

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Verdad Oil and Gas Corporation

Ptasnik Confirmation

VR181223

SGS Job Number: DA14064

Sampling Date: 03/07/19

Report to:

Verdad Oil and Gas Corporation
1401 17th Street Suite 925
Denver, CO
mcugnetti@verdadoil.com

ATTN: Mike Cugnetti

Total number of pages in report: 29



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.



Scott Heideman
Laboratory Director

Client Service contact: Carissa Cumine 303-425-6021

Certifications: CO (CO00049), ID (CO00049), NE (NE-OS-06-04), ND (R-027), NJ (CO007), OK (D9942)
UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY (8TMS-L)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	5
3.1: DA14064-1: #1	6
3.2: DA14064-2: #2	9
Section 4: Misc. Forms	12
4.1: Chain of Custody	13
Section 5: MS Volatiles - QC Data Summaries	15
5.1: Method Blank Summary	16
5.2: Blank Spike Summary	18
5.3: Matrix Spike/Matrix Spike Duplicate Summary	20
Section 6: GC Volatiles - QC Data Summaries	22
6.1: Method Blank Summary	23
6.2: Blank Spike Summary	24
6.3: Matrix Spike/Matrix Spike Duplicate Summary	25
Section 7: GC/LC Semi-volatiles - QC Data Summaries	26
7.1: Method Blank Summary	27
7.2: Blank Spike Summary	28
7.3: Matrix Spike/Matrix Spike Duplicate Summary	29



Sample Summary

Verdad Oil and Gas Corporation

Job No: DA14064

Ptasnik Confirmation
Project No: VR181223

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
DA14064-1	03/07/19	12:21 MTC	03/07/19	SO	Soil	#1
DA14064-2	03/07/19	12:28 MTC	03/07/19	SO	Soil	#2

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

Summary of Hits

Job Number: DA14064
Account: Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation
Collected: 03/07/19

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

DA14064-1 #1

No hits reported in this sample.

DA14064-2 #2

No hits reported in this sample.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	#1						
Lab Sample ID:	DA14064-1					Date Sampled:	03/07/19
Matrix:	SO - Soil					Date Received:	03/07/19
Method:	SW846 8260B					Percent Solids:	92.9
Project:	Ptasnik Confirmation						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V51591.D	1	03/08/19 16:17	MB	n/a	n/a	V5V2717
Run #2							

	Initial Weight	Final Volume
Run #1	5.06 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.53	ug/kg	
108-88-3	Toluene	ND	2.1	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	2.1	0.53	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-131%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%
17060-07-0	1,2-Dichloroethane-D4	101%		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:	#1						
Lab Sample ID:	DA14064-1					Date Sampled:	03/07/19
Matrix:	SO - Soil					Date Received:	03/07/19
Method:	SW846 8015B					Percent Solids:	92.9
Project:	Ptasnik Confirmation						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA47519.D	1	03/15/19 06:33	BB	n/a	n/a	GGA2194
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	5.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	104%		60-140%		

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:	#1	
Lab Sample ID:	DA14064-1	Date Sampled: 03/07/19
Matrix:	SO - Soil	Date Received: 03/07/19
Method:	SW846-8015B SW846 3546	Percent Solids: 92.9
Project:	Ptasnik Confirmation	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FN4142.D	1	03/13/19 06:11	RB	03/12/19	OP17564	GFN146
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	9.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	92%		41-134%		

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:	#2	
Lab Sample ID:	DA14064-2	Date Sampled: 03/07/19
Matrix:	SO - Soil	Date Received: 03/07/19
Method:	SW846 8260B	Percent Solids: 91.9
Project:	Ptasnik Confirmation	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V51592.D	1	03/08/19 16:40	MB	n/a	n/a	V5V2717
Run #2							

	Initial Weight	Final Volume
Run #1	5.03 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.54	ug/kg	
108-88-3	Toluene	ND	2.2	1.1	ug/kg	
100-41-4	Ethylbenzene	ND	2.2	0.54	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		70-131%
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%
17060-07-0	1,2-Dichloroethane-D4	101%		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:	#2						
Lab Sample ID:	DA14064-2					Date Sampled:	03/07/19
Matrix:	SO - Soil					Date Received:	03/07/19
Method:	SW846 8015B					Percent Solids:	91.9
Project:	Ptasnik Confirmation						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA47520.D	1	03/15/19 07:09	BB	n/a	n/a	GGA2194
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.1 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	5.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	103%		60-140%		

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:	#2	
Lab Sample ID:	DA14064-2	Date Sampled: 03/07/19
Matrix:	SO - Soil	Date Received: 03/07/19
Method:	SW846-8015B SW846 3546	Percent Solids: 91.9
Project:	Ptasnik Confirmation	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FN4144.D	1	03/13/19 06:49	RB	03/12/19	OP17564	GFN146
Run #2							

Run #	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	11	9.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	95%		41-134%		

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

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

Misc. Forms**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.accutest.com

Bottle Order Control #		FED-EX Tracking #	
		SGS Job # DA 14064	
SGS Quote #			

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes
Company: Verdad Resources	Project Name: Ptasnik Confirmation 12.23.18	<div style="position: relative; height: 100px;"> TPH GRO/DRO BTEX </div>													DW - Drinking Water	
Street: HDI 17 th Street	Street: WCR 100														Billing Information (if different from Report to)	GW - Ground Water
City, State: Denver, Co	City, State: Keota, CO														Company:	WW - Water
Project Contact: Mike Cugnetti	Project #: VR 181223														Street Address:	SW - Surface Water
Phone: 720 845 0690	Client Purchase Order #:														City, State ZIP:	SO - Soil
Email: mcugnetti@verdadil.com			SL - Sludge													
Sampler(s) Name(s): Brad Gammey MK	Project Manager: Mike Cugnetti	Attention:	SED-Sediment													
Collection		Number of preserved Bottles												OIL - Oil		
Field ID / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	NONE	HCl	NaOH	PNO3	H2SO4	D1 Water	MEDH	ENCORE	N2/SO2	LIQ - Other Liquid	
#1	3/7/19	12:21	SD	K	2	X									AIR - Air	
#2	3/7/19	12:28	SD	X	2	X									SOL - Other Solid	
															WP - Wipe	
															FB-Field Blank	
															EB-Equipment Blank	
															RB- Rinse Blank	
															TB-Trip Blank	
LAB USE ONLY																

Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions	
<input checked="" type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day Emergency <input type="checkbox"/> 2 Day Emergency <input type="checkbox"/> 1 Day Emergency	Special Reporting Instructions <input type="checkbox"/> Report In PPB <input type="checkbox"/> Report In PPM <input type="checkbox"/> Report MDLs	<input type="checkbox"/> Commercial "A" (Level 1, Results Only) <input type="checkbox"/> Commercial "B" (Level 2, Results + QC Summary) <input type="checkbox"/> COMMBN [Results/QC/Narrative] <input type="checkbox"/> COMMBN+ [Results/QC/Narrative (+ chromatograms)] <input type="checkbox"/> REDT2 <input type="checkbox"/> FULT1	<input type="checkbox"/> EDD Format _____		
Emergency & Rush T/A data available VIA LabLink. RUSH TAT approval needed.					

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

Relinquished By Sampler: 1 <i>[Signature]</i>	Date/Time: 3/7/19 1555	Received By: 1 <i>[Signature]</i>	Relinquished By: 2	Date/Time:	Received By:
Relinquished By Sampler: 3	Date/Time:	Received By: 3	Relinquished By: 4	Date/Time:	Received By:
Custody Seal #	Intact <input checked="" type="checkbox"/> Not Intact <input type="checkbox"/> Absent <input type="checkbox"/>	Preserved where applicable <input checked="" type="checkbox"/>	Cooler Temp. °C: 5.5	Therm. ID: I-165	On Ice <input checked="" type="checkbox"/>
Form MSQA 064-01, RV 6/19/17					

DA14064: Chain of Custody

Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: DA14064

Client: VERDAD

Project: PTASNIK CONFIRMATION

Date / Time Received: 3/7/2019 3:55:00 PM

Delivery Method:

Airbill #'s: HD

Cooler Temps (Initial/Adjusted): #1: (5.5/5.5):

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Bar Therm; | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

DA14064: Chain of Custody

Page 2 of 2

MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2717-MB	5V51573.D	1	03/08/19	MB	n/a	n/a	V5V2717

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

DA14064-1, DA14064-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	50	25	ug/kg	
100-41-4	Ethylbenzene	ND	100	25	ug/kg	
108-88-3	Toluene	ND	100	50	ug/kg	
1330-20-7	Xylene (total)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	96% 70-131%
2037-26-5	Toluene-D8	97% 70-130%
460-00-4	4-Bromofluorobenzene	96% 70-130%
17060-07-0	1,2-Dichloroethane-D4	91% 70-130%

Method Blank Summary

Page 1 of 1

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2717-MB	5V51574.D	1	03/08/19	MB	n/a	n/a	V5V2717

The QC reported here applies to the following samples:

Method: SW846 8260B

DA14064-1, DA14064-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/kg	
108-88-3	Toluene	ND	2.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	1.0	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 70-131%
2037-26-5	Toluene-D8	95% 70-130%
460-00-4	4-Bromofluorobenzene	97% 70-130%
17060-07-0	1,2-Dichloroethane-D4	103% 70-130%

Blank Spike Summary

Page 1 of 1

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2717-BS	5V51571.D	1	03/08/19	MB	n/a	n/a	V5V2717

The QC reported here applies to the following samples:

Method: SW846 8260B

DA14064-1, DA14064-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	46.2	92	68-130
100-41-4	Ethylbenzene	50	44.4	89	69-130
108-88-3	Toluene	50	43.7	87	65-130
1330-20-7	Xylene (total)	150	133	89	69-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	70-131%
2037-26-5	Toluene-D8	96%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2717-BS	5V51572.D	1	03/08/19	MB	n/a	n/a	V5V2717

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

DA14064-1, DA14064-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
---------	----------	----------------	--------------	----------	--------

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-131%
2037-26-5	Toluene-D8	95%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%
17060-07-0	1,2-Dichloroethane-D4	103%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA13989-1MS	5V51578.D	1	03/08/19	MB	n/a	n/a	V5V2717
DA13989-1MSD	5V51579.D	1	03/08/19	MB	n/a	n/a	V5V2717
DA13989-1	5V51577.D	1	03/08/19	MB	n/a	n/a	V5V2717

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

DA14064-1, DA14064-2

CAS No.	Compound	DA13989-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	55.6	53.0	95	55.6	54.6	98	3	48-130/30
100-41-4	Ethylbenzene	ND	55.6	52.0	94	55.6	51.8	93	0	25-144/30
108-88-3	Toluene	ND	55.6	51.1	92	55.6	52.1	94	2	34-130/30
1330-20-7	Xylene (total)	ND	167	154	92	167	155	93	1	24-143/30

CAS No.	Surrogate Recoveries	MS	MSD	DA13989-1	Limits
1868-53-7	Dibromofluoromethane	101%	100%	98%	70-131%
2037-26-5	Toluene-D8	97%	97%	95%	70-130%
460-00-4	4-Bromofluorobenzene	99%	98%	99%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	96%	101%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA13989-1MS	5V51580.D	1	03/08/19	MB	n/a	n/a	V5V2717
DA13989-1MSD	5V51581.D	1	03/08/19	MB	n/a	n/a	V5V2717
DA13989-1	5V51577.D	1	03/08/19	MB	n/a	n/a	V5V2717

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

DA14064-1, DA14064-2

CAS No.	Compound	DA13989-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
---------	----------	--------------------	------------	-------	-------------	---------	----------------	--------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	MS	MSD	DA13989-1	Limits
1868-53-7	Dibromofluoromethane	99%	97%	98%	70-131%
2037-26-5	Toluene-D8	95%	94%	95%	70-130%
460-00-4	4-Bromofluorobenzene	99%	98%	99%	70-130%
17060-07-0	1,2-Dichloroethane-D4	95%	98%	101%	70-130%

* = Outside of Control Limits.

5.3.2
5

GC 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: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2194-MB	GA47502.D	1	03/14/19	BB	n/a	n/a	GGA2194

The QC reported here applies to the following samples: Method: SW846 8015B
DA14064-1, DA14064-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	10	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	108% 60-140%

Blank Spike Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA2194-BS	GA47503.D	1	03/14/19	BB	n/a	n/a	GGA2194

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

DA14064-1, DA14064-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	110	78.5	71	54-139

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	108%	60-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA14098-6MS	GA47505.D	1	03/14/19	BB	n/a	n/a	GGA2194
DA14098-6MSD	GA47506.D	1	03/14/19	BB	n/a	n/a	GGA2194
DA14098-6	GA47504.D	1	03/14/19	BB	n/a	n/a	GGA2194

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

DA14064-1, DA14064-2

CAS No.	Compound	DA14098-6 mg/kg	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	162	105	65	162	112	69	6	36-145/30

CAS No.	Surrogate Recoveries	MS	MSD	DA14098-6	Limits
120-82-1	1,2,4-Trichlorobenzene	100%	105%	105%	60-140%

* = Outside of Control Limits.

GC/LC Semi-volatiles**QC Data Summaries**

7

Includes the following where applicable:

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

Method Blank Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17564-MB	FN4094.D	1	03/12/19	RB	03/12/19	OP17564	GFN146

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

DA14064-1, DA14064-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	10	9.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	99% 41-134%

Blank Spike Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17564-BS	FN4096.D	1	03/12/19	RB	03/12/19	OP17564	GFN146

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

DA14064-1, DA14064-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	250	234	94	35-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	97%	41-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA14064
Account: VEROGTXD Verdad Oil and Gas Corporation
Project: Ptasnik Confirmation

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17564-MS	FN4098.D	1	03/12/19	RB	03/12/19	OP17564	GFN146
OP17564-MSD	FN4100.D	1	03/12/19	RB	03/12/19	OP17564	GFN146
DA14098-7	FN4102.D	1	03/12/19	RB	03/12/19	OP17564	GFN146

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

DA14064-1, DA14064-2

CAS No.	Compound	DA14098-7 mg/kg	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	ND	323	250	78	323	241	75	4	10-171/30

CAS No.	Surrogate Recoveries	MS	MSD	DA14098-7	Limits
84-15-1	o-Terphenyl	86%	86%	92%	41-134%

* = Outside of Control Limits.