

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.:**

FORM  
27  
Rev 6/99

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REMEDATION WORKPLAN (Cont.)

Flare Pit PA 41-12

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

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: 11/01/10	Date Site Investigation Completed: 11/01/10	Date Remediation Plan Submitted: 2/9/2011
Remediation Start Date: NA	Anticipated Completion Date: NA	Actual Completion Date: 11/01/10

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 Canfield*

Title: FOR Chris Canfield

Date: 03/02/2011

EPS NW Region

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	PA 41-12		
<b>Lab Sample ID:</b>	T63164-18	<b>Date Sampled:</b>	11/01/10
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b>	11/08/10
<b>Method:</b>	SW846 8015	<b>Percent Solids:</b>	83.0
<b>Project:</b>	TPH		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0003397.D	1	11/10/10	AT	n/a	n/a	GBB184
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.14 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	0.41	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		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

Page 1 of 1

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<b>Lab Sample ID:</b>	T63164-18	<b>Date Sampled:</b> 11/01/10
<b>Matrix:</b>	SO - Soil	<b>Date Received:</b> 11/08/10
<b>Method:</b>	SW846 8015 M SW846 3550B	<b>Percent Solids:</b> 83.0
<b>Project:</b>	TPH	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF202498.D	1	11/10/10	EM	11/09/10	OP16626	GIF1124
Run #2							

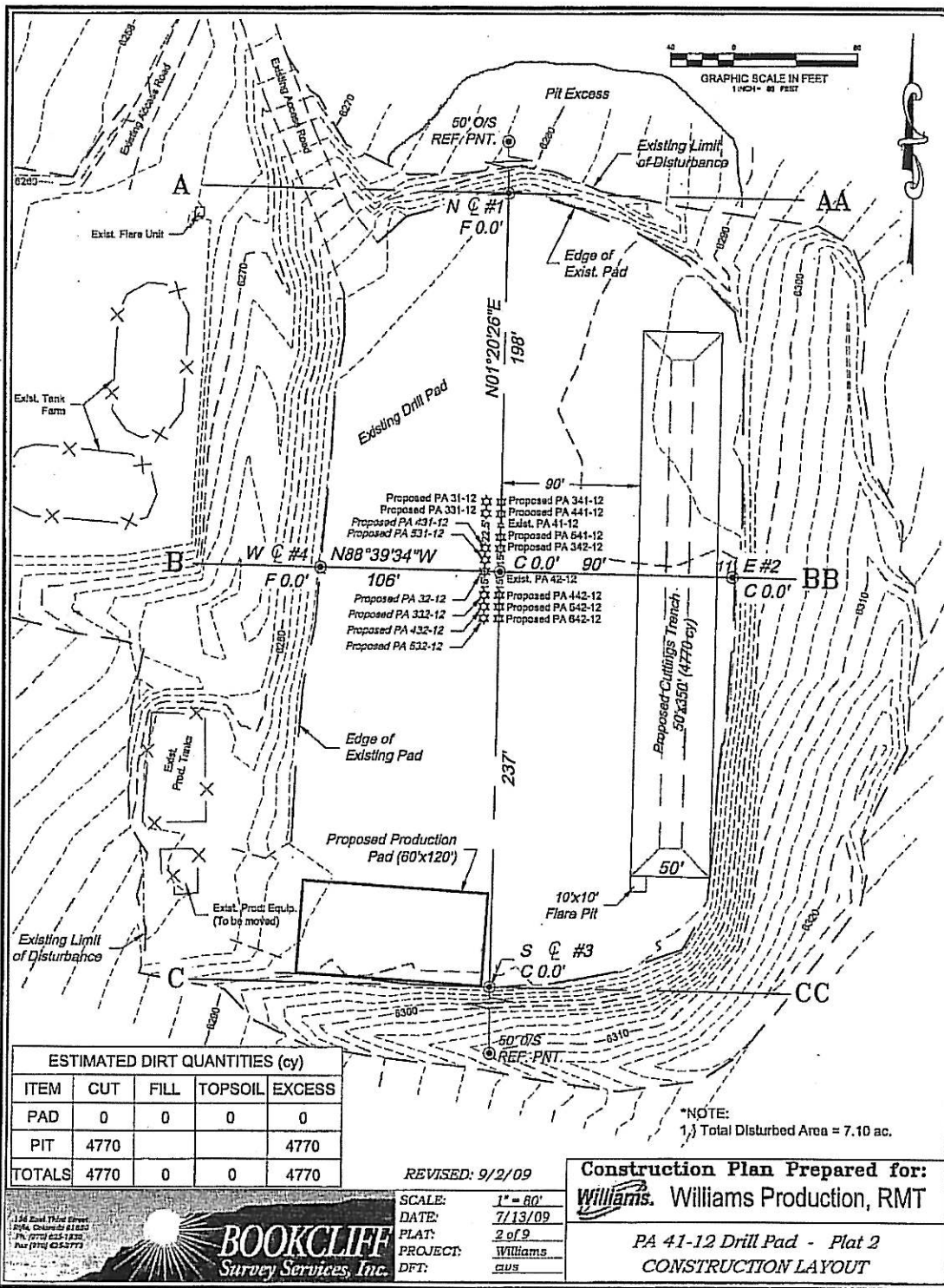
	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	9.62	4.0	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		33-115%

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

J = Indicates an estimated value  
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ESTIMATED DIRT QUANTITIES (cy)				
ITEM	CUT	FILL	TOPSOIL	EXCESS
PAD	0	0	0	0
PIT	4770			4770
TOTALS	4770	0	0	4770

REVISED: 9/2/09

Construction Plan Prepared for:  
**Williams.** Williams Production, RMT

144 East Third Street  
 204A, Oklahoma 73102  
 P.O. Box 1275-95W  
 Tulsa, Oklahoma 74112

**BOOKCLIFF**  
 Survey Services, Inc.

SCALE: 1" = 80'  
 DATE: 7/13/09  
 PLAT: 2 of 9  
 PROJECT: Williams  
 DFT: CUS

PA 41-12 Drill Pad - Plat 2  
 CONSTRUCTION LAYOUT

12-T75-95W 1 of 2