

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

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



#6360

FOR OGCC USE ONLY

**RECEIVED**  
9/30/2011

**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 never used

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

Page 2

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: 9/8/2011	Date Site Investigation Completed: 9/21/2011	Date Remediation Plan Submitted: 9/30/2011
Remediation Start Date: NA	Anticipated Completion Date: NA	Actual Completion Date: 9/21/2011

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

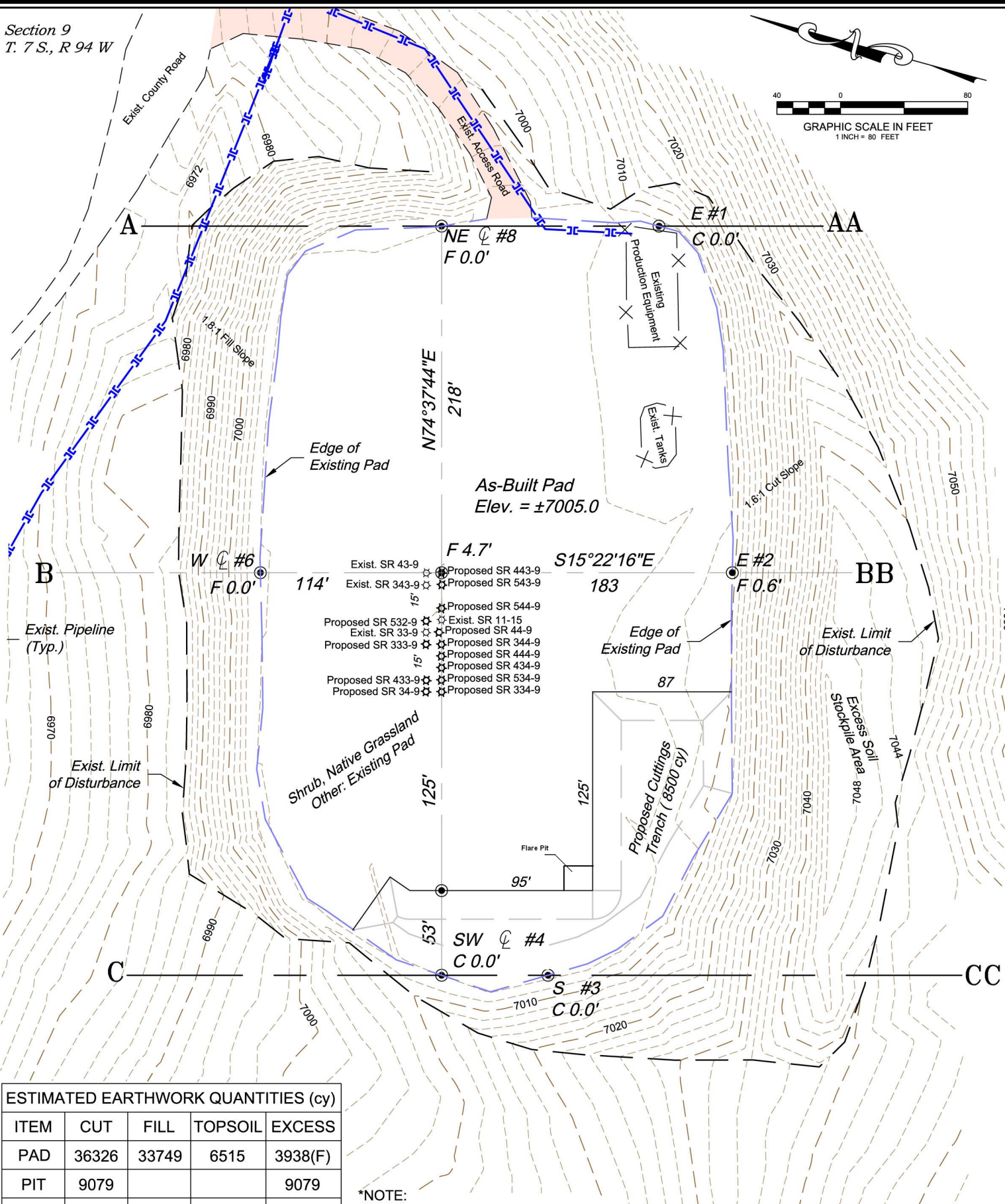
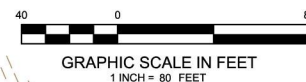
Title: Environmental Specialist

Date: 9/30/2011

OGCC Approved: Carly Bajer

Title: FOR Chris Canfield  
EPS NW Region

Date: 10/13/2011



ESTIMATED EARTHWORK QUANTITIES (cy)				
ITEM	CUT	FILL	TOPSOIL	EXCESS
PAD	36326	33749	6515	3938(F)
PIT	9079			9079
TOTALS	45405	33749	6515	5141

\*NOTE:  
1.) Total Disturbed Area = 6.35 ac.

**Construction Plan Prepared for:**

**Williams** Williams Production, RMT

SR 33-9 Drill Pad - Plat 2  
CONSTRUCTION LAYOUT



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Karolina Blaney  
Williams  
1058 County Road 215  
Parachute, CO 81635

## Report Summary

Wednesday September 21, 2011

Report Number: L535874

Samples Received: 09/14/11

Client Project:

Description: CR 33-9 Flare Pit

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

T. Alan Harvill , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,  
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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# REPORT OF ANALYSIS

Karolina Blaney  
Williams  
1058 County Road 215  
Parachute, CO 81635

September 21, 2011

Date Received : September 14, 2011  
Description : CR 33-9 Flare Pit

Sample ID : SR 33-9

Collected By :  
Collection Date : 09/08/11 14:25

ESC Sample # : L535874-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	09/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	96.5		% Rec.	602/8015	09/14/11	5
TPH (GC/FID) High Fraction	5.4	4.0	mg/kg	3546/DRO	09/19/11	1
Surrogate recovery(%) o-Terphenyl	67.9		% Rec.	3546/DRO	09/19/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 09/20/11 10:45 Revised: 09/21/11 14:56



Williams  
Karolina Blaney  
1058 County Road 215  
Parachute, CO 81635

Quality Assurance Report  
Level II

L535874

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September 21, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG555065	09/14/11 16:00
a,a,a-Trifluorotoluene(FID)		% Rec.	97.19	59-128	WG555065	09/14/11 16:00
TPH (GC/FID) High Fraction	< 4	ppm			WG555195	09/19/11 08:37
o-Terphenyl		% Rec.	71.10	50-150	WG555195	09/19/11 08:37

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.26	95.7	67-135	WG555065
a,a,a-Trifluorotoluene(FID)				103.3	59-128	WG555065
TPH (GC/FID) High Fraction	ppm	60	49.0	81.7	50-150	WG555195
o-Terphenyl				82.79	50-150	WG555195

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction	mg/kg	5.32	5.26	97.0	67-135	1.06	20	WG555065
a,a,a-Trifluorotoluene(FID)				103.7	59-128			WG555065
TPH (GC/FID) High Fraction	ppm	49.6	49.0	83.0	50-150	1.25	25	WG555195
o-Terphenyl				83.30	50-150			WG555195

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
TPH (GC/FID) Low Fraction	mg/kg	138.	14.0	5.5	105.	55-109	L535693-01	WG555065
a,a,a-Trifluorotoluene(FID)					103.3	59-128		WG555065
TPH (GC/FID) High Fraction	ppm	52.3	0	60	87.1	50-150	L535926-01	WG555195
o-Terphenyl					74.40	50-150		WG555195

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
TPH (GC/FID) Low Fraction	mg/kg	113.	138.	83.3	55-109	20.3*	20	L535693-01	WG555065
a,a,a-Trifluorotoluene(FID)				103.3	59-128				WG555065
TPH (GC/FID) High Fraction	ppm	56.2	52.3	93.6	50-150	7.19	25	L535926-01	WG555195
o-Terphenyl				80.86	50-150				WG555195

Batch number /Run number / Sample number cross reference

WG555065: R1858312: L535874-01  
WG555195: R1863012: L535874-01

\* \* Calculations are performed prior to rounding of reported values.  
\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Level II

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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.