

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	
OGCC Employee:	
Spill Inspection	Complaint NOAV
Tracking No:	

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.

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

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

OGCC Operator Number: _____	Contact Name and Telephone: _____
Name of Operator: _____	_____
Address: _____	No: _____
City: _____ State: _____ Zip: _____	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

FORM
27
Rev 6/99

State of Colorado
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801, Denver, Colorado 80203
(303)894-2100 Fax:(303)894-2109



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: [Signature] Title: For Chris Camfield Date: 03/02/2011
EPS NW Region

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 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

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

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

Run #	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							

Run #	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

Includes the following where applicable:

- Chain of Custody

SAMPLE INSPECTION FORM

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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 recd 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: Danese Huchelstein 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

SAMPLE RECEIPT LOG

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

COOLER#	SAMPLE ID	FIELD ID	DATE	MATRIX	VOL	BOTTLE #	LOCATION	PRESERV				PH	
								1	2	3	4	<2	>12
1	1	Gm 214-33	11-19-10 0830a	soil	16oz	1	VR	1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12
								1	2	3	4	<2	>12
								5	6	7	8	<2	>12

DRA
11/20/10

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: DI 7: MeOH 8: Other
 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 ewd

T64020: Chain of Custody
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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: 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%

4.1.1
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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	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%

4.3.1
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GC Semi-volatiles

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QC Data Summaries

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
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%

5.2.1
5

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
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 ^a	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%

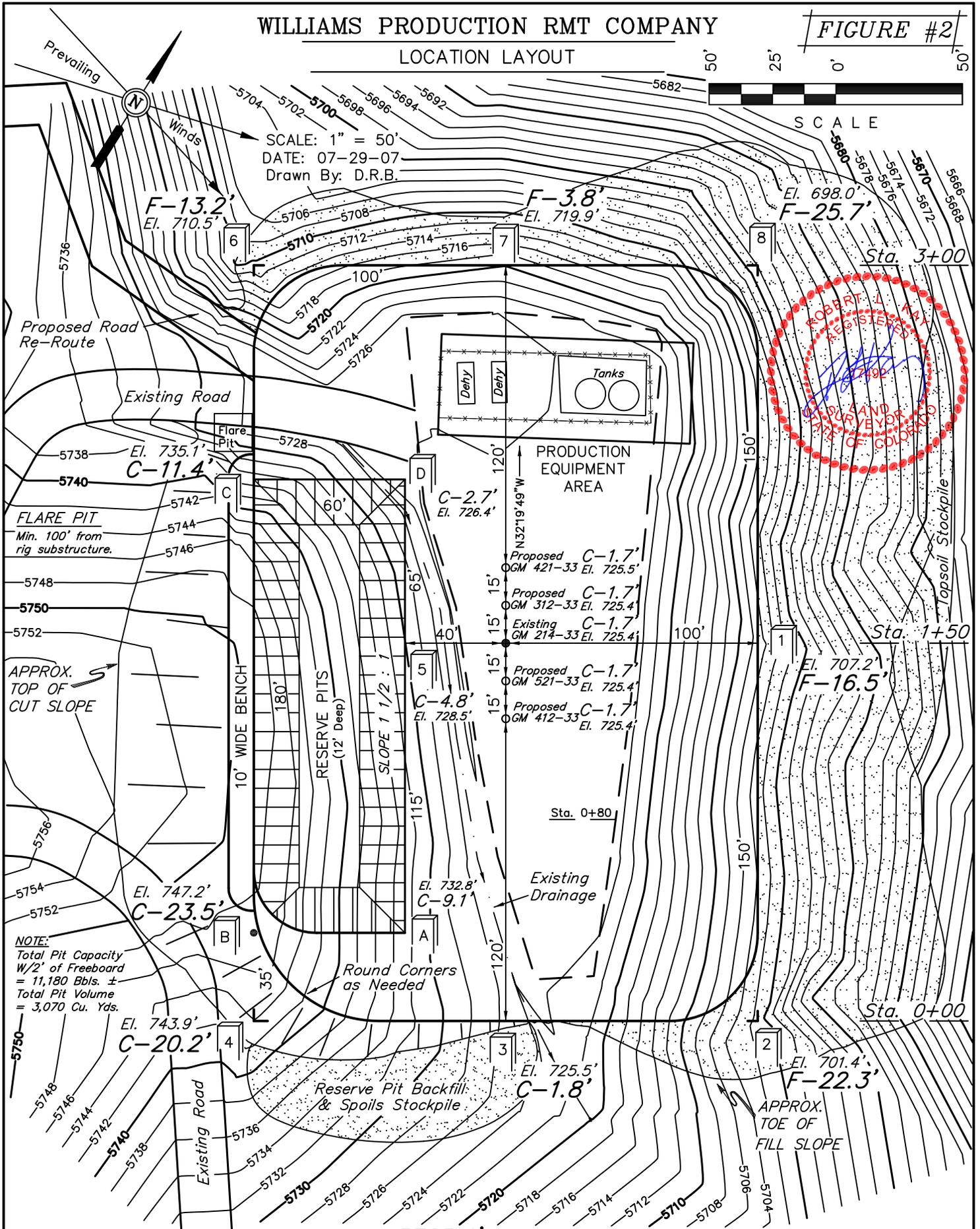
(a) Sample analyzed beyond hold time per clients request.

5.3.1
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WILLIAMS PRODUCTION RMT COMPANY

LOCATION LAYOUT

FIGURE #2



NOTE:
 Total Pit Capacity
 W/2' of Freeboard
 = 11,180 Bbls. ±
 Total Pit Volume
 = 3,070 Cu. Yds.

Elev. Ungraded Ground at Location Stake = 5725.4'
 Elev. Graded Ground at Location Stake = 5723.7'