HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

La Jolla Gateway
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Phone: 858.455.6500
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March 25, 2011

VIA FEDERAL EXPRESS AND ELECTRONIC MAIL

Mr. William F. Jeffers, PE
Hazardous Substances Engineer
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
9211 Oakdale Avenue
Chatsworth, CA 91311-6505

Re: Transmittal of Results from Initial and Confirmation Groundwater Sampling at Monitor Well MW-34, Former Raytheon Company (Formerly Hughes Aircraft Company) Site, 1901 West Malvern Avenue, Fullerton, California

Dear Mr. Jeffers:

This letter has been prepared by Hargis + Associates, Inc. (H+A), on behalf of the Raytheon Company (Raytheon) to transmit results from the initial and confirmation groundwater sampling of recently constructed monitor well MW-34 near the former Raytheon (formerly Hughes Aircraft Company) Site located at 1901 West Malvern Avenue, Fullerton, California, (the Site) to the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) (Figures 1 and 2).

Monitor well MW-34 was constructed as a triple well cluster with three separate well casings installed in separate adjacent boreholes and screened at different depths (MW-34A/B/C). Monitor well MW-34A is screened within the Site conceptual model Unit A; monitor well MW-34B is screened within the primary transport zone also referred to as the Site conceptual model Unit B (Unit B); and monitor well MW-34C is screened within the first relatively transmissive hydrostratigraphic zone below Unit B, which is a discrete coarser interval within the entire relatively finer section between the Unit B and Unit C referred to as Unit BC. The monitor well cluster was installed and groundwater samples were collected in accordance with the DTSC-approved Additional Groundwater Assessment Work Plan Addendum No. 3 and subsequent coordination with the DTSC (H+A, 2010). Details regarding drilling, geophysical logging, well installation, and well development will be included in a forthcoming well construction report.

The initial groundwater samples were collected from monitor well cluster MW-34 on February 25, 2011. Prior to sampling three screen volumes were purged from the well using a dedicated submersible pump. Confirmation groundwater samples were collected on March 10 using identical purging and sample collection protocols to those used during initial groundwater sample collection. Due to differences between the initial and confirmation sample analytical results for groundwater samples collected from monitor well MW-34B, a second round of confirmation samples were collected from this monitor well on March 15, as discussed further below. Groundwater samples were analyzed for volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method 8260B and for 1,4-dioxane using modified EPA Method 8270. Laboratory analytical results have been enclosed (Attachment 1). Details regarding well purging, sample collection, chain-of-custody, quality assurance/quality control, and data quality assessment results for the initial and confirmation sampling at newly installed monitor wells MW-34 (A/B/C) and MW-35 (A/B/C) will be submitted separately as part of the forthcoming groundwater monitoring report for the first quarter 2011.

Other Offices:
Mesa, AZ
Tucson, AZ

Water Quality Results

The compounds of potential concern (COPCs) related to the Site, namely 1,1-dichloroethylene (1,1-DCE), trichloroethylene (TCE) and 1,4-dioxane, were not detected in the initial or confirmation samples from monitor wells MW-34A and MW-34C. 1,1-DCE, TCE and 1,4-dioxane were detected in the original groundwater sample collected from monitor well MW-34B, at concentrations of 560, 1.6, and 75 micrograms per liter (ug/l), respectively (Table 1). TCE was not detected in the first confirmation groundwater sample collected from MW-34B. 1,1-DCE and 1,4-dioxane were detected at considerably lower concentrations of 20 and 4.1 ug/l, respectively (Table 1).

In light of the difference between the initial and confirmation results at monitor well MW-34B, a second round of confirmation samples were collected from this well on March 15. During the second confirmation sampling round the well was purged and sampled using the same equipment and procedures used during the initial and first confirmation sampling rounds. In addition, the well was pumped for an extended period and additional replicate samples were collected to assess whether the amount of groundwater purged had any impact on the sampling results. Replicate samples were collected after 10, 30, and 50 screen volumes had been purged and were analyzed for VOCs (Table 1). In addition, the 3 and 50 screen-volume-purged samples were also analyzed for 1,4-dioxane.

The results from the second confirmation samples collected from monitor well MW-34B, including all replicate samples, were similar to the first confirmation sample results, in that TCE was not detected and 1,1-DCE was detected at concentrations ranging from 23 to 31 ug/l, and 1,4-dioxane was detected at concentrations ranging from 4.9 to 5.0 ug/l (Table 1).

No other VOCs were detected in the initial or confirmation groundwater samples collected from monitor wells MW-34A, MW-34B, or MW-34C, with the following exceptions of a few compounds detected at relatively low concentrations. Toluene and trichlorofluoromethane (TCFM) were detected in the initial groundwater sample collected from monitor well MW-34A at concentrations of 1.7 and 1.6 ug/l, respectively. Toluene and TCFM were detected in the confirmation groundwater sample collected from monitor well MW-34A, both at a concentration of 1.4 ug/l, respectively. 1,1,2-trichloroethane and 1,1-dichloroethane were detected in the initial groundwater sample collected from monitor well MW-34B at concentrations of 1.3 and 5.1 ug/l, respectively. Toluene was detected in the first confirmation groundwater sample collected from monitor well MW-34B at a concentration of 2.6 ug/l; and was detected in the second confirmation groundwater samples at concentrations of 2.0, 1.4, 0.6 and 0.57 ug/l for the four replicate purge-volume samples, respectively. Toluene was detected in the initial and confirmation groundwater samples collected from monitor well MW-34C at concentrations of 3.1 ug/l and 9.0 ug/l, respectively.

Quality Assurance/Quality Control (QA/QC) Data Quality Assessment

In light of the difference between the initial and confirmation samples, a preliminary assessment of laboratory procedures and QA/QC data was performed. This assessment involved review of the following field and laboratory information:

- o sample chain-of-custody documentation
- o sample handling and preservation
- o sample holding times
- o trip blanks and laboratory reagent blanks/method blanks
- o laboratory control standards
- o laboratory matrix spike and matrix spike duplicates
- o field duplicate and laboratory split sample comparison

Based on the preliminary QA/QC data quality assessment, all laboratory QA/QC parameters were within acceptable limits and no sampling or handling issues were identified that would impact the laboratory results. Original sample results were generally comparable with results from the corresponding field duplicate and laboratory split samples, indicating the results are reliable. Details regarding the laboratory QA/QC and data quality assessment will be submitted separately as part of the forthcoming groundwater monitoring report for the first quarter 2011

Water Level Data

Groundwater level data for monitor wells MW-34A, MW-34B, and MW34C were also reviewed to assess whether there may have been a change in conditions that would explain the difference in the laboratory results for initial and confirmation groundwater samples collected from monitor well MW-34B. Manual water level data have been summarized for the period starting when the MW-34 cluster wells were initially sampled on February 25 through March 15 (Table 2). In addition, pressure transducers were installed in monitor well MW-34C on February 25, 2011, and in monitor wells MW-34A and MW-34B on March 10. A hydrograph showing the water level elevation versus time at the MW-34 cluster wells has been prepared (Figure 3). Pressure transducer data from monitor well MW-33, located to the southwest of monitor well cluster MW-34 are also shown for comparison.

It is apparent from the hydrograph that water levels were relatively stable from February 25 to March 8, with a slight gradual rise in water level elevation occurring (Figure 3). During this period, the water level in monitor well MW-34B was lower than the water levels in both MW-34A and MW-34C, indicating that there was a downward hydraulic gradient between monitor wells MW-34A and MW-34B, and an upward gradient between monitor wells MW-34C and MW-34B.

Beginning March 8, there was an abrupt decline in the water levels (Figure 3). The magnitude of the decline exceeded 10 feet in monitor well MW-33 while the magnitude of decline in monitor well MW-34B was about 1 foot during the same period. The larger decline in water level at monitor well MW-33 indicates that there was a likely shift in the direction of groundwater flow between initial and confirmation sample events.

The water level decline that occurred in monitor well MW-34C after March 10 was greater than the decline in monitor well MW-34B, resulting in a reversal of the vertical hydraulic gradient between these wells from upward to downward. From this hydrograph it is apparent that the vertical hydraulic gradient was upward during the initial sampling round and downward during both confirmation sampling rounds.

Discussion

Based on the water level data collected from monitor well cluster MW-34, it is apparent that there was a reversal in the vertical hydraulic gradient between the Unit B (MW-34B) and underlying coarse-grained

zone within the Unit BC (MW-34C) after the initial sampling round and prior to the collection of the confirmation samples. The screen interval for monitor well MW-34B is 50 feet long and encompasses three coarse-grained zones which comprise Unit B. During times when the hydraulic gradient is upward there is potential for upward flow of groundwater within the Unit B screen interval from the deeper coarse-grained (sand) intervals to the shallower intervals. This vertical flow would likely reverse during periods when the gradient is downward. If the concentration in the lower sand zones within the Unit B is higher than the upper sands, it could result in the pattern observed where the concentrations in the initial samples collected from monitor well MW-34B when there was an upward hydraulic gradient are higher, and the later samples collected when there was a downward hydraulic gradient are lower in concentration.

Another possibility that could explain the change in concentration at monitor well MW-34B between the initial and confirmation sampling events is related to the apparent shift in the direction of groundwater flow. A water level measurement round of Unit B wells was conducted on March 1, prior to the rapid decline in water levels and the collection of confirmation groundwater samples. The March 1 groundwater elevations indicate the direction of groundwater flow in Unit B at this time was to the northwest and generally towards monitor well MW-34B (Figure 4). The water level in monitor well MW-33 later declined to an elevation less than that in monitor well MW-34B, which would result in a shift in the groundwater flow direction to a more westerly or southwesterly direction. This could cause a lateral shift of groundwater to the south potentially resulting in a decline in the respective concentrations at monitor well MW-34B.

It is not currently known to what extent either of the two scenarios identified above (or both) may have contributed to the observed change in concentration from the initial to the confirmation sampling rounds. These hydraulic processes may have operated in concert. In either case, the data indicate that the COPCs in Unit B groundwater in the vicinity of monitor well MW-34B appear to occur in a relatively thin zone (laterally and/or vertically) and COPCs do not extend deeper than the Unit B. The results of current and recent sampling conducted at monitor well MW-34B and other Unit B monitor wells have been summarized (Figure 5).

Conclusion and Recommendations

Periodic (quarterly) monitoring should continue at monitor well MW-34 cluster for at least one to two full seasonal regional groundwater level cycles. Monitoring water quality over a range of regional groundwater levels, flow directions, and vertical hydraulic gradients will provide additional data that would support one or both of the scenarios described above to explain the variable water quality observed at monitor well MW-34B. During this time, additional groundwater assessment to the west and southwest of monitor well MW-34 cluster may be warranted and will be discussed with the DTSC prior to submittal of a work plan.

If you have any questions or would like to discuss please contact us.

Sincerely,

HARGIS + ASSOCIATES, INC.

Roger A. Niemeyer, PG 3616, CEG 1071, CHG 43
Principal Hydrogeologist

Steven P. Netto, PG 8030, CHG 872
Senior Hydrogeologist

RAN/SPN/gll

Enclosures

cc w/ enclosure:

Mr. Paul Pongetti, Department of Toxic Substances Control
Mr. Paul E. Brewer, Raytheon Company
Mr. Carl Bernhardt, California RWQCB
Mr. Dave Mark, Orange County Water District
Mr. Dave Schickling, City of Fullerton (2 copies)

532 ltr jeffers04.ama

REFERENCE

Hargis + Associates, Inc., 2010. Additional Groundwater Assessment Work Plan, Addendum No. 3, Raytheon Company (Former Hughes Aircraft Company, 1901 West Malvern, Avenue, Fullerton, California. October 15, 2010.

TABLE 1

SUMMARY OF INITIAL AND CONFIRMATION GROUNDWATER SAMPLE RESULTS
NEWLY CONSTRUCTED TARGET ZONE (UNIT B) MONITOR WELL MW-34B

Date Sampled	No. Screen Volumes Purged	Analyte	Sample Result (ug/l)		
			Original Sample	Field Duplicate	Laboratory Split
2/25/2011 (initial)	3	1,1-DCE	560	650	590
		1,4-Dioxane	75	61	78
		TCE	1.6	1.9	1
3/10/2011 (confirmation 1)	3	1,1-DCE	20	25	12
		1,4-Dioxane	4.1	4.3	6
		TCE	<0.5	<0.5	<1
3/15/2011 (confirmation 2)	3	1,1-DCE	28	NS	18
		1,4-Dioxane	4.9		7
		TCE	<0.5		<1
	10	1,1-DCE	23	NS	NA
		1,4-Dioxane	NA		
		TCE	<0.5		
	30	1,1-DCE	30	NS	NA
		1,4-Dioxane	NA		
		TCE	<0.5		
	50	1,1-DCE	31	NS	NA
		1,4-Dioxane	5		
		TCE	<0.5		

FOOTNOTES

ug/l = micrograms per liter
1,1-DCE = 1,1-dichloroethylene
TCE = trichloroethylene
< = less than; numerical value is laboratory reporting limit for respective compound
NS = not sampled
NA = not analyzed

TABLE 2

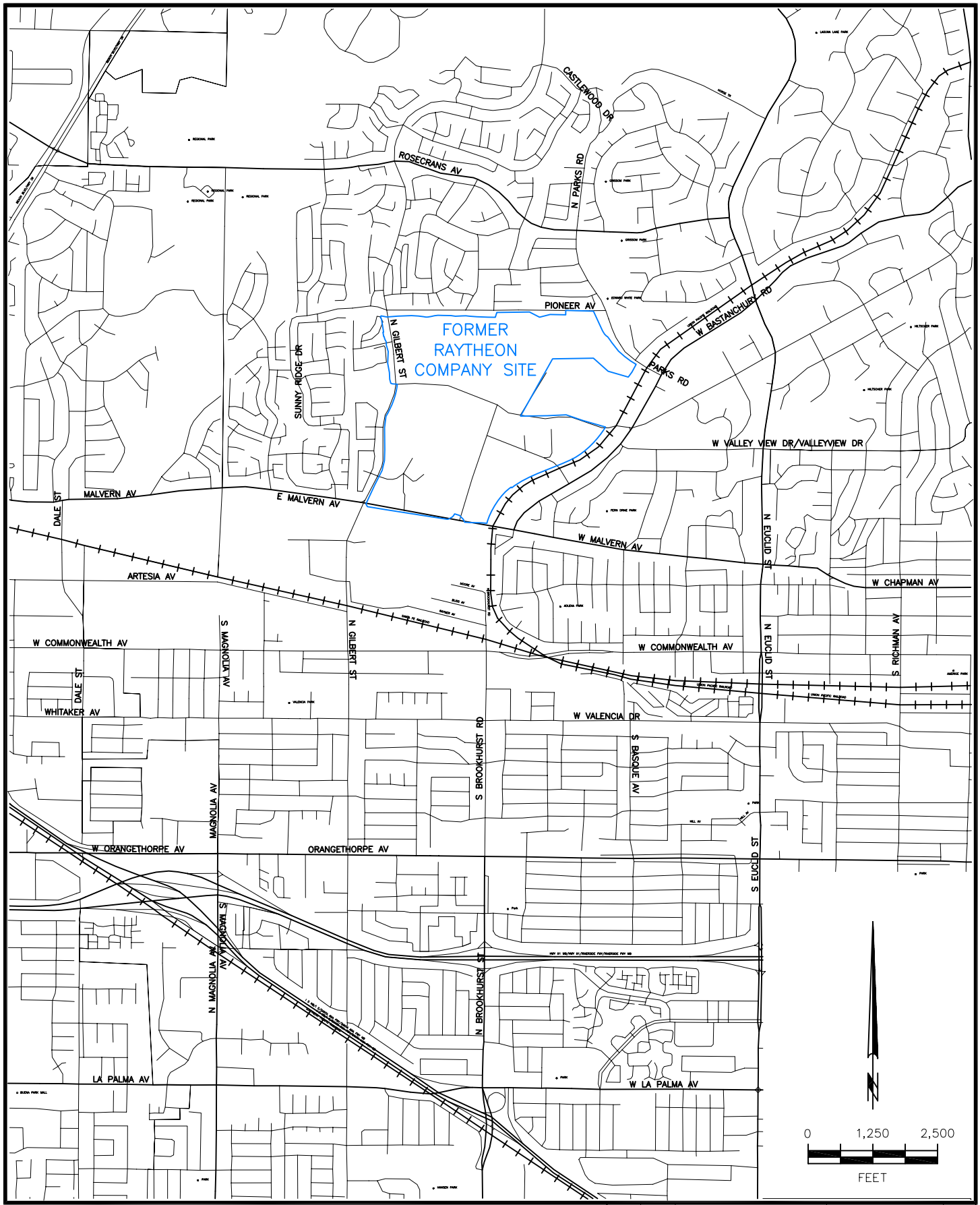
WATER LEVEL SUMMARY
JANUARY 2011 THROUGH MARCH 2011

Well Identifier	Date Measured	Reference Point Elevation (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Comments
MW-26C	03/01/11	137.22	128.33	8.89	
MW-27	03/01/11	137.16	127.65	9.51	
MW-28	03/01/11	140.77	132.48	8.29	
MW-29	03/01/11	142.34	135.43	6.91	
MW-30A	03/01/11	129.44	120.97	8.47	
MW-31	03/01/11	119.60	108.80	10.80	
MW-32B	03/01/11	92.89	82.87	10.02	
MW-33	03/01/11	83.19	73.60	9.59	
MW-34A	02/25/11	153.25	142.78	10.47	
	03/10/11	153.25	142.26	10.99	
	03/15/11	153.25	143.61	9.64	
MW-34B	02/25/11	153.11	146.89	6.22	
	03/01/11	153.11	146.32	6.79	
	03/10/11	153.11	146.80	6.31	
	03/15/11	153.11	147.91	5.20	
MW-34C	02/25/11	153.29	145.40	7.89	
	03/01/11	153.29	144.88	8.41	
	03/10/11	153.29	148.34	4.95	
	03/15/11	153.29	149.75	3.54	
MW-35A	01/19/11	93.57	77.69	15.88	
	02/03/11	93.57	77.51	16.06	
MW-35B	01/19/11	93.56	84.50	9.06	
	02/03/11	93.56	84.59	8.97	
MW-35C	01/19/11	93.55	88.79	4.76	
	02/03/11	93.55	88.62	4.93	
	03/01/11	93.55	82.54	11.01	
EW-1	03/01/11	141.07	131.68	9.39	
EW-2	01/13/11	132.97	138.52	-5.6	Pumping
	02/03/11	132.97	136.61	-3.6	Pumping
	03/02/11	132.97	130.70	2.3	Pumping

FOOTNOTES

msl = Mean sea level

bls = Below land surface



Nov 12, 2010 - 9:32am ADE - T:\2009\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-7298.dwg

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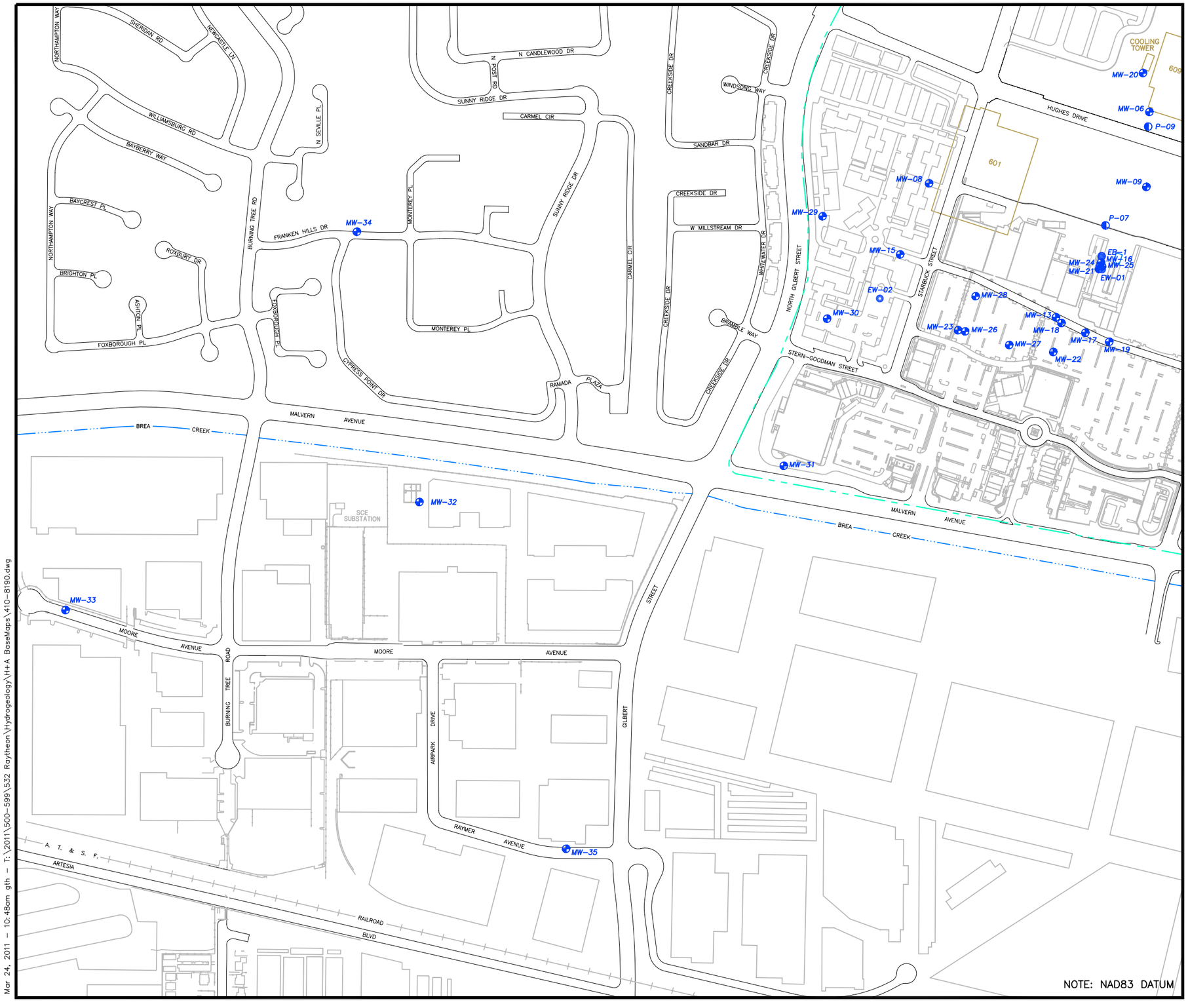
Hydrogeology/Engineering

8/09	RPT NO. 532.65	410-7298	A

FIGURE 1. SITE LOCATION



NOTE: NAD83 DATUM

EXPLANATION

- MW-09 — GROUNDWATER MONITOR WELL
- MW-25 — GROUNDWATER PIEZOMETER
- P-09 — PERCHED ZONE PIEZOMETER
- EW-01 — GROUNDWATER EXTRACTION WELL
- EB-1 — EXPLORATORY BORING
- GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
- 609 — FORMER RAYTHEON BUILDING, DEMOLISHED MID-2000
- CURRENT RESIDENTIAL AND COMMERCIAL BUILDINGS
- DRIVEWAYS, PARKING LOTS AND OTHER HARDSCAPE OF SITE RE-DEVELOPMENT
- SITE BOUNDARY

0 400 800

FEET

RAYTHEON COMPANY
FULLERTON, CALIFORNIA

WELL AND PIEZOMETER LOCATIONS

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Hydrogeology/Engineering

03/11

FIGURE 2

PREP BY GLW REV BY SPN RPT NO. 532.05 | 410-8190 | A

Mar 24, 2011 - 10:48am gth - T:\2011\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-8190.dwg

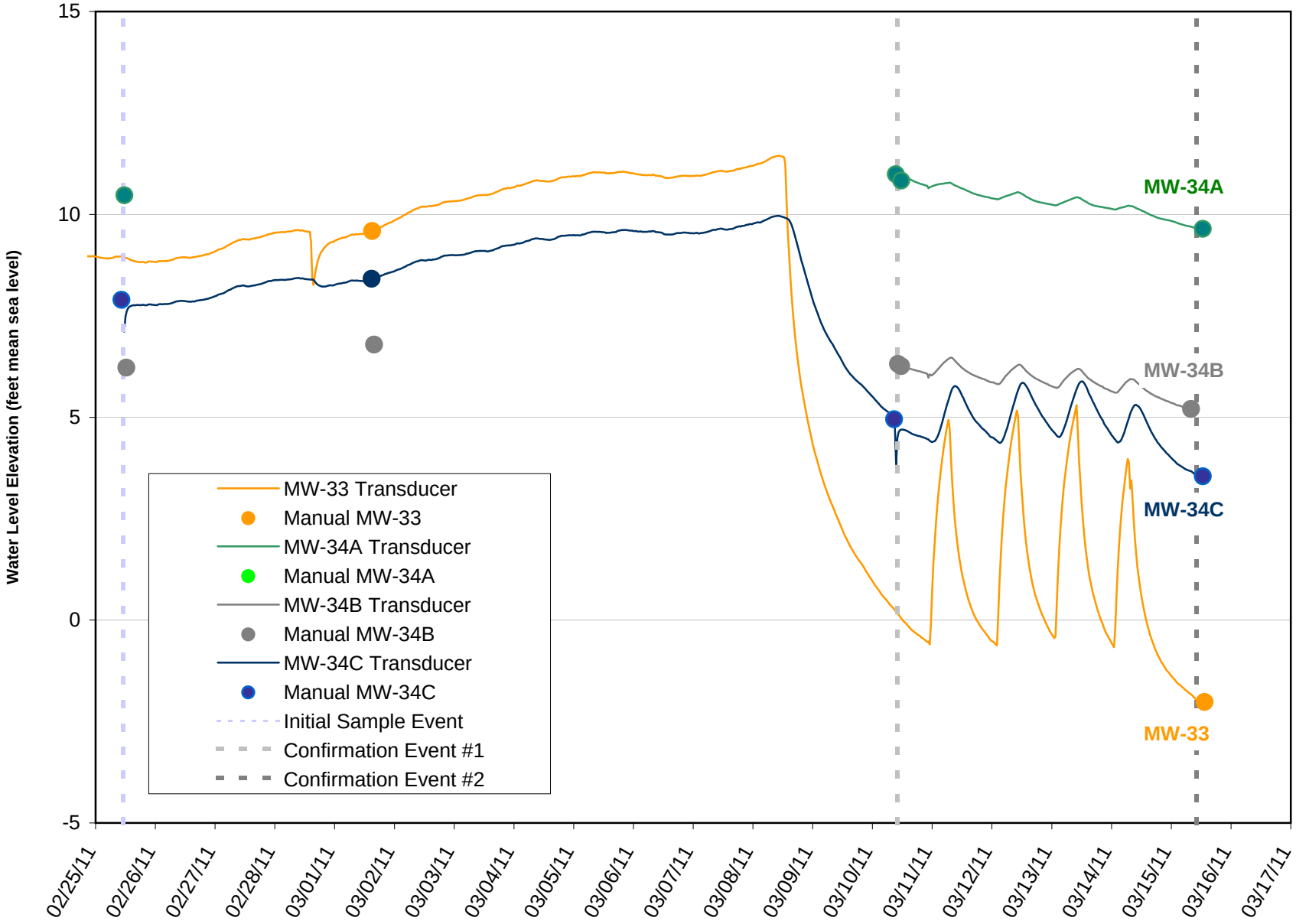
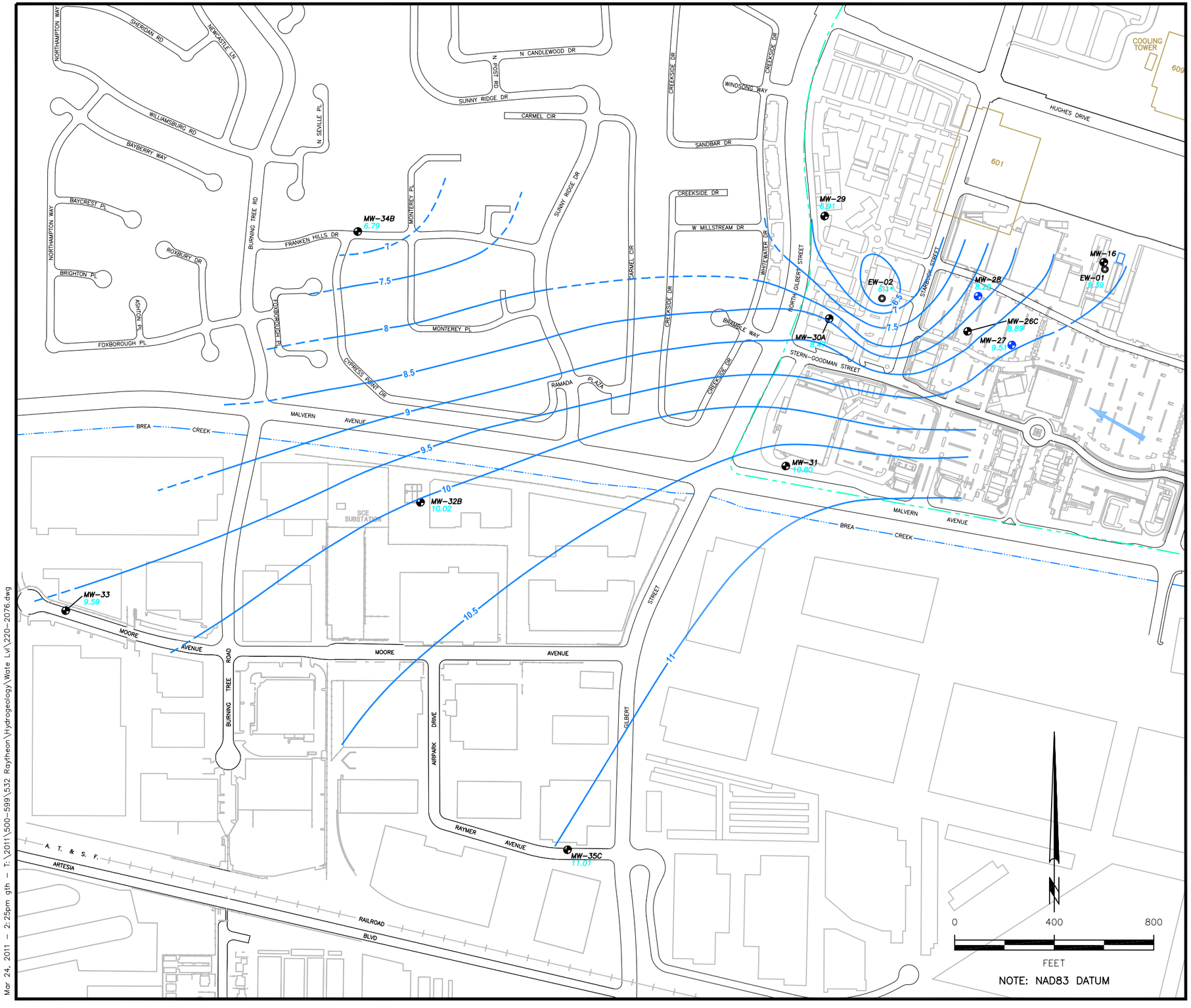


FIGURE 3. WATER LEVEL ELEVATION MONITOR WELLS MW-33 AND MW-34

fig3 wl 3334
March 23, 2011



EXPLANATION

- MW-29 — GROUNDWATER MONITOR WELL
- P-09 — PERCHED ZONE PIEZOMETER
- EW-01 — GROUNDWATER EXTRACTION WELL
- -9.02 — WATER LEVEL ELEVATION, MEASURED MARCH 01, 2011 (FEET MEAN SEA LEVEL)
- EXTRACTION WELL EW-02 PUMPING DURING WATER LEVEL GAUGING; ESTIMATED WATER LEVEL BASED ON THIEM EQUATION
- -10.5- — EQUAL WATER LEVEL ELEVATION CONTOUR, DASHED WHERE APPROXIMATE (FEET MEAN SEA LEVEL)
- 609 — FORMER RAYTHEON BUILDING, DEMOLISHED MID-2000
- DRIVEWAYS, PARKING LOTS AND OTHER HARDSCAPE OF SITE RE-DEVELOPMENT
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW, MARCH 2011

RAYTHEON COMPANY
FULLERTON, CALIFORNIA

WATER LEVEL ELEVATION TARGET ZONE (UNIT B) MARCH 1, 2011

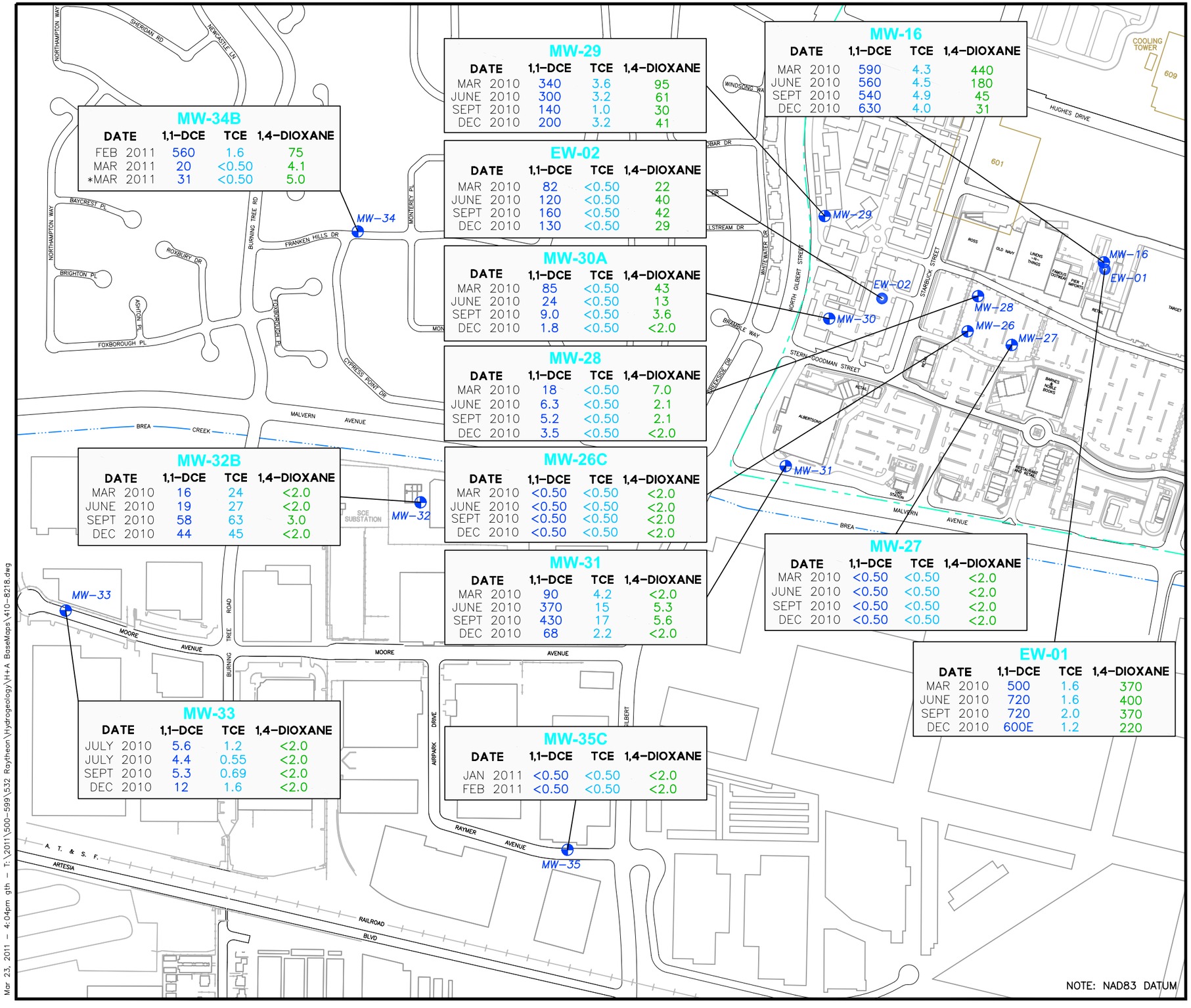
HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

03/11

FIGURE 4

PREP BY AMB REV BY SPN RPT NO. 532.31 | 220-2076 | A

Mar 24, 2011 - 2:25pm gth - T:\2011\500-599\532 Raytheon\Hydrogeology\Wate Lvl\220-2076.dwg



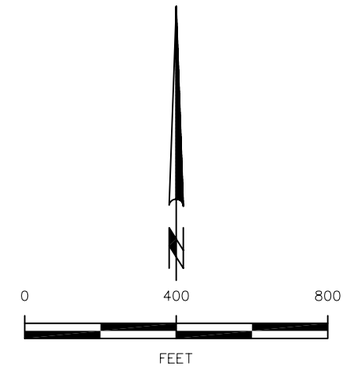
EXPLANATION

MW-27	GROUNDWATER MONITOR WELL
EW-01	GROUNDWATER EXTRACTION WELL
1,1-DCE	1,1-DICHLOROETHENE
TCE	TRICHLOROETHENE
<	LESS THAN; VALUE IS THE LIMIT OF DETECTION FOR THAT COMPOUND
E	RESULT QUALIFIED AS "ESTIMATED" IN ACCORDANCE WITH QUALITY CONTROL CRITERIA
609	FORMER RAYTHEON BUILDING, DEMOLISHED MID-2000
	CURRENT RESIDENTIAL AND COMMERCIAL BUILDINGS
	DRIVEWAYS, PARKING LOTS AND OTHER HARDSCAPE OF SITE RE-DEVELOPMENT
	SITE BOUNDARY

NOTES:

1. ALL CONCENTRATIONS ARE IN MICROGRAMS PER LITER.
2. ONLY ORIGINAL SAMPLE RESULTS POSTED.

* RESULTS BASED ON HIGHEST CONCENTRATION IN MULTIPLE PURGE VOLUME SAMPLES COLLECTED MARCH 15, 2011.



RAYTHEON COMPANY
FULLERTON, CALIFORNIA

SELECTED VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN THE TARGET ZONE (UNIT B)

HARGIS + ASSOCIATES, INC
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03/11

FIGURE 5

PREP BY CGAR REV BY SPN RPT NO. 532.31 | 410-8218 | A

Mar 23, 2011 – 4:04pm gth – T:\2011\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-8218.dwg

ATTACHMENT 1

LABORATORY ANALYTICAL RESULTS

March 08, 2011

Steve Netto
Hargis & Associates, Inc.
9171 Town Centre Drive, Suite 375
San Diego, CA 92122
TEL: (619) 249-3166
FAX: cell

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 116569

RE: Raytheon Main, 532.03

Attention: Steve Netto

Enclosed are the results for sample(s) received on February 25, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

CLIENT: Hargis & Associates, Inc.
Project: Raytheon Main, 532.03
Lab Order: 116569

CASE NARRATIVE

Analytical Comments for EPA 8270C(M)

Samples 116569-002B, 116569-003B, 116569-005B and 116569-006B, srrogate recovery biased low possibly due to matrix interferences.

Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	TB-022511
Lab Order:	116569	**Collection Date:**	2/25/2011 8:00:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	LAB H2O
Lab ID:	116569-001A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,1-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,1-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,1-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2-Dibromoethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,3-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
2,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
2-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
4-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
4-Isopropyltoluene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Benzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Bromobenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Bromodichloromethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Bromoform	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Bromomethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Carbon tetrachloride	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Chlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Chloroethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Chloroform	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Chloromethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	TB-022511
Lab Order:	116569	**Collection Date:**	2/25/2011 8:00:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	LAB H2O
Lab ID:	116569-001A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Dibromochloromethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Dibromomethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Dichlorodifluoromethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Ethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Hexachlorobutadiene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Isopropylbenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
m,p-Xylene	ND	1.0		µg/L	1	2/28/2011 10:04 AM
Methylene chloride	ND	1.0		µg/L	1	2/28/2011 10:04 AM
n-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
n-Propylbenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Naphthalene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
o-Xylene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
sec-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Styrene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
tert-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Tetrachloroethene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Toluene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Trichloroethene	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Trichlorofluoromethane	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Vinyl chloride	ND	0.50		µg/L	1	2/28/2011 10:04 AM
Surr: 1,2-Dichloroethane-d4	94.2	70-130		%REC	1	2/28/2011 10:04 AM
Surr: 4-Bromofluorobenzene	107	70-130		%REC	1	2/28/2011 10:04 AM
Surr: Dibromofluoromethane	95.5	70-130		%REC	1	2/28/2011 10:04 AM
Surr: Toluene-d8	93.6	70-130		%REC	1	2/28/2011 10:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34C
Lab Order:	116569	**Collection Date:**	2/25/2011 11:03:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-002A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,1-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,1-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,1-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2-Dibromoethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,3-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
2,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
2-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
4-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
4-Isopropyltoluene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Benzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Bromobenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Bromodichloromethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Bromoform	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Bromomethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Carbon tetrachloride	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Chlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Chloroethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Chloroform	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Chloromethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34C
Lab Order:	116569	**Collection Date:**	2/25/2011 11:03:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-002A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Dibromochloromethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Dibromomethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Dichlorodifluoromethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Ethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Hexachlorobutadiene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Isopropylbenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
m,p-Xylene	ND	1.0		µg/L	1	2/28/2011 10:24 AM
Methylene chloride	ND	1.0		µg/L	1	2/28/2011 10:24 AM
n-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
n-Propylbenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Naphthalene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
o-Xylene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
sec-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Styrene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
tert-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Tetrachloroethene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Toluene	3.1	0.50		µg/L	1	2/28/2011 10:24 AM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Trichloroethene	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Trichlorofluoromethane	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Vinyl chloride	ND	0.50		µg/L	1	2/28/2011 10:24 AM
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%REC	1	2/28/2011 10:24 AM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	2/28/2011 10:24 AM
Surr: Dibromofluoromethane	92.6	70-130		%REC	1	2/28/2011 10:24 AM
Surr: Toluene-d8	89.6	70-130		%REC	1	2/28/2011 10:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34C
Lab Order:	116569	**Collection Date:**	2/25/2011 11:03:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-002B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS: ISOTOPE DILUTION TECHNIQUE						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS 13_110228A	QC Batch: 71077			PrepDate:	2/28/2011	Analyst: **MFR**
1,4-Dioxane	ND	2.0		µg/L	1	2/28/2011 02:09 PM
Surr: 1,2-Dichlorobenzene-d4	54.2	46-97		%REC	1	2/28/2011 02:09 PM
Surr: 2,4,6-Tribromophenol	63.1	59-124		%REC	1	2/28/2011 02:09 PM
Surr: 2-Chlorophenol-d4	52.1	49-93		%REC	1	2/28/2011 02:09 PM
Surr: 2-Fluorobiphenyl	61.7	57-107		%REC	1	2/28/2011 02:09 PM
Surr: 2-Fluorophenol	32.7	27-60		%REC	1	2/28/2011 02:09 PM
Surr: 4-Terphenyl-d14	56.8	69-132	S	%REC	1	2/28/2011 02:09 PM
Surr: Nitrobenzene-d5	54.4	52-107		%REC	1	2/28/2011 02:09 PM
Surr: Phenol-d5	23.3	15-50		%REC	1	2/28/2011 02:09 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400C
Lab Order:	116569	**Collection Date:**	2/25/2011 11:30:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-003A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,1-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,1-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,1-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2-Dibromoethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,3-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
2,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
2-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
4-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
4-Isopropyltoluene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Benzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Bromobenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Bromodichloromethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Bromoform	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Bromomethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Carbon tetrachloride	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Chlorobenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Chloroethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Chloroform	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Chloromethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 11:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400C
Lab Order:	116569	**Collection Date:**	2/25/2011 11:30:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-003A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Dibromochloromethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Dibromomethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Dichlorodifluoromethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Ethylbenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Hexachlorobutadiene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Isopropylbenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
m,p-Xylene	ND	1.0		µg/L	1	2/28/2011 11:24 AM
Methylene chloride	ND	1.0		µg/L	1	2/28/2011 11:24 AM
n-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
n-Propylbenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Naphthalene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
o-Xylene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
sec-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Styrene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
tert-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Tetrachloroethene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Toluene	3.7	0.50		µg/L	1	2/28/2011 11:24 AM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Trichloroethene	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Trichlorofluoromethane	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Vinyl chloride	ND	0.50		µg/L	1	2/28/2011 11:24 AM
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%REC	1	2/28/2011 11:24 AM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	2/28/2011 11:24 AM
Surr: Dibromofluoromethane	95.0	70-130		%REC	1	2/28/2011 11:24 AM
Surr: Toluene-d8	89.7	70-130		%REC	1	2/28/2011 11:24 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400C
Lab Order:	116569	**Collection Date:**	2/25/2011 11:30:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-003B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS: ISOTOPE DILUTION TECHNIQUE						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS 13_110307B	QC Batch: 71234			PrepDate:	3/4/2011	Analyst: **DMP**
1,4-Dioxane	ND	2.0		µg/L	1	3/7/2011 01:46 PM
Surr: 1,2-Dichlorobenzene-d4	52.9	46-97		%REC	1	3/7/2011 01:46 PM
Surr: 2,4,6-Tribromophenol	66.5	59-124		%REC	1	3/7/2011 01:46 PM
Surr: 2-Chlorophenol-d4	45.2	49-93	S	%REC	1	3/7/2011 01:46 PM
Surr: 2-Fluorobiphenyl	62.8	57-107		%REC	1	3/7/2011 01:46 PM
Surr: 2-Fluorophenol	26.0	27-60	S	%REC	1	3/7/2011 01:46 PM
Surr: 4-Terphenyl-d14	76.8	69-132		%REC	1	3/7/2011 01:46 PM
Surr: Nitrobenzene-d5	54.9	52-107		%REC	1	3/7/2011 01:46 PM
Surr: Phenol-d5	18.9	15-50		%REC	1	3/7/2011 01:46 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34A
Lab Order:	116569	**Collection Date:**	2/25/2011 11:52:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-004A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,1-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,1-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,1-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2-Dibromoethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,3-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
2,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
2-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
4-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
4-Isopropyltoluene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Benzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Bromobenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Bromodichloromethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Bromoform	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Bromomethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Carbon tetrachloride	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Chlorobenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Chloroethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Chloroform	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Chloromethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34A
Lab Order:	116569	**Collection Date:**	2/25/2011 11:52:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-004A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Dibromochloromethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Dibromomethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Dichlorodifluoromethane	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Ethylbenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Hexachlorobutadiene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Isopropylbenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
m,p-Xylene	ND	1.0		µg/L	1	2/28/2011 10:44 AM
Methylene chloride	ND	1.0		µg/L	1	2/28/2011 10:44 AM
n-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
n-Propylbenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Naphthalene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
o-Xylene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
sec-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Styrene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
tert-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Tetrachloroethene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Toluene	1.7	0.50		µg/L	1	2/28/2011 10:44 AM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Trichloroethene	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Trichlorofluoromethane	1.6	0.50		µg/L	1	2/28/2011 10:44 AM
Vinyl chloride	ND	0.50		µg/L	1	2/28/2011 10:44 AM
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%REC	1	2/28/2011 10:44 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	2/28/2011 10:44 AM
Surr: Dibromofluoromethane	93.1	70-130		%REC	1	2/28/2011 10:44 AM
Surr: Toluene-d8	89.4	70-130		%REC	1	2/28/2011 10:44 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34A
Lab Order:	116569	**Collection Date:**	2/25/2011 11:52:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-004B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS: ISOTOPE DILUTION TECHNIQUE						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS 13_110228A	QC Batch: 71077			PrepDate:	2/28/2011	Analyst: **MFR**
1,4-Dioxane	ND	2.0		µg/L	1	2/28/2011 02:38 PM
Surr: 1,2-Dichlorobenzene-d4	66.0	46-97		%REC	1	2/28/2011 02:38 PM
Surr: 2,4,6-Tribromophenol	77.5	59-124		%REC	1	2/28/2011 02:38 PM
Surr: 2-Chlorophenol-d4	63.9	49-93		%REC	1	2/28/2011 02:38 PM
Surr: 2-Fluorobiphenyl	73.3	57-107		%REC	1	2/28/2011 02:38 PM
Surr: 2-Fluorophenol	40.7	27-60		%REC	1	2/28/2011 02:38 PM
Surr: 4-Terphenyl-d14	81.3	69-132		%REC	1	2/28/2011 02:38 PM
Surr: Nitrobenzene-d5	65.2	52-107		%REC	1	2/28/2011 02:38 PM
Surr: Phenol-d5	28.2	15-50		%REC	1	2/28/2011 02:38 PM

Qualifiers:				
	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
	DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400A
Lab Order:	116569	**Collection Date:**	2/25/2011 12:22:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-005A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,1-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
2-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
4-Chlorotoluene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Benzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Bromobenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Bromodichloromethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Bromoform	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Bromomethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Carbon tetrachloride	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Chlorobenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Chloroethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Chloroform	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Chloromethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 12:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400A
Lab Order:	116569	**Collection Date:**	2/25/2011 12:22:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-005A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Dibromochloromethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Dibromomethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Ethylbenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Isopropylbenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
m,p-Xylene	ND	1.0		µg/L	1	2/28/2011 12:04 PM
Methylene chloride	ND	1.0		µg/L	1	2/28/2011 12:04 PM
n-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
n-Propylbenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Naphthalene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
o-Xylene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
sec-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Styrene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
tert-Butylbenzene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Tetrachloroethene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Toluene	2.0	0.50		µg/L	1	2/28/2011 12:04 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Trichloroethene	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Trichlorofluoromethane	1.8	0.50		µg/L	1	2/28/2011 12:04 PM
Vinyl chloride	ND	0.50		µg/L	1	2/28/2011 12:04 PM
Surr: 1,2-Dichloroethane-d4	100	70-130		%REC	1	2/28/2011 12:04 PM
Surr: 4-Bromofluorobenzene	108	70-130		%REC	1	2/28/2011 12:04 PM
Surr: Dibromofluoromethane	99.1	70-130		%REC	1	2/28/2011 12:04 PM
Surr: Toluene-d8	93.8	70-130		%REC	1	2/28/2011 12:04 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400A
Lab Order:	116569	**Collection Date:**	2/25/2011 12:22:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-005B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS: ISOTOPE DILUTION TECHNIQUE						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS 13_110307B	QC Batch: 71234			PrepDate:	3/4/2011	Analyst: **DMP**
1,4-Dioxane	ND	2.0		µg/L	1	3/7/2011 02:14 PM
Surr: 1,2-Dichlorobenzene-d4	55.6	46-97		%REC	1	3/7/2011 02:14 PM
Surr: 2,4,6-Tribromophenol	71.0	59-124		%REC	1	3/7/2011 02:14 PM
Surr: 2-Chlorophenol-d4	47.1	49-93	S	%REC	1	3/7/2011 02:14 PM
Surr: 2-Fluorobiphenyl	66.5	57-107		%REC	1	3/7/2011 02:14 PM
Surr: 2-Fluorophenol	27.4	27-60		%REC	1	3/7/2011 02:14 PM
Surr: 4-Terphenyl-d14	84.5	69-132		%REC	1	3/7/2011 02:14 PM
Surr: Nitrobenzene-d5	57.1	52-107		%REC	1	3/7/2011 02:14 PM
Surr: Phenol-d5	19.2	15-50		%REC	1	3/7/2011 02:14 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B
Lab Order:	116569	**Collection Date:**	2/25/2011 12:38:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-006A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,1,2-Trichloroethane	1.3	1.0		µg/L	2	2/28/2011 12:24 PM
1,1-Dichloroethane	5.1	1.0		µg/L	2	2/28/2011 12:24 PM
1,1-Dichloroethene	560	10		µg/L	20	2/28/2011 11:44 AM
1,1-Dichloropropene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2-Dibromo-3-chloropropane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2-Dibromoethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2-Dichloroethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,2-Dichloropropane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,3-Dichloropropane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
2,2-Dichloropropane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
2-Chlorotoluene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
4-Chlorotoluene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
4-Isopropyltoluene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Benzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Bromobenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Bromodichloromethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Bromoform	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Bromomethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Carbon tetrachloride	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Chlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Chloroethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Chloroform	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Chloromethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
cis-1,2-Dichloroethene	ND	1.0		µg/L	2	2/28/2011 12:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B
Lab Order:	116569	**Collection Date:**	2/25/2011 12:38:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-006A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Dibromochloromethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Dibromomethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Dichlorodifluoromethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Ethylbenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Hexachlorobutadiene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Isopropylbenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
m,p-Xylene	ND	2.0		µg/L	2	2/28/2011 12:24 PM
Methylene chloride	ND	2.0		µg/L	2	2/28/2011 12:24 PM
n-Butylbenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
n-Propylbenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Naphthalene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
o-Xylene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
sec-Butylbenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Styrene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
tert-Butylbenzene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Tetrachloroethene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Toluene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
trans-1,2-Dichloroethene	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Trichloroethene	1.6	1.0		µg/L	2	2/28/2011 12:24 PM
Trichlorofluoromethane	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Vinyl chloride	ND	1.0		µg/L	2	2/28/2011 12:24 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	2	2/28/2011 12:24 PM
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%REC	20	2/28/2011 11:44 AM
Surr: 4-Bromofluorobenzene	104	70-130		%REC	2	2/28/2011 12:24 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	20	2/28/2011 11:44 AM
Surr: Dibromofluoromethane	99.4	70-130		%REC	2	2/28/2011 12:24 PM
Surr: Dibromofluoromethane	94.8	70-130		%REC	20	2/28/2011 11:44 AM
Surr: Toluene-d8	89.1	70-130		%REC	20	2/28/2011 11:44 AM
Surr: Toluene-d8	92.0	70-130		%REC	2	2/28/2011 12:24 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B
Lab Order:	116569	**Collection Date:**	2/25/2011 12:38:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-006B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS: ISOTOPE DILUTION TECHNIQUE						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS 13_110228A	QC Batch: 71077			PrepDate:	2/28/2011	Analyst: **MFR**
1,4-Dioxane	75	2.0		µg/L	1	2/28/2011 03:05 PM
Surr: 1,2-Dichlorobenzene-d4	60.8	46-97		%REC	1	2/28/2011 03:05 PM
Surr: 2,4,6-Tribromophenol	72.4	59-124		%REC	1	2/28/2011 03:05 PM
Surr: 2-Chlorophenol-d4	59.4	49-93		%REC	1	2/28/2011 03:05 PM
Surr: 2-Fluorobiphenyl	69.1	57-107		%REC	1	2/28/2011 03:05 PM
Surr: 2-Fluorophenol	36.1	27-60		%REC	1	2/28/2011 03:05 PM
Surr: 4-Terphenyl-d14	68.7	69-132	S	%REC	1	2/28/2011 03:05 PM
Surr: Nitrobenzene-d5	61.5	52-107		%REC	1	2/28/2011 03:05 PM
Surr: Phenol-d5	25.3	15-50		%REC	1	2/28/2011 03:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400B
Lab Order:	116569	**Collection Date:**	2/25/2011 12:58:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-007A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,1,2-Trichloroethane	1.5	1.0		µg/L	2	2/28/2011 12:44 PM
1,1-Dichloroethane	6.2	1.0		µg/L	2	2/28/2011 12:44 PM
1,1-Dichloroethene	650	10		µg/L	20	2/28/2011 01:04 PM
1,1-Dichloropropene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2,3-Trichloropropane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2-Dibromo-3-chloropropane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2-Dibromoethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2-Dichloroethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,2-Dichloropropane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,3-Dichloropropane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
2,2-Dichloropropane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
2-Chlorotoluene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
4-Chlorotoluene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
4-Isopropyltoluene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Benzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Bromobenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Bromodichloromethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Bromoform	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Bromomethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Carbon tetrachloride	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Chlorobenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Chloroethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Chloroform	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Chloromethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
cis-1,2-Dichloroethene	ND	1.0		µg/L	2	2/28/2011 12:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400B
Lab Order:	116569	**Collection Date:**	2/25/2011 12:58:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-007A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110228A QC Batch: Q11VW016 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Dibromochloromethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Dibromomethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Dichlorodifluoromethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Ethylbenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Hexachlorobutadiene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Isopropylbenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
m,p-Xylene	ND	2.0		µg/L	2	2/28/2011 12:44 PM
Methylene chloride	ND	2.0		µg/L	2	2/28/2011 12:44 PM
n-Butylbenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
n-Propylbenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Naphthalene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
o-Xylene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
sec-Butylbenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Styrene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
tert-Butylbenzene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Tetrachloroethene	1.1	1.0		µg/L	2	2/28/2011 12:44 PM
Toluene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
trans-1,2-Dichloroethene	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Trichloroethene	1.9	1.0		µg/L	2	2/28/2011 12:44 PM
Trichlorofluoromethane	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Vinyl chloride	ND	1.0		µg/L	2	2/28/2011 12:44 PM
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%REC	2	2/28/2011 12:44 PM
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%REC	20	2/28/2011 01:04 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	2	2/28/2011 12:44 PM
Surr: 4-Bromofluorobenzene	102	70-130		%REC	20	2/28/2011 01:04 PM
Surr: Dibromofluoromethane	96.6	70-130		%REC	2	2/28/2011 12:44 PM
Surr: Dibromofluoromethane	97.2	70-130		%REC	20	2/28/2011 01:04 PM
Surr: Toluene-d8	90.5	70-130		%REC	20	2/28/2011 01:04 PM
Surr: Toluene-d8	88.2	70-130		%REC	2	2/28/2011 12:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400B
Lab Order:	116569	**Collection Date:**	2/25/2011 12:58:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116569-007B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS: ISOTOPE DILUTION TECHNIQUE						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS 13_110307B	QC Batch: 71234			PrepDate:	3/4/2011	Analyst: **DMP**
1,4-Dioxane	61	2.0		µg/L	1	3/7/2011 02:42 PM
Surr: 1,2-Dichlorobenzene-d4	57.5	46-97		%REC	1	3/7/2011 02:42 PM
Surr: 2,4,6-Tribromophenol	69.8	59-124		%REC	1	3/7/2011 02:42 PM
Surr: 2-Chlorophenol-d4	50.3	49-93		%REC	1	3/7/2011 02:42 PM
Surr: 2-Fluorobiphenyl	65.2	57-107		%REC	1	3/7/2011 02:42 PM
Surr: 2-Fluorophenol	30.3	27-60		%REC	1	3/7/2011 02:42 PM
Surr: 4-Terphenyl-d14	79.4	69-132		%REC	1	3/7/2011 02:42 PM
Surr: Nitrobenzene-d5	56.7	52-107		%REC	1	3/7/2011 02:42 PM
Surr: Phenol-d5	21.9	15-50		%REC	1	3/7/2011 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: Hargis & Associates, Inc.
Work Order: 116569
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110228LCS1** SampType: **LCS** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130438**
Client ID: **LCSW** Batch ID: **Q11VW016** TestNo: **EPA 8260B** Analysis Date: **2/28/2011** SeqNo: **2121426**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.090	0.50	20.00	0	90.4	70	130				
Benzene	38.930	0.50	40.00	0	97.3	70	130				
Chlorobenzene	20.670	0.50	20.00	0	103	70	130				
MTBE	20.680	0.50	20.00	0	103	70	130				
Toluene	39.520	0.50	40.00	0	98.8	70	130				
Trichloroethene	19.710	0.50	20.00	0	98.6	70	130				
Surr: 1,2-Dichloroethane-d4	21.380		25.00		85.5	70	130				
Surr: 4-Bromofluorobenzene	25.260		25.00		101	70	130				
Surr: Dibromofluoromethane	21.880		25.00		87.5	70	130				
Surr: Toluene-d8	23.110		25.00		92.4	70	130				

Sample ID: **Q110228MB2MS** SampType: **MS** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130438**
Client ID: **ZZZZZZ** Batch ID: **Q11VW016** TestNo: **EPA 8260B** Analysis Date: **2/28/2011** SeqNo: **2121427**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	16.960	0.50	20.00	0	84.8	70	130				
Benzene	38.360	0.50	40.00	0	95.9	70	130				
Chlorobenzene	20.620	0.50	20.00	0	103	70	130				
Toluene	38.980	0.50	40.00	0	97.5	70	130				
Trichloroethene	19.390	0.50	20.00	0	97.0	70	130				
Surr: 1,2-Dichloroethane-d4	22.770		25.00		91.1	70	130				
Surr: 4-Bromofluorobenzene	25.970		25.00		104	70	130				
Surr: Dibromofluoromethane	22.690		25.00		90.8	70	130				
Surr: Toluene-d8	23.310		25.00		93.2	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110228MB2MSD** SampType: **MSD** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130438**
Client ID: **ZZZZZZ** Batch ID: **Q11VW016** TestNo: **EPA 8260B** Analysis Date: **2/28/2011** SeqNo: **2121428**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.360	0.50	20.00	0	96.8	70	130	16.96	13.2	20	
Benzene	39.030	0.50	40.00	0	97.6	70	130	38.36	1.73	20	
Chlorobenzene	20.660	0.50	20.00	0	103	70	130	20.62	0.194	20	
Toluene	40.120	0.50	40.00	0	100	70	130	38.98	2.88	20	
Trichloroethene	20.320	0.50	20.00	0	102	70	130	19.39	4.68	20	
Surr: 1,2-Dichloroethane-d4	22.480		25.00		89.9	70	130		0	0	
Surr: 4-Bromofluorobenzene	26.470		25.00		106	70	130		0	0	
Surr: Dibromofluoromethane	22.900		25.00		91.6	70	130		0	0	
Surr: Toluene-d8	23.580		25.00		94.3	70	130		0	0	

Sample ID: **Q110228MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130438**
Client ID: **PBW** Batch ID: **Q11VW016** TestNo: **EPA 8260B** Analysis Date: **2/28/2011** SeqNo: **2121429**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116569
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110228MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130438**
Client ID: **PBW** Batch ID: **Q11VW016** TestNo: **EPA 8260B** Analysis Date: **2/28/2011** SeqNo: **2121429**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,3-Dichloropropane	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
2,2-Dichloropropane	ND	0.50									
2-Chlorotoluene	ND	0.50									
4-Chlorotoluene	ND	0.50									
4-Isopropyltoluene	ND	0.50									
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dibromomethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethylbenzene	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Isopropylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	1.0									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116569
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110228MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130438**
Client ID: **PBW** Batch ID: **Q11VW016** TestNo: **EPA 8260B** Analysis Date: **2/28/2011** SeqNo: **2121429**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50									
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	23.780		25.00		95.1	70	130				
Surr: 4-Bromofluorobenzene	27.260		25.00		109	70	130				
Surr: Dibromofluoromethane	24.530		25.00		98.1	70	130				
Surr: Toluene-d8	23.880		25.00		95.5	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116569
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_Dioxane_W

Sample ID: **LCS-71077** SampType: **LCS** TestCode: **8270_Dioxan** Units: **µg/L** Prep Date: **2/28/2011** RunNo: **130443**
Client ID: **LCSW** Batch ID: **71077** TestNo: **EPA 8270C(M EPA 3510C** Analysis Date: **2/28/2011** SeqNo: **2121504**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	101.890	2.0	100.0	0	102	70	130				
Surr: 1,2-Dichlorobenzene-d4	53.480		100.0		53.5	46	97				
Surr: 2,4,6-Tribromophenol	76.970		100.0		77.0	59	124				
Surr: 2-Chlorophenol-d4	54.180		100.0		54.2	49	93				
Surr: 2-Fluorobiphenyl	63.090		100.0		63.1	57	107				
Surr: 2-Fluorophenol	33.360		100.0		33.4	27	60				
Surr: 4-Terphenyl-d14	75.770		100.0		75.8	69	132				
Surr: Nitrobenzene-d5	59.700		100.0		59.7	52	107				
Surr: Phenol-d5	23.080		100.0		23.1	15	50				

Sample ID: **MB-71077MS** SampType: **MS** TestCode: **8270_Dioxan** Units: **µg/L** Prep Date: **2/28/2011** RunNo: **130443**
Client ID: **ZZZZZZ** Batch ID: **71077** TestNo: **EPA 8270C(M EPA 3510C** Analysis Date: **2/28/2011** SeqNo: **2121505**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	106.160	2.0	100.0	0	106	70	130				
Surr: 1,2-Dichlorobenzene-d4	61.860		100.0		61.9	46	97				
Surr: 2,4,6-Tribromophenol	86.740		100.0		86.7	59	124				
Surr: 2-Chlorophenol-d4	60.920		100.0		60.9	49	93				
Surr: 2-Fluorobiphenyl	72.900		100.0		72.9	57	107				
Surr: 2-Fluorophenol	38.340		100.0		38.3	27	60				
Surr: 4-Terphenyl-d14	82.750		100.0		82.8	69	132				
Surr: Nitrobenzene-d5	66.200		100.0		66.2	52	107				
Surr: Phenol-d5	27.320		100.0		27.3	15	50				

Sample ID: **MB-71077MSD** SampType: **MSD** TestCode: **8270_Dioxan** Units: **µg/L** Prep Date: **2/28/2011** RunNo: **130443**
Client ID: **ZZZZZZ** Batch ID: **71077** TestNo: **EPA 8270C(M EPA 3510C** Analysis Date: **2/28/2011** SeqNo: **2121506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	102.150	2.0	100.0	0	102	70	130	106.2	3.85	20	
Surr: 1,2-Dichlorobenzene-d4	51.250		100.0		51.3	46	97		0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116569
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_Dioxane_W

Sample ID: **MB-71077MSD**	SampType: **MSD**	TestCode: **8270_Dioxan**	Units: **µg/L**	Prep Date: **2/28/2011**	RunNo: **130443**
Client ID: **ZZZZZZ**	Batch ID: **71077**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **2/28/2011**	SeqNo: **2121506**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	76.120		100.0		76.1	59	124		0	0	
Surr: 2-Chlorophenol-d4	50.450		100.0		50.4	49	93		0	0	
Surr: 2-Fluorobiphenyl	63.930		100.0		63.9	57	107		0	0	
Surr: 2-Fluorophenol	34.170		100.0		34.2	27	60		0	0	
Surr: 4-Terphenyl-d14	79.090		100.0		79.1	69	132		0	0	
Surr: Nitrobenzene-d5	55.610		100.0		55.6	52	107		0	0	
Surr: Phenol-d5	24.010		100.0		24.0	15	50		0	0	

Sample ID: **MB-71077**	SampType: **MBLK**	TestCode: **8270_Dioxan**	Units: **µg/L**	Prep Date: **2/28/2011**	RunNo: **130443**
Client ID: **PBW**	Batch ID: **71077**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **2/28/2011**	SeqNo: **2121591**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	2.0									
Surr: 1,2-Dichlorobenzene-d4	65.170		100.0		65.2	46	97				
Surr: 2,4,6-Tribromophenol	77.000		100.0		77.0	59	124				
Surr: 2-Chlorophenol-d4	64.370		100.0		64.4	49	93				
Surr: 2-Fluorobiphenyl	72.510		100.0		72.5	57	107				
Surr: 2-Fluorophenol	40.090		100.0		40.1	27	60				
Surr: 4-Terphenyl-d14	81.350		100.0		81.4	69	132				
Surr: Nitrobenzene-d5	65.440		100.0		65.4	52	107				
Surr: Phenol-d5	27.900		100.0		27.9	15	50				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116569
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_Dioxane_W

Sample ID: **MB-71234**	SampType: **MBLK**	TestCode: **8270_Dioxan**	Units: **µg/L**	Prep Date: **3/4/2011**	RunNo: **130748**
Client ID: **PBW**	Batch ID: **71234**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/7/2011**	SeqNo: **2127628**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	2.0									
Surr: 1,2-Dichlorobenzene-d4	43.460		50.00		86.9	46	97				
Surr: 2,4,6-Tribromophenol	53.670		50.00		107	59	124				
Surr: 2-Chlorophenol-d4	37.860		50.00		75.7	49	93				
Surr: 2-Fluorobiphenyl	48.580		50.00		97.2	57	107				
Surr: 2-Fluorophenol	22.990		50.00		46.0	27	60				
Surr: 4-Terphenyl-d14	63.430		50.00		127	69	132				
Surr: Nitrobenzene-d5	43.090		50.00		86.2	52	107				
Surr: Phenol-d5	16.130		50.00		32.3	15	50				

Sample ID: **LCS-71234**	SampType: **LCS**	TestCode: **8270_Dioxan**	Units: **µg/L**	Prep Date: **3/4/2011**	RunNo: **130748**
Client ID: **LCSW**	Batch ID: **71234**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/7/2011**	SeqNo: **2127629**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	101.680	2.0	100.0	0	102	70	130				
Surr: 1,2-Dichlorobenzene-d4	60.520		100.0		60.5	46	97				
Surr: 2,4,6-Tribromophenol	86.170		100.0		86.2	59	124				
Surr: 2-Chlorophenol-d4	55.820		100.0		55.8	49	93				
Surr: 2-Fluorobiphenyl	79.440		100.0		79.4	57	107				
Surr: 2-Fluorophenol	32.100		100.0		32.1	27	60				
Surr: 4-Terphenyl-d14	91.680		100.0		91.7	69	132				
Surr: Nitrobenzene-d5	73.170		100.0		73.2	52	107				
Surr: Phenol-d5	24.550		100.0		24.6	15	50				

Sample ID: **116634-001DMS**	SampType: **MS**	TestCode: **8270_Dioxan**	Units: **µg/L**	Prep Date: **3/4/2011**	RunNo: **130748**
Client ID: **ZZZZZZ**	Batch ID: **71234**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/7/2011**	SeqNo: **2127630**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	100.330	2.0	100.0	0	100	70	130				
Surr: 1,2-Dichlorobenzene-d4	71.290		100.0		71.3	46	97				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116569
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_Dioxane_W

Sample ID: **116634-001DMS**	SampType: **MS**	TestCode: **8270_Dioxan**	Units: **µg/L**	Prep Date: **3/4/2011**	RunNo: **130748**
Client ID: **ZZZZZZ**	Batch ID: **71234**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/7/2011**	SeqNo: **2127630**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol	84.220		100.0		84.2	59	124				
Surr: 2-Chlorophenol-d4	63.240		100.0		63.2	49	93				
Surr: 2-Fluorobiphenyl	84.880		100.0		84.9	57	107				
Surr: 2-Fluorophenol	37.460		100.0		37.5	27	60				
Surr: 4-Terphenyl-d14	91.770		100.0		91.8	69	132				
Surr: Nitrobenzene-d5	82.000		100.0		82.0	52	107				
Surr: Phenol-d5	27.140		100.0		27.1	15	50				

Sample ID: **116634-001DMSD**	SampType: **MSD**	TestCode: **8270_Dioxan**	Units: **µg/L**	Prep Date: **3/4/2011**	RunNo: **130748**
Client ID: **ZZZZZZ**	Batch ID: **71234**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/7/2011**	SeqNo: **2127631**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	101.140	2.0	100.0	0	101	70	130	100.3	0.804	20	
Surr: 1,2-Dichlorobenzene-d4	71.830		100.0		71.8	46	97		0	0	
Surr: 2,4,6-Tribromophenol	84.890		100.0		84.9	59	124		0	0	
Surr: 2-Chlorophenol-d4	62.560		100.0		62.6	49	93		0	0	
Surr: 2-Fluorobiphenyl	84.350		100.0		84.4	57	107		0	0	
Surr: 2-Fluorophenol	37.090		100.0		37.1	27	60		0	0	
Surr: 4-Terphenyl-d14	93.430		100.0		93.4	69	132		0	0	
Surr: Nitrobenzene-d5	73.280		100.0		73.3	52	107		0	0	
Surr: Phenol-d5	26.740		100.0		26.7	15	50		0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 2-25-11 PAGE 1 OF 1

PROJECT NAME: Raytheon Main
PROJECT No./TASK No.: 532.03
PROJECT MANAGER: Steve Netto
Phone No.: 858 455-6500
QA MANAGER
Fax No.: 858 455-6533
SAMPLER (SIGNATURE): Amanda Beam
SAMPLER (PRINTED): Amanda Beam, Daniel Mora

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX: Soil	Ground-water	Surface water	LAB H2O	PRESERVATION: HCl	HNO 3	NaOH	H2SO 4	Ice	SAMPLE CONTAINERS: 40ml VOAs	1L Amber	ANALYSIS REQUESTED: 8260B VOCs	8270 HOD 1,4-Dioxane	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1000	1000-10000	>10000	SPECIAL HANDLING: 24 HR TAT	Standard TAT	LABORATORY INFORMATION / REMARKS
	TB-022511	2-25-11	800				X	X				X	2		X		X						X	
	MW-34C		1103		X			X				X	3		X		X					X	X	
	↓		↓		X							X		1		X						X	DUP	24HR
	MW-3400C		1130		X			X				X	3		X		X					~~X~~	~~X~~	Standard TAT
	↓		↓		X							X		1		X						X		
	MW-34A		1152		X			X				X	3		X		X					X	X	
	↓		↓		X							X		1		X						X	DUP	24HR
	MW-3400A		1222		X			X				X	3		X			X					X	
	↓		↓		X							X		1		X						X		
	MW-34B		1238		X			X				X	3		X		X					X	X	
	↓		↓		X							X		1		X						X	DUP	24HR
	MW-3400B		1258		X			X				X	3		X		X						X	
	↓		↓		X							X		1		X						X		
													20	6										

Total number of Containers per analysis:

LABORATORY INFORMATION: ATL: ATTN RACHELLE ARADA

Total No. of Containers:

Relinquished by:	Date	Time	Received by:	Date	Time
	2/25/11	1615			
Company: H+A			Company:		
Relinquished by:	Date	Time	Received by:	Date	Time
			Marge	2/25/11	1616
Company:			Company: ATL		

INSTRUCTIONS

1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness.
2. Complete in ballpoint pen. Draw one line through errors, initial and date correction.
3. Indicate number of sample containers in analysis request space; indicate choice with √ or x.
4. Note applicable preservatives, special instructions, and deviations from typical environmental samples.
5. Consult project QA documents for specific instructions.

Sample Receipt: 4.8

- ☐ No. of containers correct
- ☐ custody seals secure
- ☐ received good condition/cold
- ☐ conforms to COC document

Shipment Method: DROP OFF
Send Results to: S. NETTO

- ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500
- ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124 MESA, AZ 85204 (480) 345-0888
- ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300

Send invoice to San Diego, CA
Attn: Accounts Payable

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

March 14, 2011

Steve Netto
Hargis & Associates, Inc.
9171 Town Centre Drive, Suite 375
San Diego, CA 92122
TEL: (619) 249-3166
FAX: cell

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 116795

RE: Raytheon Main, 532.03

Attention: Steve Netto

Enclosed are the results for sample(s) received on March 10, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

CLIENT: Hargis & Associates, Inc.
Project: Raytheon Main, 532.03
Lab Order: 116795

CASE NARRATIVE

Sample Receiving / General Comments

Sample collection time for MW34-C was taken from container label.

Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	TB-03102011A
Lab Order:	116795	**Collection Date:**	3/10/2011 8:00:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	LAB WATER
Lab ID:	116795-001A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110311A QC Batch: Q11VW026 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,1-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Benzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Bromobenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Bromoform	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Bromomethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Chlorobenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Chloroethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Chloroform	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Chloromethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	TB-03102011A
Lab Order:	116795	**Collection Date:**	3/10/2011 8:00:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	LAB WATER
Lab ID:	116795-001A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110311A QC Batch: Q11VW026 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Dibromomethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Ethylbenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
m,p-Xylene	ND	1.0		µg/L	1	3/11/2011 02:42 PM
Methylene chloride	ND	1.0		µg/L	1	3/11/2011 02:42 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Naphthalene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
o-Xylene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Styrene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Toluene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Trichloroethene	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Vinyl chloride	ND	0.50		µg/L	1	3/11/2011 02:42 PM
Surr: 1,2-Dichloroethane-d4	87.9	70-130		%REC	1	3/11/2011 02:42 PM
Surr: 4-Bromofluorobenzene	97.4	70-130		%REC	1	3/11/2011 02:42 PM
Surr: Dibromofluoromethane	86.7	70-130		%REC	1	3/11/2011 02:42 PM
Surr: Toluene-d8	83.2	70-130		%REC	1	3/11/2011 02:42 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34C
Lab Order:	116795	**Collection Date:**	3/10/2011 9:15:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-002A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110311A QC Batch: Q11VW026 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,1-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Benzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Bromobenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Bromoform	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Bromomethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Chlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Chloroethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Chloroform	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Chloromethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 03:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34C
Lab Order:	116795	**Collection Date:**	3/10/2011 9:15:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-002A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS2_110311A	QC Batch: Q11VW026			PrepDate:		Analyst: **SLL**
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Dibromomethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Ethylbenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
m,p-Xylene	ND	1.0		µg/L	1	3/11/2011 03:02 PM
Methylene chloride	ND	1.0		µg/L	1	3/11/2011 03:02 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Naphthalene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
o-Xylene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Styrene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Toluene	9.0	0.50		µg/L	1	3/11/2011 03:02 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Trichloroethene	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Vinyl chloride	ND	0.50		µg/L	1	3/11/2011 03:02 PM
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%REC	1	3/11/2011 03:02 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%REC	1	3/11/2011 03:02 PM
Surr: Dibromofluoromethane	87.2	70-130		%REC	1	3/11/2011 03:02 PM
Surr: Toluene-d8	84.8	70-130		%REC	1	3/11/2011 03:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34C
Lab Order:	116795	**Collection Date:**	3/10/2011 9:15:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-002B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS-SIM: ISOTOPE DILUTION						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS6_110310A	QC Batch: 71449			PrepDate: 3/10/2011	Analyst: **JSD**	
1,4-Dioxane	ND	0.20		µg/L	1	3/11/2011 06:49 AM
Surr: 1,2-Dichlorobenzene-d4	68.8	58-99		%REC	1	3/11/2011 06:49 AM
Surr: 2-Fluorobiphenyl	71.3	60-104		%REC	1	3/11/2011 06:49 AM
Surr: 4-Terphenyl-d14	78.3	65-127		%REC	1	3/11/2011 06:49 AM
Surr: Nitrobenzene-d5	81.9	50-136		%REC	1	3/11/2011 06:49 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34A
Lab Order:	116795	**Collection Date:**	3/10/2011 9:40:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-003A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110311A QC Batch: Q11VW026 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,1-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Benzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Bromobenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Bromoform	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Bromomethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Chlorobenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Chloroethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Chloroform	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Chloromethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 03:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34A
Lab Order:	116795	**Collection Date:**	3/10/2011 9:40:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-003A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS2_110311A	QC Batch: Q11VW026			PrepDate:		Analyst: **SLL**
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Dibromomethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Ethylbenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
m,p-Xylene	ND	1.0		µg/L	1	3/11/2011 03:22 PM
Methylene chloride	ND	1.0		µg/L	1	3/11/2011 03:22 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Naphthalene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
o-Xylene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Styrene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Toluene	1.4	0.50		µg/L	1	3/11/2011 03:22 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Trichloroethene	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Trichlorofluoromethane	1.4	0.50		µg/L	1	3/11/2011 03:22 PM
Vinyl chloride	ND	0.50		µg/L	1	3/11/2011 03:22 PM
Surr: 1,2-Dichloroethane-d4	89.6	70-130		%REC	1	3/11/2011 03:22 PM
Surr: 4-Bromofluorobenzene	99.0	70-130		%REC	1	3/11/2011 03:22 PM
Surr: Dibromofluoromethane	88.4	70-130		%REC	1	3/11/2011 03:22 PM
Surr: Toluene-d8	85.2	70-130		%REC	1	3/11/2011 03:22 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34A
Lab Order:	116795	**Collection Date:**	3/10/2011 9:40:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-003B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS-SIM: ISOTOPE DILUTION						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS6_110310A	QC Batch: 71449			PrepDate: 3/10/2011	Analyst: **JSD**	
1,4-Dioxane	ND	0.20		µg/L	1	3/11/2011 07:16 AM
Surr: 1,2-Dichlorobenzene-d4	67.8	58-99		%REC	1	3/11/2011 07:16 AM
Surr: 2-Fluorobiphenyl	71.8	60-104		%REC	1	3/11/2011 07:16 AM
Surr: 4-Terphenyl-d14	90.7	65-127		%REC	1	3/11/2011 07:16 AM
Surr: Nitrobenzene-d5	82.7	50-136		%REC	1	3/11/2011 07:16 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B
Lab Order:	116795	**Collection Date:**	3/10/2011 10:35:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-004A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110310A QC Batch: Q11VW025 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,1-Dichloroethene	20	0.50		µg/L	1	3/10/2011 03:45 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Benzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Bromobenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Bromoform	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Bromomethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Chlorobenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Chloroethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Chloroform	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Chloromethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/10/2011 03:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B
Lab Order:	116795	**Collection Date:**	3/10/2011 10:35:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-004A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
		EPA 8260B				
RunID: MS2_110310A	QC Batch: Q11VW025			PrepDate:		Analyst: **SLL**
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Dibromomethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Ethylbenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
m,p-Xylene	ND	1.0		µg/L	1	3/10/2011 03:45 PM
Methylene chloride	ND	1.0		µg/L	1	3/10/2011 03:45 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Naphthalene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
o-Xylene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Styrene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Toluene	2.6	0.50		µg/L	1	3/10/2011 03:45 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Trichloroethene	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Vinyl chloride	ND	0.50		µg/L	1	3/10/2011 03:45 PM
Surr: 1,2-Dichloroethane-d4	87.1	70-130		%REC	1	3/10/2011 03:45 PM
Surr: 4-Bromofluorobenzene	98.4	70-130		%REC	1	3/10/2011 03:45 PM
Surr: Dibromofluoromethane	84.8	70-130		%REC	1	3/10/2011 03:45 PM
Surr: Toluene-d8	86.3	70-130		%REC	1	3/10/2011 03:45 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B
Lab Order:	116795	**Collection Date:**	3/10/2011 10:35:00 AM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-004B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS-SIM: ISOTOPE DILUTION						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS6_110310A	QC Batch: 71449			PrepDate: 3/10/2011	Analyst: **JSD**	
1,4-Dioxane	4.1	0.20		µg/L	1	3/11/2011 07:43 AM
Surr: 1,2-Dichlorobenzene-d4	76.7	58-99		%REC	1	3/11/2011 07:43 AM
Surr: 2-Fluorobiphenyl	80.9	60-104		%REC	1	3/11/2011 07:43 AM
Surr: 4-Terphenyl-d14	86.7	65-127		%REC	1	3/11/2011 07:43 AM
Surr: Nitrobenzene-d5	93.1	50-136		%REC	1	3/11/2011 07:43 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400B
Lab Order:	116795	**Collection Date:**	3/10/2011 12:00:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-005A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110311A QC Batch: Q11VW026 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,1-Dichloroethene	25	0.50		µg/L	1	3/11/2011 04:02 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Benzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Bromobenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Bromoform	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Bromomethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Chlorobenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Chloroethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Chloroform	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Chloromethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 04:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400B
Lab Order:	116795	**Collection Date:**	3/10/2011 12:00:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-005A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110311A QC Batch: Q11VW026 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Dibromomethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Ethylbenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
m,p-Xylene	ND	1.0		µg/L	1	3/11/2011 04:02 PM
Methylene chloride	ND	1.0		µg/L	1	3/11/2011 04:02 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Naphthalene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
o-Xylene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Styrene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Toluene	2.7	0.50		µg/L	1	3/11/2011 04:02 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Trichloroethene	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Vinyl chloride	ND	0.50		µg/L	1	3/11/2011 04:02 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	3/11/2011 04:02 PM
Surr: 4-Bromofluorobenzene	105	70-130		%REC	1	3/11/2011 04:02 PM
Surr: Dibromofluoromethane	93.7	70-130		%REC	1	3/11/2011 04:02 PM
Surr: Toluene-d8	90.2	70-130		%REC	1	3/11/2011 04:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-3400B
Lab Order:	116795	**Collection Date:**	3/10/2011 12:00:00 PM
Project:	Raytheon Main, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116795-005B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS-SIM: ISOTOPE DILUTION						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS6_110310A	QC Batch: 71449			PrepDate: 3/10/2011		Analyst: **JSD**
1,4-Dioxane	4.3	0.20		µg/L	1	3/11/2011 02:30 PM
Surr: 1,2-Dichlorobenzene-d4	76.2	58-99		%REC	1	3/11/2011 02:30 PM
Surr: 2-Fluorobiphenyl	81.2	60-104		%REC	1	3/11/2011 02:30 PM
Surr: 4-Terphenyl-d14	84.3	65-127		%REC	1	3/11/2011 02:30 PM
Surr: Nitrobenzene-d5	92.2	50-136		%REC	1	3/11/2011 02:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110310LCS1** SampType: **LCS** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130926**
Client ID: **LCSW** Batch ID: **Q11VW025** TestNo: **EPA 8260B** Analysis Date: **3/10/2011** SeqNo: **2131090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.270	0.50	20.00	0	91.4	70	130				
Benzene	39.100	0.50	40.00	0	97.8	70	130				
Chlorobenzene	20.320	0.50	20.00	0	102	70	130				
MTBE	21.720	0.50	20.00	0	109	70	130				
Toluene	39.970	0.50	40.00	0	99.9	70	130				
Trichloroethene	19.620	0.50	20.00	0	98.1	70	130				
Surr: 1,2-Dichloroethane-d4	21.020		25.00		84.1	70	130				
Surr: 4-Bromofluorobenzene	25.630		25.00		103	70	130				
Surr: Dibromofluoromethane	21.640		25.00		86.6	70	130				
Surr: Toluene-d8	22.590		25.00		90.4	70	130				

Sample ID: **Q110310MB2MS** SampType: **MS** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130926**
Client ID: **ZZZZZZ** Batch ID: **Q11VW025** TestNo: **EPA 8260B** Analysis Date: **3/10/2011** SeqNo: **2131091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.400	0.50	20.00	0	87.0	70	130				
Benzene	39.090	0.50	40.00	0	97.7	70	130				
Chlorobenzene	20.450	0.50	20.00	0	102	70	130				
Toluene	39.780	0.50	40.00	0	99.4	70	130				
Trichloroethene	19.110	0.50	20.00	0	95.6	70	130				
Surr: 1,2-Dichloroethane-d4	20.860		25.00		83.4	70	130				
Surr: 4-Bromofluorobenzene	25.420		25.00		102	70	130				
Surr: Dibromofluoromethane	21.240		25.00		85.0	70	130				
Surr: Toluene-d8	22.110		25.00		88.4	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110310MB2MSD** SampType: **MSD** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130926**
Client ID: **ZZZZZZ** Batch ID: **Q11VW025** TestNo: **EPA 8260B** Analysis Date: **3/10/2011** SeqNo: **2131092**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.450	0.50	20.00	0	87.2	70	130	17.40	0.287	20	
Benzene	38.740	0.50	40.00	0	96.9	70	130	39.09	0.899	20	
Chlorobenzene	20.270	0.50	20.00	0	101	70	130	20.45	0.884	20	
Toluene	39.670	0.50	40.00	0	99.2	70	130	39.78	0.277	20	
Trichloroethene	19.560	0.50	20.00	0	97.8	70	130	19.11	2.33	20	
Surr: 1,2-Dichloroethane-d4	21.080		25.00		84.3	70	130		0	0	
Surr: 4-Bromofluorobenzene	25.000		25.00		100	70	130		0	0	
Surr: Dibromofluoromethane	21.270		25.00		85.1	70	130		0	0	
Surr: Toluene-d8	22.050		25.00		88.2	70	130		0	0	

Sample ID: **Q110310MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130926**
Client ID: **PBW** Batch ID: **Q11VW025** TestNo: **EPA 8260B** Analysis Date: **3/10/2011** SeqNo: **2131093**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110310MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130926**
Client ID: **PBW** Batch ID: **Q11VW025** TestNo: **EPA 8260B** Analysis Date: **3/10/2011** SeqNo: **2131093**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,3-Dichloropropane	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
2,2-Dichloropropane	ND	0.50									
2-Chlorotoluene	ND	0.50									
4-Chlorotoluene	ND	0.50									
4-Isopropyltoluene	ND	0.50									
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dibromomethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethylbenzene	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Isopropylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	1.0									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110310MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130926**
Client ID: **PBW** Batch ID: **Q11VW025** TestNo: **EPA 8260B** Analysis Date: **3/10/2011** SeqNo: **2131093**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50									
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	20.730		25.00		82.9	70	130				
Surr: 4-Bromofluorobenzene	24.930		25.00		99.7	70	130				
Surr: Dibromofluoromethane	21.070		25.00		84.3	70	130				
Surr: Toluene-d8	21.570		25.00		86.3	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110311LCS1** SampType: **LCS** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130936**
Client ID: **LCSW** Batch ID: **Q11VW026** TestNo: **EPA 8260B** Analysis Date: **3/11/2011** SeqNo: **2131335**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.660	0.50	20.00	0	93.3	70	130				
Benzene	39.840	0.50	40.00	0	99.6	70	130				
Chlorobenzene	21.390	0.50	20.00	0	107	70	130				
MTBE	21.680	0.50	20.00	0	108	70	130				
Toluene	40.670	0.50	40.00	0	102	70	130				
Trichloroethene	20.310	0.50	20.00	0	102	70	130				
Surr: 1,2-Dichloroethane-d4	20.960		25.00		83.8	70	130				
Surr: 4-Bromofluorobenzene	25.080		25.00		100	70	130				
Surr: Dibromofluoromethane	21.230		25.00		84.9	70	130				
Surr: Toluene-d8	22.410		25.00		89.6	70	130				

Sample ID: **Q110311MB2MS** SampType: **MS** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130936**
Client ID: **ZZZZZZ** Batch ID: **Q11VW026** TestNo: **EPA 8260B** Analysis Date: **3/11/2011** SeqNo: **2131336**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.660	0.50	20.00	0	98.3	70	130				
Benzene	39.350	0.50	40.00	0	98.4	70	130				
Chlorobenzene	20.980	0.50	20.00	0	105	70	130				
Toluene	40.220	0.50	40.00	0	101	70	130				
Trichloroethene	20.330	0.50	20.00	0	102	70	130				
Surr: 1,2-Dichloroethane-d4	21.670		25.00		86.7	70	130				
Surr: 4-Bromofluorobenzene	24.790		25.00		99.2	70	130				
Surr: Dibromofluoromethane	21.390		25.00		85.6	70	130				
Surr: Toluene-d8	22.450		25.00		89.8	70	130				

Sample ID: **Q110311MB2MSD** SampType: **MSD** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130936**
Client ID: **ZZZZZZ** Batch ID: **Q11VW026** TestNo: **EPA 8260B** Analysis Date: **3/11/2011** SeqNo: **2131337**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.990	0.50	20.00	0	90.0	70	130	19.66	8.87	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110311MB2MSD** SampType: **MSD** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130936**
Client ID: **ZZZZZZ** Batch ID: **Q11VW026** TestNo: **EPA 8260B** Analysis Date: **3/11/2011** SeqNo: **2131337**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	37.820	0.50	40.00	0	94.6	70	130	39.35	3.97	20	
Chlorobenzene	20.520	0.50	20.00	0	103	70	130	20.98	2.22	20	
Toluene	38.580	0.50	40.00	0	96.5	70	130	40.22	4.16	20	
Trichloroethene	19.470	0.50	20.00	0	97.4	70	130	20.33	4.32	20	
Surr: 1,2-Dichloroethane-d4	20.990		25.00		84.0	70	130		0	0	
Surr: 4-Bromofluorobenzene	25.150		25.00		101	70	130		0	0	
Surr: Dibromofluoromethane	21.290		25.00		85.2	70	130		0	0	
Surr: Toluene-d8	22.300		25.00		89.2	70	130		0	0	

Sample ID: **Q110311MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130936**
Client ID: **PBW** Batch ID: **Q11VW026** TestNo: **EPA 8260B** Analysis Date: **3/11/2011** SeqNo: **2131338**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3,5-Trimethylbenzene	ND	0.50									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110311MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130936**
Client ID: **PBW** Batch ID: **Q11VW026** TestNo: **EPA 8260B** Analysis Date: **3/11/2011** SeqNo: **2131338**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	ND	0.50									
1,3-Dichloropropane	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
2,2-Dichloropropane	ND	0.50									
2-Chlorotoluene	ND	0.50									
4-Chlorotoluene	ND	0.50									
4-Isopropyltoluene	ND	0.50									
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dibromomethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethylbenzene	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Isopropylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	1.0									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									
Naphthalene	ND	0.50									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110311MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **130936**
Client ID: **PBW** Batch ID: **Q11VW026** TestNo: **EPA 8260B** Analysis Date: **3/11/2011** SeqNo: **2131338**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	22.910		25.00		91.6	70	130				
Surr: 4-Bromofluorobenzene	26.090		25.00		104	70	130				
Surr: Dibromofluoromethane	22.810		25.00		91.2	70	130				
Surr: Toluene-d8	22.880		25.00		91.5	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_W_SIMDIOX

Sample ID: **MB-71449**	SampType: **MBLK**	TestCode: **8270_W_SIM**	Units: **µg/L**	Prep Date: **3/10/2011**	RunNo: **130947**
Client ID: **PBW**	Batch ID: **71449**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/11/2011**	SeqNo: **2131542**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	0.20									
Surr: 1,2-Dichlorobenzene-d4	0.656		1.000		65.6	58	99				
Surr: 2-Fluorobiphenyl	0.719		1.000		71.9	60	104				
Surr: 4-Terphenyl-d14	0.825		1.000		82.5	65	127				
Surr: Nitrobenzene-d5	0.836		1.000		83.6	50	136				

Sample ID: **LCS-71449**	SampType: **LCS**	TestCode: **8270_W_SIM**	Units: **µg/L**	Prep Date: **3/10/2011**	RunNo: **130947**
Client ID: **LCSW**	Batch ID: **71449**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/11/2011**	SeqNo: **2131543**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.965	0.20	1.000	0.04961	91.6	70	130				
Surr: 1,2-Dichlorobenzene-d4	0.690		1.000		69.0	58	99				
Surr: 2-Fluorobiphenyl	0.760		1.000		76.0	60	104				
Surr: 4-Terphenyl-d14	0.830		1.000		83.0	65	127				
Surr: Nitrobenzene-d5	0.865		1.000		86.5	50	136				

Sample ID: **MB-71449MS**	SampType: **MS**	TestCode: **8270_W_SIM**	Units: **µg/L**	Prep Date: **3/10/2011**	RunNo: **130947**
Client ID: **ZZZZZZ**	Batch ID: **71449**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/11/2011**	SeqNo: **2131544**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.988	0.20	1.000	0.04961	93.8	70	130				
Surr: 1,2-Dichlorobenzene-d4	0.700		1.000		70.0	58	99				
Surr: 2-Fluorobiphenyl	0.771		1.000		77.1	60	104				
Surr: 4-Terphenyl-d14	0.827		1.000		82.7	65	127				
Surr: Nitrobenzene-d5	0.879		1.000		87.9	50	136				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116795
Project: Raytheon Main, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_W_SIMDIOX

Sample ID: **MB-71449MSD** SampType: **MSD** TestCode: **8270_W_SIM** Units: **µg/L** Prep Date: **3/10/2011** RunNo: **130947**
Client ID: **ZZZZZZ** Batch ID: **71449** TestNo: **EPA 8270C(M EPA 3510C** Analysis Date: **3/11/2011** SeqNo: **2131545**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.956	0.20	1.000	0.04961	90.6	70	130	0.9880	3.33	30	
Surr: 1,2-Dichlorobenzene-d4	0.754		1.000		75.4	58	99		0	0	
Surr: 2-Fluorobiphenyl	0.829		1.000		82.9	60	104		0	0	
Surr: 4-Terphenyl-d14	0.812		1.000		81.2	65	127		0	0	
Surr: Nitrobenzene-d5	0.937		1.000		93.7	50	136		0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 3/10/11 PAGE 1 OF 1

PROJECT NAME: Raytheon Main
PROJECT No./TASK No.: 532.03
PROJECT MANAGER: Chris Ross
Phone No.: 858-455-6500
QA MANAGER: Steve Netto
Fax No.: 858-455-6533
SAMPLER (SIGNATURE):
SAMPLER (PRINTED): ERIN HUNTER, KENNETH SIMON

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	MATRIX: Soil	MATRIX: Groundwater	MATRIX: Surface water	MATRIX: Lab H_2O	PRESERVATION: HCl	PRESERVATION: HNO_3	PRESERVATION: NaOH	PRESERVATION: H_2SO_4	PRESERVATION: Ice	SAMPLE CONTAINERS: 40 mL VOA	SAMPLE CONTAINERS: 1 L Amber	ANALYSIS REQUESTED: EPA method 8260B VOCs	ANALYSIS REQUESTED: EPA method 8270 SIM 1,4-dioxane	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1000	>1,000	SPECIAL HANDLING: 24 HR TAT	SPECIAL HANDLING: Standard TAT (5 day TAT)	LABORATORY INFORMATION / REMARKS
	TB-03102011A	03/10/11	0800				X	X				X	2		X		X					X	ATL
	MW-34C				X			X				X	3		X		X					X	ATTN: RACHELLE ARADA
	↓		↓		X							X		1		X	X					X	
	MW-34A		0940		X			X				X	3		X		X					X	5 DAY TAT FINAL REPORT
	↓		↓		X							X		1		X	X					X	
	MW-34B		1035		X			X				X	3		X				X		X		24 HR TAT
	↓		↓		X							X		1		X	X		X		X		24 HR TAT
	MW-34DUP		1200 1045		X			X				X	3		X		X		X			X	
	↓	↓	↓		X							X		1		X	X		X			X	

Total number of Containers per analysis: 14

Total No. of Containers: 18

Relinquished by:	Date	Time	Received by:	Date	Time
Company	03 10 11	13 15	Company	3/10/11	1315
Relinquished by:	Date	Time	Received by:	Date	Time
Company	3/10/11	1349	Company	3/10/11	1349

INSTRUCTIONS

1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness.
2. Complete in ballpoint pen. Draw one line through errors, initial and date correction.
3. Indicate number of sample containers in analysis request space; indicate choice with √ or x.
4. Note applicable preservatives, special instructions, and deviations from typical environmental samples.
5. Consult project QA documents for specific instructions.

Sample Receipt:

☐ No. of containers correct ☐ received good condition/cold
☐ custody seals secure ☐ conforms to COC document

Shipment Method: courier
Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375
SAN DIEGO, CA 92122 (858) 455-6500

☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124
MESA, AZ 85204 (480) 345-0888

☐ 1820 EAST RIVER ROAD, SUITE 220
TUCSON, AZ 85718 (520) 881-7300

Send invoice to San Diego, CA
Attn: Accounts Payable

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

Rachelle Arada

From: Amanda Beam [ABeam@HARGIS.COM]
Sent: Monday, March 14, 2011 12:42 PM
To: Rachelle Arada
Subject: Re: Rush on MW-34A & MW-34C samples

Hi Rachelle,

Is it possible to get MW-3400 results today or tomorrow as well? Thanks for accommodating us.

Amanda

Sent from my HTC smartphone on the Now Network from Sprint!

----- Reply message -----
From: "Rachelle Arada" <rachelle@atlglobal.com>
Date: Mon, Mar 14, 2011 8:47 am
Subject: Rush on MW-34A & MW-34C samples
To: "Amanda Beam" <ABeam@HARGIS.COM>
Cc: "customer.relations" <customer.relations@atlglobal.com>

Hi Amanda,

I got your request. If all QC pass, we'll have results today.

Thanks,
Rachelle

-----Original Message-----
From: Amanda Beam [mailto:ABeam@HARGIS.COM]
Sent: Saturday, March 12, 2011 3:06 PM
To: Rachelle Arada
Subject: Rush on MW-34A & MW-34C samples
Importance: High

Hello Rachelle,

I'm sending this follow-up email in case you have not received the voice mail message I left shortly after 5 yesterday. If possible we would like to put a rush on the results for sample ID MW-34A and MW-34C that was turned in Thursday for 532.03. May we receive the results by Monday, or Tuesday if Monday is not possible? Please let us know when you get this request.

Thanks,
Amanda

March 18, 2011

Steve Netto
Hargis & Associates, Inc.
9171 Town Centre Drive, Suite 375
San Diego, CA 92122
TEL: (619) 249-3166
FAX: cell

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Workorder No.: 116856

RE: RAYTHEON MAIN, 532.03

Attention: Steve Netto

Enclosed are the results for sample(s) received on March 15, 2011 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

CLIENT: Hargis & Associates, Inc.
Project: RAYTHEON MAIN, 532.03
Lab Order: 116856

CASE NARRATIVE

Sample Receiving / General Comments

Sample MW-34B-1 labeled as MW-34-1, time of collection matched @ 0825.

Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	TB-03152011A
Lab Order:	116856	**Collection Date:**	3/15/2011 8:25:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	LAB H2O
Lab ID:	116856-001A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,1-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Benzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Bromobenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Bromoform	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Bromomethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Chlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Chloroethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Chloroform	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Chloromethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 03:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	TB-03152011A
Lab Order:	116856	**Collection Date:**	3/15/2011 8:25:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	LAB H2O
Lab ID:	116856-001A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Dibromomethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Ethylbenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
m,p-Xylene	ND	1.0		µg/L	1	3/15/2011 03:31 PM
Methylene chloride	ND	1.0		µg/L	1	3/15/2011 03:31 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Naphthalene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
o-Xylene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Styrene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Toluene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Trichloroethene	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Vinyl chloride	ND	0.50		µg/L	1	3/15/2011 03:31 PM
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	3/15/2011 03:31 PM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	3/15/2011 03:31 PM
Surr: Dibromofluoromethane	101	70-130		%REC	1	3/15/2011 03:31 PM
Surr: Toluene-d8	96.1	70-130		%REC	1	3/15/2011 03:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-1
Lab Order:	116856	**Collection Date:**	3/15/2011 8:25:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-002A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,1-Dichloroethene	28	0.50		µg/L	1	3/15/2011 02:12 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Benzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Bromobenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Bromoform	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Bromomethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Chlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Chloroethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Chloroform	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Chloromethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 02:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-1
Lab Order:	116856	**Collection Date:**	3/15/2011 8:25:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-002A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Dibromomethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Ethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
m,p-Xylene	ND	1.0		µg/L	1	3/15/2011 02:12 PM
Methylene chloride	ND	1.0		µg/L	1	3/15/2011 02:12 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Naphthalene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
o-Xylene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Styrene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Toluene	2.0	0.50		µg/L	1	3/15/2011 02:12 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Trichloroethene	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Vinyl chloride	ND	0.50		µg/L	1	3/15/2011 02:12 PM
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%REC	1	3/15/2011 02:12 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	3/15/2011 02:12 PM
Surr: Dibromofluoromethane	93.0	70-130		%REC	1	3/15/2011 02:12 PM
Surr: Toluene-d8	91.0	70-130		%REC	1	3/15/2011 02:12 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-1
Lab Order:	116856	**Collection Date:**	3/15/2011 8:25:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-002B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS-SIM: ISOTOPE DILUTION						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS6_110315A	QC Batch: 71547			PrepDate: 3/15/2011	Analyst: **JSD**	
1,4-Dioxane	4.9	0.40		µg/L	2	3/16/2011 08:57 AM
Surr: 1,2-Dichlorobenzene-d4	83.9	58-99		%REC	2	3/16/2011 08:57 AM
Surr: 2-Fluorobiphenyl	77.7	60-104		%REC	2	3/16/2011 08:57 AM
Surr: 4-Terphenyl-d14	88.6	65-127		%REC	2	3/16/2011 08:57 AM
Surr: Nitrobenzene-d5	89.6	50-136		%REC	2	3/16/2011 08:57 AM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-2
Lab Order:	116856	**Collection Date:**	3/15/2011 8:40:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-003A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,1-Dichloroethene	23	0.50		µg/L	1	3/15/2011 02:31 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Benzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Bromobenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Bromoform	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Bromomethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Chlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Chloroethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Chloroform	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Chloromethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 02:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-2
Lab Order:	116856	**Collection Date:**	3/15/2011 8:40:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-003A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Dibromomethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Ethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
m,p-Xylene	ND	1.0		µg/L	1	3/15/2011 02:31 PM
Methylene chloride	ND	1.0		µg/L	1	3/15/2011 02:31 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Naphthalene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
o-Xylene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Styrene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Toluene	1.4	0.50		µg/L	1	3/15/2011 02:31 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Trichloroethene	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Vinyl chloride	ND	0.50		µg/L	1	3/15/2011 02:31 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%REC	1	3/15/2011 02:31 PM
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	3/15/2011 02:31 PM
Surr: Dibromofluoromethane	93.9	70-130		%REC	1	3/15/2011 02:31 PM
Surr: Toluene-d8	92.6	70-130		%REC	1	3/15/2011 02:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-3
Lab Order:	116856	**Collection Date:**	3/15/2011 9:30:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-004A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,1-Dichloroethene	30	0.50		µg/L	1	3/15/2011 02:52 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Benzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Bromobenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Bromoform	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Bromomethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Chlorobenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Chloroethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Chloroform	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Chloromethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 02:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-3
Lab Order:	116856	**Collection Date:**	3/15/2011 9:30:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-004A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Dibromomethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Ethylbenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
m,p-Xylene	ND	1.0		µg/L	1	3/15/2011 02:52 PM
Methylene chloride	ND	1.0		µg/L	1	3/15/2011 02:52 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Naphthalene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
o-Xylene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Styrene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Toluene	0.60	0.50		µg/L	1	3/15/2011 02:52 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Trichloroethene	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Vinyl chloride	ND	0.50		µg/L	1	3/15/2011 02:52 PM
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%REC	1	3/15/2011 02:52 PM
Surr: 4-Bromofluorobenzene	100	70-130		%REC	1	3/15/2011 02:52 PM
Surr: Dibromofluoromethane	95.0	70-130		%REC	1	3/15/2011 02:52 PM
Surr: Toluene-d8	90.8	70-130		%REC	1	3/15/2011 02:52 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-4
Lab Order:	116856	**Collection Date:**	3/15/2011 10:20:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-005A		

VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS2_110315A QC Batch: Q11VW029 PrepDate: Analyst: **SLL**

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,1,1,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,1,1-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,1,2,2-Tetrachloroethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,1,2-Trichloroethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,1-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,1-Dichloroethene	31	0.50		µg/L	1	3/15/2011 03:11 PM
1,1-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2,3-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2,3-Trichloropropane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2,4-Trichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2,4-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2-Dibromo-3-chloropropane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2-Dibromoethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2-Dichloroethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,3,5-Trimethylbenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,3-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,3-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
1,4-Dichlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
2,2-Dichloropropane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
2-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
4-Chlorotoluene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
4-Isopropyltoluene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Benzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Bromobenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Bromodichloromethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Bromoform	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Bromomethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Carbon tetrachloride	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Chlorobenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Chloroethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Chloroform	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Chloromethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 03:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified
DO	Surrogate Diluted Out

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-4
Lab Order:	116856	**Collection Date:**	3/15/2011 10:20:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-005A		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
		EPA 8260B				
RunID: MS2_110315A	QC Batch: Q11VW029			PrepDate:		Analyst: **SLL**
cis-1,3-Dichloropropene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Dibromochloromethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Dibromomethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Dichlorodifluoromethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Ethylbenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Hexachlorobutadiene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Isopropylbenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
m,p-Xylene	ND	1.0		µg/L	1	3/15/2011 03:11 PM
Methylene chloride	ND	1.0		µg/L	1	3/15/2011 03:11 PM
n-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
n-Propylbenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Naphthalene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
o-Xylene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
sec-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Styrene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
tert-Butylbenzene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Tetrachloroethene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Toluene	0.57	0.50		µg/L	1	3/15/2011 03:11 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Trichloroethene	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Trichlorofluoromethane	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Vinyl chloride	ND	0.50		µg/L	1	3/15/2011 03:11 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%REC	1	3/15/2011 03:11 PM
Surr: 4-Bromofluorobenzene	103	70-130		%REC	1	3/15/2011 03:11 PM
Surr: Dibromofluoromethane	98.6	70-130		%REC	1	3/15/2011 03:11 PM
Surr: Toluene-d8	95.8	70-130		%REC	1	3/15/2011 03:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT:	Hargis & Associates, Inc.	**Client Sample ID:**	MW-34B-4
Lab Order:	116856	**Collection Date:**	3/15/2011 10:20:00 AM
Project:	RAYTHEON MAIN, 532.03	**Matrix:**	GROUNDWATER
Lab ID:	116856-005B		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-DIOXANE BY GC/MS-SIM: ISOTOPE DILUTION						
EPA 3510C				**EPA 8270C(M)**		
RunID: MS6_110315A	QC Batch: 71547			PrepDate: 3/15/2011	Analyst: **JSD**	
1,4-Dioxane	5.0	0.20		µg/L	1	3/15/2011 07:31 PM
Surr: 1,2-Dichlorobenzene-d4	80.2	58-99		%REC	1	3/15/2011 07:31 PM
Surr: 2-Fluorobiphenyl	80.1	60-104		%REC	1	3/15/2011 07:31 PM
Surr: 4-Terphenyl-d14	85.2	65-127		%REC	1	3/15/2011 07:31 PM
Surr: Nitrobenzene-d5	92.4	50-136		%REC	1	3/15/2011 07:31 PM

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out
E	Value above quantitation range
ND	Not Detected at the Reporting Limit
	Results are wet unless otherwise specified

CLIENT: Hargis & Associates, Inc.
Work Order: 116856
Project: RAYTHEON MAIN, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110315LCS1** SampType: **LCS** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **131074**
Client ID: **LCSW** Batch ID: **Q11VW029** TestNo: **EPA 8260B** Analysis Date: **3/15/2011** SeqNo: **2133751**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.820	0.50	20.00	0	99.1	70	130				
Benzene	41.540	0.50	40.00	0	104	70	130				
Chlorobenzene	22.240	0.50	20.00	0	111	70	130				
MTBE	22.540	0.50	20.00	0	113	70	130				
Toluene	42.290	0.50	40.00	0	106	70	130				
Trichloroethene	21.410	0.50	20.00	0	107	70	130				
Surr: 1,2-Dichloroethane-d4	20.460		25.00		81.8	70	130				
Surr: 4-Bromofluorobenzene	26.850		25.00		107	70	130				
Surr: Dibromofluoromethane	20.990		25.00		84.0	70	130				
Surr: Toluene-d8	22.200		25.00		88.8	70	130				

Sample ID: **Q110315MB2MS** SampType: **MS** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **131074**
Client ID: **ZZZZZZ** Batch ID: **Q11VW029** TestNo: **EPA 8260B** Analysis Date: **3/15/2011** SeqNo: **2133752**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.870	0.50	20.00	0	94.4	70	130				
Benzene	38.180	0.50	40.00	0	95.4	70	130				
Chlorobenzene	20.330	0.50	20.00	0	102	70	130				
Toluene	38.820	0.50	40.00	0	97.0	70	130				
Trichloroethene	19.600	0.50	20.00	0	98.0	70	130				
Surr: 1,2-Dichloroethane-d4	19.930		25.00		79.7	70	130				
Surr: 4-Bromofluorobenzene	25.560		25.00		102	70	130				
Surr: Dibromofluoromethane	20.670		25.00		82.7	70	130				
Surr: Toluene-d8	21.310		25.00		85.2	70	130				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits

Calculations are based on raw values

- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110315MB2MSD** SampType: **MSD** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **131074**
Client ID: **ZZZZZZ** Batch ID: **Q11VW029** TestNo: **EPA 8260B** Analysis Date: **3/15/2011** SeqNo: **2133753**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.660	0.50	20.00	0	98.3	70	130	18.87	4.10	20	
Benzene	40.050	0.50	40.00	0	100	70	130	38.18	4.78	20	
Chlorobenzene	21.550	0.50	20.00	0	108	70	130	20.33	5.83	20	
Toluene	40.950	0.50	40.00	0	102	70	130	38.82	5.34	20	
Trichloroethene	20.760	0.50	20.00	0	104	70	130	19.60	5.75	20	
Surr: 1,2-Dichloroethane-d4	20.180		25.00		80.7	70	130		0	0	
Surr: 4-Bromofluorobenzene	26.080		25.00		104	70	130		0	0	
Surr: Dibromofluoromethane	20.620		25.00		82.5	70	130		0	0	
Surr: Toluene-d8	22.030		25.00		88.1	70	130		0	0	

Sample ID: **Q110315MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **131074**
Client ID: **PBW** Batch ID: **Q11VW029** TestNo: **EPA 8260B** Analysis Date: **3/15/2011** SeqNo: **2133754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
1,1-Dichloropropene	ND	0.50									
1,2,3-Trichlorobenzene	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
1,2,4-Trichlorobenzene	ND	0.50									
1,2,4-Trimethylbenzene	ND	0.50									
1,2-Dibromo-3-chloropropane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,2-Dichloropropane	ND	0.50									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116856
Project: RAYTHEON MAIN, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110315MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **131074**
Client ID: **PBW** Batch ID: **Q11VW029** TestNo: **EPA 8260B** Analysis Date: **3/15/2011** SeqNo: **2133754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,3-Dichloropropane	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
2,2-Dichloropropane	ND	0.50									
2-Chlorotoluene	ND	0.50									
4-Chlorotoluene	ND	0.50									
4-Isopropyltoluene	ND	0.50									
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
Dibromochloromethane	ND	0.50									
Dibromomethane	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
Ethylbenzene	ND	0.50									
Hexachlorobutadiene	ND	0.50									
Isopropylbenzene	ND	0.50									
m,p-Xylene	ND	1.0									
Methylene chloride	ND	1.0									
n-Butylbenzene	ND	0.50									
n-Propylbenzene	ND	0.50									

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116856
Project: RAYTHEON MAIN, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_WP_LL

Sample ID: **Q110315MB2** SampType: **MBLK** TestCode: **8260_WP_LL** Units: **µg/L** Prep Date: RunNo: **131074**
Client ID: **PBW** Batch ID: **Q11VW029** TestNo: **EPA 8260B** Analysis Date: **3/15/2011** SeqNo: **2133754**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	0.50									
o-Xylene	ND	0.50									
sec-Butylbenzene	ND	0.50									
Styrene	ND	0.50									
tert-Butylbenzene	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	22.130		25.00		88.5	70	130				
Surr: 4-Bromofluorobenzene	26.850		25.00		107	70	130				
Surr: Dibromofluoromethane	21.930		25.00		87.7	70	130				
Surr: Toluene-d8	22.480		25.00		89.9	70	130				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116856
Project: RAYTHEON MAIN, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_W_SIMDIOX

Sample ID: **MB-71547**	SampType: **MBLK**	TestCode: **8270_W_SIM**	Units: **µg/L**	Prep Date: **3/15/2011**	RunNo: **131068**
Client ID: **PBW**	Batch ID: **71547**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/15/2011**	SeqNo: **2133664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	0.20									
Surr: 1,2-Dichlorobenzene-d4	0.809		1.000		80.9	58	99				
Surr: 2-Fluorobiphenyl	0.849		1.000		84.9	60	104				
Surr: 4-Terphenyl-d14	0.889		1.000		88.9	65	127				
Surr: Nitrobenzene-d5	0.969		1.000		96.9	50	136				

Sample ID: **LCS-71547**	SampType: **LCS**	TestCode: **8270_W_SIM**	Units: **µg/L**	Prep Date: **3/15/2011**	RunNo: **131068**
Client ID: **LCSW**	Batch ID: **71547**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/15/2011**	SeqNo: **2133665**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.961	0.20	1.000	0	96.1	70	130				
Surr: 1,2-Dichlorobenzene-d4	0.768		1.000		76.8	58	99				
Surr: 2-Fluorobiphenyl	0.780		1.000		78.0	60	104				
Surr: 4-Terphenyl-d14	0.832		1.000		83.2	65	127				
Surr: Nitrobenzene-d5	0.944		1.000		94.4	50	136				

Sample ID: **MB-71547MS**	SampType: **MS**	TestCode: **8270_W_SIM**	Units: **µg/L**	Prep Date: **3/15/2011**	RunNo: **131068**
Client ID: **ZZZZZZ**	Batch ID: **71547**	TestNo: **EPA 8270C(M**	**EPA 3510C**	Analysis Date: **3/15/2011**	SeqNo: **2133666**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.955	0.20	1.000	0	95.5	70	130				
Surr: 1,2-Dichlorobenzene-d4	0.776		1.000		77.6	58	99				
Surr: 2-Fluorobiphenyl	0.780		1.000		78.0	60	104				
Surr: 4-Terphenyl-d14	0.851		1.000		85.1	65	127				
Surr: Nitrobenzene-d5	0.941		1.000		94.1	50	136				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Hargis & Associates, Inc.
Work Order: 116856
Project: RAYTHEON MAIN, 532.03

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_W_SIMDIOX

Sample ID: **MB-71547MSD** SampType: **MSD** TestCode: **8270_W_SIM** Units: **µg/L** Prep Date: **3/15/2011** RunNo: **131068**
Client ID: **ZZZZZZ** Batch ID: **71547** TestNo: **EPA 8270C(M EPA 3510C** Analysis Date: **3/15/2011** SeqNo: **2133667**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dioxane	0.994	0.20	1.000	0	99.4	70	130	0.9550	3.98	30	
Surr: 1,2-Dichlorobenzene-d4	0.734		1.000		73.4	58	99		0	0	
Surr: 2-Fluorobiphenyl	0.779		1.000		77.9	60	104		0	0	
Surr: 4-Terphenyl-d14	0.854		1.000		85.4	65	127		0	0	
Surr: Nitrobenzene-d5	0.878		1.000		87.8	50	136		0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 3.15.11 PAGE 1 OF 1

PROJECT NAME: RAYTHEON MAIN	PROJECT No./TASK No.: 532.03
PROJECT MANAGER: CHRIS ROSS	Phone No.: 858-455-6500
QA MANAGER: STEVE NERO	Fax No.: " " -6533
SAMPLER (SIGNATURE):	SAMPLER (PRINTED): CHRIS PENKUHN, KEN SIMON

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX: Soil	Ground water	Surface water	LAB WATER	PRESERVATION: HCl	HNO 3	NaOH	H2SO 4	Ice	SAMPLE CONTAINERS: 40ML VOA	1L AMBER GLASS	ANALYSIS REQUESTED: EPA 8260B - VOC's	EPA 8270 SIM, 1,4-Dioxane	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-5	5-100	SPECIAL HANDLING: 24HR TAT	STANDARD TAT	HOLD	LABORATORY INFORMATION / REMARKS
	TB-031520114	3.15.11	08:25				X	X				X	3		X					X		
	MW-34B-1		0825		X			X				X	3		X					X		24 H. TAT
	"		"		X							X		1		X				X		24 H. TAT
	MW-34B-2		0840		X			X				X	3		X					X		24 H. TAT
	"		"		X							X		1		X					X	HOLD
	MW-34B-3		0930		X			X				X	3		X					X		24 H. TAT
	"		"		X							X		1		X					X	HOLD
	MW-34B-4		10:20		X			X				X	3		X					X		24 H. TAT
	"		"		X							X		1		X				X		24 H. TAT
Total number of Containers per analysis:													15	4						Total No. of Containers:		19

Relinquished by:	Date	Time	Company	Received by:	Date	Time	Company
	3.15.11	1130	H+A, INC		3/15/11	1130	ATL
	3/15/11	1227	ATL	FP DHL	3/15/11	1227	ATL

INSTRUCTIONS

1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness.
2. Complete in ballpoint pen. Draw one line through errors, initial and date correction.
3. Indicate number of sample containers in analysis request space; indicate choice with √ or x.
4. Note applicable preservatives, special instructions, and deviations from typical environmental samples.
5. Consult project QA documents for specific instructions.

Sample Receipt: 0.8°C

- ☐ No. of containers correct
- ☑ received good condition/cold
- ☐ custody seals secure
- ☐ conforms to COC document

Shipment Method: COURIER

Send Results to: STEVE NERO

- ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500
- ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124 MESA, AZ 85204 (480) 345-0888
- ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300

Send invoice to San Diego, CA
Attn: Accounts Payable

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

Exova
9240 Santa Fe Springs Road
Santa Fe Springs
California
USA
90670

T: +1 (562) 948-2225
F: +1 (562) 948-5850
E: info400@exova.com
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Certificate of Analysis

March 16, 2011

Hargis+Associates Inc
9171 Towne Centre Dr
Ste 375
San Diego, CA 92122

Attn: Steve Netto

Exova Job No: 129046
Purchase Order: 532.03
Project Name: Raytheon
Samples Received: Fifteen (15) Samples
Date Received: 02/25/2011

KC

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1,4-Dioxane by Modified EPA 8270	11

Michael Shelton
Technical Director

Patricia Metzger
Senior Chemist

EXOVA

Volatile Organics by EPA 624/8260B

Sample: TB-022511A

			Parts per Billion (µg/L)		
Compound	Result		Detection Limit	Blank Result	Detection Limit
Acetone	7	B	5	7	5
tert-Amyl Methyl Ether	ND		1	ND	1
Benzene	ND		1	ND	1
Bromodichloromethane	ND		1	ND	1
Bromoform	ND		1	ND	1
Bromomethane	ND		5	ND	5
2-Butanone (MEK)	ND		2	ND	2
tert-Butyl Alcohol	ND		5	ND	5
tert-Butyl Ethyl Ether	ND		1	ND	1
Carbon Disulfide	ND		1	ND	1
Carbon Tetrachloride	ND		1	ND	1
Chlorobenzene	ND		1	ND	1
Chloroethane	ND		1	ND	1
Chloroform	ND		1	ND	1
Chloromethane	ND		2	ND	2
2-Chlorotoluene	ND		1	ND	1
4-Chlorotoluene	ND		1	ND	1
Dibromochloromethane	ND		1	ND	1
1,2-Dichlorobenzene	ND		1	ND	1
1,3-Dichlorobenzene	ND		1	ND	1
1,4-Dichlorobenzene	ND		1	ND	1
1,1-Dichloroethane	ND		1	ND	1
1,2-Dichloroethane	ND		1	ND	1
1,1-Dichloroethylene	ND		1	ND	1
cis-1,2-Dichloroethylene	ND		1	ND	1
trans-1,2-Dichloroethylene	ND		1	ND	1
1,2-Dichloropropane	ND		1	ND	1
cis-1,3-Dichloropropene	ND		1	ND	1
trans-1,3-Dichloropropene	ND		1	ND	1
Diisopropyl Ether	ND		1	ND	1
Ethylbenzene	ND		1	ND	1
Ethylene Dibromide	ND		1	ND	1
Freon-TF	ND		1	ND	1
2-Hexanone	ND		1	ND	1
Methylene Chloride	ND		5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND		1	ND	1
Methyl t-Butyl Ether	ND		2	ND	2
Styrene	ND		1	ND	1

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Volatile Organics by EPA 624/8260B

Sample: TB-022511A (continued)

		Parts per Billion (µg/L)		
Compound	Result	Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	ND	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 03-11-11
Date analyzed: 03-11-11

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	103	100
1,2-Dichloroethane-d_4	82-121	107	103
Toluene-d_8	87-110	103	102
Bromofluorobenzene	76-113	103	102

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Volatile Organics by EPA 624/8260B

Sample: MW-34A

Compound	Result		Parts per Billion (µg/L) Detection Limit	Blank Result	Detection Limit
Acetone	6	B	5	7	5
tert-Amyl Methyl Ether	ND		1	ND	1
Benzene	ND		1	ND	1
Bromodichloromethane	ND		1	ND	1
Bromoform	ND		1	ND	1
Bromomethane	ND		5	ND	5
2-Butanone (MEK)	ND		2	ND	2
tert-Butyl Alcohol	ND		5	ND	5
tert-Butyl Ethyl Ether	ND		1	ND	1
Carbon Disulfide	ND		1	ND	1
Carbon Tetrachloride	ND		1	ND	1
Chlorobenzene	ND		1	ND	1
Chloroethane	ND		1	ND	1
Chloroform	ND		1	ND	1
Chloromethane	ND		2	ND	2
2-Chlorotoluene	ND		1	ND	1
4-Chlorotoluene	ND		1	ND	1
Dibromochloromethane	ND		1	ND	1
1,2-Dichlorobenzene	ND		1	ND	1
1,3-Dichlorobenzene	ND		1	ND	1
1,4-Dichlorobenzene	ND		1	ND	1
1,1-Dichloroethane	ND		1	ND	1
1,2-Dichloroethane	ND		1	ND	1
1,1-Dichloroethylene	ND		1	ND	1
cis-1,2-Dichloroethylene	ND		1	ND	1
trans-1,2-Dichloroethylene	ND		1	ND	1
1,2-Dichloropropane	ND		1	ND	1
cis-1,3-Dichloropropene	ND		1	ND	1
trans-1,3-Dichloropropene	ND		1	ND	1
Diisopropyl Ether	ND		1	ND	1
Ethylbenzene	ND		1	ND	1
Ethylene Dibromide	ND		1	ND	1
Freon-TF	ND		1	ND	1
2-Hexanone	ND		1	ND	1
Methylene Chloride	ND		5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND		1	ND	1
Methyl t-Butyl Ether	ND		2	ND	2
Styrene	ND		1	ND	1

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Volatile Organics by EPA 624/8260B

Sample: MW-34A (continued)

		Parts per Billion (µg/L)		
Compound	Result	Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	1	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 03-11-11
Date analyzed: 03-11-11

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	96	100
1,2-Dichloroethane-d_4	82-121	103	103
Toluene-d_8	87-110	100	102
Bromofluorobenzene	76-113	103	102

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Volatile Organics by EPA 624/8260B

Sample: MW-34B

Compound	Result		Parts per Billion (µg/L) Detection Limit	Blank Result	Detection Limit
Acetone	6	B	5	7	5
tert-Amyl Methyl Ether	ND		1	ND	1
Benzene	ND		1	ND	1
Bromodichloromethane	ND		1	ND	1
Bromoform	ND		1	ND	1
Bromomethane	ND		5	ND	5
2-Butanone (MEK)	ND		2	ND	2
tert-Butyl Alcohol	ND		5	ND	5
tert-Butyl Ethyl Ether	ND		1	ND	1
Carbon Disulfide	ND		1	ND	1
Carbon Tetrachloride	ND		1	ND	1
Chlorobenzene	ND		1	ND	1
Chloroethane	ND		1	ND	1
Chloroform	ND		1	ND	1
Chloromethane	ND		2	ND	2
2-Chlorotoluene	ND		1	ND	1
4-Chlorotoluene	ND		1	ND	1
Dibromochloromethane	ND		1	ND	1
1,2-Dichlorobenzene	ND		1	ND	1
1,3-Dichlorobenzene	ND		1	ND	1
1,4-Dichlorobenzene	ND		1	ND	1
1,1-Dichloroethane	4		1	ND	1
1,2-Dichloroethane	ND		1	ND	1
1,1-Dichloroethylene	590		1	ND	1
cis-1,2-Dichloroethylene	ND		1	ND	1
trans-1,2-Dichloroethylene	ND		1	ND	1
1,2-Dichloropropane	ND		1	ND	1
cis-1,3-Dichloropropene	ND		1	ND	1
trans-1,3-Dichloropropene	ND		1	ND	1
Diisopropyl Ether	ND		1	ND	1
Ethylbenzene	ND		1	ND	1
Ethylene Dibromide	ND		1	ND	1
Freon-TF	ND		1	ND	1
2-Hexanone	ND		1	ND	1
Methylene Chloride	ND		5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND		1	ND	1
Methyl t-Butyl Ether	ND		2	ND	2
Styrene	ND		1	ND	1

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Volatile Organics by EPA 624/8260B

Sample: MW-34B (continued)

Compound	Result	Parts per Billion (µg/L) Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	ND	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	1	1	ND	1
Trichloroethylene	1	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 03-11-11
Date analyzed: 03-11-11

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	99	100
1,2-Dichloroethane-d_4	82-121	107	103
Toluene-d_8	87-110	101	102
Bromofluorobenzene	76-113	104	102

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Volatile Organics by EPA 624/8260B

Sample: MW-34C

Compound	Result		Parts per Billion (µg/L) Detection Limit	Blank Result	Detection Limit
Acetone	7	B	5	7	5
tert-Amyl Methyl Ether	ND		1	ND	1
Benzene	ND		1	ND	1
Bromodichloromethane	ND		1	ND	1
Bromoform	ND		1	ND	1
Bromomethane	ND		5	ND	5
2-Butanone (MEK)	ND		2	ND	2
tert-Butyl Alcohol	ND		5	ND	5
tert-Butyl Ethyl Ether	ND		1	ND	1
Carbon Disulfide	ND		1	ND	1
Carbon Tetrachloride	ND		1	ND	1
Chlorobenzene	ND		1	ND	1
Chloroethane	ND		1	ND	1
Chloroform	ND		1	ND	1
Chloromethane	ND		2	ND	2
2-Chlorotoluene	ND		1	ND	1
4-Chlorotoluene	ND		1	ND	1
Dibromochloromethane	ND		1	ND	1
1,2-Dichlorobenzene	ND		1	ND	1
1,3-Dichlorobenzene	ND		1	ND	1
1,4-Dichlorobenzene	ND		1	ND	1
1,1-Dichloroethane	ND		1	ND	1
1,2-Dichloroethane	ND		1	ND	1
1,1-Dichloroethylene	ND		1	ND	1
cis-1,2-Dichloroethylene	ND		1	ND	1
trans-1,2-Dichloroethylene	ND		1	ND	1
1,2-Dichloropropane	ND		1	ND	1
cis-1,3-Dichloropropene	ND		1	ND	1
trans-1,3-Dichloropropene	ND		1	ND	1
Diisopropyl Ether	ND		1	ND	1
Ethylbenzene	ND		1	ND	1
Ethylene Dibromide	ND		1	ND	1
Freon-TF	ND		1	ND	1
2-Hexanone	ND		1	ND	1
Methylene Chloride	ND		5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND		1	ND	1
Methyl t-Butyl Ether	ND		2	ND	2
Styrene	ND		1	ND	1

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Volatile Organics by EPA 624/8260B

Sample: MW-34C (continued)

Compound	Result	Parts per Billion (µg/L) Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	4	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 03-11-11
Date analyzed: 03-11-11

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	104	100
1,2-Dichloroethane-d_4	82-121	112	103
Toluene-d_8	87-110	104	102
Bromofluorobenzene	76-113	106	102

EXOVA

Quality Control Summary

Batch ID: MW-34A

Compound	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Dup Result	Spike Dup % Rec	Spike RPD
Benzene	ND	50.0	54.2	108	51.2	102	6
Chlorobenzene	ND	50.0	56.6	113	53.7	107	5
1,1-Dichloroethylene	ND	50.0	56.7	113	52.2	104	8
Toluene	1.5	50.0	62.4	122*	58.3	114	7
Trichloroethylene	ND	50.0	53.5	107	51.0	102	5

* - Result is outside control limits. No aromatic compounds were detected higher than five times the detection limit;no action taken.

Quality Control Limits

Compound	% Recovery	RPD
Benzene	77-127	10
Chlorobenzene	80-116	9
1,1-Dichloroethylene	66-125	11
Toluene	81-118	10
Trichloroethylene	72-119	11

EXOVA

1,4-Dioxane by Modified EPA 8270
Gas Chromatography/Mass Spectrometry

Sample ID	Parts per Billion (µg/L)
MW-34A	ND
MW-34B	78
MW-34C	ND
Method Blank	ND
Detection Limit	1

Date Extracted: 03-02-11
Date Analyzed: 03-04-11

Quality Control Summary

Sample ID: 030211WB

Analyte	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Duplicate Result	Spike Duplicate % Rec	Spike RPD
1,4-Dioxane	ND	19.8	19.2	97	20.3	103	6

Quality Control Guidelines

Analyte	% Recovery	RPD
1,4-Dioxane	85 - 113	NMT 11

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 2/25/2011 PAGE 1 OF 1

PROJECT NAME: RAYTHEON
PROJECT No./TASK No.: 532.03
PROJECT MANAGER: C. ROSS
Phone No. 858.455.6500
QA MANAGER: S. NETTO
Fax No.
SAMPLER (SIGNATURE): [signature]
SAMPLER (PRINTED): DANIEL MORA, AMANDA BEAM

SAMPLE CONTAINERS: 40ml VOA; 1L AMBER
ANALYSIS REQUESTED: VOC 8260B; 8270 MOD 1,4 DIOXANE
SPECIAL HANDLING: STANDARD TAT
LABORATORY INFORMATION: EXOVA

LAB ID	SAMPLE ID	Date	Time	Soil	Groundwater	Surface water	H2O	HCl	HNO 3	NaOH	H2SO 4	Ice	40ml VOA	1L AMBER	VOC 8260B	8270 MOD 1,4 DIOXANE	STANDARD TAT	REMARKS
~~	TB-022511A	2/25/11	800				X	X				X	3		X		X	
~~	MW-34C	↓	1113		X			X				X	3		X		X	
~	MW-34C		1113		X							X		1		X	X	
~~	MW-34A		1212		X			X				X	3		X		X	
~	MW-34A		1212		X							X		1		X	X	
~~	MW-34B		1308		X			X				X	3		X		X	
~	MW-34B	↓	1308		X							X		1		X	X	

Total number of Containers per analysis: 12 3

Total No. of Containers: 15

Relinquished by:	Date	Received by:	Date
[signature]	2/25/11	—	
Company: H+A INC	Time: 1530	Company: —	Time:
Relinquished by: —	Date	Received by: [signature]	Date: 02-25-11
Company: —	Time	Company: Exova	Time: 03:30

INSTRUCTIONS

1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness.
2. Complete in ballpoint pen. Draw one line through errors, initial and date correction.
3. Indicate number of sample containers in analysis request space; indicate choice with √ or x.
4. Note applicable preservatives, special instructions, and deviations from typical environmental samples.
5. Consult project QA documents for specific instructions.

Sample Receipt:

- ☐ No. of containers correct
- ☐ received good condition/cold
- ☐ custody seals secure
- ☐ conforms to COC document

Shipment Method: DROP OFF

Send Results to: S. NETTO

- ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500
- ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124 MESA, AZ 85204 (480) 345-0888
- ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300

Send invoice to San Diego, CA
Attn: Accounts Payable

129046

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

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March 16, 2011

Hargis+Associates Inc
9171 Towne Centre Dr
Ste 375
San Diego, CA 92122

Attn: Steve Netto

Exova Job No: 129366
Purchase Order: 532.03
Project Name: Raytheon Main
Samples Received: Six (6) Samples
Date Received: 03/10/2011

KC

Michael Shelton
Technical Director

Patricia Metzger
Senior Chemist

EXOVA

Volatile Organics by EPA 624/8260B

Sample: TB-03102011B

			Parts per Billion (µg/L) Detection	Blank	Detection
Compound	Result		Limit	Result	Limit
Acetone	6	B	5	7	5
tert-Amyl Methyl Ether	ND		1	ND	1
Benzene	ND		1	ND	1
Bromodichloromethane	ND		1	ND	1
Bromoform	ND		1	ND	1
Bromomethane	ND		5	ND	5
2-Butanone (MEK)	ND		2	ND	2
tert-Butyl Alcohol	ND		5	ND	5
tert-Butyl Ethyl Ether	ND		1	ND	1
Carbon Disulfide	3		1	ND	1
Carbon Tetrachloride	ND		1	ND	1
Chlorobenzene	ND		1	ND	1
Chloroethane	ND		1	ND	1
Chloroform	ND		1	ND	1
Chloromethane	ND		2	ND	2
2-Chlorotoluene	ND		1	ND	1
4-Chlorotoluene	ND		1	ND	1
Dibromochloromethane	ND		1	ND	1
1,2-Dichlorobenzene	ND		1	ND	1
1,3-Dichlorobenzene	ND		1	ND	1
1,4-Dichlorobenzene	ND		1	ND	1
1,1-Dichloroethane	ND		1	ND	1
1,2-Dichloroethane	ND		1	ND	1
1,1-Dichloroethylene	ND		1	ND	1
cis-1,2-Dichloroethylene	ND		1	ND	1
trans-1,2-Dichloroethylene	ND		1	ND	1
1,2-Dichloropropane	ND		1	ND	1
cis-1,3-Dichloropropene	ND		1	ND	1
trans-1,3-Dichloropropene	ND		1	ND	1
Diisopropyl Ether	ND		1	ND	1
Ethylbenzene	ND		1	ND	1
Ethylene Dibromide	ND		1	ND	1
Freon-TF	ND		1	ND	1
2-Hexanone	ND		1	ND	1
Methylene Chloride	ND		5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND		1	ND	1
Methyl t-Butyl Ether	ND		2	ND	2
Styrene	ND		1	ND	1

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Volatile Organics by EPA 624/8260B

Sample: TB-03102011B (continued)

Compound	Result	Parts per Billion (µg/L) Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	ND	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 03-11-11
Date analyzed: 03-12-11

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	109	108
1,2-Dichloroethane-d_4	82-121	115	113
Toluene-d_8	87-110	105	103
Bromofluorobenzene	76-113	103	106

EXOVA

Volatile Organics by EPA 624/8260B

Sample: MW-34B

Compound	Result		Parts per Billion (µg/L) Detection Limit	Blank Result	Detection Limit
Acetone	6	B	5	7	5
tert-Amyl Methyl Ether	ND		1	ND	1
Benzene	ND		1	ND	1
Bromodichloromethane	ND		1	ND	1
Bromoform	ND		1	ND	1
Bromomethane	ND		5	ND	5
2-Butanone (MEK)	ND		2	ND	2
tert-Butyl Alcohol	ND		5	ND	5
tert-Butyl Ethyl Ether	ND		1	ND	1
Carbon Disulfide	ND		1	ND	1
Carbon Tetrachloride	ND		1	ND	1
Chlorobenzene	ND		1	ND	1
Chloroethane	ND		1	ND	1
Chloroform	ND		1	ND	1
Chloromethane	ND		2	ND	2
2-Chlorotoluene	ND		1	ND	1
4-Chlorotoluene	ND		1	ND	1
Dibromochloromethane	ND		1	ND	1
1,2-Dichlorobenzene	ND		1	ND	1
1,3-Dichlorobenzene	ND		1	ND	1
1,4-Dichlorobenzene	ND		1	ND	1
1,1-Dichloroethane	ND		1	ND	1
1,2-Dichloroethane	ND		1	ND	1
1,1-Dichloroethylene	12		1	ND	1
cis-1,2-Dichloroethylene	ND		1	ND	1
trans-1,2-Dichloroethylene	ND		1	ND	1
1,2-Dichloropropane	ND		1	ND	1
cis-1,3-Dichloropropene	ND		1	ND	1
trans-1,3-Dichloropropene	ND		1	ND	1
Diisopropyl Ether	ND		1	ND	1
Ethylbenzene	ND		1	ND	1
Ethylene Dibromide	ND		1	ND	1
Freon-TF	ND		1	ND	1
2-Hexanone	ND		1	ND	1
Methylene Chloride	ND		5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND		1	ND	1
Methyl t-Butyl Ether	ND		2	ND	2
Styrene	ND		1	ND	1

EXOVA

Volatile Organics by EPA 624/8260B

Sample: MW-34B (continued)

Compound	Result	Parts per Billion (µg/L) Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	2	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 03-11-11
Date analyzed: 03-12-11

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	101	108
1,2-Dichloroethane-d_4	82-121	113	113
Toluene-d_8	87-110	100	103
Bromofluorobenzene	76-113	107	106

EXOVA

Quality Control Summary

Batch ID: MW-34B

Compound	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Dup Result	Spike Dup % Rec	Spike RPD
Benzene	ND	50.0	48.8	98	49.1	98	1
Chlorobenzene	ND	50.0	52.1	104	52.9	106	2
1,1-Dichloroethylene	12	50.0	69.4	115	68.4	113	1
Toluene	1.8	50.0	58.9	114	59.6	116	1
Trichloroethylene	ND	50.0	48.1	96	48.1	96	0

Quality Control Limits

Compound	% Recovery	RPD
Benzene	77-127	10
Chlorobenzene	80-116	9
1,1-Dichloroethylene	66-125	11
Toluene	81-118	10
Trichloroethylene	72-119	11

EXOVA

1,4-Dioxane by Modified EPA 8270
Gas Chromatography/Mass Spectrometry

Sample ID	Parts per Billion (µg/L)
MW-34B	6
Method Blank	ND
Detection Limit	1

Date Extracted: 03-14-11
Date Analyzed: 03-15-11

Quality Control Summary

Sample ID: 031411WB

Analyte	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Duplicate Result	Spike Duplicate % Rec	Spike RPD
1,4-Dioxane	ND	19.8	19.4	98	20.3	103	5

Quality Control Guidelines

Analyte	% Recovery	RPD
1,4-Dioxane	85 - 113	NMT 11

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 03/10/11 PAGE 1 OF 1

PROJECT NAME: Raytheon Main	PROJECT No./TASK No.: 532.03
PROJECT MANAGER	Phone No.: 858 455-6500
QA MANAGER	Fax No.: 858 455-6533
SAMPLER (SIGNATURE):	SAMPLER (PRINTED): ERIN HUNTOE, KENNETH SIMON

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX: Soil	Ground-water	Surface water	Lab H2O	PRESERVATION: HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS: 40ml VOA	1L Amber	ANALYSIS REQUESTED: EPA method 8260B VOCs	EPA method 8270MOD/1,4-dioxane	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1,000	>1,000	SPECIAL HANDLING: 5 day Turn around Time	Standard TAT
~~	TB-03102011B	03/10/11	0805				X	X				X	2		X		X				X	
4x ~	MW-34B	↓	1045		X			X				X	3		X				X		X	
	↓	↓	↓		X							X		1		X			X		X	
													(2)									
														1								

5 DAY TAT

Total number of Containers per analysis: (2) 6

Total No. of Containers: 6

Relinquished by:	Date	Received by:	Date
	3/10/11		03-10-11
H+A, INC.	Time 1345	EXOVA	Time 19:43
Company		Company	
Relinquished by:	Date	Received by:	Date
	Time		Time
Company		Company	

INSTRUCTIONS

1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness.
2. Complete in ballpoint pen. Draw one line through errors, initial and date correction.
3. Indicate number of sample containers in analysis request space; indicate choice with √ or x.
4. Note applicable preservatives, special instructions, and deviations from typical environmental samples.
5. Consult project QA documents for specific instructions.

Sample Receipt:

- ☑ No. of containers correct
- ☐ custody seals secure
- ☑ received good condition/cold
- ☑ conforms to COC document

Shipment Method: Drop off

Send Results to: Stan Nath

- ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500
- ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124 MESA, AZ 85204 (480) 345-0888
- ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300

Send invoice to San Diego, CA
Attn: Accounts Payable

129366

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

Client: Hargis + Associates
Job No.: 129496

Volatile Organics by EPA 624/8260B

Sample: MW-34B-1

		Parts per Billion (µg/L)		
		Detection	Blank	Detection
Compound	Result	Limit	Result	Limit
Acetone	ND	5	ND	5
tert-Amyl Methyl Ether	ND	1	ND	1
Benzene	ND	1	ND	1
Bromodichloromethane	ND	1	ND	1
Bromoform	ND	1	ND	1
Bromomethane	ND	5	ND	5
2-Butanone (MEK)	ND	2	ND	2
tert-Butyl Alcohol	ND	5	ND	5
tert-Butyl Ethyl Ether	ND	1	ND	1
Carbon Disulfide	ND	1	ND	1
Carbon Tetrachloride	ND	1	ND	1
Chlorobenzene	ND	1	ND	1
Chloroethane	ND	1	ND	1
Chloroform	ND	1	ND	1
Chloromethane	ND	2	ND	2
2-Chlorotoluene	ND	1	ND	1
4-Chlorotoluene	ND	1	ND	1
Dibromochloromethane	ND	1	ND	1
1,2-Dichlorobenzene	ND	1	ND	1
1,3-Dichlorobenzene	ND	1	ND	1
1,4-Dichlorobenzene	ND	1	ND	1
1,1-Dichloroethane	ND	1	ND	1
1,2-Dichloroethane	ND	1	ND	1
1,1-Dichloroethylene	18	1	ND	1
cis-1,2-Dichloroethylene	ND	1	ND	1
trans-1,2-Dichloroethylene	ND	1	ND	1
1,2-Dichloropropane	ND	1	ND	1
cis-1,3-Dichloropropene	ND	1	ND	1
trans-1,3-Dichloropropene	ND	1	ND	1
Diisopropyl Ether	ND	1	ND	1
Ethylbenzene	ND	1	ND	1
Ethylene Dibromide	ND	1	ND	1
Freon-TF	ND	1	ND	1
2-Hexanone	ND	1	ND	1
Methylene Chloride	ND	5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND	1	ND	1
Methyl t-Butyl Ether	ND	2	ND	2
Styrene	ND	1	ND	1

Client: Hargis + Associates
Job No.: 129496

Volatile Organics by EPA 624/8260B

Sample: MW-34B-1 (continued)

		Parts per Billion (µg/L)		
		Detection	Blank	Detection
Compound	Result	Limit	Result	Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	1	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 03-21-11
Date analyzed: 03-22-11

		Sample	Blank
Surrogate	QC Limits	Percent Recovery	Percent Recovery
Dibromofluoromethane	75-125	108	107
1,2-Dichloroethane-d_4	82-121	107	100
Toluene-d_8	87-110	103	102
Bromofluorobenzene	76-113	110	111

Client: Hargis + Associates
Job No.: 129496

Volatile Organics by EPA 624/8260B

Sample: TB-03152011B

		Parts per Billion (µg/L)		
		Detection	Blank	Detection
Compound	Result	Limit	Result	Limit
Acetone	ND	5	ND	5
tert-Amyl Methyl Ether	ND	1	ND	1
Benzene	ND	1	ND	1
Bromodichloromethane	ND	1	ND	1
Bromoform	ND	1	ND	1
Bromomethane	ND	5	ND	5
2-Butanone (MEK)	ND	2	ND	2
tert-Butyl Alcohol	ND	5	ND	5
tert-Butyl Ethyl Ether	ND	1	ND	1
Carbon Disulfide	ND	1	ND	1
Carbon Tetrachloride	ND	1	ND	1
Chlorobenzene	ND	1	ND	1
Chloroethane	ND	1	ND	1
Chloroform	ND	1	ND	1
Chloromethane	ND	2	ND	2
2-Chlorotoluene	ND	1	ND	1
4-Chlorotoluene	ND	1	ND	1
Dibromochloromethane	ND	1	ND	1
1,2-Dichlorobenzene	ND	1	ND	1
1,3-Dichlorobenzene	ND	1	ND	1
1,4-Dichlorobenzene	ND	1	ND	1
1,1-Dichloroethane	ND	1	ND	1
1,2-Dichloroethane	ND	1	ND	1
1,1-Dichloroethylene	ND	1	ND	1
cis-1,2-Dichloroethylene	ND	1	ND	1
trans-1,2-Dichloroethylene	ND	1	ND	1
1,2-Dichloropropane	ND	1	ND	1
cis-1,3-Dichloropropene	ND	1	ND	1
trans-1,3-Dichloropropene	ND	1	ND	1
Diisopropyl Ether	ND	1	ND	1
Ethylbenzene	ND	1	ND	1
Ethylene Dibromide	ND	1	ND	1
Freon-TF	ND	1	ND	1
2-Hexanone	ND	1	ND	1
Methylene Chloride	ND	5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND	1	ND	1
Methyl t-Butyl Ether	ND	2	ND	2
Styrene	ND	1	ND	1

Client: Hargis + Associates
Job No.: 129496

Volatile Organics by EPA 624/8260B

Sample: TB-03152011B (continued)

		Parts per Billion (µg/L)		
		Detection	Blank	Detection
Compound	Result	Limit	Result	Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	ND	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 03-21-11
Date analyzed: 03-22-11

		Sample	Blank
Surrogate	QC Limits	Percent Recovery	Percent Recovery
Dibromofluoromethane	75-125	106	107
1,2-Dichloroethane-d_4	82-121	102	100
Toluene-d_8	87-110	104	102
Bromofluorobenzene	76-113	108	111

Client: Hargis + Associates
Job No.: 129496

Quality Control Summary

Batch ID: MW-34B-1

Compound	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Dup Result	Spike Dup % Rec	Spike RPD
Benzene	ND	50.0	47.5	95	48.7	97	2
Chlorobenzene	ND	50.0	49.6	99	51.4	103	4
1,1-Dichloroethylene	18	50.0	65.8	96	67.0	98	2
Toluene	1.3	50.0	50.8	99	52.2	102	3
Trichloroethylene	ND	50.0	46.2	92	46.5	93	1

Quality Control Limits

Compound	% Recovery	RPD
Benzene	77-127	10
Chlorobenzene	80-116	9
1,1-Dichloroethylene	66-125	11
Toluene	81-118	10
Trichloroethylene	72-119	11

Client: Hargis + Associates
Job No.: 129496

1,4-Dioxane by Modified EPA 8270
Gas Chromatography/Mass Spectrometry

Sample ID	Parts per Billion (µg/L)
MW-34B-1	7
Method Blank	ND
Detection Limit	1

Date Extracted: 03-17-11
Date Analyzed: 03-22-11

Quality Control Summary

Sample ID: 031711WB

Analyte	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Duplicate Result	Spike Duplicate % Rec	Spike RPD
1,4-Dioxane	ND	20.0	20.3	102	20.5	103	1

Quality Control Guidelines

Analyte	% Recovery	RPD
1,4-Dioxane	85 - 113	NMT 11