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DATE: January 13, 2012

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Very truly yours,

O'BRIEN & GERE ENGIENEERS, INC.

Scott B. Scheidelman
Senior Managing Engineer

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FINAL REPORT

Additional Groundwater Investigations
Former GE Court Street Building 5 Site
Town of Dewitt – Onondaga County, New York

Lockheed Martin Corporation
Syracuse, New York

LOCKHEED MARTIN

January 2012

O'BRIEN & GERE

5851 | 43929

Additional Groundwater Investigations
Former GE Court Street Building 5 Site
Town of Dewitt
Onondaga County, New York

Prepared for:

Lockheed Martin Corporation
Syracuse, New York

January 2012

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1. INTRODUCTION

An Enhanced In-Situ Bioremediation (EISB) Pilot Study is being performed at the Lockheed Martin (LMC) Former GE Court Street Building 5 Site (Figure 1) consistent with the EISB Pilot Study Work Plan approved by the New York State Department of Environmental Conservation (NYSDEC) on July 15, 2009. Additional investigations were conducted to better understand groundwater conditions at the Site prior to completion of the EISB Pilot Study. An Additional Ground Water Investigations Work Plan was submitted to NYSDEC on June 8, 2011 and subsequently approved on July 11, 2011. This document presents the findings of those investigations.

The objectives of the investigations and evaluations were as follows:

- Assess the current distribution of electron donor (organic acids) and volatile organic compounds (VOCs) in the groundwater adjacent to EISB Pilot Study injection well (IW-1), where lactate injection was initiated in 2009.
- Assess the VOC distribution in groundwater upgradient of MW-1S along the western edge of Building 5 in an attempt to further define the potential source of VOCs.

2. SITE BACKGROUND

The Lockheed Martin Corporation (LMC) Former GE Court Street Building 5 site is located in Dewitt, NY (Figure 1). The facility covers approximately 260,000 square feet on an approximate 14 acre parcel shared with Building 5A.

Historical activities at the facility involved operation of nine 250-gallon solvent underground storage tanks (USTs) in the 1950's. These tanks were located on the west side of the building as noted on attached Figure 2. The USTs were taken out of service in 1960 and removed from the ground in 1986.

Additionally, historical activities involved dispensing paint solvents from 55-gallon drums on an outdoor diked concrete pad. (Wehran-New York Inc., 1992)

Between April and May 1992, an interim remedial measure (IRM) was implemented Wehran-New York (Wehran) that included removal of impacted soil from the UST area and solvent drum dispensing pad. (Wehran-New York Inc. 1993). In January 1998, additional IRM implementation included installation of a GCT. Operation of the GCT began in February 1998 and has operated since that time. (O'Brien & Gere, 2011)

Starting in 2007, LMC began conducting pilot studies to evaluate the effectiveness of remedial technologies to address elevated concentrations of VOCs in groundwater. Between June 2007 and January 2008 Submerged Oxygen Curtain (iSOC®) technology was evaluated by Shaw Environmental, Inc. (Shaw) and the use of this technology was concluded to be generally ineffective (Shaw Environmental, Inc., 2008).

In July 2008 groundwater samples were collected for a Microcosm Study that was performed by O'Brien & Gere and Bioremediation Consulting, Inc. (BCI) between July 2008 and December 2008 (O'Brien & Gere, 2009). The study indicated that an indigenous population of bacteria is present in Site groundwater to facilitate reductive (anaerobic) dechlorination of Site VOCs. As a result, an EISB Pilot Study was implemented by O'Brien & Gere starting in October 2009. EISB was implemented by the injection of an organic electron donor, a solution of sodium lactate (0.6%) and water (99.4%), into one injection well in the overburden aquifer.

Through November 11, 2011, 4,300 gallons of donor solution were injected. Observations from the EISB Pilot Study indicated that the overburden permeability was low and effects of the donor solution on groundwater chemistry weren't observed in the downgradient well.

On June 8, 2011, O'Brien & Gere submitted an Additional Groundwater Investigations Work Plan to NYSDEC. On July 11, 2011, NYSDEC approved the Work Plan.

3. WORK PERFORMED

Two tasks were identified to address the objectives of the additional groundwater investigation and included in the 2011 Work Plan, as summarized below.

Task 1 consisted of evaluating the current distribution of donor/organic acids and VOCs in the subsurface adjacent to the injection well (IW-1). Temporary well locations were selected to provide sampling locations downgradient and side-gradient from IW-1 (**Figure 3**), based on available groundwater flow maps and existing wells. Ten soil borings were completed to facilitate installation of ten temporary wells as part of this effort.

Task 2 consisted of the evaluation of VOCs in groundwater upgradient of MW-1S along the northwestern edge of Building 5. Temporary well locations were selected to provide sampling locations distributed immediately adjacent to the Building 5 wall and downgradient from the building, in an effort to identify the potential source of impacted groundwater observed at MW-1S (**Figure 4**). Ten soil borings were completed to facilitate installation of ten temporary wells as part of this effort.

Soil borings were completed to 15-ft below the ground surface using direct push drilling methods. Subsurface soil samples were collected continuously to the terminal depth of each boring. Samples were described and screened using a photoionization detector (PID) by a hydrogeologist. Boring logs are provided as **Attachment 1**.

Upon completion, each boring was to be converted into a temporary well with potential for vertically nested wells. However, field observations for both tasks identified thinner sand deposits than anticipated. As a result, nested wells were deemed unnecessary. Single temporary wells were constructed in each boring with 1-inch diameter PVC well material with a 10-feet long, 0.010-inch slotted well screen.

Upon completion of installation, wells were purged and sampled with a disposable bailer. Groundwater quality parameters were measured and recorded on groundwater sampling logs (**Attachment 2**). Groundwater samples collected from temporary wells adjacent to IW-1 and MW-2S were submitted to BCI laboratory in Watertown, Massachusetts via courier under standard chain of custody procedures and analyzed for VOCs and organic acids. Groundwater samples collected from temporary wells adjacent to MW-1S along the western edge of Building 5 were submitted to Accutest Laboratories of Edison, New Jersey via courier under standard chain of custody procedures and analyzed for VOCs only.

4. WORK PLAN DEVIATION

The work plan indicated groundwater samples collected from temporary wells adjacent to MW-1S would be submitted to TestAmerica Inc. of Amherst, New York. However, samples were submitted to Accutest Laboratories of Edison, New Jersey. This change was implemented when sample containers were not available when desired from TestAmerica.

The work plan also indicated that well MW-2S would be sampled concurrent with temporary wells. Field measurements of groundwater at temporary wells between the injection well (IW-01) and MW-2S did not reflect conditions favorable for bioremediation. A field judgment was made not to sample the well.

5. RESULTS DISCUSSION

5.1 SITE GEOLOGY

In general, the surficial material encountered consisted of urban fill approximately 0.5 feet in thickness. The composition of the fill layer was characterized by sand and angular gravel. A lacustrine unit was encountered beneath the fill unit. This layer consists of silt with varying amounts of clay. In the vicinity of IW-1, a unit of fine to medium grained sand, ranging in thickness from 1.8 to 4 feet, is present at approximately 6 feet below ground surface. The horizontal extent of this unit was not defined during this investigation; however, review of historical and current boring logs indicates that the unit is not present at TMW-21 or in the vicinity of MW-1S.

Groundwater in the vicinity of IW-01 was encountered at approximately 3 to 4 feet below grade. Groundwater in the vicinity of MW-01S was encountered at approximately 1 foot below grade. In both areas, the water table occurred in the silt unit. The elevations of the temporary wells were not surveyed. However, historical Annual Operations and Maintenance Reports indicate that groundwater flow is radial away from Building 5 towards the collection trench.

5.2 ANALYTICAL RESUTLS

Current and select historical results (from wells not sampled during this investigation) were compared to Class GA groundwater standards as provided in the Ambient Water Quality Standard and Guideline in the New York State Technical and Operational Guidance Series 1.1.1 (TOGS) and are presented in **Table 1** and **Table 2**. Laboratory report forms are provided as **Attachment 3** and **Attachment 4**.

5.2.1 IW-1 Area Investigation

No observations of staining, odors, or sheen were observed during drilling or sampling. **Table 1** summarizes the detected constituents in groundwater. Several constituents exceeded TOGS across the area investigated with at least two constituents exceeding at each sample location (**Figure 3**). Compounds that exceeded TOGS were limited to chlorinated VOCs. Chlorinated compounds were detected in groundwater above TOGS at each location. The highest overall concentrations of chlorinated compounds were detected in the three most southern temporary wells TMW-01, TMW-02, and TMW-03 (**Figure 3**).

Methane concentrations at IW-1 and MW-2S prior to donor solution injection were 7.3 ug/L and 63 ug/L, respectively (O'Brien & Gere, 2009). At the time of this investigation, the highest concentrations of methane (>1,000 ug/L) were observed in wells TMW-04, TMW-06, TMW-07, and TMW-21. These elevated concentrations are oriented with the general radial flow direction from Building 5 and are likely an indicator that the elevated methane concentrations are due to the injected sodium lactate. Elevated methane was observed approximately 40 ft from IW-01 but slightly north of MW-2S and suggests localized groundwater flow is more northerly than expected.

Lactate, representative of donor solution, was not detected in groundwater. Acetate and propionate are volatile fatty acids that are generated from fermentation of the lactate and act as electron donors. Acetate was only detected in groundwater fromTMW-03 (0.7 ug/L), TMW-04 (4 ug/L), and TMW-06 (7.7 ug/L). Propionate was detected in wells TMW-03 (0.2 ug/L) and TMW-07 (0.1 ug/L). The propionate detections are oriented similar to methane detections.

Concentrations of methane in temporary wells elevated above adjacent pre-injection concentrations, concentrations of ethane in temporary wells elevated above adjacent pre-injection concentrations, and the presence of propionate and acetate in temporary wells indicates that injection of sodium lactate may have enhanced bioremediation immediately adjacent to IW-01. However, the absence of acetate and propionate in groundwater above trace levels or in wells not adjacent to IW-01, the absence of lactate in wells, and the limited horizontal extent of methane indicates that the injected donor solution was not transported away from the injection well more than approximately 40 feet, either due the limited permeability and/or metabolism of the organic acids by bacteria.

5.2.2 MW-1S Area Investigation

No observations of staining, odors, or sheen were observed during drilling or sampling. **Table 2** summarizes the detected constituents in groundwater. Several constituents exceeded TOGS across the area investigated with at least one constituent exceeding at each sample location (**Figure 4**). Compounds that exceeded TOGS included chlorinated VOCs, BTEX (benzene, toluene, ethylbenzene, and xylene) compounds, and CFC 113.

Chlorinated VOCs were detected in groundwater above TOGS at each location with the exception of TMW-10 and TMW-18. BTEX compounds were detected above TOGS at several locations. CFC 113 was detected (5.3 ug/L) above TOGS (5.0 ug/L) at one location (TMW-14) adjacent to Building 5 and within the historic former solvent pad area. The lack of CFC 113 detections at other locations indicates that this may be an isolated occurrence that will be further assessed based on future sampling events at MW-1S.

Chloroethane, 1,1-dichloroethane (DCA), cis-1,2-dichloroethene (cDCE), and toluene were the most frequently detected compounds. Highly variable concentrations were observed across the area investigated with higher concentrations of chlorinated VOCs observed adjacent to MW-1S and northwest of the approximate former solvent pad location.

Elevated concentrations of chlorinated VOCs detected adjacent to MW-1S include chloroethane and 1,1-DCA detected at TMW-12 (4,200 ug/L and 5,700 ug/L respectively) and TMW-16 (243 ug/L and 3,130 ug/L respectively). Additionally, 1,1-DCA was detected at 31,000 ug/L at PTMW-1 in 2008. No monitoring points exist west of these locations. Concentrations detected at locations north, south and east are an order of magnitude lower.

Elevated VOC concentrations in groundwater were also detected northwest of the approximate former solvent pad location. Chloroethane and 1,1-DCA were detected in TMW-20 groundwater (northwest of the former solvent pad area) at 12,900 and 15,200 ug/L, respectively. No monitoring points exist north of these locations. Concentrations detected at locations south of TMW-20 are an order of magnitude lower.

A general lack of detections was observed in locations southeast of MW-1S.

Highly variable concentrations across the area investigated indicate that localized sources of VOCs may be present in subsurface soil/groundwater.

6. CONCLUSIONS

6.1 IW-1 AREA

Groundwater occurs between 3 to 4 feet below grade, within the silt unit. Based on historical groundwater elevations, groundwater flow direction is assumed to generally be radial away from Building 5 towards the collection trench and nearby creeks.

Analytical results in the vicinity of IW-01 reveal the presence of several compounds above TOGS in groundwater at each location sampled. Compounds exceeding TOGS were limited to chlorinated VOCs and ethylbenzene. The highest overall concentrations of compounds were detected in the three most southern temporary wells TMW-01, TMW-02, and TMW-03 (**Figure 3**). These results indicate that the southern, western and possibly eastern extent of VOC-impacted groundwater is not delineated at this time.

The orientation of the methane in groundwater suggests that localized groundwater flow may be more northwesterly than indicated by historical groundwater elevations.

Given the current flow direction and the apparent low hydraulic conductivity of the aquifer, the influence of the EISB may not affect groundwater at MW-2S, or affect groundwater in a timeframe that is reasonable for the Pilot Study. The lactate donor solution is affecting groundwater quality and that affected groundwater quality is observed up to approximately 40 ft from IW-01. However, the absence of detectable lactate and fermented organic acids (except at trace levels) in groundwater indicates that lactate is not being effectively distributed through the aquifer by the injection approach.

6.2 MW-1S AREA

Groundwater occurs between 1 to 1.5 feet below grade, within the silt unit. Based on historical groundwater elevations, groundwater flow direction is assumed to be westerly away from Building 5 towards the collection trench and nearby creeks.

Analytical results in the vicinity of MW-1S identified VOCs at concentrations above TOGS in groundwater at each location sampled including chlorinated VOCs, toluene, ethylbenzene, xylene, and CFC 113 (**Figure 4**).

Highly variable and elevated concentrations of chlorinated VOCs were observed across the area of investigation. Chloroethane and 1,1-DCA were the most frequently detected compounds at the highest concentrations. Chloroethane ranged in concentration from 12,900 ug/L at TMW-20 to non-detect at several locations. 1,1-DCA ranged in concentration from 15,200 ug/L at TMW-20 to 0.73 ug/L at TMW-10. 1,1-DCA was also observed at PTMW-1 (31,000 ug/L) in 2008 during a separate investigation(Shaw Environmental, Inc., 2008). Two general areas were identified with elevated groundwater VOC concentrations: an area adjacent to MW-1S and an area northwest of the former solvent storage pad.

The highly variable groundwater VOC concentrations across the area investigated indicates that localized sources of VOC impact may be present in subsurface soil.

The horizontal extent of elevated VOC concentrations in groundwater is not fully defined at this time in groundwater at either area investigated.

7. RECOMMENDATIONS

The following recommendations are made regarding the EISB Pilot Study and groundwater VOC concentrations:

- Terminate Donor Solution Injection: The groundwater VOC/geochemical data and microcosm studies demonstrate that biodegradation via reductive dechlorination is occurring in Site groundwater. Findings from this pilot investigation, however, did not result in measurably enhanced biodegradation due to the ineffectiveness of the method of donor solution delivery to distribute donor downgradient of the injection well. Donor distribution was limited due to the low hydraulic conductivity of the aquifer, organic acid degradation/consumption, and/or unidentified preferential flow paths.
- Maintain Temporary Wells: Notify NYSDEC of the intent to formally transition temporary wells into piezometers for use during future investigations or pilot studies. Minor modifications may be necessary to prepare wells for winter.
- Perform Site Survey: Temporary wells were measured off existing structures and monitoring wells. However, existing monitoring well locations are not properly lining up between report figures. Surveying existing well locations and new temporary well locations prior to abandonment would provide more detailed information for future investigations. Additionally, local groundwater flow can be evaluated when temporary well casings are surveyed for vertical control.

8. REFERENCES

O'Brien & Gere, June 2009, "Enhanced In-Situ Bioremediation Pilot Study, Former GE Court Street Building 5, Deere Road, East Syracuse."

O'Brien & Gere, January 2011, "2009 Annual Operations and Maintenance Report, Former GE Court Street Building 5 Site, Town of Dewitt – Onondaga County, New York."

Shaw Environmental, Inc., March 13, 2008, iSOC Pilot Test Summary Report, Lockheed Martin Corporation, - Court Street Building 5, P.O.#: FFM 738442."

WEHRAN-NEW YORK, Inc., May 1992, "Interim Subsurface Investigation Report, Court Street – Building 5 and 5A, Inactive Solvent Dispensing Area"

WEHRAN-NEW YORK, Inc., March 1993, "Remedial Action Plan, Court Street – Building 5 and 5A, Inactive Solvent Dispensing Area, Volume I – Report"

Tables

Table 1

Lockheed Martin Corporation
Former GE Court Street Building 5
Dewitt, New York

Additional Investigations
IW-01 Area Investigation
Groundwater Analyical Results

Sample ID	TOGS [1]	Units	TMW-01	TMW-02	TMW-03	TMW-04	TMW-05	TMW-06	TMW-07	TMW-21	TMW-22	TMW-23
Date Sampled			9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011
VOCs by USEPA Method 5021A												
Acetylene	NC	µg/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	5	µg/L	**110**	**31**	**22**	**41**	**8**	**16**	**64**	**34**	**12**	**5**
1,1-Dichloroethane	5	µg/L	**3,070**	**640**	**530**	**20**	10 U	**30**	**130**	**126**	**29**	10 U
1,1-Dichloroethene	5	µg/L	**20**	10 U	**12**	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	5	µg/L	**2,070**	**800**	**1,170**	20 U	**64**	**130**	20	**27**	**13**	**37**
trans-1,2-Dichloroethene	5	µg/L	12 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U
Ethane	NC	µg/L	2.3	5.2	6.9	42	2.7	6.0	86	24	5	4.0
Ethene	NC	µg/L	58	79	45	7.7	0.3	34	110	170	34	5.7
Methane	NC	µg/L	38	210	470	1,950	150	1,090	4,690	1,450	370	740
Tetrachloroethene	5	µg/L	35 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
1,1,1-Trichloroethane	5	µg/L	**160**	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Trichloroethene	5	µg/L	**27**	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Vinyl Chloride	2	µg/L	**910**	**1,290**	**970**	**10**	**7**	**230**	**60**	**85**	**160**	**39**
Volatile Fatty Acids by USEPA Method 300												
Acetate	NC	mg/L	0.5 U	0.5 U	0.7	4	0.5 U	8	0.5 U	0.5 U	0.5 U	0.5 U
Butyrate	NC	mg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Formate	NC	mg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Lactate	NC	mg/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Propionate	NC	mg/L	0.5 U	0.5 U	0.2	0.5 U	0.5 U	0.5 U	0.1	0.5 U	0.5 U	0.5 U

Notes:
[1] New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.
NC - No Criteria, U - Not Detected
BOLD - Exceeds TOGS

Table 2

Lockheed Martin Corporation
Former GE Court Street Building 5
Dewitt, New York

Additional Investigations
MW-01S Area Investigation
Groundwater Analyical Results

Location ID:	TOGS[1]	TMW-08	TMW-09	TMW-10	TMW-11	TMW-12	TMW-13	TMW-14	TMW-15	TMW-16	TMW-17	TMW-18	TMW-19	TMW-20	Trip Blank
Date Sampled:		9/15/2011	9/15/2011	9/15/2011	9/15/2011	9/16/2011	9/16/2011	9/16/2011	9/15/2011	9/15/2011	9/15/2011	9/15/2011	9/15/2011	9/15/2011	9/16/2011
Acetone	50	10 U	10 U	20 U	8.1 J	250 U	10 U	25 U	10 U	100 U	10 U	10 U	200 U	1000 U	10 U
Benzene	1	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Bromochloromethane	5	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
Bromodichloromethane	50	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Bromoform	50	4.0 U	4.0 U	8.0 U	4.0 U	100 U	4.0 U	10 U	4.0 U	40 U	4.0 U	4.0 U	80 U	400 U	4.0 U
Bromomethane	5	2.0 U	2.0 U	4.0 U	2.0 U	50 U	2.0 U	5.0 U	2.0 U	20 U	2.0 U	2.0 U	40 U	200 U	2.0 U
2-Butanone (MEK)	50	10 U	10 U	20 U	10 U	250 U	10 U	25 U	10 U	100 U	10 U	10 U	200 U	1000 U	10 U
Carbon disulfide	60	2.0 U	2.0 U	4.0 U	0.19 J	50 U	0.32 J	5.0 U	2.0 U	20 U	0.36 J	2.0 U	40 U	200 U	2.0 U
Carbon tetrachloride	5	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Chloroethane	5	**5.1**	**107**	2.0 U	0.68 J	**4200**	**478**	**137**	1.0 U	**243**	1.0 U	1.0 U	**720**	**12900**	1.0 U
Chloroform	7	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Chloromethane	5	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Cyclohexane	NC	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
1,2-Dibromo-3-chloropropane	0.04	10 U	10 U	20 U	10 U	250 U	10 U	25 U	10 U	100 U	10 U	10 U	200 U	1000 U	10 U
Dibromochloromethane	50	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
1,2-Dibromoethane	0.0006	2.0 U	2.0 U	4.0 U	2.0 U	50 U	2.0 U	5.0 U	2.0 U	20 U	2.0 U	2.0 U	40 U	200 U	2.0 U
1,2-Dichlorobenzene	3	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
1,4-Dichlorobenzene	3	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Dichlorodifluoromethane	5	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
1,1-Dichloroethane	5	4.9	**171**	0.73 J	**5.9**	**5700**	**46.3**	**418**	4.4	**3130**	**5.8**	1	**8520**	**15200**	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	**0.78 J**	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
1,1-Dichloroethene	5	2.4	1.0 U	2.0 U	1.0 U	25 U	2.8	1.1 J	0.49 J	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
cis-1,2-Dichloroethene	5	**7.8**	3.7	2.0 U	**10.1**	25 U	**15.4**	**76.9**	**7.6**	**29.2**	1	1.0 U	**10.6 J**	100 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
1,2-Dichloropropane	1	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
cis-1,3-Dichloropropene	0.4	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
trans-1,3-Dichloropropene	0.4	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
1,4-Dioxane	NC	130 U	130 U	250 U	130 U	3100 U	130 U	310 U	130 U	1300 U	130 U	130 U	2500 U	13000 U	130 U
Ethylbenzene	5	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	0.72 J	1.0 U	10 U	1.0 U	1.0 U	**9.3 J**	100 U	1.0 U
Freon 113	5	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	**5.3 J**	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
2-Hexanone	50	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
Isopropylbenzene	5	2.0 U	2.0 U	4.0 U	2.0 U	50 U	2.0 U	5.0 U	2.0 U	20 U	2.0 U	2.0 U	40 U	200 U	2.0 U
Methyl Acetate	NC	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
Methylcyclohexane	NC	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
Methyl Tert Butyl Ether	10	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
4-Methyl-2-pentanone(MIBK)	NC	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
Methylene chloride	5	2.0 U	2.0 U	4.0 U	2.0 U	50 U	2.0 U	5.0 U	2.0 U	20 U	2.0 U	2.0 U	40 U	200 U	2.0 U
Styrene	5	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
1,1,2,2-Tetrachloroethane	NC	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Tetrachloroethene	5	**7.6**	**6.3**	2.0 U	1.0 U	25 U	1.0 U	3.3	2.4	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Toluene	5	**153**	**138**	**416**	**61**	25 U	1.0 U	**5.8**	**15.7**	10 U	1.5	**152**	**69.6**	100 U	1.0 U
1,2,3-Trichlorobenzene	5	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
1,2,4-Trichlorobenzene	5	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
1,1,1-Trichloroethane	5	**9**	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	**22.2**	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
1,1,2-Trichloroethane	1	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.5 U	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
Trichloroethene	5	2.3	0.78 J	2.0 U	1.0 U	25 U	1.0 U	2.6	0.40 J	4.3 J	1.0 U	1.0 U	20 U	100 U	1.0 U
Trichlorofluoromethane	5	5.0 U	5.0 U	10 U	5.0 U	130 U	5.0 U	13 U	5.0 U	50 U	5.0 U	5.0 U	100 U	500 U	5.0 U
Vinyl chloride	2	**2.7**	0.28 J	2.0 U	1.0 U	25 U	**12**	**13.4**	1.0 U	10 U	1.0 U	1.0 U	20 U	100 U	1.0 U
m,p-Xylene	5	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	1.4 J	0.46 J	10 U	1.0 U	1.0 U	**30.6**	100 U	1.0 U
o-Xylene	5	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	0.80 J	1.0 U	10 U	1.0 U	1.0 U	**12.0 J**	100 U	1.0 U
Xylene (total)	5	1.0 U	1.0 U	2.0 U	1.0 U	25 U	1.0 U	2.2 J	0.63 J	10 U	1.0 U	1.0 U	**42.6**	100 U	1.0 U

Notes:

Units are in ug/L

[1] New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.

NC - No Criteria, U - Not Detected, J - Estimated Value

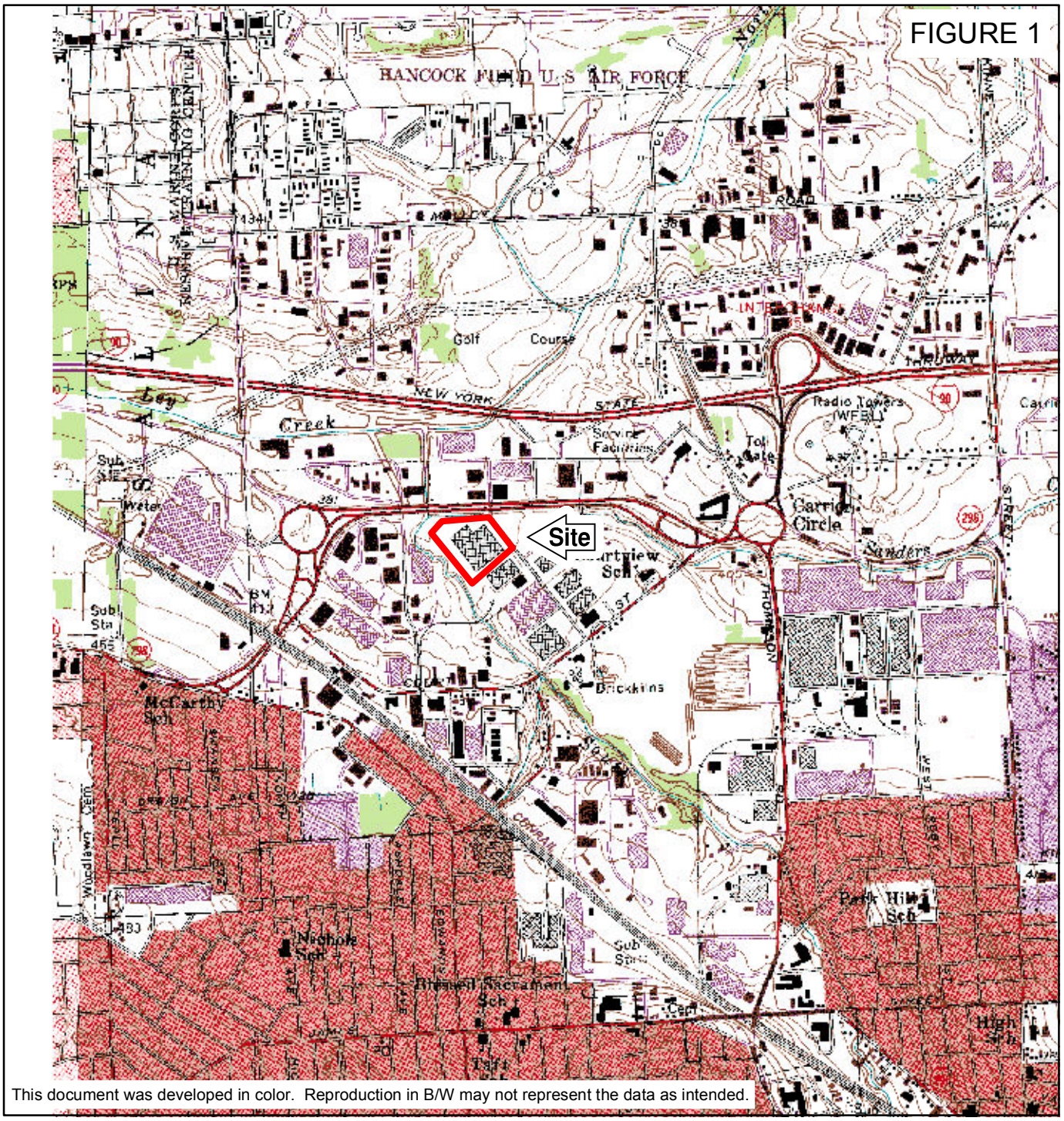
BOLD - Exceeds TOGS

Figures

I:\Lockheed-Mar-Fs.5851\STDS\Former GE Court St Bldg 5\GIS\Site Location.mxd

PLOTDATE: never never TuckerSM

FIGURE 1



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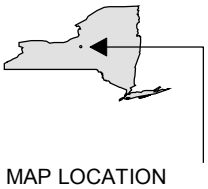
ADAPTED FROM: SYRACUSE EAST USGS QUADRANGLE

LOCKHEED MARTIN CORPORATION
COURT STREET BUILDING 5
ADDITIONAL INVESTIGATIONS
DEWITT, NEW YORK



MAP LOCATION

N

SITE LOCATION

0 1,000 2,000 4,000 6,000 8,000

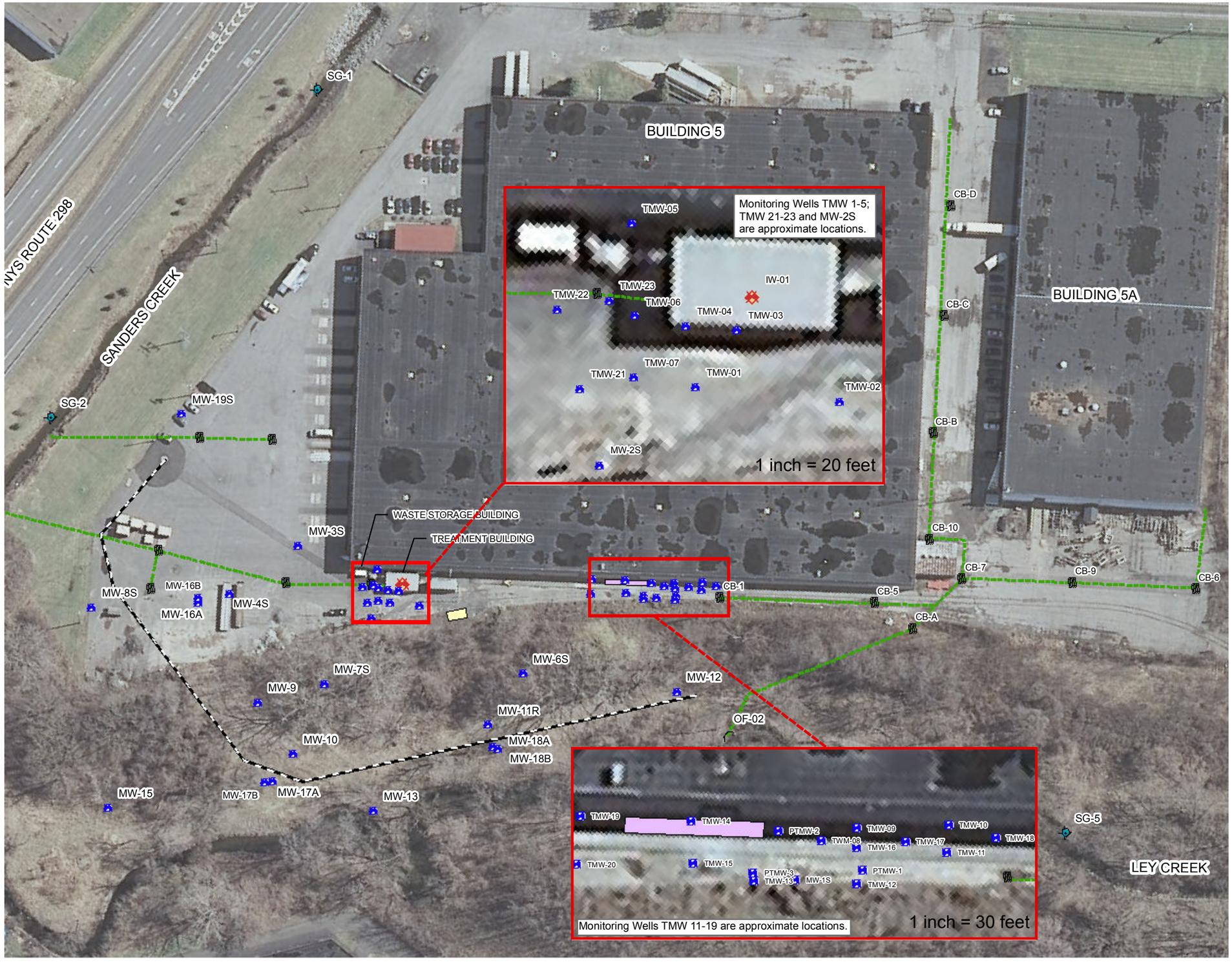
Feet

NOVEMBER 2011

1:24,000

O'BRIEN & GERE

FIGURE 2



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LEGEND

- INJECTION WELL
- MONITORING WELL
- OUTFALL
- STAFF GAUGE
- CATCH BASINS
- GROUND WATER COLLECTION TRENCH
- STORM SEWER

HISTORICAL CHEMICAL STORAGE LOCATIONS

- FORMER UST LOCATION
- FORMER SOLVENT PAD

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5/5A
TOWN OF DEWIT, NEW YORK

SITE LAYOUT

0 50 100 200
Feet

NOVEMBER 2011
43929

O'BRIEN & GERE

PATH: I:\Lockheed-Mar-Fs.5851\STDS\Former GE Court St Bldg 5\GIS\Site Layout_zoom_extents.mxd
NAME: KellyBA
DATE: 9/26/2011 4:56:59 PM

FIGURE 3

Location ID:	TMW-22
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	**29**
CA	**12**
Ethane	4.6
cis-DCE	**13**
VC	**160**
Ethene	34
Methane	370000
Acetate	500 U
Propionate	500 U
Lactate	500 U

Location ID:	TMW-23
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	10 U
CA	**5.3**
Ethane	4
cis-DCE	**37**
VC	**39**
Ethene	5.7
Methane	740000
Acetate	500 U
Propionate	500 U
Lactate	500 U

Location ID:	TMW-06
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	**30**
CA	**16**
Ethane	6
cis-DCE	**130**
VC	**230**
Ethene	34
Methane	1090000
Acetate	7700
Propionate	500 U
Lactate	500 U

Location ID:	TMW-05
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	10 U
CA	**8**
Ethane	2.7
cis-DCE	**64**
VC	**7.3**
Ethene	0.3
Methane	150000
Acetate	500 U
Propionate	500 U
Lactate	500 U

Location ID:	TMW-04
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	**20**
CA	**41**
Ethane	42
cis-DCE	20 U
VC	**10**
Ethene	7.7
Methane	1950000
Acetate	4000
Propionate	500 U
Lactate	500 U

Location ID:	IW-01*
Sample Date:	10/28/2009
Chemical Name	
1,1-DCA	**20**
CA	4 U
Ethane	0.4
cis-DCE	**40**
VC	**9.1**
Ethene	0.6
Methane	7300
Acetate	200 U
Propionate	200 U
Lactate	200 U

BUILDING 5

TREATMENT BUILDING

Location ID:	TMW-03
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	**550**
CA	**22**
Ethane	6.9
cis-DCE	**1170**
VC	**970**
Ethene	45
Methane	470000
Acetate	700
Propionate	200
Lactate	500 U

TMW-22 TMW-23 TMW-06 TMW-05 TMW-04 TMW-03 IW-01

TMW-21 TMW-07 TMW-01 TMW-02 MW-2S

Location ID:	TMW-21
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	**126**
CA	**34**
Ethane	24
cis-DCE	**27**
VC	**85**
Ethene	170
Methane	1450000
Acetate	500 U
Propionate	500 U
Lactate	500 U

Location ID:	TMW-07
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	**130**
CA	**64**
Ethane	86
cis-DCE	20 U
VC	**60**
Ethene	110
Methane	4690000
Acetate	500 U
Propionate	100
Lactate	500 U

Location ID:	MW-2S*	MW-2S**
Sample Date:	10/14/2010	3/15/2011
Chemical Name		
1,1-DCA	**1240**	**660**
CA	**42**	**70**
Ethane	6.7	NA
cis-DCE	**1210**	**140**
VC	**2850**	**760**
Ethene	142	NA
Methane	330000	NA
Acetate	600 U	NA
Propionate	600 U	NA
Lactate	600 U	NA

Location ID:	TMW-01
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	**3070**
CA	**110**
Ethane	2.3
cis-DCE	**2070**
VC	**910**
Ethene	58
Methane	38000
Acetate	500 U
Propionate	500 U
Lactate	500 U

Location ID:	TMW-02
Sample Date:	9/16/2011
Chemical Name	
1,1-DCA	**640**
CA	**31**
Ethane	5.2
cis-DCE	**800**
VC	**1290**
Ethene	79
Methane	210000
Acetate	500 U
Propionate	500 U
Lactate	500 U

LEGEND

- BUILDING
- INJECTION WELL
- MONITORING WELL
- OUTFALL
- STAFF GAUGE
- CATCH BASINS
- STORM SEWER

HISTORICAL CHEMICAL STORAGE LOCATIONS
- FORMER UST LOCATION

NOTES:
- WELL LOCATIONS ARE APPROXIMATE.
- FORMER SOLVENT PAD LOCATION IS APPROXIMATE.
- * DATA FROM EISB SAMPLING EVENTS
- ** DATA FROM ANNUAL SAMPLING EVENT

Location ID:	TMW-14
Sample Date:	9/16/2011
Chemical Name	
1,1,1-Trichloroethane	ND (0.59)
1,1-Dichloroethane	**418**
1,2-Dichloroethane	**0.78 J**
Chloroethane	**137**
Tetrachloroethene	3.3
cis-1,2-Dichloroethene	**76.9**
Vinyl chloride	**13.4**
Ethylbenzene	0.72 J
Toluene	**5.8**
Xylene (total)	2.2 J
Freon 113	**5.3 J**

DETECTED ABOVE CLASS GA STANDARDS AND GUIDANCE VALUES (NYSDEC TOGS 1.1.1 JUNE 1998)

DETECTED BELOW CLASS GA STANDARDS AND GUIDANCE VALUES (NYSDEC TOGS 1.1.1 JUNE 1998)

RESULTS IN ug/l

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5/5A
TOWN OF DEWIT, NEW YORK

GROUNDWATER EVALUATION IW-01

0 10 20 40
Feet

JANUARY 2012
43929

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This document was developed in color. Reproduction in B/W may not represent the data as intended.
TCA = trichloroethane, DCA = dichloroethane, CA = chloroethane, PERC = tetrachloroethane, DCE = dichloroethene, VC = vinyl chloride, U = not detected, J = estimated value

PATH: I:\Lockheed-Mar-Fs.5851\STDS\Former GE Court St Bldg 5\GIS\IW1.mxd
NAME: TuckerSM
DATE: 1/12/2012 5:01:12 PM

FIGURE 4

PATH: I:\Lockheed-Mar-Fs.5851\STDS\Former GE Court St Bldg 5\GIS\MW-1S.mxd

NAME: TuckerSM

DATE: 11/15/2011 1:33:58 PM

Location ID:	TMW-14
Date Sampled:	9/16/2011
Chemical Name	
1,1,1-TCA	2.5 U
1,1-DCA	**418**
1,2-DCA	**0.78 J**
CA	**137**
PERC	3.3
cis-1,2-DCE	**76.9**
trans-1,2-DCE	2.5 U
VC	**13.4**

Location ID:	PTMW-2
Date Sampled:	1/10/2008
Chemical Name	
1,1,1-TCA	**11**
1,1-DCA	**56**
1,2-DCA	1.0 U
CA	1.7
PERC	1.0 U
cis-1,2-DCE	**26**
trans-1,2-DCE	1.0 U
VC	1.0 U

Location ID:	TMW-08
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	**9**
1,1-DCA	4.9
1,2-DCA	1.0 U
CA	**5.1**
PERC	**7.6**
cis-1,2-DCE	**7.8**
trans-1,2-DCE	1.0 U
VC	**2.7**

Location ID:	TMW-09
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	1.0 U
1,1-DCA	**171**
1,2-DCA	1.0 U
CA	**107**
PERC	**6.3**
cis-1,2-DCE	3.7
trans-1,2-DCE	1.0 U
VC	0.28 J

Location ID:	TMW-17
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	1.0 U
1,1-DCA	**5.8**
1,2-DCA	1.0 U
CA	1.0 U
PERC	1.0 U
cis-1,2-DCE	1
trans-1,2-DCE	1.0 U
VC	1.0 U

Location ID:	TMW-10
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	2.0 U
1,1-DCA	0.73 J
1,2-DCA	2.0 U
CA	2.0 U
PERC	2.0 U
cis-1,2-DCE	2.0 U
trans-1,2-DCE	2.0 U
VC	2.0 U

Location ID:	TMW-19
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	20 U
1,1-DCA	**8520**
1,2-DCA	20 U
CA	**720**
PERC	20 U
cis-1,2-DCE	**10.6 J**
trans-1,2-DCE	20 U
VC	20 U

BUILDING 5

Location ID:	TMW-18
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	1.0 U
1,1-DCA	1
1,2-DCA	1.0 U
CA	1.0 U
PERC	1.0 U
cis-1,2-DCE	1.0 U
trans-1,2-DCE	1.0 U
VC	1.0 U

Location ID:	TMW-20
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	100 U
1,1-DCA	**15200**
1,2-DCA	100 U
CA	**12900**
PERC	100 U
cis-1,2-DCE	100 U
trans-1,2-DCE	100 U
VC	100 U

Location ID:	TMW-11
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	1.0 U
1,1-DCA	**5.9**
1,2-DCA	1.0 U
CA	0.68 J
PERC	1.0 U
cis-1,2-DCE	**10.1**
trans-1,2-DCE	1.0 U
VC	1.0 U

Location ID:	TMW-16
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	10 U
1,1-DCA	**3130**
1,2-DCA	10 U
CA	**243**
PERC	10 U
cis-1,2-DCE	**29.2**
trans-1,2-DCE	10 U
VC	10 U

Location ID:	TMW-15
Date Sampled:	9/15/2011
Chemical Name	
1,1,1-TCA	**22.2**
1,1-DCA	4.4
1,2-DCA	1.0 U
CA	1.0 U
PERC	2.4
cis-1,2-DCE	**7.6**
trans-1,2-DCE	1.0 U
VC	1.0 U

Location ID:	PTMW-1
Date Sampled:	1/10/2008
Chemical Name	
1,1,1-TCA	200 U
1,1-DCA	**31000**
1,2-DCA	200 U
CA	**1600**
PERC	200 U
cis-1,2-DCE	200 U
trans-1,2-DCE	200 U
VC	200 U

Location ID:	TMW-13
Date Sampled:	9/16/2011
Chemical Name	
1,1,1-TCA	1.0 U
1,1-DCA	**46.3**
1,2-DCA	1.0 U
CA	**478**
PERC	1.0 U
cis-1,2-DCE	**15.4**
trans-1,2-DCE	1.0 U
VC	**12**

Location ID:	MW-1S
Date Sampled:	3/15/2011
Chemical Name	
1,1,1-TCA	1.0 U
1,1-DCA	**2900**
1,2-DCA	**4.8**
CA	**9100**
PERC	1.0 U
cis-1,2-DCE	**5.4**
trans-1,2-DCE	**6.1**
VC	**14**

Location ID:	TMW-12
Date Sampled:	9/16/2011
Chemical Name	
1,1,1-TCA	25 U
1,1-DCA	**5700**
1,2-DCA	25 U
CA	**4200**
PERC	25 U
cis-1,2-DCE	25 U
trans-1,2-DCE	25 U
VC	25 U

Location ID:	PTMW-3
Date Sampled:	1/10/2008
Chemical Name	
1,1,1-TCA	1.0 U
1,1-DCA	**54**
1,2-DCA	1.0 U
CA	**73**
PERC	1.0 U
cis-1,2-DCE	3
trans-1,2-DCE	1.0 U
VC	1.0 U

TMW-19, TMW-14, PTMW-2, TWM-08, TMW-09, TMW-10, TMW-16, TMW-17, TMW-18, TMW-11, TMW-20, TMW-15, PTMW-3, MW-1S, PTMW-1, TMW-13, TMW-12

LEGEND

- BUILDING
- MONITORING WELL
- STAFF GAUGE
- CATCH BASINS
- STORM SEWER

HISTORICAL CHEMICAL STORAGE LOCATIONS

- FORMER SOLVENT PAD

NOTES:
- EXCEEDANCES ONLY
- WELL LOCATIONS ARE APPROXIMATE
- FORMER SOLVENT PAD LOCATION IS APPROXIMATE
- ETHYLBENZENE, TOLUENE, XYLENES, AND CFC 113 ARE NOT PRESENTED IN THIS FIGURE

Location ID:	TMW-14
Sample Date:	9/16/2011
Chemical Name	
1,1,1-Trichloroethane	ND (0.59)
1,1-Dichloroethane	**418**
1,2-Dichloroethane	**0.78 J**
Chloroethane	**137**
Tetrachloroethene	3.3
cis-1,2-Dichloroethene	**76.9**
Vinyl chloride	**13.4**
Ethylbenzene	0.72 J
Toluene	**5.8**
Xylene (total)	2.2 J
Freon 113	**5.3 J**

DETECTED ABOVE CLASS GA STANDARDS AND GUIDANCE VALUES (NYSDEC TOGS 1.1.1, JUNE 1998)

DETECTED BELOW CLASS GA STANDARDS AND GUIDANCE VALUES (NYSDEC TOGS 1.1.1, JUNE 1998)

RESULTS IN ug/l

LOCKHEED MARTIN CORPORATION
FORMER GE COURT ST BLDG 5/5A
TOWN OF DEWIT, NEW YORK

GROUNDWATER EVALUATION MW-1S

0 10 20 40

Feet

JANUARY 2012
43929

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TCA = trichloroethane, DCA = dichloroethane, CA = chloroethane, PERC = tetrachloroethane, DCE = dichloroethene, VC = vinyl chloride, U = not detected, J = estimated value

Attachments

Attachment 1

Boring Logs

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-01
Client: Lockheed Martin Corp. **Proj. Loc:** Court St Building #5, Syracuse, NY **File No.:**	**Sampler:** 4' Macro core **Hammer:** Geoprobe **Fall:** NA	**Page** 1 of 1 **Location:** **Start Date:** 9/12/11 **End Date:** 9/12/11
Boring Company: Parratt-Wolff **Foreman:** Layne Peck **OBG Geologist:** Jonathan Bone		**Screen** = **Riser** Grout, Sand Pack, Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	NA	4.0/2.0	—	0-0.7' Loose, dry, f-m sand, Dusky brown (5YR2/2), some s-m angular gvl	Fill			
						0.7-2.0 Dense, moist, moderate yellowish brown (10YR 5/4) silt, trc clay.	silt		0.0	1050
4	2	8	—	4.0/4.0	—	0-2.0 SAA (0.7-2.0) 2.0-4.0 soft, saturated, grayish brown (5YR 3/2) f-m sand, little silt, slight sulfur-like odor	6.0 f-m sand	▽	11.1 2.5	1057
8	3	12	—	4.0/4.0	—	0-1.0 SAA (2.0-4.0) little c. sand, very soft, slight odor 1.0-4.0 very soft, saturated Brownish gray (5YR2/1) silt + clay, very cohesive	9.0' silt + clay		0.9	1102
12	4	16	—	4.0/4.0	—	0-4.0 SAA (1-4.0')			0.0	1107
						End of Boring 16' bgs well Construction Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-02
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5 Syracuse, NY File No.:	Sampler: 4' macrocore Hammer: Geoprobe Fall: NA	Page 1 of 1 Location: Start Date: 9/12/11 End Date: 9/12/11
Boring Company: Parratt-Wolff Foreman: Layne Dech OBG Geologist: Jonathan Bone		Screen / Riser / Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Date/ Time
0	1	4	-	4.0/0.5	-	0-0.4 Loose, moist, dark gray (N3) f-m-c sand, little f-m angular grvl. 0.4-0.5 Dense, slightly moist, moderate brown (5YR 3/4) Silt	Fill Silt		0.0	1128
4	2	8	-	4.0/3.0	-	0-1.5 SAA (0.4-0.5) 1.5-2.8 soft-Loose, saturated moderate brown (5YR 4/4) f-m sand, tr c. sand. 2.8-3.0 soft, saturated, brownish gray (5YR 4/1) silt & clay cohesive	6.0' f-m sand 7.8	∇	0.0	1136
8	3	12	-	4.0/4.0	-	0-4.0 SAA (2.8-3.0)	Silt & clay		0.0	1140
12	4	16	-	4.0/4.0	-	0-4.0 SAA, little black mottling			0.0	1145
						End of Boring 16' bgs				
						well construction				
						Screen: 5-15'				
						Riser: 0-5'				
						Sand: 3-15'				
						Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-03
Client: Lockheed Martin Corp.	**Sampler:** 4' Macrocore	**Page** 1 **of** 1
Proj. Loc: Court St Building #5, Syracuse, NY	**Hammer:** Geoprobe	**Location:**
File No.:	**Fall:** NA	**Start Date:** 9/12/11 **End Date:** 9/12/11
Boring Company: Parratt-Wolff **Foreman:** Layne Peck **OBG Geologist:** Jonathan Bone		**Screen** / **Riser** — **Grout** / **Sand Pack** / **Bentonite**

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	PID (ppm)	Date/ Time
0	1	4	—	4.0/1.0	—	0-1.0 Dense, moist, brownish gray (5YR4/1) fine sand, little silt, tr small angular grvl	Fill		0.0	1241
4	2	8	—	4.0/0.7'	—	0-0.7 Soft, saturated, moderate brown (5YR 4/4) silt, some fine sand, poor recovery, hard to tell where water table is.	~6.0' F-m sand + silt	▽ 6'	0.5	1247
8	3	12	—	4.0/3.0	-	0-1.0 Very soft, saturated, brownish grey (5YR4/1) silt, some f. sand 1.0-3.0 Very soft, saturated, brownish gray (5YR4/1) silt + clay, cohesive	9.0 Silt + clay		0.0	1253
12	4	16	-	4.0/3.0	—	0-3.0 SAA (1.0-3.0)			0.0	1258
						End of Boring @ 16'				
						Well Construction (bgs)				
						Screen: 5-15'				
						Riser: 0-5'				
						Sand: 3-15'				
						Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC. | **SOIL BORING LOG** | **REPORT OF BORING** TMW-04

Client: Lockheed Martin Corp.
Proj. Loc: Court St Building #5, Syracuse, NY
File No.:
Sampler: 4' Macrocore
Hammer: Geoprobe
Fall: NA
Page 1 of 1
Location:
Start Date: 9/12/11
End Date: 9/12/11
Boring Company: Parratt-Wolff
Foreman: Layne Peck
OBG Geologist: Jonathan Bone
Screen / Riser
Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	—	4.0/1.0	—	0-0.5 Dense, moist, moderate brown (5YR 3/4) f-m-c sand, some s-m angular gvl, tr silt 0.5-1.0 Dense, dry, med-light gray (N6) f-m-c sand, little s-m angular gvl	Fill		0.0	1320
4	2	8	—	4.0/2.5	—	0-0.7 Dense, saturated, med dark gray (N4) m-c sand, little s-m gvl, tr large gvl. 0.7-1.3 Dense, moist, dark yellowish brown (10YR 4/2) silt, little clay 1.3-2.5 firm, saturated, moderate brown (5YR 3/4) f-m sand	5.0' Silt 6.0' F-M sand	▽ ~6.0'	1.0	1325
8	3	12	-	4.0/4.0		0-1.0 Loose, saturated, med-dark gray (N4) f-m-c sand, 1.0-4.0 Very soft, saturated, brownish gray (5YR 4/1) silty clay, cohesive	9.0 Silty clay		0.6	1330
12	4	16	—	4.0/4.0	—	0-4.0 SAA (1-4.0')			0.0	1335
						End of Boring @ 16' bgs Well Construction (Bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-05
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5 Syracuse, NY File No.:	Sampler: 4' Macrocore Hammer: Geoprobe Fall: NA	Page 1 of 1 Location: Start Date: 9/12/11 End Date: 9/12/11
Boring Company: Parratt-Wolff Foreman: Layne Peck OBG Geologist: Jonathan Bone		Screen = \ Grout Riser ▯ Sand Pack ▪ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	-	4.0 | 1.5	-	0-1.2 Dense, moist-wet, moderate brown (5YR 3/4) f-m-c sand, few sm angular grvl, trc silt 1.2-1.5 firm, moist, dark yellowish brown (10YR4/2) silt, some clay	Fill silt, little clay		0.0	1400
4	2	8	-	4.0 | 3.5	-	0-2.0 SAA (1.2-1.5') 2.0-3.5 Firm/soft, saturated moderate brown (5YR4/4) f-m sandy trc silt	6' f-m sand	V	0.0	1405
8	3	12	-	4.0 | 4.0	-	0-0.5 SAA (2.0-3.5') 0.5-4.0 Soft, saturated, Brownish grey (5YR 4/1) silt + clay, cohesive	8.5 silt + clay		0.0	1410
12	4	16	-	4.0 | 4.0	-	0-4.0 (SAA 0.5-4.0') Very cohesive			0.0	1412
						End of Boring @ 16' Well construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING
		TMW-06
Client: Lockheed Martin Corp.	Sampler: 4' ~~Geoprobe~~ Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/12/11
		End Date: 9/12/11
Boring Company: Parratt-Wolff		Screen = \ Grout
Foreman: Layne Rech		Riser Sand Pack
OBG Geologist: Jonathan Bone		Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/2.0	–	0-1.0 Dense, moist, grayish brown (5YR 3/2), transitioning to moderate brown (5YR 4/4) f-m-c sand, little s-m gnd, tr silt 1.0-2.0 firm, moist dark yellowish brown (10YR 4/2) silt, little clay	Fill silt, little clay		0.0	1447
4	2	8	–	4.0/4.0	–	0-1.7 SAA (1.0-2.0) 1.7-4.0 firm, saturated, moderate brown (5YR 4/4) f-m sand, tr silt	5.7' f-m sand	▽	0.0	1450
8	3	12	–	4.0/4.0	–	0-1.0 soft, saturated, med dark gray (N4) silt & f-m-c sand, tr clay 1.0-4.0 soft, saturated. Brownish gray (5YR 4/1) silt & clay, cohesive	9.0' silt & clay		0.0	1455
12	4	16	–	4.0/4.0	–	0-4.0 SAA (1.0-4.0) very cohesive			0.0	1500
16						End of Boring @ 16' bgs Well Construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-07
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/12/11 End Date: 9/12/11
Boring Company: Parratt-Wolff Foreman: Layne Arch OBG Geologist: Jonathan Bone		Screen = Riser \ Grout Sand Pack Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/1.0	–	0-0.5 Dense, moist, med. dark gray (N4) m-c sand, some f-m angular gvl, trc silt 0.5-1.0 Firm, moist, brownish black (5YR 2/1) silt	Fill Silt		0.0	1330
4	2	8	–	4.0/4.0	–	0-2.5 SAA (0.5-1.0) dark yellowish brown (10YR 4/2) some clay 2.5-4.0 Firm, saturated, moderate brown (5YR 4/4) f-m sand, little silt	0.5 F-m sand	*	0.0	1334
8	3	12	–	4.0/4.0	–	0-1.0 Soft, saturated, brownish gray (5YR 4/1) f-m sand, little silt, trc c. sand 1.0-4.0 Very soft, saturated Brownish gray (5YR 4/1) silt & clay. Very cohesive	9.0 Silt & clay		0.0	1337
12	4	16	–	4.0/4.0	–	0-4.0 SAA (1.0-4.0')			0.0	1340
						End of Boring @ 16' bgs Well Construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-08
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5 Syracuse, NY File No.:	Sampler: 4' Macrocore Hammer: Geoprobe Fall: NA	Page 1 of 1 Location: Start Date: 9/13/11 End Date: 9/13/11
Boring Company: Parratt-Wolff Foreman: Layne Peck OBG Geologist: Jonathan Bone		Screen = \ Grout Riser . Sand Pack Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	—	4.0/0.6	—	0-0.6 Dense, wet, dark yellowish brown (10YR 4/2) m-c sand, few f-m angular gvl, trace silt	Fill		0.0	0830
							Silt some clay			
4	2	8	—	4.0/4.0	—	0-4.0 Stiff, moist to wet dark yellowish brown silt some clay, increase clay content with depth, gradually softer & more cohesive			0.0	0835
8	3	12	—	4.0/4.0	—	0-1.0 stiff, moist, brownish gray (5YR 4/1) silt, little clay trace woody material 1.0-1.5 soft, saturated, brownish black (5YR 2/1) f-m sand & silt 1.5-4.0 soft, saturated, brownish gray (5YR 4/1) silt & clay, very cohesive	9.0' Silt & Sand 10.0' Silt & clay		0.0	0837
12	4	16	—	4.0/4.0	—	0-4.0 SAA (1.5-4.0)			0.0	0840
						End of Boring @ 16' Well construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-09
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/13/11 End Date: 9/13/11
Boring Company: Parratt-Wolff		Screen / Riser / Grout / Sand Pack / Bentonite
Foreman: Layne Peck		
OBG Geologist: Jonathan Bone		

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	—	4.0/7.0	—	0-0.8 Dense, wet, dark yellowish brown (10YR 4/2) fine sand, few sm gravel, little silt	Fill			
						0.8-2.0 Stiff, moist, dark yellowish brown (10YR 4/2) silt, little clay	Silt little clay		0.0	0902
4	2	8	—	4.0/3.5	—	0-3.0 SAA (0.8-2.0)				
						3.0-3.5 Soft, moist, brownish gray (5YR 4/1) silt, trc clay & wood material	7.0			0905
8	3	12	—	4.0/4.0	—	0-2.5 SAA (3.0-3.5) few thin bands (0.2') of fine sand & silt, trc small gravel	Silt little sand Bands			
						2.5-4.0 Soft, brownish gray (5YR 4/1) silt & clay, very cohesive	10.5'		0.0	0910
							Silt & clay			
12	4	16	—	4.0/4.0	—	0-4.0 SAA (2.5-4.0')				
									0.0	0915
						End of Boring @ 16' bgs				
						Well Construction (bgs)				
						Screen: 5-15'				
						Riser: 0-5'				
						Sand: 3-15'				
						Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-10
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5, Syracuse, NY File No.:	Sampler: 4' Macrocore Hammer: Geoprobe Fall: NA	Page 1 of 1 Location: Start Date: 9/13/11 End Date:
Boring Company: Parratt-Wolff Foreman: Layne Peck OBG Geologist: Jonathan Bone		Screen / Riser; Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Date/ Time
0	1	4	–	4.0/2.5	–	0-0.5 Dense, moist, brownish black (5YR 2/1) m-c sand, some small grvl, tr f. sand & silt 0.5-2.5 Stiff, moist, dark yellowish brown (10YR 2/2) silt, little clay	Fill Silt little clay		0.6	1005
4	2	8	–	4.0/3.5	–	0-3.5 SAA (0.5-2.5') tr f. sand (2.0-2.5')	8.0'		0.0	1008
8	3	12	–	4.0/3.8	–	0-2.3 Soft, wet, brownish gray (5YR 4/1) silt, tr clay & tr woody material, tr f-m sand & s-m grvl (1.8-2.3) 2.3-3.8 Soft, saturated, brownish gray (5YR 4/1) silt & clay very cohesive	Silt tr sand 10.5 Silt & Clay		0.0	1012
12	4	16	–	4.0/4.0	–	0-4.0 SAA (2.3-3.8')			0.0	1015
						End of Boring @ 16' bgs well construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING
		TMW-11
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/13/11
		End Date: 9/13/11
Boring Company: Parratt-Wolff		Screen = \ Grout
Foreman: Layne Rech		Riser Sand Pack
OBG Geologist: Jonathan Bone		Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	-	4.0/2.5	-	0-0.5 Stiff - dense, moist, brownish black (5YR 2/1) f-m-c Sand, some silt, trc small gravel	Fill			
						0.5-2.5 stiff, moist, dark yellowish brown (10YR 4/2) silt, little clay	silt little clay		0.0	1040
4	2	8	-	4.0/4.0	-	0-2.5 SAA (0.5-2.5')				
						2.5-4.0 soft, moist-wet, brownish gray (5YR 4/1) silt, trc clay & woody material, trc f. sand	6.5' silt trc f. sand		0.0	1045
8	3	12	-	4.0/4.0	-	0-2.0 SAA (2.5-4.0) saturated				
						2.0-4.0 soft-stiff, saturated brownish gray (5YR 4/1) silt & clay, very cohesive	10.0 silt & clay		0.0	1048
12	4	16	-	4.0/4.0	-	0-4.0 SAA				
									0.0	1050
						End of Boring @ 16'				
						Well construction (bgs)				
						Screen: 5-15'				
						Riser: 0-5'				
						Sand: 3-15'				
						Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-12
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/13/11 End Date: 9/13/11
Boring Company: Parratt-Wolff Foreman: Layne Pech OBG Geologist: Jonathan Bone		Screen / Riser / Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	PID (ppm)	Date/ Time
0	1	4	—	4.0/2.5	—	0-0.4 soft, moist, brownish black (5YR 2/1) silt, few sticks & vegetation, tr f. sand 0.4-2.5 stiff, moist, dark yellowish brown (10YR 4/2) silt, little clay	Fill/Topsoil Silt little clay		0.0	1104
4	2	8	-	4.0/3.5	—	0-2.0 SAA (0.4-2.5') 2.0-3.5 soft, wet, brownish gray (5YR 4/1) silt, little f. sand tr woody vegetation	6.0 Silt little sand		0.0	1108
8	3	12	-	4.0/4.0	—	0-2.5 SAA (2.0-3.5') saturated 2.5-4.0 soft, saturated, brownish gray (5YR 4/1) silt & clay, very cohesive	10.5 Silt & Clay		0.0	1112
12	4	16	—	4.0/4.0	—	0-4.0 SAA				
						End of Boring @ 16' bgs				
						Well Construction				
						Screen: 5-15'				
						Riser: 0-5'				
						Sand: 3-15'				
						Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-13
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5, Syracuse, NY File No.:	Sampler: 4' Macrocore Hammer: Geoprobe Fall: NA	Page/of 1 Location: Start Date: 9/12/11 End Date: 9/13/11
Boring Company: Parratt-Wolff Foreman: Layne Peck OBG Geologist: Jonathan Bone		Screen = \ Grout Riser ▒ Sand Pack ■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/0.2	–	0-0.2 soft, moist, brownish gray (5YR 4/1) silt, tr f sand & vegetation	Top soil		0.0	1218
							Silt little clay			
4	2	8	–	4.0/3.6	–	0-3.0 Stiff, moist, Dark yellowish brown (10YR 4/2) Silt, little clay. 3.0-3.6 soft, moist, olive gray (5Y 4/1) silt, tr vegetation + small white shells			0.0	1220
							7.3			
8	3	12	–	4.0/4.0	–	0-1.0 soft, saturated, olive gray (5Y4/1) f-m sand, some silt, tr c. sand & v. fine shells 1.0-4.0 soft, saturated, brownish gray (5YR4/1) silt & clay very cohesive	Silt little fine sand			
							9.0			
							Silt & clay		0.0	1225
12	4	16	–	4.0/4.0	–	0-4.0 SAA (1.0-4.0)			0.0	1230
						End of Boring @ 16' bgs Well Construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-14
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5 Syracuse, NY File No.:	Sampler: 4' Macrocore Hammer: Geoprobe Fall: NA	Page 1 of 1 Location: Start Date: 9/12/11 End Date: 9/13/11
Boring Company: Parratt-Wolff Foreman: Layne Pech OBG Geologist: Jonathan Bone		Screen = Riser \ Grout Sand Pack Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/0.2	–	0-0.2 soft, moist, brownish gray (5YR 4/1) silt, few sm angular gvl, slight chemical like odor	Fill		0.6	1240
							Silt little clay			
4	2	8	–	4.0/4.0	–	0-2.8 firm, moist, dark yellowish brown (10YR 4/2) silt little clay			0.0	1244
						2.8-4.0 soft, wet, olive black (5Y 2/1) silt, trc f. sand	6.8 Silt trc sand			
8	3	12	–	4.0/4.0	–	0-1.5 SAA (2.8-4.0) trc clay				
						1.5-4.0 soft, wet saturated brownish gray (5YR 4/1) silt & clay, very cohesive	9.5 Silt & Clay		0.0	1255
12	4	16	–	4.0/4.0	–	0-4.0 SAA (1.5-4.0)			0.0	1300
						End of Boring @ 16'				
						Well Construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-15
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5 Syracuse, NY File No.:	Sampler: 4' Macrocore Hammer: Geoprobe Fall: NA	Page 1 of 1 Location: Start Date: 9/13/11 End Date: 9/13/11
Boring Company: Parratt-Wolff Foreman: Layne Pech OBG Geologist: Jonathan Bone		Screen ▒ Grout Riser ▒ Sand Pack ■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/1.0	–	0-1.0 Loose, wet, med dark gray (NH) m-c sand, some s-m angular gravel	Fill		0.0	1341
							Silt some clay 5.7'			
4	2	8	–	4.0/2.7	–	0-1.7 Stiff, wet, dark yellowish gray (10YR 4/2) Silt, some clay 1.7-2.2 Soft, saturated, dark yellowish gray silt, some f sand 2.2-2.7 Soft, saturated, olive gray (5Y 4/1) Silt, trc f. sand & vegetation			0.0	1343
							Silt some sand			
							Silt trc sand			
8	3	12	–	4.0/4.0	–	0-2.5 SAA (2.2-2.7) slight increase in f-m-c sand 2.5-4.0 Stiff, saturated, brownish gray (5YR 4/1) silt & clay, cohesive	10.5 Silt & clay		0.0	1345
12	4	16	–	4.0/4.0	–	0-4.0 SAA, very cohesive			0.0	1350
						End of Boring @ 16' bgs				

Well Construction (bgs)

Screen: 5-15'

Riser: 0-5'

Sand: 3-15'

Bentonite: 0-3'

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-16
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/13/11 End Date: 9/13/11
Boring Company: Parratt-Wolff Foreman: Layne Peck OBG Geologist: Jonathan Bone		Screen / Riser; Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	—	4.0/0.5'	—	0-0.5 Wood chunks, boring b/w 2 railroad tracks, wood is rail road tie, small chunk of moderate yellowish brown (10YR 5/4) silt & fine sand (little small gravel	Silt some clay		0.0	1415
4	2	8	—	4.0/4.0	—	0-3.7 Stiff, wet, moderate yellowish brown (10YR 5/4) Silt, some clay. 3.7-4.0 soft, saturated, dark grey (5Y4/1) silt, fine sand & vegetation	7.7		0.0	1418
8	3	12	—	4.0/4.0	—	0-1.5 SAA (3.7-4.0) fine clay, large chunk of wood (matrix) 1.5-4.0 soft, saturated, brownish grey (5YR 4/1). Silt & clay, very cohesive	Silt fine f. some 9.5'		0.0	1421
12	4	16	—	4.0/4.0	—	0-4.0 SAA (1.5-4.0)	Silt & clay		0.0	1423
						End of Boring @ 16' bgs Well Construction Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-17
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/13/11 End Date: 9/13/11
Boring Company: Parratt-Wolff		Screen = \ Grout
Foreman: Layne Peck		Riser Sand Pack
OBG Geologist: Jonathan Bone		Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	—	4.0/2.2	—	0-0.3 Dense, moist, mod dark gray (N4) m-c sand + s-m angular gvl	Fill		0.0	1445
						0.3-2.2 stiff, moist Dark yellowish brown (10YR 4/2) silt, little clay	Silt little clay			
4	2	8	—	4.0/4.0	—	0-2.5 SAA (0.3-2.2) increase in clay content, softer				
						2.5-4.0 soft, wet, olive gray (5Y 4/1) silt, some vegetation, v. fine f. sand	6.5 Silt fine f. sand		0.0	1448
8	3	12	—	4.0/4.0	—	0-2.0 SAA (2.5-4.0) slight increase in fine sand content, saturated				
						2.0-4.0 soft, saturated brownish gray (5YR 4/1) silt & clay, very cohesive	10.0 Silt & clay		0.0	1452
12	4	16	—	4.0/4.0	—	0-4.0 SAA (2.0-4.0)			0.0	1455
						End of Boring @ 16' bgs				
						Well Construction (bgs)				
						Screen: 5-15'				
						Riser: 0-5'				
						Sand: 3-15'				
						Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING
		TMW-18
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/14/11 End Date: 9/14/11
Boring Company: Parratt-Wolff		Screen = Riser = Grout Sand Pack Bentonite
Foreman: Layne Peck		
OBG Geologist: Jonathan Bone		

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/2.0	–	0-0.5' Dense, moist, med dark gray (N4) m-c sand + s-m angular gvl 0.5-2.0 Stiff, moist, dark yellowish brown (10YR 4/2) silt, little clay	Fill Silt little clay		0.0	0845
4	2	8	–	4.0/4.0	–	0-4.0 SAA (0.5-2.0) softer less clay content	8.0'		0.0	0848
8	3	12	–	4.0/4.0	–	0-2.0 Soft, wet, brownish gray (5YR4/1) silt, trc f-sand 2.0-4.0 soft, saturated brownish gray silt + clay very cohesive	Silt trc f-sand 10.0 Silt + clay		0.0	0850
12	4	16	–	4.0/4.0	–	0-4.0 SAA (2.0-4.0)			0.0	0852
						End of Boring @ 16' bgs				
						Well Construction Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING
		TMW-19

Client:	Lockheed Martin Corp.	**Sampler:** 4' Macrocore	**Page/of** 1
Proj. Loc:	Court St Building #5 Syracuse, NY	**Hammer:** Geoprobe	**Location:**
File No.:		**Fall:** NA	**Start Date:** 4/14/11 **End Date:** 4/14/11
Boring Company:	Parratt-Wolff		Screen [=] Grout
Foreman:	Layne Peck		Riser [ ] Sand Pack
OBG Geologist:	Jonathan Bone		[ ] Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	—	4.0/2.0	—	0-1.0 Dense, wet, dark red gray (N/A) m-c sand + s-m angular gravel, tr silt 1.0-2.0 Stiff, moist, dark yellowish gray (10YR4/2) silt, little clay	Fill Silt little clay		0.0	0922
4	2	8	—	4.0/4.0	—	0-3.0 SAA (1.0-2.0) 3.0-4.0 Soft, wet, olive gray (5Y4/1) silt, tr f. sand + vegetation	7.0' Silt tr f. sand		0.0	0926
8	3	12	—	4.0/4.0	—	0-3.0 SAA (3.0-4.0) 3.0-4.0 Soft, saturated, brownish gray (5YR4/1) silt + clay, cohesive	11.0' Silt + clay		0.0	0928
12	4	16	—	4.0/4.0	—	0-4.0 SAA (3.0-4.0)			0.0	0930
						End of Boring @ 16' bgs Well construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-20
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5 Syracuse, NY File No.:	Sampler: 4' Macrocore Hammer: Geoprobe Fall: NA	Page 1 of 1 Location: Start Date: 9/14/11 End Date: 9/14/11
Boring Company: Parratt-Wolff Foreman: Layne Peck OBG Geologist: Jonathan Bone		Screen = \ Grout Riser ▒ Sand Pack ■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/2.0	–	0-0.5 Dense, moist, med gray (N3) m-c sand + s-m angular gravel 0.5-2.0 stiff, moist, dark yellowish gray (10YR 4/2) Silt, little clay	Silt the clay		0.0	0955
4	2	8	–	4.0/4.0	–	0-4.0 SAA (0.5-2.0) slightly softer, less clay content	8.0		0.0	0957
8	3	12	–	4.0/4.0	–	0-2.0 Soft, wet, Olive gray (5Y 4/1) Silt, trc f. sand + vegetation 2.0-4.0 Soft, saturated Brownish gray (5YR 4/1) Silt + clay, cohesive	Silt the sand 10.0 Silt + clay		0.0	1000
12	4	16	–	4.0/4.0	–	0-4.0 SAA (2.0-4.0) very cohesive			0.0	1003
						End of Boring @ 16' bgs Well Construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-21
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/14/11 End Date: 9/14/11
Boring Company: Parratt-Wolff Foreman: Layne Peck OBG Geologist: Jonathan Bone		Screen / Riser; Grout / Sand Pack / Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/0.0	–	No Recovery, large piece of gravel stuck in sleeve of Macrocore			–	1054
4	2	8	–	4.0/4.0	–	0-2.5 Soft, moist of dark yellowish gray (10YR4/2) Silt, some clay	5.1 some clay		0.0	1057
8	3	12	–	4.0/4.0	–	0-1.5 Soft, saturated, brownish gray (5YR4/1) Silt, some fine sand, trc clay 1.5-4.0 Soft, saturated, brownish gray (5YR4/1) Silt & Clay, cohesive	9.5 Silt & clay		0.0	1109
12	4	16	–	4.0/4.0	–	0-4.0 SAA (1.5-4.0) very cohesive			0.0	1114
						End of Boring @ 16' bgs Well Construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-22
Client: Lockheed Martin Corp. Proj. Loc: Court St Building #5 Syracuse, NY File No.:	Sampler: 4' Macrocore Hammer: Geoprobe Fall: NA	Page 1 of 1 Location: Start Date: 9/14/11 End Date: 9/14/11
Boring Company: Parratt-Wolff Foreman: Layne Peck OBG Geologist: Jonathan Bone		Screen = \ Grout Riser Sand Pack Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	–	4.0/1.5	–	0-0.5 Dense, dry, med dark gray (N4) m-c sand & s-m angular grvl 0.5-1.5 stiff, moist, dark yellowish brown (10YR4/2) silt, tr clay	Fill Silt tr clay		0.0	1214
4	2	8	–	4.0/3.5	–	0-2.0 SAA (0.5-1.5) 2.0-3.5 soft, saturated, dark yellowish brown (10YR4/2) f-m sand, tr silt	6.0 f-m sand		0.0	1217
8	3	12	–	4.0/4.0	–	0-2.0 Very soft, saturated Brownish gray (5YR4/1) f-m sand, little c sand, tr silt 2.0-4.0 soft, saturated, brownish gray (5YR4/1) silt & clay, cohesive	10.0 Silt & clay		0.0	1222
12	4	16	–	4.0/4.0	–	0-4.0 SAA (2.0-4.0) Very cohesive			0.0	1225
						End of Boring @ 16' bgs Well Construction Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

O'BRIEN & GERE ENGINEERS, INC.	SOIL BORING LOG	REPORT OF BORING TMW-23
Client: Lockheed Martin Corp.	Sampler: 4' Macrocore	Page 1 of 1
Proj. Loc: Court St Building #5 Syracuse, NY	Hammer: Geoprobe	Location:
File No.:	Fall: NA	Start Date: 9/14/11 End Date: 9/14/11
Boring Company: Parratt-Wolff		Screen / Riser / Grout / Sand Pack / Bentonite
Foreman: Layne Peck		
OBG Geologist: Jonathan Bone		

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	Field Testing Date/ Time
0	1	4	-	4.0/1.5	-	0-0.9 Dense, moist, med dark gray (NA) m-c sand & s-m angular grvl 0.9-1.5 Stiff, moist, dark yellowish brown (10YR 4/2) silt, little clay	Fill Silt little clay		0.0	1245
4	2	8	-	4.0/4.0	-	0-1.7 SAA (0.9-1.5) 1.7-4.0 Very soft, saturated dark yellowish brown (10YR 4/2) f-m sand, trc silt	5.7' f-m sand		0.0	1248
8	3	12	-	4.0/4.0	-	0-4.0 soft, saturated Brownish gray (5YR 4/1) silt & clay, very cohesive	8.0 Silty clay		0.0	1251
17	4	16	-	4.0/2.5	-	0-2.5 SAA			0.0	1254
						End of Boring @ 16' bgs Well construction (bgs) Screen: 5-15' Riser: 0-5' Sand: 3-15' Bentonite: 0-3'				

Attachment 2

Sampling Logs

O'Brien & Gere Engineers, Inc. — Standard Ground Water Sampling Log

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-01
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.30	ft.
Depth to Water *	3.43	ft.
Length of Water Column	9.87	ft.
Volume of Water in Well	0.4	gal.(s)
3X Volume of Water in Well	1.2	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.2 gal.(s)
Did well go dry? no

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO	ORP
initial	0.25	19.73	7.32	0.406	2.26	-92
	0.4	19.42	7.21	0.416	2.10	-88
	0.8	19.04	7.20	0.427	1.97	-81
	1.2	18.95	7.21	0.417	1.01	-89

Water Sample:
Time Collected: 1045

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Light Brn	Color	Brn
Odor	No	Odor	No
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	no	Sheen/Free Product	no

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/6/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-02
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	12.85	ft.
Depth to Water *	2.80	ft.
Length of Water Column	10.05	ft.
Volume of Water in Well	0.41	gal.(s)
3X Volume of Water in Well	1.23	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.3 gal.(s)
Did well go dry? yes

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings uS/cm	DO	ORP
initial	0.25	20.69	7.57	0500	3.75	-6
	0.41	20.11	7.43	0.471	1.89	-30
	0.82	19.99	7.26	0.457	1.69	-41
	1.24	20.01	7.04	0.425	1.60	-38

Water Sample:
Time Collected: 1025

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Light Brn	Color	Brn
Odor	No	Odor	No
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	no	Sheen/Free Product	N

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-3
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.10	ft.
Depth to Water *	3.10	ft.
Length of Water Column	10	ft.
Volume of Water in Well	0.41	gal.(s)
3X Volume of Water in Well	1.23	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: _____ gal.(s)
Did well go dry? _____

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO	ORP
initial	0.4	19.21	7.28	0.418	2.30	-45
	0.9	19.23	7.26	0.440	1.95	-31
	1.3	18.74	7.30	0.451	1.74	-44

Water Sample:
Time Collected: 1105

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Light Brown	Color	
Odor	No	Odor	
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	
Sheen/Free Product	No	Sheen/Free Product	

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-4
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	12.45	ft.
Depth to Water *	3.21	ft.
Length of Water Column	9.24	ft.
Volume of Water in Well	0.37	gal.(s)
3X Volume of Water in Well	1.13	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: ~1.0 gal.(s)
Did well go dry? yes

* Measurements taken from: X Well Casing; Protective Casing; (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	18.84	7.41	0.481	2.44	-117
	0.37	18.95	7.65	0.488	1.58	-109
	0.74	18.81	7.69	0.511	1.02	-112
	1.13					

Water Sample:
Time Collected: 1118

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Very light Brn	Color	light Brn
Odor	NO	Odor	no
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-5
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.08	ft.
Depth to Water *	3.20	ft.
Length of Water Column	9.88	ft.
Volume of Water in Well	0.4	gal.(s)
3X Volume of Water in Well	1.2	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.2 gal.(s)
Did well go dry? no

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ ms/cm	DO mg/L	ORP
initial	0.25	19.33	7.89	0239	3.51	-29
	0.4	19.08	7.78	0.260	3.32	4
	0.8	19.01	7.61	0.283	2.65	4
	1.2	19.01	7.66	0.256	3.02	12

Water Sample:
Time Collected: 1140

Physical Appearance at Start		Physical Appearance at Sampling	
Color	light Brown	Color	Brown
Odor	no	Odor	no
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	no	Sheen/Free Product	no

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — Standard Ground Water Sampling Log

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-06
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	12.96	ft.
Depth to Water *	3.42	ft.
Length of Water Column	9.54	ft.
Volume of Water in Well	0.40	gal.(s)
3X Volume of Water in Well	1.2	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.2 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	19.55	7.21	0.586	1.08	-82
	0.4	19.39	7.13	0.675	0.81	-75
	0.8	19.61	7.11	0.704	1.02	-77
	1.2	19.18	7.13	0.709	0.88	-77

Water Sample:
Time Collected: 1155

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Light Brown	Color	Brown
Odor	NO	Odor	No
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-07
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	14.60	ft.
Depth to Water *	3.81	ft.
Length of Water Column	10.79	ft.
Volume of Water in Well	0.44	gal.(s)
3X Volume of Water in Well	1.32	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: ~1.0 gal.(s)
Did well go dry? yes

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	18.76	7.17	0.677	1.73	-93
	0.45	19.12	7.18	0.691	1.65	-91
	0.90	19.10	7.16	0.702	0.90	-89
	1.32	—	—	—	—	—

Water Sample:
Time Collected: 1210

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Clear	Color	Brown
Odor	No	Odor	No
Turbidity (> 100 NTU)	no	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	no	Sheen/Free Product	No

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-08
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	14.0	ft.
Depth to Water *	0.96	ft.
Length of Water Column	13.04	ft.
Volume of Water in Well	0.5	gal.(s)
3X Volume of Water in Well	1.5	gal.(s)

Water Volume /ft. for:
X 1" Diameter Well = 0.041 X LWC
2" Diameter Well = 0.163 X LWC
4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings uS/cm ms/cm	DO mg/L	ORP
initial	0.25	20.78	7.56	0.364	2.62	40
	0.5	20.92	7.55	0.362	2.76	18
	1.0	20.85	7.54	0.363	3.31	34
	1.5	19.95	7.51	0.373	2.50	48

Water Sample:
Time Collected: 1355

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Light Brown	Color	Brown
Odor	None	Odor	None
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	No	Sheen/Free Product	No

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-09
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.6	ft.
Depth to Water *	0.91	ft.
Length of Water Column	12.6	ft.
Volume of Water in Well	0.52	gal.(s)
3X Volume of Water in Well	1.56	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings uS/cm mS/cm	DO mg/L	ORP
initial	0.25	20.58	7.39	0.427	2.26	57
	0.5	20.25	7.40	0.454	2.01	46
	1.0	20.17	7.36	0.453	1.89	19
	1.5	19.94	7.37	0.439	1.85	17

Water Sample:
Time Collected: 1415

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Brown	Color	Brown
Odor	None	Odor	None
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — Standard Ground Water Sampling Log

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-10
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.00	ft.
Depth to Water *	0.94	ft.
Length of Water Column	12.06	ft.
Volume of Water in Well	0.50	gal.(s)
3X Volume of Water in Well	1.50	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	20.01	7.59	0.489	2.98	-2
	0.50	20.01	7.44	0.477	2.65	18
	1.0	19.56	7.29	0.496	1.51	26
	1.5	19.51	7.25	0.498	1.37	31

Water Sample:
Time Collected: 1500

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Light Brown	Color	Brown
Odor	None	Odor	None
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-11
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	14.00	ft.
Depth to Water *	1.05	ft.
Length of Water Column	12.95	ft.
Volume of Water in Well	0.52	gal.(s)
3X Volume of Water in Well	1.56	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.6 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	19.75	7.44	0.578	2.54	30
	0.52	19.24	7.33	0.587	2.44	29
	1.04	19.16	7.23	0.586	2.17	28
	1.60	18.66	7.16	0.584	1.13	25

Water Sample:
Time Collected: 1530

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Light brown	Color	Brown
Odor	NO	Odor	NO
Turbidity (> 100 NTU)	YES	Turbidity (> 100 NTU)	YES
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-12
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.90	ft.
Depth to Water *	0.76	ft.
Length of Water Column	13.14	ft.
Volume of Water in Well	0.54	gal.(s)
3X Volume of Water in Well	1.62	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.62 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings uS/cm mS/cm	Do mg/L	ORP
initial	0.25	18.62	7.55	0.603	5.60	112
	0.54	17.97	7.28	0.697	4.40	-22
	1.08	17.52	7.23	0.704	2.74	-52
	1.62	17.24	6.96	0.716	1.96	-64

Water Sample:
Time Collected: 0810

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Clear	Color	Light murky
Odor	None	Odor	No
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-13
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.62	ft.
Depth to Water *	1.10	ft.
Length of Water Column	12.52	ft.
Volume of Water in Well	0.51	gal.(s)
3X Volume of Water in Well	1.53	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.60 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	17.21	7.27	0.643	2.50	-55
	0.51	16.86	7.22	0.647	1.65	-57
	1.07	16.35	7.17	0.632	1.36	-54
	1.53	16.31	7.06	0.649	1.33	-43

Water Sample:
Time Collected: 0900

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Light Brown	Color	Brown
Odor	NO	Odor	NO
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — Standard Ground Water Sampling Log

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-14
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	14.0	ft.
Depth to Water *	1.01	ft.
Length of Water Column	12.99	ft.
Volume of Water in Well	0.53	gal.(s)
3X Volume of Water in Well	1.60	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.6 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	18.07	7.24	0.454	2.15	-37
	0.55	18.10	7.22	0.449	2.02	-38
	1.00	17.91	7.25	0.460	1.30	-43
	1.68	17.61	7.17	0.466	1.77	-30

Water Sample:
Time Collected: 0920

Physical Appearance at Start		Physical Appearance at Sampling	
Color	V. light brown	Color	Light Brown
Odor	NO	Odor	NO
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-15
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.01	ft.
Depth to Water *	1.00	ft.
Length of Water Column	12.01	ft.
Volume of Water in Well	0.419	gal.(s)
3X Volume of Water in Well	1.47	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings uS/cm	DO mg/L	ORP mV
initial	0.25	20.24	7.53	0.374	2.40	-113
	0.5	20.47	7.50	0.343	2.06	-124
	1.0	20.18	7.47	0.347	1.31	-119
	1.5	20.04	7.42	0.339	0.44	-101

Water Sample:
Time Collected: 1345

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Brown	Color	Brown
Odor	None	Odor	None
Turbidity (> 100 NTU)	~~No~~ Yes	Turbidity (> 100 NTU)	~~No~~ Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-16
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.80	ft.
Depth to Water *	0.95	ft.
Length of Water Column	12.82	ft.
Volume of Water in Well	0.52	gal.(s)
3X Volume of Water in Well	1.56	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings uS/cm mS/cm	DO mg/L	ORP
initial	0.25	20.69	7.40	0.423	3.28	46
	0.5	20.38	7.29	0.468	2.76	44
	1.0	19.86	7.27	0.497	2.40	32
	1.5	19.78	7.28	0.501	2.10	27

Water Sample:
Time Collected: 1430

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Brown	Color	Brown
Odor	None	Odor	None
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-17
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	14.08	ft.
Depth to Water *	0.92	ft.
Length of Water Column	13.08	ft.
Volume of Water in Well	0.53	gal.(s)
3X Volume of Water in Well	1.60	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.6 gal.(s)
Did well go dry? NO

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings uS/cm	DO mg/L	ORP
initial	0.25	20.11	7.27	0.758	3.44	-20
	0.53	19.93	7.18	0.769	2.75	-29
	1.06	18.62	7.25	0.753	3.24	-43
	1.60	18.50	7.27	0.755	1.95	-47

Water Sample:
Time Collected: 1445

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Clear	Color	Clear
Odor	NO	Odor	NO
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-18
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.28	ft.
Depth to Water *	0.95	ft.
Length of Water Column	12.33	ft.
Volume of Water in Well	0.5	gal.(s)
3X Volume of Water in Well	1.5	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? No

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	20.42	7.75	0.409	2.39	32
	0.5	20.64	7.58	0.400	2.20	18
	1.0	20.38	7.51	0.420	2.13	-15
	1.5	20.21	7.40	0.420	1.26	-24

Water Sample:
Time Collected: 1520

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Brown	Color	Brown
Odor	No	Odor	No
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	No	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-19
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	12.90	ft.
Depth to Water *	0.86	ft.
Length of Water Column	12.04	ft.
Volume of Water in Well	0.49	gal.(s)
3X Volume of Water in Well	1.48	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? yes

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings °C	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	19.80	7.17	0.769	2.49	-71
	0.50	19.62	7.13	0.784	2.20	-78
	1.0	19.47	7.10	0.791	1.50	-80
	1.5	18.84	7.08	0.822	1.01	-82

Water Sample:
Time Collected: 1320

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Clear	Color	Brown
Odor	None	Odor	None
Turbidity (> 100 NTU)	~~No~~ Yes	Turbidity (> 100 NTU)	~~No~~ Yes
Sheen/Free Product	No	Sheen/Free Product	No

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/15/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-70
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.94	ft.
Depth to Water *	1.55	ft.
Length of Water Column	12.39	ft.
Volume of Water in Well	0.5	gal.(s)
3X Volume of Water in Well	1.5	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 1.5 gal.(s)
Did well go dry? yes

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	19.95	7.11	0.931	5.27	-35
	0.50	19.81	7.18	0.925	5.90	-35
	1.0	19.10	7.03	0.919	3.80	-36
	1.5	19.00	7.00	0.903	3.66	-37

Water Sample:
Time Collected: 1310

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Clear	Color	Clear
Odor	None	Odor	None
Turbidity (> 100 NTU)	188	Turbidity (> 100 NTU)	125
Sheen/Free Product	None	Sheen/Free Product	None

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — Standard Ground Water Sampling Log

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: SMW-21
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.55	ft.
Depth to Water *	4.19	ft.
Length of Water Column	9.36	ft.
Volume of Water in Well	0.38	gal.(s)
3X Volume of Water in Well	1.15	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: ~1.0 gal.(s)
Did well go dry? yes

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ ms/cm	DO mg/L	ORP
initial	0.25	19.74	7.31	0.613	2.48	-35
	0.38	19.98	7.26	0.613	2.23	-59
	0.80	19.47	7.25	0.618	1.64	-71
	1.20	—	—	—	—	—

Water Sample:
Time Collected: 1225

Physical Appearance at Start		Physical Appearance at Sampling	
Color	clear	Color	Brown
Odor	No	Odor	no
Turbidity (> 100 NTU)	no	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	no	Sheen/Free Product	no

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-22
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.82	ft.
Depth to Water *	3.71	ft.
Length of Water Column	10.11	ft.
Volume of Water in Well	0.4	gal.(s)
3X Volume of Water in Well	1.2	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: 4.0 gal.(s)
Did well go dry? yes

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO mg/L	ORP
initial	0.25	20.41	7.30	0.637	2.20	-56
	0.4	19.75	7.20	0.639	1.40	-73
	0.8	19.57	7.21	0.648	1.38	-76
	1.2					

Water Sample:
Time Collected: 1245

Physical Appearance at Start		Physical Appearance at Sampling	
Color		Color	
Odor		Odor	
Turbidity (> 100 NTU)		Turbidity (> 100 NTU)	
Sheen/Free Product		Sheen/Free Product	

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

O'Brien & Gere Engineers, Inc. — **Standard Ground Water Sampling Log**

Date: 9/16/11
Site Name: Lockheed Martin Inc., Court St. Bldg # 5
Location: Syracuse, NY
Project No.: 43929.005.300
Personnel: J. Bone
Weather:
Well #: TMW-23
Evacuation Method: Bailer
Sampling Method: Bailer

Well Information:

Depth of Well *	13.91	ft.
Depth to Water *	3.36	ft.
Length of Water Column	10.55	ft.
Volume of Water in Well	0.43	gal.(s)
3X Volume of Water in Well	1.30	gal.(s)

Water Volume /ft. for:
- X 1" Diameter Well = 0.041 X LWC
- 2" Diameter Well = 0.163 X LWC
- 4" Diameter Well = 0.653 X LWC

Volume removed before sampling: ~1.0 gal.(s)
Did well go dry? yes

* Measurements taken from: [X] Well Casing [ ] Protective Casing [ ] (Other, Specify)

Instrument Calibration:

pH Buffer Readings		Conductivity Standard Readings	
4.0 Standard		84 S Standard	
7.0 Standard		1413 S Standard	
10.0 Standard			

Water parameters:

	Gallons Removed	Temperature Readings	pH Readings	Conductivity Readings ~~uS/cm~~ mS/cm	DO	ORP
initial	0.25	19.30	7.46	0.392	1.48	0
	0.45	19.76	7.37	0.404	1.21	-17
	0.90	18.90	7.36	0.405	1.07	-32
	1.30					

Water Sample:
Time Collected: 1300

Physical Appearance at Start		Physical Appearance at Sampling	
Color	Clear	Color	Brown
Odor	NO	Odor	NO
Turbidity (> 100 NTU)	Yes	Turbidity (> 100 NTU)	Yes
Sheen/Free Product	NO	Sheen/Free Product	NO

Samples collected:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH

Notes:

Attachment 3

Laboratory Report – Bioremediation Consulting Inc.

Analytical Report

September 23, 2011

LMC Site-Syracuse, NY Samples

Sampled 9/16/'11
Received 9/20/'11
Analyzed 9/22 & 9/23/'11

Prepared for:

Scott Tucker Scott.Tucker@obg.com
O'Brien & Gere Engineers, Inc.
333 W. Washington Street
PO Box 4873
Syracuse, NY 13202
(315) 956-6345

Prepared by

Bioremediation Consulting Inc
39 Clarendon St, Watertown MA 02472
ph 617-923-0976 bioremediation@bciLabs.com

Methods

Gas Chromatography. ***Dissolved gasses and volatile chlorinated compounds*** were analyzed according to EPA Method 5021A. 40 mL VOA vials, provided with HCl as preservative, were prepared for analysis by replacing 5 mL of groundwater with 5 cc Helium, using a double needle procedure through the septum, then shaken for 20 minutes to allow volatilization of gasses into the headspace. Headspace samples of 100 uL were removed by syringe and injected directly into an HP 5890 gas chromatograph with a Flame Ionization Detector. Standards were prepared and analyzed in the same manner as samples. Compounds were identified by retention time, and quantitation was conducted using ChemStation software.

Ion Chromatography. **O*rganic acids*** were analyzed by ion chromatography according to EPA Method 300, using samples from HCl-preserved VOA vials. Compounds were identified by retention time.

Sample ID			TMW-01	TMW-02	TMW-03	TMW-04	TMW-05	TMW-06	TMW-07	TMW-21	TMW-22	TMW-23	Trip Blank	Trip Blank
Date Sampled			9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011	prep 9/1	prep 9/1
Date Received			9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011	9/20/2011
Dissolved Gas, water matrix,														
Headspace GC, EPA meth 5021A														
Date Analyzed			9/22/2011	9/22/2011	9/22/2011	9/22/2011	9/22/2011	9/22/2011	9/22/2011	9/23/2011	9/23/2011	9/23/2011	9/22/2011	9/23/2011
Analyst			t.s.	t.s.	t.s.	t.s.	t.s.	t.s.	t.s.	t.s.	t.s.	t.s.	t.s.	t.s.
	Det. Lim.	Units												
Methane	0.2	µg/L	38	210	470	1,950	150	1,090	4,690	1,450	370	740	< 0.2	< 0.2
Ethane	0.1	µg/L	2.3	5.2	6.9	42	2.7	6.0	86	24	5	4.0	< 0.1	< 0.1
Ethene	0.1	µg/L	58	79	45	7.7	0.3	34	110	170	34	5.7	< 0.1	< 0.1
Acetylene	0.2	µg/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
VC	2	µg/L	910	1,290	970	10	7	230	60	85	160	39	< 2	< 2
1,1-DCE	10	µg/L	20	< 10	12	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 6	< 6
CA	4	µg/L	110	31	22	41	8	16	64	34	12	5	< 4	< 4
trans-DCE	8	µg/L	< 12	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8	< 8
cis-DCE	20	µg/L	2,070	800	1,170	< 20	64	130	< 20	27	13 (trace)	37	< 20	< 20
1,1-DCA	10	µg/L	3,070	640	530	20	< 10	30	130	126	29	< 10	< 10	< 10
TCE	12	µg/L	27	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12
1,1,1-TCA	20	µg/L	160	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
PCE	20	µg/L	< 35	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
Anions. water matrix, EPA meth 300														
Date Analyzed			9/22	9/22	9/22	9/22	9/22	9/22	9/22	9/22	9/22	9/22	9/22	9/22
Analyst			i.a.	i.a.	i.a.	i.a.	i.a.	i.a.	i.a.	i.a.	i.a.	i.a.	i.a.	i.a.
Dilution			*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*
formate	0.5	mg/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
acetate	0.5	mg/L	< 0.5	< 0.5	0.7	4	< 0.5	8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
lactate	0.5	mg/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
propionate	0.5	mg/L	< 0.5	< 0.5	0.2 (trace)	< 0.5	< 0.5	< 0.5	0.1 (trace)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
butyrate	0.5	mg/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Bioremediation Consulting Inc
39 Clarendon Street Watertown MA 02472
phone 617-923-0976
e-mail: MFindlay@bciLabs.com
e-mail: DSmoler@bciLabs.com

CHAIN OF CUSTODY RECORD

Project Name: OBG-LMC Sampling Location: Lockheed Martin Co Billing Ref. 43929.004.400
Billing # 5
Oeere Rd, Syracuse, NY

Sampled by: Jonathan Bone
Contact: Scott Tucker TuckerSM@obg.com
315-956-6345

Instructions: Fill containers completely. No air bubble.
(dissolved gasses & VOCs): 2 **voas/well, HCl-preserved**
: 1 **voa/well, HCl-preserved**

Well Number	Date	VOA Vials **HCl**-preserved **GC analyses**	rcv	VOA Vials **HCl**-preserved **organic acids**	rcv	ORP	pH
TMW-~~07~~ 01_09161l	9/16/11	2		1		-89	7.21
TMW-~~08~~ 02_09161l	9/16/11	2		1		-38	7.04
TMW-03_09161l	9/16/11	2		1		-141	7.30
TMW-04_09161l	9/16/11	2		1		-112	7.69
TMW-05_09161l	9/16/11	2		1		12	7.66
TMW-06_09161l	9/16/11	2		1		-77	7.13
TMW-07_09161l	9/16/11	2		1		-89	7.16
TMW-21_09161l	9/16/11	2		1		-74	7.25
TMW-22_09161l	9/16/11	2		1		-76	7.21
TMW-23_09161l	9/16/11	2		1		-32	7.36
trip blanks_09161l	—	2		1		—	—

SHIP TO: Bioremediation Consulting Inc (phone 617-923-0976)
39 Clarendon St Watertown MA 02472

Shipping Conditions:

ICE NECESSARY: **however,**
No Loose Ice – bag ice in leak-proof bags
Do not allow ice to contact groundwater samples

Fed Ex Priority Overnite. **NO** Saturday Delivery

Call or fax BCI at time of shipping and report the tracking number

Relinquished by _____ date 9/19/11

Received by _____ date 9/20/11

Attachment 4

Laboratory Report – Accutest Laboratories

New Jersey ACCUTEST LABORATORIES

11/11/11

Technical Report for

O'Brien & Gere Engineers, Inc

Lockheed Martin Company, Deere Rd, Syracuse, NY

Accutest Job Number: JA86529

Sampling Dates: 09/15/11 - 09/16/11

Report to:

O'Brien & Gere Engineers, Inc

Scott.Tucker@obg.com

ATTN: Scott Tucker

Total number of pages in report: **61**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

Test results relate only to samples analyzed.

Sections: 1 2 3 4

Table of Contents

Sample Summary

O'Brien & Gere Engineers, Inc

Lockheed Martin Company, Deere Rd, Syracuse, NY

Job No: JA86529

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JA86529-1	09/15/11	13:55	JB	09/17/11	AQ	Ground Water	TMW-08_091511
JA86529-2	09/15/11	14:15	JB	09/17/11	AQ	Ground Water	TMW-09_091511
JA86529-3	09/15/11	15:00	JB	09/17/11	AQ	Ground Water	TMW-10_091511
JA86529-4	09/15/11	15:30	JB	09/17/11	AQ	Ground Water	TMW-11_091511
JA86529-5	09/16/11	08:40	JB	09/17/11	AQ	Ground Water	TMW-12_091511
JA86529-6	09/16/11	09:00	JB	09/17/11	AQ	Ground Water	TMW-13_091511
JA86529-7	09/16/11	09:20	JB	09/17/11	AQ	Ground Water	TMW-14_091511
JA86529-8	09/15/11	13:45	JB	09/17/11	AQ	Ground Water	TMW-15_091511
JA86529-9	09/15/11	14:30	JB	09/17/11	AQ	Ground Water	TMW-16_091511
JA86529-10	09/15/11	14:45	JB	09/17/11	AQ	Ground Water	TMW-17_091511
JA86529-11	09/15/11	15:20	JB	09/17/11	AQ	Ground Water	TMW-18_091511
JA86529-12	09/15/11	13:20	JB	09/17/11	AQ	Ground Water	TMW-19_091511
JA86529-13	09/15/11	13:10	JB	09/17/11	AQ	Ground Water	TMW-20_091511

Sample Summary
(continued)

O'Brien & Gere Engineers, Inc

Job No: JA86529

Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JA86529-14	09/16/11	09:20	JB	09/17/11	AQ	Trip Blank Water	TB_091511

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-08_091511		
Lab Sample ID:	JA86529-1	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97466.D	1	09/21/11	HSS	n/a	n/a	V3A4181
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	5.1	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	4.9	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	2.4	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	7.8	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-08_091511		
Lab Sample ID:	JA86529-1	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	7.6	1.0	0.32	ug/l	
108-88-3	Toluene	153	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	9.0	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	2.3	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	2.7	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		77-120%
17060-07-0	1,2-Dichloroethane-D4	86%		70-127%
2037-26-5	Toluene-D8	101%		79-120%
460-00-4	4-Bromofluorobenzene	94%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-09_091511		
Lab Sample ID:	JA86529-2	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97467.D	1	09/21/11	HSS	n/a	n/a	V3A4181
Run #2	3A97541.D	10	09/23/11	HSS	n/a	n/a	V3A4185

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	107 [a]	10	3.7	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	171	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.7	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-09_091511		
Lab Sample ID:	JA86529-2	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	6.3	1.0	0.32	ug/l	
108-88-3	Toluene	138	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	0.78	1.0	0.21	ug/l	J
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	0.28	1.0	0.27	ug/l	J
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%	97%	77-120%
17060-07-0	1,2-Dichloroethane-D4	88%	93%	70-127%
2037-26-5	Toluene-D8	99%	97%	79-120%
460-00-4	4-Bromofluorobenzene	94%	95%	76-118%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: TMW-10_091511
Lab Sample ID: JA86529-3
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Date Sampled: 09/15/11
Date Received: 09/17/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97485.D	2	09/22/11	HSS	n/a	n/a	V3A4182
Run #2	3A97542.D	10	09/23/11	HSS	n/a	n/a	V3A4185

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	15	ug/l	
71-43-2	Benzene	ND	2.0	0.44	ug/l	
74-97-5	Bromochloromethane	ND	10	0.79	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.46	ug/l	
75-25-2	Bromoform	ND	8.0	0.49	ug/l	
74-83-9	Bromomethane	ND	4.0	0.63	ug/l	
78-93-3	2-Butanone (MEK)	ND	20	5.8	ug/l	
75-15-0	Carbon disulfide	ND	4.0	0.36	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.39	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.45	ug/l	
75-00-3	Chloroethane	ND	2.0	0.73	ug/l	
67-66-3	Chloroform	ND	2.0	0.41	ug/l	
74-87-3	Chloromethane	ND	2.0	0.44	ug/l	
110-82-7	Cyclohexane	ND	10	0.57	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	2.5	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.41	ug/l	
106-93-4	1,2-Dibromoethane	ND	4.0	0.42	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.37	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.57	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	0.62	ug/l	
75-34-3	1,1-Dichloroethane	0.73	2.0	0.38	ug/l	J
107-06-2	1,2-Dichloroethane	ND	2.0	0.36	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	0.56	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.43	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.63	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.43	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.37	ug/l	
123-91-1	1,4-Dioxane	ND	250	140	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.42	ug/l	
76-13-1	Freon 113	ND	10	0.98	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-10_091511		
Lab Sample ID:	JA86529-3	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	6.1	ug/l	
98-82-8	Isopropylbenzene	ND	4.0	0.39	ug/l	
79-20-9	Methyl Acetate	ND	10	5.7	ug/l	
108-87-2	Methylcyclohexane	ND	10	0.37	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.37	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	10	2.4	ug/l	
75-09-2	Methylene chloride	ND	4.0	0.40	ug/l	
100-42-5	Styrene	ND	10	0.46	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.40	ug/l	
127-18-4	Tetrachloroethene	ND	2.0	0.64	ug/l	
108-88-3	Toluene	416 [a]	10	1.5	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	1.4	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.47	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.46	ug/l	
79-01-6	Trichloroethene	ND	2.0	0.42	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	0.70	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.53	ug/l	
	m,p-Xylene	ND	2.0	0.64	ug/l	
95-47-6	o-Xylene	ND	2.0	0.35	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	97%	77-120%
17060-07-0	1,2-Dichloroethane-D4	93%	94%	70-127%
2037-26-5	Toluene-D8	100%	98%	79-120%
460-00-4	4-Bromofluorobenzene	97%	94%	76-118%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-11_091511		
Lab Sample ID:	JA86529-4	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97486.D	1	09/22/11	HSS	n/a	n/a	V3A4182
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.1	10	7.6	ug/l	J
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	0.19	2.0	0.18	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	0.68	1.0	0.37	ug/l	J
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	5.9	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	10.1	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-11_091511		
Lab Sample ID:	JA86529-4	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	61.0	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		77-120%
17060-07-0	1,2-Dichloroethane-D4	93%		70-127%
2037-26-5	Toluene-D8	101%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-12_091511		
Lab Sample ID:	JA86529-5	**Date Sampled:**	09/16/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97487.D	25	09/22/11	HSS	n/a	n/a	V3A4182
Run #2	3A97488.D	250	09/22/11	HSS	n/a	n/a	V3A4182

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	190	ug/l	
71-43-2	Benzene	ND	25	5.5	ug/l	
74-97-5	Bromochloromethane	ND	130	9.9	ug/l	
75-27-4	Bromodichloromethane	ND	25	5.7	ug/l	
75-25-2	Bromoform	ND	100	6.1	ug/l	
74-83-9	Bromomethane	ND	50	7.9	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	73	ug/l	
75-15-0	Carbon disulfide	ND	50	4.5	ug/l	
56-23-5	Carbon tetrachloride	ND	25	4.9	ug/l	
108-90-7	Chlorobenzene	ND	25	5.6	ug/l	
75-00-3	Chloroethane	4200	25	9.2	ug/l	
67-66-3	Chloroform	ND	25	5.2	ug/l	
74-87-3	Chloromethane	ND	25	5.5	ug/l	
110-82-7	Cyclohexane	ND	130	7.2	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	32	ug/l	
124-48-1	Dibromochloromethane	ND	25	5.1	ug/l	
106-93-4	1,2-Dibromoethane	ND	50	5.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	25	4.6	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	25	7.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	25	6.4	ug/l	
75-71-8	Dichlorodifluoromethane	ND	130	7.8	ug/l	
75-34-3	1,1-Dichloroethane	5700 [a]	250	48	ug/l	
107-06-2	1,2-Dichloroethane	ND	25	4.5	ug/l	
75-35-4	1,1-Dichloroethene	ND	25	7.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	25	5.4	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	25	7.8	ug/l	
78-87-5	1,2-Dichloropropane	ND	25	5.4	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	25	5.4	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	25	4.6	ug/l	
123-91-1	1,4-Dioxane	ND	3100	1800	ug/l	
100-41-4	Ethylbenzene	ND	25	5.3	ug/l	
76-13-1	Freon 113	ND	130	12	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-12_091511		
Lab Sample ID:	JA86529-5	**Date Sampled:**	09/16/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	130	76	ug/l	
98-82-8	Isopropylbenzene	ND	50	4.9	ug/l	
79-20-9	Methyl Acetate	ND	130	72	ug/l	
108-87-2	Methylcyclohexane	ND	130	4.6	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	25	4.6	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	130	30	ug/l	
75-09-2	Methylene chloride	ND	50	5.1	ug/l	
100-42-5	Styrene	ND	130	5.7	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	5.0	ug/l	
127-18-4	Tetrachloroethene	ND	25	8.0	ug/l	
108-88-3	Toluene	ND	25	3.6	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	130	17	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	130	3.7	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	25	5.9	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	25	5.8	ug/l	
79-01-6	Trichloroethene	ND	25	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	130	8.8	ug/l	
75-01-4	Vinyl chloride	ND	25	6.7	ug/l	
	m,p-Xylene	ND	25	8.0	ug/l	
95-47-6	o-Xylene	ND	25	4.3	ug/l	
1330-20-7	Xylene (total)	ND	25	4.3	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	97%	77-120%
17060-07-0	1,2-Dichloroethane-D4	95%	95%	70-127%
2037-26-5	Toluene-D8	99%	102%	79-120%
460-00-4	4-Bromofluorobenzene	94%	96%	76-118%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-13_091511		
Lab Sample ID:	JA86529-6	**Date Sampled:**	09/16/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97489.D	1	09/22/11	HSS	n/a	n/a	V3A4182
Run #2	3A97544.D	10	09/23/11	HSS	n/a	n/a	V3A4185

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	0.32	2.0	0.18	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	478 [a]	10	3.7	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	46.3	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	2.8	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	15.4	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-13_091511		
Lab Sample ID:	JA86529-6	**Date Sampled:**	09/16/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	12.0	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	98%	77-120%
17060-07-0	1,2-Dichloroethane-D4	96%	96%	70-127%
2037-26-5	Toluene-D8	99%	98%	79-120%
460-00-4	4-Bromofluorobenzene	94%	95%	76-118%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-14_091511		
Lab Sample ID:	JA86529-7	**Date Sampled:**	09/16/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97545.D	2.5	09/23/11	HSS	n/a	n/a	V3A4185
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	19	ug/l	
71-43-2	Benzene	ND	2.5	0.55	ug/l	
74-97-5	Bromochloromethane	ND	13	0.99	ug/l	
75-27-4	Bromodichloromethane	ND	2.5	0.57	ug/l	
75-25-2	Bromoform	ND	10	0.61	ug/l	
74-83-9	Bromomethane	ND	5.0	0.79	ug/l	
78-93-3	2-Butanone (MEK)	ND	25	7.3	ug/l	
75-15-0	Carbon disulfide	ND	5.0	0.45	ug/l	
56-23-5	Carbon tetrachloride	ND	2.5	0.49	ug/l	
108-90-7	Chlorobenzene	ND	2.5	0.56	ug/l	
75-00-3	Chloroethane	137	2.5	0.92	ug/l	
67-66-3	Chloroform	ND	2.5	0.52	ug/l	
74-87-3	Chloromethane	ND	2.5	0.55	ug/l	
110-82-7	Cyclohexane	ND	13	0.72	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	25	3.2	ug/l	
124-48-1	Dibromochloromethane	ND	2.5	0.51	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	0.52	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.46	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.72	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.64	ug/l	
75-71-8	Dichlorodifluoromethane	ND	13	0.78	ug/l	
75-34-3	1,1-Dichloroethane	418	2.5	0.48	ug/l	
107-06-2	1,2-Dichloroethane	0.78	2.5	0.45	ug/l	J
75-35-4	1,1-Dichloroethene	1.1	2.5	0.70	ug/l	J
156-59-2	cis-1,2-Dichloroethene	76.9	2.5	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.78	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.5	0.54	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.54	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.46	ug/l	
123-91-1	1,4-Dioxane	ND	310	180	ug/l	
100-41-4	Ethylbenzene	0.72	2.5	0.53	ug/l	J
76-13-1	Freon 113	5.3	13	1.2	ug/l	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-14_091511		
Lab Sample ID:	JA86529-7	**Date Sampled:**	09/16/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	13	7.6	ug/l	
98-82-8	Isopropylbenzene	ND	5.0	0.49	ug/l	
79-20-9	Methyl Acetate	ND	13	7.2	ug/l	
108-87-2	Methylcyclohexane	ND	13	0.46	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	0.46	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	13	3.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.51	ug/l	
100-42-5	Styrene	ND	13	0.57	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	0.50	ug/l	
127-18-4	Tetrachloroethene	3.3	2.5	0.80	ug/l	
108-88-3	Toluene	5.8	2.5	0.36	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	13	1.7	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	13	0.37	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.59	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.5	0.58	ug/l	
79-01-6	Trichloroethene	2.6	2.5	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	13	0.88	ug/l	
75-01-4	Vinyl chloride	13.4	2.5	0.67	ug/l	
	m,p-Xylene	1.4	2.5	0.80	ug/l	J
95-47-6	o-Xylene	0.80	2.5	0.43	ug/l	J
1330-20-7	Xylene (total)	2.2	2.5	0.43	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		77-120%
17060-07-0	1,2-Dichloroethane-D4	100%		70-127%
2037-26-5	Toluene-D8	97%		79-120%
460-00-4	4-Bromofluorobenzene	95%		76-118%

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-15_091511		
Lab Sample ID:	JA86529-8	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97543.D	1	09/23/11	HSS	n/a	n/a	V3A4185
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	4.4	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	0.49	1.0	0.28	ug/l	J
156-59-2	cis-1,2-Dichloroethene	7.6	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-15_091511		
Lab Sample ID:	JA86529-8	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	2.4	1.0	0.32	ug/l	
108-88-3	Toluene	15.7	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	22.2	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	0.40	1.0	0.21	ug/l	J
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	0.46	1.0	0.32	ug/l	J
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	0.63	1.0	0.17	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		77-120%
17060-07-0	1,2-Dichloroethane-D4	95%		70-127%
2037-26-5	Toluene-D8	97%		79-120%
460-00-4	4-Bromofluorobenzene	95%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-16_091511		
Lab Sample ID:	JA86529-9	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97547.D	10	09/23/11	HSS	n/a	n/a	V3A4185
Run #2	3A97477.D	25	09/22/11	HSS	n/a	n/a	V3A4182

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	76	ug/l	
71-43-2	Benzene	ND	10	2.2	ug/l	
74-97-5	Bromochloromethane	ND	50	4.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	2.3	ug/l	
75-25-2	Bromoform	ND	40	2.4	ug/l	
74-83-9	Bromomethane	ND	20	3.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	29	ug/l	
75-15-0	Carbon disulfide	ND	20	1.8	ug/l	
56-23-5	Carbon tetrachloride	ND	10	1.9	ug/l	
108-90-7	Chlorobenzene	ND	10	2.2	ug/l	
75-00-3	Chloroethane	243	10	3.7	ug/l	
67-66-3	Chloroform	ND	10	2.1	ug/l	
74-87-3	Chloromethane	ND	10	2.2	ug/l	
110-82-7	Cyclohexane	ND	50	2.9	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	13	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	20	2.1	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	1.8	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	2.9	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	2.6	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	3.1	ug/l	
75-34-3	1,1-Dichloroethane	3130 [a]	25	4.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	1.8	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	2.8	ug/l	
156-59-2	cis-1,2-Dichloroethene	29.2	10	2.2	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	10	3.1	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	2.2	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.2	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	1.9	ug/l	
123-91-1	1,4-Dioxane	ND	1300	720	ug/l	
100-41-4	Ethylbenzene	ND	10	2.1	ug/l	
76-13-1	Freon 113	ND	50	4.9	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-16_091511		
Lab Sample ID:	JA86529-9	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	50	30	ug/l	
98-82-8	Isopropylbenzene	ND	20	1.9	ug/l	
79-20-9	Methyl Acetate	ND	50	29	ug/l	
108-87-2	Methylcyclohexane	ND	50	1.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	12	ug/l	
75-09-2	Methylene chloride	ND	20	2.0	ug/l	
100-42-5	Styrene	ND	50	2.3	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	10	1.5	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	6.9	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	1.5	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.3	ug/l	
79-01-6	Trichloroethene	4.3	10	2.1	ug/l	J
75-69-4	Trichlorofluoromethane	ND	50	3.5	ug/l	
75-01-4	Vinyl chloride	ND	10	2.7	ug/l	
	m,p-Xylene	ND	10	3.2	ug/l	
95-47-6	o-Xylene	ND	10	1.7	ug/l	
1330-20-7	Xylene (total)	ND	10	1.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	96%	77-120%
17060-07-0	1,2-Dichloroethane-D4	102%	88%	70-127%
2037-26-5	Toluene-D8	97%	98%	79-120%
460-00-4	4-Bromofluorobenzene	94%	94%	76-118%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-17_091511		
Lab Sample ID:	JA86529-10	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97479.D	1	09/22/11	HSS	n/a	n/a	V3A4182
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	0.36	2.0	0.18	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	5.8	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.0	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-17_091511		
Lab Sample ID:	JA86529-10	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	1.5	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		77-120%
17060-07-0	1,2-Dichloroethane-D4	89%		70-127%
2037-26-5	Toluene-D8	99%		79-120%
460-00-4	4-Bromofluorobenzene	97%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-18_091511		
Lab Sample ID:	JA86529-11	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97554.D	1	09/23/11	HSS	n/a	n/a	V3A4185
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	1.0	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-18_091511		
Lab Sample ID:	JA86529-11	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	152	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		77-120%
17060-07-0	1,2-Dichloroethane-D4	100%		70-127%
2037-26-5	Toluene-D8	99%		79-120%
460-00-4	4-Bromofluorobenzene	96%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-19_091511		
Lab Sample ID:	JA86529-12	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97548.D	20	09/23/11	HSS	n/a	n/a	V3A4185
Run #2	3A97481.D	50	09/22/11	HSS	n/a	n/a	V3A4182

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	150	ug/l	
71-43-2	Benzene	ND	20	4.4	ug/l	
74-97-5	Bromochloromethane	ND	100	7.9	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.6	ug/l	
75-25-2	Bromoform	ND	80	4.9	ug/l	
74-83-9	Bromomethane	ND	40	6.3	ug/l	
78-93-3	2-Butanone (MEK)	ND	200	58	ug/l	
75-15-0	Carbon disulfide	ND	40	3.6	ug/l	
56-23-5	Carbon tetrachloride	ND	20	3.9	ug/l	
108-90-7	Chlorobenzene	ND	20	4.5	ug/l	
75-00-3	Chloroethane	720	20	7.3	ug/l	
67-66-3	Chloroform	ND	20	4.1	ug/l	
74-87-3	Chloromethane	ND	20	4.4	ug/l	
110-82-7	Cyclohexane	ND	100	5.7	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	200	25	ug/l	
124-48-1	Dibromochloromethane	ND	20	4.1	ug/l	
106-93-4	1,2-Dibromoethane	ND	40	4.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	3.7	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	5.7	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	5.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	6.2	ug/l	
75-34-3	1,1-Dichloroethane	8520 [a]	50	9.6	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	3.6	ug/l	
75-35-4	1,1-Dichloroethene	ND	20	5.6	ug/l	
156-59-2	cis-1,2-Dichloroethene	10.6	20	4.3	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	20	6.3	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	4.3	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	3.7	ug/l	
123-91-1	1,4-Dioxane	ND	2500	1400	ug/l	
100-41-4	Ethylbenzene	9.3	20	4.2	ug/l	J
76-13-1	Freon 113	ND	100	9.8	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-19_091511		
Lab Sample ID:	JA86529-12	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	100	61	ug/l	
98-82-8	Isopropylbenzene	ND	40	3.9	ug/l	
79-20-9	Methyl Acetate	ND	100	57	ug/l	
108-87-2	Methylcyclohexane	ND	100	3.7	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	3.7	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	24	ug/l	
75-09-2	Methylene chloride	ND	40	4.0	ug/l	
100-42-5	Styrene	ND	100	4.6	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	4.0	ug/l	
127-18-4	Tetrachloroethene	ND	20	6.4	ug/l	
108-88-3	Toluene	69.6	20	2.9	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	100	14	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	100	3.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	4.7	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	4.6	ug/l	
79-01-6	Trichloroethene	ND	20	4.2	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	7.0	ug/l	
75-01-4	Vinyl chloride	ND	20	5.3	ug/l	
	m,p-Xylene	30.6	20	6.4	ug/l	
95-47-6	o-Xylene	12.0	20	3.5	ug/l	J
1330-20-7	Xylene (total)	42.6	20	3.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	96%	77-120%
17060-07-0	1,2-Dichloroethane-D4	102%	91%	70-127%
2037-26-5	Toluene-D8	98%	98%	79-120%
460-00-4	4-Bromofluorobenzene	97%	94%	76-118%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-20_091511		
Lab Sample ID:	JA86529-13	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97483.D	100	09/22/11	HSS	n/a	n/a	V3A4182
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1000	760	ug/l	
71-43-2	Benzene	ND	100	22	ug/l	
74-97-5	Bromochloromethane	ND	500	40	ug/l	
75-27-4	Bromodichloromethane	ND	100	23	ug/l	
75-25-2	Bromoform	ND	400	24	ug/l	
74-83-9	Bromomethane	ND	200	31	ug/l	
78-93-3	2-Butanone (MEK)	ND	1000	290	ug/l	
75-15-0	Carbon disulfide	ND	200	18	ug/l	
56-23-5	Carbon tetrachloride	ND	100	19	ug/l	
108-90-7	Chlorobenzene	ND	100	22	ug/l	
75-00-3	Chloroethane	12900	100	37	ug/l	
67-66-3	Chloroform	ND	100	21	ug/l	
74-87-3	Chloromethane	ND	100	22	ug/l	
110-82-7	Cyclohexane	ND	500	29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1000	130	ug/l	
124-48-1	Dibromochloromethane	ND	100	20	ug/l	
106-93-4	1,2-Dibromoethane	ND	200	21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	100	18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	100	29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	100	26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	500	31	ug/l	
75-34-3	1,1-Dichloroethane	15200	100	19	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	18	ug/l	
75-35-4	1,1-Dichloroethene	ND	100	28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	100	22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	100	31	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	100	22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	19	ug/l	
123-91-1	1,4-Dioxane	ND	13000	7200	ug/l	
100-41-4	Ethylbenzene	ND	100	21	ug/l	
76-13-1	Freon 113	ND	500	49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TMW-20_091511		
Lab Sample ID:	JA86529-13	**Date Sampled:**	09/15/11
Matrix:	AQ - Ground Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	500	300	ug/l	
98-82-8	Isopropylbenzene	ND	200	19	ug/l	
79-20-9	Methyl Acetate	ND	500	290	ug/l	
108-87-2	Methylcyclohexane	ND	500	18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	100	18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	500	120	ug/l	
75-09-2	Methylene chloride	ND	200	20	ug/l	
100-42-5	Styrene	ND	500	23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	20	ug/l	
127-18-4	Tetrachloroethene	ND	100	32	ug/l	
108-88-3	Toluene	ND	100	15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	500	69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	500	15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	23	ug/l	
79-01-6	Trichloroethene	ND	100	21	ug/l	
75-69-4	Trichlorofluoromethane	ND	500	35	ug/l	
75-01-4	Vinyl chloride	ND	100	27	ug/l	
	m,p-Xylene	ND	100	32	ug/l	
95-47-6	o-Xylene	ND	100	17	ug/l	
1330-20-7	Xylene (total)	ND	100	17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		77-120%
17060-07-0	1,2-Dichloroethane-D4	94%		70-127%
2037-26-5	Toluene-D8	100%		79-120%
460-00-4	4-Bromofluorobenzene	96%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TB_091511		
Lab Sample ID:	JA86529-14	**Date Sampled:**	09/16/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A97476.D	1	09/22/11	HSS	n/a	n/a	V3A4182
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TB_091511		
Lab Sample ID:	JA86529-14	**Date Sampled:**	09/16/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	09/17/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Lockheed Martin Company, Deere Rd, Syracuse, NY		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		77-120%
17060-07-0	1,2-Dichloroethane-D4	87%		70-127%
2037-26-5	Toluene-D8	98%		79-120%
460-00-4	4-Bromofluorobenzene	94%		76-118%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW
SD

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

SYRACUSE, NY

PAGE 1 OF 2

FED-EX Tracking # 8768 0866 9306
Accutest Quote #
Bottle Order Control #
Accutest Job # JA86529

Client / Reporting Information	Project Information	Requested Analysis (see TEST CODE sheet)
Company Name: O'Brien & Gere Engineers	Project Name: Lockheed Martin Company Additional Groundwater Investigation	
Street Address: 333 W. Washington St	Street: Deere Rd	Billing Information (If different from Report to)
City / State / Zip: Syracuse NY	City: Syracuse, NY	Company Name
Project Contact / E-mail: Scott Tucker / Scott.Tucker@OBG.com	Project #:	Street Address
Phone # / Fax #: 315-956-6100	Client PO#:	City / State / Zip
Sampler(s) Name(s) / Phone #: Jonathan Bour	Project Manager: Scott Schiedelman	Attention: / PO#

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection: Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOCs	LAB USE ONLY
-1	TMW-08_091511		9/15/11	1355	JB	GW Water	3	3									X	2008
-2	TMW-09_091511		9/15/11	1415	JB	GW Water	3	3									X	
-3	TMW-10_091511		9/15/11	1500	JB	GW Water	3	3									X	
-4	TMW-11_091511		9/15/11	1530	JB	GW Water	3	3									X	
-5	TMW-12_091511		9/16/11	0840	JB	GW Water	3	3									X	
-6	TMW-13_091511		9/16/11	0900	JB	GW Water	3	3									X	
-7	TMW-14_091511		9/16/11	0920	JB	GW Water	3	3									X	
-8	TMW-15_091511		9/15/11	1345	JB	GW Water	3	3									X	
-9	TMW-16_091511		9/15/11	1430	JB	GW Water	3	3									X	
-10	TMW-17_091511		9/15/11	1445	JB	GW Water	3	3									X	
-11	TMW-18_091511		9/15/11	1520	JB	GW Water	3	3									X	
-12	TMW-19_091511		9/15/11	1320	JB	GW Water	3	3									X	

Turnaround Time (Business days) — Approved By (Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [x] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		9/16/11 14:10	1	2	9/16/11 17:30	2 FED EX
3	FEDEX	9/17/11 0930	3	4	Date Time:	4
5	Relinquished by:	Date Time:	5	Custody Seal # CLIENT SEAL	[x] Intact [ ] Not intact	Preserved where applicable [ ]

On Ice: 8 Cooler Temp: 3.1°C

JA86529: Chain of Custody
Page 1 of 3

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CHAIN OF CUSTODY

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SYRACUSE, NY PAGE ___ OF ___

FED-EX Tracking # 8768 0886 8306 | Bottle Order Control #
Accutest Quote # | Accutest Job # J486529

Client / Reporting Information	Project Information	Requested Analysis (see TEST CODE sheet)
Company Name: OBrien & Gere Engineers	Project Name: Lockheed Martin Company Additional GW Investigation	
Street Address: 333 W. Washington St	Street: Deere Rd	Billing Information (If different from Report to)
City / State / Zip: Syracuse NY 13	City: Syracuse, NY	Company Name
Project Contact / E-mail: Scott Tucker / Scott.Tucker@obg.com	Project #:	Street Address
Phone # / Fax #: 315-956-6100	Client PO#:	City / State / Zip
Sampler(s) Name(s) / Phone #: Jonathan Bone	Project Manager: Scott Schiedelman	Attention: / PO#

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OL - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB- Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOCs	LAB USE ONLY
-13	TMW-20_091511		9/15/11	1316	JB	GW	3	3									X	
-14	TB_091511		9/15/11	—	—	water	2	2									X	

Turnaround Time (Business days) — Approved By (Accutest PM): / Date:
- [X] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [x] Commercial "B" (Level 2)
- [ ] FULL11 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		9/16/11 14:40	1	2	9/16/11 17:30	2 FED EX
3	FED EX	9/17/11 0930	3			4
5			5			

Custody Seal # CLIENT SEAL INTACT — Intact / Not Intact — Preserved where applicable — On Ice: X — Cooler Temp: 3.1 °C

Accutest Laboratories Sample Receipt Summary

Accutest Job Number JA86529 **Client:**

Date / Time Received: 9/17/2011 **Project:**

No. Coolers: 1 **Airbill #'s:** **Delivery Method:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
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Dayton, New Jersey
www/accutest.com

JA86529: Chain of Custody
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New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4181-MB	3A97447.D	1	09/21/11	HSS	n/a	n/a	V3A4181

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-1, JA86529-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	

Method Blank Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4181-MB	3A97447.D	1	09/21/11	HSS	n/a	n/a	V3A4181

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-1, JA86529-2

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	77-120%
17060-07-0	1,2-Dichloroethane-D4	95%	70-127%
2037-26-5	Toluene-D8	98%	79-120%
460-00-4	4-Bromofluorobenzene	95%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4182-MB	3A97471.D	1	09/21/11	HSS	n/a	n/a	V3A4182

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-3, JA86529-4, JA86529-5, JA86529-6, JA86529-9, JA86529-10, JA86529-12, JA86529-13, JA86529-14

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	

Method Blank Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4182-MB	3A97471.D	1	09/21/11	HSS	n/a	n/a	V3A4182

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-3, JA86529-4, JA86529-5, JA86529-6, JA86529-9, JA86529-10, JA86529-12, JA86529-13, JA86529-14

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	96%	77-120%
17060-07-0	1,2-Dichloroethane-D4	89%	70-127%
2037-26-5	Toluene-D8	98%	79-120%
460-00-4	4-Bromofluorobenzene	94%	76-118%

Method Blank Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4185-MB	3A97539.D	1	09/23/11	HSS	n/a	n/a	V3A4185

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-2, JA86529-3, JA86529-6, JA86529-7, JA86529-8, JA86529-9, JA86529-11, JA86529-12

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	7.6	ug/l	
71-43-2	Benzene	ND	1.0	0.22	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.23	ug/l	
75-25-2	Bromoform	ND	4.0	0.24	ug/l	
74-83-9	Bromomethane	ND	2.0	0.31	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.18	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.19	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.22	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.21	ug/l	
74-87-3	Chloromethane	ND	1.0	0.22	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.29	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.3	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.21	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.18	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.29	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.31	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.19	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.18	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.28	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.31	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.22	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.22	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.19	ug/l	
123-91-1	1,4-Dioxane	ND	130	72	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
76-13-1	Freon 113	ND	5.0	0.49	ug/l	
591-78-6	2-Hexanone	ND	5.0	3.0	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.19	ug/l	
79-20-9	Methyl Acetate	ND	5.0	2.9	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.18	ug/l	

Method Blank Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4185-MB	3A97539.D	1	09/23/11	HSS	n/a	n/a	V3A4185

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-2, JA86529-3, JA86529-6, JA86529-7, JA86529-8, JA86529-9, JA86529-11, JA86529-12

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.18	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.2	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.23	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.15	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.69	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.15	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.21	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.35	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.27	ug/l	
	m,p-Xylene	ND	1.0	0.32	ug/l	
95-47-6	o-Xylene	ND	1.0	0.17	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	77-120%
17060-07-0	1,2-Dichloroethane-D4	92%	70-127%
2037-26-5	Toluene-D8	99%	79-120%
460-00-4	4-Bromofluorobenzene	94%	76-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4181-BS	3A97448.D	1	09/21/11	HSS	n/a	n/a	V3A4181

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-1, JA86529-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	43.4	87	49-142
71-43-2	Benzene	50	47.3	95	76-119
74-97-5	Bromochloromethane	50	50.0	100	77-129
75-27-4	Bromodichloromethane	50	48.4	97	81-133
75-25-2	Bromoform	50	51.3	103	72-139
74-83-9	Bromomethane	50	56.0	112	55-140
78-93-3	2-Butanone (MEK)	50	46.7	93	64-132
75-15-0	Carbon disulfide	50	46.2	92	45-149
56-23-5	Carbon tetrachloride	50	54.8	110	74-146
108-90-7	Chlorobenzene	50	51.1	102	79-120
75-00-3	Chloroethane	50	47.4	95	60-134
67-66-3	Chloroform	50	49.0	98	77-127
74-87-3	Chloromethane	50	44.4	89	50-128
110-82-7	Cyclohexane	50	47.2	94	65-128
96-12-8	1,2-Dibromo-3-chloropropane	50	45.1	90	64-137
124-48-1	Dibromochloromethane	50	49.8	100	77-131
106-93-4	1,2-Dibromoethane	50	47.6	95	76-127
95-50-1	1,2-Dichlorobenzene	50	51.8	104	78-123
541-73-1	1,3-Dichlorobenzene	50	51.2	102	77-124
106-46-7	1,4-Dichlorobenzene	50	49.3	99	76-121
75-71-8	Dichlorodifluoromethane	50	48.2	96	41-138
75-34-3	1,1-Dichloroethane	50	47.1	94	74-124
107-06-2	1,2-Dichloroethane	50	48.0	96	71-138
75-35-4	1,1-Dichloroethene	50	50.4	101	68-126
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	78-131
156-60-5	trans-1,2-Dichloroethene	50	49.2	98	64-119
78-87-5	1,2-Dichloropropane	50	45.8	92	76-121
10061-01-5	cis-1,3-Dichloropropene	50	50.0	100	76-123
10061-02-6	trans-1,3-Dichloropropene	50	53.3	107	74-129
123-91-1	1,4-Dioxane	1250	1570	126	54-149
100-41-4	Ethylbenzene	50	48.3	97	77-119
76-13-1	Freon 113	50	60.4	121	64-145
591-78-6	2-Hexanone	50	43.9	88	63-135
98-82-8	Isopropylbenzene	50	51.6	103	74-125
79-20-9	Methyl Acetate	50	35.9	72	54-135
108-87-2	Methylcyclohexane	50	58.4	117	65-134

Blank Spike Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4181-BS	3A97448.D	1	09/21/11	HSS	n/a	n/a	V3A4181

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-1, JA86529-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	100	94.5	95	72-125
108-10-1	4-Methyl-2-pentanone(MIBK)	50	47.6	95	68-131
75-09-2	Methylene chloride	50	48.7	97	73-122
100-42-5	Styrene	50	50.7	101	77-121
79-34-5	1,1,2,2-Tetrachloroethane	50	44.6	89	70-121
127-18-4	Tetrachloroethene	50	53.5	107	64-148
108-88-3	Toluene	50	51.7	103	77-122
87-61-6	1,2,3-Trichlorobenzene	50	55.5	111	69-136
120-82-1	1,2,4-Trichlorobenzene	50	55.4	111	73-133
71-55-6	1,1,1-Trichloroethane	50	52.8	106	76-135
79-00-5	1,1,2-Trichloroethane	50	46.8	94	79-125
79-01-6	Trichloroethene	50	50.1	100	80-129
75-69-4	Trichlorofluoromethane	50	52.6	105	66-145
75-01-4	Vinyl chloride	50	50.2	100	56-133
	m,p-Xylene	100	99.8	100	77-121
95-47-6	o-Xylene	50	49.9	100	80-124
1330-20-7	Xylene (total)	150	150	100	78-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	77-120%
17060-07-0	1,2-Dichloroethane-D4	91%	70-127%
2037-26-5	Toluene-D8	98%	79-120%
460-00-4	4-Bromofluorobenzene	93%	76-118%

Blank Spike Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4182-BS	3A97472.D	1	09/21/11	HSS	n/a	n/a	V3A4182

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-3, JA86529-4, JA86529-5, JA86529-6, JA86529-9, JA86529-10, JA86529-12, JA86529-13, JA86529-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	39.4	79	49-142
71-43-2	Benzene	50	47.3	95	76-119
74-97-5	Bromochloromethane	50	51.0	102	77-129
75-27-4	Bromodichloromethane	50	47.1	94	81-133
75-25-2	Bromoform	50	52.3	105	72-139
74-83-9	Bromomethane	50	52.6	105	55-140
78-93-3	2-Butanone (MEK)	50	43.8	88	64-132
75-15-0	Carbon disulfide	50	44.7	89	45-149
56-23-5	Carbon tetrachloride	50	53.2	106	74-146
108-90-7	Chlorobenzene	50	50.7	101	79-120
75-00-3	Chloroethane	50	43.5	87	60-134
67-66-3	Chloroform	50	47.0	94	77-127
74-87-3	Chloromethane	50	39.9	80	50-128
110-82-7	Cyclohexane	50	46.9	94	65-128
96-12-8	1,2-Dibromo-3-chloropropane	50	43.6	87	64-137
124-48-1	Dibromochloromethane	50	49.6	99	77-131
106-93-4	1,2-Dibromoethane	50	48.6	97	76-127
95-50-1	1,2-Dichlorobenzene	50	51.2	102	78-123
541-73-1	1,3-Dichlorobenzene	50	51.0	102	77-124
106-46-7	1,4-Dichlorobenzene	50	49.9	100	76-121
75-71-8	Dichlorodifluoromethane	50	43.7	87	41-138
75-34-3	1,1-Dichloroethane	50	43.8	88	74-124
107-06-2	1,2-Dichloroethane	50	45.3	91	71-138
75-35-4	1,1-Dichloroethene	50	49.3	99	68-126
156-59-2	cis-1,2-Dichloroethene	50	49.0	98	78-131
156-60-5	trans-1,2-Dichloroethene	50	48.2	96	64-119
78-87-5	1,2-Dichloropropane	50	45.2	90	76-121
10061-01-5	cis-1,3-Dichloropropene	50	50.3	101	76-123
10061-02-6	trans-1,3-Dichloropropene	50	52.1	104	74-129
123-91-1	1,4-Dioxane	1250	1670	134	54-149
100-41-4	Ethylbenzene	50	47.8	96	77-119
76-13-1	Freon 113	50	65.1	130	64-145
591-78-6	2-Hexanone	50	43.2	86	63-135
98-82-8	Isopropylbenzene	50	50.7	101	74-125
79-20-9	Methyl Acetate	50	38.5	77	54-135
108-87-2	Methylcyclohexane	50	62.5	125	65-134

Blank Spike Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4182-BS	3A97472.D	1	09/21/11	HSS	n/a	n/a	V3A4182

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-3, JA86529-4, JA86529-5, JA86529-6, JA86529-9, JA86529-10, JA86529-12, JA86529-13, JA86529-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	100	94.5	95	72-125
108-10-1	4-Methyl-2-pentanone(MIBK)	50	46.5	93	68-131
75-09-2	Methylene chloride	50	47.1	94	73-122
100-42-5	Styrene	50	50.5	101	77-121
79-34-5	1,1,2,2-Tetrachloroethane	50	45.3	91	70-121
127-18-4	Tetrachloroethene	50	53.2	106	64-148
108-88-3	Toluene	50	52.9	106	77-122
87-61-6	1,2,3-Trichlorobenzene	50	54.6	109	69-136
120-82-1	1,2,4-Trichlorobenzene	50	52.4	105	73-133
71-55-6	1,1,1-Trichloroethane	50	51.3	103	76-135
79-00-5	1,1,2-Trichloroethane	50	49.7	99	79-125
79-01-6	Trichloroethene	50	49.1	98	80-129
75-69-4	Trichlorofluoromethane	50	49.2	98	66-145
75-01-4	Vinyl chloride	50	46.1	92	56-133
	m,p-Xylene	100	99.1	99	77-121
95-47-6	o-Xylene	50	48.8	98	80-124
1330-20-7	Xylene (total)	150	148	99	78-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	77-120%
17060-07-0	1,2-Dichloroethane-D4	85%	70-127%
2037-26-5	Toluene-D8	100%	79-120%
460-00-4	4-Bromofluorobenzene	94%	76-118%

Blank Spike Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4185-BS	3A97540.D	1	09/23/11	HSS	n/a	n/a	V3A4185

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-2, JA86529-3, JA86529-6, JA86529-7, JA86529-8, JA86529-9, JA86529-11, JA86529-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	57.3	115	49-142
71-43-2	Benzene	50	47.4	95	76-119
74-97-5	Bromochloromethane	50	52.7	105	77-129
75-27-4	Bromodichloromethane	50	48.3	97	81-133
75-25-2	Bromoform	50	54.9	110	72-139
74-83-9	Bromomethane	50	52.5	105	55-140
78-93-3	2-Butanone (MEK)	50	52.7	105	64-132
75-15-0	Carbon disulfide	50	48.4	97	45-149
56-23-5	Carbon tetrachloride	50	53.1	106	74-146
108-90-7	Chlorobenzene	50	51.5	103	79-120
75-00-3	Chloroethane	50	43.5	87	60-134
67-66-3	Chloroform	50	48.1	96	77-127
74-87-3	Chloromethane	50	38.9	78	50-128
110-82-7	Cyclohexane	50	46.5	93	65-128
96-12-8	1,2-Dibromo-3-chloropropane	50	51.7	103	64-137
124-48-1	Dibromochloromethane	50	51.9	104	77-131
106-93-4	1,2-Dibromoethane	50	50.4	101	76-127
95-50-1	1,2-Dichlorobenzene	50	51.5	103	78-123
541-73-1	1,3-Dichlorobenzene	50	50.9	102	77-124
106-46-7	1,4-Dichlorobenzene	50	50.3	101	76-121
75-71-8	Dichlorodifluoromethane	50	39.7	79	41-138
75-34-3	1,1-Dichloroethane	50	46.3	93	74-124
107-06-2	1,2-Dichloroethane	50	47.2	94	71-138
75-35-4	1,1-Dichloroethene	50	53.6	107	68-126
156-59-2	cis-1,2-Dichloroethene	50	49.4	99	78-131
156-60-5	trans-1,2-Dichloroethene	50	48.9	98	64-119
78-87-5	1,2-Dichloropropane	50	45.4	91	76-121
10061-01-5	cis-1,3-Dichloropropene	50	52.4	105	76-123
10061-02-6	trans-1,3-Dichloropropene	50	54.6	109	74-129
123-91-1	1,4-Dioxane	1250	1280	102	54-149
100-41-4	Ethylbenzene	50	48.9	98	77-119
76-13-1	Freon 113	50	59.9	120	64-145
591-78-6	2-Hexanone	50	53.9	108	63-135
98-82-8	Isopropylbenzene	50	53.9	108	74-125
79-20-9	Methyl Acetate	50	44.3	89	54-135
108-87-2	Methylcyclohexane	50	55.5	111	65-134

Blank Spike Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A4185-BS	3A97540.D	1	09/23/11	HSS	n/a	n/a	V3A4185

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-2, JA86529-3, JA86529-6, JA86529-7, JA86529-8, JA86529-9, JA86529-11, JA86529-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	100	95.3	96	72-125
108-10-1	4-Methyl-2-pentanone(MIBK)	50	51.6	103	68-131
75-09-2	Methylene chloride	50	49.6	99	73-122
100-42-5	Styrene	50	51.0	102	77-121
79-34-5	1,1,2,2-Tetrachloroethane	50	48.1	96	70-121
127-18-4	Tetrachloroethene	50	57.6	115	64-148
108-88-3	Toluene	50	53.2	106	77-122
87-61-6	1,2,3-Trichlorobenzene	50	57.3	115	69-136
120-82-1	1,2,4-Trichlorobenzene	50	54.6	109	73-133
71-55-6	1,1,1-Trichloroethane	50	51.7	103	76-135
79-00-5	1,1,2-Trichloroethane	50	49.4	99	79-125
79-01-6	Trichloroethene	50	50.3	101	80-129
75-69-4	Trichlorofluoromethane	50	47.5	95	66-145
75-01-4	Vinyl chloride	50	44.6	89	56-133
	m,p-Xylene	100	102	102	77-121
95-47-6	o-Xylene	50	50.3	101	80-124
1330-20-7	Xylene (total)	150	152	101	78-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	77-120%
17060-07-0	1,2-Dichloroethane-D4	94%	70-127%
2037-26-5	Toluene-D8	99%	79-120%
460-00-4	4-Bromofluorobenzene	94%	76-118%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA85801-2MS	3A97459.D	5	09/21/11	HSS	n/a	n/a	V3A4181
JA85801-2MSD	3A97460.D	5	09/21/11	HSS	n/a	n/a	V3A4181
JA85801-2	3A97457.D	5	09/21/11	HSS	n/a	n/a	V3A4181
JA85801-2	3A97456.D	50	09/21/11	HSS	n/a	n/a	V3A4181

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-1, JA86529-2

CAS No.	Compound	JA85801-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	184	74	220	88	18	39-150/20
71-43-2	Benzene	ND		250	247	99	239	96	3	40-139/12
74-97-5	Bromochloromethane	ND		250	266	106	260	104	2	67-134/12
75-27-4	Bromodichloromethane	ND		250	242	97	235	94	3	68-135/12
75-25-2	Bromoform	ND		250	242	97	241	96	0	55-141/14
74-83-9	Bromomethane	ND		250	266	106	274	110	3	49-145/16
78-93-3	2-Butanone (MEK)	74.6		250	277	81	275	80	1	55-141/15
75-15-0	Carbon disulfide	ND		250	223	89	225	90	1	23-153/19
56-23-5	Carbon tetrachloride	ND		250	275	110	266	106	3	52-155/16
108-90-7	Chlorobenzene	ND		250	264	106	260	104	2	66-129/11
75-00-3	Chloroethane	ND		250	230	92	232	93	1	50-140/16
67-66-3	Chloroform	ND		250	251	100	246	98	2	63-133/13
74-87-3	Chloromethane	ND		250	212	85	218	87	3	43-138/17
110-82-7	Cyclohexane	ND		250	250	100	241	96	4	35-151/17
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	227	91	214	86	6	57-142/14
124-48-1	Dibromochloromethane	ND		250	242	97	238	95	2	64-136/12
106-93-4	1,2-Dibromoethane	ND		250	245	98	236	94	4	69-132/11
95-50-1	1,2-Dichlorobenzene	ND		250	267	107	267	107	0	69-129/11
541-73-1	1,3-Dichlorobenzene	ND		250	266	106	263	105	1	66-130/12
106-46-7	1,4-Dichlorobenzene	ND		250	261	104	259	104	1	66-127/12
75-71-8	Dichlorodifluoromethane	ND		250	223	89	232	93	4	31-166/20
75-34-3	1,1-Dichloroethane	3.7	J	250	240	95	233	92	3	58-132/13
107-06-2	1,2-Dichloroethane	3.1	J	250	240	95	228	90	5	62-145/12
75-35-4	1,1-Dichloroethene	3.2	J	250	260	103	264	104	2	43-142/17
156-59-2	cis-1,2-Dichloroethene	1120 [b]		250	1190	24* [a]	1170	16* [a]	2	55-132/12
156-60-5	trans-1,2-Dichloroethene	8.2		250	256	99	259	100	1	53-132/14
78-87-5	1,2-Dichloropropane	ND		250	229	92	224	90	2	65-128/12
10061-01-5	cis-1,3-Dichloropropene	ND		250	264	106	260	104	2	66-130/12
10061-02-6	trans-1,3-Dichloropropene	ND		250	269	108	262	105	3	64-135/13
123-91-1	1,4-Dioxane	ND		6250	6610	106	6650	106	1	49-152/24
100-41-4	Ethylbenzene	ND		250	252	101	246	98	2	40-140/12
76-13-1	Freon 113	ND		250	312	125	314	126	1	38-159/18
591-78-6	2-Hexanone	ND		250	223	89	221	88	1	56-140/17
98-82-8	Isopropylbenzene	ND		250	275	110	271	108	1	56-138/13
79-20-9	Methyl Acetate	ND		250	198	79	198	79	0	42-144/17
108-87-2	Methylcyclohexane	ND		250	279	112	275	110	1	36-152/17

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA85801-2MS	3A97459.D	5	09/21/11	HSS	n/a	n/a	V3A4181
JA85801-2MSD	3A97460.D	5	09/21/11	HSS	n/a	n/a	V3A4181
JA85801-2	3A97457.D	5	09/21/11	HSS	n/a	n/a	V3A4181
JA85801-2	3A97456.D	50	09/21/11	HSS	n/a	n/a	V3A4181

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-1, JA86529-2

CAS No.	Compound	JA85801-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	ND		250	236	94	234	94	1	54-136/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		250	243	97	234	94	4	61-138/14
75-09-2	Methylene chloride	ND		250	244	98	251	100	3	60-130/13
100-42-5	Styrene	ND		250	261	104	257	103	2	59-132/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	232	93	228	91	2	65-128/12
127-18-4	Tetrachloroethene	6.9		250	291	114	282	110	3	52-143/15
108-88-3	Toluene	ND		250	277	111	268	107	3	47-140/12
87-61-6	1,2,3-Trichlorobenzene	ND		250	290	116	285	114	2	62-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		250	279	112	273	109	2	64-136/14
71-55-6	1,1,1-Trichloroethane	ND		250	277	111	264	106	5	55-146/15
79-00-5	1,1,2-Trichloroethane	ND		250	245	98	235	94	4	70-129/12
79-01-6	Trichloroethene	672		250	760	35* [a]	749	31* [a]	1	54-142/14
75-69-4	Trichlorofluoromethane	ND		250	253	101	257	103	2	45-159/19
75-01-4	Vinyl chloride	4.4	J	250	245	96	251	99	2	42-145/18
	m,p-Xylene	ND		500	519	104	508	102	2	39-141/12
95-47-6	o-Xylene	ND		250	257	103	249	100	3	51-138/12
1330-20-7	Xylene (total)	ND		750	776	103	756	101	3	42-140/12

CAS No.	Surrogate Recoveries	MS	MSD	JA85801-2	JA85801-2	Limits
1868-53-7	Dibromofluoromethane	100%	99%	97%	98%	77-120%
17060-07-0	1,2-Dichloroethane-D4	97%	90%	91%	91%	70-127%
2037-26-5	Toluene-D8	100%	100%	99%	98%	79-120%
460-00-4	4-Bromofluorobenzene	97%	96%	95%	93%	76-118%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA86529-9MS [a]	3A97473.D	25	09/21/11	HSS	n/a	n/a	V3A4182
JA86529-9MSD [a]	3A97474.D	25	09/21/11	HSS	n/a	n/a	V3A4182
JA86529-9	3A97477.D	25	09/22/11	HSS	n/a	n/a	V3A4182

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-3, JA86529-4, JA86529-5, JA86529-6, JA86529-9, JA86529-10, JA86529-12, JA86529-13, JA86529-14

CAS No.	Compound	JA86529-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		1250	1070	86	1190	95	11	39-150/20
71-43-2	Benzene	ND		1250	1250	100	1230	98	2	40-139/12
74-97-5	Bromochloromethane	ND		1250	1380	110	1380	110	0	67-134/12
75-27-4	Bromodichloromethane	ND		1250	1220	98	1260	101	3	68-135/12
75-25-2	Bromoform	ND		1250	1360	109	1410	113	4	55-141/14
74-83-9	Bromomethane	ND		1250	1370	110	1350	108	1	49-145/16
78-93-3	2-Butanone (MEK)	ND		1250	1160	93	1150	92	1	55-141/15
75-15-0	Carbon disulfide	ND		1250	1230	98	1210	97	2	23-153/19
56-23-5	Carbon tetrachloride	ND		1250	1360	109	1380	110	1	52-155/16
108-90-7	Chlorobenzene	ND		1250	1340	107	1320	106	2	66-129/11
75-00-3	Chloroethane	357		1250	1450	87	1460	88	1	50-140/16
67-66-3	Chloroform	ND		1250	1290	103	1250	100	3	63-133/13
74-87-3	Chloromethane	ND		1250	1090	87	1050	84	4	43-138/17
110-82-7	Cyclohexane	ND		1250	1260	101	1210	97	4	35-151/17
96-12-8	1,2-Dibromo-3-chloropropane	ND		1250	1240	99	1180	94	5	57-142/14
124-48-1	Dibromochloromethane	ND		1250	1300	104	1340	107	3	64-136/12
106-93-4	1,2-Dibromoethane	ND		1250	1260	101	1320	106	5	69-132/11
95-50-1	1,2-Dichlorobenzene	ND		1250	1380	110	1360	109	1	69-129/11
541-73-1	1,3-Dichlorobenzene	ND		1250	1370	110	1360	109	1	66-130/12
106-46-7	1,4-Dichlorobenzene	ND		1250	1350	108	1300	104	4	66-127/12
75-71-8	Dichlorodifluoromethane	ND		1250	1160	93	1150	92	1	31-166/20
75-34-3	1,1-Dichloroethane	3130		1250	4230	88	4080	76	4	58-132/13
107-06-2	1,2-Dichloroethane	ND		1250	1170	94	1160	93	1	62-145/12
75-35-4	1,1-Dichloroethene	ND		1250	1380	110	1350	108	2	43-142/17
156-59-2	cis-1,2-Dichloroethene	33.1		1250	1350	105	1300	101	4	55-132/12
156-60-5	trans-1,2-Dichloroethene	ND		1250	1330	106	1280	102	4	53-132/14
78-87-5	1,2-Dichloropropane	ND		1250	1170	94	1160	93	1	65-128/12
10061-01-5	cis-1,3-Dichloropropene	ND		1250	1310	105	1320	106	1	66-130/12
10061-02-6	trans-1,3-Dichloropropene	ND		1250	1340	107	1350	108	1	64-135/13
123-91-1	1,4-Dioxane	ND		31300	38500	123	37000	118	4	49-152/24
100-41-4	Ethylbenzene	ND		1250	1260	101	1250	100	1	40-140/12
76-13-1	Freon 113	ND		1250	1540	123	1550	124	1	38-159/18
591-78-6	2-Hexanone	ND		1250	1140	91	1100	88	4	56-140/17
98-82-8	Isopropylbenzene	ND		1250	1360	109	1360	109	0	56-138/13
79-20-9	Methyl Acetate	ND		1250	990	79	1000	80	1	42-144/17
108-87-2	Methylcyclohexane	ND		1250	1330	106	1340	107	1	36-152/17

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA86529-9MS [a]	3A97473.D	25	09/21/11	HSS	n/a	n/a	V3A4182
JA86529-9MSD [a]	3A97474.D	25	09/21/11	HSS	n/a	n/a	V3A4182
JA86529-9	3A97477.D	25	09/22/11	HSS	n/a	n/a	V3A4182

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-3, JA86529-4, JA86529-5, JA86529-6, JA86529-9, JA86529-10, JA86529-12, JA86529-13, JA86529-14

CAS No.	Compound	JA86529-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	ND		1250	1210	97	1180	94	3	54-136/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1250	1180	94	1210	97	3	61-138/14
75-09-2	Methylene chloride	ND		1250	1300	104	1280	102	2	60-130/13
100-42-5	Styrene	ND		1250	1330	106	1350	108	1	59-132/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		1250	1180	94	1240	99	5	65-128/12
127-18-4	Tetrachloroethene	ND		1250	1410	113	1440	115	2	52-143/15
108-88-3	Toluene	ND		1250	1390	111	1380	110	1	47-140/12
87-61-6	1,2,3-Trichlorobenzene	ND		1250	1490	119	1480	118	1	62-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		1250	1460	117	1400	112	4	64-136/14
71-55-6	1,1,1-Trichloroethane	ND		1250	1350	108	1330	106	1	55-146/15
79-00-5	1,1,2-Trichloroethane	ND		1250	1260	101	1300	104	3	70-129/12
79-01-6	Trichloroethene	ND		1250	1310	105	1320	106	1	54-142/14
75-69-4	Trichlorofluoromethane	ND		1250	1290	103	1270	102	2	45-159/19
75-01-4	Vinyl chloride	ND		1250	1220	98	1200	96	2	42-145/18
	m,p-Xylene	ND		2500	2600	104	2590	104	0	39-141/12
95-47-6	o-Xylene	ND		1250	1280	102	1290	103	1	51-138/12
1330-20-7	Xylene (total)	ND		3750	3880	103	3890	104	0	42-140/12

CAS No.	Surrogate Recoveries	MS	MSD	JA86529-9	Limits
1868-53-7	Dibromofluoromethane	96%	96%	96%	77-120%
17060-07-0	1,2-Dichloroethane-D4	87%	92%	88%	70-127%
2037-26-5	Toluene-D8	98%	97%	98%	79-120%
460-00-4	4-Bromofluorobenzene	95%	95%	94%	76-118%

(a) (pH= 6)Sample pH did not satisfy field preservation criteria.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA86529-8MS	3A97551.D	1	09/23/11	HSS	n/a	n/a	V3A4185
JA86529-8MSD	3A97552.D	1	09/23/11	HSS	n/a	n/a	V3A4185
JA86529-8	3A97543.D	1	09/23/11	HSS	n/a	n/a	V3A4185

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-2, JA86529-3, JA86529-6, JA86529-7, JA86529-8, JA86529-9, JA86529-11, JA86529-12

CAS No.	Compound	JA86529-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	47.7	95	46.7	93	2	39-150/20
71-43-2	Benzene	ND		50	44.5	89	42.3	85	5	40-139/12
74-97-5	Bromochloromethane	ND		50	48.8	98	48.0	96	2	67-134/12
75-27-4	Bromodichloromethane	ND		50	47.1	94	44.6	89	5	68-135/12
75-25-2	Bromoform	ND		50	50.0	100	48.9	98	2	55-141/14
74-83-9	Bromomethane	ND		50	46.7	93	47.0	94	1	49-145/16
78-93-3	2-Butanone (MEK)	ND		50	47.0	94	47.6	95	1	55-141/15
75-15-0	Carbon disulfide	ND		50	41.6	83	41.7	83	0	23-153/19
56-23-5	Carbon tetrachloride	ND		50	50.0	100	47.9	96	4	52-155/16
108-90-7	Chlorobenzene	ND		50	47.0	94	44.7	89	5	66-129/11
75-00-3	Chloroethane	ND		50	39.5	79	41.0	82	4	50-140/16
67-66-3	Chloroform	ND		50	47.7	95	45.5	91	5	63-133/13
74-87-3	Chloromethane	ND		50	39.7	79	41.0	82	3	43-138/17
110-82-7	Cyclohexane	ND		50	43.3	87	42.1	84	3	35-151/17
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	50.4	101	47.1	94	7	57-142/14
124-48-1	Dibromochloromethane	ND		50	48.1	96	46.1	92	4	64-136/12
106-93-4	1,2-Dibromoethane	ND		50	47.2	94	45.9	92	3	69-132/11
95-50-1	1,2-Dichlorobenzene	ND		50	49.2	98	46.6	93	5	69-129/11
541-73-1	1,3-Dichlorobenzene	ND		50	48.0	96	45.8	92	5	66-130/12
106-46-7	1,4-Dichlorobenzene	ND		50	46.7	93	44.5	89	5	66-127/12
75-71-8	Dichlorodifluoromethane	ND		50	44.6	89	46.0	92	3	31-166/20
75-34-3	1,1-Dichloroethane	4.4		50	47.6	86	46.3	84	3	58-132/13
107-06-2	1,2-Dichloroethane	ND		50	49.0	98	44.6	89	9	62-145/12
75-35-4	1,1-Dichloroethene	0.49	J	50	46.1	91	47.2	93	2	43-142/17
156-59-2	cis-1,2-Dichloroethene	7.6		50	52.4	90	50.8	86	3	55-132/12
156-60-5	trans-1,2-Dichloroethene	ND		50	45.5	91	44.4	89	2	53-132/14
78-87-5	1,2-Dichloropropane	ND		50	43.7	87	41.4	83	5	65-128/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	51.3	103	48.5	97	6	66-130/12
10061-02-6	trans-1,3-Dichloropropene	ND		50	53.2	106	50.5	101	5	64-135/13
123-91-1	1,4-Dioxane	ND		1250	1370	110	1120	90	20	49-152/24
100-41-4	Ethylbenzene	ND		50	45.7	91	43.2	86	6	40-140/12
76-13-1	Freon 113	ND		50	47.2	94	49.0	98	4	38-159/18
591-78-6	2-Hexanone	ND		50	47.8	96	44.8	90	6	56-140/17
98-82-8	Isopropylbenzene	ND		50	50.5	101	47.6	95	6	56-138/13
79-20-9	Methyl Acetate	ND		50	42.9	86	42.0	84	2	42-144/17
108-87-2	Methylcyclohexane	ND		50	45.7	91	45.7	91	0	36-152/17

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA86529-8MS	3A97551.D	1	09/23/11	HSS	n/a	n/a	V3A4185
JA86529-8MSD	3A97552.D	1	09/23/11	HSS	n/a	n/a	V3A4185
JA86529-8	3A97543.D	1	09/23/11	HSS	n/a	n/a	V3A4185

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA86529-2, JA86529-3, JA86529-6, JA86529-7, JA86529-8, JA86529-9, JA86529-11, JA86529-12

CAS No.	Compound	JA86529-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	ND		50	46.2	92	45.3	91	2	54-136/12
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	51.6	103	50.1	100	3	61-138/14
75-09-2	Methylene chloride	ND		50	45.5	91	44.6	89	2	60-130/13
100-42-5	Styrene	ND		50	47.0	94	45.2	90	4	59-132/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	48.1	96	45.1	90	6	65-128/12
127-18-4	Tetrachloroethene	2.4		50	51.8	99	50.0	95	4	52-143/15
108-88-3	Toluene	15.7		50	64.6	98	62.9	94	3	47-140/12
87-61-6	1,2,3-Trichlorobenzene	ND		50	53.9	108	52.1	104	3	62-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	51.1	102	49.0	98	4	64-136/14
71-55-6	1,1,1-Trichloroethane	22.2		50	69.4	94	66.0	88	5	55-146/15
79-00-5	1,1,2-Trichloroethane	ND		50	48.2	96	45.5	91	6	70-129/12
79-01-6	Trichloroethene	0.40	J	50	47.0	93	45.2	90	4	54-142/14
75-69-4	Trichlorofluoromethane	ND		50	46.0	92	46.3	93	1	45-159/19
75-01-4	Vinyl chloride	ND		50	42.0	84	44.0	88	5	42-145/18
	m,p-Xylene	0.46	J	100	93.1	93	89.2	89	4	39-141/12
95-47-6	o-Xylene	ND		50	46.2	92	44.8	90	3	51-138/12
1330-20-7	Xylene (total)	0.63	J	150	139	92	134	89	4	42-140/12

CAS No.	Surrogate Recoveries	MS	MSD	JA86529-8	Limits
1868-53-7	Dibromofluoromethane	98%	100%	95%	77-120%
17060-07-0	1,2-Dichloroethane-D4	102%	100%	95%	70-127%
2037-26-5	Toluene-D8	100%	100%	97%	79-120%
460-00-4	4-Bromofluorobenzene	98%	96%	95%	76-118%

Instrument Performance Check (BFB)

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample:	V3A4016-BFB	**Injection Date:**	06/16/11
Lab File ID:	3A93604.D	**Injection Time:**	08:34
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	6714	21.8		Pass
75	30.0 - 60.0% of mass 95	15199	49.4		Pass
95	Base peak, 100% relative abundance	30762	100.0		Pass
96	5.0 - 9.0% of mass 95	2054	6.68		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	26469	86.0		Pass
175	5.0 - 9.0% of mass 174	2272	7.39	(8.58) [a]	Pass
176	95.0 - 101.0% of mass 174	26144	85.0	(98.8) [a]	Pass
177	5.0 - 9.0% of mass 176	1746	5.68	(6.68) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A4016-IC4016	3A93606.D	06/16/11	09:35	01:01	Initial cal 0.5
V3A4016-IC4016	3A93607.D	06/16/11	10:04	01:30	Initial cal 2
V3A4016-IC4016	3A93608.D	06/16/11	10:33	01:59	Initial cal 5
V3A4016-IC4016	3A93609.D	06/16/11	11:01	02:27	Initial cal 20
V3A4016-ICC4016	3A93610.D	06/16/11	11:30	02:56	Initial cal 50
V3A4016-IC4016	3A93611.D	06/16/11	11:59	03:25	Initial cal 100
V3A4016-IC4016	3A93612.D	06/16/11	12:28	03:54	Initial cal 200
V3A4016-IC4016	3A93615.D	06/16/11	13:54	05:20	Initial cal 1
V3A4016-ICV4016	3A93617.D	06/16/11	15:06	06:32	Initial cal verification 50
ZZZZZZ	3A93618.D	06/16/11	18:10	09:36	(unrelated sample)
ZZZZZZ	3A93619.D	06/16/11	18:39	10:05	(unrelated sample)
ZZZZZZ	3A93620.D	06/16/11	19:08	10:34	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample:	V3A4181-BFB	**Injection Date:**	09/21/11
Lab File ID:	3A97444.D	**Injection Time:**	07:40
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	5451	17.4		Pass
75	30.0 - 60.0% of mass 95	14438	46.2		Pass
95	Base peak, 100% relative abundance	31248	100.0		Pass
96	5.0 - 9.0% of mass 95	2199	7.04		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	30840	98.7		Pass
175	5.0 - 9.0% of mass 174	2452	7.85	(7.95) [a]	Pass
176	95.0 - 101.0% of mass 174	30162	96.5	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	2133	6.83	(7.07) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A4181-CC4016	3A97445.D	09/21/11	08:08	00:28	Continuing cal 20
V3A4181-MB	3A97447.D	09/21/11	09:27	01:47	Method Blank
V3A4181-BS	3A97448.D	09/21/11	10:03	02:23	Blank Spike
ZZZZZZ	3A97450.D	09/21/11	11:09	03:29	(unrelated sample)
ZZZZZZ	3A97451.D	09/21/11	11:38	03:58	(unrelated sample)
ZZZZZZ	3A97452.D	09/21/11	12:07	04:27	(unrelated sample)
ZZZZZZ	3A97453.D	09/21/11	12:36	04:56	(unrelated sample)
ZZZZZZ	3A97454.D	09/21/11	13:05	05:25	(unrelated sample)
ZZZZZZ	3A97455.D	09/21/11	13:34	05:54	(unrelated sample)
JA85801-2	3A97456.D	09/21/11	14:02	06:22	(used for QC only; not part of job JA86529)
JA85801-2	3A97457.D	09/21/11	14:31	06:51	(used for QC only; not part of job JA86529)
ZZZZZZ	3A97458.D	09/21/11	15:00	07:20	(unrelated sample)
JA85801-2MS	3A97459.D	09/21/11	15:29	07:49	Matrix Spike
JA85801-2MSD	3A97460.D	09/21/11	15:58	08:18	Matrix Spike Duplicate
ZZZZZZ	3A97462.D	09/21/11	16:56	09:16	(unrelated sample)
ZZZZZZ	3A97463.D	09/21/11	17:25	09:45	(unrelated sample)
ZZZZZZ	3A97465.D	09/21/11	18:23	10:43	(unrelated sample)
JA86529-1	3A97466.D	09/21/11	18:52	11:12	TMW-08_091511
JA86529-2	3A97467.D	09/21/11	19:21	11:41	TMW-09_091511

Instrument Performance Check (BFB)

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample: V3A4182-BFB
Lab File ID: 3A97468.D
Instrument ID: GCMS3A
Injection Date: 09/21/11
Injection Time: 19:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	5676	17.7		Pass
75	30.0 - 60.0% of mass 95	15050	46.9		Pass
95	Base peak, 100% relative abundance	32106	100.0		Pass
96	5.0 - 9.0% of mass 95	2123	6.61		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	31562	98.3		Pass
175	5.0 - 9.0% of mass 174	2522	7.86	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	30808	96.0	(97.6) [a]	Pass
177	5.0 - 9.0% of mass 176	2117	6.59	(6.87) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A4182-CC4016	3A97469.D	09/21/11	20:16	00:28	Continuing cal 50
V3A4182-MB	3A97471.D	09/21/11	21:14	01:26	Method Blank
V3A4182-BS	3A97472.D	09/21/11	22:12	02:24	Blank Spike
JA86529-9MS	3A97473.D	09/21/11	22:40	02:52	Matrix Spike
JA86529-9MSD	3A97474.D	09/21/11	23:09	03:21	Matrix Spike Duplicate
JA86529-14	3A97476.D	09/22/11	00:07	04:19	TB_091511
JA86529-9	3A97477.D	09/22/11	00:36	04:48	TMW-16_091511
JA86529-10	3A97479.D	09/22/11	01:34	05:46	TMW-17_091511
JA86529-12	3A97481.D	09/22/11	02:32	06:44	TMW-19_091511
JA86529-13	3A97483.D	09/22/11	03:30	07:42	TMW-20_091511
JA86529-3	3A97485.D	09/22/11	04:28	08:40	TMW-10_091511
JA86529-4	3A97486.D	09/22/11	04:57	09:09	TMW-11_091511
JA86529-5	3A97487.D	09/22/11	05:26	09:38	TMW-12_091511
JA86529-5	3A97488.D	09/22/11	05:55	10:07	TMW-12_091511
JA86529-6	3A97489.D	09/22/11	06:24	10:36	TMW-13_091511

Instrument Performance Check (BFB)

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Sample:	V3A4185-BFB	**Injection Date:**	09/23/11
Lab File ID:	3A97536.D	**Injection Time:**	07:49
Instrument ID:	GCMS3A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8322	16.4		Pass
75	30.0 - 60.0% of mass 95	23008	45.3		Pass
95	Base peak, 100% relative abundance	50813	100.0		Pass
96	5.0 - 9.0% of mass 95	3526	6.94		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	52216	102.8		Pass
175	5.0 - 9.0% of mass 174	4216	8.30	(8.07) [a]	Pass
176	95.0 - 101.0% of mass 174	50642	99.7	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	3476	6.84	(6.86) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A4185-CC4016	3A97538.D	09/23/11	08:59	01:10	Continuing cal 20
V3A4185-MB	3A97539.D	09/23/11	09:33	01:44	Method Blank
V3A4185-BS	3A97540.D	09/23/11	10:09	02:20	Blank Spike
JA86529-2	3A97541.D	09/23/11	10:45	02:56	TMW-09_091511
JA86529-3	3A97542.D	09/23/11	11:14	03:25	TMW-10_091511
JA86529-8	3A97543.D	09/23/11	11:43	03:54	TMW-15_091511
JA86529-6	3A97544.D	09/23/11	12:12	04:23	TMW-13_091511
JA86529-7	3A97545.D	09/23/11	12:41	04:52	TMW-14_091511
JA86529-9	3A97547.D	09/23/11	13:39	05:50	TMW-16_091511
JA86529-12	3A97548.D	09/23/11	14:08	06:19	TMW-19_091511
JA86529-8MS	3A97551.D	09/23/11	15:34	07:45	Matrix Spike
JA86529-8MSD	3A97552.D	09/23/11	16:03	08:14	Matrix Spike Duplicate
JA86529-11	3A97554.D	09/23/11	17:02	09:13	TMW-18_091511
ZZZZZZ	3A97556.D	09/23/11	18:00	10:11	(unrelated sample)
ZZZZZZ	3A97557.D	09/23/11	18:29	10:40	(unrelated sample)
ZZZZZZ	3A97559.D	09/23/11	19:27	11:38	(unrelated sample)

Volatile Surrogate Recovery Summary

Job Number: JA86529
Account: OBGNYS O'Brien & Gere Engineers, Inc
Project: Lockheed Martin Company, Deere Rd, Syracuse, NY

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA86529-1	3A97466.D	94.0	86.0	101.0	94.0
JA86529-2	3A97541.D	97.0	93.0	97.0	95.0
JA86529-2	3A97467.D	95.0	88.0	99.0	94.0
JA86529-3	3A97542.D	97.0	94.0	98.0	94.0
JA86529-3	3A97485.D	97.0	93.0	100.0	97.0
JA86529-4	3A97486.D	99.0	93.0	101.0	97.0
JA86529-5	3A97488.D	97.0	95.0	102.0	96.0
JA86529-5	3A97487.D	99.0	95.0	99.0	94.0
JA86529-6	3A97544.D	98.0	96.0	98.0	95.0
JA86529-6	3A97489.D	98.0	96.0	99.0	94.0
JA86529-7	3A97545.D	100.0	100.0	97.0	95.0
JA86529-8	3A97543.D	95.0	95.0	97.0	95.0
JA86529-9	3A97547.D	100.0	102.0	97.0	94.0
JA86529-9	3A97477.D	96.0	88.0	98.0	94.0
JA86529-10	3A97479.D	96.0	89.0	99.0	97.0
JA86529-11	3A97554.D	99.0	100.0	99.0	96.0
JA86529-12	3A97548.D	99.0	102.0	98.0	97.0
JA86529-12	3A97481.D	96.0	91.0	98.0	94.0
JA86529-13	3A97483.D	98.0	94.0	100.0	96.0
JA86529-14	3A97476.D	94.0	87.0	98.0	94.0
JA85801-2MS	3A97459.D	100.0	97.0	100.0	97.0
JA85801-2MSD	3A97460.D	99.0	90.0	100.0	96.0
JA86529-8MS	3A97551.D	98.0	102.0	100.0	98.0
JA86529-8MSD	3A97552.D	100.0	100.0	100.0	96.0
JA86529-9MS	3A97473.D	96.0	87.0	98.0	95.0
JA86529-9MSD	3A97474.D	96.0	92.0	97.0	95.0
V3A4181-BS	3A97448.D	97.0	91.0	98.0	93.0
V3A4181-MB	3A97447.D	100.0	95.0	98.0	95.0
V3A4182-BS	3A97472.D	96.0	85.0	100.0	94.0
V3A4182-MB	3A97471.D	96.0	89.0	98.0	94.0
V3A4185-BS	3A97540.D	97.0	94.0	99.0	94.0
V3A4185-MB	3A97539.D	95.0	92.0	99.0	94.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	77-120%
S2 = 1,2-Dichloroethane-D4	70-127%
S3 = Toluene-D8	79-120%
S4 = 4-Bromofluorobenzene	76-118%

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