<b>ADEQ</b>	WATE	<b>ER DIVISION</b>	<b>COMPLAINT RE</b>	PORT
ADEU	AFIN: 23-0000	0	PERMIT #: N/A	
	COUNTY: 23 I	Faulkner	PDS #: <b>015781</b>	
ARKANSAS	GPS LOCATION	ON: LAT: <b>34.90373</b>	LONG: -92.449438	
Department of Environmental Quality		🛚 Discharge Site / 🛭	🛚 General Area / 🔲 Entrar	nce
COMPLAINANT NAME: Congressman	COMPLAINT A	GAINST: <b>Unknown</b>		
RESPONSE REQUESTED BY COMPL	AINANT: <b>Yes</b>	SITE ADDRES	S:	
MAILING 1105 Deer St., Suite 12		MAILING		
ADDRESS:		ADDRESS:		
CITY, STATE, ZIP: Conway AR 72032		CITY, STATE,	ZIP:	
PHONE & EXT: <b>501.358.3481</b> F.	AX:	PHONE & EXT	: FAX:	
EMAIL:		EMAIL:		
HOW WAS COMPLAINT RECEIVED BY ADEQ: EML  ADEQ = ADEQ Personnel   EML = E-Mail   FAX = Fax   LTR = Letter PERS = Personal Contact   PHON = Telephone   WEB = ADEQ Website				
PERSON RECEIVING REPORT:	DATE:	SUPERVISOR	REFERRAL:	DATE:
Dean VanDerhoff	6/24/13	Kerri McCabe		6/24/13
MEDIA SUPERVISOR REFERRAL:	DATE:		SPECTOR: (ID & Name)	DATE:
		26036 Risa Pa		6/24/13
		RIPTION OF COMPI		\ 504.000
Lance Hines, Director of Sales & Bus 1793(cell) notified Congressman Grif				
Arkansas River. Subsequently, the E				
notified Dean VanDerhoff, ADEQ, Ha			by Congressman Crimin's	Office. Li A
notified Boart Variable from NBEQ, Flat		LED LOCATION		
Confluence of Palarm Creek and the Arkansas River off Hwy 365 (see attached map).				
PREVIOUS COMPLAINTS: No DATE(	S):			
		JP ON COMPLAINT		_
NUMBER OF SITE VISITS: 1 DATES:			<u></u>	
I		R OF THE STATE: <b>N</b>	o SAMPLES COLLEC	CTED: Yes
NAME OF WATERBODY: Palarm Cree	k/Arkansas Riv	ver.		

### INVESTIGATION & ACTION TAKEN

FAYETTEVILLE SHALE VIOLATIONS: No

6/24/13-(Confluence of Palarm Creek/Arkansas River)-Dean VanDerhoff, Erica McAdoo, and I responded to a complaint alleging oil was running into the Arkansas River from Palarm Creek at the confluence. Upon arrival, the following conditions were observed: a distinct mixing zone at the confluence of Palarm Creek with the Arkansas River was observed. Palarm Creek was dark (tea-colored); this is attributed to the decomposition of organic material; specifically, plant matter and the presence of tannins and lignins. Samples were obtained and exceedences of APC&EC Regulation 2: Water Quality Standards for Surface Waters of the State of Arkansas were not detected in the samples obtained at the time of investigation. See NPDES Report Page 6 of 37 for the approximate sampling location and NPDES Report Pages 7-36 of 37 for sample results.

#### Additional locations investigated were:

FAYETTEVILLE SHALE RELATED: No

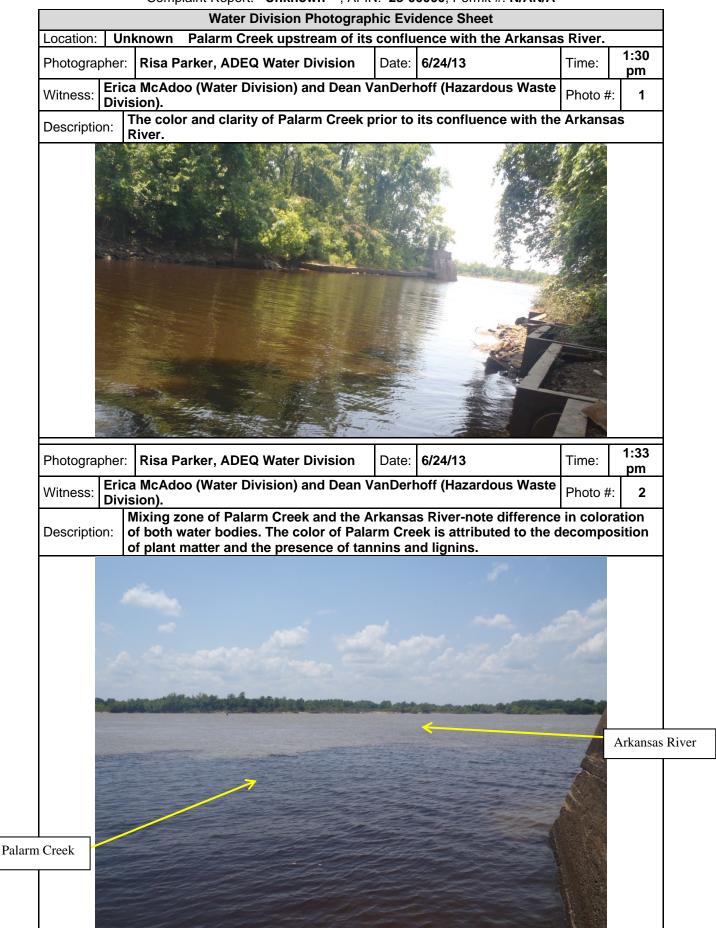
(Arkansas River-upstream of confluence with Palarm Creek): water samples were not collected; however, the following readings were obtained using field meters: Dissolved Oxygen (DO): 6.61 mg/L; pH 7.62.

(Boat Launch Area-Palarm Creek-Hwy 365): the following conditions were observed at the boat launch area off Hwy 365: Palarm Creek was dark (tea-colored); the coloration was attributed to the decomposition of organic material; a film was observed around the boat launch structure, this was attributed to bacterial activity in relatively stagnant water causing a biofilm. Water samples were not collected; however, the following readings were obtained using field meters: DO: 5.86 mg/L @ 34.2°C; pH 7.21.

(Palarm Creek located downstream of Lake Conway dam and boat launch area): the following conditions were observed downstream of the dam: Palarm Creek was dark (tea-colored); the coloration was attributed to the decomposition of organic material. Water samples were not collected; however, the following readings were obtained using field meters: DO: 5.04 mg/L @ 31.4°C; pH 7.14.

REFERRED: <b>No</b>	TO WHOM: <b>N/A</b>	DATE REFERRED:
---------------------	---------------------	----------------

	RESPONSE	TRACKI	NG	
RESPONSE REQUESTED: Yes	RESPONSE PROVIDED	D: Yes	RESPONSE PROVIDED D below.	ATE: See comment
BY WHOM?(ID and Name):		ASSIGN	NED TO? (ID and Name):	
RESPONSE COMMENT:				
Per verbal notification to me by coordinated through the ADEQ			response to Congressmar	n Griffin is to be
INSPECTOR:	Risa Parker			DATE: <b>6/27/13</b>
INCI ECTOR:	- INIGUT UTKOT			
SUPERVISOR:	Jason Bolenbaug	h		DATE: <b>6/27/2013</b>



		Complaint Report: <b>Unknown</b> , AFIN: <b>23-00000</b> , Permit #	: N/AN/A		
		Water Division Photographic Evidence Sheet			
Location:		known			1:56
Photograp		Risa Parker, ADEQ Water Division Date: 6/24/13		Time:	pm
williess.	Divi	a McAdoo (Water Division) and Dean VanDerhoff (Hazardoเ sion).		Photo #:	3
Description	n:	Film in Palarm Creek at this location attributed to bacteria.		1 6 m 1 1 1	
	Eric:	Risa Parker, ADEQ Water Division  Date: 6/24/13  a McAdoo (Water Division) and Dean VanDerhoff (Hazardousion).  Film in Palarm Creek at this location attributed to bacteria.	us Waste	Time:	1:58 pm 4

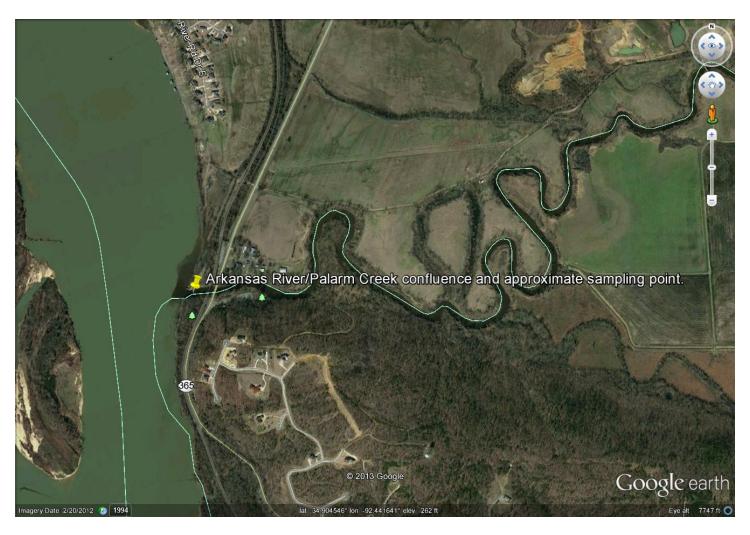
	Complaint Report: Unknown , AFIN: 23-00000, Permit #: N/AN/A		
	Water Division Photographic Evidence Sheet		
Location: Pa	alarm Creek located downstream of Lake Conway dam and boat laund	ch area.	
Photographe	Risa Parker, ADEQ Water Division Date: 6/24/13	Time:	2:35 pm
	ca McAdoo (Water Division) and Dean VanDerhoff (Hazardous Waste rision).	Photo #	5
Description:	The color of Palarm Creek is attributed to the decomposition of planthe presence of tannins and lignins.	t matter	and
*/ <u>#</u>			



2:34 Date: 6/24/13 Photographer: Risa Parker, ADEQ Water Division Time: pm Erica McAdoo (Water Division) and Dean VanDerhoff (Hazardous Waste Photo #: Witness: 6 Division).

The color of Palarm Creek is attributed to the decomposition of plant matter and the presence of tannins and lignins. Description:







5301 Northshore Drive North Little Rock, AR 72118 Telephone: 501-682-0744

Client Report For:	Palarm Creek Complaint 2013 2215-2216
Attention:	
Client Address:	
	ÿ

 Report Date:
 June 26, 2013

 LAB ID:
 AR13JUN24-02

Comment:

Approved By:\_\_\_\_\_\_ Date:June 26, 2013

Arkansas Department of Environmental Quality

5301 Northshore Drive North Little Rock, AR 72118 Laboratory Contact: Jeff Ruehr

Ruehr@adeq.state.ar.us

501-682-0955

Client:Special SamplesClient Sample ID:Palarm Creek ComplaintLab ID:2013-2215Collection Date:6/24/2013 1:41:00 PM

Matrix: Water

#### **Analyses**

Dil and Grease	EPA1664	Batch: 130625	03 Run:	1	
	Result	Reporting <u>Limit</u>	MDL	<u>Qual</u>	<u>Unit</u>
Oil and Grease	<2.5	2.5	2.5		mg/L
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	06/25/2013 1000				

-Volatiles by GC/MS	EPA 3510C/EPA 8270D	Batch: 1306250	04 Run:	1	
	Result	Reporting Limit	MDL	<u>Qual</u>	<u>Unit</u>
2-Fluorophenol (% Recovery)	37.3	40-110			%
Nitrobenzene-d5 (% Recovery)	65.5	50-110			%
2-Fluorobiphenyl (% Recovery)	66.0	50-110			%
2,4,6-Tribromophenol (% Recovery)	65.6	40-110			%
Terphenyl-d14 (% Recovery)	64.0	50-110			%
Methyl Methanesulfonate	<0.2	0.2	100		ug/L
Ethyl methanesulfonate	<0.2	0.2	100		ug/L
Phenol	<0.2	0.2	100		ug/L
Aniline	<0.2	0.2	100		ug/L
Bis(2-chloroethyl)ether	<0.2	0.2	100		ug/L
2-Chlorophenol	<0.2	0.2	100		ug/L
1,3-Dichlorobenzene	<0.12	0.12	60		ug/L
1,4-Dichlorobenzene	<0.12	0.12	60		ug/L
Benzyl alcohol	0.207	0.16	80		ug/L
1,2-Dichlorobenzene	<0.12	0.12	60		ug/L
2-Methylphenol	<0.1	0.1	50		ug/L
Acetophenone	<0.1	0.1	50		ug/L
4-Methylphenol	<0.1	0.1	50		ug/L
N-Nitrosodi-n-propylamine	<0.2	0.2	100		ug/L
Hexachloroethane	<0.2	0.2	100		ug/L
Nitrobenzene	<0.2	0.2	100		ug/L
N-Nitrosopiperidine	<0.2	0.2	100		ug/L

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Laboratory Contact: Jeff Ruehr

Ruehr@adeq.state.ar.us 501-682-0955

Isophorone	<0.1	0.1	50	ug/L
2-Nitrophenol	<0.3	0.3	150	ug/L
2,4-Dimethylphenol	<0.1	0.1	50	ug/L
Bis(2-chloroethoxy)methane	<0.2	0.2	100	ug/L
2,4-Dichlorophenol	<0.2	0.2	100	ug/L
1,2,4-Trichlorobenzene	<0.12	0.12	60	ug/L
Naphthalene	<0.08	0.08	40	ug/L
4-Chloroaniline	<0.1	0.1	50	ug/L
2,6-Dichlorophenol	<0.2	0.2	100	ug/L
Hexachlorobutadiene	<0.2	0.2	100	ug/L
N-Nitrosodibutylamine	<0.2	0.2	100	ug/L
4-Chloro-3-methylphenol	<0.16	0.16	80	ug/L
2-Methylnaphthalene	<0.1	0.1	50	ug/L
1,2,4,5-Tetrachlorobenzene	<0.1	0.1	50	ug/L
Hexachlorocyclopentadiene	<0.16	0.16	80	ug/L
2,4,6-Trichlorophenol	<0.2	0.2	100	ug/L
2,4,5-Trichlorophenol	<0.2	0.2	100	ug/L
2-Chloronaphthalene	<0.1	0.1	50	ug/L
1-Chloronaphthalene	<0.1	0.1	50	ug/L
2-Nitroaniline	<0.2	0.2	100	ug/L
Dimethyl phthalate	<0.2	0.2	100	ug/L
2,6-Dinitrotoluene	<0.2	0.2	100	ug/L
Acenaphthylene	<0.08	0.08	40	ug/L
3-Nitroaniline	<0.2	0.2	100	ug/L
Acenaphthene	<0.1	0,1	50	ug/L
2,4-Dinitrophenol	<4	4	2000	ug/L
Pentachlorobenzene	<0.12	0.12	60	ug/L
4-Nitrophenol	<2	2	1000	ug/L
Dibenzofuran	<0.1	0.1	50	ug/L
2,4-Dinitrotoluene	<0.2	0.2	100	ug/L
2,3,4,6-Tetrachlorophenol	<0.6	0.6	300	ug/L
Diethyl phthalate	<0.2	0.2	100	ug/L
Fluorene	<0.1	0.1	50	ug/L
4-Chlorophenyl phenyl ether	<0.1	0.1	50	ug/L
4-Nitroaniline	<0.2	0.2	100	ug/L
4,6-Dinitro-2-methylphenol	<6	6	3000	ug/L
Diphenylamine	<0.1	0.1	50	ug/L
Azobenzene	<0.08	0.08	40	ug/L
4-Bromophenyl phenyl ether	<0.2	0.2	100	ug/L
Hexachlorobenzene	<0.16	0.16	80	ug/L

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Laboratory Contact: Jeff Ruehr

Ruehr@adeq.state.ar.us

501-682-0955

Pentachlorophenol	ব	1	500	ug/L
Pentachloronitrobenzene	<0.2	0.2	100	ug/L
Pronamide	<0.2	0.2	100	ug/L
Phenanthrene	<0.08	0.08	40	ug/L
Anthracene	<0.08	0.08	40	ug/L
Carbazole	<0.1	0.1	50	ug/L
Di-n-butyl phthalate	<0.2	0.2	100	ug/L
Fluoranthene	<0.08	0.08	40	ug/L
Pyrene	<0.08	0.08	40	ug/L
Dimethylaminoazobenzene	<0.2	0.2	100	ug/L
Butyl benzyl phthalate	<0.3	0.3	150	ug/L
Benzo (a) anthracene	<0.1	0.1	50	ug/L
Chrysene	<0.1	0.1	50	ug/L
Bis(2-ethylhexyl)phthalate	<0.3	0.3	150	ug/L
Di-n-octyl phthalate	<0.3	0.3	150	ug/L
Benzo (b) fluoranthene	<0.16	0.16	80	ug/L
7,12-Dimethylbenz (a) anthracene	<0.2	0.2	100	ug/L
Benzo (k) fluoranthene	<0.16	0.16	80	ug/L
Benzo (a) pyrene	<0.16	0.16	80	ug/L
3-Methylcholanthrene	<0.2	0.2	100	ug/L
Indeno (1,2,3-cd) pyrene	<0.2	0.2	100	ug/L
Dibenzo (a,h) anthracene	<0.16	0.16	80	ug/L
Benzo (g,h,i) perylene	<0.16	0.16	80	ug/L
nitial Volume	500			mL
Final Volume	1			mL
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	6/25/2013 11:52 AM			
Prep By	Ed Harris			
Prep Date/Time	6/25/2013 08:00			

Arkansas Department of Environmental Quality 5301 Northshore Drive

North Liitle Rock, AR 72118

Laboratory Contact: Jeff Ruehr

Ruehr@adeq.state.ar.us

501-682-0955

Client Sample ID: Palarm Creek Complaint Client: Special Samples Lab ID: 2013-2215

Collection Date: 6/24/2013 1:41:00 PM

Matrix: Water

#### **Analyses**

ile Organics by GCMS	EPA 8260C	Batch: 13062602 Run: 1			
	Result	Reporting Limit	MDL	Qual	Unit
Dibromofluoromethane (% Recovery)	108	70-130			%
1,2-Dichloroethane-d4 (% Recovery)	107	70-130			%
Toluene-d8 (% Recovery)	93.3	70-130			%
4-Bromofluorobenzene (% Recovery)	104	70-130			%
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L
Chloromethane	<0.58	0.58	0.58		ug/L
Vinyl chloride	<0.82	0.82	0.82		ug/L
Bromomethane	<3.9	3.9	3.90		ug/L
Chloroethane	<2.68	2.68	2.68		ug/L
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L
Acetone	<10.5	10.5	10.5		ug/L
Methylene chloride	<2.5	2.5	2.5		ug/L
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L
Bromochloromethane	<0.66	0.66	0.66		ug/L
Chloroform	<0.27	0.27	0.27		ug/L
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L
Carbon tetrachloride	<0.6	0.6	0.6		ug/L
Benzene	<0.66	0.66	0.66		ug/L
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L
Trichloroethene	<0.6	0.6	0.60		ug/L
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L
Dibromomethane	<1.78	1.78	1.78		ug/L
Bromodichloromethane	<0.65	0.65	0.65		ug/L
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L

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Laboratory Contact: Jeff Ruehr

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501-682-0955

Toluene	0.595	0.57	0.57	uall
1.707.0701	<0.84	0.57	0.84	ug/L
rans-1,3-Dichloropropene				ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	0.527	0.5	0.5	ug/L
Styrene	1.03	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
sopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
ert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	6/25/2013 1:36 PM			

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Arkansas Department of Environmental Quality

5301 Northshore Drive

North Liitle Rock, AR 72118

Laboratory Contact: Jeff Ruehr

Ruehr@adeq.state.ar.us

501-682-0955

 Client:
 Special Samples
 Client Sample ID:
 Volatiles Trip Blank

 Lab ID:
 2013-2216
 Collection Date:
 6/24/2013 1:41:00 PM

Matrix: Water

#### **Analyses**

ile Organics by GCMS	EPA 8260C	Batch: 13062602 Run: 1				
	Result	Reporting Limit	MDL	Qual	<u>Unit</u>	
Dibromofluoromethane (% Recovery)	106	70-130			%	
1,2-Dichloroethane-d4 (% Recovery)	104	70-130			%	
Toluene-d8 (% Recovery)	95.9	70-130			%	
4-Bromofluorobenzene (% Recovery)	101	70-130			%	
Dichlorodifluoromethane	<1.12	1.12	1.12		ug/L	
Chloromethane	<0.58	0.58	0.58		ug/L	
Vinyl chloride	<0.82	0.82	0.82		ug/L	
Bromomethane	<3.9	3.9	3.90		ug/L	
Chloroethane	<2.68	2.68	2.68		ug/L	
Trichlorofluoromethane	<0.51	0.51	0.51		ug/L	
1,1-Dichloroethene	<0.43	0.43	0.43		ug/L	
Acetone	<10.5	10.5	10.5		ug/L	
Methylene chloride	<2.5	2.5	2.5		ug/L	
Methyl tert-butyl ether	<0.83	0.83	0.83		ug/L	
trans-1,2-Dichloroethene	<0.59	0.59	0.59		ug/L	
1,1-Dichloroethane	<0.42	0.42	0.42		ug/L	
Methyl ethyl ketone	<12.8	12.8	12.8		ug/L	
cis-1,2-Dichloroethene	<1.15	1.15	1.15		ug/L	
2,2-Dichloropropane	<0.81	0.81	0.81		ug/L	
Bromochloromethane	<0.66	0.66	0.66		ug/L	
Chloroform	<0.27	0.27	0.27		ug/L	
1,1,1-Trichloroethane	<0.46	0.46	0.46		ug/L	
1,1-Dichloropropene	<0.59	0.59	0.59		ug/L	
Carbon tetrachloride	<0.6	0.6	0.6		ug/L	
Benzene	<0.66	0.66	0.66		ug/L	
1,2-Dichloroethane	<1.15	1.15	1.15		ug/L	
Trichloroethene	<0.6	0.6	0.60		ug/L	
1,2-Dichloropropane	<0.98	0.98	0.98		ug/L	
Dibromomethane	<1.78	1.78	1.78		ug/L	
Bromodichloromethane	<0.65	0.65	0.65		ug/L	
cis-1,3-Dichloropropene	<0.86	0.86	0.86		ug/L	
Methyl isobutyl ketone	<8.1	8.1	8.10		ug/L	

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Laboratory Contact: Jeff Ruehr

Ruehr@adeq.state.ar.us

501-682-0955

Toluene	<0.57	0.57	0.57	ug/L
trans-1,3-Dichloropropene	<0.84	0.84	0.84	ug/L
1,1,2-Trichloroethane	<0.78	0.78	0.78	ug/L
2-Hexanone	<9.5	9.5	9.5	ug/L
Tetrachloroethene	<0.96	0.96	0.96	ug/L
1,3-Dichloropropane	<0.94	0.94	0.94	ug/L
Dibromochloromethane	<1.25	1.25	1.25	ug/L
1,2-Dibromoethane (EDB)	<0.68	0.68	0.68	ug/L
Chlorobenzene	<0.62	0.62	0.62	ug/L
Ethylbenzene	<0.51	0.51	0.51	ug/L
1,1,1,2-Tetrachloroethane	<0.57	0.57	0.57	ug/L
m,p-Xylene	<1.2	1.2	1.2	ug/L
o-Xylene	<0.5	0.5	0.5	ug/L
Styrene	1.04	0.53	0.53	ug/L
Bromoform	<1.56	1.56	1.56	ug/L
Isopropylbenzene	<0.59	0.59	0.59	ug/L
1,1,2,2-Tetrachloroethane	<0.39	0.39	0.39	ug/L
1,2,3-Trichloropropane	<1.83	1.83	1.83	ug/L
n-Propylbenzene	<0.49	0.49	0.49	ug/L
Bromobenzene	<0.5	0.5	0.5	ug/L
1,3,5-Trimethylbenzene	<0.3	0.3	0.30	ug/L
2-Chlorotoluene	<0.66	0.66	0.66	ug/L
4-Chlorotoluene	<0.8	0.8	0.80	ug/L
tert-Butylbenzene	<0.85	0.85	0.85	ug/L
1,2,4-Trimethylbenzene	<0.46	0.46	0.46	ug/L
sec-Butylbenzene	<0.63	0.63	0.63	ug/L
p-Isopropyltoluene	<0.59	0.59	0.59	ug/L
1,3-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,4-Dichlorobenzene	<0.53	0.53	0.53	ug/L
n-Butylbenzene	<0.72	0.72	0.72	ug/L
1,2-Dichlorobenzene	<0.7	0.7	0.70	ug/L
1,2-Dibromo-3-chloropropane	<0.86	0.86	0.86	ug/L
1,2,4-Trichlorobenzene	<1.14	1.14	1.14	ug/L
Naphthalene	<1.53	1.53	1.53	ug/L
1,2,3-Trichlorobenzene	<1.3	1.3	1.3	ug/L
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	6/25/2013 1:11 PM			

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Arkansas Department of Environmental Quality

Laboratory Contact: Jeff Ruehr 5301 Northshore Drive Ruehr@adeq.state.ar.us

North Liitle Rock, AR 72118 501-682-0955

Client: Special Samples Client Sample ID: Palarm Creek Complaint Lab ID: Collection Date: 6/24/2013 1:41:00 PM 2013-2215

Matrix: Water

**Analyses** 

Field Data Batch: 13062604 Run: 1

	Result	Reporting Limit	MDL	Qual	<u>Unit</u>
Dissolved Oxygen	4.43				mg/L
рН	6.79				SU
Temperature	30.7				С
Analyzed By	Erica McAdoo				
Analysis Date/Time	6/24/2013 13:47				

Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

# Analytical Quality Control Results Report

Batch: 13062602					VOA - water
Palarm Creek Complaint		<del> </del>			LIMS ID: 2013-2215
Volatiles - water DUP					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	103 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	102 %			70 - 130	
Toluene-d8 (% Recovery)	92.2 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	99.4 %			70 - 130	
Dichlorodifluoromethane	<1.12 ug/L	1.12	1.12		
Dichlorodifluoromethane (RPD)	0 %				0 - 20
Chloromethane (RPD)	0 %				0 - 20
Chloromethane	<0.58 ug/L	0.58	0.58		
Vinyl chloride	<0.82 ug/L	0.82	0.82		
Vinyl chloride (RPD)	0 %				0 - 20
Bromomethane (RPD)	0 %				0 - 20
Bromomethane	<3.9 ug/L	3.9	3.9		
Chloroethane	<2.68 ug/L	2.68	2.68		
Chloroethane (RPD)	0 %				0 - 20
Trichlorofluoromethane (RPD)	0 %				0 - 20
Trichlorofluoromethane	<0.51 ug/L	0.51	0.51		
1,1-Dichloroethene (RPD)	0 %				0 - 20
1,1-Dichloroethene	<0.43 ug/L	0.43	0.43		
Acetone	<10.5 ug/L	10.5	10.5		
Acetone (RPD)	38.6 %				0 - 20
Methylene chloride (RPD)	7.1 %				0 - 20
Methylene chloride	<2.5 ug/L	2.5	2.5		
Methyl tert-butyl ether	<0.83 ug/L	0.83	0.83		
Methyl tert-butyl ether (RPD)	0 %				0 - 20
trans-1,2-Dichloroethene (RPD)	0 %				0 - 20
trans-1,2-Dichloroethene	<0.59 ug/L	0.59	0.59		
1,1-Dichloroethane	<0.42 ug/L	0.42	0.42		
1,1-Dichloroethane (RPD)	0 %				0 - 20
Methyl ethyl ketone (RPD)	0 %				0 - 20
Methyl ethyl ketone	<12.8 ug/L	12.8	12.8		
cis-1,2-Dichloroethene	<1.15 ug/L	1.15	1.15		

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Arkansas Department of Environmental Quality Laboratory Contact: Jeff Ruehr 5301 Northshore Drive Ruehr@adeq.state.ar.us North Liitle Rock, AR 72118 501-682-0955 0 - 20 cis-1,2-Dichloroethene (RPD) 0 % 2,2-Dichloropropane (RPD) 0 % 0 - 20 2,2-Dichloropropane <0.81 ug/L 0.81 0.81 0.66 Bromochloromethane <0.66 ug/L 0.66 0 - 20 Bromochloromethane (RPD) 0% Chloroform (RPD) 0% 0 - 20Chloroform <0.27 ug/L 0.27 0.27 1,1,1-Trichloroethane <0.46 ug/L 0.46 0.46 1,1,1-Trichloroethane (RPD) 0 % 0 - 20 1,1-Dichloropropene (RPD) 0% 0 - 20 1,1-Dichloropropene <0.59 ug/L 0.59 0.59 Carbon tetrachloride <0.6 ug/L 0.6 0.6 Carbon tetrachloride (RPD) 0% 0 - 20 Benzene (RPD) 0% 0 - 20 <0.66 ug/L 0.66 0.66 Benzene 1,2-Dichloroethane <1.15 ug/L 1.15 1.15 1,2-Dichloroethane (RPD) 0% 0 - 20 Trichloroethene (RPD) 0 - 20 Trichloroethene <0.6 ug/L 0.6 0.6 1,2-Dichloropropane <0.98 ug/L 0.98 0.98 1,2-Dichloropropane (RPD) 0% 0 - 20 Dibromomethane (RPD) 0% 0 - 20 Dibromomethane <1.78 ug/L 1.78 1.78 Bromodichloromethane <0.65 ug/L 0.65 0.65 Bromodichloromethane (RPD) 0 - 20 0 % 0 - 20 cis-1,3-Dichloropropene (RPD) 0% cis-1,3-Dichloropropene <0.86 ug/L 0.86 0.86 Methyl isobutyl ketone <8.1 ug/L 8.1 8.1 Methyl isobutyl ketone (RPD) 0% 0 - 20 Toluene (RPD) 0.5 % 0 - 20 Toluene 0.592 ug/L 0.57 0.57 trans-1,3-Dichloropropene <0.84 ug/L 0.84 0.84 trans-1,3-Dichloropropene (RPD) 0% 0 - 201,1,2-Trichloroethane (RPD) 0% 0 - 20 1.1.2-Trichloroethane 0.78 0.78 <0.78 ug/L 9.5 2-Hexanone 9.5 <9.5 ug/L 2-Hexanone (RPD) 0% 0 - 20 Tetrachloroethene (RPD) 0 % 0 - 20 Tetrachloroethene <0.96 ug/L 0.96 0.96 1,3-Dichloropropane <0.94 ug/L 0.94 0.94

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Arkansas Department of Environmental Quality Laboratory Contact: Jeff Ruehr 5301 Northshore Drive Ruehr@adeq.state.ar.us North Liitle Rock, AR 72118 501-682-0955 0 - 20 1,3-Dichloropropane (RPD) 0 % Dibromochloromethane (RPD) 0 % 0 - 20 Dibromochloromethane <1.25 ug/L 1.25 1.25 0.68 1,2-Dibromoethane (EDB) 0.68 <0.68 ug/L 1,2-Dibromoethane (EDB) (RPD) 0 - 20 0% Chlorobenzene (RPD) 0% 0 - 20Chlorobenzene <0.62 ug/L 0.62 0.62 Ethylbenzene <0.51 ug/L 0.51 0.51 Ethylbenzene (RPD) 0% 0 - 20 1,1,1,2-Tetrachloroethane (RPD) 0% 0 - 20 1,1,1,2-Tetrachloroethane <0.57 ug/L 0.57 0.57 m,p-Xylene <1.2 ug/L 1.2 1.2 m,p-Xylene (RPD) 26.9 % 0 - 20 o-Xylene (RPD) 0.2 % 0 - 20 0.526 ug/L 0.5 0.5 o-Xylene 1.03 ug/L 0.53 0.53 Styrene Styrene (RPD) 0.5 % 0 - 20 Bromoform (RPD) 0 - 20 <1.56 ug/L Bromoform 1.56 1.56 Isopropylbenzene <0.59 ug/L 0.59 0.59 0 - 20 Isopropylbenzene (RPD) 0% 1,1,2,2-Tetrachloroethane (RPD) 0% 0 - 20 1,1,2,2-Tetrachloroethane <0.39 ug/L 0.39 0.39 1,2,3-Trichloropropane <1.83 ug/L 1.83 1.83 1,2,3-Trichloropropane (RPD) 0 % 0 - 20 0 - 20 n-Propylbenzene (RPD) 200 % <0.49 ug/L n-Propylbenzene 0.49 0.49 Bromobenzene <0.5 ug/L 0.5 0.5 Bromobenzene (RPD) 0% 0 - 20 1,3,5-Trimethylbenzene (RPD) 0% 0 - 20 1,3,5-Trimethylbenzene 0.3 0.3 <0.3 ug/L 0.66 0.66 2-Chlorotoluene <0.66 ug/L 2-Chlorotoluene (RPD) 0% 0 - 204-Chlorotoluene (RPD) 0% 0 - 20 4-Chlorotoluene <0.8 ug/L 0.8 0.8 tert-Butylbenzene <0.85 ug/L 0.85 0.85 tert-Butylbenzene (RPD) 0% 0 - 20 0 % 1,2,4-Trimethylbenzene (RPD) 0 - 20 1,2,4-Trimethylbenzene <0.46 ug/L 0.46 0.46 sec-Butylbenzene <0.63 ug/L 0.63 0.63

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Laboratory Contact: Jeff Ruehr

Ruehr@adeq.state.ar.us

501-682-0955

sec-Butylbenzene (RPD)	0 %			0 - 20
p-Isopropyltoluene (RPD)	0 %			0 - 20
p-Isopropyltoluene	<0.59 ug/L	0.59	0.59	
1,3-Dichlorobenzene	<0.7 ug/L	0.7	0.7	
1,3-Dichlorobenzene (RPD)	0 %			0 - 20
1,4-Dichlorobenzene (RPD)	0 %			0 - 20
1,4-Dichlorobenzene	<0.53 ug/L	0.53	0.53	
n-Butylbenzene	<0.72 ug/L	0.72	0.72	
n-Butylbenzene (RPD)	0 %			0 - 20
1,2-Dichlorobenzene (RPD)	0 %			0 - 20
1,2-Dichlorobenzene	<0.7 ug/L	0.7	0.7	
1,2-Dibromo-3-chloropropane	<0.86 ug/L	0.86	0.86	
1,2-Dibromo-3-chloropropane (RPD)	0 %			0 - 20
1,2,4-Trichlorobenzene (RPD)	0 %			0 - 20
1,2,4-Trichlorobenzene	<1.14 ug/L	1.14	1.14	
Naphthalene	<1.53 ug/L	1.53	1.53	
Naphthalene (RPD)	0 %			0 - 20
1,2,3-Trichlorobenzene (RPD)	0 %			0 - 20
1,2,3-Trichlorobenzene	<1.3 ug/L	1.3	1.3	
Dilution Factor	1			
Analyzed By	Jeff Ruehr			
Analysis Date/Time	6/25/2013 2:01 8	PM		

Palarm Creek Complaint					LIMS ID: 2013-2215
Volatiles - water MS					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	104 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	110 %			70 - 130	
Toluene-d8 (% Recovery)	89.1 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	104 %			70 - 130	
1,1-Dichloroethene (% Recovery)	93.2 %			70 - 130	
Benzene (% Recovery)	96.7 %			70 - 130	
Trichloroethene (% Recovery)	93.2 %			70 - 130	
Toluene (% Recovery)	81.2 %			70 - 130	
Chlorobenzene (% Recovery)	87.3 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	6/25/2013 2:27	PM			

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Laboratory Contact: Jeff Ruehr

Ruehr@adeq.state.ar.us

501-682-0955

Palarm Creek Complaint					LIMS ID: 2013-2215
Volatiles - water MSD					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	104 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	108 %			70 - 130	
Toluene-d8 (% Recovery)	92.0 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	105 %			70 - 130	
1,1-Dichloroethene (% Recovery)	95.9 %			70 - 130	
1,1-Dichloroethene (RPD)	2.8 %				0 - 20
Benzene (RPD)	1.0 %				0 - 20
Benzene (% Recovery)	97.7 %			70 - 130	
Trichloroethene (RPD)	3.0 %				0 - 20
Trichloroethene (% Recovery)	96.1 %			70 - 130	
Toluene (% Recovery)	83.0 %			70 - 130	
Toluene (RPD)	2.2 %				0 - 20
Chlorobenzene (RPD)	1.1 %				0 - 20
Chlorobenzene (% Recovery)	88.3 %			70 - 130	
Dilution Factor	1				
Analyzed By	Jeff Ruehr				
Analysis Date/Time	6/25/2013 2:52	PM			

LCS LIMS ID: 13062					
Volatiles - water LCS					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Dibromofluoromethane (% Recovery)	101 %			70 - 130	
1,2-Dichloroethane-d4 (% Recovery)	109 %			70 - 130	
Toluene-d8 (% Recovery)	91.9 %			70 - 130	
4-Bromofluorobenzene (% Recovery)	98.2 %			70 - 130	
Dichlorodifluoromethane (% Recovery)	112 %			60 - 130	
Chloromethane (% Recovery)	86.2 %			60 - 130	
Vinyl chloride (% Recovery)	105 %			60 - 130	
Bromomethane (% Recovery)	70.2 %			60 - 130	
Chloroethane (% Recovery)	76.7 %			60 - 130	
Trichlorofluoromethane (% Recovery)	96.3 %			60 - 130	
1,1-Dichloroethene (% Recovery)	97.5 %			60 - 130	
Acetone (% Recovery)	127 %			60 - 130	
Methylene chloride (% Recovery)	111 %			60 - 130	
Methyl tert-butyl ether (% Recovery)	99.9 %			60 - 130	

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Arkansas Department of Environmental Quality Laboratory Contact: Jeff Ruehr 5301 Northshore Drive Ruehr@adeq.state.ar.us North Liitle Rock, AR 72118 501-682-0955 trans-1,2-Dichloroethene (% Recovery) 97.8 % 60 - 130 1,1-Dichloroethane (% Recovery) 60 - 130 110 % Methyl ethyl ketone (% Recovery) 119 % 60 - 130 cis-1,2-Dichloroethene (% Recovery) 99.7 % 60 - 130 2,2-Dichloropropane (% Recovery) 103 % 60 - 130 Bromochloromethane (% Recovery) 109 % 60 - 130 Chloroform (% Recovery) 100 % 60 - 130 1,1,1-Trichloroethane (% Recovery) 99.5 % 60 - 130 1,1-Dichloropropene (% Recovery) 102 % 60 - 130 Carbon tetrachloride (% Recovery) 98.2 % 60 - 130 Benzene (% Recovery) 103 % 60 - 130 1,2-Dichloroethane (% Recovery) 109 % 60 - 130 Trichloroethene (% Recovery) 98.7 % 60 - 130 1,2-Dichloropropane (% Recovery) 102 % 60 - 130 103 % Dibromomethane (% Recovery) 60 - 130 Bromodichloromethane (% Recovery) 96.8 % 60 - 130 cis-1,3-Dichloropropene (% Recovery) 104 % 60 - 130 107 % Methyl isobutyl ketone (% Recovery) 60 - 130 94.8 % Toluene (% Recovery) 60 - 130 trans-1,3-Dichloropropene (% Recovery) 103 % 60 - 130 1,1,2-Trichloroethane (% Recovery) 93.3 % 60 - 130 2-Hexanone (% Recovery) 112 % 60 - 130 Tetrachloroethene (% Recovery) 102 % 60 - 130 1,3-Dichloropropane (% Recovery) 99.4 % 60 - 130 95.6 % Dibromochloromethane (% Recovery) 60 - 1301,2-Dibromoethane (EDB) (% Recovery) 95.8 % 60 - 130 Chlorobenzene (% Recovery) 99.6 % 60 - 130 Ethylbenzene (% Recovery) 90.1 % 60 - 130 1,1,1,2-Tetrachloroethane (% Recovery) 93.0 % 60 - 130 m,p-Xylene (% Recovery) 95.6 % 60 - 130 97.7% o-Xylene (% Recovery) 60 - 130 Styrene (% Recovery) 92.7 % 60 - 130 Bromoform (% Recovery) 109 % 60 - 130 Isopropylbenzene (% Recovery) 109 % 60 - 130 1,1,2,2-Tetrachloroethane (% Recovery) 98.4 % 60 - 130 1,2,3-Trichloropropane (% Recovery) 109 % 60 - 130 n-Propylbenzene (% Recovery) 90.0 % 60 - 130Bromobenzene (% Recovery) 106 % 60 - 130 1,3,5-Trimethylbenzene (% Recovery) 94.7 % 60 - 130 2-Chlorotoluene (% Recovery) 94.5 % 60 - 130

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Arkansas Department of Environmental Quality		Laboratory Contact: Jeff Ruehr				
5301 Northshore Drive		Ruehr@adeq.state.ar.us				
North Liitle Rock, AR 72118		501-682-0955				
4-Chlorotoluene (% Recovery)	96.1 %	60 - 130				
tert-Butylbenzene (% Recovery)	94.2 %	60 - 130				
1,2,4-Trimethylbenzene (% Recovery)	95.8 %	60 - 130				
sec-Butylbenzene (% Recovery)	95.1 %	60 - 130				
p-Isopropyltoluene (% Recovery)	89.9 %	60 - 130				
1,3-Dichlorobenzene (% Recovery)	97.3 %	60 - 130				
1,4-Dichlorobenzene (% Recovery)	92.5 %	60 - 130				
n-Butylbenzene (% Recovery)	91.9 %	60 - 130				
1,2-Dichlorobenzene (% Recovery)	98.2 %	60 - 130				
1,2-Dibromo-3-chloropropane (% Recovery)	106 %	60 - 130				
1,2,4-Trichlorobenzene (% Recovery)	99.5 %	60 - 130				
Naphthalene (% Recovery)	95.3 %	60 - 130				
1,2,3-Trichlorobenzene (% Recovery)	101 %	60 - 130				
Dilution Factor	1					
Analyzed By	Jeff Ruehr					
Analysis Date/Time	6/25/2013	11:30				

Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

## Analytical Quality Control Results Report

Batch: 13062503				Oil and	Grease - water
Palarm Creek Complaint	÷=				LIMS ID: 2013-2215
Oil and Grease - water DUP					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease	<2.5 mg/L	2.5	2.5		
Oil and Grease (RPD)	0 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	06/25/2013 1000				
Palarm Creek Complaint			) ·		LIMS ID: 2013-2215
Oil and Grease - water MS					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	102 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	06/25/2013 1000				
Palarm Creek Complaint			, .	•	LIMS ID: 2013-2215
Oil and Grease - water MSD					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	101 %			70 - 130	
Oil and Grease (RPD)	1.5 %				0 - 20
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	06/25/2013 1000				
МВ	*		,	LIM	S ID: 13062503-MB-01
Oil and Grease - water MB					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease	<2.5 mg/L	2.5	2.5		
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	06/25/2013 1000				

Arkansas Department of Environmental Quality 5301 Northshore Drive North Liitle Rock, AR 72118 Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

LCS LIMS ID: 130625					
Oil and Grease - water LCS					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Oil and Grease (% Recovery)	101 %			70 - 130	
Dilution Factor	1				
Analyzed By	Robert Graddy				
Analysis Date/Time	06/25/2013 1000				

Laboratory Contact: Jeff Ruehr
Ruehr@adeq.state.ar.us
501-682-0955

# Analytical Quality Control Results Report

Batch: 13062504				Semi-VO	A water (Prep)
Palarm Creek Complaint	Palarm Creek Complaint				LIMS ID: 2013-2215
Semi Volatiles - water DUP					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	6/25/2013 08:00				
2-Fluorophenol (% Recovery)	36.0 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	63.1 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	64.6 %			40 - 110	
2,4,6-Tribromophenol (% Recovery)	58.3 %			40 - 110	
Terphenyl-d14 (% Recovery)	62.1 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Methyl Methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate (RPD)	0 %				0 - 40
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Phenol (RPD)	38.2 %				0 - 40
Aniline (RPD)	3.0 %				0 - 40
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.24 ug/L	0.2	0.24		
Bis(2-chloroethyl)ether (RPD)	0 %				0 - 40
2-Chlorophenol (RPD)	0 %				0 - 40
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,3-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene (RPD)	0 %				0 - 40
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	0.202 ug/L	0.16	0.16		
Benzyl alcohol (RPD)	2.1 %				0 - 40
1,2-Dichlorobenzene (RPD)	0 %				0 - 40
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
2-Methylphenol (RPD)	0 %				0 - 40
Acetophenone (RPD)	17.3 %				0 - 40
Acetophenone	<0.1 ug/L	0.1	0.1		

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Arkansas Department of Environmental Quality Laboratory Contact: Jeff Ruehr 5301 Northshore Drive Ruehr@adeq.state.ar.us North Liitle Rock, AR 72118 501-682-0955 4-Methylphenol <0.1 ug/L 0.1 0.1 4-Methylphenol (RPD) 0 - 40 0% N-Nitrosodi-n-propylamine (RPD) 0 % 0 - 40 0.2 0.2 N-Nitrosodi-n-propylamine <0.2 ug/L Hexachloroethane 0.2 0.2 <0.2 ug/L 0 - 40 Hexachloroethane (RPD) 0% Nitrobenzene (RPD) 0% 0 - 40 Nitrobenzene <0.2 ug/L 0.2 0.2 N-Nitrosopiperidine <0.2 ug/L 0.2 0.2 N-Nitrosopiperidine (RPD) 0% 0 - 40 Isophorone (RPD) 0 % 0 - 40Isophorone <0.1 ug/L 0.1 0.1 2-Nitrophenol <0.3 ug/L 0.3 0.3 2-Nitrophenol (RPD) 0 % 0 - 40 2,4-Dimethylphenol (RPD) 200 % 0-40 2,4-Dimethylphenol 0.1 0.1 <0.1 ug/L Bis(2-chloroethoxy)methane <0.2 ug/L 0.2 0.2 Bis(2-chloroethoxy)methane (RPD) 0 % 0 - 40 2,4-Dichlorophenol (RPD) 0% 0 - 40 2,4-Dichlorophenol <0.2 ug/L 0.2 0.2 1.2.4-Trichlorobenzene <0.12 ug/L 0.12 0.12 1,2,4-Trichlorobenzene (RPD) 0 % 0 - 40 Naphthalene (RPD) 0% 0 - 40 Naphthalene <0.08 ug/L 0.08 0.08 4-Chloroaniline <0.1 ug/L 0.1 0.1 0 - 40 4-Chloroaniline (RPD) 0% 2,6-Dichlorophenol (RPD) 0% 0 - 40 0.2 0.2 2,6-Dichlorophenol <0.2 ug/L Hexachlorobutadiene <0.2 ug/L 0.2 0.2 0 - 40 Hexachlorobutadiene (RPD) 0% N-Nitrosodibutylamine 0.2 0.24 <0.24 ug/L N-Nitrosodibutylamine (RPD) 0% 0 - 40 4-Chloro-3-methylphenol (RPD) 0 - 40 0% 4-Chloro-3-methylphenol <0.16 ug/L 0.16 0.16 2-Methylnaphthalene <0.1 ug/L 0.1 0.1 2-Methylnaphthalene (RPD) 0 % 0 - 40 1,2,4,5-Tetrachlorobenzene (RPD) 0% 0 - 40 1,2,4,5-Tetrachlorobenzene <0.1 ug/L 0.1 0.1 Hexachlorocyclopentadiene <0.16 ug/L 0.16 0.16 Hexachlorocyclopentadiene (RPD) 0% 0 - 40

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Arkansas Department of Environmen 5301 Northshore Drive	tal Quality	Laboratory (	Contact	: Jeff Ruehr Ruehr@adeq.state.ar.us	
North Liitle Rock, AR 72118				501-682-0955	
North Elite Nock, AN 72110				301-002-0333	
2,4,6-Trichlorophenol (RPD)	0 %				0 - 40
2,4,6-Trichlorophenol	<0.4 ug/L	0.2	0.4		
2,4,5-Trichlorophenol	<0.2 ug/L	0.2	0.2		
2,4,5-Trichlorophenol (RPD)	0 %				0 - 40
2-Chloronaphthalene (RPD)	0 %				0 - 40
2-Chloronaphthalene	<0.1 ug/L	0.1	0.1		
1-Chloronaphthalene	<0.1 ug/L	0.1	0.1		
1-Chloronaphthalene (RPD)	0 %				0 - 40
2-Nitroaniline (RPD)	0 %				0 - 40
2-Nitroaniline	<0.2 ug/L	0.2	0.2		
Dimethyl phthalate	<0.2 ug/L	0.2	0.2		
Dimethyl phthalate (RPD)	0 %				0 - 40
2,6-Dinitrotoluene (RPD)	0 %				0 - 40
2,6-Dinitrotoluene	<0.2 ug/L	0.2	0.2		
Acenaphthylene	<0.08 ug/L	0.08	0.08		
Acenaphthylene (RPD)	0 %				0 - 40
3-Nitroaniline (RPD)	0 %				0 - 40
3-Nitroaniline	<0.2 ug/L	0.2	0.2		
Acenaphthene	<0.1 ug/L	0.1	0.1		
Acenaphthene (RPD)	0 %				0 - 40
2,4-Dinitrophenol (RPD)	0 %				0 - 40
2,4-Dinitrophenol	<4 ug/L	4	4		
Pentachlorobenzene	<0.12 ug/L	0.12	0.12		
Pentachlorobenzene (RPD)	0 %				0 - 40
4-Nitrophenol (RPD)	0 %				0 - 40
4-Nitrophenol	<2 ug/L	2	2		
Dibenzofuran	<0.1 ug/L	0.1	0.1		
Dibenzofuran (RPD)	200 %				0 - 40
2,4-Dinitrotoluene (RPD)	0 %				0 - 40
2,4-Dinitrotoluene	<0.2 ug/L	0.2	0.2		
2,3,4,6-Tetrachlorophenol	<0.6 ug/L	0.6	0.6		
2,3,4,6-Tetrachlorophenol (RPD)	0 %				0 - 40
Diethyl phthalate (RPD)	2.5 %				0 - 40
Diethyl phthalate	<0.4 ug/L	0.2	0.4		
Fluorene	<0.1 ug/L	0.1	0.1		
Fluorene (RPD)	0 %				0 - 40
4-Chlorophenyl phenyl ether (RPD)	0 %				0 - 40
4-Chlorophenyl phenyl ether	<0.1 ug/L	0.1	0.1		
4-Nitroaniline	<0.3 ug/L	0.2	0.3		
4-Nitroaniline (RPD)	0 %				0 - 40

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Arkansas Department of Environmental Quality Laboratory Contact: Jeff Ruehr 5301 Northshore Drive Ruehr@adeq.state.ar.us North Liitle Rock, AR 72118 501-682-0955 0% 0 - 40 4,6-Dinitro-2-methylphenol (RPD) 4,6-Dinitro-2-methylphenol 6 6 <6 ug/L Diphenylamine <0.1 ug/L 0.1 0.1 Diphenylamine (RPD) 0% 0 - 40 Azobenzene (RPD) 0% 0 - 40 0.08 0.08 Azobenzene <0.08 ug/L 4-Bromophenyl phenyl ether <0.2 ug/L 0.2 0.2 4-Bromophenyl phenyl ether (RPD) 0% 0 - 40 Hexachlorobenzene (RPD) 0% 0 - 40 Hexachlorobenzene <0.16 ug/L 0.16 0.16 Pentachlorophenol 1 <1 ug/L 1 0% Pentachlorophenol (RPD) 0 - 40 Pentachloronitrobenzene (RPD) 0% 0 - 40 Pentachloronitrobenzene <0.2 ug/L 0.2 0.2 Pronamide <0.2 ug/L 0.2 0.2 Pronamide (RPD) 0 % 0 - 40 Phenanthrene (RPD) 1.3 % 0 - 40Phenanthrene <0.08 ug/L 0.08 0.08 Anthracene <0.08 ug/L 0.08 0.08 Anthracene (RPD) 0% 0 - 40 Carbazole (RPD) 0% 0 - 40Carbazole <0.1 ug/L 0.1 0.1 Di-n-butyl phthalate <0.2 ug/L 0.2 0.2 Di-n-butyl phthalate (RPD) 7.0 % 0 - 40 Fluoranthene (RPD) 0 - 40 Fluoranthene 0.08 0.08 <0.08 ug/L Pyrene <0.08 ug/L 0.08 0.08 Pyrene (RPD) 0% 0 - 40 Dimethylaminoazobenzene (RPD) 0% 0 - 400.2 Dimethylaminoazobenzene <0.2 ug/L 0.2 Butyl benzyl phthalate 0.4 0.4 <0.4 ug/L Butyl benzyl phthalate (RPD) 0% 0 - 40 Benzo (a) anthracene (RPD) 0% 0 - 40 Benzo (a) anthracene <0.1 ug/L 0.1 0.1 Chrysene <0.1 ug/L 0.1 0.1 Chrysene (RPD) 0 % 0 - 40 Bis(2-ethylhexyl)phthalate (RPD) 28.4 % 0 - 40 Bis(2-ethylhexyl)phthalate <0.3 ug/L 0.3 0.3 Di-n-octyl phthalate <0.3 ug/L 0.3 0.3 Di-n-octyl phthalate (RPD) 28.3 % 0 - 40

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Laboratory Contact: Jeff Ruehr

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501-682-0955

Benzo (b) fluoranthene (RPD)	0 %			0 - 40
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16	
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2	
7,12-Dimethylbenz (a) anthracene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene (RPD)	0 %			0 - 40
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene (RPD)	0 %			0 - 40
3-Methylcholanthrene (RPD)	0 %			0 - 40
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene (RPD)	0 %			0 - 40
Dibenzo (a,h) anthracene (RPD)	0 %			0 - 40
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene (RPD)	0 %			0 - 40
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	6/25/2013 12:21 PM			

Palarm Creek Complaint				,	LIMS ID: 2013-2215	
Semi Volatiles - water MS					Run: 1	
Parameter	Result	DL	RL	Accuracy Control	Precision Control	
Initial Volume	500 mL					
Final Volume	1 mL					
Prep By	Ed Harris					
Prep Date/Time	6/25/2013 08:00					
2-Fluorophenol (% Recovery)	35.3 %	35.3 % 40 - 110				
Nitrobenzene-d5 (% Recovery)	78.2 %			40 - 125		
2-Fluorobiphenyl (% Recovery)	70.0 %			40 - 125		
2,4,6-Tribromophenol (% Recovery)	66.6 %			40 - 125		
Terphenyl-d14 (% Recovery)	62.9 %			40 - 125		
Phenol (% Recovery)	21.9 %			25 - 125		
2-Chlorophenol (% Recovery)	36.0 %			25 - 125		
1,4-Dichlorobenzene (% Recovery)	63.6 %			25 - 125		
N-Nitrosodi-n-propylamine (% Recovery)	68.4 % 25 - 125					
1,2,4-Trichlorobenzene (% Recovery)	62.7 %			25 - 125		
4-Chloro-3-methylphenol (% Recovery)	38.6 %			25 - 125		
Acenaphthene (% Recovery)	67.9 %			25 - 125		

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Arkansas Department of Environme	ental Quality	Laboratory Contact: Jeff Ruehr
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North Liitle Rock, AR 72118		501-682-0955
4-Nitrophenol (% Recovery)	28.8 %	25 - 125
2,4-Dinitrotoluene (% Recovery)	65.6 %	25 - 125
Pentachlorophenol (% Recovery)	55.6 %	25 - 125
Pyrene (% Recovery)	55.7 %	25 - 125
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	6/25/2013 12 DM	:50

Palarm Creek Complaint					LIMS ID: 2013-2215
Semi Volatiles - water MSD					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	6/25/2013 08:0	0			
2-Fluorophenol (% Recovery)	37.2 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	68.1 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	61.0 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	69.0 %			40 - 125	
Terphenyl-d14 (% Recovery)	60.2 %			40 - 125	
Phenol (% Recovery)	23.8 %			25 - 125	
Phenol (RPD)	8.5 %				0 - 40
2-Chlorophenol (% Recovery)	40.0 %			25 - 125	
2-Chlorophenol (RPD)	10.4 %				0 - 40
1,4-Dichlorobenzene (RPD)	7.4 %				0 - 40
1,4-Dichlorobenzene (% Recovery)	59.0 %			25 - 125	
N-Nitrosodi-n-propylamine (% Recovery)	68.3 %			25 - 125	
N-Nitrosodi-n-propylamine (RPD)	0.2 %				0 - 40
1,2,4-Trichlorobenzene (RPD)	0.5 %				0 - 40
1,2,4-Trichlorobenzene (% Recovery)	62.3 %			25 - 125	
4-Chloro-3-methylphenol (% Recovery)	45.9 %			25 - 125	
4-Chloro-3-methylphenol (RPD)	17.3 %				0 - 40
Acenaphthene (% Recovery)	64.4 %			25 - 125	
Acenaphthene (RPD)	5.2 %				0 - 40
4-Nitrophenol (% Recovery)	31.0 %			25 - 125	
4-Nitrophenol (RPD)	7.3 %				0 - 40
2,4-Dinitrotoluene (% Recovery)	63.2 %			25 - 125	
2,4-Dinitrotoluene (RPD)	3.7 %				0 - 40
Pentachlorophenol (% Recovery)	55.4 %			25 - 125	

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Laboratory Contact: Jeff Ruehr
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501-682-0955

0.3 %		0 - 40	
58.8 %	25 - 125		
5.5 %		0 - 40	
1			
Ed Harris			
6/25/2013 1:19 PM			
	58.8 % 5.5 % 1 Ed Harris	58.8 % 25 - 125 5.5 % 1 Ed Harris	

IB LIMS ID: 130				S ID: 13062504-MB-01	
Semi Volatiles - water MB					Run: 1
Parameter	Result	DL	RL	Accuracy Control	Precision Control
Initial Volume	500 mL				
Final Volume	1 mL				
Prep By	Ed Harris				
Prep Date/Time	6/25/2013 08:00				
2-Fluorophenol (% Recovery)	36.4 %			40 - 110	
Nitrobenzene-d5 (% Recovery)	65.4 %			40 - 125	
2-Fluorobiphenyl (% Recovery)	60.7 %			40 - 125	
2,4,6-Tribromophenol (% Recovery)	60.4 %			40 - 125	
Terphenyl-d14 (% Recovery)	79.7 %			40 - 125	
Methyl Methanesulfonate	<0.2 ug/L	0.2	0.2		
Ethyl methanesulfonate	<0.2 ug/L	0.2	0.2		
Phenol	<0.2 ug/L	0.2	0.2		
Aniline	<0.2 ug/L	0.2	0.2		
Bis(2-chloroethyl)ether	<0.2 ug/L	0.2	0.2		
2-Chlorophenol	<0.2 ug/L	0.2	0.2		
1,3-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
1,4-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
Benzyl alcohol	<0.16 ug/L	0.16	0.16		
1,2-Dichlorobenzene	<0.12 ug/L	0.12	0.12		
2-Methylphenol	<0.1 ug/L	0.1	0.1		
Acetophenone	<0.1 ug/L	0.1	0.1		
4-Methylphenol	<0.1 ug/L	0.1	0.1		
N-Nitrosodi-n-propylamine	<0.2 ug/L	0.2	0.2		
Hexachloroethane	<0.2 ug/L	0.2	0.2		
Nitrobenzene	<0.2 ug/L	0.2	0.2		
N-Nitrosopiperidine	<0.2 ug/L	0.2	0.2		
Isophorone	<0.1 ug/L	0.1	0.1		
2-Nitrophen ol	<0.3 ug/L	0.3	0.3		
2,4-Dimethylphenol	<0.1 ug/L	0.1	0.1		

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Laboratory Contact: Jeff Ruehr

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Bis(2-chloroethoxy)methane	<0.2 ug/L	0.2	0.2	
2,4-Dichlorophenol	<0.2 ug/L	0.2	0.2	
1,2,4-Trichlorobenzene	<0.12 ug/L	0.12	0.12	
Naphthalene	<0.08 ug/L	0.08	0.08	
4-Chloroaniline	<0.1 ug/L	0.1	0.1	
2,6-Dichlorophenol	<0.2 ug/L	0.2	0.2	
Hexachlorobutadiene	<0.2 ug/L	0.2	0.2	
N-Nitrosodibutylamine	<0.2 ug/L	0.2	0.2	
4-Chloro-3-methylphenol	<0.16 ug/L	0.16	0.16	
2-Methylnaphthalene	<0.12 ug/L	0.12	0.12	
1,2,4,5-Tetrachlorobenzene	<0.1 ug/L	0.1	0.1	
Hexachlorocyclopentadiene	<0.16 ug/L	0.16	0.16	
2,4,6-Trichlorophenol	<0.2 ug/L	0.2	0.2	
2,4,5-Trichlorophenol	<0.2 ug/L	0.2	0.2	
2-Chloronaphthalene	<0.1 ug/L	0.1	0.1	
1-Chloronaphthalene	<0.1 ug/L	0.1	0.1	
2-Nitroaniline	<0.2 ug/L	0.2	0.2	
Dimethyl phthalate	<0.2 ug/L	0.2	0.2	
2,6-Dinitrotoluene	<0.2 ug/L	0.2	0.2	
Acenaphthylene	<0.08 ug/L	0.08	0.08	
3-Nitroaniline	<0.2 ug/L	0.2	0.2	
Acenaphthene	<0.1 ug/L	0.1	0.1	
2,4-Dinitrophenol	<4 ug/L	4	4	
Pentachlorobenzene	<0.12 ug/L	0.12	0.12	
4-Nitrophenol	<2 ug/L	2	2	
Dibenzofuran	<0.1 ug/L	0.1	0.1	
2,4-Dinitrotoluene	<0.2 ug/L	0.2	0.2	
2,3,4,6-Tetrachlorophenol	<0.6 ug/L	0.6	0.6	
Diethyl phthalate	<0.2 ug/L	0.2	0.2	
Fluorene	<0.1 ug/L	0.1	0.1	
4-Chlorophenyl phenyl ether	<0.1 ug/L	0.1	0.1	
4-Nitroaniline	<0.2 ug/L	0.2	0.2	
4,6-Dinitro-2-methylphenol	<6 ug/L	6	6	
Diphenylamine	<0.1 ug/L	0.1	0.1	
Azobenzene	<0.08 ug/L	0.08	0.08	
4-Bromophenyl phenyl ether	<0.2 ug/L	0.2	0.2	
Hexachlorobenzene	<0.16 ug/L	0.16	0.16	
Pentachlorophenol	<1 ug/L	1	1	
Pentachloronitrobenzene	<0.2 ug/L	0.2	0.2	
Pronamide	<0.2 ug/L	0.2	0.2	
	-0.2 ug/L	0.2	0.2	

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Laboratory Contact: Jeff Ruehr

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501-682-0955

Phenanthrene	<0.08 ug/L	0.08	0.08	
Anthracene	<0.08 ug/L	0.08	0.08	
Carbazole	<0.1 ug/L	0.1	0.1	
Di-n-butyl phthalate	0.637 ug/L	0.2	0.2	
Fluoranthene	<0.08 ug/L	0.08	0.08	
Pyrene	<0.08 ug/L	0.08	0.08	
Dimethylaminoazobenzene	<0.2 ug/L	0.2	0.2	
Butyl benzyl phthalate	<0.3 ug/L	0.3	0.3	
Benzo (a) anthracene	<0.2 ug/L	0.2	0.2	
Chrysene	<0.1 ug/L	0.1	0.1	
Bis(2-ethylhexyl)phthalate	<0.3 ug/L	0.3	0.3	
Di-n-octyl phthalate	<0.3 ug/L	0.3	0.3	
Benzo (b) fluoranthene	<0.16 ug/L	0.16	0.16	
7,12-Dimethylbenz (a) anthracene	<0.2 ug/L	0.2	0.2	
Benzo (k) fluoranthene	<0.16 ug/L	0.16	0.16	
Benzo (a) pyrene	<0.16 ug/L	0.16	0.16	
3-Methylcholanthrene	<0.2 ug/L	0.2	0.2	
Indeno (1,2,3-cd) pyrene	<0.2 ug/L	0.2	0.2	
Dibenzo (a,h) anthracene	<0.16 ug/L	0.16	0.16	
Benzo (g,h,i) perylene	<0.16 ug/L	0.16	0.16	
Dilution Factor	1			
Analyzed By	Ed Harris			
Analysis Date/Time	6/25/2013 10:53			

LCS LIMS ID: 13062504-LCS						
Semi Volatiles - water LCS					Run: 1	
Parameter	Result	DL	RL	Accuracy Control	Precision Control	
Initial Volume	500 mL					
Final Volume	1 mL					
Prep By	Ed Harris					
Prep Date/Time	6/25/2013 08:00					
2-Fluorophenol (% Recovery)	42.2 %			40 - 110		
Nitrobenzene-d5 (% Recovery)	71.7 %			50 - 125		
2-Fluorobiphenyl (% Recovery)	66.1 %			50 - 125		
2,4,6-Tribromophenol (% Recovery)	71.0 %			40 - 125		
Terphenyl-d14 (% Recovery)	73.4 % 50 - 125					
Methyl Methanesulfonate (% Recovery)	70.4 % 50 - 150					
Ethyl methanesulfonate (% Recovery)	80.7 % 50 - 150					
Phenol (% Recovery)	48.1 %			50 - 150		

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5301 Northshore Drive		Ruehr@adeq.state.ar.us
North Liitle Rock, AR 72118		501-682-0955
Aniline (% Recovery)	64.8 %	50 - 150
Bis(2-chloroethyl)ether (% Recovery)	79.1 %	50 - 150
2-Chlorophenol (% Recovery)	79.4 %	50 - 150
1,3-Dichlorobenzene (% Recovery)	60.6 %	50 - 150
1,4-Dichlorobenzene (% Recovery)	62.6 %	50 - 150
Benzyl alcohol (% Recovery)	96.0 %	50 - 150
1,2-Dichlorobenzene (% Recovery)	65.7 %	50 - 150
2-Methylphenol (% Recovery)	78.1 %	50 - 150
Acetophenone (% Recovery)	85.4 %	50 - 150
4-Methylphenol (% Recovery)	76.8 %	50 - 150
N-Nitrosodi-n-propylamine (% Recovery)	84.8 %	50 - 150
Hexachloroethane (% Recovery)	54.7 %	50 - 150
Nitrobenzene (% Recovery)	83.9 %	50 - 150
N-Nitrosopiperidine (% Recovery)	96.0 %	50 - 150
sophorone (% Recovery)	90.3 %	50 - 150
2-Nitrophenol (% Recovery)	85.6 %	50 - 150
2,4-Dimethylphenol (% Recovery)	8.5 %	50 - 150
Bis(2-chloroethoxy)methane (% Recovery)	80.0 %	50 - 150
2,4-Dichlorophenol (% Recovery)	85.1 %	50 - 150
1,2,4-Trichlorobenzene (% Recovery)	65.1 %	50 - 150
Naphthalene (% Recovery)	74.1 %	50 - 150
4-Chloroaniline (% Recovery)	75.8 %	50 - 150
2,6-Dichlorophenol (% Recovery)	86.5 %	50 - 150
Hexachlorobutadiene (% Recovery)	57.6 %	50 - 150
N-Nitrosodibutylamine (% Recovery)	101 %	50 - 150
4-Chloro-3-methylphenol (% Recovery)	87.1 %	50 - 150
2-Methylnaphthalene (% Recovery)	76.7 %	50 - 150
1,2,4,5-Tetrachlorobenzene (% Recovery)	72.4 %	50 - 150
Hexachlorocyclopentadiene (% Recovery)	66.7 %	50 - 150
2,4,6-Trichlorophenol (% Recovery)	81.0 %	50 - 150
2,4,5-Trichlorophenol (% Recovery)	83.6 %	50 - 150
2-Chloronaphthalene (% Recovery)	78.7 %	50 - 150
I-Chloronaphthalene (% Recovery)	83.5 %	50 - 150
2-Nitroaniline (% Recovery)	90.5 %	50 - 150
Dimethyl phthalate (% Recovery)	86.4 %	50 - 150
2,6-Dinitrotoluene (% Recovery)	86.6 %	50 - 150
Acenaphthylene (% Recovery)	80.5 %	50 - 150
3-Nitroaniline (% Recovery)	93.0 %	50 - 150
Acenaphthene (% Recovery)	81.6 %	50 - 150
2,4-Dinitrophenol (% Recovery)	108 %	50 - 150

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Arkansas Department of Environmental C	Quality	Laboratory Contact: Jeff Ruehr
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North Liitle Rock, AR 72118		501-682-0955
Pentachlorobenzene (% Recovery)	77.6 %	50 - 150
4-Nitrophenol (% Recovery)	44.0 %	50 - 150
Dibenzofuran (% Recovery)	82.4 %	50 - 150
2,4-Dinitrotoluene (% Recovery)	90.6 %	50 - 150
2,3,4,6-Tetrachlorophenol (% Recovery)	90.9 %	50 - 150
Diethyl phthalate (% Recovery)	94.7 %	50 - 150
Fluorene (% Recovery)	78.3 %	50 - 150
4-Chlorophenyl phenyl ether (% Recovery)	79.9 %	50 - 150
4-Nitroaniline (% Recovery)	92.3 %	50 - 150
4,6-Dinitro-2-methylphenol (% Recovery)	100 %	50 - 150
Diphenylamine (% Recovery)	79.9 %	50 - 150
Azobenzene (% Recovery)	75.6 %	50 - 150
4-Bromophenyl phenyl ether (% Recovery)	74.3 %	50 - 150
Hexachlorobenzene (% Recovery)	75.1 %	50 - 150
Pentachlorophenol (% Recovery)	80.6 %	50 - 150
Pentachloronitrobenzene (% Recovery)	81.6 %	50 - 150
Pronamide (% Recovery)	97.4 %	50 - 150
Phenanthrene (% Recovery)	81.2 %	50 - 150
Anthracene (% Recovery)	82.8 %	50 - 150
Carbazole (% Recovery)	100 %	50 - 150
Di-n-butyl phthalate (% Recovery)	130 %	50 - 150
Fluoranthene (% Recovery)	92.7 %	50 - 150
Pyrene (% Recovery)	79.7 %	50 - 150
Dimethylaminoazobenzene (% Recovery)	91.2 %	50 - 150
Butyl benzyl phthalate (% Recovery)	96.8 %	50 - 150
Benzo (a) anthracene (% Recovery)	94.8 %	50 - 150
Chrysene (% Recovery)	90.0 %	50 - 150
Bis(2-ethylhexyl)phthalate (% Recovery)	96.8 %	50 - 150
Di-n-octyl phthalate (% Recovery)	102 %	50 - 150
Benzo (b) fluoranthene (% Recovery)	102 %	50 - 150
7,12-Dimethylbenz (a) anthracene (% Recovery)	83.4 %	50 - 150
Benzo (k) fluoranthene (% Recovery)	105 %	50 - 150
Benzo (a) pyrene (% Recovery)	98.3 %	50 - 150
3-Methylcholanthrene (% Recovery)	95.9 %	50 - 150
Indeno (1,2,3-cd) pyrene (% Recovery)	85.5 %	50 - 150
Dibenzo (a,h) anthracene (% Recovery)	91.7 %	50 - 150
Benzo (g,h,i) perylene (% Recovery)	87.7 %	50 - 150
Dilution Factor	1	
Analyzed By	Ed Harris	
Analysis Date/Time	6/25/2013	11:22

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Arkansas Department of Environmental Quality 5301 Northshore Drive North Liitle Rock, AR 72118 Laboratory Contact: Jeff Ruehr
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