April 15, 2022

Mr. Dale Myers
Washington State Department of Ecology
Toxics Cleanup Program / Northwest Regional Office
15700 Dayton Ave. N
Shoreline, WA 98133

Subject: **Progress Report – March 2022**
Newman's Chevron
2021 6th Street
Bremerton, Washington

Dear Mr. Myers:

On behalf of Chevron Environmental Management Company (CEMC), Nordic Properties, Inc., and Victory Business Park, LLC (collectively, the PLPs), Leidos, Inc. (Leidos) is providing this progress report to document activities performed to satisfy the requirements of Agreed Order No. DE 14246 for the above-referenced site (the Site). This report summarizes activities completed from March 1 through 31, 2022.

ACTIONS TAKEN TO COMPLY WITH THE AGREED ORDER

- On March 15, Leidos submitted the February 2022 monthly progress report to Ecology.
- Leidos coordinated with the property owners and tenants to conduct inspections of the structures on the 1936 5th Street and 2005/2007 6th Street properties in preparation to conduct a Tier II vapor intrusion assessment (VIA) for the Site.

SUMMARY OF SAMPLING/TESTING AND OTHER DATA REPORTS

- On March 7, Leidos received laboratory analytical results from Eurofins Air Toxics for soil vapor samples collected on February 18. These results indicate that naphthalene was not detected in the soil vapor sample collected from SVP-7, which is located on the property at 1932 5th Street, or in the associated field blank sample. These results were submitted to EcoChem for third-party data validation. EcoChem concluded that all data, as reported, are acceptable for use. No data were qualified for any reason. The laboratory analytical report and data validation report are attached.

DEVIATIONS FROM THE APPROVED WORK PLAN

- None during this reporting period.

SUMMARY OF CONTACTS WITH PUBLIC STAKEHOLDERS

- Leidos did not engage with representatives of the local community, public interest groups, press, or federal, state, or tribal governments during this reporting period.

PROBLEMS OR ANTICIPATED PROBLEMS IN MEETING THE SCHEDULE OR OBJECTIVES OF AGREED ORDER OR RIWP

- The due date for completion of RI field investigations must be extended to provide for further assessment of the potential for petroleum vapor intrusion to existing buildings in the vicinity of the Site. The planned scope and a preliminary schedule for this additional work has been communicated to and approved by email correspondence with Ecology.

CHANGES IN KEY PERSONNEL

- None during the current reporting period.

ACTIVITIES ANTICIPATED FOR THE NEXT REPORTING PERIOD

- Leidos will complete inspections of the structures on the 1936 5th Street and 2005/2007 6th Street properties and begin preparation of a work plan to conduct a Tier II VIA for the Site.

If you have any questions or comments regarding the information presented in this report, please contact me at (425) 482-3323 or via email at russell.s.shropshire@leidos.com.

Sincerely,

Leidos, Inc.

Russell S. Shropshire, PE
Principal Engineer

Enclosures:
Eurofins Air Toxics Laboratory Analytical Report
EcoChem Data Validation Report

cc: Mike Ehlebracht – Hart Crowser
James Kiernan – CEMC
Cheryl Cameron – CEMC
Roger Jensen – Nordic Properties, Inc.
Jim Reed – Victory Business Park, LLC
Brandon Dewey – Neighboring property owner
George Brainerd – Neighboring property owner
Marlena Marie – Neighboring property owner
Bob Goodman – Rogers Joseph O'Donnell
E. Jacob Lubarsky – Rogers Joseph O'Donnell
William Joyce – Joyce Ziker Partners, PLLC
Larry Hall – Hall & West
Paul Ferman – Hall & West
Doug Morrison – Tupper Mack Wells PLLC
Peter Kingston– Farallon Consulting

eurofins | Air Toxics

3/7/2022
Mr. Russ Shropshire
Leidos
11824 N Creek Parkway North
Ste 101
Bothell WA 98011

Project Name: Newman's Chevron
Project #: 204117
Workorder #: 2202501

Dear Mr. Russ Shropshire

The following report includes the data for the above referenced project for sample(s) received on 2/22/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-17 VI are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Monica Tran at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Monica Tran

Project Manager

eurofins | Air Toxics

WORK ORDER #: 2202501

Work Order Summary

CLIENT:	Mr. Russ Shropshire Leidos 11824 N Creek Parkway North Ste 101 Bothell, WA 98011	**BILL TO:**	Accounts Payable - Bothell Leidos 11824 N Creek Parkway North Ste 101 Bothell, WA 98011
PHONE:	425-485-5800	**P.O. #**	P010242812
FAX:		**PROJECT #**	204117 Newman's Chevron
DATE RECEIVED:	02/22/2022	**CONTACT:**	Monica Tran
DATE COMPLETED:	03/07/2022		

FRACTION #	NAME	TEST
01A	SVP-7-021822	Modified TO-17 VI
02A	FB-1-021822	Modified TO-17 VI
03A	Lab Blank	Modified TO-17 VI
04A	CCV	Modified TO-17 VI
05A	LCS	Modified TO-17 VI
05AA	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Hayes DATE: 03/07/22

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.
Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Leidos
Workorder# 2202501

Two TO-17 VI Tube samples were received on February 22, 2022. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

Requirement	***TO-17***	***ATL Modifications***
Verification of Safe Sampling Volume	Collect Distributed Volume Pairs at uncharacterized sites and/or utilize field test method to evaluate breakthrough by sampling tubes in series at different air volumes.	Field surrogates are spiked onto each tube prior to deployment in the field. Recoveries are used to monitor method performance from sample collection through analysis for each sample tube.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A sampling volume of 0.8 L was used to convert ng to ug/m3 for the associated Lab Blank.

Definition of Data Qualifying Flags

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in blank (subtraction not performed).
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.
CN - See case narrative

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

eurofins | Air Toxics

Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SVP-7-021822

Lab ID#: 2202501-01A

No Detections Were Found.

Client Sample ID: FB-1-021822

Lab ID#: 2202501-02A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: SVP-7-021822

Lab ID#: 2202501-01A

EPA METHOD TO-17

File Name:	**6022313**	**Date of Extraction: NA**	**Date of Collection: 2/18/22 10:38:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/23/22 06:42 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	1.2	Not Detected	Not Detected

Air Sample Volume(L): 0.800
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	124	50-150

eurofins | Air Toxics

Client Sample ID: FB-1-021822

Lab ID#: 2202501-02A

EPA METHOD TO-17

File Name:	**6022312**	**Date of Extraction: NA**	**Date of Collection: 2/18/22 10:50:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 2/23/22 06:01 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	1.2	Not Detected	Not Detected

Air Sample Volume(L): 0.800
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	98	50-150

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2202501-03A

EPA METHOD TO-17

File Name:	**6022307**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/23/22 01:45 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	1.2	Not Detected	Not Detected

Air Sample Volume(L): 0.800

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	110	50-150

eurofins | Air Toxics

Client Sample ID: CCV
Lab ID#: 2202501-04A
EPA METHOD TO-17

File Name:	**6022304**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/23/22 11:07 AM**

Compound	%Recovery
Naphthalene	94

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	110	50-150

eurofins | Air Toxics

Client Sample ID: LCS
Lab ID#: 2202501-05A
EPA METHOD TO-17

File Name:	**6022302**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/23/22 09:45 AM**

Compound	%Recovery	Method Limits
Naphthalene	119	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	122	50-150

eurofins | Air Toxics

Client Sample ID: LCSD
Lab ID#: 2202501-05AA
EPA METHOD TO-17

File Name:	**6022303**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 2/23/22 10:26 AM**

Compound	%Recovery	Method Limits
Naphthalene	115	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	114	50-150

DATA VALIDATION REPORT
NEWMAN'S CHEVRON – SOIL VAPOR

Prepared for:

Leidos
18939 120th Ave NE, Suite 112
Bothell, Washington 98011

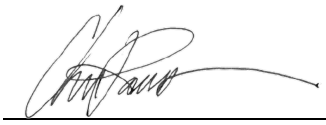
Prepared by:

EcoChem, Inc.
500 Union Street, Suite 1010
Seattle, WA 98101

EcoChem Project: C4159-8

March 25, 2022

Approved for Release:



Christine Ransom
Senior Project Chemist
EcoChem, Inc.

PROJECT NARRATIVE

Basis for the Data Validation

This report summarizes the results of summary validation (EPA Stage 2B) performed on soil vapor and associated quality control sample data for the Newman's Chevron project. A cross-reference of field and laboratory IDs is provided in the Sample Index.

The analyses were performed by Eurofins Air Toxics, Folsom, California. The analytical method and EcoChem project chemists are noted below:

ANALYSIS	METHOD	PRIMARY REVIEW	SECONDARY REVIEW
Naphthalene	TO-17	E. Clayton	C. Ransom

The data were reviewed using guidance and quality control criteria documented in the analytical methods; *Final Remedial Investigation Work Plan Newman's Chevron* (Leidos, July 2018); and *National Functional Guidelines for Organic Data Review* (USEPA 2008).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. Data that have been rejected are flagged with (R). Rejected data should not be used for any purpose. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above. No data were qualified.

Validation criteria are included as Appendix A. Data Validation Worksheets and project associated communications will be kept on file at EcoChem, Inc. A verified laboratory electronic data deliverable (EDD) is also submitted.

Sample Index
Newman's Chevron- Soil Vapor

SDG	Sample ID	Lab ID	TO17
2202501	SVP-7-021822	2202501-01A	✓
2202501	FB-1-021822	2202501-02A	✓

DATA VALIDATION REPORT
Newman's Chevron
Naphthalene by EPA TO-17 GCMS

This report documents the review of analytical data from the analysis of one soil vapor sample and the associated laboratory and field quality control (QC) samples. Samples were analyzed by Eurofins Air Toxics, Folsom, California. Refer to the Sample Index for a complete list of samples.

SDG	NUMBER OF SAMPLES	VALIDATION LEVEL
2202501	1 Soil Vapor, 1 Field Blank	Stage 2B

DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

EDD TO HARDCOPY VERIFICATION

All sample IDs and results reported in the electronic data deliverable (EDD) were verified (10% verification) by comparing the EDD to the laboratory data package.

TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

✓	Sample Receipt, Preservation, and Holding Times	✓	Laboratory Control Samples (LCS/LCSD)
✓	GC/MS Instrument Performance (Tune)	1	Matrix Spike/Matrix Spike Duplicates (MS/MSD)
✓	Initial Calibration (ICAL)	✓	Internal Standards
✓	Continuing Calibration (CCAL)	1	Field Duplicates
✓	Laboratory Blanks	✓	Target Analyte List
1	Field Blanks	✓	Reporting Limits
✓	Surrogate Compounds	✓	Reported Results

✓ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.
1 Quality control outliers are discussed below, but no data were qualified.
2 Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Field Blanks

On field blank, FB-1-021822, was submitted. Naphthalene was not detected in this blank.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

Matrix Spike/matrix spike duplicate analyses were not performed. Laboratory precision and accuracy were evaluated using the laboratory control sample/laboratory control sample duplicate (LCs/LCSD) results.

Field Duplicates

No field duplicates were submitted.

OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. Accuracy was acceptable as demonstrated by the surrogate and LCS/LCSD recovery values and precision was acceptable as demonstrated by the LCS/LCSD relative percent difference value.

No data were qualified for any reason. All data, as reported, are acceptable for use.

ECOCHEM
Data Quality

APPENDIX A

DATA QUALIFIER DEFINITIONS
REASON CODES
AND CRITERIA TABLES

DATA VALIDATION QUALIFIER CODES
Based on National Functional Guidelines

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.

DATA QUALIFIER REASON CODES

Group	Code	Reason for Qualification
Sample Handling	1	Improper Sample Handling or Sample Preservation (i.e., headspace, cooler temperature, pH, summa canister pressure); Exceeded Holding Times
Instrument Performance	24	Instrument Performance (i.e., tune, resolution, retention time window, endrin breakdown, lock-mass)
	5A	Initial Calibration (RF, %RSD, r^2)
	5B	Calibration Verification (CCV, CCAL; RF, %D, %R) Use bias flags (H,L)[1] where appropriate
	5C	Initial Calibration Verification (ICV %D, %R) Use bias flags (H,L)[1] where appropriate
Blank Contamination	6	Field Blank Contamination (Equipment Rinsate, Trip Blank, etc.)
	7	Lab Blank Contamination (i.e., method blank, instrument blank, etc.) Use low bias flag (L)[1] for negative instrument blanks
Precision and Accuracy	8	Matrix Spike (MS and/or MSD) Recoveries Use bias flags (H,L)[1] where appropriate
	9	Precision (all replicates: LCS/LCSD, MS/MSD, Lab Replicate, Field Replicate)
	10	Laboratory Control Sample Recoveries (a.k.a. Blank Spikes) Use bias flags (H,L)[1] where appropriate
	12	Reference Material Use bias flags (H,L)[1] where appropriate
	13	Surrogate Spike Recoveries (a.k.a. labeled compounds, recovery standards) Use bias flags (H,L)[1] where appropriate
Interferences	16	ICP/ICP-MS Serial Dilution Percent Difference
	17	ICP/ICP-MS Interference Check Standard Recovery Use bias flags (H,L)[1] where appropriate
	19	Internal Standard Performance (i.e., area, retention time, recovery)
	22	Elevated Detection Limit due to Interference (i.e., chemical and/or matrix)
	23	Bias from Matrix Interference (i.e. diphenyl ether, PCB/pesticides)
Identification and Quantitation	2	Chromatographic pattern in sample does not match pattern of calibration standard
	3	2nd column confirmation (RPD or %D)
	4	Tentatively Identified Compound (TIC) (associated with NJ only)
	20	Calibration Range or Linear Range Exceeded
	25	Compound Identification (i.e., ion ratio, retention time, relative abundance, etc.)
Miscellaneous	11	A more appropriate result is reported (multiple reported analyses i.e., dilutions, re-extractions, etc. Associated with "R" and "DNR" only)
	14	Other (See DV report for details)
	26	Method QC information not provided

[1] H = high bias indicated
L = low bias indicated

Polycyclic Aromatic Hydrocarbons (PAH) by GCMS, Method TO17

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Sample Handling					
Cooler/Storage Temperature Preservation	Air cartridge - Cool to ≤ 6°C	Method[1,2]	J(pos)/UJ(ND) if > 6 deg. C (EcoChem PJ)	1	
Holding Time	30 days from collection to analysis	Method[1,2]	J(pos)/UJ(ND) if HT exceeded J(pos)/R(ND) if gross exceedance(> 2X HT)	1	Gross exceedance = > 2X HT, as per 1999 NFG
Instrument Performance					
Tuning	DFTPP Beginning of each 12 hour period Use method acceptance criteria	Method [1,2] NFG [3]	R(pos/ND) all analytes in all samples associated with the tune	24	12 hour clock begins with a new DFTPP tune or if the closing CCV within criteria.
Initial Calibration (Minimum 5 stds.) **Sensitivity**	**TAL Compounds:** RRF ≥ 0.050	QSM [(1)] QAPP [(3)]	J(pos)/R(ND) if RRF/RF is less than criterion	5A	
Initial Calibration (Minimum 5 stds.) **Stability**	**CCC Compounds:** %RSD ≤ 30% and one option as follows: RSD for each analyte ≤ 20%; **OR** Linear r ≥ 0.995; **OR** Non-linear r2 ≥ 0.99 (6 points must be used) **CCC Compounds:** Acenaphthene, Fluoranthene, Benzo(a)pyrene	Method [1,2] NFG [3]	J(pos) if %RSD > 30% (for CCC Compounds) OR >20% (all other compounds) OR r2-value < 0.990 OR r < 0.995	5A	
Initial Calibration Verification (ICV)	Standard from independent source Analyzed immediately after ICAL %R within ± 30% of true value	Method [1,2] NFG [3]	If > +/-80%: J(pos)/R(ND) If -79% to -31%: J(pos) - high bias If 31% to 79%: J(pos)/UJ(ND) - low bias	5A (H,L)[4]	
Continuing Calibration (Prior to each 12 hr. shift) **Sensitivity**	**TAL Compounds:** RRF ≥ 0.050	QSM [(1)] QAPP [(3)]	J(pos)/R(ND) if RRF/RF is less than criterion	5B	
Continuing Calibration (Prior to each 12 hr. shift) **Stability**	%Drift ≤ 30%	Method [1,2] NFG [3]	If > +/-80%: J(pos)/R(ND) If -79% to -31%: J(pos) - high bias If 31% to 79%: J(pos)/UJ(ND) - low bias	5B (H,L)[4]	QSM states that analysis cannot proceed if any CCC fails acceptance criterion.
Blank Contamination					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > RL	Method [1,2] NFG [3]	U(pos) if result is < 5X or 10X action level, as per analyte.	7	10X action level applies to bis(2-ethylhexyl) phthalate only. 5X for all other target analytes **Hierarchy of blank review:** **#1 - Review MB, quaify as needed** **#2 - Review FB , qualify as needed**
	No TICs present		R(pos) TICs using 10X rule	7	
Field Blank (FB)	FB: frequency as per QAPP No detected compounds > RL	Method [1,2] NFG [3]	U(pos) if result is < 5X or 10X action level, as per analyte.	6	

Polycyclic Aromatic Hydrocarbons (PAH) by GCMS, Method TO17

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Precision and Accuracy					
LCS	One per lab batch (of ≤ 20 samples) 70% -130%	NFG [3]	Qualify all associated samples J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if both %R < LCL - low bias J(pos)/R(ND) if both %R < 10% - very low bias J(pos)/UJ(ND) if one > UCL & one < LCL, with no bias **PJ if only one %R outlier**	10 (H,L)[4]	No action if only one spike %R is outside criteria, when LCSD is analyzed. Qualify all associated samples.
LCS/LCSD (RPD)	One set per matrix per batch (of ≤ 20 samples) RPD ≤ 30%	NFG [3]	J(pos) assoc. cmpd. in all samples	9	Qualify all associated samples.
Surrogates	Minimum of 3 acid & 3 base/neutral (B/N) compounds added to all samples Within method control limits	Method [1,2] NFG [3]	Note: Do not qualify if only 1 acid and/or 1 B/N surrogate is out, unless <10%. *** J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	13 (H,L)[4]	*** If 1 surrogate outlier < 10% then J(pos)/R(ND) NFG specifies surrogates and CL, and to J(pos)/R(ND) results <20%, EcoChem **PJ** is J(pos)/R(ND) <10%.
Internal Standards	Added to all samples Acceptable Range: IS area 50% to 200% of CCAL area RT within 30 seconds of CC RT	Method [1,2] NFG [3]	J(pos) if > 200% J(pos)/UJ(ND) if < 50% J(pos)/R(ND) if < 25% RT>30 seconds, narrate and notify PM	19	NFG specifies surrogates and CL, and to J(pos)/R(ND) results <20%, EcoChem **PJ** is J(pos)/R(ND) <10%.
Field Duplicates	RPD ≤30% OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	Narrate and qualify if required by project **(EcoChem PJ)** Qualify only field duplicate samples J(pos)/UJ(ND)	9	
Compound ID and Calculation					
Quantitation/ Identification	RRT within 0.06 of standard RRT Ion relative intensity within 20% of standard All ions in std. at > 10% intensity must be present in sample	Method [1,2] NFG [3]	**See Technical Director if outliers are found**	14 25 (false pos)	
TICs	Major ions (>10%) in reference must be present in sample; intensities agree within 20%; check identification	Method [1,2] NFG [3]	NJ the TIC unless: R(pos) common laboratory contaminants **See Technical Director for ID issues**	4	Common laboratory contaminants: aldol condensation products, solvent preservatives, and reagent contaminants
Calibration Range	Results exceed the upper calibration range	EcoChem standard policy	Qualify J(pos)	20	If result from dilution analysis is not reported.
Calculation Check	Check 10% of field & QC sample results	EcoChem standard policy	Contact laboratory for resolution and/or corrective action	na	Full data validation only.
Electronic Data Deliverable (EDD)					
Verification of EDD to hardcopy data	EcoChem verify @ 10% unless problems noted; then increase level up to 100% for next several packages.	EcoChem standard policy	Depending on scope of problem, correct at EcoChem (minor issues) to resubmittal by laboratory (major issues).	na	EcoChem Project Manager and/or Database Administrator will work with lab to provide long-term corrective action.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	EcoChem standard policy	Use "DNR" to flag results that will not be reported.	11	**TM-04 Rev. 1** EcoChem Policy for Rejection/Selection Process for Multiple Results

(pos): Positive Result(s)
(ND): Non-detects

[1] Compendium Method TO-17, Determination of Volatile Organic Compounds (VOCs) in Ambient Air Using Active Sampling Onto Sorbent Tubes, Second Edition, January 1999. EPA/625/R-96/010b

[2] Air Toxics/Eurofin SOP: Analysis of Volatile and Semivolatile Organic Compounds in Vapor by Thermal Desorption GC/MS Full Scan Using Modified EPA Method TO-17 (SOP 109)

[3] National Functional Guidelines for Organic Data Review, June, 2008

[4] "H" = high bias indicated; "L" = low bias indicated