

State of Colorado  
**Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109



FOR OGCC USE ONLY

**SITE INVESTIGATION AND REMEDIATION WORKPLAN**

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

OGCC Employee:

Spill                      Complaint  
Inspection              NOAV

Tracking No:

**CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED**

Spill or Release    Plug & Abandon    Central Facility Closure    Site/Facility Closure    Other (describe): \_\_\_\_\_

OGCC Operator Number: \_\_\_\_\_

Name of Operator: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Contact Name and Telephone: \_\_\_\_\_

No: \_\_\_\_\_

Fax: \_\_\_\_\_

API Number: \_\_\_\_\_

County: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Facility Number: \_\_\_\_\_

Well Name: \_\_\_\_\_

Well Number: \_\_\_\_\_

Location: (QtrQtr, Sec, Twp, Rng, Meridian): \_\_\_\_\_ Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_

**TECHNICAL CONDITIONS**

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): \_\_\_\_\_

**Site Conditions:** Is location within a sensitive area (according to Rule 901e)?                      Y                      N                      If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): \_\_\_\_\_

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: \_\_\_\_\_

Potential receptors (water wells within 1/4 mi, surface waters, etc.): \_\_\_\_\_

**Description of Impact** (if previously provided, refer to that form or document):

Impacted Media (check):                      Extent of Impact:                      How Determined:

Soils                      \_\_\_\_\_                      \_\_\_\_\_

Vegetation                      \_\_\_\_\_                      \_\_\_\_\_

Groundwater                      \_\_\_\_\_                      \_\_\_\_\_

Surface Water                      \_\_\_\_\_                      \_\_\_\_\_

**REMEDIALTION WORKPLAN**

**Describe initial action taken** (if previously provided, refer to that form or document):

**Describe how source is to be removed:**

**Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:**



Flare Pit GH 214-33

Tracking Number: \_\_\_\_\_  
Name of Operator: \_\_\_\_\_  
OGCC Operator No: \_\_\_\_\_  
Received Date: \_\_\_\_\_  
Well Name & No: \_\_\_\_\_  
Facility Name & No: \_\_\_\_\_

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REMEDIATION WORKPLAN (Cont.)

OGCC Employee: \_\_\_\_\_

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Ground water has not been impacted.

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

The pit will be reclaimed in accordance with the 1000 series rules.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☒ N If yes, describe:

One grab sample was collected from the middle of the pit.

See attached plat for the grab sample and pit location.

See attached analytical report for the analytical results.

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

No E&P waste was generated.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 11/19/2010	Date Site Investigation Completed: 12/01/2010	Date Remediation Plan Submitted: 2/9/2011
Remediation Start Date: NA	Anticipated Completion Date: NA	Actual Completion Date: 12/01/2010

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Karolina Blaney

Signed: Karolina Blaney

Title: Environmental Specialist

Date: 2/9/2011

OGCC Approved: Chris Camfield

Title: For Chris Camfield

Date: 03/02/2011

EPS NW Region



12/01/10

## Technical Report for

**Williams Production RMT Company**

**GM 214-33 Flare Pit**

**Accutest Job Number: T64020**

**Sampling Date: 11/19/10**

### Report to:

**Williams Production RMT Company  
1058 County Road 215  
Parachute, CO 81635  
karolina.blaney@williams.com**

**ATTN: Karolina Blaney**

**Total number of pages in report: 18**



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

*Paul K Canevaro*

**Paul Canevaro  
Laboratory Director**

**Client Service contact: Sylvia Garza 713-271-4700**

Certifications: TX (T104704220-10-3) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004)  
OK (9103)

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

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Sample Summary

Williams Production RMT Company

Job No: T64020

GM 214-33 Flare Pit

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T64020-1	11/19/10	08:30	11/20/10	SO	Soil	GM 214-33

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

## Sample Results

## Report of Analysis

## Report of Analysis

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<b>Client Sample ID:</b>	GM 214-33		
<b>Lab Sample ID:</b>	T64020-1	<b>Date Sampled:</b>	11/19/10
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	11/20/10
<b>Method:</b>	SW846 8015	<b>Percent Solids:</b>	88.8
<b>Project:</b>	GM 214-33 Flare Pit		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0003809.D	1	11/23/10	AT	n/a	n/a	GBB199
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.72 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	0.33	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	96%		46-127%
98-08-8	aaa-Trifluorotoluene	107%		44-120%

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

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<b>Client Sample ID:</b>	GM 214-33		
<b>Lab Sample ID:</b>	T64020-1	<b>Date Sampled:</b>	11/19/10
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	11/20/10
<b>Method:</b>	SW846 8015 M SW846 3550B	<b>Percent Solids:</b>	88.8
<b>Project:</b>	GM 214-33 Flare Pit		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC220526.D	1	11/25/10	FO	11/23/10	OP16765	GCC1140
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	10.8	3.7	3.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		33-115%

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

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Includes the following where applicable:

- Chain of Custody



# SAMPLE INSPECTION FORM

Accutest Job Number: T64020 Client: Williams Production Date/Time Received: 11/20/10 1025  
 # of Coolers Received: 1 Thermometer #: IRGun04 Temperature Adjustment Factor: 0  
 Cooler Temperatures (initial/adjusted): #1: 1.4°C #2: \_\_\_\_\_ #3: \_\_\_\_\_ #4: \_\_\_\_\_ #5: \_\_\_\_\_  
 #6: \_\_\_\_\_ #7: \_\_\_\_\_ #8: \_\_\_\_\_ #9: \_\_\_\_\_ #10: \_\_\_\_\_ #11: \_\_\_\_\_ #12: \_\_\_\_\_

Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other

## COOLER INFORMATION

- ☐ Custody seal missing or not intact
- ☐ Temperature criteria not met
- ☐ Wet ice received in cooler

## CHAIN OF CUSTODY

- ☐ Chain of Custody not received
- ☐ Sample D/T unclear or missing
- ☐ Analyses unclear or missing
- ☐ COC not properly executed

## SAMPLE INFORMATION

- ☐ Sample containers received broken
- ☐ VOC vials have headspace
- ☐ Sample labels missing or illegible
- ☐ ID on COC does not match label(s)
- ☐ D/T on COC does not match label(s)
- ☐ Sample/Bottles rec'd but no analysis on COC
- ☐ Sample listed on COC, but not received
- ☐ Bottles missing for requested analysis
- ☐ Insufficient volume for analysis
- ☐ Sample received improperly preserved

## TRIP BLANK INFORMATION

- ☐ Trip Blank on COC but not received
- ☐ Trip Blank received but not on COC
- ☐ Trip Blank not intact
- ☐ Received Water Trip Blank
- ☐ Received Soil TB

Number of Encores? \_\_\_\_\_  
 Number of 5035 kits? \_\_\_\_\_  
 Number of lab-filtered metals? \_\_\_\_\_

Summary of Discrepancies:

TECHNICIAN SIGNATURE/DATE: Danesh Huchlitsch 11/20/10

INFORMATION AND SAMPLE LABELING VERIFIED BY: \_\_\_\_\_

## CORRECTIVE ACTIONS

Client Representative Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Accutest Representative: \_\_\_\_\_

Via: Phone Email

Client Instructions: \_\_\_\_\_

I:\mwalker\form\samplemanagement SM023 Revised 8/11/10

T64020: Chain of Custody

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JOB #: T64020 DATE/TIME RECEIVED: 11/20/10 1025  
CLIENT: Williams Production INITIALS: DEA

[illegible]

LOCATION: 1: Walk-In #1 (Waters) 2: Walk-In #2 (Soils) VR: Volatile Fridge M: Metals SUB: Subcontract EF: Encore Freezer

Rev 8/13/01 ewp

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## GC 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: T64020  
Account: WPRMTCOP Williams Production RMT Company  
Project: GM 214-33 Flare Pit

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB199-MB	BB0003802.DI		11/23/10	AT	n/a	n/a	GBB199

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

T64020-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	96%	46-127%
98-08-8	aaa-Trifluorotoluene	107%	44-120%

Blank Spike Summary

Job Number: T64020  
Account: WPRMTCOP Williams Production RMT Company  
Project: GM 214-33 Flare Pit

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB199-BS	BB0003799.DI		11/23/10	AT	n/a	n/a	GBB199

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

T64020-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.373	93	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	98%	46-127%
98-08-8	aaa-Trifluorotoluene	110%	44-120%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T64020  
Account: WPRMTCOP Williams Production RMT Company  
Project: GM 214-33 Flare Pit

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T64018-1MS	BB0003805.DI		11/23/10	AT	n/a	n/a	GBB199
T64018-1MSD	BB0003806.DI		11/23/10	AT	n/a	n/a	GBB199
T64018-1	BB0003804.DI		11/23/10	AT	n/a	n/a	GBB199

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

T64020-1

CAS No.	Compound	T64018-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		28	25.9	92	26.3	94	2	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T64018-1	Limits
460-00-4	4-Bromofluorobenzene	98%	98%	97%	46-127%
98-08-8	aaa-Trifluorotoluene	108%	110%	107%	44-120%



## GC Semi-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

Page 1 of 1

**Job Number:** T64020  
**Account:** WPRMTCOP Williams Production RMT Company  
**Project:** GM 214-33 Flare Pit

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP16765-MB	JJ8759.D	1	11/23/10	EM	11/23/10	OP16765	GJB96

The QC reported here applies to the following samples:

Method: SW846 8015 M

T64020-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	82% 33-115%

Blank Spike Summary

Job Number: T64020  
Account: WPRMTCOP Williams Production RMT Company  
Project: GM 214-33 Flare Pit

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP16765-BS	JJ8760.D	1	11/23/10	EM	11/23/10	OP16765	GJF96

The QC reported here applies to the following samples:

Method: SW846 8015 M

T64020-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	27.1	81	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	104%	33-115%

# Matrix Spike/Matrix Spike Duplicate Summary

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**Job Number:** T64020

**Account:** WPRMTCOP Williams Production RMT Company

**Project:** GM 214-33 Flare Pit

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP16765-MS	JJ8761.D	1	11/23/10	EM	11/23/10	OP16765	GJB96
OP16765-MSD	JJ8762.D	1	11/23/10	EM	11/23/10	OP16765	GJF96
T61681-57A <sup>a</sup>	JJ8763.D	1	11/23/10	EM	11/23/10	OP16765	GJB96

The QC reported here applies to the following samples:

Method: SW846 8015 M

T64020-1

CAS No.	Compound	T61681-57A mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	14.4	38	31.5	45	31.4	45	0	45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T61681-57A	Limits
84-15-1	o-Terphenyl	69%	84%	73%	33-115%

(a) Sample analyzed beyond hold time per clients request.

# WILLIAMS PRODUCTION RMT COMPANY

## LOCATION LAYOUT

FIGURE #2

