YRC Freight
10990 Roe Avenue
Overland Park, KS 66211

June 29, 2015

To Whom it May Concern:

Attached is the "WELL DESTRUCTION REPORT" for the former YRC Inc. (formerly known as Roadway Express) d.b.a. YRC Freight, property located at 1708 Wood Street in Oakland, CA 94607, Fuel Leak Case No. RO0000039. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

YRC Freight is a subsidiary or YRC Worldwide Inc., as Manager –Environmental Services and Properties of YRC Freight, I have been charged by YRC Worldwide Inc., to represent YRC Freight.

Sincerely,

Ruben D. Byerley

Manager –Environmental Services and Properties.

Well Destruction Report

YRC Worldwide Inc.

Former Roadway Express (REX) Facility
1708 Wood St. Oakland, CA
ACEH ID: RO0000039
RB Case #: 01-2291
ACPWA Permit: W2015-0346
Project No. 79379

Revision 3
06/29/2015

Well Destruction Report

Prepared for

YRC Worldwide Inc.
Former Roadway Express (REX) Facility
1708 Wood St. Oakland, CA
ACEH ID: RO0000039
RB Case #: 01-2291
ACPWA Permit: W2015-0346
Overland Park, Kansas

Project No. 79379

Revision 3
06/29/2015

prepared by

Burns & McDonnell Engineering Company, Inc.
South San Francisco, California

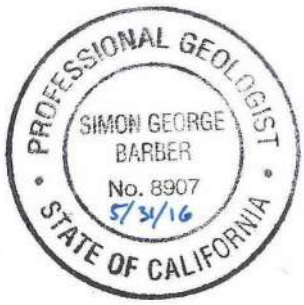
INDEX AND CERTIFICATION

YRC Worldwide Inc.
Well Destruction Report
Project No. 79379

Report Index

Certification

I hereby certify, as a Professional Geologist in the state of California, that the information in this document was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by the YRC Worldwide Inc. or others without specific verification or adaptation by the Geologist.



Simon Barber

Simon Barber P.G. QSP/D (CA 8907)
BMcD Project Geologist

Date: 05/21/2015

TABLE OF CONTENTS

Page No.

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
ACEH	Alameda County Environmental Health
ACPWA	Alameda County Public Works Agency
bgs	Below Ground Surface
BMcD	Burns & McDonnell
Burns & McDonnell	Burns & McDonnell Engineering Company, Inc.
Cascade	Cascade Drilling L.P.
DOT	United States-Department of Transportation
HSA	Hollow Stem Auger
IDW	Investigation Derived Waste
LTC	Low Threat Closure
psi	Pounds per Square Inch
PVC	Poly-vinyl Chloride
SF-RWQCB	San Francisco Bay- Regional Water Quality Control Board (Region 2)
Site	Former Roadway Express (REX) Facility: 1708 Wood St. Oakland, CA
SWRCB	State Water Resources Control Board
USAN	Underground Service Alert of Northern California
YRC	YRC Worldwide Inc.

1.0 EXECUTIVE SUMMARY

On behalf of YRC Worldwide Inc., (YRC), Burns & McDonnell Engineering Company Inc. (Burns & McDonnell), is please to present this well destruction report documenting the destruction of six monitoring wells at YRCs former YRC Freight-Roadway Express (REX) facility located at 1708 Wood Street (Site), Oakland, California (Figure 1-1 & Figure 1-2).

On May 19, 2015, in accordance with the Alameda County Public Works Agency (ACPWA) permit W2015-0346 (Appendix A), the Sites six remaining groundwater monitoring wells (MW-3 through MW-8) [Figure 1-3] were destroyed using over-drilling (to five feet below ground surface) and pressure grouting techniques by Cascade Drilling L.P. (Cascade), a CA C-57 licensed drilling company. Each monitoring well was backfilled with Type II-V neat cement till overflowing the well head and static level maintained. After which a poly vinyl chloride (PVC) threaded cap was cemented to the well-head, and air fittings were connected to the PVC union. Compressed air generated from the drill rig was applied at a pressure of 25 pound per square inch (psi) for duration of five minutes. All pressure tests passed the 25 psi for 5 minute criteria stipulated in the ACPWA permit.

Post pressure grouting, the well boxes and surrounding concrete and the top five feet of each monitoring well was removed with 8-inch outer diameter hollow stem auger flights. The borings were backfilled with grout to approximately 1 foot to 8 inches below ground surface (bgs). Surface grade was completed with rapid set concrete and hardener.

All remaining investigation, remediation, and well destruction derived wastes have been removed from the site.

2.0 INTRODUCTION

The Site is overseen by Alameda County Environmental Health (ACEH), ACEH ID: RO0000039, San Francisco Bay-Regional Water Quality Control Board (SF-RWQCB) Case #: 01-229, and State Water Resources Control Board (SWRQCB) GeoTracker ID: TO600102107. YRC Freight is a subsidiary of YRC Worldwide Inc., environmental management of the former YRC Freight-Roadway Express (REX) facility is managed through YRC Worldwide Inc. The site is currently owned by PSAI Partners IV LLC, located in San Francisco, California; and operated by Three Rivers Trucking as a trucking terminal.

2.1 Low Threat Closure Policy Acceptance

The ACEH has accepted Burns & McDonnell's recommendation for Low-Threat Closure (LTC) and determined that the Site satisfies SWRCB Resolution No. 2012-0062 Low-Threat UST Case Closure Policy criteria and has approved the final closure pending destruction of the Site's monitoring wells.

Public participation notification, a requirement for the case closure processes, was initiated by the ACEH and concluded on May 4, 2015. In a Letter dated May 5, 2015, the ACEH confirmed (Appendix B) that no public comments were received and that YRC was free to precede with well destruction activities at the Site. The Letter additionally requests the submittal of a monitoring well destruction and waste removal activities report be submitted by June 18, 2015 to the ACEH website and SWRCB GeoTracker Database.

3.0 WELL DESTRUCTION ACTIVITIES

3.1 Permitting & USA Service Alert

Alameda County Public Works Agency (ACPWA) Water Resources Well Permit W2015-0346 was acquired by Burns & McDonnell on April 28, 2014. The Sites monitoring wells were then demarked with white paint and Underground Service Alert of Northern California (USAN) was notified; USAN dig alert ticket #: 0223405 was issued. USAN contacted the appropriate utility owners and agencies of record within the Site vicinity and notified them of the schedule of work in proximity of potential subsurface utilities. Selected utility owners of record, or their designated agents, marked the position of their utilities on the ground surface throughout the area designated for investigation.

3.2 Well Destruction Activities

On May 19, 2015, Cascade (CA C-57 # 938110) under supervisor of a Burns & McDonnell CA professional geologist, properly destroyed all Site wells (MW-3 through MW-8) using standard well pressure grouting techniques and ACPW permits conditions. Historical monitoring wells MW-1 and MW-2 were destroyed in August 2009.

Cascade placed neat cement (Type II-V) within each PVC well casing until overflowing. Sufficient time was allowed for initial settling. Once a static grout level was obtained, a PVC threaded cap was cemented to the well head and air fittings were attached. Cascade applied constant pressure at each monitoring well at a constant pressure of 25 psi for duration of five minutes. Each Site well passed the pressure grouting pressure test on the first attempt.

Post pressure grouting, Cascade removed the well boxes and surrounding concrete and over-drilled each well using a CME 75 hollow stem auger drill rig (HSA) with an 8 inch outer diameter hollow stem auger flight to a depth of 5 feet bgs. Each wells vault and sanitary seal was removed during over-drilling. Well construction details are shown as Table 3-1.

The boreholes were backfilled with grout to an approximate depth of 8 inches bgs. The top grade was completed with rapid set high strength concrete. Well destruction photographs are provided as Appendix C.

3.3 Investigation Derived Waste

Investigation Derived Waste (IDW) which included the annular materials generated during drilling, and decontamination fluids and construction debris generated during over-drilling activities (e.g. well vaults, concrete) were containerized in Department of Transportation (DOT) 55-gallon steel drum(s) pending disposal or recycling at an appropriate facility. The drum(s) were sealed and labeled, date of waste generation, type of waste, name and phone number of Burns & McDonnell representative. The IDW soil was profiled. After acceptance of the waste characterization profile by a licensed disposal facility, the drums were disposed of at appropriate disposal facilities by Univar USA Inc (US EPA ID CAD010925576), which holds the appropriate licensing for these activities. The waste disposal manifest is included in Appendix D. The analytical testing report in support of the profiling is attached as Appendix E.

In summary, all remaining investigation, remediation, and well destruction derived wastes have been removed from the site.

4.0 SUMMARY

On May 19, 2015, Burns & McDonnell oversaw the permanent destruction of Site wells MW-3 through MW-8 by pressure grouting; destructions were performed by Cascade. Each well passed the pressure grouting test criteria set forth by ACPWA of 25 psi for duration of 5 minutes. Post pressure grouting, each well was over-drilled to a depth of 5 feet bgs and backfilled with grout. The top grade was competed with concrete to match surrounding conditions.

All remaining investigation, remediation, and well destruction derived wastes have been removed from the site.

As stated by the ACEH, the Site is in compliance with SWRCB Low-Threat Closure Policy and therefore eligible for closure. The Public Participation period has expired with no recorded comments submitted to the ACEH regarding the Site, and all Site wells summarily destroyed. Henceforth, on behalf of YRC, Burns & McDonnell anticipates that the ACEH shall formally grant No Further Action status upon the receipt of this report.

*****

TABLES

Table 3-1
Well Construction Details

YRC Worldwide Inc.
Former Roadway Express (REX) Facility
1708 Wood Street
Oakland, California

Well ID	Installation Date	Casing Diameter (Inches)	Casing Elevation (ft msl)	Construction Depth (ft msl)	Screened Interval (ft msl)	Comments
MW-1	March 1987	4	unknown	10	0.5-10	Well Destroyed August 2008
MW-2	March 1987	4	9.89	9.5	0.5-9.5	Well Destroyed August 2008
MW-3	September 2000	2	10.11	30	10-30	Well Destroyed May 2015
MW-4	September 2000	2	9.52	30	10-30	Well Destroyed May 2015
MW-5	September 2000	2	9.97	30	10-30	Well Destroyed May 2015
MW-6	February 2009	1	10.13	10	5-10	Well Destroyed May 2015
MW-7	February 2009	1	9.93	10	5-10	Well Destroyed May 2015
MW-8	February 2009	1	9.83	10	5-10	Well Destroyed May 2015

Notes:

ft msl Elevation reference in feet to mean sea level
ft bgs Depth in feet below ground surface

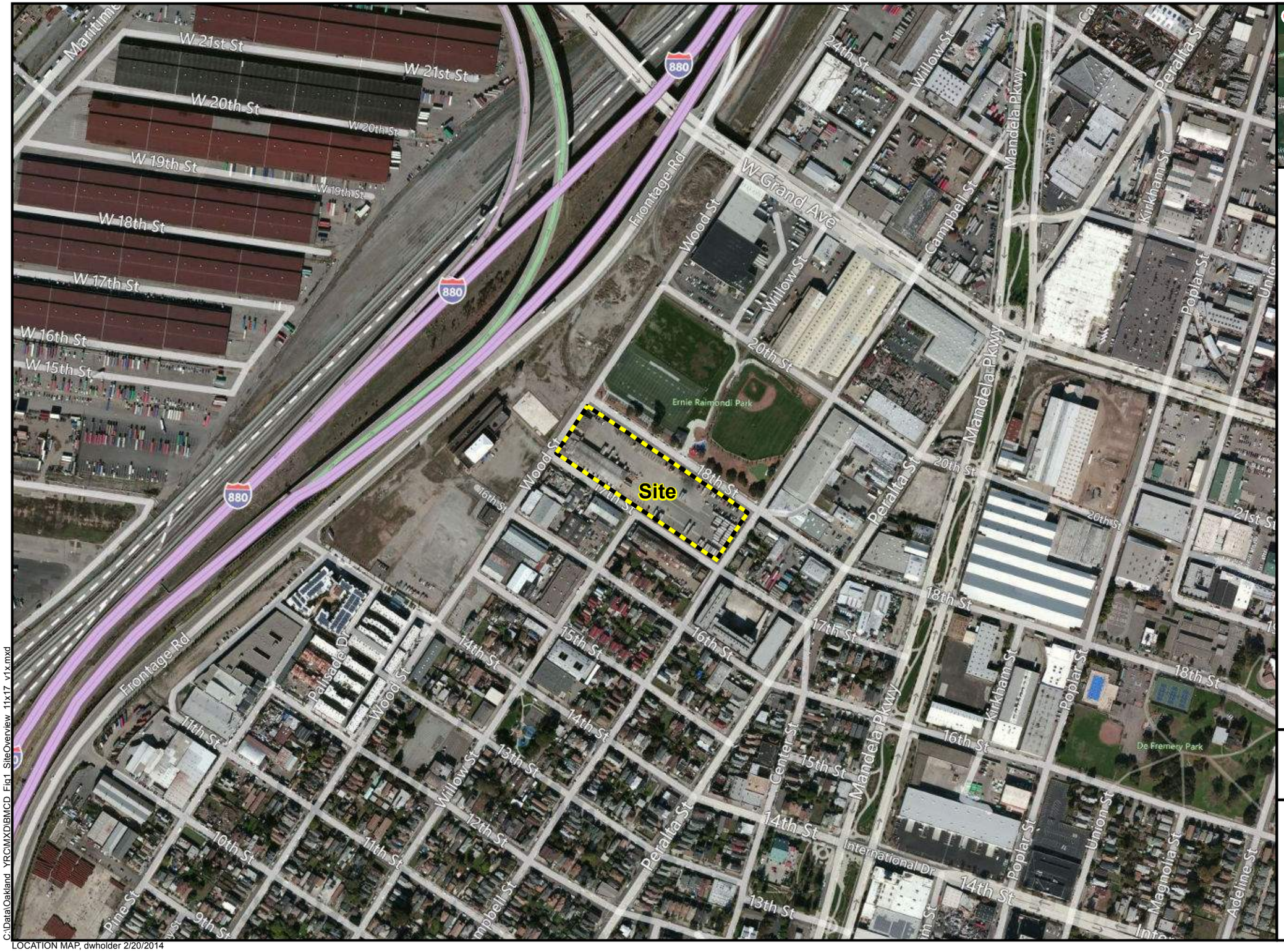
Construction-Survey Notes:

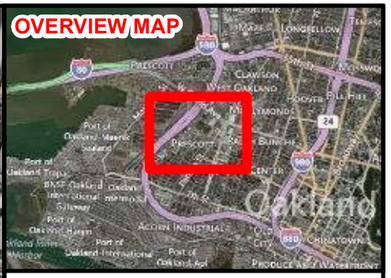
Construction depth and screened intervals for MW-3, MW-4, and MW-5 based on boring logs located in the *Additional Groundwater Investigation Report by One Environment, 2001.*
Casing elevation for MW-2, MW-3, MW-4, and MW-5 resurveyed by Luk and Associates on December 20, 2007.
Casing elevation for MW-6, MW-7, and MW-8 surveyed by Luk and Associates on March 3, 2009.

Well Destruction Notes:

August 2008: Monitoring wells MW-1 and MW-2 deastroyed by overdriling.
May 19, 2015: Monitoring wells MW-3 through MW-8 destroyed by pressure grounting.

FIGURES





LEGEND

Site

NORTH

400 200 0 400

SCALE IN FEET

BURNS McDONNELL

Figure 1-1

LOCATION MAP

FORMER ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA

C:\Data\Oakland YRC\MXD\BMCD_Fig1_SiteOverview_11x17_v1x.mxd
LOCATION MAP, dwholder 2/20/2014

LEGEND

Site

NORTH

75 37.5 0 75

SCALE IN FEET

BURNS McDONNELL

Figure 1-2

SITE PLAN
FORMER ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA

C:\Data\Oakland_YRC\MXD\BMCD_Fig2_UST_Locations_11x17_v1x.mxd

SITE MAP, dwholder 2/20/2014

LEGEND

SHALLOW MONITORING WELLS (MW-6 TO MW-8) DESTROYED MAY 2015

DEEP MONITORING WELLS (MW-3 TO MW-5) DESTROYED MAY 2015

MONITORING WELLS (MW-1 AND MW-2) DESTROYED AUGUST 2008

SANITARY SEWER

SS

18TH STREET

18TH STREET

LIMITS OF SOIL EXCAVATION

ASPHALT

PROPERTY FENCE

ELECTRIC SECURITY FENCE

FORMER MECHANICS SHED (REMOVED 2011)

MW-4

OIL/WATER SEPARATOR

(NOV 2011)

MW-8

CENTRAL EASTERN UST AREA

MW-7

10k Diesel (1996)

MO

FMR. DISP.

MW-1

10k Gas (1987)

MW-2

PARKING

MW-5

MW-3

MW-6

N

0 10' 20'

SCALE IN FEET

BURNS McDONNELL

Figure 1-3
FORMER MONITORING WELL LOCATIONS (AREA 2)
1708 WOOD STREET
OAKLAND, CALIFORNIA

\\BMCD\DFS\CLIENTS\ENV\YRC\79379_OAKLAND\STUDIES\DELIVERABLES\BMCD_REPORTS\2015_WELL_CLOSURE\FIGURES\YRC OAKLAND FIG 3.DWG 4/6/2015 2:34 PM CDSA

APPENDIX A - ALAMEDA COUNTY PUBLIC WORKS AGENCY- WELL PERMIT

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 04/28/2015 By jamesy

Permit Numbers: W2015-0346
Permits Valid from 05/19/2015 to 05/20/2015

Application Id: 1428358785443
City of Project Site: Oakland
Site Location: 1708 Wood Street
Project Start Date: 05/19/2015
Completion Date: 05/20/2015

Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Burns & McDonnell - Christopher D'Sa
200 S Los Robles Ave #250, Pasadena, CA 91101
Phone: 310-570-7069

Property Owner: Attn: Martin Ward PSAI Partners IV, LLC.
155 Montgomery St Ste 1600, San Francisco, CA 94104
Phone: 415-362-3743

Client: Ruben Byerley
10990 Roe Avenue, Overland Park, KS 66211
Phone: 913-234-8940 x

Total Due: $265.00
Receipt Number: WR2015-0194 **Total Amount Paid:** $265.00
Payer Name : Christopher D'Sa Paid By: MC **PAID IN FULL**

Works Requesting Permits:

Remediation Well Destruction-Injection - 6 Wells
Driller: CASCADE DRILLING L P - Lic #: 938110 - Method: press **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2015-0346	04/28/2015	08/17/2015	MW-3	8.00 in.	2.00 in.	8.00 ft	30.00 ft	No Records	No Records	No Records
W2015-0346	04/28/2015	08/17/2015	MW-4	8.00 in.	2.00 in.	8.00 ft	30.00 ft	No Records	No Records	No Records
W2015-0346	04/28/2015	08/17/2015	MW-5	8.00 in.	2.00 in.	8.00 ft	30.00 ft	No Records	No Records	No Records
W2015-0346	04/28/2015	08/17/2015	MW-6	4.00 in.	1.00 in.	4.00 ft	10.00 ft	No Records	No Records	No Records
W2015-0346	04/28/2015	08/17/2015	MW-7	4.00 in.	1.00 in.	4.00 ft	10.00 ft	No Records	No Records	No Records
W2015-0346	04/28/2015	08/17/2015	MW-8	4.00 in.	1.00 in.	4.00 ft	10.00 ft	No Records	No Records	No Records

Specific Work Permit Conditions

1. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

2. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.

3. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

4. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

APPENDIX B - WELL DESTRUCTION APPROVAL LETTER

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

May 5, 2015

Ruben Byerley
Roadway Express
1077 Gorge Boulevard
Akron, OH 44310
(*Sent via E-mail to:*
ruben.byerley@yrcfreight.com)

Martin Ward
PSIA Partners IV LLC
155 Montgomery St., Suite 1600
San Francisco, CA 94104
(*Sent via E-mail to:*
MWard@psai-cre.com)

Subject: Well Destruction Authorization for Fuel Leak Case No. RO0000039 (GeoTracker Global ID T0600102107), Roadway Express, 1708 Wood Street, Oakland, CA 94607

Dear Responsible Parties:

The public comment period for the subject site ended on May 4, 2015. No comments were received by Alameda County Environmental Health (ACEH). You are free to proceed with the destruction of all wells associated with the site (groundwater, vapor, etc.), as requested in the April 6, 2015 letter from ACEH. As requested in the letter, please contact the Alameda County Public Works Agency to obtain well destruction permits. Following the well destruction, please provide ACEH a well destruction report according to the schedule outlined below. The well destruction report should document site activities, provide well destruction permit documentation, and documentation indicating that any remaining investigation, remediation, and well destruction derived waste have been removed from the site.

TECHNICAL REPORT REQUEST

Please submit reports to Alameda County Environmental Health, and upload technical reports to the ACEH ftp site (Attention: Keith Nowell), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **June 18, 2015 - Monitoring Well Destruction and Waste Removal Activities -** File to be named RO39_WELL_DCM_R_yyyymm-dd

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Should you have any questions, please contact me at (510) 567--6764 or send me an electronic mail message at keith.nowell@acgov.org.

Sincerely,

Keith Nowell

Digitally signed by Keith Nowell
DN: cn=Keith Nowell, o=Alameda County, ou=Department of Environmental Health, email=keith.nowell@acgov.org, c=US
Date: 2015.05.05 08:35:13 -07'00'

Keith Nowell, PG, CHG
Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements/Obligations and Electronic Report Upload (ftp) Instructions

cc: Christopher D'Sa, Burns and McDonnell Engineering Company, Inc., 400 Oyster Point Blvd., Suite 533, South San Francisco, CA 94080 (*Sent via E-mail to: cdsa@burnsmcd.com*)

James Yoo, Alameda Co. Dept. of Public Works, Water Resources Section, 399 Elmhurst Street, Hayward, CA 94544 (*Sent via E-mail to: jamesy@acpwa.org*)

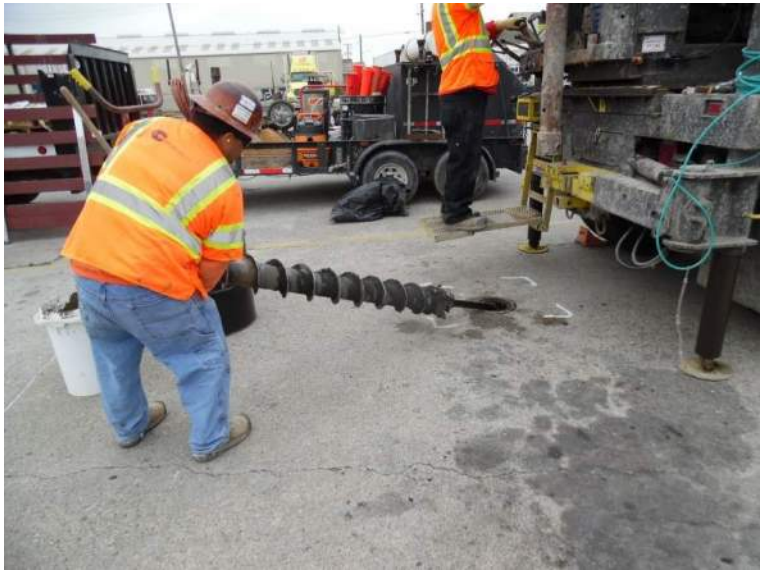
Dilan Roe, ACEH, (sent via e-mail to *dilan.roe@acgov.org*)
Keith Nowell, ACEH, (sent via e-mail *keith.nowell@acgov.org*)
Geotracker, Electronic File

APPENDIX C - WELL DESTRUCTION PHOTOGRAPHS

Former Roadway Express (REX): Well Destruction- May 2015

Pressure-Grouting

Over-Drilling



BURNS McDONNELL

Former Roadway Express (REX): Well Destruction- May 2015

Well Vault Removal

Restoration

BURNS McDONNELL

APPENDIX D - WASTE DISPOSAL MANIFEST

R

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

ORDER # SJC785213

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAR000039180
2. Page 1 of: 2
3. Emergency Response Phone: Univar USA Inc. 800-535-5053
4. Manifest Tracking Number: 014370009 JJK

GENERATOR

5. Generator's Name and Mailing Address

YRC INC DBA YRC FREIGHT
1708 WOOD STREET
OAKLAND, CA 94607

Generator's Phone: 613 344-3644

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: 1. UNIVAR USA INC.
U.S. EPA ID Number: CAD010925576

7. Transporter 2 Company Name: 2. ENGLUND EQUIPMENT CO.
U.S. EPA ID Number: AZD982403586

8. Designated Facility Name and Site Address

US ECOLOGY BEATTY
PO BOX 578
HWY 95 (11 MI S OF BEATTY), BEATTY, NV 89003-057

Facility's Phone: 800-239-3943

U.S. EPA ID Number: NVT330010000

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON-RCRA HAZARDOUS WASTE, SOLID (SOIL CUTTINGS)	1	DM	200	P	181
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

1. 070128300-11781
PLACARDS PROVIDED BY CARRIER/SHIPPER YES (NO) DRIVER SIGNATURE Tony R
**** ER CALLER MUST IDENTIFY UNIVAR USA AS REGISTRANT (CONTRACT # 97569) ****

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Fernando Ambriz
Signature:
Month 6 Day 17 Year 15

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JAMES MINKS
Signature:
Month 6 Day 17 Year 15

Transporter 2 Printed/Typed Name: TONY RODRIGUEZ
Signature:
Month 06 Day 22 Year 15

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Jessica Reed
Signature:
Month 6 Day 26 Year 15

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

ORDER # SJC785212

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)	21. Generator ID Number	22. Page	23. Manifest Tracking Number
	C A R 0 0 0 0 3 9 1 8 0	2 of 2	014370009JJK

24. Generator's Name
YRC INC DBA YRC FREIGHT
1708 WOOD STREET
OAKLAND, CA 94607

25. Transporter 3 Company Name
3. UNIVAR USA INC.
U.S. EPA ID Number
C A R 0 0 0 0 4 7 6 9 6

26. Transporter 4 Company Name
4. ENGLUND EQUIPMENT CO.
U.S. EPA ID Number
A Z D 9 8 2 4 0 3 5 8 6

27a. HM	27b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes

32. Special Handling Instructions and Additional Information

GENERATOR

TRANSPORTER

33. Transporter 3 Acknowledgment of Receipt of Materials
Printed/Typed Name: Luis Sanchez
Signature:
Month: 06 Day: 25 Year: 15

34. Transporter 4 Acknowledgment of Receipt of Materials
Printed/Typed Name: Jonathan Rodriguez
Signature:
Month: 06 Day: 25 Year: 15

DESIGNATED FACILITY

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

EPA Form 8700-22A (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

APPENDIX E - ANALYTICAL REPORT IN SUPPORT OF WASTE PROFILING

Northern California ACCUTEST LABORATORIES

05/22/15

Technical Report for

Burns and McDonnell Engineering

T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA 79379

Accutest Job Number: C39925

Sampling Date: 05/19/15

Report to:

Burns and McDonnell Engineering
400 Oyster Point Blvd Suite 533
South San Francisco, CA 94080
sbarber@burnsmcd.com

ATTN: Simon Barber

Total number of pages in report: **58**

NELAP ACCREDITED TNI LABORATORY

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

James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Accutest Laboratories

Sample Summary

Burns and McDonnell Engineering

Job No: C39925

T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA
Project No: 79379

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
C39925-1	05/19/15	11:00	SB	05/20/15	SO	Soil	COMP-1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C39925
Account: Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA
Collected: 05/19/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C39925-1	**COMP-1**					
Acetone		652	160	40	ug/kg	SW846 8260B
Methyl ethyl ketone		956	81	8.1	ug/kg	SW846 8260B
TPH-GRO (C6-C10)		1250	400	200	ug/kg	SW846 8260B
TPH (C10-C28)		30.5	16	4.1	mg/kg	SW846 8015B M
TPH (> C28-C40)		146	33	8.2	mg/kg	SW846 8015B M
Arsenic		5.3	1.7		mg/kg	SW846 6010B
Barium		239	17		mg/kg	SW846 6010B
Chromium		41.4	0.86		mg/kg	SW846 6010B
Cobalt		7.9	0.86		mg/kg	SW846 6010B
Copper		43.4	2.2		mg/kg	SW846 6010B
Lead		95.3	1.7		mg/kg	SW846 6010B
Mercury		2.8	0.37		mg/kg	SW846 7471A
Molybdenum		1.7	1.7		mg/kg	SW846 6010B
Nickel		62.3	0.86		mg/kg	SW846 6010B
Selenium		2.3	1.7		mg/kg	SW846 6010B
Vanadium		47.1	0.86		mg/kg	SW846 6010B
Zinc		119	1.7		mg/kg	SW846 6010B

Northern California ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: COMP-1
Lab Sample ID: C39925-1
Matrix: SO - Soil
Method: SW846 8260B
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Date Sampled: 05/19/15
Date Received: 05/20/15
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L41449.D	1	05/20/15	XB	n/a	n/a	VL1244
Run #2	L41457.D	1	05/20/15	XB	n/a	n/a	VL1244

	Initial Weight
Run #1	5.00 g
Run #2	1.24 g

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	652 [b]	160	40	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

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

Report of Analysis

Client Sample ID:	COMP-1		
Lab Sample ID:	C39925-1	**Date Sampled:**	05/19/15
Matrix:	SO - Soil	**Date Received:**	05/20/15
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	956 [b]	81	8.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	1250 [b]	400	200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	9% [c]	48% [c]	70-130%

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

Report of Analysis

Client Sample ID:	COMP-1		
Lab Sample ID:	C39925-1	**Date Sampled:**	05/19/15
Matrix:	SO - Soil	**Date Received:**	05/20/15
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	110%	106%	70-130%
460-00-4	4-Bromofluorobenzene	92%	99%	70-130%

(a) All results reported on a wet weight basis.
(b) Result is from Run# 2
(c) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	COMP-1		
Lab Sample ID:	C39925-1	**Date Sampled:**	05/19/15
Matrix:	SO - Soil	**Date Received:**	05/20/15
Method:	SW846 8015B M SW846 3550B	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG58555.D	5	05/22/15	NN	05/21/15	OP12273	GGG1717
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	30.5	16	4.1	mg/kg	
	TPH (> C28-C40)	146	33	8.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	98%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMP-1		
Lab Sample ID:	C39925-1	**Date Sampled:**	05/19/15
Matrix:	SO - Soil	**Date Received:**	05/20/15
		Percent Solids:	n/a [a]
Project:	T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	< 1.7	1.7	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Arsenic	5.3	1.7	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Barium	239	17	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Beryllium	< 0.86	0.86	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Cadmium	< 0.86	0.86	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Chromium	41.4	0.86	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Cobalt	7.9	0.86	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Copper	43.4	2.2	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Lead	95.3	1.7	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Mercury	2.8	0.37	mg/kg	10	05/21/15	05/22/15	EB	SW846 7471A [2]	SW846 7471A [4]
Molybdenum	1.7	1.7	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Nickel	62.3	0.86	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Selenium	2.3	1.7	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Silver	< 0.86	0.86	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Thallium	< 1.7	1.7	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Vanadium	47.1	0.86	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]
Zinc	119	1.7	mg/kg	1	05/21/15	05/22/15	RS	SW846 6010B [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA4892
(2) Instrument QC Batch: MA4895
(3) Prep QC Batch: MP9555
(4) Prep QC Batch: MP9563

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Northern California ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Burns & McDonnell SINCE 1898

03082011 Form WCD-KC1-SDO

Request for Chemical Analysis and Chain of Custody Record

C39925

Burns & McDonnell Engineering
400 Oyster Point Blvd. Suite 533
South San Francisco, CA 94080
Phone: (650) 871-2926 Fax: (650) 871-2653

Attention: Simon Barber

Laboratory: accutest
Address: 2105 Lundy Ave
City/State/Zip: San Jose, CA
Telephone: 408-588-0200

Document Control No:
Lab. Reference No. or Episode No.:

Project Number: 79379
Client Name: YRC. 1708 Wood St.

Analysis: title 22 metals 6010B; VOCs 8260B; TPHg 8260B; TPHd + TPHmo 8015

Group or SWMU Name	Sample Point	Sample Designator	Round	Year	Depth From	Depth To	Date	Time	Liquid	Solid	Gas	Number of Containers	title 22 metals 6010B	VOCs 8260B	TPHg 8260B	TPHd + TPHmo 8015			Remarks
1	Comp-1		May	2015			5-19	1100		X		2	X	X	X	X			

48 hour turn.

2 DAYS

Sampler (signature): [signature]
Sampler (signature):

Special Instructions: ~~Standard turn time:~~ SB
T0600102107 Run Silica gel

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
1. [signature]	5-20-15 0815	[signature]	5/20/15 0815
2. [signature]	5/20/15 12:10	[signature]	5/20/15 1214

Ice Present in Container: Yes [checked] No [ ]

Temperature Upon Receipt: 4.7; 4.7°C

Laboratory Comments: [signature]

C39925: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C39925 **Client:** BURNS & MCDONNEL **Project:** YRC 1708 WOOD STREET

Date / Time Received: 5/20/2015 12:14:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (4.7/4.7);

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

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Therm ID:	IR1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

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

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

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

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

Comments

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www/accutest.com

C39925: Chain of Custody
Page 2 of 2

Northern California ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1244-MB	L41448.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

Method Blank Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1244-MB	L41448.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1244-MB	L41448.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	70-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	95%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1244-BS	L41445.D	1	05/20/15	XB	n/a	n/a	VL1244
VL1244-BSD	L41446.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	135	84	141	88	4	62-130/24
71-43-2	Benzene	40	34.5	86	34.5	86	0	81-119/20
108-86-1	Bromobenzene	40	36.4	91	36.5	91	0	79-120/22
74-97-5	Bromochloromethane	40	34.1	85	34.9	87	2	81-120/19
75-27-4	Bromodichloromethane	40	36.3	91	36.6	92	1	79-124/20
75-25-2	Bromoform	40	36.7	92	38.7	97	5	76-128/21
104-51-8	n-Butylbenzene	40	38.3	96	37.8	95	1	79-123/26
135-98-8	sec-Butylbenzene	40	37.6	94	37.8	95	1	77-122/24
98-06-6	tert-Butylbenzene	40	36.3	91	37.1	93	2	77-121/23
108-90-7	Chlorobenzene	40	36.6	92	38.0	95	4	82-121/20
75-00-3	Chloroethane	40	32.0	80	32.1	80	0	80-126/21
67-66-3	Chloroform	40	34.8	87	35.3	88	1	82-123/20
95-49-8	o-Chlorotoluene	40	36.4	91	36.3	91	0	78-125/25
106-43-4	p-Chlorotoluene	40	37.2	93	37.4	94	1	75-125/26
56-23-5	Carbon tetrachloride	40	36.3	91	36.0	90	1	82-127/22
75-34-3	1,1-Dichloroethane	40	34.2	86	34.7	87	1	80-123/20
75-35-4	1,1-Dichloroethylene	40	29.8	75* [a]	30.2	76	1	76-123/19
563-58-6	1,1-Dichloropropene	40	35.7	89	35.6	89	0	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	34.9	87	35.8	90	3	64-133/23
106-93-4	1,2-Dibromoethane	40	35.4	89	37.1	93	5	80-120/20
107-06-2	1,2-Dichloroethane	40	37.7	94	37.1	93	2	76-132/21
78-87-5	1,2-Dichloropropane	40	35.5	89	35.3	88	1	80-121/20
142-28-9	1,3-Dichloropropane	40	36.5	91	37.9	95	4	78-120/20
108-20-3	Di-Isopropyl ether	40	34.4	86	34.9	87	1	78-126/19
594-20-7	2,2-Dichloropropane	40	35.0	88	34.9	87	0	77-132/22
124-48-1	Dibromochloromethane	40	36.7	92	38.3	96	4	76-121/21
75-71-8	Dichlorodifluoromethane	40	41.5	104	39.9	100	4	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	33.6	84	34.3	86	2	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	34.9	87	35.6	89	2	81-124/21
541-73-1	m-Dichlorobenzene	40	37.2	93	37.2	93	0	79-123/23
95-50-1	o-Dichlorobenzene	40	37.5	94	37.5	94	0	79-124/22
106-46-7	p-Dichlorobenzene	40	37.4	94	36.9	92	1	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	32.8	82	33.5	84	2	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	37.2	93	38.9	97	4	81-123/22
100-41-4	Ethylbenzene	40	36.4	91	37.7	94	4	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	34.5	86	35.1	88	2	75-132/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1244-BS	L41445.D	1	05/20/15	XB	n/a	n/a	VL1244
VL1244-BSD	L41446.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	142	89	148	93	4	68-139/24
87-68-3	Hexachlorobutadiene	40	39.0	98	38.3	96	2	81-126/32
98-82-8	Isopropylbenzene	40	36.5	91	38.1	95	4	81-122/22
99-87-6	p-Isopropyltoluene	40	37.5	94	37.4	94	0	81-121/23
108-10-1	4-Methyl-2-pentanone	160	135	84	137	86	1	74-136/23
74-83-9	Methyl bromide	40	34.8	87	35.5	89	2	82-124/20
74-87-3	Methyl chloride	40	37.9	95	37.8	95	0	60-132/26
74-95-3	Methylene bromide	40	35.0	88	35.4	89	1	82-120/20
75-09-2	Methylene chloride	40	31.8	80	32.7	82	3	75-119/20
78-93-3	Methyl ethyl ketone	160	131	82	136	85	4	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	33.5	84	34.5	86	3	79-127/19
91-20-3	Naphthalene	40	37.4	94	38.4	96	3	78-125/23
103-65-1	n-Propylbenzene	40	37.6	94	37.3	93	1	79-124/22
100-42-5	Styrene	40	35.0	88	36.3	91	4	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	33.5	84	34.5	86	3	80-127/20
75-65-0	Tert Butyl Alcohol	200	160	80	165	83	3	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	36.8	92	38.7	97	5	82-123/21
71-55-6	1,1,1-Trichloroethane	40	34.7	87	35.0	88	1	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	36.7	92	37.1	93	1	77-126/20
79-00-5	1,1,2-Trichloroethane	40	36.1	90	37.1	93	3	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	38.8	97	38.7	97	0	81-122/26
96-18-4	1,2,3-Trichloropropane	40	41.9	105	43.0	108	3	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	38.9	97	39.1	98	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	37.1	93	37.2	93	0	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	37.0	93	37.1	93	0	81-123/23
127-18-4	Tetrachloroethylene	40	35.4	89	38.2	96	8	80-125/25
108-88-3	Toluene	40	35.4	89	36.8	92	4	80-117/21
79-01-6	Trichloroethylene	40	35.0	88	34.7	87	1	81-122/20
75-69-4	Trichlorofluoromethane	40	35.6	89	34.9	87	2	77-133/22
75-01-4	Vinyl chloride	40	37.7	94	36.9	92	2	71-133/23
1330-20-7	Xylene (total)	120	109	91	112	93	3	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	96%	98%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1244-BS	L41445.D	1	05/20/15	XB	n/a	n/a	VL1244
VL1244-BSD	L41446.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	102%	103%	70-130%
460-00-4	4-Bromofluorobenzene	98%	98%	70-130%

(a) Outside laboratory control limits (high low); but within marginal exceedence criteria.

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1244-LCS	L41447.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	233	93	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	70-130%
2037-26-5	Toluene-D8	105%	70-130%
460-00-4	4-Bromofluorobenzene	96%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C39925-1MS	L41450.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1MSD	L41451.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1	L41449.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1	L41457.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Compound	C39925-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	652 [b]		158	653	1* [a]	160	669	11* [a]	2	62-130/24
71-43-2	Benzene	ND		39.6	33.8	85	40	33.4	84	1	81-119/20
108-86-1	Bromobenzene	ND		39.6	32.1	81	40	30.7	77* [c]	4	79-120/22
74-97-5	Bromochloromethane	ND		39.6	34.2	86	40	33.6	84	2	81-120/19
75-27-4	Bromodichloromethane	ND		39.6	29.8	75* [c]	40	27.4	69* [c]	8	79-124/20
75-25-2	Bromoform	ND		39.6	33.6	85	40	32.5	81	3	76-128/21
104-51-8	n-Butylbenzene	ND		39.6	29.1	73* [c]	40	24.4	61* [c]	18	79-123/26
135-98-8	sec-Butylbenzene	ND		39.6	30.1	76* [c]	40	26.2	66* [c]	14	77-122/24
98-06-6	tert-Butylbenzene	ND		39.6	30.2	76* [c]	40	27.1	68* [c]	11	77-121/23
108-90-7	Chlorobenzene	ND		39.6	33.9	86	40	32.4	81* [c]	5	82-121/20
75-00-3	Chloroethane	ND		39.6	30.3	77* [c]	40	31.2	78* [c]	3	80-126/21
67-66-3	Chloroform	ND		39.6	34.5	87	40	33.8	85	2	82-123/20
95-49-8	o-Chlorotoluene	ND		39.6	32.9	83	40	28.6	72* [c]	14	78-125/25
106-43-4	p-Chlorotoluene	ND		39.6	32.2	81	40	29.2	73* [c]	10	75-125/26
56-23-5	Carbon tetrachloride	ND		39.6	34.9	88	40	31.9	80* [c]	9	82-127/22
75-34-3	1,1-Dichloroethane	ND		39.6	32.8	83	40	32.6	82	1	80-123/20
75-35-4	1,1-Dichloroethylene	ND		39.6	39.9	101	40	41.0	103	3	76-123/19
563-58-6	1,1-Dichloropropene	ND		39.6	33.5	85	40	31.9	80	5	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		39.6	24.1	61* [c]	40	22.0	55* [c]	9	64-133/23
106-93-4	1,2-Dibromoethane	ND		39.6	34.8	88	40	34.8	87	0	80-120/20
107-06-2	1,2-Dichloroethane	ND		39.6	36.3	92	40	35.8	90	1	76-132/21
78-87-5	1,2-Dichloropropane	ND		39.6	32.8	83	40	32.3	81	2	80-121/20
142-28-9	1,3-Dichloropropane	ND		39.6	37.2	94	40	37.0	93	1	78-120/20
108-20-3	Di-Isopropyl ether	ND		39.6	32.4	82	40	32.2	81	1	78-126/19
594-20-7	2,2-Dichloropropane	ND		39.6	35.1	89	40	33.5	84	5	77-132/22
124-48-1	Dibromochloromethane	ND		39.6	31.9	81	40	30.0	75* [c]	6	76-121/21
75-71-8	Dichlorodifluoromethane	ND		39.6	39.7	100	40	39.6	99	0	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		39.6	32.9	83	40	32.6	82	1	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		39.6	29.9	75* [c]	40	28.1	70* [c]	6	81-124/21
541-73-1	m-Dichlorobenzene	ND		39.6	30.4	77* [c]	40	28.3	71* [c]	7	79-123/23
95-50-1	o-Dichlorobenzene	ND		39.6	31.1	79	40	28.8	72* [c]	8	79-124/22
106-46-7	p-Dichlorobenzene	ND		39.6	30.8	78* [c]	40	28.4	71* [c]	8	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		39.6	32.4	82	40	31.0	78	4	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		39.6	31.6	80* [c]	40	30.0	75* [c]	5	81-123/22
100-41-4	Ethylbenzene	ND		39.6	34.0	86	40	31.9	80	6	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		39.6	33.9	86	40	33.8	85	0	75-132/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C39925-1MS	L41450.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1MSD	L41451.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1	L41449.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1	L41457.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Compound	C39925-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND		158	154	97	160	156	98	1	68-139/24
87-68-3	Hexachlorobutadiene	ND		39.6	23.1	58* c	40	16.1	40* c	36* c	81-126/32
98-82-8	Isopropylbenzene	ND		39.6	33.1	84	40	30.3	76* c	9	81-122/22
99-87-6	p-Isopropyltoluene	ND		39.6	29.9	75* c	40	26.0	65* c	14	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		158	120	76	160	126	79	5	74-136/23
74-83-9	Methyl bromide	ND		39.6	30.2	76* c	40	30.0	75* c	1	82-124/20
74-87-3	Methyl chloride	ND		39.6	34.4	87	40	40.1	100	15	60-132/26
74-95-3	Methylene bromide	ND		39.6	33.7	85	40	34.0	85	1	82-120/20
75-09-2	Methylene chloride	ND		39.6	31.9	81	40	31.8	80	0	75-119/20
78-93-3	Methyl ethyl ketone	956 b		158	952	-3* a	160	983	17* a	3	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		39.6	31.6	80	40	31.8	80	1	79-127/19
91-20-3	Naphthalene	ND		39.6	28.6	72* c	40	27.1	68* c	5	78-125/23
103-65-1	n-Propylbenzene	ND		39.6	31.1	79	40	28.3	71* c	9	79-124/22
100-42-5	Styrene	ND		39.6	31.9	81* c	40	30.1	75* c	6	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		39.6	33.8	85	40	33.7	84	0	80-127/20
75-65-0	Tert Butyl Alcohol	ND		198	149	75	200	169	85	13	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		39.6	34.1	86	40	32.4	81* c	5	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		39.6	35.1	89	40	33.4	84	5	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		39.6	9.8	25* c	40	10.1	25* c	3	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		39.6	27.2	69* c	40	24.9	62* c	9	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		39.6	28.4	72* c	40	24.3	61* c	16	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		39.6	38.8	98	40	38.3	96	1	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		39.6	27.7	70* c	40	24.3	61* c	13	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		39.6	31.0	78* c	40	28.2	71* c	9	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		39.6	32.2	81	40	29.3	73* c	9	81-123/23
127-18-4	Tetrachloroethylene	ND		39.6	61.3	155* c	40	56.3	141* c	9	80-125/25
108-88-3	Toluene	ND		39.6	34.7	88	40	33.8	85	3	80-117/21
79-01-6	Trichloroethylene	ND		39.6	60.3	152* c	40	57.8	145* c	4	81-122/20
75-69-4	Trichlorofluoromethane	ND		39.6	34.4	87	40	34.0	85	1	77-133/22
75-01-4	Vinyl chloride	ND		39.6	40.1	101	40	41.2	103	3	71-133/23
1330-20-7	Xylene (total)	ND		119	99.8	84	120	93.8	78* c	6	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C39925-1	C39925-1	Limits
1868-53-7	Dibromofluoromethane	23%* c	20%* c	9%* d	48%* d	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C39925-1MS	L41450.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1MSD	L41451.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1	L41449.D	1	05/20/15	XB	n/a	n/a	VL1244
C39925-1	L41457.D	1	05/20/15	XB	n/a	n/a	VL1244

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

C39925-1

CAS No.	Surrogate Recoveries	MS	MSD	C39925-1	C39925-1	Limits
2037-26-5	Toluene-D8	105%	104%	110%	106%	70-130%
460-00-4	4-Bromofluorobenzene	99%	99%	92%	99%	70-130%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.
(c) Outside control limits due to matrix interference.
(d) Outside control limits due to matrix interference. Confirmed by reanalysis.

* = Outside of Control Limits.

Northern California ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L150520\
Data File : L41449.D
Acq On : 20 May 2015 3:15 pm
Operator : XINGB
Sample : C39925-1
Misc : MS1865,VL1244,5.00,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 10:07:13 2015
Quant Method : C:\msdchem\1\METHODS\VL1214S.M
Quant Title : EPA -8260B
QLast Update : Mon Apr 06 10:01:31 2015
Response via : Initial Calibration

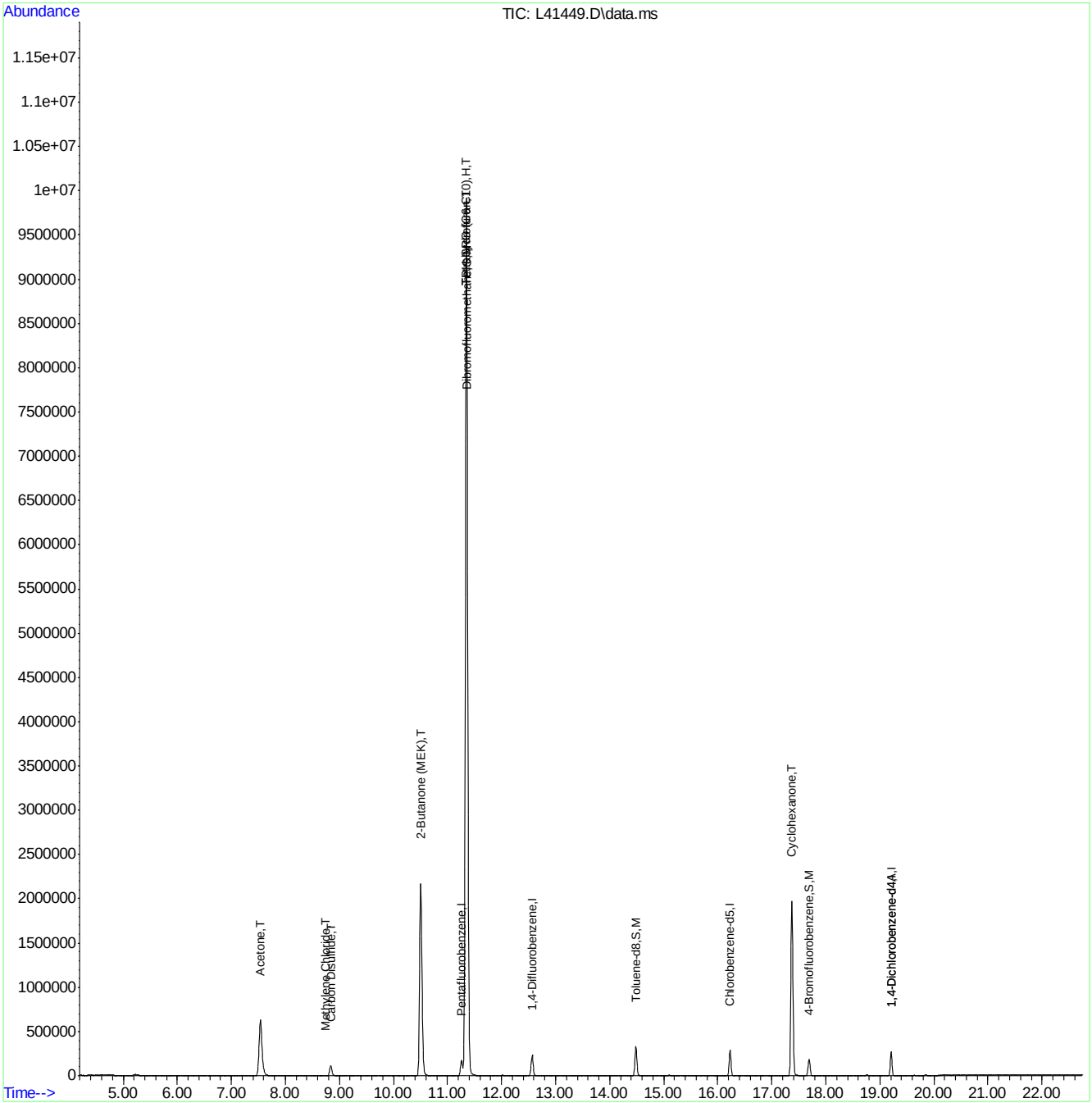
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	11.264	168	1662645	20.00	ug/Kg	0.00
39) 1,4-Difluorobenzene	12.568	114	2581087	20.00	ug/Kg	0.00
54) Chlorobenzene-d5	16.229	117	2122146	20.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	19.208	152	897893	20.00	ug/Kg	0.00
98) 1,4-Dichlorobenzene-d4A	19.208	152	897893	20.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	11.367	111	81404	1.85	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 9.25%#			
55) Toluene-d8	14.488	98	2974424	21.95	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 109.75%			
73) 4-Bromofluorobenzene	17.691	95	1081465	18.42	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 92.10%			
Target Compounds						Qvalue
11) Acetone	7.537	58	4686876	843.00	ug/Kg	98
19) Methylene Chloride	8.737	84	34814	0.54	ug/Kg	88
21) Carbon Disulfide	8.836	76	2705840	14.94	ug/Kg	100
29) Tetrahydrofuran	11.351	42	101069416	4285.58	ug/Kg	95
30) 2-Butanone (MEK)	10.505	72	9611003	1338.07	ug/Kg#	79
70) Cyclohexanone	17.369	55	13332288	5468.91	ug/Kg	97
99) TPH-GRO (C6-C10)	11.351	TIC	458983438m	1902.14	ug/Kg	

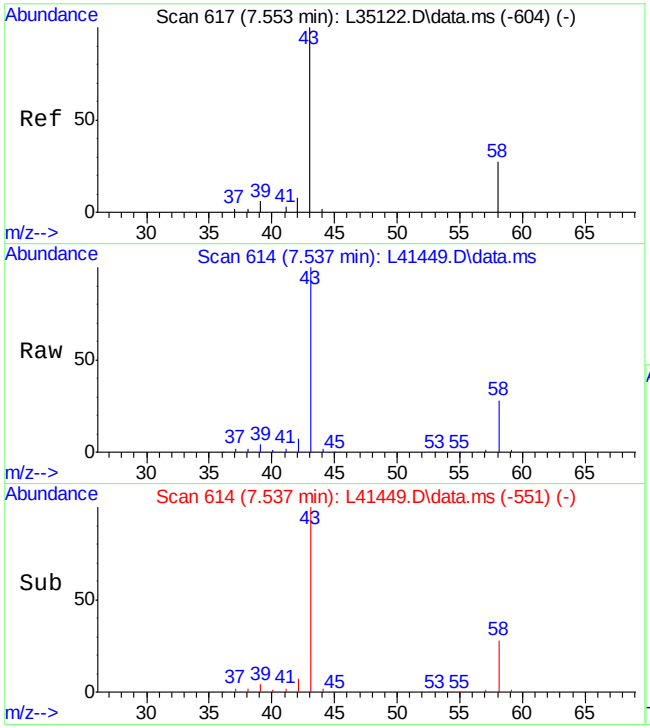
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L150520\
Data File : L41449.D
Acq On : 20 May 2015 3:15 pm
Operator : XINGB
Sample : C39925-1
Misc : MS1865,VL1244,5.00,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 10:07:13 2015
Quant Method : C:\msdchem\1\METHODS\VL1214S.M
Quant Title : EPA -8260B
QLast Update : Mon Apr 06 10:01:31 2015
Response via : Initial Calibration

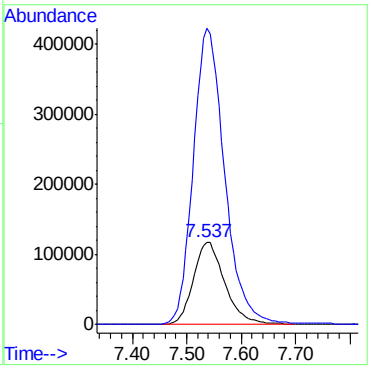


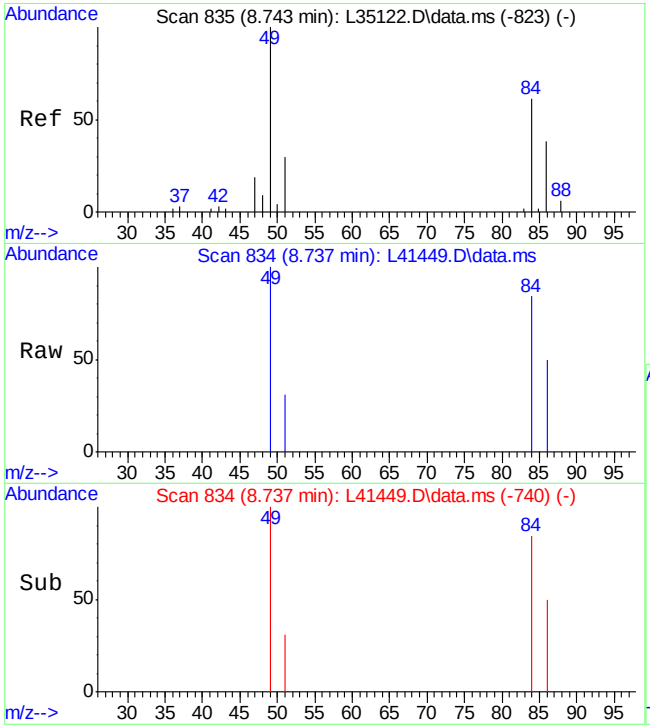


#11
Acetone
Concen: 843.00 ug/Kg
RT: 7.537 min Scan# 614
Delta R.T. -0.005 min
Lab File: L41449.D
Acq: 20 May 2015 3:15 pm

Tgt Ion: 58 Resp: 4686876

Ion	Ratio	Lower	Upper
58	100		
43	360.3	335.3	375.3

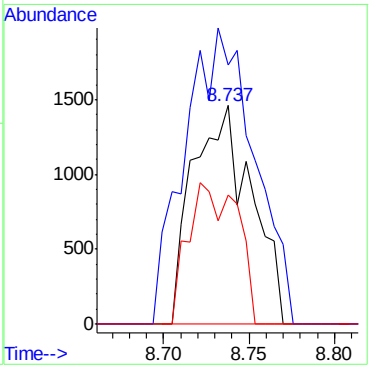


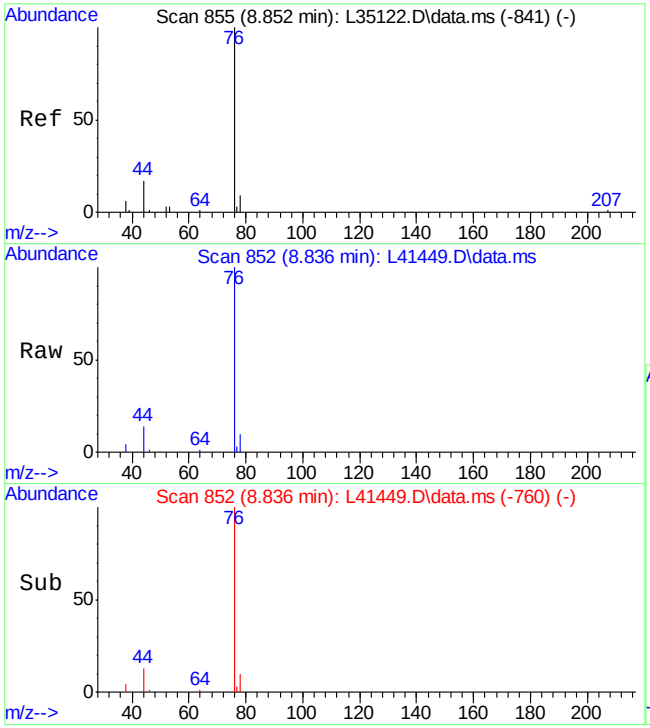


#19
Methylene Chloride
Concen: 0.54 ug/Kg
RT: 8.737 min Scan# 834
Delta R.T. 0.011 min
Lab File: L41449.D
Acq: 20 May 2015 3:15 pm

Tgt Ion: 84 Resp: 34814

Ion	Ratio	Lower	Upper
84	100		
49	160.9	125.7	165.7
86	55.0	43.7	83.7

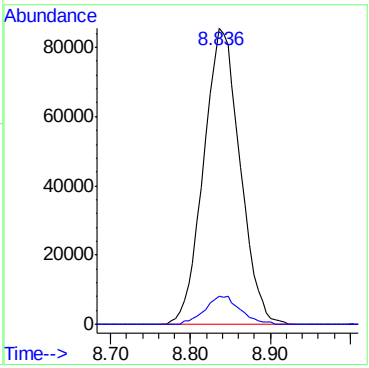


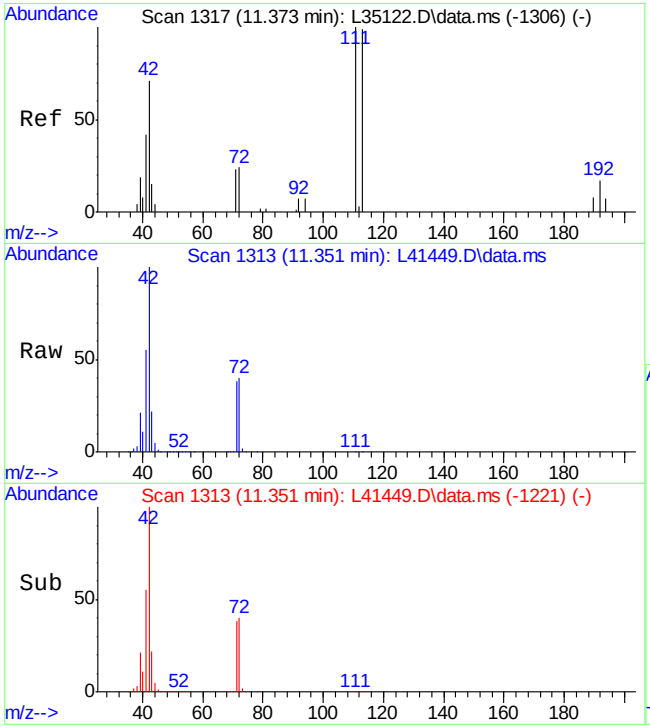


#21
Carbon Disulfide
Concen: 14.94 ug/Kg
RT: 8.836 min Scan# 852
Delta R.T. 0.000 min
Lab File: L41449.D
Acq: 20 May 2015 3:15 pm

Tgt Ion: 76 Resp: 2705840

Ion	Ratio	Lower	Upper
76	100		
78	9.2	0.0	29.1

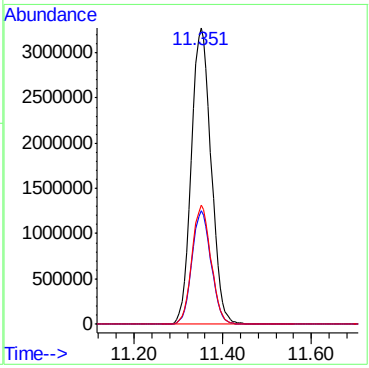


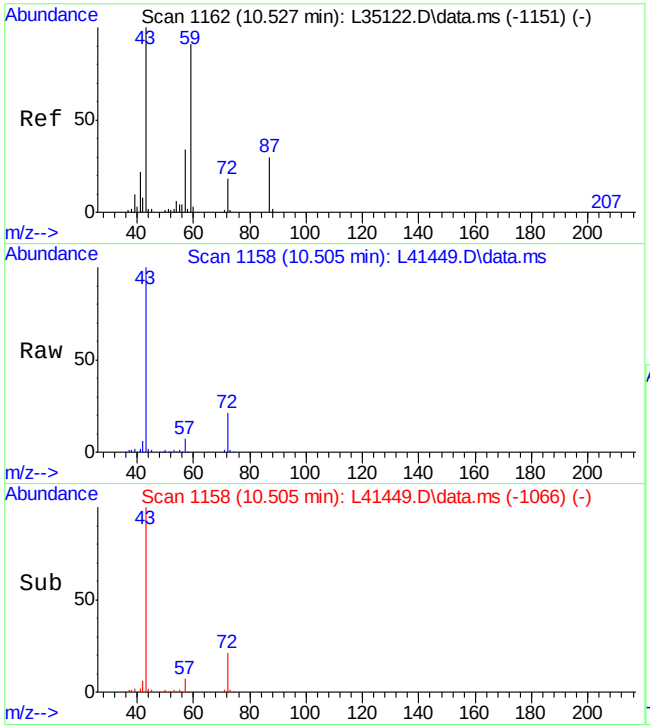


#29
Tetrahydrofuran
Concen: 4285.58 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. 0.000 min
Lab File: L41449.D
Acq: 20 May 2015 3:15 pm

Tgt Ion: 42 Resp:101069416

Ion	Ratio	Lower	Upper
42	100		
71	37.1	14.3	54.3
72	38.8	15.7	55.7

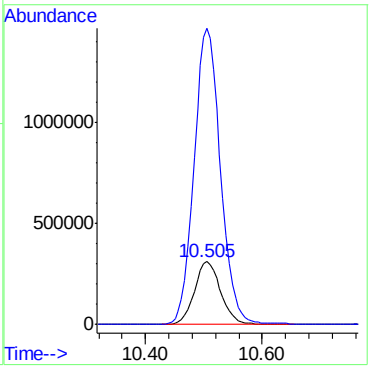


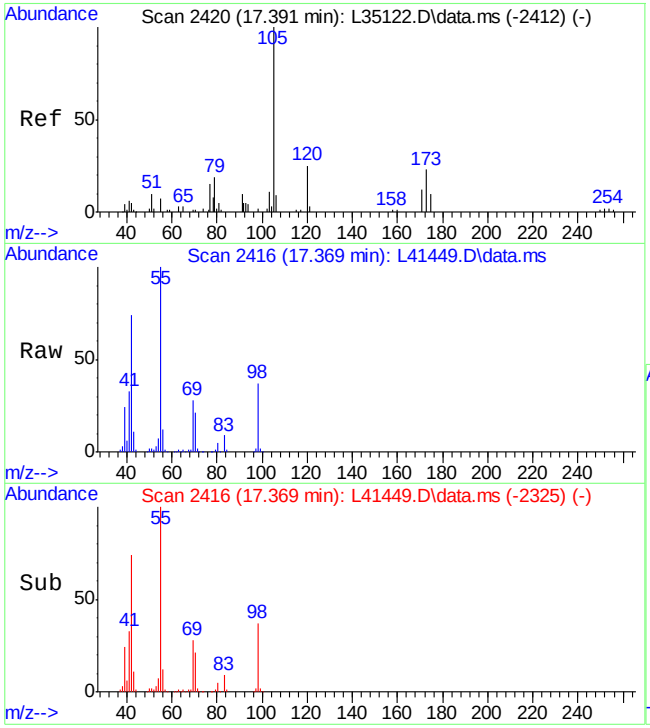


#30
2-Butanone (MEK)
Concen: 1338.07 ug/Kg
RT: 10.505 min Scan# 1158
Delta R.T. 0.000 min
Lab File: L41449.D
Acq: 20 May 2015 3:15 pm

Tgt Ion: 72 Resp: 9611003

Ion	Ratio	Lower	Upper
72	100		
43	479.5	521.0	561.0#

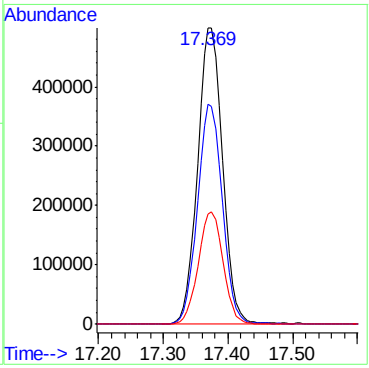


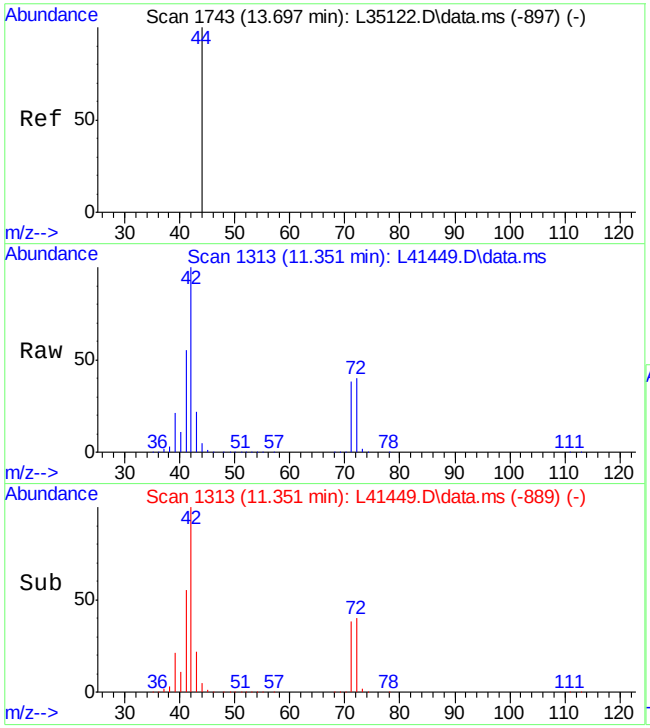


#70
Cyclohexanone
Concen: 5468.91 ug/Kg
RT: 17.369 min Scan# 2416
Delta R.T. -0.005 min
Lab File: L41449.D
Acq: 20 May 2015 3:15 pm

Tgt Ion: 55 Resp:13332288

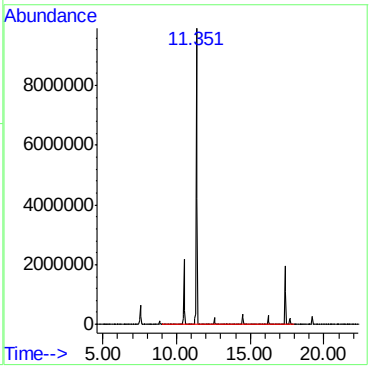
Ion	Ratio	Lower	Upper
55	100		
42	74.0	50.5	90.5
98	37.7	17.6	57.6





#99
TPH-GRO (C6-C10)
Concen: 1902.14 ug/Kg m
RT: 11.351 min Scan# 1313
Delta R.T. -2.349 min
Lab File: L41449.D
Acq: 20 May 2015 3:15 pm

Tgt Ion:TIC Resp:458983438



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L150520\
Data File : L41457.D
Acq On : 20 May 2015 7:08 pm
Operator : XINGB
Sample : C39925-1
Misc : MS1865,VL1244,1.24,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 21 10:12:09 2015
Quant Method : C:\msdchem\1\METHODS\VL1214S.M
Quant Title : EPA -8260B
QLast Update : Mon Apr 06 10:01:31 2015
Response via : Initial Calibration

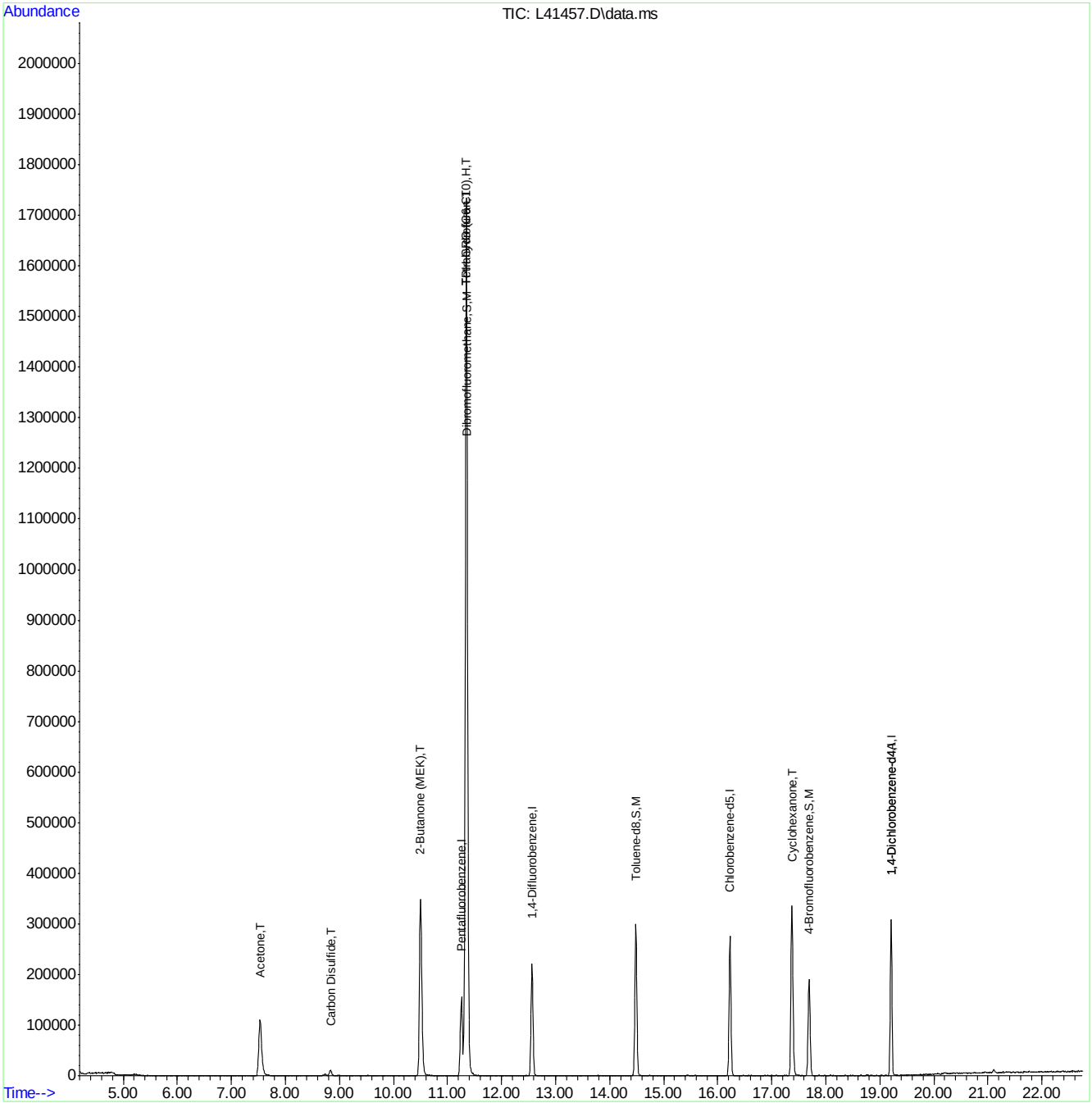
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	11.258	168	1487803	20.00	ug/Kg	0.00
39) 1,4-Difluorobenzene	12.562	114	2298329	20.00	ug/Kg	0.00
54) Chlorobenzene-d5	16.229	117	2000688	20.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	19.208	152	1027630	20.00	ug/Kg	0.00
98) 1,4-Dichlorobenzene-d4A	19.208	152	1027630	20.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	11.368	111	375365	9.51	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 47.55%#			
55) Toluene-d8	14.489	98	2713525	21.24	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 106.20%			
73) 4-Bromofluorobenzene	17.691	95	1092014	19.73	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 98.65%			
Target Compounds						Qvalue
11) Acetone	7.526	58	804735	161.75	ug/Kg	96
21) Carbon Disulfide	8.836	76	246377	1.52	ug/Kg	94
29) Tetrahydrofuran	11.351	42	17552477	831.73	ug/Kg	100
30) 2-Butanone (MEK)	10.500	72	1523531	237.04	ug/Kg#	84
70) Cyclohexanone	17.375	55	2289117	996.00	ug/Kg	97
99) TPH-GRO (C6-C10)	11.351	TIC	103400576m	309.21	ug/Kg	

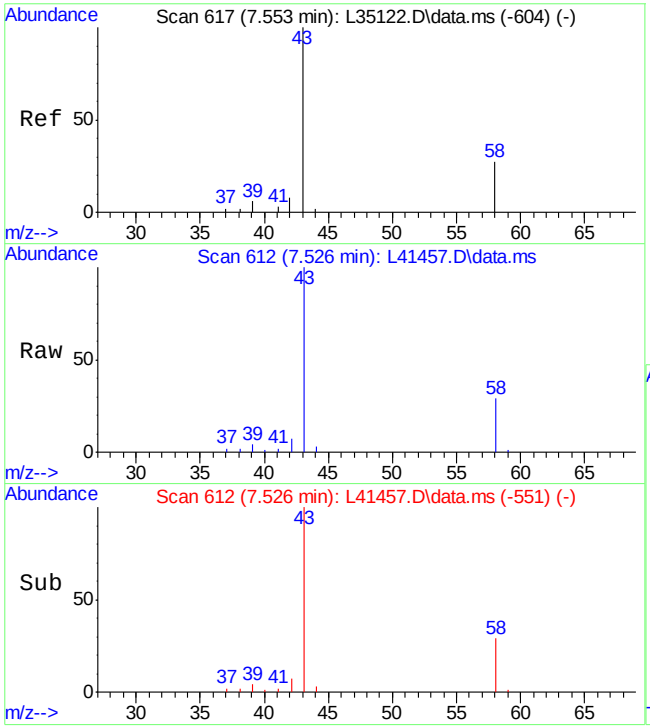
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L150520\
Data File : L41457.D
Acq On : 20 May 2015 7:08 pm
Operator : XINGB
Sample : C39925-1
Misc : MS1865,VL1244,1.24,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 21 10:12:09 2015
Quant Method : C:\msdchem\1\METHODS\VL1214S.M
Quant Title : EPA -8260B
QLast Update : Mon Apr 06 10:01:31 2015
Response via : Initial Calibration

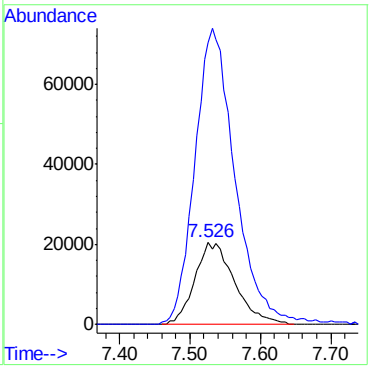


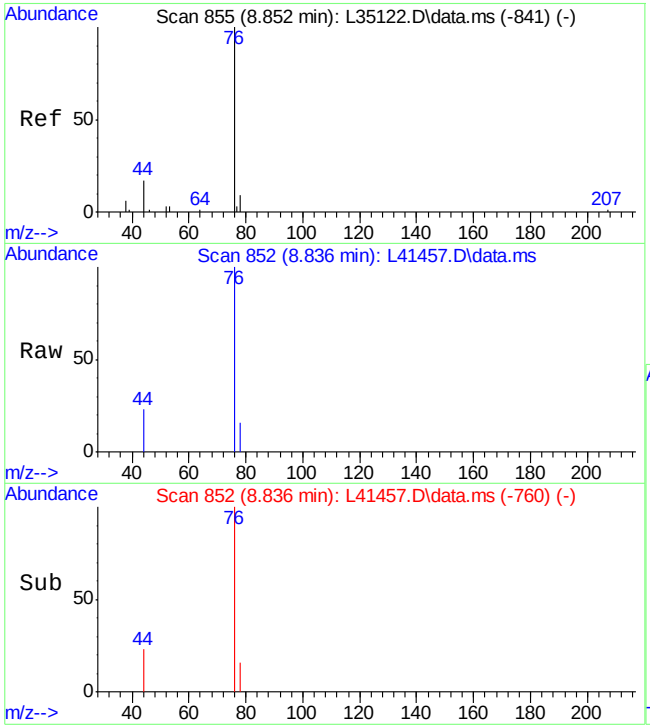


#11
Acetone
Concen: 161.75 ug/Kg
RT: 7.526 min Scan# 612
Delta R.T. -0.016 min
Lab File: L41457.D
Acq: 20 May 2015 7:08 pm

Tgt Ion: 58 Resp: 804735

Ion	Ratio	Lower	Upper
58	100		
43	364.9	335.3	375.3

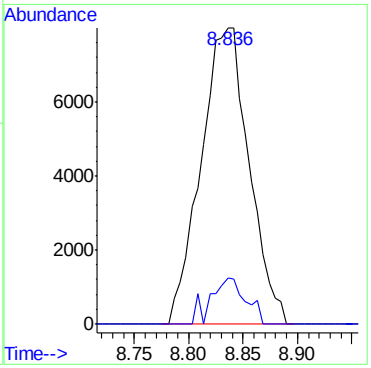


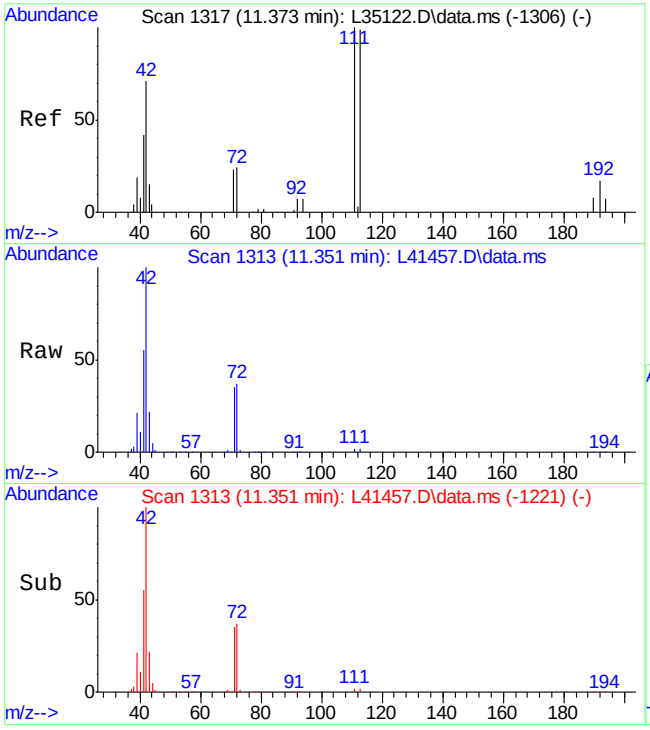


#21
Carbon Disulfide
Concen: 1.52 ug/Kg
RT: 8.836 min Scan# 852
Delta R.T. 0.000 min
Lab File: L41457.D
Acq: 20 May 2015 7:08 pm

Tgt Ion: 76 Resp: 246377

Ion	Ratio	Lower	Upper
76	100		
78	11.3	0.0	29.1

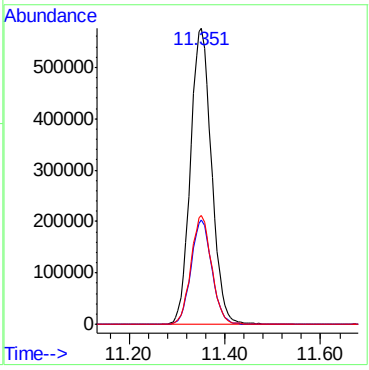


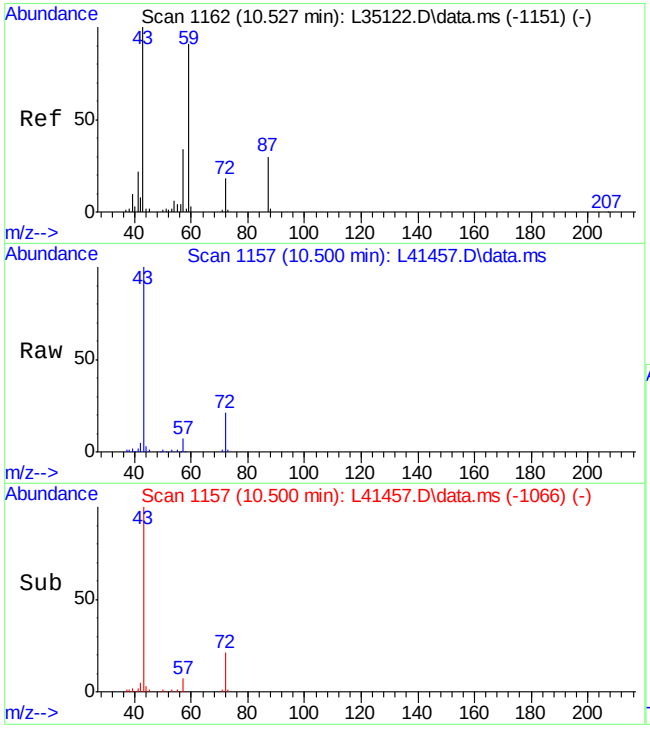


#29
Tetrahydrofuran
Concen: 831.73 ug/Kg
RT: 11.351 min Scan# 1313
Delta R.T. 0.000 min
Lab File: L41457.D
Acq: 20 May 2015 7:08 pm

Tgt Ion: 42 Resp:17552477

Ion	Ratio	Lower	Upper
42	100		
71	34.5	14.3	54.3
72	35.9	15.7	55.7

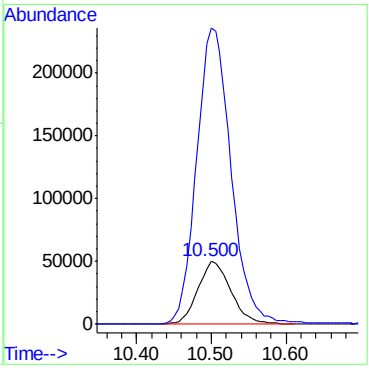


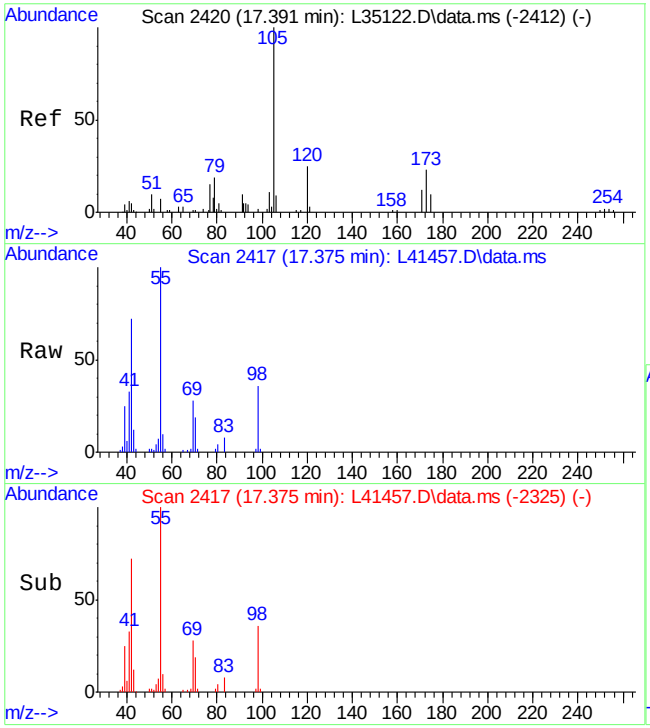


#30
2-Butanone (MEK)
Concen: 237.04 ug/Kg
RT: 10.500 min Scan# 1157
Delta R.T. -0.005 min
Lab File: L41457.D
Acq: 20 May 2015 7:08 pm

Tgt Ion: 72 Resp: 1523531

Ion	Ratio	Lower	Upper
72	100		
43	495.8	521.0	561.0#

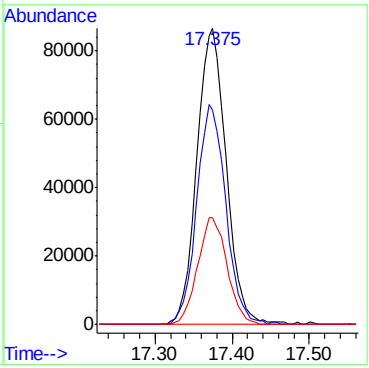


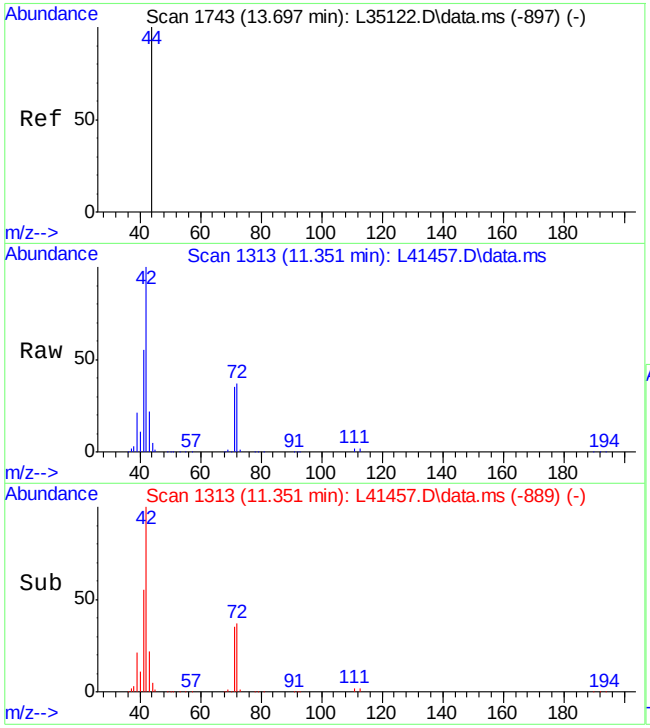


#70
Cyclohexanone
Concen: 996.00 ug/Kg
RT: 17.375 min Scan# 2417
Delta R.T. 0.001 min
Lab File: L41457.D
Acq: 20 May 2015 7:08 pm

Tgt Ion: 55 Resp: 2289117

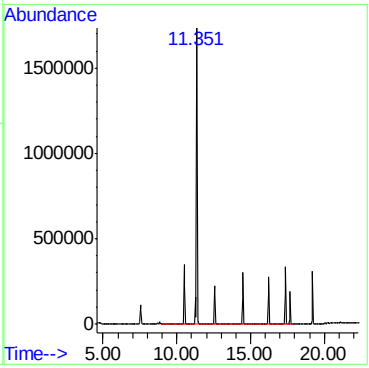
Ion	Ratio	Lower	Upper
55	100		
42	73.4	50.5	90.5
98	36.1	17.6	57.6





#99
TPH-GRO (C6-C10)
Concen: 309.21 ug/Kg m
RT: 11.351 min Scan# 1313
Delta R.T. -2.349 min
Lab File: L41457.D
Acq: 20 May 2015 7:08 pm

Tgt Ion:TIC Resp:103400576



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L150520\
Data File : L41448.D
Acq On : 20 May 2015 2:46 pm
Operator : XINGB
Sample : MB
Misc : MS1850,VL1244,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 09:58:45 2015
Quant Method : C:\msdchem\1\METHODS\VL1214S.M
Quant Title : EPA -8260B
QLast Update : Mon Apr 06 10:01:31 2015
Response via : Initial Calibration

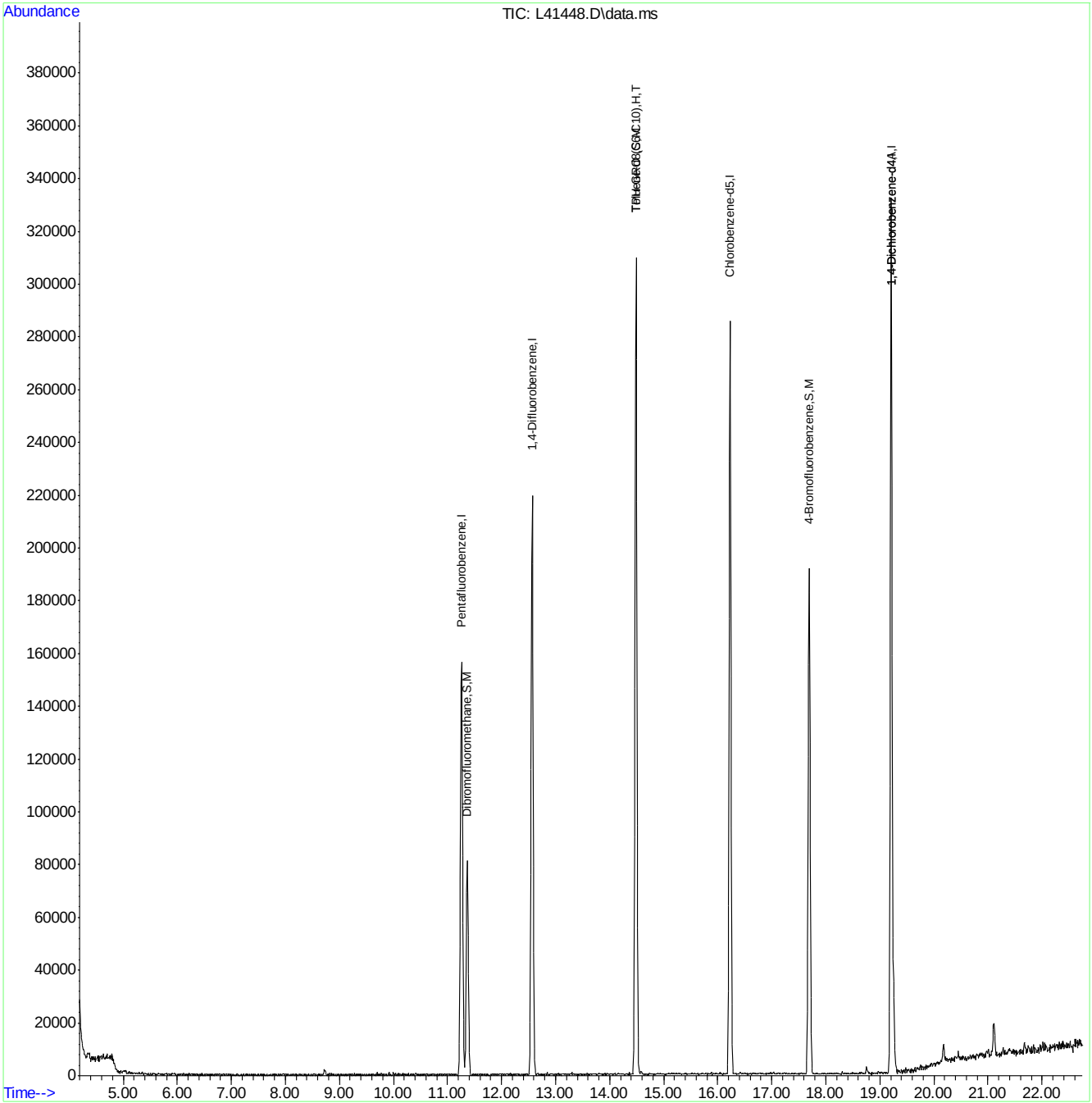
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	11.264	168	1589138	20.00	ug/Kg	0.00
39) 1,4-Difluorobenzene	12.568	114	2422158	20.00	ug/Kg	0.00
54) Chlorobenzene-d5	16.229	117	2125041	20.00	ug/Kg	0.00
76) 1,4-Dichlorobenzene-d4	19.208	152	1098569	20.00	ug/Kg	0.00
98) 1,4-Dichlorobenzene-d4A	19.208	152	1098569	20.00	ug/Kg	0.00
System Monitoring Compounds						
35) Dibromofluoromethane	11.367	111	781473	18.54	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 92.70%			
55) Toluene-d8	14.488	98	2822406	20.80	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 104.00%			
73) 4-Bromofluorobenzene	17.691	95	1112627	18.92	ug/Kg	0.00
Spiked Amount 20.000	Range 70 - 130		Recovery = 94.60%			
Target Compounds						Qvalue
99) TPH-GRO (C6-C10)	14.488	TIC	34016754m	38.96	ug/Kg	

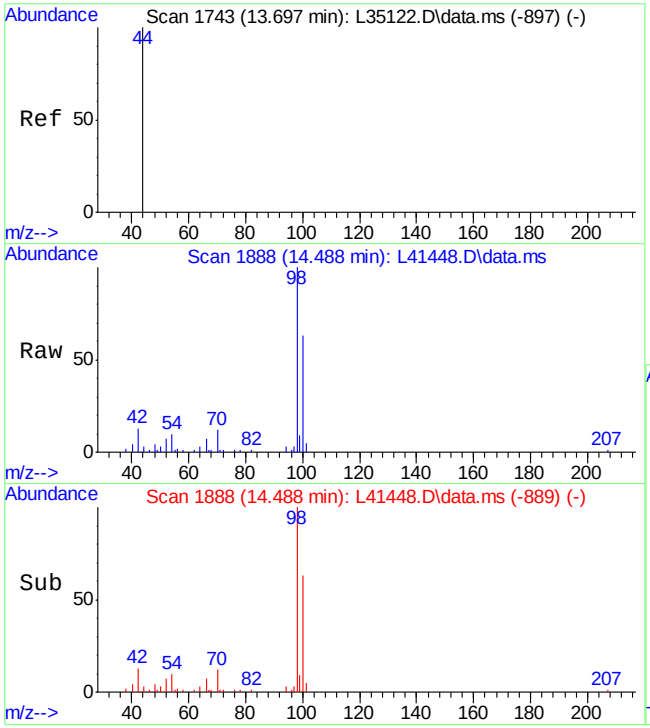
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\L150520\
Data File : L41448.D
Acq On : 20 May 2015 2:46 pm
Operator : XINGB
Sample : MB
Misc : MS1850,VL1244,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

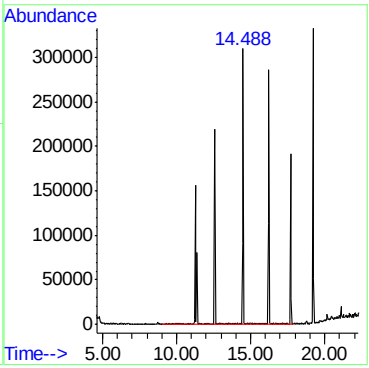
Quant Time: May 21 09:58:45 2015
Quant Method : C:\msdchem\1\METHODS\VL1214S.M
Quant Title : EPA -8260B
QLast Update : Mon Apr 06 10:01:31 2015
Response via : Initial Calibration





#99
TPH-GRO (C6-C10)
Concen: 38.96 ug/Kg m
RT: 14.488 min Scan# 1888
Delta R.T. 0.788 min
Lab File: L41448.D
Acq: 20 May 2015 2:46 pm

Tgt Ion:TIC Resp:34016754



Northern California ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12273-MB	GG58531.D	1	05/21/15	NN	05/21/15	OP12273	GGG1716

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C39925-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	0.83	mg/kg	
	TPH (> C28-C40)	ND	6.7	1.7	mg/kg	

CAS No.	Surrogate Recoveries		Limits
630-01-3	Hexacosane	74% [a]	37-122%

(a) Surrogate recoveries corrected for double spike.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12273-BS	GG58532.D	1	05/21/15	NN	05/21/15	OP12273	GGG1716
OP12273-BSD	GG58533.D	1	05/21/15	NN	05/21/15	OP12273	GGG1716

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C39925-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	27.9	84	27.6	83	1	39-102/29
	TPH (> C28-C40)	33.3	30.8	92	31.4	94	2	42-111/26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	100%	101%	37-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C39925
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12273-MS	GG58556.D	5	05/22/15	NN	05/21/15	OP12273	GGG1717
OP12273-MSD	GG58557.D	5	05/22/15	NN	05/21/15	OP12273	GGG1717
C39925-1	GG58555.D	5	05/22/15	NN	05/21/15	OP12273	GGG1717

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C39925-1

CAS No.	Compound	C39925-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	30.5		33.2	59.0	86	33.1	61.8	95	5	39-102/29
	TPH (> C28-C40)	146		33.2	187	124* [a]	33.1	216	211* [a]	14	42-111/26

CAS No.	Surrogate Recoveries	MS	MSD	C39925-1	Limits
630-01-3	Hexacosane	85%	83%	98%	37-122%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Northern California ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\D#2\DATA\GGG1717\GG58555.D Vial: 3
Acq On : 5-22-15 9:55:06 AM Operator: NHATN
Sample : C39925-1 Inst : Diesel #2
Misc : OP12273,GGG1717,30.31,,,1,5,S Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 22 10:21 2015 Quant Results File: GGG1696.RES

Quant Method : C:\HPCHEM\D#2\METHODS\GGG1696.M (Chemstation Integrator)
Title : DRO calibration: Back column
Last Update : Mon Apr 27 09:46:47 2015
Response via : Initial Calibration
DataAcq Meth : ACQ_GG2.M

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S,M Hexacosane	11.69f	30258479	19.501 ppm
Spiked Amount 100.000		Recovery =	19.50%
Target Compounds			
2) H,M TPH (C10-C28)	6.00	364824745	184.817 ppm
3) H TPH (>C28-C40)	14.00	904388002	887.462 ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D. ppm
5) H TPH (Kerosene)	0.00	0	N.D. ppm
6) H,M TPH (Diesel)	0.00	0	N.D. ppm
7) H TPH (Motor Oil)	14.00	1267428317	1245.325 ppm

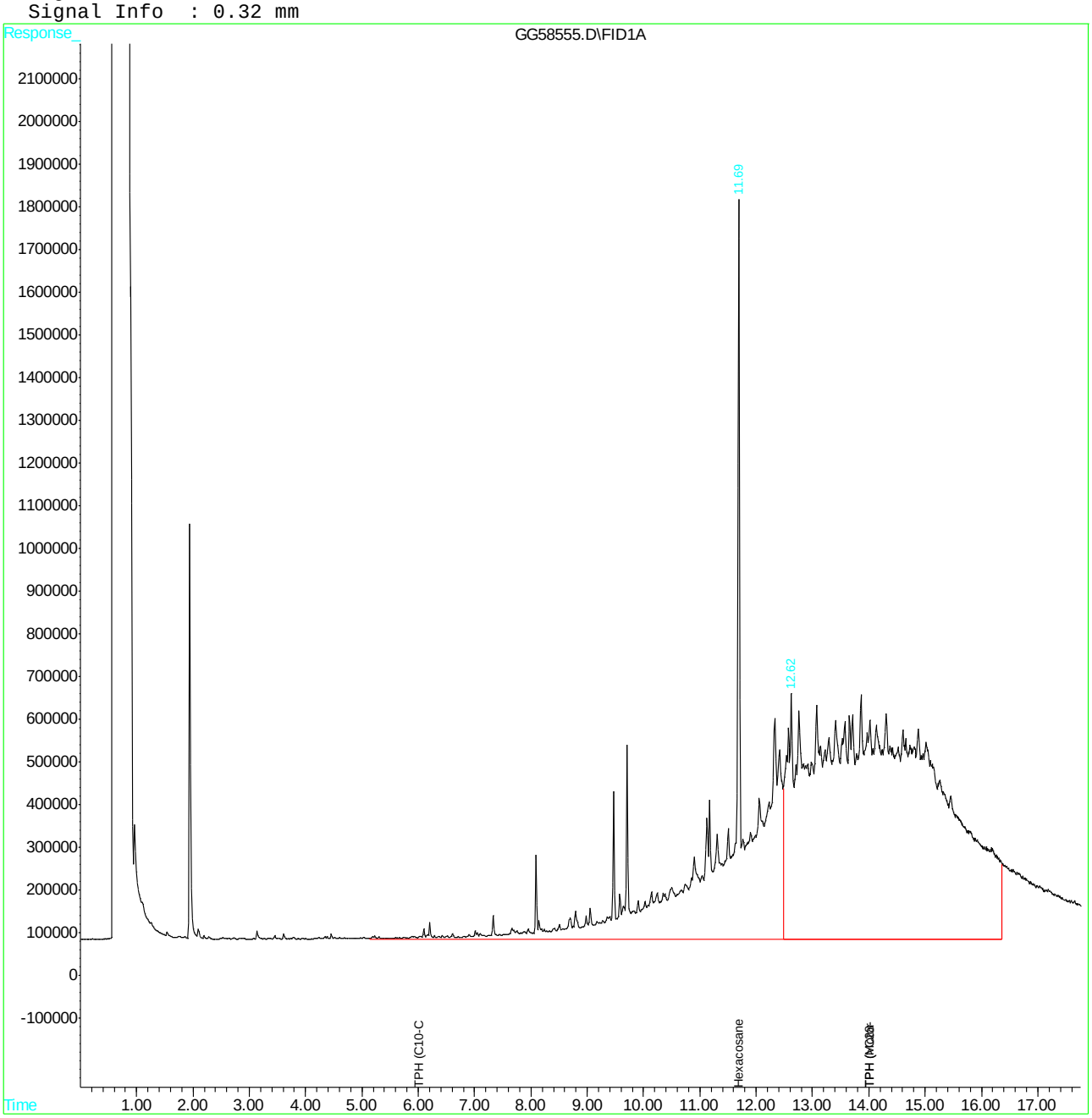
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\D#2\DATA\GGG1717\GG58555.D Vial: 3
Acq On : 5-22-15 9:55:06 AM Operator: NHATN
Sample : C39925-1 Inst : Diesel #2
Misc : OP12273,GGG1717,30.31,,,1,5,S Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 22 10:21 2015 Quant Results File: GGG1696.RES

Quant Method : C:\HPCHEM\D#2\METHODS\GGG1696.M (Chemstation Integrator)
Title : DRO calibration: Back column
Last Update : Mon Apr 27 09:46:47 2015
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_GG2.M

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\D#2\DATA\GGG1716\GG58531.D Vial: 18
Acq On : 5-21-15 10:12:03 PM Operator: NHATN
Sample : OP12273-MB Inst : Diesel #2
Misc : OP12273,GGG1716,30.00,,,1,1,S Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 22 9:10 2015 Quant Results File: GGG1696.RES

Quant Method : C:\HPCHEM\D#2\METHODS\GGG1696.M (Chemstation Integrator)
Title : DRO calibration: Back column
Last Update : Mon Apr 27 09:46:47 2015
Response via : Initial Calibration
DataAcq Meth : ACQ_GG2.M

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S,M Hexacosane	11.71	231734729	149.348 ppm
Spiked Amount 100.000		Recovery =	149.35%
Target Compounds			
2) H,M TPH (C10-C28)	6.00	26296630	13.322 ppm
3) H TPH (>C28-C40)	14.00	34674774	34.026 ppm
4) H TPH (Mineral Spirits)	0.00	0	N.D. ppm
5) H TPH (Kerosene)	0.00	0	N.D. ppm
6) H,M TPH (Diesel)	6.00	26296630	13.331 ppm
7) H TPH (Motor Oil)	14.00	34674774	34.070 ppm

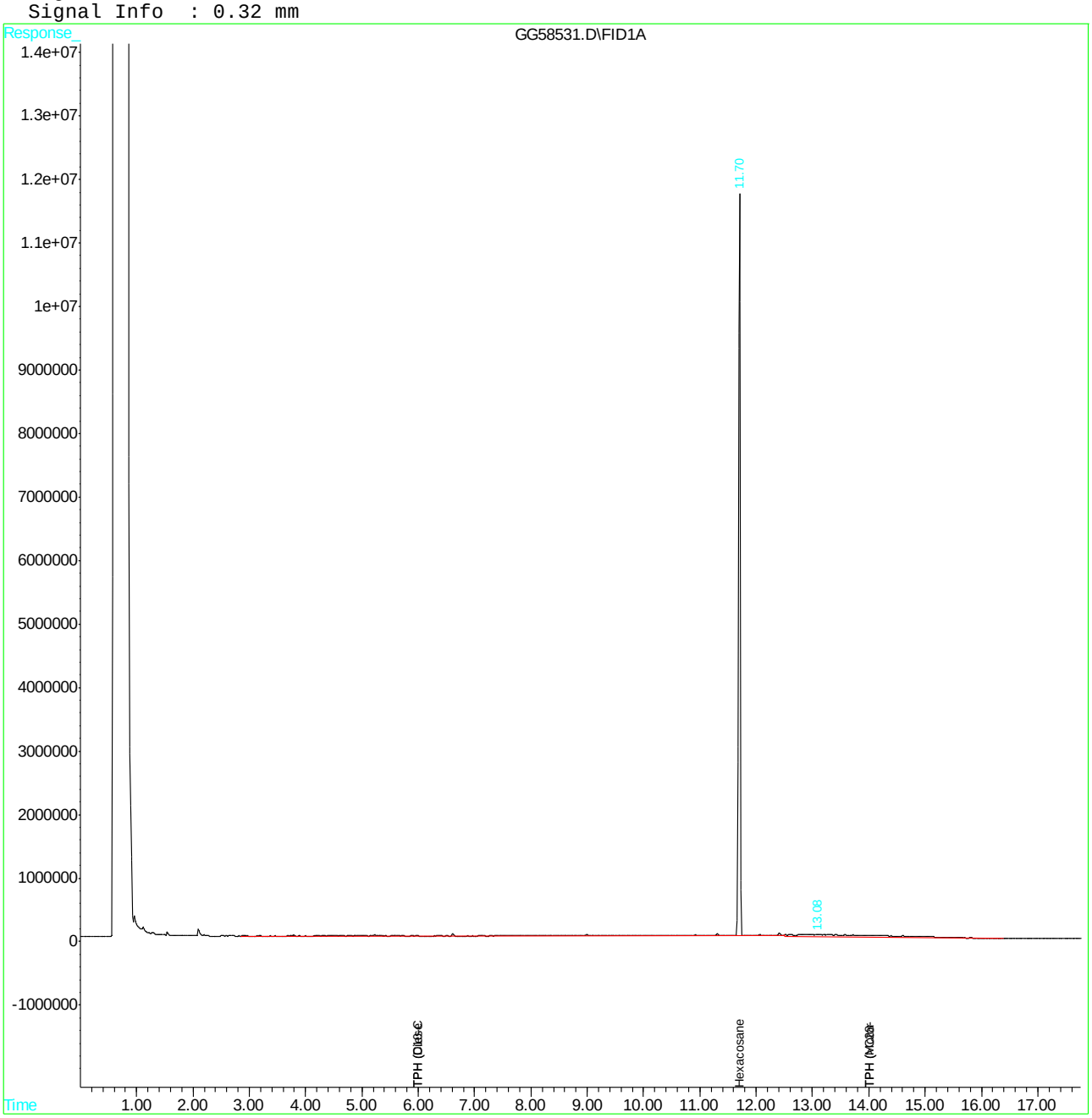
(f)=RT Delta > 1/2 Window (m)=manual int.
GG58531.D GGG1696.M Fri May 22 09:53:51 2015 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\D#2\DATA\GGG1716\GG58531.D Vial: 18
Acq On : 5-21-15 10:12:03 PM Operator: NHATN
Sample : OP12273-MB Inst : Diesel #2
Misc : OP12273,GGG1716,30.00,,,1,1,S Multiplr: 1.00
IntFile : autoint1.e
Quant Time: May 22 9:10 2015 Quant Results File: GGG1696.RES

Quant Method : C:\HPCHEM\D#2\METHODS\GGG1696.M (Chemstation Integrator)
Title : DRO calibration: Back column
Last Update : Mon Apr 27 09:46:47 2015
Response via : Multiple Level Calibration
DataAcq Meth : ACQ_GG2.M

Volume Inj. : 1.0 uL
Signal Phase : HP-5
Signal Info : 0.32 mm



Northern California ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9555
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 05/21/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	1.5		
Antimony	2.0	.12	.18	0.070	<2.0
Arsenic	2.0	.16	.17	-0.22	<2.0
Barium	20	.02	.09	0.24	<20
Beryllium	1.0	.02	.01	-0.010	<1.0
Boron	10	.18	.15		
Cadmium	1.0	.02	.031	0.010	<1.0
Calcium	500	2.8	4.5		
Chromium	1.0	.04	.054	0.020	<1.0
Cobalt	1.0	.03	.025	0.0	<1.0
Copper	2.5	.12	.15	0.44	<2.5
Iron	20	.53	.76		
Lead	2.0	.1	.14	0.090	<2.0
Magnesium	500	1.6	2.1		
Manganese	1.5	.02	.026		
Molybdenum	2.0	.05	.04	0.010	<2.0
Nickel	1.0	.04	.047	-0.020	<1.0
Potassium	1000	3.5	4.6		
Selenium	2.0	.17	.33	0.15	<2.0
Silicon	20	.24	.43		
Silver	1.0	.05	.067	-0.020	<1.0
Sodium	1000	1.1	1.2		
Strontium	1.0	.01	.018		
Thallium	2.0	.17	.12	-0.42	<2.0
Tin	50	.08	.28		
Titanium	1.0	.08	.13		
Vanadium	1.0	.06	.074	-0.020	<1.0
Zinc	2.0	.05	.22	0.60	<2.0

Associated samples MP9555: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9555
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 05/21/15

Metal	C39908-1 Original	MS	Spikelot MPIR5	% Rec	QC Limits
Aluminum					
Antimony	0.0	13.7	46.3	29.6N(a)	75-125
Arsenic	2.1	42.7	46.3	87.7	75-125
Barium	162	196	46.3	73.4N(a)	75-125
Beryllium	0.70	41.6	46.3	88.3	75-125
Boron					
Cadmium	0.24	44.6	46.3	95.8	75-125
Calcium					
Chromium	175	208	46.3	71.3N(a)	75-125
Cobalt	24.2	62.0	46.3	81.6	75-125
Copper	61.3	99.6	46.3	82.7	75-125
Iron					
Lead	7.8	51.2	46.3	93.7	75-125
Magnesium					
Manganese					
Molybdenum	0.10	37.2	46.3	80.1	75-125
Nickel	164	197	46.3	71.3N(a)	75-125
Potassium					
Selenium	2.6	41.3	46.3	83.6	75-125
Silicon					
Silver	0.37	41.1	46.3	88.0	75-125
Sodium					
Strontium					
Thallium	1.8	44.6	46.3	92.4	75-125
Tin					
Titanium					
Vanadium	120	151	46.3	67.0N(a)	75-125
Zinc	68.2	102	46.3	73.0N(a)	75-125

Associated samples MP9555: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9555
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 05/21/15

Metal	C39908-1 Original	MSD	Spikelot MPIR5	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	12.3	44.6	27.6N(a)	10.8	20
Arsenic	2.1	41.1	44.6	87.4	3.8	20
Barium	162	203	44.6	91.8	3.5	20
Beryllium	0.70	39.6	44.6	87.1	4.9	20
Boron						
Cadmium	0.24	42.8	44.6	95.3	4.1	20
Calcium						
Chromium	175	211	44.6	80.6	1.4	20
Cobalt	24.2	60.6	44.6	81.5	2.3	20
Copper	61.3	101	44.6	88.9	1.4	20
Iron						
Lead	7.8	51.1	44.6	97.0	0.2	20
Magnesium						
Manganese						
Molybdenum	0.10	35.0	44.6	78.2	6.1	20
Nickel	164	200	44.6	80.6	1.5	20
Potassium						
Selenium	2.6	39.2	44.6	82.0	5.2	20
Silicon						
Silver	0.37	40.2	44.6	89.2	2.2	20
Sodium						
Strontium						
Thallium	1.8	42.5	44.6	91.2	4.8	20
Tin						
Titanium						
Vanadium	120	158	44.6	85.1	4.5	20
Zinc	68.2	104	44.6	80.2	1.9	20

Associated samples MP9555: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9555
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 05/21/15

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum				
Antimony	48.0	50	96.0	80-120
Arsenic	48.0	50	96.0	80-120
Barium	48.9	50	97.8	80-120
Beryllium	48.9	50	97.8	80-120
Boron				
Cadmium	50.4	50	100.8	80-120
Calcium				
Chromium	50.2	50	100.4	80-120
Cobalt	51.6	50	103.2	80-120
Copper	48.3	50	96.6	80-120
Iron				
Lead	46.2	50	92.4	80-120
Magnesium				
Manganese				
Molybdenum	49.1	50	98.2	80-120
Nickel	48.1	50	96.2	80-120
Potassium				
Selenium	45.9	50	91.8	80-120
Silicon				
Silver	46.6	50	93.2	80-120
Sodium				
Strontium				
Thallium	48.9	50	97.8	80-120
Tin				
Titanium				
Vanadium	46.8	50	93.6	80-120
Zinc	49.8	50	99.6	80-120

Associated samples MP9555: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9555
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 05/21/15

Metal	C39908-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	21.9	33.0	50.7 (a)	0-10
Barium	1700	1830	7.6	0-10
Beryllium	7.30	9.00	23.3 (a)	0-10
Boron				
Cadmium	2.50	2.30	8.0	0-10
Calcium				
Chromium	1840	2070	12.7*(b)	0-10
Cobalt	254	301	18.3*(b)	0-10
Copper	644	686	6.5	0-10
Iron				
Lead	81.8	82.2	0.5	0-10
Magnesium				
Manganese				
Molybdenum	1.10	0.00	100.0(a)	0-10
Nickel	1720	1680	2.0	0-10
Potassium				
Selenium	26.8	29.4	9.7	0-10
Silicon				
Silver	3.90	4.40	12.8 (a)	0-10
Sodium				
Strontium				
Thallium	18.7	30.8	64.7 (a)	0-10
Tin				
Titanium				
Vanadium	1260	1380	9.4	0-10
Zinc	716	820	14.6*(b)	0-10

Associated samples MP9555: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9563 Methods: SW846 7471A
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/21/15

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.042	.00035	.0043	-0.00088	<0.042

Associated samples MP9563: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9563 Methods: SW846 7471A
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/21/15

Metal	C39917-1 Original	MS	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.0056	0.17	0.159	103.6	75-125

Associated samples MP9563: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9563 Methods: SW846 7471A
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/21/15

Metal	C39917-1 Original	MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0056	0.17	0.156	105.2	0.0	20

Associated samples MP9563: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C39925
Account: BMECASF - Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, 1708 Wood Street, Oakland, CA

QC Batch ID: MP9563
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 05/21/15

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.16	0.167	96.0	80-120

Associated samples MP9563: C39925-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

CREATE AMAZING.

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