Water	8260B	
280-80735-35	PIN12-2452	T	Water	8260B	
280-80735-36	PIN12-2453	T	Water	8260B	
280-80735-37	PIN12-S69B	T	Water	8260B	
280-80735-38	PIN12-S69C	T	Water	8260B	
280-80735-39	PIN12-S69D	T	Water	8260B	
280-80735-40	PIN12-S70B	T	Water	8260B	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-317331</b>					
LCS 280-317331/3	Lab Control Sample	T	Water	8260B SIM	
MB 280-317331/4	Method Blank	T	Water	8260B SIM	
160-16505-O-5 MS	Matrix Spike	T	Water	8260B SIM	
160-16505-O-5 MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
280-80735-47	PIN12-S73C	T	Water	8260B SIM	
<b>Analysis Batch:280-317515</b>					
LCS 280-317515/4	Lab Control Sample	T	Water	8260B	
MB 280-317515/8	Method Blank	T	Water	8260B	
280-80735-6	PIN12-0551-2	T	Water	8260B	
280-80735-7	PIN12-0554A	T	Water	8260B	
280-80735-8	PIN12-0554B	T	Water	8260B	
280-80735-9	PIN12-0554C	T	Water	8260B	
280-80735-10	PIN12-0572-1	T	Water	8260B	
280-80735-11	PIN12-0572-2	T	Water	8260B	
280-80735-15	PIN12-0577-2	T	Water	8260B	
280-80735-17	PIN12-0578-1	T	Water	8260B	
280-80735-17MS	Matrix Spike	T	Water	8260B	
280-80735-17MSD	Matrix Spike Duplicate	T	Water	8260B	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-317694</b>					
LCS 280-317694/4	Lab Control Sample	T	Water	8260B	
MB 280-317694/6	Method Blank	T	Water	8260B	
280-80735-1	PIN12-0539	T	Water	8260B	
280-80735-1MS	Matrix Spike	T	Water	8260B	
280-80735-1MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80735-2	PIN12-0540	T	Water	8260B	
280-80735-2DL	PIN12-0540	T	Water	8260B	
280-80735-3	PIN12-0541	T	Water	8260B	
280-80735-4	PIN12-0542	T	Water	8260B	
280-80735-5	PIN12-0549	T	Water	8260B	
280-80735-9DL	PIN12-0554C	T	Water	8260B	
280-80735-19	PIN12-0578-3	T	Water	8260B	
280-80735-20	PIN12-0580-1	T	Water	8260B	
280-80735-21	PIN12-0580-2	T	Water	8260B	
280-80735-21DL	PIN12-0580-2	T	Water	8260B	
280-80735-22	PIN12-0580-3	T	Water	8260B	
280-80735-32	PIN12-2200	T	Water	8260B	
280-80735-41	PIN12-S70C	T	Water	8260B	
280-80735-42	PIN12-S70D	T	Water	8260B	
280-80735-43	PIN12-S71B	T	Water	8260B	
280-80735-44	PIN12-S71C	T	Water	8260B	
280-80735-45	PIN12-S71D	T	Water	8260B	
280-80735-46	PIN12-S73B	T	Water	8260B	
280-80735-47	PIN12-S73C	T	Water	8260B	
280-80735-47DL	PIN12-S73C	T	Water	8260B	
280-80735-48	PIN12-S73D	T	Water	8260B	
<b>Analysis Batch:280-317699</b>					
LCS 280-317699/4	Lab Control Sample	T	Water	8260B	
MB 280-317699/6	Method Blank	T	Water	8260B	
160-16480-M-1 MS	Matrix Spike	T	Water	8260B	
160-16480-M-1 MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80735-12	PIN12-0576-1	T	Water	8260B	
280-80735-13	PIN12-0576-2	T	Water	8260B	
280-80735-16	PIN12-0577-3	T	Water	8260B	
280-80735-18	PIN12-0578-2	T	Water	8260B	

## Quality Control Results

Client: Navarro Research and Engineering, Inc

Job Number: 280-80735-1

Sdg Number: 16027653

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:280-317723</b>					
LCS 280-317723/4	Lab Control Sample	T	Water	8260B	
LCSD 280-317723/5	Lab Control Sample Duplicate	T	Water	8260B	
MB 280-317723/6	Method Blank	T	Water	8260B	
280-80719-B-1 MS	Matrix Spike	T	Water	8260B	
280-80719-B-1 MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80735-23	PIN12-0581-1	T	Water	8260B	
280-80735-24	PIN12-0581-2	T	Water	8260B	
280-80735-25	PIN12-0581-3	T	Water	8260B	
280-80735-26	PIN12-0582-1	T	Water	8260B	
280-80735-28	PIN12-0582-3	T	Water	8260B	
280-80735-29	PIN12-0583-1	T	Water	8260B	
280-80735-30	PIN12-0583-2	T	Water	8260B	
280-80735-31	PIN12-0583-3	T	Water	8260B	
<b>Analysis Batch:280-317884</b>					
LCS 280-317884/3	Lab Control Sample	T	Water	8260B SIM	
LCSD 280-317884/4	Lab Control Sample Duplicate	T	Water	8260B SIM	
MB 280-317884/5	Method Blank	T	Water	8260B SIM	
160-16588-R-5 MS	Matrix Spike	T	Water	8260B SIM	
160-16588-R-5 MSD	Matrix Spike Duplicate	T	Water	8260B SIM	
280-80735-46	PIN12-S73B	T	Water	8260B SIM	
<b>Analysis Batch:280-317886</b>					
LCS 280-317886/4	Lab Control Sample	T	Water	8260B	
LCSD 280-317886/5	Lab Control Sample Duplicate	T	Water	8260B	
MB 280-317886/6	Method Blank	T	Water	8260B	
160-16560-B-8 MS	Matrix Spike	T	Water	8260B	
160-16560-B-8 MSD	Matrix Spike Duplicate	T	Water	8260B	
280-80735-27	PIN12-0582-2	T	Water	8260B	
<b>Analysis Batch:280-318092</b>					
LCS 280-318092/4	Lab Control Sample	T	Water	8260B	
MB 280-318092/8	Method Blank	T	Water	8260B	
280-80735-14	PIN12-0576-3	T	Water	8260B	
280-80754-L-2 MS	Matrix Spike	T	Water	8260B	
280-80754-L-2 MSD	Matrix Spike Duplicate	T	Water	8260B	

**Report Basis**

T = Total