



PROJECT NO:	012-1538
DRAWN BY:	KJG
DATE:	5/10/13

Landfarm Sampling Diagram
Location: MV 25-17
 WPX Energy Rocky Mountain, LLC



760 Horizon Drive, Suite 102
 Grand Junction, CO 81506
 TEL 970.263.7800
 FAX 970.263.7456

FIGURE

1



07/10/13

Technical Report for

WPX Energy Rocky Mountain, LLC

CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline

NXEEPPARACH

Accutest Job Number: D47863

Sampling Date: 07/02/13

Report to:

Williams Production

karolina.blaney@wpxenergy.com

ATTN: Karolina Blaney

Total number of pages in report: **14**



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.

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

Scott Heideman
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), TX (T104704511)

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Test results relate only to samples analyzed.

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Sample Summary

WPX Energy Rocky Mountain, LLC

Job No: D47863

CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline
Project No: NXEEPPARACH

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D47863-1	07/02/13	16:35 JS	07/03/13	SO	Soil	MV 25-17 LF 2-11(0-24IN)

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



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: WPX Energy Rocky Mountain, LLC

Job No D47863

Site: CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline

Report Date 7/5/2013 1:32:30 PM

On 07/03/2013, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.8 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D47863 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO	Batch ID: V5V1684
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47861-1MS, D47861-1MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix SO	Batch ID: OP8142
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47862-2MS, D47862-2MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015B

Matrix SO	Batch ID: GGB1152
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47859-1MS, D47859-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix SO	Batch ID: OP8139
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47802-1MS, D47802-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM19 2540B M

Matrix SO	Batch ID: GN20885
------------------	--------------------------

- The data for SM19 2540B M meets quality control requirements.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D47863
Account: WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline
Collected: 07/02/13



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D47863-1	MV 25-17 LF 2-11(0-24IN)					
Fluorene		9.3	9.3	5.6	ug/kg	SW846 8270C BY SIM
Naphthalene		52.1	13	11	ug/kg	SW846 8270C BY SIM
TPH-DRO (C10-C28)		85.0	7.4	5.6	mg/kg	SW846-8015B

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 1

Client Sample ID:	MV 25-17 LF 2-11(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47863-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8260B		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V27732.D	1	07/03/13	BD	n/a	n/a	V5V1684
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.09 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	60	30	ug/kg	
108-88-3	Toluene	ND	120	60	ug/kg	
100-41-4	Ethylbenzene	ND	120	23	ug/kg	
1330-20-7	Xylene (total)	ND	240	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	92%		64-130%
460-00-4	4-Bromofluorobenzene	105%		62-131%
17060-07-0	1,2-Dichloroethane-D4	105%		70-130%

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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Client Sample ID:	MV 25-17 LF 2-11(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47863-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8270C BY SIM SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G15322.D	1	07/04/13	SM	07/03/13	OP8142	E3G751
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	9.3	4.8	ug/kg	
120-12-7	Anthracene	ND	9.3	4.8	ug/kg	
56-55-3	Benzo(a)anthracene	ND	9.3	4.8	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	9.3	4.8	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	9.3	4.8	ug/kg	
50-32-8	Benzo(a)pyrene	ND	9.3	4.8	ug/kg	
218-01-9	Chrysene	ND	9.3	4.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	9.3	4.8	ug/kg	
206-44-0	Fluoranthene	ND	9.3	4.8	ug/kg	
86-73-7	Fluorene	9.3	9.3	5.6	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.3	4.8	ug/kg	
91-20-3	Naphthalene	52.1	13	11	ug/kg	
129-00-0	Pyrene	ND	9.3	4.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	96%		10-159%
321-60-8	2-Fluorobiphenyl	85%		19-131%
1718-51-0	Terphenyl-d14	84%		18-150%

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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Client Sample ID:	MV 25-17 LF 2-11(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47863-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8015B		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB21011.D	1	07/03/13	BD	n/a	n/a	GGB1152
Run #2							

	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	6.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	94%		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

Page 1 of 1

Client Sample ID:	MV 25-17 LF 2-11(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47863-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846-8015B SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD26115.D	1	07/03/13	TU	07/03/13	OP8139	GFD1284
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	85.0	7.4	5.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		35-130%		

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

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

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

Client / Reporting Information Company Name: Olsson Associates Street Address: 760 Horizon Drive, STE 102 City: Grand Junction, CO 81506 Project Contact: Tim Dobransky Email: tdobransky@olssonassociates.com Phone #: 970-263-7800 Sampler(s) Name(s): J Sutrina		Project Information Project Name: CORCCOGJ: MV 25-17 Landfarm 2 Batch 6 Baseline Street: _____ City: _____ State: _____ Billing Information (if different from Report to): Company Name: WPX Energy Rocky Mountain, LLC (WILLCOPI) Street Address: 1068 County Road 215 City: Parachute, CO 81635 Client Purchase Order #: NXEEPPARACH Project Manager: Leo Braun Email Invoices: Leo.Braun@wpxenergy.com		Requested Analysis (see TEST CODE sheet) GRODRO _____ BTEX _____ PAH (COGCC Table 910 List) _____ Matrix Codes: DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WPT - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank LAB USE ONLY																
Account Sample #	Field ID / Point of Collection	MCH/ID/Visi #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	HCN	DI Water	MECH	ENGLER	GRODRO	BTEX	PAH	Matrix Codes	
	MV 25-17 LF 2-12 (0-24 hr)		7/8/13	1030	JS	SO	1													
	MV 25-17 LF 2-11 (0-24 hr)		7/8/13	1036	JS	SO	1												01	
DR 7/8/13																				
Turnaround Time (Business days) <input type="checkbox"/> 5 Business Day Std. (per contract) <input type="checkbox"/> 3 Day Emergency <input type="checkbox"/> 2 Day Emergency <input checked="" type="checkbox"/> 1 Day Emergency Emergency & Rush TIA data available VIA Lablink		Approved By (Accutest PM): / Date: JGM 12/8/12		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> COMMBN <input type="checkbox"/> COMMBN+ Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial BN = Results/QC/Narrative (+ = chromatograms)										State Forms Required <input type="checkbox"/> Send Forms to State <input type="checkbox"/> Report by Fax <input checked="" type="checkbox"/> Report by PDF <input type="checkbox"/> EDD Format Also email final report to: Karolina.Blaney@wpxenergy.com PLEASE RUSH 24 HR TAT						
Sample Custody must be documented below each time samples change possession, including courier delivery.																				
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	7/8/13 1715	1	2		2				3		4			5						
3		3	4		4				5		5			5						
5		5																		
Custody Seal # HD/CS <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Not Intact Preserved where applicable <input type="checkbox"/> On Ice <input checked="" type="checkbox"/> Cooler Temp. 5.8																				

D47863: Chain of Custody

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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D47863

Client: OLSSON ASSOC.

Immediate Client Services Action Required: No

Date / Time Received: 7/3/2013 1:30:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: CORCCOGJ: MV 25-17 LANDFARM 2 BATCH

Airbill #'s: HD/CO

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:			Infrared gun
3. Cooler media:			Ice (bag)

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input 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:			Intact

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 rec'd 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

Accutest Laboratories
V:(303) 425-6021

4036 Youngfield Street
F: (303) 425-6854

Wheat Ridge, CO
www.accutest.com



07/10/13

Technical Report for

WPX Energy Rocky Mountain, LLC

CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline

NXEEPPARACH

Accutest Job Number: D47862

Sampling Date: 07/02/13

Report to:

Williams Production

karolina.blaney@wpxenergy.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.

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

Scott Heideman
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), TX (T104704511)

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Test results relate only to samples analyzed.

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Sample Summary

WPX Energy Rocky Mountain, LLC

Job No: D47862

CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline
Project No: NXEEPPARACH

Sample Number	Collected		Time By	Received	Matrix		Client Sample ID
	Date				Code	Type	
D47862-1	07/02/13	16:35	JS	07/03/13	SO	Soil	MV 25-17 LF 1-8(0-24IN)
D47862-2	07/02/13	16:40	JS	07/03/13	SO	Soil	MV 25-17 LF 1-1(0-24IN)

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



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: WPX Energy Rocky Mountain, LLC

Job No D47862

Site: CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline

Report Date 7/5/2013 1:31:51 PM

On 07/03/2013, 2 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.8 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D47862 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO	Batch ID: V5V1684
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47861-1MS, D47861-1MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix SO	Batch ID: OP8142
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47862-2MS, D47862-2MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015B

Matrix SO	Batch ID: GGB1152
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47859-1MS, D47859-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix SO	Batch ID: OP8139
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47802-1MS, D47802-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM19 2540B M

Matrix SO	Batch ID: GN20885
------------------	--------------------------

- The data for SM19 2540B M meets quality control requirements.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Page 1 of 1

Job Number: D47862
Account: WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline
Collected: 07/02/13



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

D47862-1 **MV 25-17 LF 1-8(0-24IN)**

Fluorene	8.3 J	9.3	5.6	ug/kg	SW846 8270C BY SIM
Naphthalene	94.8	13	12	ug/kg	SW846 8270C BY SIM
TPH-DRO (C10-C28)	88.6	7.4	5.5	mg/kg	SW846-8015B

D47862-2 **MV 25-17 LF 1-1(0-24IN)**

Fluorene	6.2 J	9.1	5.4	ug/kg	SW846 8270C BY SIM
Naphthalene	47.4	13	11	ug/kg	SW846 8270C BY SIM
TPH-DRO (C10-C28)	80.2	7.3	5.4	mg/kg	SW846-8015B

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 1

Client Sample ID:	MV 25-17 LF 1-8(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47862-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8260B		
Project:	CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V27730.D	1	07/03/13	BD	n/a	n/a	V5V1684
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	61	30	ug/kg	
108-88-3	Toluene	ND	120	61	ug/kg	
100-41-4	Ethylbenzene	ND	120	23	ug/kg	
1330-20-7	Xylene (total)	ND	240	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	92%		64-130%
460-00-4	4-Bromofluorobenzene	105%		62-131%
17060-07-0	1,2-Dichloroethane-D4	106%		70-130%

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

Client Sample ID:	MV 25-17 LF 1-8(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47862-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8270C BY SIM SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G15321.D	1	07/04/13	SM	07/03/13	OP8142	E3G751
Run #2							

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

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	9.3	4.8	ug/kg	
120-12-7	Anthracene	ND	9.3	4.8	ug/kg	
56-55-3	Benzo(a)anthracene	ND	9.3	4.8	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	9.3	4.8	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	9.3	4.8	ug/kg	
50-32-8	Benzo(a)pyrene	ND	9.3	4.8	ug/kg	
218-01-9	Chrysene	ND	9.3	4.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	9.3	4.8	ug/kg	
206-44-0	Fluoranthene	ND	9.3	4.8	ug/kg	
86-73-7	Fluorene	8.3	9.3	5.6	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.3	4.8	ug/kg	
91-20-3	Naphthalene	94.8	13	12	ug/kg	
129-00-0	Pyrene	ND	9.3	4.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		10-159%
321-60-8	2-Fluorobiphenyl	85%		19-131%
1718-51-0	Terphenyl-d14	84%		18-150%

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

Client Sample ID:	MV 25-17 LF 1-8(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47862-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846 8015B		
Project:	CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB21009.D	1	07/03/13	BD	n/a	n/a	GGB1152
Run #2							

	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	6.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	91%		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

Page 1 of 1

Client Sample ID:	MV 25-17 LF 1-8(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47862-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	89.7
Method:	SW846-8015B SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD26111.D	1	07/03/13	TU	07/03/13	OP8139	GFD1284
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-DRO (C10-C28)	88.6	7.4	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	72%		35-130%		

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

Client Sample ID:	MV 25-17 LF 1-1(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47862-2	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8260B		
Project:	CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V27731.D	1	07/03/13	BD	n/a	n/a	V5V1684
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.07 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	58	29	ug/kg	
108-88-3	Toluene	ND	120	58	ug/kg	
100-41-4	Ethylbenzene	ND	120	22	ug/kg	
1330-20-7	Xylene (total)	ND	230	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		64-130%
460-00-4	4-Bromofluorobenzene	107%		62-131%
17060-07-0	1,2-Dichloroethane-D4	102%		70-130%

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

Client Sample ID:	MV 25-17 LF 1-1(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47862-2	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8270C BY SIM SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G15316.D	1	07/04/13	SM	07/03/13	OP8142	E3G751
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	9.1	4.7	ug/kg	
120-12-7	Anthracene	ND	9.1	4.7	ug/kg	
56-55-3	Benzo(a)anthracene	ND	9.1	4.7	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	9.1	4.7	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	9.1	4.7	ug/kg	
50-32-8	Benzo(a)pyrene	ND	9.1	4.7	ug/kg	
218-01-9	Chrysene	ND	9.1	4.7	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	9.1	4.7	ug/kg	
206-44-0	Fluoranthene	ND	9.1	4.7	ug/kg	
86-73-7	Fluorene	6.2	9.1	5.4	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.1	4.7	ug/kg	
91-20-3	Naphthalene	47.4	13	11	ug/kg	
129-00-0	Pyrene	ND	9.1	4.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		10-159%
321-60-8	2-Fluorobiphenyl	77%		19-131%
1718-51-0	Terphenyl-d14	85%		18-150%

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

Client Sample ID:	MV 25-17 LF 1-1(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47862-2	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846 8015B		
Project:	CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB21010.D	1	07/03/13	BD	n/a	n/a	GGB1152
Run #2							

	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	88%		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

Page 1 of 1

Client Sample ID:	MV 25-17 LF 1-1(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47862-2	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	91.8
Method:	SW846-8015B SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 1 Batch 5 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD26113.D	1	07/03/13	TU	07/03/13	OP8139	GFD1284
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	80.2	7.3	5.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	82%		35-130%		

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

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D47862

Client: OLSSON ASSOC.

Immediate Client Services Action Required: No

Date / Time Received: 7/3/2013 1:30:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: CORCCOGJ: MV 25-17 LANDFARM 1 BATCH

Airbill #'s: HD/CO

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:			Infrared gun
3. Cooler media:			Ice (bag)

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input 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:			Intact

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 rec'd 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

Accutest Laboratories
V:(303) 425-6021

4036 Youngfield Street
F: (303) 425-6854

Wheat Ridge, CO
www.accutest.com



07/10/13

Technical Report for

WPX Energy Rocky Mountain, LLC

CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline

NXEEPPARACH

Accutest Job Number: D47861

Sampling Date: 07/02/13

Report to:

Williams Production

karolina.blaney@wpxenergy.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.

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

Scott Heideman
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), TX (T104704511)

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

WPX Energy Rocky Mountain, LLC

Job No: D47861

CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline
Project No: NXEEPPARACH

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D47861-1	07/02/13	16:20 JS	07/03/13	SO	Soil	MV 25-17 LF 2-3(0-24IN)
D47861-2	07/02/13	16:25 JS	07/03/13	SO	Soil	MV 25-17 LF 2-4(0-24IN)

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



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: WPX Energy Rocky Mountain, LLC

Job No D47861

Site: CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline

Report Date 7/5/2013 1:31:13 PM

On 07/03/2013, 2 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.8 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D47861 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO	Batch ID: V5V1684
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47861-1MS, D47861-1MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix SO	Batch ID: OP8142
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47862-2MS, D47862-2MSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015B

Matrix SO	Batch ID: GGB1152
------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47859-1MS, D47859-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846-8015B

Matrix SO	Batch ID: OP8139
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D47802-1MS, D47802-1MSD were used as the QC samples indicated.

Wet Chemistry By Method SM19 2540B M

Matrix SO	Batch ID: GN20885
------------------	--------------------------

- The data for SM19 2540B M meets quality control requirements.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Page 1 of 1

Job Number: D47861
Account: WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline
Collected: 07/02/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

D47861-1 **MV 25-17 LF 2-3(0-24IN)**

Fluorene	6.0 J	9.2	5.5	ug/kg	SW846 8270C BY SIM
Naphthalene	21.3	13	11	ug/kg	SW846 8270C BY SIM
TPH-DRO (C10-C28)	90.7	7.4	5.5	mg/kg	SW846-8015B

D47861-2 **MV 25-17 LF 2-4(0-24IN)**

Naphthalene	29.2	13	11	ug/kg	SW846 8270C BY SIM
TPH-DRO (C10-C28)	89.9	7.3	5.5	mg/kg	SW846-8015B

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 1

Client Sample ID:	MV 25-17 LF 2-3(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47861-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	90.1
Method:	SW846 8260B		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V27726.D	1	07/03/13	BD	n/a	n/a	V5V1684
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.07 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	60	30	ug/kg	
108-88-3	Toluene	ND	120	60	ug/kg	
100-41-4	Ethylbenzene	ND	120	23	ug/kg	
1330-20-7	Xylene (total)	ND	240	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	93%		64-130%
460-00-4	4-Bromofluorobenzene	106%		62-131%
17060-07-0	1,2-Dichloroethane-D4	104%		70-130%

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

Client Sample ID:	MV 25-17 LF 2-3(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47861-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	90.1
Method:	SW846 8270C BY SIM SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G15319.D	1	07/04/13	SM	07/03/13	OP8142	E3G751
Run #2							

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

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	9.2	4.8	ug/kg	
120-12-7	Anthracene	ND	9.2	4.8	ug/kg	
56-55-3	Benzo(a)anthracene	ND	9.2	4.8	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	9.2	4.8	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	9.2	4.8	ug/kg	
50-32-8	Benzo(a)pyrene	ND	9.2	4.8	ug/kg	
218-01-9	Chrysene	ND	9.2	4.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	9.2	4.8	ug/kg	
206-44-0	Fluoranthene	ND	9.2	4.8	ug/kg	
86-73-7	Fluorene	6.0	9.2	5.5	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.2	4.8	ug/kg	
91-20-3	Naphthalene	21.3	13	11	ug/kg	
129-00-0	Pyrene	ND	9.2	4.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		10-159%
321-60-8	2-Fluorobiphenyl	75%		19-131%
1718-51-0	Terphenyl-d14	76%		18-150%

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

Client Sample ID:	MV 25-17 LF 2-3(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47861-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	90.1
Method:	SW846 8015B		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB21007.D	1	07/03/13	BD	n/a	n/a	GGB1152
Run #2							

	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	6.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
120-82-1	1,2,4-Trichlorobenzene	91%		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

Page 1 of 1

Client Sample ID:	MV 25-17 LF 2-3(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47861-1	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	90.1
Method:	SW846-8015B SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD26107.D	1	07/03/13	TU	07/03/13	OP8139	GFD1284
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-DRO (C10-C28)	90.7	7.4	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	92%		35-130%		

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

Client Sample ID:	MV 25-17 LF 2-4(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47861-2	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8260B		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V27729.D	1	07/03/13	BD	n/a	n/a	V5V1684
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	60	30	ug/kg	
108-88-3	Toluene	ND	120	60	ug/kg	
100-41-4	Ethylbenzene	ND	120	23	ug/kg	
1330-20-7	Xylene (total)	ND	240	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	92%		64-130%
460-00-4	4-Bromofluorobenzene	107%		62-131%
17060-07-0	1,2-Dichloroethane-D4	105%		70-130%

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

Client Sample ID:	MV 25-17 LF 2-4(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47861-2	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8270C BY SIM SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G15320.D	1	07/04/13	SM	07/03/13	OP8142	E3G751
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	9.2	4.8	ug/kg	
120-12-7	Anthracene	ND	9.2	4.8	ug/kg	
56-55-3	Benzo(a)anthracene	ND	9.2	4.8	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	9.2	4.8	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	9.2	4.8	ug/kg	
50-32-8	Benzo(a)pyrene	ND	9.2	4.8	ug/kg	
218-01-9	Chrysene	ND	9.2	4.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	9.2	4.8	ug/kg	
206-44-0	Fluoranthene	ND	9.2	4.8	ug/kg	
86-73-7	Fluorene	ND	9.2	5.5	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	9.2	4.8	ug/kg	
91-20-3	Naphthalene	29.2	13	11	ug/kg	
129-00-0	Pyrene	ND	9.2	4.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%		10-159%
321-60-8	2-Fluorobiphenyl	72%		19-131%
1718-51-0	Terphenyl-d14	79%		18-150%

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

Client Sample ID:	MV 25-17 LF 2-4(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47861-2	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846 8015B		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB21008.D	1	07/03/13	BD	n/a	n/a	GGB1152
Run #2							

	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	6.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	93%		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

Page 1 of 1

Client Sample ID:	MV 25-17 LF 2-4(0-24IN)	Date Sampled:	07/02/13
Lab Sample ID:	D47861-2	Date Received:	07/03/13
Matrix:	SO - Soil	Percent Solids:	90.6
Method:	SW846-8015B SW846 3546		
Project:	CORCCOGJ: MV 25-17 Landfarm 2 Batch 7 Baseline		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FD26109.D	1	07/03/13	TU	07/03/13	OP8139	GFD1284
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	89.9	7.3	5.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	85%		35-130%		

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

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

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

Client / Reporting Information Company Name: Olsson Associates Street Address: 760 Horizon Drive, STE 102 City: Grand Junction, CO 81506 Project Contact: Tim Dobransky Email: tdobransky@olssonassociates.com Phone #: 970-263-7800 Sample(s) Name(s): J Sutrina		Project Information Project Name: CORCCOGJ: MV 26-17 Landfarm 2 Batch 7 Baseline Street: _____ City: _____ State: _____ Billing Information (if different from Report to): Company Name: WPX Energy Rocky Mountain, LLC (WILLCOP) Street Address: 1058 County Road 215 City: Parachute, CO 81635 Client Purchase Order #: NXEEPPARACH Project Manager: Leo Braun Email Invoices: Leo.Braun@wpxenergy.com		Requested Analysis (see TEST CODE sheet) GRO/DRO _____ BTEX _____ PAH (COGCC Table 910 List) _____ Matrix Codes: Water _____ GW - Ground Water _____ WW - Water _____ SW - Surface Water _____ SO - Soil _____ SL - Sludge _____ SED - Sediment _____ OI - Oil _____ LIQ - Other Liquid _____ AIR - Air _____ SOL - Other Solid _____ WP - Waste _____ FB - Field Blank _____ EB - Equipment Blank _____ RB - Rinse Blank _____ TB - Trip Blank _____ LAB USE ONLY															
Accutest Sample #	Field ID / Point of Collection	MECH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	HClO4	DI Water	MEDIA	ENCORE	GRO/DRO	BTEX	PAH	Matrix Codes
	MV 25-17 LF23 (0-24in)		7/2/13	1620	JS	SO	1									X	X	X	01
	MV 25-17 LF 2-4 (0-24in)		7/2/13	1625	JS	SO	1									X	X	X	02
<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> DR 7/3/13 </div>																			
Turnaround Time (Business days)		Data Deliverable Information														Comments / Special Instructions			
<input type="checkbox"/> 5 Business Day Std. (per contract) <input type="checkbox"/> 3 Day Emergency <input type="checkbox"/> 2 Day Emergency <input checked="" type="checkbox"/> 1 Day Emergency Emergency & Rush TAA data available VIA Lablink		Approved By (Accutest PHL) / Date: JGM 12/8/12		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> COMMEN <input type="checkbox"/> COMMEN+ Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial BN = Results/QC/Narrative (+ = chromatograms)										<input type="checkbox"/> State Forms Required <input type="checkbox"/> Send Forms to State <input type="checkbox"/> Report by Fax <input checked="" type="checkbox"/> Report by PDF <input type="checkbox"/> EDD Format Also email final report to: Karolina.Blaney@wpxenergy.com PLEASE RUSH 24 HR TAT					
Sample Custody must be documented below each time samples change possession, including courier delivery.																			
Relinquished by Sampler:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:	Received By:	Date Time:												
1	7/2/13 1715	3		2		2													
Relinquished by Sampler:	Date Time:	Received By:	Date Time:	Relinquished By:	Date Time:	Received By:	Date Time:												
3		3		4		4													
Relinquished by:	Date Time:	Received By:	Date Time:	Custody Seal #	Intact	Preserved where applicable	On Ice	Cooler Temp.											
6		6		HD/CO	<input checked="" type="checkbox"/>	<input type="checkbox"/>		5.8											

D47861: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D47861

Client: OLSSON ASSOC.

Immediate Client Services Action Required: No

Date / Time Received: 7/3/2013 1:30:00 PM

No. Coolers: 1

Client Service Action Required at Login: No

Project: CORCCOGJ MV25-17 LANDFARM 2 BATCH 7

Airbill #'s: HD/CO

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: | Infrared gun |
| 3. Cooler media: | Ice (bag) |

Quality Control Preservation
Y or N
N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input 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: | | | Intact |

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 rec'd 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

 Accutest Laboratories
 V: (303) 425-6021

 4036 Youngfield Street
 F: (303) 425-6854

 Wheat Ridge, CO
 www.accutest.com

D47861: Chain of Custody

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