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*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.

A handwritten signature in black ink, appearing to read 'Scott Heideman'.

**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)

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Test results relate only to samples analyzed.

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## Sample Summary

**Verdad Oil and Gas Corporation**

**Job No: DA14064**

**Ptasnik Confirmation  
Project No: VR181223**

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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

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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**

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**Report of Analysis**

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## Report of Analysis

3.1  
3

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

	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      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

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

Run #	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							

Run #	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      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

3.1  
3

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

	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							

	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      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

32  
3

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

Run #	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							

Run #	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      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

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

Run #	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							

Run #	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

32  
3

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

	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							

	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	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

**Misc. Forms**

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**Custody Documents and Other Forms**

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**Includes the following where applicable:**

- Chain of Custody



CHAIN OF CUSTODY

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

Bottle Order Control #
FED-EX Tracking #
SGS Quote #
SGS Job # DA14064

Client / Reporting Information
Project Information
Requested Analysis (see TEST CODE sheet)
Matrix Codes
Company: Verdad Resources
Project Name: Ptasnik Confirmation 12.23.18
Street: 471 17th Street
City, State: Denver, CO
Project Contact: Mike Cugnetti
Project #: VR 181223
Phone: 720 845 6901
Email: mcugnetti@verdadil.com
Sampler(s) Name(s): Brad Gammey, Mike Cugnetti
Project Manager: Mike Cugnetti
Collection table with columns: Field ID / Point of Collection, Date, Time, Sampled by, Matrix, # of bottles, and various chemical analysis columns (NONE, HCl, HNO3, H2SO4, etc.).

TPH GRO/DRO
BTEX

4.1
4

Turnaround Time (Business days)
Data Deliverable Information
Comments / Special Instructions
Std. 10 Business Days
5 Day RUSH
3 Day Emergency
2 Day Emergency
1 Day Emergency
Special Reporting Instructions
Report in PPB
Report in PPM
Report MDLs
Commercial "A" (Level 1, Results Only)
Commercial "B" (Level 2, Results + QC Summary)
COMMBN (Results/QC/Narrative)
COMMBN+ [Results/QC/Narrative (+ chromatograms)]
REDT2
FULT1
EDD Format

Sample Custody must be documented below each time samples change possession, including courier delivery.
Relinquished by Sampler: 1
Date/Time: 3/7/19 1555
Received By: 1
Date/Time: 3-7-19 1555
Relinquished by: 2
Date/Time:
Received By: 3
Date/Time:
Relinquished by: 4
Date/Time:
Custody Seal # Intact [X] Not intact [ ] Absent [ ]
Preserved where applicable [X] Cooler Temp. °C: 5.5 Therm. ID: T-185 On Ice [X]
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: | <u>Bar Therm;</u>                   |                          |
| 3. Cooler media:             | <u>Ice (Bag)</u>                    |                          |
| 4. No. Coolers:              | <u>1</u>                            |                          |

**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:          | <u>Intact</u>                       |                          |

**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

4.1  
4

## MS Volatiles

### QC Data Summaries

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**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	Results	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%

5.1.1  
5

## 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	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

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
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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.

5.3.1  
5

# 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	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

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## QC Data Summaries

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**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 Q 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

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**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%

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# 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 Q	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.

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