February 19, 2015

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By Alameda County Environmental Health at 3:19 pm, Mar 02, 2015

Sunny Goyal Vintners Distributors Inc. 41805 Albrae Street Fremont, CA 94538

Mr. Jerry Wickham ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Subject:

Interim Removal Action Report

1800 ½ Powell Street, Emeryville, California, APN 049 -1495-001-12

Case No. RO0000254; GeoTracker Global ID: T0600101231

Dear Mr. Wickham:

Au Energy, LLC (Au Energy, the *responsible party*), is submitting the enclosed report summarizing the excavation work around the former diesel line leak. This report was prepared by Bureau Veritas North America, Inc. (BVNA) on behalf of AU Energy, LLC.

I declare, under penalty of perjury, that the information contained in the attached enclosed Work Plan is true and correct to the best of my knowledge. If you have any comments or questions regarding this report, please do not hesitate to contact Mark Williams or John Werfal of BVNA. Their contact information is provided in the Work Plan.

Sincerely,

Sunny Goyal Au Energy Director



February 19, 2015

Mr. Sunny Goyal AU ENERGY 41805 Albrae Street, 2nd Floor Fremont, California 94538

Project No. 33113-013181.00

Main: (925) 426.2600

Fax: (925) 426.0106

www.us.bureauveritas.com

Subject: Interim Removal Action Report

1800 ½ Powell Street

Emeryville, Alameda County, California

Dear Mr. Goyal:

Bureau Veritas North America, Inc. is pleased to present this report summarizing the excavation efforts around the former diesel line leak at the above-referenced property.

If you have any questions or comments regarding the information provided herein, please do not hesitate to contact me.

Sincerely,

Mark Williams, PG Senior Project Geologist

Health, Safety and Environmental Services

mark.williams@us.bureauveritas.com

(925) 426-2676

Enclosure



Shell-Branded Station 1800 ½ Powell Street Emeryville, Alameda County, California

> February 19, 2015 Project No. 33114-013181.00

Prepared for **AU ENERGY** 41805 Albrae Street, 2nd Floor Fremont, California



For the benefit of business and people

Bureau Veritas North America, Inc. 2430 Camino Ramon, Suite 122

San Ramon, California 94583 925.426.2600

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1.0 INTRODUCTION

Bureau Veritas North America, Inc. (BVNA) is pleased to present this Interim Removal Action Report for the above-referenced property (the "Site," Figures 1 and 2).

In 2013, BVNA was retained to collect soil samples for initial waste characterization prior to the planned redevelopment activities. During that work, a subsurface fiberglass diesel fuel product line was apparently damaged. Up to approximately 3 inches of separate phase hydrocarbon (SPH) was measured in two of the underground storage tank (UST) backfill observation wells (S-2/E, S-3/B) following the line damage, and was removed utilizing a vacuum truck. Approximately 5,000 gallons of water/SPH mixture were removed for offsite disposal.

In May through June 2014, three gasoline USTs, and one diesel UST were removed from the site as well as impacted soil, fill materials and pea gravel around the former USTs. The removal of these USTs is documented in a report entitled *Underground Storage Tank Removal Report* dated August 11, 2014, and prepared by Sparger Technology Inc. The extent of excavated soils, fill materials, and pea gravel fill around the former USTs ranged from at least 45 feet by 65 feet long to 12 feet in depth.

2.0 SCOPE OF WORK

The proposed extent of excavation presented in the May 19, 2014 diesel line excavation workplan was anticipated to be at least 20 feet by 25 feet laterally. A response from the Alameda County Health Care Services Agency (ACHCSA) dated May 20, 2014, stated that the line leakage may have impacted a larger area than proposed, and requested that the excavation be expanded to remove observed diesel contamination where feasible. This scope of work was conducted using the expanded excavation of visibly impacted material approach as guidance.

2.1 PRE-FIELD ACTIVITIES

Prior to the excavation of the soils, the former dispenser island areas and diesel line path to the UST excavation was survey and located in the field using white marking paint. Notifications were placed to the ACHCA prior to conducting the soils removal work and in anticipation of the soil confirmation sampling.

2.2 FIELD ACTIVITIES

The following is a summary of the field activities.

2.2.1 <u>Excavation Activities</u>

On June 20 - 26, 2014, NCM/LVI Services under contract with Wendt Construction performed the excavation work using a long reach excavator, and directly loaded the diesel impacted soil and fill materials into lined -trucks for disposal at Forward Landfill in Manteca California.

Subsurface materials encountered during this excavation work included silty clays to clays mixed with a significant amount of fill materials and debris. This debris included roofing materials, shingles, insulation, wood, brick debris, glass, gravel, and trash debris. During the excavation, the impacted gravel fill in the



former diesel line trench was observed and excavated as well as the visibly diesel- impacted fill materials. Soils were removed laterally and vertically to a point where there was no visible diesel fuel impact in the sidewalls or base of the excavation.

Soils and fill materials were removed in a westerly direction from the former diesel line break to a point where no visible impact was observed. This included soils below both former dispenser islands locations. Soils to the south were removed to the extent possible. The lateral direction of this side of the excavation was constrained by the nearby Pacific, Gas and Electric utility line. However, at the edge of this side of the excavation, little to no visible diesel impact was observed. Soils to the north were removed to a point where little to no diesel impact was observed in the remaining soil/fill materials. Soils to the east were removed laterally to the point of contact with the west side of the former UST excavation area which was previously excavated, but had been backfilled at that point.

The depth of the excavation ranged from 5 to 6 feet deep. Roofing materials which included tar shingles and tar paper were encountered throughout the excavation, but did not appear impacted with diesel fuel at the base of the excavation below 5 to 6 feet in depth. The fill materials which appeared impacted with by the diesel release were removed above this depth. Based on the UST removal work conducted on the site, these fill materials extended to depths of 10 to 12 feet in the area of the former USTs. No base samples were collected in the diesel line excavation area, since the materials at the base of the excavation consisted primarily of roof shingles and tar paper debris and likely extended to depths of at least 12 feet. Furthermore, these fill materials did not appear impacted with diesel fuel unlike the materials which were removed at shallower depths.

The lateral extent of excavation ranged from 10 to 12 feet wide, and 40 to 50 feet long. Figure 2 depicts the location and graphical extent of the diesel line excavation. The red lined area presents a depiction of the excavation by June 23, 2014. Based on the sample results, the excavation was further widened on the north, west, southwest and east sides. On June 26, 2014, two additional confirmation samples were collected to represent the remaining soils at the edges of the excavation. This additional excavated area is noted as a blue line on Figure 2 which shows the expanded areas from the first excavated area.

2.2.2 <u>Soil Confirmation Sampling</u>

On June 23, 2014 under the direction of the ACHCA, four soil confirmation samples were collected from the sides of the excavation. Based on the data, additional soils were excavated as noted above, and two additional confirmation samples were then collected on June 26, 2014. The soil sample analytical results are summarized in Table 1.

3.0 LABORATORY ANALYSES

The soil samples were submitted to a State-certified laboratory for chemical analysis by the following United States Environmental Protection Agency (USEPA) Methods as required by ACHCA:

- TPH as gasoline (TPH-g), BTEX, EDB, EDC, MTBE, TAME, ETBE, DIPE, TBA and EtOH by Method 8260B
- TPH-diesel and TPH as motor oil (TPH-d & TPH-mo) by Method 8015M



Naphthalene by Method 8270

4.0 FINDINGS

BVNA evaluated the data generated during this investigation. Our findings are summarized in the following subsections.

4.1 SOIL ANALYTICAL RESULTS

A summary of soil analytical results is provided in Table 1. Copies of the soil analytical laboratory reports are presented in Appendix B. Areas represented by the confirmation samples DE-1N, DE-1E, and DE-1W were further excavated after the sample results were available. Once the additional excavation work was completed, two confirmation samples were collected: DE-2E and DE-2W. It should be noted that the area north of DE-1N were further excavated and that the remaining soils on the north side of the excavation were visibly similar to the soils which were represented by DE-2W.

Soil analytical data were compared to the Environmental Screening Levels (ESLs) which were established by the RWQCB – San Francisco Region, Table A – Shallow Soils for commercial uses, December 2013. The analyzed constituents detected in DE-1S, DE-2W and DE-2E are summarized as follows:

- TPH-d concentrations in the second confirmation samples ranged from 110 to 460 milligrams per kilogram (mg/kg).
- TPH-mo concentrations in these two samples ranged from 170 to 1,300 mg/kg.
- Napthalene ranged from below the detection limit to 2.3 mg/kg.
- Detected VOC concentrations were xylenes which ranged from below the detection limit to 14 micrograms per kilogram (ug/kg).

4.2 QUALITY ASSURANCE/QUALITY CONTROL

The analytical laboratory data was reviewed by BVNA to establish its validity and to ensure the laboratory data was complete and accurate. A review of the data validation process indicates that the laboratories completed the QA/QC activities required for the samples such as lab control samples, matrix spikes, and duplicates. No significant QA/QC issues were identified, as noted in the laboratory reports presented in Appendices C and D. The QA/QC parameters for the samples were within acceptable limits and suggest that the data is useful for its intended purpose.

5.0 DISCUSSION AND RECOMMENDATIONS

By the late 1950s, the area of the subject property had been filled in with soil, industrial waste, and construction debris by the Paraffine Company, who operated an industrial complex along the Emeryville waterfront from around 1884 until the late 1960s. The subject property remained vacant and appeared to be used for dumping until around 1970, when it was developed with a gasoline station. The placement of



fill consisting of industrial waste and construction debris on the subject property in the late 1950s, and various fill materials identified as roofing material were visible in the excavated areas.

The soil and fill impacted by the diesel release were excavated and removed from the site. The extent of the excavation was significantly larger than what was proposed in the May 2014 workplan. Final confirmation samples contained remarkably less naphthalene, VOCs, and diesel range hydrocarbons than previously collected samples in the diesel impacted areas. Fill materials encountered during excavation of the diesel release area as well as the UST replacement included large quantities of brick and glass debris, asphalt shingles, tar paper, trash, building and roofing insulation, and wood debris. Residual concentrations of TPH-d and TPH-mo in the final confirmation samples appear to be largely attributable to the historical industrial waste debris present beneath the site and surrounding area.

No further action appears warranted with respect to the diesel line release.

6.0 SIGNATURES

This report prepared by:

Mark Williams, P.G..

Senior Project Geologist

Health, Safety and Environmental Services

San Francisco Regional Office

This report reviewed by:

John Werfal Regional Director

Health, Safety and Environmental Services

San Francisco Regional Office



TABLE

TABLE 1 Diesel Line Excavation Soil Analytical Results-TPH and VOCs

1800 1/2 Powell Street Emeryville, California

	Sample Identification	DE-1-N	DE-1-S	DE-1-E	DE-2E	DE-1-W	DE-2-W	
		excavated		excavated		excavated		RWQCB ESL - Commercial
	Sample Date	6/23/2014	6/23/2014	6/23/2014	6/26/2014	6/23/2014	6/26/2014	
	Benzene	1,800	<4.9	<5	<4.8	<460	<4.9	44
	Toluene	7,200	<4.9	<5	<4.8	1,100	<4.9	2,900
	Ethylbenzene	16,000	<4.9	<5	<4.8	7,400	<4.9	3,300
	Total Xylenes	92,000	14	23	<9.6	48,000	10	2,300
(g)	Ethanol	<440	<980	<1,000	<960	<46,000	<970	
(µg/kg)	Methyl Tert-Butyl Ether (MTBE)	<440	<4.9	<5	<4.8	<460	<4.9	23
VOCs	Tert-Amyl Methyl Ether (TAME)	<440	<4.9	<5	<4.8	<460	<4.9	
^	Ethyl Tert-Butyl Ether (ETBE)	<440	<4.9	<5	<4.8	<460	<4.9	
	Ethylene Dibromide (EDB)	<440	<4.9	<5	<4.8	<460	<4.9	
	Ethylene Dichloride (EDC)	<440	<4.9	<5	<4.8	<460	<4.9	
	Tert-Butyl Alcohol (TBA)	<870	<98	<100	<4.8	<930	<4.9	75
	Diisopropyl Ether (DIPE)	<440	<4.9	<5	<4.8	<460	<4.9	
Naphthalene (mg/kg)		12	2.3	0.26	<0.13	12	<1.3	1.2
Diesel Range Organics (DRO) (mg/kg)		740	110	1,200	150	800	460	110
Motor	Oill Range Organics (MRO) (mg/kg)	<250	170	2,100	350	420	1,300	500

Notes:

Volatile organic compounds (VOC) samples reported in micrograms per kilogram (µg/Kg)

Diesel Range Organics (DRO) samples reported in milligrams per kilogram (mg/Kg)

Motor Oil Range Organics (MRO) samples reported in milligrams per kilogram (mg/Kg)

<4,800 = not detected above analytical laboratory reporting limit (elevated reporting limits due to dillution)

RWQCB ESL = Regional Water Quality Control Board Environmental Screening Level for Commercial land use (RWQCB, Table A-1, December 2013).

DRO analyzed by EPA Method 8015B

VOCs analyzed by EPA Method 8260

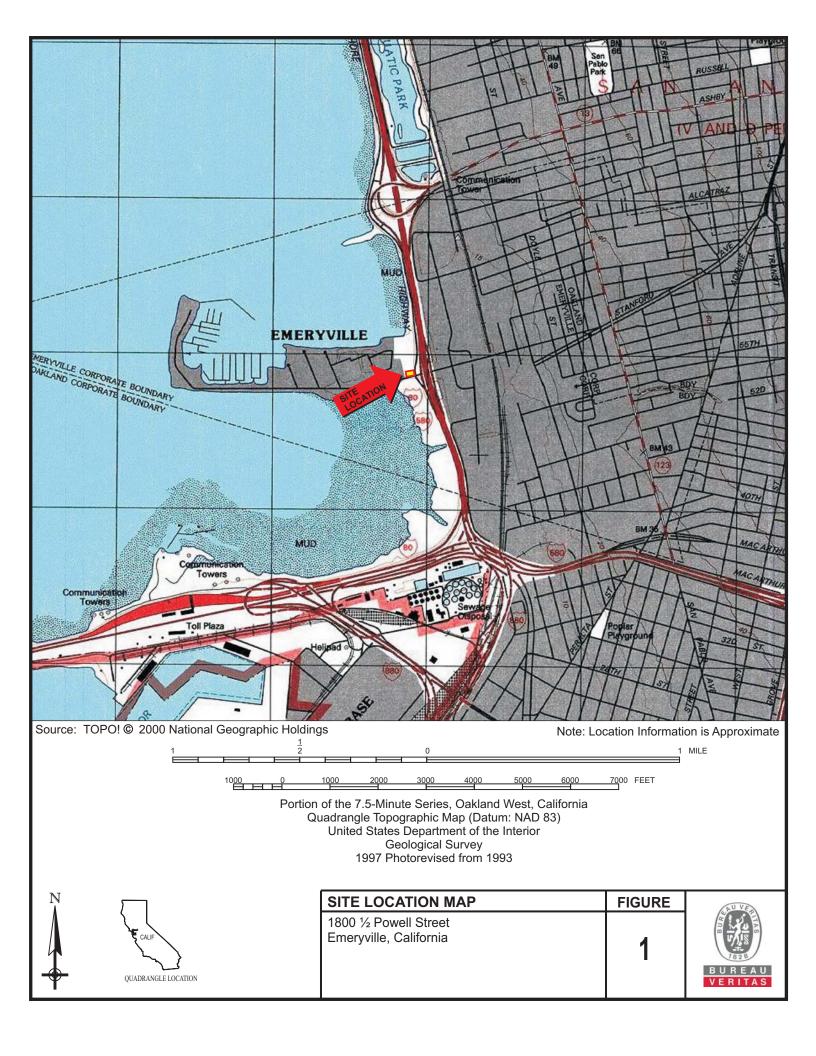
SVOC Napthalene analyzed by EPA Method 8270

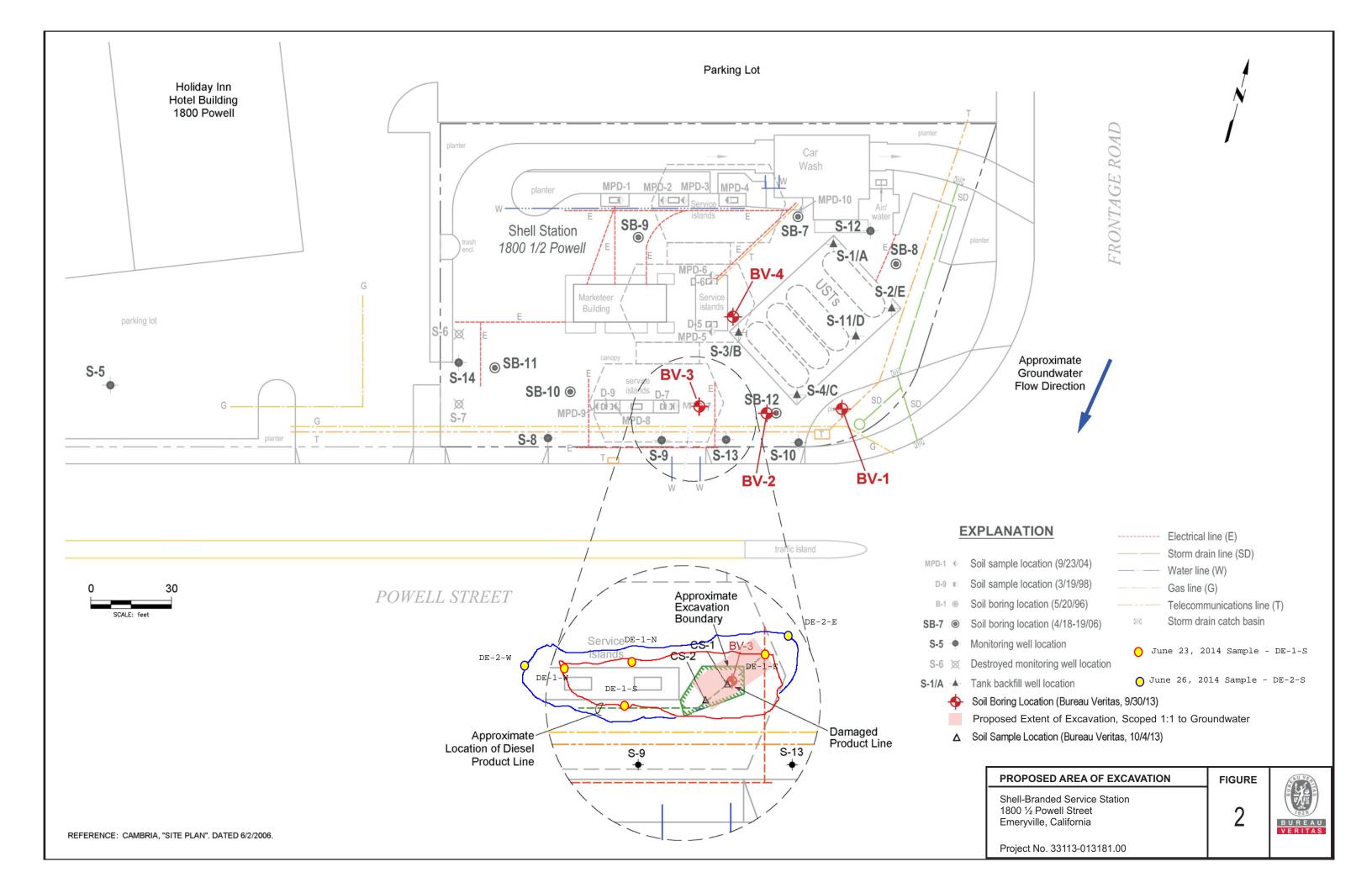
Bolded values denote concentrations detected above laboratory reporting limits and above ESL

-- = Not Established



FIGURES







APPENDIX A

LABORATORY ANALYTICAL DATA SHEETS AND CHAIN OF CUSTODY RECORD



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-58215-1

Client Project/Site: Au Energy - 1800 Powell

For:

Bureau Veritas North America, Inc. Bishop Ranch 6 2430 Camino Ramon Suite 122 San Ramon, California 94583

Attn: Mark Williams

Authorized for release by:

Authorized for release by 6/24/2014 3:09:50 PM

Micah Smith, Project Manager II (925)484-1919

micah.smith@testamericainc.com

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Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58215-1

3

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits

A Surrogate is

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC Semi VOA

Qua	lifier	Qualifier Description
D		Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a
		dilution may be flagged with a D.
X		Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control
RER Relative error ratio

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58215-1

Job ID: 720-58215-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-58215-1

Comments

No additional comments.

Receipt

The samples were received on 6/23/2014 10:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.7° C.

GC/MS VOA

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample: DE-1-S (720-58215-4). The sample shows evidence of matrix interference.

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

GC/MS Semi VOA

Method(s) 8270C: Surrogate recovery for the following sample(s) was outside control limits: DE-1-W (720-58215-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC VOA

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

GC Semi VOA

Method(s) 8015B: The following sample(s) required a dilution due to the nature of the sample matrix: DE-1-E (720-58215-2), DE-1-N (720-58215-3), DE-1-W (720-58215-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

Organic Prep

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

TestAmerica Pleasanton 6/24/2014

3

4

5

6

0

9

11

12

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

TestAmerica Job ID: 720-58215-1

Lab Sample ID: 720-58215-1

Lab Sample ID: 720-58215-4

Client Sample ID: DE-1-W

_									
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	7400		460		ug/Kg	100	_	8260B	Total/NA
Toluene	1100		460		ug/Kg	100		8260B	Total/NA
Xylenes, Total	48000		930		ug/Kg	100		8260B	Total/NA
Naphthalene	12		0.27		mg/Kg	2		8270C	Total/NA
Diesel Range Organics [C10-C28]	800		4.9		mg/Kg	5		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	420		250		mg/Kg	5		8015B	Total/NA

Client Sample ID: DE-1-E	Lab Sample ID: 720-58215-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	23		10		ug/Kg	1	_	8260B/CA_LUFT	Total/NA
								MS	
Naphthalene	0.26		0.26		mg/Kg	2		8270C	Total/NA
Diesel Range Organics [C10-C28]	1200		20		mg/Kg	20		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	2100		1000		mg/Kg	20		8015B	Total/NA

Client Sample ID: DE-1-N Lab Sample ID: 720-58215-3

Analyte	Result Qualifier	RL	MDL Un	nit	Dil Fac	D	Method	Prep Type
Benzene	1800	440	ug	/Kg	100	_	8260B	Total/NA
Ethylbenzene	16000	4400	ug	/Kg	1000		8260B	Total/NA
Toluene	7200	440	ug	/Kg	100		8260B	Total/NA
Xylenes, Total	92000	8700	ug	/Kg	1000		8260B	Total/NA
Naphthalene	12	0.26	mg	g/Kg	2		8270C	Total/NA
Diesel Range Organics [C10-C28]	740	4.9	mg	g/Kg	5		8015B	Total/NA

Client Sample ID: DE-1-S

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Xylenes, Total	14	9.8	ug/Kg		8260B/CA_LUFT	Total/NA
					MS	
Naphthalene	2.3	0.27	mg/Kg	2	8270C	Total/NA
Diesel Range Organics [C10-C28]	110	2.0	mg/Kg	2	8015B	Total/NA
Motor Oil Range Organics [C24-C36]	170	99	mg/Kg	2	8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Client Sample ID: DE-1-W

Date Collected: 06/23/14 09:00

Date Received: 06/23/14 10:35

Toluene-d8 (Surr)

TestAmerica Job ID: 720-58215-1

Lab Sample ID: 720-58215-1

06/24/14 09:00

06/24/14 12:51

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		460		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
Ethylbenzene	7400		460		ug/Kg		06/24/14 09:00	06/24/14 12:51	100
Ethanol	ND	*	46000		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
MTBE	ND		460		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
TAME	ND		460		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
Ethyl tert-butyl ether	ND		460		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
Toluene	1100		460		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
EDB	ND		460		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
Xylenes, Total	48000		930		ug/Kg		06/24/14 09:00	06/24/14 12:51	100
EDC	ND		460		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
TBA	ND	*	930		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
DIPE	ND		460		ug/Kg		06/24/14 09:00	06/24/14 11:51	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	109		66 - 148				06/24/14 09:00	06/24/14 11:51	100
4-Bromofluorobenzene	112		66 - 148				06/24/14 09:00	06/24/14 12:51	100
1,2-Dichloroethane-d4 (Surr)	103		62 - 137				06/24/14 09:00	06/24/14 11:51	100
1,2-Dichloroethane-d4 (Surr)	102		62 - 137				06/24/14 09:00	06/24/14 12:51	100
Toluene-d8 (Surr)	97		65 - 141				06/24/14 09:00	06/24/14 11:51	100

65 - 141

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	12		0.27		mg/Kg		06/23/14 10:52	06/24/14 02:29	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	101	X	21 - 98				06/23/14 10:52	06/24/14 02:29	2
2-Fluorobiphenyl	78		30 - 112				06/23/14 10:52	06/24/14 02:29	2
Terphenyl-d14	89		32 - 117				06/23/14 10:52	06/24/14 02:29	2
2-Fluorophenol	96		28 - 98				06/23/14 10:52	06/24/14 02:29	2
Phenol-d5	81		23 - 101				06/23/14 10:52	06/24/14 02:29	2
2,4,6-Tribromophenol	95		37 - 114				06/23/14 10:52	06/24/14 02:29	2
Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	800		4.9		mg/Kg		06/23/14 16:34	06/23/14 18:58	5
Motor Oil Range Organics [C24-C36]	420		250		mg/Kg		06/23/14 16:34	06/23/14 18:58	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl		X D	40 - 130				06/23/14 16:34	06/23/14 18:58	

	€	

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Client Sample ID: DE-1-E

Date Collected: 06/23/14 09:05

Date Received: 06/23/14 10:35

Surrogate

p-Terphenyl

TestAmerica Job ID: 720-58215-1

Lab Sample ID: 720-58215-2

Matrix: Solid

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
Benzene	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
EDB	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
EDC	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
Ethylbenzene	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
Toluene	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
Xylenes, Total	23		10		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
TBA	ND		100		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
Ethanol	ND		1000		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
DIPE	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
TAME	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/Kg		06/23/14 18:43	06/23/14 21:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	114		45 - 131				06/23/14 18:43	06/23/14 21:14	1
1,2-Dichloroethane-d4 (Surr)	119		60 - 140				06/23/14 18:43	06/23/14 21:14	1
Toluene-d8 (Surr)	77		58 ₋ 140				06/23/14 18:43	06/23/14 21:14	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.26		0.26		mg/Kg		06/23/14 10:52	06/24/14 02:53	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	80		21 - 98				06/23/14 10:52	06/24/14 02:53	2
2-Fluorobiphenyl	77		30 - 112				06/23/14 10:52	06/24/14 02:53	2
Terphenyl-d14	91		32 - 117				06/23/14 10:52	06/24/14 02:53	2
2-Fluorophenol	85		28 - 98				06/23/14 10:52	06/24/14 02:53	2
Phenol-d5	75		23 - 101				06/23/14 10:52	06/24/14 02:53	2
2,4,6-Tribromophenol	92		37 - 114				06/23/14 10:52	06/24/14 02:53	2
- Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1200		20		mg/Kg		06/23/14 16:34	06/23/14 19:22	20
Motor Oil Range Organics [C24-C36]	2100		1000		mg/Kg		06/23/14 16:34	06/23/14 19:22	20

Limits

40 - 130

%Recovery Qualifier

0 XD

TestAmerica Pleasanton

Analyzed

06/23/14 16:34 06/23/14 19:22

Prepared

Dil Fac 20

RL

440

4400

44000

440

440

440

440

440

8700

440

870

440

Limits

66 - 148

66 - 148

62 - 137

62 - 137

65 - 141

65 - 141

MDL Unit

ug/Kg

D

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Method: 8260B - Volatile Organic Compounds (GC/MS)

Result Qualifier

1800

16000

ND

ND

ND

ND

ND

ND

ND

111

103

101

99

97

97

%Recovery

ND *

Qualifier

7200

92000

Client Sample ID: DE-1-N

Date Collected: 06/23/14 09:10

Date Received: 06/23/14 10:35

Analyte

Benzene

Ethanol

MTBE

TAME

Toluene

EDB

EDC

TBA

DIPE

Surrogate

4-Bromofluorobenzene

4-Bromofluorobenzene

Toluene-d8 (Surr)

Toluene-d8 (Surr)

1,2-Dichloroethane-d4 (Surr)

1,2-Dichloroethane-d4 (Surr)

Ethylbenzene

Ethyl tert-butyl ether

Xylenes, Total

TestAmerica Job ID: 720-58215-1

Lab Sample ID: 720-58215-3

Matrix: Solid

Prepared	Analyzed	Dil Fac	
06/24/14 09:00	06/24/14 11:22	100	
06/24/14 09:00	06/24/14 12:20	1000	
06/24/14 09:00	06/24/14 11:22	100	
06/24/14 09:00	06/24/14 11:22	100	
06/24/14 09:00	06/24/14 11:22	100	
06/24/14 09:00	06/24/14 11:22	100	
06/24/14 09:00	06/24/14 11:22	100	
06/24/14 09:00	06/24/14 11:22	100	
06/24/14 09:00	06/24/14 12:20	1000	

06/24/14 11:22

06/24/14 11:22

06/24/14 09:00	06/24/14 11:22	100
Prepared	Analyzed	Dil Fac
06/24/14 09:00	06/24/14 11:22	100
06/24/14 09:00	06/24/14 12:20	1000
06/24/14 09:00	06/24/14 11:22	100
06/24/14 09:00	06/24/14 12:20	1000
06/24/14 09:00	06/24/14 11:22	100
06/24/14 09:00	06/24/14 12:20	1000

06/24/14 09:00

06/24/14 09:00

Method: 8270C - Semivolati	le Compounds by G	as Chroma	tography/Mass	Spectro	metry (GC	(MS)			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	12		0.26		mg/Kg		06/23/14 10:52	06/24/14 03:17	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	84		21 - 98				06/23/14 10:52	06/24/14 03:17	2
2-Fluorobiphenyl	76		30 - 112				06/23/14 10:52	06/24/14 03:17	2
Terphenyl-d14	88		32 - 117				06/23/14 10:52	06/24/14 03:17	2
2-Fluorophenol	95		28 - 98				06/23/14 10:52	06/24/14 03:17	2
Phenol-d5	77		23 - 101				06/23/14 10:52	06/24/14 03:17	2
2,4,6-Tribromophenol	86		37 - 114				06/23/14 10:52	06/24/14 03:17	2

Method: 8015B - Diesel Range O	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	740		4.9		mg/Kg		06/23/14 16:34	06/23/14 18:33	5
Motor Oil Range Organics [C24-C36]	ND		250		mg/Kg		06/23/14 16:34	06/23/14 18:33	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	0	X D	40 - 130				06/23/14 16:34	06/23/14 18:33	5

100

100

6/24/2014

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Client Sample ID: DE-1-S

Date Collected: 06/23/14 09:15

Toluene-d8 (Surr)

Motor Oil Range Organics

TestAmerica Job ID: 720-58215-1

Lab Sample ID: 720-58215-4

06/24/14 11:51

06/23/14 18:09

06/24/14 09:00

06/23/14 16:34

Matrix: Solid

Date Received: 06/23/14 10:35

Method: 8260B/CA_LUFTMS	- 8260B / CA LUFT	MS							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
Benzene	ND		4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
EDB	ND		4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
EDC	ND		4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
Ethylbenzene	ND	*	4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
Toluene	ND	*	4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
Xylenes, Total	14		9.8		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
TBA	ND		98		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
Ethanol	ND		980		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
DIPE	ND		4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
TAME	ND		4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
Ethyl-t-butyl ether (ETBE)	ND		4.9		ug/Kg		06/24/14 09:00	06/24/14 11:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	164	X *	45 _ 131				06/24/14 09:00	06/24/14 11:51	1
1,2-Dichloroethane-d4 (Surr)	111		60 - 140				06/24/14 09:00	06/24/14 11:51	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	2.3		0.27		mg/Kg		06/23/14 10:52	06/24/14 03:41	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	87		21 - 98				06/23/14 10:52	06/24/14 03:41	2
2-Fluorobiphenyl	88		30 - 112				06/23/14 10:52	06/24/14 03:41	2
Terphenyl-d14	95		32 - 117				06/23/14 10:52	06/24/14 03:41	2
2-Fluorophenol	89		28 - 98				06/23/14 10:52	06/24/14 03:41	2
Phenol-d5	81		23 - 101				06/23/14 10:52	06/24/14 03:41	2
2,4,6-Tribromophenol	92		37 - 114				06/23/14 10:52	06/24/14 03:41	2
- Method: 8015B - Diesel Range Or	ganics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	110		2.0		mg/Kg		06/23/14 16:34	06/23/14 18:09	2

58 - 140

49 X

170

[C24-C36]					
Surrogate	%Recovery Qualifi	ier Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	77	40 - 130	06/23/14 16:34	06/23/14 18:09	2

99

mg/Kg

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-161742/4 Matrix: Solid

Analysis Batch: 161742

Lab Sample ID: LCS 720-161742/5

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		500		ug/Kg			06/24/14 09:00	100
Ethylbenzene	ND		500		ug/Kg			06/24/14 09:00	100
MTBE	ND		500		ug/Kg			06/24/14 09:00	100
Toluene	ND		500		ug/Kg			06/24/14 09:00	100
EDB	ND		500		ug/Kg			06/24/14 09:00	100
Xylenes, Total	ND		1000		ug/Kg			06/24/14 09:00	100
EDC	ND		500		ug/Kg			06/24/14 09:00	100
TBA	ND		1000		ug/Kg			06/24/14 09:00	100
Ethanol	ND		50000		ug/Kg			06/24/14 09:00	100
DIPE	ND		500		ug/Kg			06/24/14 09:00	100
TAME	ND		500		ug/Kg			06/24/14 09:00	100
Ethyl tert-butyl ether	ND		500		ug/Kg			06/24/14 09:00	100

мв мв

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104	66 - 148		06/24/14 09:00	100
1,2-Dichloroethane-d4 (Surr)	96	62 - 137		06/24/14 09:00	100
Toluene-d8 (Surr)	99	65 - 141		06/24/14 09:00	100

Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA Analysis Batch: 161742

	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	5000	4650		ug/Kg		93	76 - 122
Ethylbenzene	5000	4660		ug/Kg		93	76 ₋ 137
MTBE	5000	4600		ug/Kg		92	71 - 146
m-Xylene & p-Xylene	5000	4900		ug/Kg		98	71 - 142
Toluene	5000	4630		ug/Kg		93	77 _ 120
EDB	5000	4900		ug/Kg		98	70 - 138
EDC	5000	4580		ug/Kg		92	67 ₋ 126
ТВА	50000	58000		ug/Kg		116	70 - 130
Ethanol	250000	263000		ug/Kg		105	70 - 130
DIPE	5000	4230		ug/Kg		85	70 ₋ 130
TAME	5000	5120		ug/Kg		102	70 ₋ 130
Ethyl tert-butyl ether	5000	4570		ug/Kg		91	70 ₋ 130
o-Xylene	5000	4930		ug/Kg		99	71 - 142

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	102		66 - 148
1,2-Dichloroethane-d4 (Surr)	92		62 - 137
Toluene-d8 (Surr)	98		65 - 141

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-161742/6

Matrix: Solid

Analysis Batch: 161742

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	5000	4650		ug/Kg		93	76 - 122	0	20
Ethylbenzene	5000	4630		ug/Kg		93	76 - 137	1	20
MTBE	5000	4830		ug/Kg		97	71 - 146	5	20
m-Xylene & p-Xylene	5000	4870		ug/Kg		97	71 - 142	0	20
Toluene	5000	4620		ug/Kg		92	77 - 120	0	20
EDB	5000	5080		ug/Kg		102	70 - 138	4	20
EDC	5000	4730		ug/Kg		95	67 - 126	3	20
TBA	50000	45000	*	ug/Kg		90	70 - 130	25	20
Ethanol	250000	192000	*	ug/Kg		77	70 - 130	31	20
DIPE	5000	4440		ug/Kg		89	70 - 130	5	20
TAME	5000	5320		ug/Kg		106	70 - 130	4	20
Ethyl tert-butyl ether	5000	4800		ug/Kg		96	70 - 130	5	20
o-Xylene	5000	4960		ug/Kg		99	71 - 142	1	20

LCSD LCSD

95

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		66 - 148
1,2-Dichloroethane-d4 (Surr)	95		62 - 137
Toluene-d8 (Surr)	99		65 - 141

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-161700/5

Matrix: Solid

Toluene-d8 (Surr)

Analysis Batch: 161700

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Benzene ND 5.0 06/23/14 18:16 ug/Kg Ethylbenzene ND 5.0 ug/Kg 06/23/14 18:16 MTBE ND 5.0 ug/Kg 06/23/14 18:16 Toluene ND 5.0 ug/Kg 06/23/14 18:16 EDB ND 5.0 06/23/14 18:16 ug/Kg Xylenes, Total ND 10 ug/Kg 06/23/14 18:16 EDC ND 5.0 ug/Kg 06/23/14 18:16 TBA ND 100 ug/Kg 06/23/14 18:16 Ethanol ND 1000 ug/Kg 06/23/14 18:16 DIPE 06/23/14 18:16 ND 5.0 ug/Kg TAME ND 5.0 ug/Kg 06/23/14 18:16 Ethyl-t-butyl ether (ETBE) ND 5.0 ug/Kg 06/23/14 18:16

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		45 - 131		06/23/14 18:16	1
1,2-Dichloroethane-d4 (Surr)	103		60 - 140		06/23/14 18:16	1

58 - 140

06/23/14 18:16

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Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-161700/6

Matrix: Solid

Analysis Batch: 161700

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Spike	LCS	LCS				%Rec.	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
50.0	45.9		ug/Kg		92	70 - 130	
50.0	44.4		ug/Kg		89	80 _ 137	
50.0	49.8		ug/Kg		100	70 - 144	
50.0	46.1		ug/Kg		92	70 - 146	
50.0	46.6		ug/Kg		93	80 - 128	
50.0	50.7		ug/Kg		101	70 - 140	
50.0	50.2		ug/Kg		100	70 - 130	
500	455		ug/Kg		91	63 - 130	
2500	2340		ug/Kg		94	49 - 162	
50.0	47.4		ug/Kg		95	70 - 131	
50.0	52.5		ug/Kg		105	70 - 140	
50.0	48.8		ug/Kg		98	70 - 130	
50.0	46.8		ug/Kg		94	70 - 140	
	Added 50.0 50.0 50.0 50.0 50.0 50.0 50.0 50.	Added Result 50.0 45.9 50.0 44.4 50.0 49.8 50.0 46.1 50.0 50.7 50.0 50.7 50.0 50.2 500 455 2500 2340 50.0 52.5 50.0 48.8	Added Result Qualifier 50.0 45.9 50.0 44.4 50.0 49.8 50.0 46.1 50.0 46.6 50.0 50.7 50.0 50.2 500 455 2500 2340 50.0 47.4 50.0 52.5 50.0 48.8	Added Result Qualifier Unit 50.0 45.9 ug/Kg 50.0 44.4 ug/Kg 50.0 49.8 ug/Kg 50.0 46.1 ug/Kg 50.0 46.6 ug/Kg 50.0 50.7 ug/Kg 50.0 50.2 ug/Kg 500 455 ug/Kg 2500 2340 ug/Kg 50.0 47.4 ug/Kg 50.0 52.5 ug/Kg 50.0 48.8 ug/Kg	Added Result Qualifier Unit D 50.0 45.9 ug/Kg ug/Kg 50.0 44.4 ug/Kg ug/Kg 50.0 46.1 ug/Kg 50.0 46.6 ug/Kg 50.0 50.7 ug/Kg 50.0 50.2 ug/Kg 500 455 ug/Kg 2500 2340 ug/Kg 50.0 47.4 ug/Kg 50.0 52.5 ug/Kg 50.0 48.8 ug/Kg	Added Result Qualifier Unit D %Rec 50.0 45.9 ug/Kg 92 50.0 44.4 ug/Kg 89 50.0 49.8 ug/Kg 100 50.0 46.1 ug/Kg 92 50.0 46.6 ug/Kg 93 50.0 50.7 ug/Kg 101 50.0 50.2 ug/Kg 100 500 455 ug/Kg 91 2500 2340 ug/Kg 94 50.0 47.4 ug/Kg 95 50.0 52.5 ug/Kg 105 50.0 48.8 ug/Kg 98	Added Result Qualifier Unit D %Rec Limits 50.0 45.9 ug/Kg 92 70 - 130 50.0 44.4 ug/Kg 89 80 - 137 50.0 49.8 ug/Kg 100 70 - 144 50.0 46.1 ug/Kg 92 70 - 146 50.0 46.6 ug/Kg 93 80 - 128 50.0 50.7 ug/Kg 101 70 - 140 50.0 50.2 ug/Kg 100 70 - 130 500 455 ug/Kg 91 63 - 130 2500 2340 ug/Kg 94 49 - 162 50.0 47.4 ug/Kg 95 70 - 131 50.0 52.5 ug/Kg 105 70 - 140 50.0 48.8 ug/Kg 98 70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	97		45 - 131
1,2-Dichloroethane-d4 (Surr)	98		60 - 140
Toluene-d8 (Surr)	96		58 ₋ 140

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Lab Sample ID: LCSD 720-161700/7

Matrix: Solid

Analysis Batch: 161700

-	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	50.0	45.9		ug/Kg		92	70 - 130	0	20
Ethylbenzene	50.0	44.6		ug/Kg		89	80 - 137	0	20
MTBE	50.0	48.5		ug/Kg		97	70 - 144	3	20
m-Xylene & p-Xylene	50.0	46.1		ug/Kg		92	70 - 146	0	20
Toluene	50.0	46.6		ug/Kg		93	80 - 128	0	20
EDB	50.0	50.8		ug/Kg		102	70 - 140	0	20
EDC	50.0	49.4		ug/Kg		99	70 - 130	1	20
TBA	500	456		ug/Kg		91	63 - 130	0	20
Ethanol	2500	2350		ug/Kg		94	49 - 162	1	20
DIPE	50.0	46.4		ug/Kg		93	70 - 131	2	20
TAME	50.0	51.7		ug/Kg		103	70 - 140	2	20
Ethyl-t-butyl ether (ETBE)	50.0	47.9		ug/Kg		96	70 - 130	2	20
o-Xylene	50.0	46.6		ug/Kg		93	70 - 140	0	20

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	94		45 - 131
1,2-Dichloroethane-d4 (Surr)	98		60 - 140
Toluene-d8 (Surr)	98		58 ₋ 140

TestAmerica Pleasanton

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Prep Type: Total/NA

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-161740/4 Client Sample ID: Method Blank Matrix: Solid

Analysis Batch: 161740

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0		ug/Kg			06/24/14 08:57	1
Ethylbenzene	ND		5.0		ug/Kg			06/24/14 08:57	1
MTBE	ND		5.0		ug/Kg			06/24/14 08:57	1
Toluene	ND		5.0		ug/Kg			06/24/14 08:57	1
EDB	ND		5.0		ug/Kg			06/24/14 08:57	1
Xylenes, Total	ND		10		ug/Kg			06/24/14 08:57	1
EDC	ND		5.0		ug/Kg			06/24/14 08:57	1
TBA	ND		100		ug/Kg			06/24/14 08:57	1
Ethanol	ND		1000		ug/Kg			06/24/14 08:57	1
DIPE	ND		5.0		ug/Kg			06/24/14 08:57	1
TAME	ND		5.0		ug/Kg			06/24/14 08:57	1
Ethyl-t-butyl ether (ETBE)	ND		5.0		ug/Kg			06/24/14 08:57	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene 98 45 - 131 06/24/14 08:57 1,2-Dichloroethane-d4 (Surr) 97 60 - 140 06/24/14 08:57 Toluene-d8 (Surr) 95 58 - 140 06/24/14 08:57

Lab Sample ID: LCS 720-161740/5

Matrix: Solid

Analysis Batch: 161740

Client Sample ID:	Lab Control Sample
	Prep Type: Total/NA

•	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	50.0	43.5		ug/Kg		87	70 - 130
Ethylbenzene	50.0	41.6		ug/Kg		83	80 - 137
MTBE	50.0	48.7		ug/Kg		97	70 - 144
m-Xylene & p-Xylene	50.0	46.6		ug/Kg		93	70 - 146
Toluene	50.0	44.3		ug/Kg		89	80 - 128
EDB	50.0	51.5		ug/Kg		103	70 - 140
EDC	50.0	44.9		ug/Kg		90	70 - 130
TBA	500	423		ug/Kg		85	63 _ 130
Ethanol	2500	1880		ug/Kg		75	49 - 162
DIPE	50.0	38.2		ug/Kg		76	70 - 131
TAME	50.0	53.1		ug/Kg		106	70 - 140
Ethyl-t-butyl ether (ETBE)	50.0	45.0		ug/Kg		90	70 - 130
o-Xylene	50.0	44.1		ug/Kg		88	70 - 140

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	97		45 - 131
1,2-Dichloroethane-d4 (Surr)	96		60 - 140
Toluene-d8 (Surr)	96		58 ₋ 140

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-161740/6 **Matrix: Solid**

Analysis Batch: 161740

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Added	D 14							
	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
50.0	43.9		ug/Kg		88	70 - 130	1	20
50.0	41.7		ug/Kg		83	80 - 137	0	20
50.0	49.5		ug/Kg		99	70 - 144	2	20
50.0	46.7		ug/Kg		93	70 - 146	0	20
50.0	44.6		ug/Kg		89	80 - 128	1	20
50.0	52.6		ug/Kg		105	70 - 140	2	20
50.0	45.2		ug/Kg		90	70 - 130	1	20
500	449		ug/Kg		90	63 - 130	6	20
2500	1850		ug/Kg		74	49 - 162	1	20
50.0	38.7		ug/Kg		77	70 - 131	1	20
50.0	54.4		ug/Kg		109	70 - 140	3	20
50.0	45.8		ug/Kg		92	70 - 130	2	20
50.0	44.7		ug/Kg		89	70 - 140	1	20
	50.0 50.0 50.0 50.0 50.0 50.0 50.0 2500 50.0 50.0 50.0	50.0 41.7 50.0 49.5 50.0 46.7 50.0 44.6 50.0 52.6 50.0 45.2 500 449 2500 1850 50.0 38.7 50.0 54.4 50.0 45.8	50.0 41.7 50.0 49.5 50.0 46.7 50.0 44.6 50.0 52.6 50.0 45.2 500 449 2500 1850 50.0 38.7 50.0 54.4 50.0 45.8	50.0 41.7 ug/Kg 50.0 49.5 ug/Kg 50.0 46.7 ug/Kg 50.0 44.6 ug/Kg 50.0 52.6 ug/Kg 50.0 45.2 ug/Kg 500 449 ug/Kg 2500 1850 ug/Kg 50.0 38.7 ug/Kg 50.0 54.4 ug/Kg 50.0 45.8 ug/Kg	50.0 41.7 ug/Kg 50.0 49.5 ug/Kg 50.0 46.7 ug/Kg 50.0 44.6 ug/Kg 50.0 52.6 ug/Kg 50.0 45.2 ug/Kg 500 449 ug/Kg 2500 1850 ug/Kg 50.0 38.7 ug/Kg 50.0 54.4 ug/Kg 50.0 45.8 ug/Kg	50.0 41.7 ug/Kg 83 50.0 49.5 ug/Kg 99 50.0 46.7 ug/Kg 93 50.0 44.6 ug/Kg 89 50.0 52.6 ug/Kg 105 50.0 45.2 ug/Kg 90 500 449 ug/Kg 90 2500 1850 ug/Kg 74 50.0 38.7 ug/Kg 77 50.0 54.4 ug/Kg 109 50.0 45.8 ug/Kg 92	50.0 41.7 ug/Kg 83 80 - 137 50.0 49.5 ug/Kg 99 70 - 144 50.0 46.7 ug/Kg 93 70 - 146 50.0 44.6 ug/Kg 89 80 - 128 50.0 52.6 ug/Kg 105 70 - 140 50.0 45.2 ug/Kg 90 70 - 130 500 449 ug/Kg 90 63 - 130 2500 1850 ug/Kg 74 49 - 162 50.0 38.7 ug/Kg 77 70 - 131 50.0 54.4 ug/Kg 109 70 - 140 50.0 45.8 ug/Kg 92 70 - 130	50.0 41.7 ug/Kg 83 80 - 137 0 50.0 49.5 ug/Kg 99 70 - 144 2 50.0 46.7 ug/Kg 93 70 - 146 0 50.0 44.6 ug/Kg 89 80 - 128 1 50.0 52.6 ug/Kg 105 70 - 140 2 50.0 45.2 ug/Kg 90 70 - 130 1 500 449 ug/Kg 90 63 - 130 6 2500 1850 ug/Kg 74 49 - 162 1 50.0 38.7 ug/Kg 77 70 - 131 1 50.0 54.4 ug/Kg 109 70 - 140 3 50.0 45.8 ug/Kg 92 70 - 130 2

LCSD LCSD

MB MB

Result Qualifier

Surrogate	%Recovery Quali	fier Limits
4-Bromofluorobenzene	98	45 - 131
1,2-Dichloroethane-d4 (Surr)	95	60 - 140
Toluene-d8 (Surr)	98	58 ₋ 140

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Lab Sample ID: MB 720-161663/1-A

Matrix: Solid

Analyte

Analysis Batch: 161709

Client Sample ID: Method Blank Prep Type: Total/NA **Prep Batch: 161663**

Prepared

Analyzed Dil Fac

Naphthalene	ND		0.066	mg/Kg	06/23/14 09:20	06/24/14 00:54	1
	MB	МВ					
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	86		21 - 98		06/23/14 09:20	06/24/14 00:54	1
2-Fluorobiphenyl	97		30 - 112		06/23/14 09:20	06/24/14 00:54	1
Terphenyl-d14	99		32 - 117		06/23/14 09:20	06/24/14 00:54	1
2-Fluorophenol	92		28 - 98		06/23/14 09:20	06/24/14 00:54	1
Phenol-d5	82		23 - 101		06/23/14 09:20	06/24/14 00:54	1
2,4,6-Tribromophenol	96		37 - 114		06/23/14 09:20	06/24/14 00:54	1

RL

MDL Unit

Lab Sample ID: LCS 720-161663/2-A

Matrix: Solid

Analysis Batch: 161709

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 161663

	Spike	LUS	LUS				/onec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Naphthalene	1.33	1.01		mg/Kg		76	44 - 115	

LCS LCS	
%Recovery Qualifie	er Limits
83	21 - 98
97	30 - 112
99	32 - 117
	%Recovery 83 97

TestAmerica Pleasanton

6/24/2014

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Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Prep Batch: 161663

Prep Batch: 161669

Prep Type: Total/NA

Prep Batch: 161669

Client Sample ID: Lab Control Sample

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 720-161663/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 161709 Prep Batch: 161663**

	LCS	LCS			
Surrogate	%Recovery	Qualifier	Limits		
2-Fluorophenol	88		28 - 98		
Phenol-d5	86		23 _ 101		
2,4,6-Tribromophenol	103		37 - 114		

Lab Sample ID: LCSD 720-161663/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Solid

LCSD LCSD Spike %Rec. RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Naphthalene 1.31 0.989 75 44 - 115 2 35 mg/Kg

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Nitrobenzene-d5	82		21 - 98
2-Fluorobiphenyl	95		30 - 112
Terphenyl-d14	97		32 - 117
2-Fluorophenol	87		28 - 98
Phenol-d5	86		23 - 101
2,4,6-Tribromophenol	103		37 - 114

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-161669/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 161650

Analysis Batch: 161709

MB MB Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] ND 0.99 mg/Kg 06/23/14 10:34 06/23/14 20:45 Motor Oil Range Organics [C24-C36] ND 50 mg/Kg 06/23/14 10:34 06/23/14 20:45 MB MB %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analyzed

40 - 130 06/23/14 10:34 06/23/14 20:45 p-Terphenyl 89

Lab Sample ID: LCS 720-161669/2-A **Matrix: Solid**

Analysis Batch: 161650

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Diesel Range Organics 83.0 85.2 mg/Kg 103 50 - 150

[C10-C28]

LCS LCS Surrogate %Recovery Qualifier Limits p-Terphenyl 115 40 - 130

TestAmerica Pleasanton

QC Sample Results

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Lab Sample ID: LCSD 720-161669/3-A

Matrix: Solid

Analysis Batch: 161650

TestAmerica Job ID: 720-58215-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 161669

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics	82.8	84.9		mg/Kg		103	50 - 150	0	35
10.40.0003									

[C10-C28]

LCSD LCSD

%Recovery Qualifier Surrogate Limits 40 - 130 p-Terphenyl 112

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

GC/MS VOA

Analysis Batch: 161700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-2	DE-1-E	Total/NA	Solid	8260B/CA_LUFT	161725
				MS	
LCS 720-161700/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT	
				MS	
LCSD 720-161700/7	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT	
				MS	
MB 720-161700/5	Method Blank	Total/NA	Solid	8260B/CA_LUFT	
				MS	

Prep Batch: 161725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-2	DE-1-E	Total/NA	Solid	5030B	

Analysis Batch: 161740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-4	DE-1-S	Total/NA	Solid	8260B/CA_LUFT	161761
				MS	
LCS 720-161740/5	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT	
				MS	
LCSD 720-161740/6	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT	
				MS	
MB 720-161740/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT	
				MS	

Analysis Batch: 161742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-1	DE-1-W	Total/NA	Solid	8260B	161764
720-58215-1	DE-1-W	Total/NA	Solid	8260B	161764
720-58215-3	DE-1-N	Total/NA	Solid	8260B	161764
720-58215-3	DE-1-N	Total/NA	Solid	8260B	161764
LCS 720-161742/5	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-161742/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 720-161742/4	Method Blank	Total/NA	Solid	8260B	

Prep Batch: 161761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-4	DE-1-S	Total/NA	Solid	5030B	

Prep Batch: 161764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-1	DE-1-W	Total/NA	Solid	5030B	
720-58215-3	DE-1-N	Total/NA	Solid	5030B	

GC/MS Semi VOA

Prep Batch: 161663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-1	DE-1-W	Total/NA	Solid	3546	
720-58215-2	DE-1-E	Total/NA	Solid	3546	
720-58215-3	DE-1-N	Total/NA	Solid	3546	
720-58215-4	DE-1-S	Total/NA	Solid	3546	
LCS 720-161663/2-A	Lab Control Sample	Total/NA	Solid	3546	

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QC Association Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

TestAmerica Job ID: 720-58215-1

GC/MS Semi VOA (Continued)

Prep Batch: 161663 (Continued)

١	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	LCSD 720-161663/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
١	MB 720-161663/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 161709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-1	DE-1-W	Total/NA	Solid	8270C	161663
720-58215-2	DE-1-E	Total/NA	Solid	8270C	161663
720-58215-3	DE-1-N	Total/NA	Solid	8270C	161663
720-58215-4	DE-1-S	Total/NA	Solid	8270C	161663
LCS 720-161663/2-A	Lab Control Sample	Total/NA	Solid	8270C	161663
LCSD 720-161663/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	161663
MB 720-161663/1-A	Method Blank	Total/NA	Solid	8270C	161663

GC Semi VOA

Analysis Batch: 161650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-1	DE-1-W	Total/NA	Solid	8015B	161669
720-58215-2	DE-1-E	Total/NA	Solid	8015B	161669
720-58215-3	DE-1-N	Total/NA	Solid	8015B	161669
720-58215-4	DE-1-S	Total/NA	Solid	8015B	161669
LCS 720-161669/2-A	Lab Control Sample	Total/NA	Solid	8015B	161669
LCSD 720-161669/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	161669
MB 720-161669/1-A	Method Blank	Total/NA	Solid	8015B	161669

Prep Batch: 161669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58215-1	DE-1-W	Total/NA	Solid	3546	
720-58215-2	DE-1-E	Total/NA	Solid	3546	
720-58215-3	DE-1-N	Total/NA	Solid	3546	
720-58215-4	DE-1-S	Total/NA	Solid	3546	
LCS 720-161669/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-161669/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-161669/1-A	Method Blank	Total/NA	Solid	3546	

TestAmerica Pleasanton

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Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Client Sample ID: DE-1-W

Lab Sample ID: 720-58215-1

Matrix: Solid

Date Collected: 06/23/14 09:00 Date Received: 06/23/14 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			161764	06/24/14 09:00	PDR	TAL PLS
Total/NA	Analysis	8260B		100	161742	06/24/14 11:51	PDR	TAL PLS
Total/NA	Prep	5030B			161764	06/24/14 09:00	PDR	TAL PLS
Total/NA	Analysis	8260B		100	161742	06/24/14 12:51	PDR	TAL PLS
Total/NA	Prep	3546			161663	06/23/14 10:52	NDU	TAL PLS
Total/NA	Analysis	8270C		2	161709	06/24/14 02:29	MQL	TAL PLS
Total/NA	Prep	3546			161669	06/23/14 16:34	AFM	TAL PLS
Total/NA	Analysis	8015B		5	161650	06/23/14 18:58	JL	TAL PLS

Client Sample ID: DE-1-E Lab Sample ID: 720-58215-2

Date Collected: 06/23/14 09:05

Date Received: 06/23/14 10:35

Matrix: Solid

Dilution Batch Batch Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab 5030B Total/NA Prep 161725 06/23/14 18:43 LPL TAL PLS Total/NA Analysis 8260B/CA_LUFTMS 1 161700 06/23/14 21:14 ASC TAL PLS Total/NA 06/23/14 10:52 NDU TAL PLS Prep 3546 161663 Total/NA MQL TAL PLS Analysis 8270C 2 161709 06/24/14 02:53 TAL PLS Total/NA Prep 3546 161669 06/23/14 16:34 AFM Total/NA 20 161650 06/23/14 19:22 JL TAL PLS Analysis 8015B

Client Sample ID: DE-1-N Lab Sample ID: 720-58215-3

Date Collected: 06/23/14 09:10 Date Received: 06/23/14 10:35

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			161764	06/24/14 09:00	PDR	TAL PLS
Total/NA	Analysis	8260B		100	161742	06/24/14 11:22	PDR	TAL PLS
Total/NA	Prep	5030B			161764	06/24/14 09:00	PDR	TAL PLS
Total/NA	Analysis	8260B		1000	161742	06/24/14 12:20	PDR	TAL PLS
Total/NA	Prep	3546			161663	06/23/14 10:52	NDU	TAL PLS
Total/NA	Analysis	8270C		2	161709	06/24/14 03:17	MQL	TAL PLS
Total/NA	Prep	3546			161669	06/23/14 16:34	AFM	TAL PLS
Total/NA	Analysis	8015B		5	161650	06/23/14 18:33	JL	TAL PLS

Client Sample ID: DE-1-S Lab Sample ID: 720-58215-4

Date Collected: 06/23/14 09:15 Matrix: Solid

Date Received: 06/23/14 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			161761	06/24/14 09:00	PDR	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	161740	06/24/14 11:51	PDR	TAL PLS
Total/NA	Prep	3546			161663	06/23/14 10:52	NDU	TAL PLS

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Matrix: Solid

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Lab Chronicle

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58215-1

Lab Sample ID: 720-58215-4

Matrix: Solid

Client Sample ID: DE-1-S

Date Collected: 06/23/14 09:15 Date Received: 06/23/14 10:35

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		2	161709	06/24/14 03:41	MQL	TAL PLS
Total/NA	Prep	3546			161669	06/23/14 16:34	AFM	TAL PLS
Total/NA	Analysis	8015B		2	161650	06/23/14 18:09	JL	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Certification Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58215-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program		EPA Region	Certification ID	Expiration Date
California	State Progr	ram	9	2496	01-31-16
Analysis Method	Prep Method	Matrix	Analyt	е	

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Method Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58215-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8270C	Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS

Protocol References:

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

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58215-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-58215-1	DE-1-W	Solid	06/23/14 09:00	06/23/14 10:35
720-58215-2	DE-1-E	Solid	06/23/14 09:05	06/23/14 10:35
720-58215-3	DE-1-N	Solid	06/23/14 09:10	06/23/14 10:35
720-58215-4	DE-1-S	Solid	06/23/14 09:15	06/23/14 10:35

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Login Sample Receipt Checklist

Client: Bureau Veritas North America, Inc. Job Number: 720-58215-1

Login Number: 58215 List Source: TestAmerica Pleasanton

List Number: 1 Creator: Mullen, Joan

oreator. Mullen, Joan		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton 1220 Quarry Lane Pleasanton, CA 94566 Tel: (925)484-1919

TestAmerica Job ID: 720-58286-1

Client Project/Site: Au Energy - 1800 Powell

For:

Bureau Veritas North America, Inc. Bishop Ranch 6 2430 Camino Ramon Suite 122 San Ramon, California 94583

Attn: Mark Williams

Mint RJ Som Authorized for release by:

6/27/2014 4:25:59 PM

Micah Smith, Project Manager II (925)484-1919

micah.smith@testamericainc.com

.....LINKS

Review your project results through Total Access

Have a Question?



Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

TestAmerica Job ID: 720-58286-1

Qualifiers

GC/MS Semi VOA

C	Qualifier	Qualifier Description
X	(Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a
X	dilution may be flagged with a D. Surrogate is outside control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)

NC

ND Not detected at the reporting limit (or MDL or EDL if shown)

Practical Quantitation Limit PQL

Not Calculated

QC **Quality Control** Relative error ratio RER

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) TEF TEQ Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58286-1

Job ID: 720-58286-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-58286-1

Comments

No additional comments.

Receipt

The samples were received on 6/26/2014 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270C: The following sample(s) was diluted due to the abundance of non-target analytes: DE-2-E (720-58286-2), DE-2-W (720-58286-1). Elevated reporting limits (RLs) are provided.

Method(s) 8270C: %R of surrogate (2,4,6-tribromophenol) outside of control limit.

Method(s) 8270C: Surrogate recovery for the following sample(s) was outside the upper control limit: DE-2-E (720-58286-2). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

GC VOA

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

GC Semi VOA

Method(s) 8015B: The following sample(s) required a dilution due to the nature of the sample matrix: (720-58286-1 MS), (720-58286-1 MSD). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8015B: Due to the high concentration of C10-C28, the matrix spike / matrix spike duplicate (MS/MSD) for batch 161926 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8015B: The following sample(s) required a dilution due to the nature of the sample matrix: DE-2-W (720-58286-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information

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

Organic Prep

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

TestAmerica Pleasanton 6/27/2014

Detection Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Client Sample ID: DE-2-W

TestAmerica Job ID: 720-58286-1

Lab Sample ID: 720-58286-1

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Xylenes, Total	9.8	9.7	ug/Kg	1	8260B/CA_LUFT	Total/NA
					MS	
Diesel Range Organics [C10-C28]	460	20	mg/Kg	20	8015B	Total/NA
Motor Oil Range Organics [C24-C36]	1300	1000	mg/Kg	20	8015B	Total/NA

Client Sample ID: DE-2-E Lab Sample ID: 720-58286-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type	
Diesel Range Organics [C10-C28]	150		2.0		mg/Kg		_	8015B	Total/NA	_
Motor Oil Range Organics [C24-C36]	350		99		mg/Kg	2	2	8015B	Total/NA	

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Client Sample Results

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Client Sample ID: DE-2-W

Surrogate

p-Terphenyl

TestAmerica Job ID: 720-58286-1

Lab Sample ID: 720-58286-1

Matrix: Solid

Date Collected: 06/26/14 08:50 Date Received: 06/26/14 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
Benzene	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
EDB	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
EDC	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
Ethylbenzene	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
Toluene	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
Xylenes, Total	9.8		9.7		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
TBA	ND		97		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
Ethanol	ND		970		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
DIPE	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
TAME	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
Ethyl-t-butyl ether (ETBE)	ND		4.9		ug/Kg		06/26/14 18:57	06/26/14 21:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		45 - 131				06/26/14 18:57	06/26/14 21:17	1
1,2-Dichloroethane-d4 (Surr)	116		60 - 140				06/26/14 18:57	06/26/14 21:17	1
Toluene-d8 (Surr)	83		58 ₋ 140				06/26/14 18:57	06/26/14 21:17	1

Method: 8270C - Semivolatile Co Analyte	Result	Qualifier	RL	-	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.3		mg/Kg		06/26/14 13:03	06/27/14 13:12	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	89		21 - 98				06/26/14 13:03	06/27/14 13:12	10
2-Fluorobiphenyl	84		30 - 112				06/26/14 13:03	06/27/14 13:12	10
Terphenyl-d14	101		32 - 117				06/26/14 13:03	06/27/14 13:12	10
2-Fluorophenol	84		28 - 98				06/26/14 13:03	06/27/14 13:12	10
Phenol-d5	83		23 - 101				06/26/14 13:03	06/27/14 13:12	10
2,4,6-Tribromophenol	73		37 - 114				06/26/14 13:03	06/27/14 13:12	10
Method: 8015B - Diesel Range C	rganics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	460		20		mg/Kg		06/26/14 13:18	06/27/14 10:21	20
Motor Oil Range Organics [C24-C36]	1300		1000		mg/Kg		06/26/14 13:18	06/27/14 10:21	20

Limits

40 - 130

%Recovery Qualifier

0 XD

Analyzed

06/26/14 13:18 06/27/14 10:21

Dil Fac

20

Prepared

Client Sample Results

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Client Sample ID: DE-2-E Date Collected: 06/26/14 08:35 Date Received: 06/26/14 09:40 TestAmerica Job ID: 720-58286-1

Lab Sample ID: 720-58286-2

IJ	Sample	ID.	120-30200-2
			Matrix: Solid

Method: 8260B/CA_LUFTMS -	8260B / CA LUFT	T MS							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
Benzene	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
EDB	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
EDC	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
Ethylbenzene	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
Toluene	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
Xylenes, Total	ND		9.6		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
TBA	ND		96		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
Ethanol	ND		960		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
DIPE	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
TAME	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
Ethyl-t-butyl ether (ETBE)	ND		4.8		ug/Kg		06/26/14 18:57	06/26/14 21:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		45 - 131				06/26/14 18:57	06/26/14 21:46	1
1,2-Dichloroethane-d4 (Surr)	105		60 - 140				06/26/14 18:57	06/26/14 21:46	1
Toluene-d8 (Surr)	88		58 - 140				06/26/14 18:57	06/26/14 21:46	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.13		mg/Kg		06/26/14 13:03	06/27/14 13:36	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	96		21 - 98				06/26/14 13:03	06/27/14 13:36	2
2-Fluorobiphenyl	98		30 - 112				06/26/14 13:03	06/27/14 13:36	2
Terphenyl-d14	104		32 - 117				06/26/14 13:03	06/27/14 13:36	2
2-Fluorophenol	104	X	28 - 98				06/26/14 13:03	06/27/14 13:36	2
Phenol-d5	88		23 - 101				06/26/14 13:03	06/27/14 13:36	2
2,4,6-Tribromophenol	119	X	37 - 114				06/26/14 13:03	06/27/14 13:36	2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	150		2.0		mg/Kg		06/26/14 13:18	06/27/14 11:09	2
Motor Oil Range Organics [C24-C36]	350		99		mg/Kg		06/26/14 13:18	06/27/14 11:09	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	101		40 - 130				06/26/14 13:18	06/27/14 11:09	

TestAmerica Job ID: 720-58286-1

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Lab Sample ID: MB 720-161938/4

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Client Sample ID: Method Blank

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 161938

	MB MB						
Analyte	Result Qua	lifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND	5.0	ug/Kg			06/26/14 18:52	1
Benzene	ND	5.0	ug/Kg			06/26/14 18:52	1
EDB	ND	5.0	ug/Kg			06/26/14 18:52	1
EDC	ND	5.0	ug/Kg			06/26/14 18:52	1
Ethylbenzene	ND	5.0	ug/Kg			06/26/14 18:52	1
Toluene	ND	5.0	ug/Kg			06/26/14 18:52	1
Xylenes, Total	ND	10	ug/Kg			06/26/14 18:52	1
TBA	ND	100	ug/Kg			06/26/14 18:52	1
Ethanol	ND	1000	ug/Kg			06/26/14 18:52	1
DIPE	ND	5.0	ug/Kg			06/26/14 18:52	1
TAME	ND	5.0	ug/Kg			06/26/14 18:52	1
Ethyl-t-butyl ether (ETBE)	ND	5.0	ug/Kg			06/26/14 18:52	1
	MB MB						

Surrogate	%Recovery Quali	lifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100	45 - 131		06/26/14 18:52	1
1,2-Dichloroethane-d4 (Surr)	116	60 - 140		06/26/14 18:52	1
Toluene-d8 (Surr)	94	58 ₋ 140		06/26/14 18:52	1

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Analysis Batch: 161938

Matrix: Solid

Lab Sample ID: LCS 720-161938/5

-	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
MTBE	50.0	49.4		ug/Kg		99	70 - 144
Benzene	50.0	43.8		ug/Kg		88	70 - 130
EDB	50.0	53.5		ug/Kg		107	70 - 140
EDC	50.0	52.1		ug/Kg		104	70 - 130
Ethylbenzene	50.0	44.0		ug/Kg		88	80 _ 137
Toluene	50.0	43.5		ug/Kg		87	80 - 128
m-Xylene & p-Xylene	50.0	48.3		ug/Kg		97	70 - 146
o-Xylene	50.0	47.1		ug/Kg		94	70 - 140
TBA	500	510		ug/Kg		102	63 - 130
Ethanol	2500	2120		ug/Kg		85	49 - 162
DIPE	50.0	41.7		ug/Kg		83	70 - 131
TAME	50.0	54.4		ug/Kg		109	70 - 140
Ethyl-t-butyl ether (ETBE)	50.0	48.5		ug/Kg		97	70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	103		45 - 131
1,2-Dichloroethane-d4 (Surr)	107		60 - 140
Toluene-d8 (Surr)	98		58 ₋ 140

TestAmerica Job ID: 720-58286-1

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-161938/6

Matrix: Solid

Analysis Batch: 161938

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
MTBE	50.0	49.3		ug/Kg		99	70 - 144	0	20
Benzene	50.0	44.1		ug/Kg		88	70 - 130	1	20
EDB	50.0	51.6		ug/Kg		103	70 - 140	4	20
EDC	50.0	50.3		ug/Kg		101	70 - 130	4	20
Ethylbenzene	50.0	43.5		ug/Kg		87	80 - 137	1	20
Toluene	50.0	43.9		ug/Kg		88	80 - 128	1	20
m-Xylene & p-Xylene	50.0	47.8		ug/Kg		96	70 - 146	1	20
o-Xylene	50.0	46.3		ug/Kg		93	70 - 140	2	20
TBA	500	487		ug/Kg		97	63 - 130	5	20
Ethanol	2500	2140		ug/Kg		85	49 - 162	1	20
DIPE	50.0	41.3		ug/Kg		83	70 - 131	1	20
TAME	50.0	53.3		ug/Kg		107	70 - 140	2	20
Ethyl-t-butyl ether (ETBE)	50.0	47.5		ug/Kg		95	70 - 130	2	20

LCSD LCSD

MB MB

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	101		45 - 131
1,2-Dichloroethane-d4 (Surr)	103		60 - 140
Toluene-d8 (Surr)	98		58 ₋ 140

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Lab Sample ID: MB 720-161905/1-A

Matrix: Solid

Analysis Batch: 161915

Client Sample ID: Method Blank Prep Type: Total/NA **Prep Batch: 161905**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.067		mg/Kg		06/26/14 07:57	06/26/14 15:35	1
	МВ	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	87		21 - 98				06/26/14 07:57	06/26/14 15:35	1
2-Fluorobiphenyl	96		30 - 112				06/26/14 07:57	06/26/14 15:35	1
Terphenyl-d14	102		32 - 117				06/26/14 07:57	06/26/14 15:35	1
2-Fluorophenol	97		28 - 98				06/26/14 07:57	06/26/14 15:35	1
Phenol-d5	80		23 - 101				06/26/14 07:57	06/26/14 15:35	1
2,4,6-Tribromophenol	96		37 - 114				06/26/14 07:57	06/26/14 15:35	1

Lab Sample ID: LCS 720-161905/2-A

Matrix: Solid

Analysis Batch: 161915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 161905**

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Naphthalene		1.32	1.04		mg/Kg		79	44 - 115	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Nitrobenzene-d5	91		21 - 98
2-Fluorobiphenyl	103		30 - 112
Terphenyl-d14	99		32 - 117

Page 9 of 19

Client Sample ID: Lab Control Sample Dup

%Rec

79

%Rec.

Limits

44 - 115

RPD

Limit

35

Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)

Lab Sample ID: LCS 720-161905/2-A **Matrix: Solid**

Analysis Batch: 161915

Client Sample ID: Lab Control Sample Prep Type: Total/NA **Prep Batch: 161905**

mg/Kg

1.04

RL

1.0

50

Limits

Spike

Added

I imits

40 - 130

82.4

40 - 130

MDL Unit

LCS LCS

74.6

Result Qualifier

mg/Kg

mg/Kg

Unit

mg/Kg

D

Prepared

06/26/14 13:18

%Rec

90

LCS LCS Surrogate %Recovery Qualifier Limits 2-Fluorophenol 97 28 - 98 Phenol-d5 89 23 - 101 2,4,6-Tribromophenol 118 X 37 - 114

Lab Sample ID: LCSD 720-161905/3-A

Matrix: Solid Analysis Batch: 161915

LCSD LCSD Spike Analyte Result Qualifier Unit

ND

ND

Added Naphthalene 1.32

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Nitrobenzene-d5	90		21 - 98
2-Fluorobiphenyl	105		30 - 112
Terphenyl-d14	104		32 - 117
2-Fluorophenol	96		28 - 98
Phenol-d5	90		23 - 101
2,4,6-Tribromophenol	120	X	37 - 114

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-161926/1-A

Matrix: Solid

Analysis Ratch: 161900

Analysis batch. 161900		
	MB	MB
Analyte	Result	Qualifier

Diesel Range Organics [C10-C28] Motor Oil Range Organics [C24-C36]

MB MB %Recovery Qualifier Surrogate p-Terphenyl 101

Lab Sample ID: LCS 720-161926/2-A

Matrix: Solid Analysis Batch: 161900

Analyte Diesel Range Organics [C10-C28]

LCS LCS Surrogate %Recovery Qualifier p-Terphenyl 98

Client Sample ID: Method Blank Prep Type: Total/NA

Analyzed

06/27/14 04:45

Prep Batch: 161926

Dil Fac

Prep Type: Total/NA

Prep Batch: 161905

RPD

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			Prepared	Analyzed	Dil Fac	
			00/20/14 13:10	00/27/14 04.43	,	
			06/26/14 13:18	06/27/14 04:45	1	
_	_	_	06/26/14 13:18	06/27/14 04:45	1	
_	_	_	06/26/14 13:18	06/27/14 04:45		1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 161926

%Rec.

Limits

50 - 150

TestAmerica Job ID: 720-58286-1

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

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Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

MS MS

-	Lab Sample ID: LCSD 720-161926/3-A Matrix: Solid					Clie	nt Sam	ple ID:	Lab Contro	•	
Analysis Batch: 161900									•	ype: To Batch: 1	
			Spike	LCSD	LCSD				%Rec.		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics			82.7	76.6		mg/Kg		93	50 - 150	3	35
[C10-C28]											
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
p-Terphenyl	99		40 - 130								
Lab Sample ID: 720-58286-1 M	IS							C	Client Samp	ole ID: D	E-2-W
Matrix: Solid									Prep T	ype: To	al/NA
Analysis Batch: 161899									Prep I	Batch: 1	61926
	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics	460		82.5	934	4	mg/Kg		574	50 - 150		
[C10-C28]											

Matrix: Solid									Prep T	ype: To	tal/NA
Analysis Batch: 161899									Prep l	Batch: 1	61926
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics	460		82.6	722	4	mg/Kg		316	50 - 150	26	30
[C10-C28]											

[C10-C26]			
	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl		ΧD	40 - 130

TestAmerica Job ID: 720-58286-1

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell

GC/MS VOA

Analysis Batch: 161938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58286-1	DE-2-W	Total/NA	Solid	8260B/CA_LUFT	161957
				MS	
720-58286-2	DE-2-E	Total/NA	Solid	8260B/CA_LUFT	161957
				MS	
LCS 720-161938/5	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT	
				MS	
LCSD 720-161938/6	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT	
				MS	
MB 720-161938/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT	
				MS	

Prep Batch: 161957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58286-1	DE-2-W	Total/NA	Solid	5030B	
720-58286-2	DE-2-E	Total/NA	Solid	5030B	

GC/MS Semi VOA

Prep Batch: 161905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58286-1	DE-2-W	Total/NA	Solid	3546	<u> </u>
720-58286-2	DE-2-E	Total/NA	Solid	3546	
LCS 720-161905/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-161905/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-161905/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 161915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-161905/2-A	Lab Control Sample	Total/NA	Solid	8270C	161905
LCSD 720-161905/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	161905
MB 720-161905/1-A	Method Blank	Total/NA	Solid	8270C	161905

Analysis Batch: 162000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58286-1	DE-2-W	Total/NA	Solid	8270C	161905
720-58286-2	DE-2-E	Total/NA	Solid	8270C	161905

GC Semi VOA

Analysis Batch: 161899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58286-1 MS	DE-2-W	Total/NA	Solid	8015B	161926
720-58286-1 MSD	DE-2-W	Total/NA	Solid	8015B	161926

Analysis Batch: 161900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-161926/2-A	Lab Control Sample	Total/NA	Solid	8015B	161926
LCSD 720-161926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	161926
MB 720-161926/1-A	Method Blank	Total/NA	Solid	8015B	161926

TestAmerica Pleasanton

Page 12 of 19

QC Association Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58286-1

GC Semi VOA (Continued)

Prep Batch: 161926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58286-1	DE-2-W	Total/NA	Solid	3546	_
720-58286-1 MS	DE-2-W	Total/NA	Solid	3546	
720-58286-1 MSD	DE-2-W	Total/NA	Solid	3546	
720-58286-2	DE-2-E	Total/NA	Solid	3546	
LCS 720-161926/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-161926/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-161926/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 161978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58286-1	DE-2-W	Total/NA	Solid	8015B	161926

Analysis Batch: 161979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-58286-2	DE-2-E	Total/NA	Solid	8015B	161926

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Lab Chronicle

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58286-1

Lab Sample ID: 720-58286-1

TAL PLS

Matrix: Solid

Client Sample ID: DE-2-W Date Collected: 06/26/14 08:50 Date Received: 06/26/14 09:40

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			161957	06/26/14 18:57	LPL	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	161938	06/26/14 21:17	PDR	TAL PLS
Total/NA	Prep	3546			161905	06/26/14 13:03	NVP	TAL PLS
Total/NA	Analysis	8270C		10	162000	06/27/14 13:12	MQL	TAL PLS
Total/NA	Prep	3546			161926	06/26/14 13:18	STL	TAL PLS
Total/NA	Analysis	8015B		20	161978	06/27/14 10:21	JL	TAL PLS

Client Sample ID: DE-2-E Lab Sample ID: 720-58286-2

Date Collected: 06/26/14 08:35

Date Received: 06/26/14 09:40

Matrix: Solid

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161979

06/27/14 11:09

Dilution Batch Batch Batch Prepared Prep Type Type Method Run **Factor** Number or Analyzed Analyst 06/26/14 18:57 Total/NA 5030B 161957 LPL TAL PLS Prep Total/NA Analysis 8260B/CA_LUFTMS 1 161938 06/26/14 21:46 PDR TAL PLS Total/NA TAL PLS Prep 3546 161905 06/26/14 13:03 NVP Total/NA Analysis 8270C 2 162000 06/27/14 13:36 MQL TAL PLS Total/NA 06/26/14 13:18 TAL PLS Prep 3546 161926 STL

Laboratory References:

Total/NA

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

8015B

Analysis

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Certification Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58286-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority California	Program State Prog	Program State Program		Certification ID 2496	Expiration Date 01-31-16
Analysis Method	Prep Method	Matrix	Analyt	e	

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Method Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58286-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL PLS
S			
8270C	Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS

Protocol References:

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

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Client: Bureau Veritas North America, Inc. Project/Site: Au Energy - 1800 Powell TestAmerica Job ID: 720-58286-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-58286-1	DE-2-W	Solid	06/26/14 08:50	06/26/14 09:40
720-58286-2	DE-2-E	Solid	06/26/14 08:35	06/26/14 09:40

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CHAIN OF CUSTO

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	1	W	-2	82		\ *k 3#/
					•	Ansign.

Page L or 1.	
Lab: Test America-	
TAT: ZY how	

Report results to: Name Company Mailing Address City, State, Zip Telephone No.	6920 Kell-	Mark Williams Bureau Veritas San Kama 6920 Kell Center Parkway, Ste. 276 Pleasanton, California 94566 (925) 426-2600						Analyses Requested							Project Information Project No: 13181.03 Name: 1800 Powell		
Fax No.	(925) 426- Williams	-0106	auveritas.co	m		CTBR.	101				Q.			L	ocation: Emcyville, CA	NO NO	
Special instructions and/o	Date	Lime	Matrix/	No of	876x, 608, 80C	TAME	DIPE, TBA, E	00/95/u	TOH-diesel	TP11-motoroil	Japholene Born				DD Format for Geotracker YES Sample Condition/Comments	Preservative	
Sample Identification	Sampled 6/26/14	Sampled 8:30	Media 551	Conts	× 8		7	+-		<u> </u>	×		<u> </u> 	4		<u>ia</u>	
DE-2-E	6/26/14	835	501		R		\top	+	┰	Ź	<u> </u>					i CL	
	720-58286 Cha	ain of Custody									1928 4520						4.12
Collected by:	Markh	villoms						olled	tor's	Sign	natu	ıre:	<u> </u>	ACCEPTANCE OF	W. L		1.15
Relinquished by: Relinquished by: Method of Shipmen	Morkwill		Date/Time Date/Time	6/16/	14	9	:40		_Red _Red	ceive ceive	ed b	y: _	V	25.50	Date/Time		₹6

Login Sample Receipt Checklist

Client: Bureau Veritas North America, Inc. Job Number: 720-58286-1

Login Number: 58286 List Source: TestAmerica Pleasanton

List Number: 1 Creator: Mullen, Joan

oreator. Mulieri, Joan	
Question	Answer Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td>	N/A
The cooler's custody seal, if present, is intact.	N/A
Sample custody seals, if present, are intact.	N/A
The cooler or samples do not appear to have been compromised or tampered with.	True
Samples were received on ice.	True
Cooler Temperature is acceptable.	True
Cooler Temperature is recorded.	True
COC is present.	True
COC is filled out in ink and legible.	True
COC is filled out with all pertinent information.	True
Is the Field Sampler's name present on COC?	True
There are no discrepancies between the containers received and the COC.	True
Samples are received within Holding Time.	True
Sample containers have legible labels.	True
Containers are not broken or leaking.	True
Sample collection date/times are provided.	True
Appropriate sample containers are used.	True
Sample bottles are completely filled.	True
Sample Preservation Verified.	N/A
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True
Multiphasic samples are not present.	True
Samples do not require splitting or compositing.	True
Residual Chlorine Checked.	N/A

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