

March 19, 2015

Ms. Tammie Hynum Chief Hazardous Waste Division Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, Arkansas 72118-5317

Re: Offsite Soil Vapor Monitoring Results Whirlpool Corporation Fort Smith, Arkansas EPA No. ARD042755389 AFIN No. 66-00048 CAO LIS 13-202

Dear Ms. Hynum:

This correspondence summarizes the results of the shallow soil vapor sampling conducted by Whirlpool at offsite residential properties in January 2015. Soil vapor and shallow groundwater monitoring has been performed at five properties consisting of three separate residential properties (identified as Parcel's #1 through #3 on Figure 1), a Whirlpool property on Jacobs Avenue, and the Whirlpool property containing the former manufacturing building.

Letters communicating the soil vapor and shallow groundwater results were provided to each of the respective offsite property owners during face-to-face meetings on Tuesday, March 17, 2015. These letters also reported to residents that the modeled indoor air concentrations indicate that TCE in groundwater and vapor beneath the residential parcels is not a threat to human health due to potential vapor intrusion.

Formal reports summarizing the soil vapor and shallow groundwater investigation will be included in the First Quarter 2015 Progress Report as Attachment B - Soil Vapor Monitoring Report and Attachment E - First Quarter 2015 Shallow Offsite Groundwater Investigation Letter Report, respectively.

MONITORING WELL AND SOIL VAPOR POINT INSTALLATION AND SAMPLING

Shallow groundwater monitoring wells and soil vapor monitoring points were used to assess potential vapor intrusion as a result of trichloroethylene (TCE) impacts in groundwater. This correspondence focuses on investigations completed at three offsite private properties identified as Parcel #1, #2 and #3. Locations of the shallow groundwater monitoring wells and soil vapor sample points installed are depicted on Figure 1.

The monitoring wells and soil vapor points were installed at the respective parcels as presented in the following table:

Parcel ID	Permanent Well ID (screened interval)	Soil Vapor Point ID (screened interval)
#1	MW-173 (5-6) MW-174 (10-11)	VP-5 (7.25-7.75) VP-6 (13.75-14.25)
#2	MW-175 (14-15)	VP-7 (5.25-5.75) VP-8 (10.25-10.75)
#3	MW-176 (13.5-14.5)	VP-9 (5.25-5.75) VP-10 (10.75-11.25)

Groundwater monitoring wells were constructed with 2 inch diameter, schedule 40 PVC, 0.010 slotted pipe, 1 foot in length and 2 inch diameter, solid schedule 40 PVC pipe to the surface. A 20/40 grade sand pack was installed in the well annulus around the PVC screen to approximately 1 foot above the top of the screen. This was followed by an annular seal consisting of bentonite chips 1 to 2 foot above the top of the sand pack. Cement/bentonite grout was placed in the annular space above the seal to the surface. Soil vapor points were constructed with a 6 inch stainless steel screen produced by Geoprobe®. Teflon tubing was connected to the 6 inch screen. A 20/40 grade sand pack was installed in the well annulus, around the screen to approximately 0.25 feet above the top of the screen. This was followed by an annular seal consisting of bentonite chips 1 to 2 feet above the top of sand pack. Bentonite grout was placed in the annular space above the seal to the surface. The monitoring wells and soil vapor points were completed with flush-mount protectors set in concrete with bolted covers. Well construction logs and vapor point logs are provided in Appendix A.

Groundwater samples were submitted to PACE Analytical Services (Lenexa, Kansas) for analysis of VOCs by SW486 Method 8260B. Soil vapor samples were submitted to ALS Environmental (Simi Valley, California) for analysis of volatile organic compounds (VOCs) by EPA Method TO 15. Analytical results by parcel are summarized below and the laboratory reports are provided in Appendix B.

Sample Location	Measured Soil Vapor Concentration	Modeled Indoor Air Concentration		
VP-5	0.84 µg/m³	0.03 µg/m³		
Sample Location	Measured Water Concentration	Modeled Indoor Air Concentration		
VP-6	4.3 μg/L	0.01 µg/m³		
MW-174	Non-detect	Not applicable		

TCE Concentrations at Parcel #1 – Fort Smith, Arkansas



TCE Concentra	TCE Concentrations at Parcel #2 – Fort Smith, Arkansas										
Sample Location	Measured Soil Vapor Concentration	Modeled Indoor Air Concentration									
VP-7	2.8 µg/m³	0.08 µg/m³									
Sample Location	Measured Water Concentration	Modeled Indoor Air Concentration									
MW-175	123 µg/L	0.20 µg/m³									

TCE Concentrations at Parcel #3 – Fort Smith, Arkansas

Sample Location	Measured Soil Vapor Concentration	Modeled Indoor Air Concentration		
VP-9	31 µg/m³	0.93 µg/m³		
Sample Location	Measured Water Concentration	Modeled Indoor Air Concentration		
VP-10	636 µg/L	1.02 µg/m³		
MW-176	720 μg/L	1.16 µg/m³		

The modeled indoor air concentrations were compared with the USEPA interim residential indoor air action level of 2 microgram per cubic meter (μ g/m³) from the USEPA Region 9 Response Action Levels and Recommendations to Address Near-Term Inhalation Exposures to TCE in Air from Subsurface Vapor Intrusion Memorandum dated July 9, 2014. The modeled indoor air concentrations were less than 1.16 μ g/m³ and therefore indicate that TCE in groundwater and vapor beneath the residential parcels is not a threat to human health due to potential vapor intrusion.

In accordance with the Arkansas Department of Environmental Quality's (ADEQ's) guidance, Whirlpool has used the results above to calculate both cancer risk and non-cancer risk related to these groundwater and soil vapor results for TCE by parcel. The calculated risk values for the subject residential parcels are provided below and are below ADEQ's risk thresholds for cancer risk of 1 x 10⁻⁵ and non-cancer hazard index of 1.



Parcel ID #	Cancer Risk	Non-cancer Risk
1	1 X 10 ⁻⁶	0.01
2	5 X 10 ⁻⁷	0.04
3	4 X 10 ⁻⁶	0.50

Quarterly monitoring of shallow groundwater and soil vapor will continue throughout 2015 in accordance with the work plans for the shallow groundwater and soil vapor investigations.

During the meetings with the respective property owners, each was asked for their preference for additional crawl space and indoor air sampling. The forms signed by the respective property owners are attached. The requested crawl space and indoor air sampling will be performed during the second quarter monitoring event in April 2015.

If you have any questions or comments please contact me at your earliest convenience.

Sincerely,

ENVIRON International Corporation

Michael F. Ellis, PE Principal

LIST OF ATTACHMENTS

Figure 1:	Location of Shallow Monitoring Wells and Soil Vapor Points
Table 1:	Summary of Groundwater Analytical Results for Offsite Parcels
Table 2:	Summary of Soil Vapor Analytical Results for Offsite Parcels
Appendix A:	Monitoring Well Construction and Vapor Point Construction Logs
Appendix B:	Laboratory Analytical Reports



FIGURE





Whirlpool Facility - Fort Smith, Arkansas

DRAFTED BY: KTS

DATE: 03/16/2015

PROJECT: 3436269

TABLES



TABLE 1 SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS (OFFSITE PARCELS) Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial	MW-174	MW-175	MW-176	VP-6	VP-10
ENVIRON Sample ID	Action Levels	MW-174-GW-20150120	MW-175-GW-20150120	MW-176-GW-20150120	VP-06-GW-20150120	VP-10-GW-20150120
Lab Sample ID	per ADEQ	60186563001	60186566001	60186564001	60186563002	60186564002
Collection Depth (ft bgs)	RADD Issued	10 - 11	14 - 15	13.5 - 14.5	13.75 - 14.25	10.75 - 11.25
Sample Date	Dec 2013	01/20/2015	01/20/2015	01/20/2015	01/20/2015	01/20/2015
Volatile Organic Compound	ls					
Acetone	12000	51.1 (5.0)	16.1 (5.0)	U (5.0)	5.7 J (5.0)	5.8 J (5.0)
2-Butanone	4900	11.3 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	2.6 (0.50)	U (0.50)	2.8 (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	2.0 (0.50)	16.8 (0.50)	U (0.50)	18.8 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)
Trichloroethene	5.0	U (0.50)	<u>123 (0.50)</u>	<u>720 (5.0)</u>	4.3 (0.50)	<u>636 (5.0)</u>
Vinyl Chloride	2.0	U (0.50)	U (0.50)	0.57 J (0.50)	U (0.50)	0.61 J (0.50)

Notes:

1 All concentrations are presented in µg/L (ppb)

- 2 Only compounds with at least one detection are shown
- 3 Concentrations that exceed the remedial action levels per ADEQ RADD issued December 2013 are <u>double underlined</u>

U: Not detected

J: Estimated concentration

(): Method detection limit

RADD: Remedial Action Decision Document

ADEQ: Arkansas Department of

Environmental Quality

µg/L: Micrograms per liter

ft bgs: Feet below ground surface



TABLE 2 SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS (OFFSITE PARCELS) Whirlpool Facility - Fort Smith, Arkansas

Parcel	1	2	3
Location	VP-5	VP-7	VP-9
ENVIRON Sample ID	VP-05-201501	VP-7-201501	VP-9-201501
Lab Sample ID	P1500238-001	P1500228-001	P1500223-001
Collection Depth (ft bgs)	7.5	5.5	5.5
Sample Date	01/16/2015	01/19/2015	01/19/2015
Volatile Organic Compound	S		
1,1-Dichloroethane	U (0.0091)	U (0.011)	0.36 (0.011)
1,2-Dichloroethane	0.20 (0.0092)	0.20 (0.011)	2.3 (0.011)
1,1-Dichloroethene	0.85 (0.0088)	0.42 (0.011)	1.7 (0.010)
cis-1,2-Dichloroethene	0.084 (0.0082)	0.25 (0.010)	0.14 (0.0096)
trans-1,2-Dichloroethene	0.15 (0.0086)	U (0.011)	0.14 (0.010)
Tetrachloroethene	0.79 (0.0099)	0.44 (0.012)	0.29 (0.012)
1,1,1-Trichloroethane	U (0.0076)	U (0.0094)	0.045 (0.0090)
Trichloroethene	0.84 (0.0096)	2.8 (0.012)	31 (0.011)
Vinyl Chloride	4.6 (0.0091)	1.5 (0.011)	4.1 (0.011)

Notes:

1 All concentrations are presented in $\mu g/m^3$

2 Only compounds with at least one detection are shown

U: Not detected

D: Reported result is from a dilution

(): Method detection limit

ft bgs: Feet below ground surface



APPENDIX A: Monitoring Well Construction and Soil Vapor Point Construction Logs



								Site ID: MW-173	Date(s): 1	/14/2	015	
							NN	Location: Fort Smith, Arl	ansas			
			2118 Nort	h Tyler I	Road Build	ing A, W	ichita, KS 67212	Logged By: N. Zurweller	Checked B	y:	K. Stonestreet	
Contractor: Walker-Hill								Purpose: Monitoring Well				
Drillir	ng Met	hod:	Sonic					GS Elevation: 463.94 ft amsl	TOC Eleva	tion:	463.56 ft amsl	
Sam	oling N	letho	d: Sonic					North: 369623.00	East: 591	972.9	98	
<u>Well</u>	Const	ructio	<u>n:</u>					Borehole Dia.: 12 inches	Total Depth	ı: 1	15.5 feet	
Surfa	ice Ca	sing:	Sch 40 P	VC 8 ii	nch	0.5 FT	to 4 FT	Project Number: 3433244A	1			
Scree	en:	iy.	Sch. 40 2	2 Inch (0.10 PVC	5 FT to	6 FT	Project Name: Whirlpool Co	orporation			
Surfa Well:	ice Ca	sing:	Cement Cement Bentonite Sand	Grout Grout e		0 FT to 0 FT to 2 FT to 4 FT to	4 FT 2 FT 4 FT 6 FT	Remarks: Lithology from bor	ing DP-63.			
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code		Material Description		Water Level	Well Construction Flush Mount	
							TOPSOIL, DARK BRC	WN, SANDY, LOOSE, MOIST, OCC.	ASIONAL			
	-	4		0.0		CL	SILTY CLAY, DARK B	ROWN/GRAY, MOTTLED, FREQUE	NT ORGANIC			
	-	-		0.0			NODOLES, STIFF, PL	ASTIC, MOIST				
-460	-460								ED SOET	-		
	5-	-	(5.5) 0.0	0.0			PLASTIC, MOIST			-		
	-	6					GRAIN, SAND, FINE T	IOWN, FREQUENT GRAVEL, SUB R FO MEDIUM GRAIN, STIFF, SLIGHT	LY PLASTIC,			
	-	-		0.0								
-455	-		DP-63									
	-10	_	(10.5)				SILTY CLAY, DARK B GRAIN, SOFT, PLAST	ROWN/RED BROWN, TRACE GRAV	/EL, FINE			
	-	5.5		0.0		СН	SANDY CLAY, RED B GRAVEL, FINE GRAIN	BROWN, FINE TO MEDIUM GRAIN, WITH				
-450	-	5.5		0.0		CL	SILTY CLAY, RED BR COURSE GRAIN, SUI STIFF, COHESIVE, M	OWN/GRAY, MOTTLED, WITH GRA 3 ROUND, SAND, FINE TO MEDIUM OIST	VEL, FINE TO GRAIN, VERY			
	15-											
	-	-										
5	-	-										
 − 445	-	-										
	20-											
	-	-										
440	-	-										
440												
	-	-										
-435	-	-										
2											Page 1 of 1	

								Site ID: MW-174	Date(s): 1	/14/2	015
				Εľ	ΝVΙ	KC	NN	Location: Fort Smith	, Arkansas			
			2118 Nort	h Tyler I	Road Build	ing A, W	ichita, KS 67212	Logged By: N. Zurwell	er Checke	ed B	y:	K. Stonestreet
Contractor: Walker-Hill								Purpose: Monitoring We	ell			
Drillir	ng Met	hod:	Sonic					GS Elevation: 463.72 ft a	IMSI TOC E	leva	tion:	463.45 ft amsl
Sam	oling N	letho	d: Sonic					North: 369643.79	East:	591	975.5	59
<u>Well</u>	Const	ructio	<u>n:</u>					Borehole Dia.: 12 inch	es Total D	epth	n: 1	5.5 feet
Surfa	ce Ca	sing:	Sch 40 P	VC 8 ii	nch nch	0.5 FT	to 10 FT	Project Number: 343324	4A			
Scree	en:	ig.	Sch. 40 2	2 Inch (0.10 PVC	11 FT t	to 12 FT	Project Name: Whirlpo	ol Corporation			
Surfa Well:	ice Ca	sing:	Cement (Cement (Bentonite Sand	Grout Grout Ə		0 FT to 0 FT to 8 FT to 10 FT t	0 10 FT 0 8 FT 0 10 FT to 12 FT	Remarks: Lithology from	n boring DP-63.			
Elevation ft)	Jepth (ft)	Recovery feet)	sample No.	PID (ppm)	Graphic Log	JSCS Code		Material Description			Vater Level	Well Construction Flush Mount
							TOPSOIL, DARK BRC	WN, SANDY, LOOSE, MOIST,	OCCASIONAL		>	
	-			0.0		CL	ROOT HAIRS SILTY CLAY, DARK B	ROWN/GRAY, MOTTLED, FRE	QUENT ORGANI	c		
	-	-		0.0			NODULES, STIFF, PL	ASTIC, MOIST				
-460	-											
	5-	-	(5.5)	0.0			SILTY CLAY, DARK B PLASTIC, MOIST	ROWN/RED BROWN/GRAY, M	OTTLED,SOFT,		_	
	-	6					SILTY CLAY, RED BR GRAIN, SAND, FINE	OWN, FREQUENT GRAVEL, S TO MEDIUM GRAIN, STIFF, SLI	UB ROUND, FINE GHTLY PLASTIC	Ξ		
	-					MOIST, WITH ORGANIC NODULES						
-455	-	-		0.0								
	10-		(10.5)				SILTY CLAY, DARK B	ROWN/RED BROWN, TRACE	GRAVEL, FINE			
	-			0.0		СН	SANDY CLAY, RED B	ROWN, FINE TO MEDIUM GRA	NN, WITH			
	-	5.5				CL	SILTY CLAY, RED BR	OWN/GRAY, MOTTLED, WITH	GRAVEL, FINE	то		
-450	-	-		0.0			STIFF, COHESIVE, M	B ROUND, SAND, FINE TO MEL OIST	DIUM GRAIN, VE	RY		
	15-	-										
2	-	-										
- -	-	-										
5 - 445	-	-										
	20-	-										
	-	-										
	-	-										
440	440 _											
	25-											
-	-	-										
	-	-										
435	-											
												Page 1 of 1

								Site ID: MW	/-175	Date(s): 1/	15/2	015
				Εľ		КĊ	NN	Location:	Fort Smith, Arka	nsas		
2118 North Tyler Road Building A, Wichita, KS 67212								Logged By:	N. Zurweller	Checked By	/:	K. Stonestreet
Contractor: Walker-Hill								Purpose: Mo	onitoring Well			
Drillin	Drilling Method: Sonic								: 464.52 ft amsl	TOC Elevat	ion:	464.17 ft amsl
Samp	oling N	letho	d: Sonic					North: 3696	54.94	East: 591	602.5	59
<u>Well</u>	Const	ructio	<u>n:</u>					Borehole Dia	: 12 inches	Total Depth	: 1	5.0 feet
Surfa	ce Ca Casi	sing:	Sch 40 P Sch 40 P	VC 8 ii	nch nch	0.5 FT 0 FT to	to 13 FT 14 5 FT	Project Numb	oer: 3433244A			
Scree	en:		Sch. 40 2	2 Inch (0.10 PVC	13.5 F	T to 14.5 FT	Project Name	: Whirlpool Corp	poration		
Well:	ice Ca	sing:	Cement (Cement (Bentonite Sand	Grout Grout		0 FT to 0 FT to 10.5 F 12.5 F	0 13 FT 0 10.5 FT T to 12.5 FT T to 14.5 FT	Remarks: L	ithology from boring	g DP-64.		
Elevation (ft)	Jepth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	JSCS Code		Material Des	scription		Nater Level	Well Construction Flush Mount
							TOPSOIL, DARK BRC	WN, ROOT HAIR	S, WET(SATURATE)	-	
	-	4		0.0		CL	SILTY CLAY, RED BR NODULES, SILT DEC GRAIN, SUB ROUND,	OWN/GRAY, MO REASING WITH I STIFF, PLASTIC	TTLED, FREQUENT (DEPTH, TRACE GRA , MOIST	ORGANIC VEL, FINE		
	-		=	0.0			SILTY CLAY, RED BR NODULES, TRACE G	OWN/GRAY, MO ^T RAVEL, FINE GRA	TTLED, FREQUENT (AIN, SUB ROUND, VE	ORGANIC ERY STIFF,		
-460	5-	-		0.0			PLASTIC, MOIST					
	-											
	-	6										
-455	- 10-	-	-	0.0			SILTY CLAY, RED BR FINE GRAIN, TRACE MOIST	OWN/GRAY, MO SAND, FINE GRA	TTLED, FREQUENT (NN, STIFF, SLIGHTL)	GRAVEL, Y PLASTIC,		
	-			0.0			SILTY CLAY, RED BR TRACE SAND, FINE (OWN, WITH GRA BRAIN, STIFF, CC	VEL, SUB ROUND, F DHESIVE, MOIST	FINE GRAIN,		
-450	-	5	DP-64 (14.5)	0.1		SM	SILTY SAND, RED BF GRAIN, SLIGHTLY CO	OWN, SLIGHTLY DHESIVE, MOIST	CLAYEY, FINE TO N	/EDIUM		
	15-						SILTY CLAY, RED BR	OWN, WITH GRA RD, DRY	VEL, SUB ROUND, F			
	-											
	-											
-445	20-	-										
	-	-										
	-											
440												
440	⁻⁴⁴⁰ 25- 25-											
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-435	-	-										
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								Site ID: MW-176 Date(s): 1/16/2015				
				EL		RC	ЛN	Location:	Fort Smith, Arka	nsas		
2118 North Tyler Road Building A, Wichita, KS 67212								Logged By:	N. Zurweller	Checked By	/:	K. Stonestreet
Contractor: Able Environmental								Purpose: Mo	onitoring Well			
Drillir	ng Met	hod:	Hollow	/ Stem	Auger			GS Elevation	: 465.46 ft amsl	TOC Elevat	ion:	465.24 ft amsl
Sam	oling N	1etho	d: Sonic					North: 3696	675.04	East: 591	473.4	47
<u>Well</u>	<u>Const</u>	ructio	<u>n:</u>					Borehole Dia	.: 12 inches	Total Depth	: 1	5.0 feet
Surfa	ce Ca Casil	sing: na:	Sch 40 P Sch 40 P	VC 8 ir VC 2 Ir	nch nch	0.5 FT 0 FT to	to 12.5 FT 13 FT	Project Numb	ber: 3433244A			
Scree	en:	.g.	Sch. 40 2	2 Inch C	.10 PVC	13 FT 1	to 14 FT	Project Name	e: Whirlpool Cor	poration		
Surfa Well:	ice Ca	sing:	Cement (Cement (Bentonite Sand	Grout Grout e		0 FT to 0 FT to 10 FT t 12 FT t	9 12.5 FT 9 10 FT to 12 FT to 14 FT	Remarks: L	ithology from borin	g DP-65.		
evation :)	epth (ft)	ecovery eet)	ample No.	(mqq) Ol	raphic Log	SCS Code		Material Des	scription		ater Level	Well Construction
Ē€	Ō	R €	Ю		<u> </u>	C C					8	Flush Mount
-465	-	4		0.1		UL	OCCASIONAL ROOT	HAIR	.0, 301 1, 1 1, 310, 1	VL1,		
	-	-		0.8			SILTY CLAY, RED BR	OWN/GRAY, MO	TTLED, TRACE GRA	VEL, FINE		
	-		-				GRAIN, SUB ROUND, ORGANIC NODULES	VERY STIFF, PL				
-460	5-			1.8								
	-	6				1						
	-	-		8.7								
	10											
-455	-	-		21								
	-	5										
	-		DP-65 (14)	2.8		SM	SILTY SAND, RED BR		MEDIUM GRAIN, SLIC	GHTLY		
	15-		(,			CL	SILTY CLAY, RED BR	OWN/GRAY, MO	TTLED, SLIGHTLY S			
-450	-	-					SILTY CLAY, RED BR	OWN, WITH GRA	AVEL, FINE TO COAF	RSE GRAIN,		
5	-	-					SUB ROUND, STIFF,	COHESIVE, MOIS	ST, CRUMBLES]		
5	-	-										
	20-											
445		-										
	-	-										
	-											
440	-	-										
	-											
	-											
												Page 1 of 1

								Site ID: VP-5		Date(s): 1/	14/2	015		
				Εľ	171	RC	N	Location: Fort Smit	h, Arka	nsas				
			2118 Nort	th Tyler F	Road Build	ing A, W	ichita, KS 67212	Logged By: N. Zurwe	ller	Checked B	y:	K. Stonestreet		
Cont	ractor:		Walke	r-Hill				Purpose: Vapor Point		1				
Drillir	ng Met	hod:	Sonic					GS Elevation: 464.08 ft	amsl	TOC Elevat	tion:	Not available		
Sam	oling N	letho	d: Sonic					North: 369619.19		East: 591959.04				
Well	Const	ructio	<u>n:</u>					Borehole Dia.: 12 inc	hes	Total Depth	: 8	3.0 feet		
Surfa	ce Ca	sing:	Sch 40 F	VC 8 ir	nch	0.5 FT	to 7 FT	Project Number: 34332	44A					
Scree	en:	ng.	Stainless	s Steel	guid	7.25 F	Γ to 7.75 FT	Project Name: Whirlp	ool Corp	oration				
Surfa Well:	Surface Casing: Cement Grout 0 FT to 7 FT Nell: Cement Grout 0 FT to 5 FT Bentonite Grout 5 FT to 7 FT Sand 7 FT to 8 FT							Remarks: Lithology from boring DP-63.						
Elevation (ft)	(ff) Depth (ff) Depth (ff) (ffeet) Material Description Material Description									Water Level	Well Construction Fl <u>ush Mo</u> unt			
	-	-		0.0		СІ	TOPSOIL, DARK BRC ROOT HAIRS	WN, SANDY, LOOSE, MOIST	, OCCAS	IONAL				
	-	4					SILTY CLAY, DARK B NODULES, STIFF, PL	ROWN/GRAY, MOTTLED, FR ASTIC, MOIST	EQUENT	ORGANIC				
-460	-		-	0.0										
	5-	-	DP-63 (5.5)	0.0			SILTY CLAY, DARK B	ROWN/RED BROWN/GRAY,	MOTTLE	D,SOFT,				
	-	_		0.0			SILTY CLAY, RED BR	OWN, FREQUENT GRAVEL,		JND, FINE				
	-	6					MOIST, WITH ORGAN	NIC NODULES		r EAGTIC,				
-455	-	-		0.0										
	10-		DP-63 (10.5)				SILTY CLAY, DARK B	ROWN/RED BROWN, TRACE	GRAVE	L, FINE	-			
	-	-		0.0		СН	GRAIN, SOFT, PLAST SANDY CLAY, RED B	TIC, MOIST ROWN, FINE TO MEDIUM GF	RAIN, WI	ГН				
	-	5.5				CL	GRAVEL, FINE GRAIN SILTY CLAY, RED BR	N, SUB ROUND, COHESIVE, I OWN/GRAY, MOTTLED, WIT	MOIST TH GRAV	EL, FINE TO	-			
-450	-	-		0.0			COURSE GRAIN, SUI STIFF, COHESIVE, M	3 ROUND, SAND, FINE TO MI OIST	EDIUM G	RÁIN, VERY				
	15-													
	-													
	-	-												
-445	-	-												
	20-	-												
	-													
	-	-												
-440	-	-												
	25-													
Î	-	-												
1	-	-												
-435	-	-												
												Page 1 of 1		
L														

								Site ID: VP-	-6	Date(s): 1	/14/2	015		
				EĽ		RC	NN	Location:	Fort Smith, Arka	insas				
			2118 Nort	h Tyler F	Road Build	ing A, W	ichita, KS 67212	Logged By:	N. Zurweller	Checked B	y:	K. Stonestreet		
Conti	actor:		Walke	r-Hill				Purpose: Va	apor Point					
Drillir	ng Met	hod:	Sonic					GS Elevation	: 464.01 ft amsl	TOC Eleva	tion:	Not available		
Samp	oling N	letho	d: Sonic					North: 3696	369615.51 East: 591961.14					
<u>Well</u>	Const	ructio	<u>n:</u>					Borehole Dia	.: 12 inches	Total Depth	n: 1	4.5 feet		
Surfa	ce Ca Casi	sing:	Sch 40 P 0 25 Inch	VC 8 ir	ich Ibina	0.5 FT 0 FT to	to 13.5 FT 13 75 FT	Project Numb	ber: 3433244A					
Scree	en:		Stainless	Steel	~~···g	13.75 F	T to 14.25 FT	Project Name	e: Whirlpool Cor	poration				
Well:	Surface Casing: Cement Grout0 FT to 13.5 FTWell:Cement Grout0 FT to 11.5 FTBentonite Grout11.5 FT to 13.5 FTSand13.5 FT to 14.5 FT							Remarks: Lithology from boring DP-63.						
Elevation Claptic Material Material								scription		Water Level	Well Construction Flush Mount			
	-	4		0.0		CL	TOPSOIL, DARK BRC ROOT HAIRS SILTY CLAY, DARK B NODULES, STIFF, PL	WN, SANDY, LO ROWN/GRAY, M ASTIC, MOIST	OSE, MOIST, OCCAS	SIONAL T ORGANIC	-			
-460	- 5		DP-63 (5.5)	0.0			SILTY CLAY, DARK B PLASTIC, MOIST SILTY CLAY, RED BR GRAIN SAND FINE	K BROWN/RED BROWN/GRAY, MOTTLED, SOFT, BROWN, FREQUENT GRAVEL, SUB ROUND, FINE IE TO MEDIUM GRAIN, STIFF, SLIGHTLY PLASTIC,						
-455	- - 10-	6	DP-63	0.0			MOIST, WITH ORGAN	NIC NODULES		1210110,				
	-	5.5	(10.5)	0.0		СН	SILTY CLAY, DARK B GRAIN, SOFT, PLAST SANDY CLAY, RED B GRAVEL, FINE GRAIN	ROWN/RED BRC TC, MOIST ROWN, FINE TO N, SUB ROUND, (OWN, TRACE GRAVE MEDIUM GRAIN, WI COHESIVE, MOIST	EL, FINE	-			
-450	- - 15-			0.0		CL	SILTY CLAY, RED BR COURSE GRAIN, SUE STIFF, COHESIVE, M	own/gray, mo 3 Round, sand Oist	TTLED, WITH GRAV , FINE TO MEDIUM G	(EL, FINE TO GRAIN, VERY				
-445	- - - 20-	-												
-440	- - - 25-													
-435	-	-												
												Page 1 of 1		

								Site ID: VP-7	Date(s): 1	/15/2	015				
				Εľ		КĊ	NN	Location: Fort Smith, Arl	ansas						
			2118 North	h Tyler F	Road Build	ing A, W	ichita, KS 67212	Logged By: N. Zurweller	Checked B	y:	K. Stonestreet				
Contr	actor:		Walker	r-Hill				Purpose: Vapor Point							
Drillin	ng Met	hod:	Sonic					GS Elevation: 464.63 ft amsl	TOC Eleva	tion:	Not available				
Samp	oling N	/letho	d: Sonic					North: 369641.40 East: 591612.33							
<u>Well</u>	Const	ructio	<u>n:</u>					Borehole Dia.: 12 inches Total Depth: 6.0 feet							
Surface Casing: Sch 40 PVC 8 inch 0.5 FT to 5 FT Project Number: 3433244A															
Scree	en:		Stainless	Steel	aonig	5.25 FT	Г to 5.75 FT	Project Name: Whirlpool Co	orporation						
Surfa Well:	Surface Casing: Cement Grout 0 FT to 5 FT Well: Cement Grout 0 FT to 3 FT Bentonite Grout 3 FT to 5 FT Sand 5 FT to 6 FT							Remarks: Lithology from boring DP-64.							
Material Depth (ft) Depth (ft										Water Level	Well Construction Flush Mount				
	Image:														
	-	4		0.0		CL	SILTY CLAY, RED BR NODULES, SILT DEC	OWN/GRAY, MOTTLED, FREQUEN REASING WITH DEPTH, TRACE GR	FORGANIC AVEL. FINE						
	-	-		0.0			GRAIN, SUB ROUND,	, STIFF, PLASTIC, MOIST		-					
-460	-		-				NODULES, TRACE G PLASTIC, MOIST	RAVEL, FINE GRAIN, SUB ROUND,	VERY STIFF,						
	5-			0.0											
	-	6													
	-	-		0.0											
-455	-	-		0.0			SILTY CLAY, RED BR FINE GRAIN, TRACE	OWN/GRAY, MOTTLED, FREQUEN SAND, FINE GRAIN, STIFF, SLIGHT	F GRAVEL, LY PLASTIC,						
	10						SILTY CLAY, RED BR	OWN, WITH GRAVEL, SUB ROUND	, FINE GRAIN,						
	-	5		0.0			IRACE SAND, FINE (GRAIN, STIFF, COHESIVE, MOIST							
	-		DP-64	0.1		SM	SILTY SAND, RED BF	ROWN, SLIGHTLY CLAYEY, FINE TO	MEDIUM	-					
-450	15		(14.5)	0.1		CL	GRAIN, SLIGHTLY CO	DHESIVE, MOIST OWN. WITH GRAVEL. SUB ROUND	. FINE TO						
	-	-					COURSE GRAIN, HAI	RD, DRY	,						
	-	-													
5	-	-													
-445	- 20														
	-	-													
	-	_													
	-	-													
-440	25-														
	-	-													
	-	-													
	-	-													
-435															
											Page 1 of 1				

									Site ID: VP-8 Date(s): 1/15/2015			015		
					Εľ	1/1	RC	N	Location: F	ort Smith, Arka	nsas			
				2118 North	n Tyler F	Road Build	ing A, W	ichita, KS 67212	Logged By: N	I. Zurweller	Checked By	/:	K. Stonestreet	
С	ontra	actor:		Walker	-Hill				Purpose: Vapo	or Point				
D	Prilling	g Met	hod:	Sonic					GS Elevation: 4	464.61 ft amsl	ft amsl TOC Elevation: Not available			
s	amp	ling N	letho	d: Sonic					North: 369641.14 East: 591615.45					
V	Well Construction:								Borehole Dia.:	12 inches	Total Depth	: 1	1.0 feet	
S	Surface Casing: Sch 40 PVC 8 inch 0.5 FT to 10 FT								Project Number	r: 3433244A				
S	cree	n:	ig.	Stainless	Steel	Joing	10.25 F	FT to 10.75 FT	Project Name:	Whirlpool Corp	ooration			
S V	Surface Casing: Cement Grout0 FT to 10 FTNell:Cement Grout0 FT to 8 FTBentonite Grout8 FT to 10 FTSand10 FT to 11 FT							0 10 FT 0 8 FT 0 10 FT 10 FT	Remarks: Lithology from boring DP-64.					
Tevation	Elevation (ff) Depth (ff) Recovery (feet) (feet) PID (ppm) USCS Code USCS Code									Vater Level	Well Construction			
H			ЦС	0,				TOPSOIL, DARK BRC	WN, ROOT HAIRS,	WET(SATURATED))	~		
		-	4		0.0		CL	SILTY CLAY, RED BR NODULES, SILT DEC GRAIN, SUB ROUND,	OWN/GRAY, MOTTI REASING WITH DEI STIFF, PLASTIC, M	LED, FREQUENT (PTH, TRACE GRA) IOIST	DRGANIC /EL, FINE			
	60	-		-	0.0			SILTY CLAY, RED BR NODULES, TRACE G	OWN/GRAY, MOTTI RAVEL, FINE GRAIN	LED, FREQUENT (N, SUB ROUND, VE	DRGANIC RY STIFF,			
		5— _			0.0			r LASTIC, MOIST						
		-	6											
-4	55	- 10		-	0.0			SILTY CLAY, RED BR FINE GRAIN, TRACE	OWN/GRAY, MOTTI SAND, FINE GRAIN	LED, FREQUENT (, STIFF, SLIGHTLY	GRAVEL, PLASTIC,			
		_			0.0			SILTY CLAY, RED BR TRACE SAND, FINE (OWN, WITH GRAVE GRAIN, STIFF, COHE	el, sub round, f Esive, moist	INE GRAIN,			
-4	50	-	5	DP-64 (14.5)	0.1		SM	SILTY SAND, RED BR GRAIN, SLIGHTLY CO	Rown, Slightly Ci Dhesive, Moist	LAYEY, FINE TO M	IEDIUM			
	50	15						SILTY CLAY, RED BR	.OWN, WITH GRAVE RD, DRY	EL, SUB ROUND, F				
; 1/28/15		-												
	45	-												
H_EDI		20-												
-OGS (J		_												
00L_L		-												
13 12 14	40													
File: V														
MKE2;		_												
G REV	35	_												
9 -4	55													
port: WE														
Re													Page 1 of 1	

								Site ID: VP-9 Date(s): 1/16/2015					
						RC	NN	Location:	Fort Smith, Arka	nsas			
			2118 Nort	h Tyler F	Road Build	ing A, W	ichita, KS 67212	Logged By:	N. Zurweller	Checked By	/ :	K. Stonestreet	
Contr	actor:		Able E	nviron	mental			Purpose: Va	por Point				
Drillin	ig Met	hod:	Hollow	Stem	Auger			GS Elevation	: 465.6 ft amsl	TOC Elevation: Not available			
Samp	ling N	/letho	d: Sonic					North: 3696	55.87	East: 591	471.	58	
Well	Const	ructio	<u>n:</u>					Borehole Dia	.: 12 inches	Total Depth	: 6	6.0 feet	
Surfa	ce Ca	sing:	Sch 40 P	VC 8 ir	ich Ibing	0.5 FT	to 5 FT	Project Numb	oer: 3433244A				
Scree	en:	ng.	Stainless	Steel	Joing	5.25 FT	Г to 5.75 FT	Project Name	: Whirlpool Cor	poration			
Surfa Well:	Surface Casing: Cement Grout0 FT to 5 FTWell:Cement Grout0 FT to 3 FTBentonite Grout3 FT to 5 FTSand5 FT to 6 FT							Remarks: Lithology from boring DP-65.					
Elevation (ft)	The ation of the a									Water Level	Well Construction Flush Mount		
-465	<u> </u>				/////	CL	SILTY CLAY, GRAY/B	ROWN, MOTTLE	D, SOFT, PLASTIC, V	VET,			
-465 -4 -4 0.1 -4 0.8 Sill Y CLAY, GRAT/BROWN, MOTTLED, SOFT, PLASTIC, WET, OCCASIONAL ROOT HAIR Sill Y CLAY, RED BROWN/GRAY, MOTTLED, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST, OCCASIONAL ORGANIC NODULES													
-460		6		1.8									
-455	- 10- -	-		2.1									
-450	- - 15-	5	DP-65 (14)	2.8		SM CL	SILTY SAND, RED BR CLAYEY, SLIGHTLY C SILTY CLAY, RED BR GRAIN, STIFF, PLAST SILTY CLAY, RED BR	Rown, fine to M Cohesive, Mois Own/Gray, Mo Tic, Moist Own, with Gra	MEDIUM GRAIN, SLIG T TTLED, SLIGHTLY SA AVEL, FINE TO COAR	GHTLY			
-445	- - 20 -	-					SUB KOUND, STIFF,	COHESIVE, MOIS	51, CRUMBLES]			
-440	- 25 - - -	-											
-												Page 1 of 1	

								Site ID: VP-10 Date(s): 1/16/2015				015	
				Сľ		κC	NN	Location:	Fort Smith, Arka	nsas			
			2118 Nortl	h Tyler F	Road Build	ling A, W	ichita, KS 67212	Logged By:	N. Zurweller	Checked By	/:	K. Stonestreet	
Contr	actor:		Able E	nviron	mental			Purpose: Va	por Point	1			
Drillin	ng Met	hod:	Hollow	v Stem	Auger			GS Elevation	: 465.59 ft amsl	TOC Elevation: Not available			
Samp	oling N	letho	d: Sonic					North: 3696	61.02	East: 591	471.6	62	
<u>Well</u>	Const	ructio	<u>n:</u>					Borehole Dia	.: 12 inches	Total Depth	: 1	1.5 feet	
Surfa Blank	ce Ca Casii	sing: na:	Sch 40 P 0.25 Inch	VC 8 ir 1.D. Τι	ıch Jbina	0.5 FT 0 FT to	to 10.5 FT 0 10.75 FT	Project Numb	oer: 3433244A				
Scree	Screen: Stainless Steel 10.75 FT to 11.25 FT							Project Name	: Whirlpool Corp	poration			
Well:	Surface Casing: Cement Grout0 FT to 10.5 FTWell:Cement Grout0 FT to 8.5 FTBentonite Grout8.5 FT to 10.5 FTSand10.5 FT to 11.5 FT						0 10.5 FT 0 8.5 FT to 10.5 FT <u>T to 11.5 FT</u>	Remarks: Lithology from boring DP-65.					
Elevation (ft)	Elevation (ft) Depth (ft) Recovery (feet) PID (ppm) Graphic Log USCS Code							Material Description					
-465	465 CL SILTY CLAY, GR							ROWN, MOTTLE	D, SOFT, PLASTIC, V	VET,			
	-	4		0.1			SILTY CLAY, RED BR GRAIN, SUB ROUND,	OWN/GRAY, MO VERY STIFF, PL	TTLED, TRACE GRA' ASTIC, MOIST, OCC/	VEL, FINE ASIONAL			
-460	5 -	6		1.8			ORGANIC NODULES						
-455	- - 10			8.7									
	-	5	DP-65 (14)	2.1		SM	SILTY SAND, RED BR CLAYEY, SLIGHTLY C	ROWN, FINE TO N COHESIVE, MOIS	/IEDIUM GRAIN, SLIG T	GHTLY			
-450	15 - -				/////		SILTY CLAY, RED BR GRAIN, STIFF, PLAST SILTY CLAY, RED BR SUB ROUND, STIFF,	OWN/GRAY, MO FIC, MOIST OWN, WITH GRA COHESIVE, MOIS	TTLED, SLIGHTLY SA VEL, FINE TO COAR ST, CRUMBLES	ANDY, FINE RSE GRAIN,			
-445	- 20 -												
		<u> </u>	1	<u> </u>	1	1	1				<u> </u>	<u> </u>	
												Page 1 of 1	

APPENDIX B: Laboratory Analytical Reports





Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 (913)599-5665

January 27, 2015

Wendy Stonestreet Environ International Corporation 7500 College Blvd Ste 925 Overland Park, KS 66210

RE: Project: FORT SMITH AR Pace Project No.: 60186563

Dear Wendy Stonestreet:

Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Myercels

Mary Jane Walls maryjane.walls@pacelabs.com PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation





CERTIFICATIONS

Project: FORT SMITH AR

Pace Project No.: 60186563

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219 WY STR Certification #: 2456.01 Arkansas Certification #: 13-012-0 Illinois Certification #: 003097 Iowa Certification #: 118 Kansas/NELAP Certification #: E-10116 Louisiana Certification #: 03055 Nevada Certification #: KS000212008A Oklahoma Certification #: 9205/9935 Texas Certification #: T104704407 Utah Certification #: KS00021



SAMPLE SUMMARY

Project: FORT SMITH AR

Pace Project No.: 60186563

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186563001	MW-174-GW-20150120	Water	01/20/15 13:40	01/21/15 08:30
60186563002	VP-06-GW-20150120	Water	01/20/15 15:50	01/21/15 08:30



SAMPLE ANALYTE COUNT

Project: FORT SMITH AR Pace Project No.: 60186563

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186563001	MW-174-GW-20150120	EPA 5030B/8260	PRG	38
60186563002	VP-06-GW-20150120	EPA 5030B/8260	PRG	38



PROJECT NARRATIVE

Project: FORT SMITH AR

Pace Project No.: 60186563

Method: EPA 5030B/8260

Description:8260 MSVClient:Environ_ARDate:January 27, 2015

General Information:

2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable): All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67171

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



ANALYTICAL RESULTS

Project: FORT SMITH AR

Pace Project No.: 60186563

Sample: MW-174-GW-20150120	Lab ID:	60186563001	Collecte	d: 01/20/15	5 13:40	Received: 0'	I/21/15 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 5	5030B/8260						
Acetone	51.1 u	g/L	10.0	5.0	1		01/23/15 19:41	67-64-1	
Benzene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	71-43-2	
Bromodichloromethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	75-27-4	
Bromoform	ND u	g/L	1.0	0.50	1		01/23/15 19:41	75-25-2	
Bromomethane	ND u	g/L	5.0	2.5	1		01/23/15 19:41	74-83-9	
2-Butanone (MEK)	11.3 u	g/L	10.0	5.0	1		01/23/15 19:41	78-93-3	
Carbon disulfide	ND u	g/L	5.0	2.5	1		01/23/15 19:41	75-15-0	
Carbon tetrachloride	ND u	g/L	1.0	0.50	1		01/23/15 19:41	56-23-5	
Chlorobenzene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	108-90-7	
Chloroethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	75-00-3	
Chloroform	ND u	g/L	1.0	0.50	1		01/23/15 19:41	67-66-3	
Chloromethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	74-87-3	
Dibromochloromethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	124-48-1	
1,1-Dichloroethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	75-34-3	
1,2-Dichloroethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	107-06-2	
1,1-Dichloroethene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	75-35-4	
cis-1,2-Dichloroethene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	156-59-2	
trans-1,2-Dichloroethene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	156-60-5	
1,2-Dichloropropane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	78-87-5	
cis-1,3-Dichloropropene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	10061-01-5	
trans-1,3-Dichloropropene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	10061-02-6	
Ethylbenzene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	100-41-4	
2-Hexanone	ND u	g/L	10.0	5.0	1		01/23/15 19:41	591-78-6	
Methylene chloride	ND u	g/L	1.0	0.50	1		01/23/15 19:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND u	g/L	10.0	2.5	1		01/23/15 19:41	108-10-1	
Styrene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	79-34-5	
Tetrachloroethene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	127-18-4	
Toluene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	108-88-3	
1,1,1-Trichloroethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	71-55-6	
1,1,2-Trichloroethane	ND u	g/L	1.0	0.50	1		01/23/15 19:41	79-00-5	
Trichloroethene	ND u	g/L	1.0	0.50	1		01/23/15 19:41	79-01-6	
Vinyl chloride	ND u	g/L	1.0	0.50	1		01/23/15 19:41	75-01-4	
Xylene (Total)	ND u	g/L	3.0	1.5	1		01/23/15 19:41	1330-20-7	
Surrogates		•							
4-Bromofluorobenzene (S)	100 %	, D	80-120		1		01/23/15 19:41	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %	, D	80-120		1		01/23/15 19:41	17060-07-0	
Toluene-d8 (S)	100 %	, D	80-120		1		01/23/15 19:41	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		01/23/15 19:41		



ANALYTICAL RESULTS

Project: FORT SMITH AR

Pace Project No.: 60186563

Sample: VP-06-GW-20150120	Lab ID:	60186563002	Collecte	d: 01/20/1	5 15:50	Received: 0'	1/21/15 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA	5030B/8260						
Acetone	5.7 J u	ıg/L	10.0	5.0	1		01/23/15 19:56	67-64-1	
Benzene	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	71-43-2	
Bromodichloromethane	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	75-27-4	
Bromoform	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	75-25-2	
Bromomethane	ND u	ig/L	5.0	2.5	1		01/23/15 19:56	74-83-9	
2-Butanone (MEK)	ND u	ig/L	10.0	5.0	1		01/23/15 19:56	78-93-3	
Carbon disulfide	ND u	ig/L	5.0	2.5	1		01/23/15 19:56	75-15-0	
Carbon tetrachloride	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	56-23-5	
Chlorobenzene	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	108-90-7	
Chloroethane	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	75-00-3	
Chloroform	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	67-66-3	
Chloromethane	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	74-87-3	
Dibromochloromethane	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	124-48-1	
1,1-Dichloroethane	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	75-34-3	
1,2-Dichloroethane	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	107-06-2	
1,1-Dichloroethene	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	75-35-4	
cis-1,2-Dichloroethene	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	156-59-2	
trans-1,2-Dichloroethene	ND u	ig/L	1.0	0.50	1		01/23/15 19:56	156-60-5	
1,2-Dichloropropane	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	78-87-5	
cis-1,3-Dichloropropene	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	10061-01-5	
trans-1,3-Dichloropropene	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	10061-02-6	
Ethylbenzene	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	100-41-4	
2-Hexanone	ND u	ig/L	10.0	5.0	1		01/23/15 19:56	591-78-6	
Methylene chloride	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND u	ıg/L	10.0	2.5	1		01/23/15 19:56	108-10-1	
Styrene	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	79-34-5	
Tetrachloroethene	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	127-18-4	
Toluene	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	108-88-3	
1,1,1-Trichloroethane	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	71-55-6	
1,1,2-Trichloroethane	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	79-00-5	
Trichloroethene	4.3 u	ıg/L	1.0	0.50	1		01/23/15 19:56	79-01-6	
Vinyl chloride	ND u	ıg/L	1.0	0.50	1		01/23/15 19:56	75-01-4	
Xylene (Total)	ND u	ıg/L	3.0	1.5	1		01/23/15 19:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101 %	6	80-120		1		01/23/15 19:56	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %	6	80-120		1		01/23/15 19:56	17060-07-0	
Toluene-d8 (S)	98 %	6	80-120		1		01/23/15 19:56	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		01/23/15 19:56		



QUALITY CONTROL DATA

EPA 5030B/8260

8260 MSV Water 10 mL Purge

Analysis Method:

Analysis Description:

Project: FORT SMITH AR

Pace Project No.: 60186563

QC Batch: MSV/67171 QC Batch Method: EPA 5030B

QC Batch Method: EPA 5030B/8260 Associated Lab Samples: 60186563001, 60186563002

METHOD BLANK: 1510745 Matrix: Water Associated Lab Samples: 60186563001, 60186563002 Blank Reporting Parameter Result Limit Qualifiers Units Analyzed 1,1,1-Trichloroethane ND 1.0 01/23/15 15:12 ug/L 1,1,2,2-Tetrachloroethane ug/L ND 10 01/23/15 15:12 1,1,2-Trichloroethane ug/L ND 1.0 01/23/15 15:12 ND 01/23/15 15:12 1,1-Dichloroethane ug/L 1.0 1,1-Dichloroethene ug/L ND 10 01/23/15 15:12 1,2-Dichloroethane ug/L ND 1.0 01/23/15 15:12 1,2-Dichloropropane ug/L ND 1.0 01/23/15 15:12 2-Butanone (MEK) ug/L ND 10.0 01/23/15 15:12 2-Hexanone ug/L ND 10.0 01/23/15 15:12 4-Methyl-2-pentanone (MIBK) ug/L ND 10.0 01/23/15 15:12 Acetone ND 10.0 01/23/15 15:12 ug/L Benzene ND 1.0 01/23/15 15:12 ug/L Bromodichloromethane ND 01/23/15 15:12 ug/L 10 ND Bromoform 1.0 01/23/15 15:12 ug/L ND 5.0 01/23/15 15:12 Bromomethane ug/L Carbon disulfide ug/L ND 5.0 01/23/15 15:12 Carbon tetrachloride ug/L ND 1.0 01/23/15 15:12 Chlorobenzene ug/L ND 1.0 01/23/15 15:12 Chloroethane ND 1.0 01/23/15 15:12 ug/L Chloroform ND 01/23/15 15:12 ug/L 1.0 Chloromethane ug/L ND 1.0 01/23/15 15:12 cis-1,2-Dichloroethene ND 1.0 01/23/15 15:12 ug/L cis-1,3-Dichloropropene ND 1.0 01/23/15 15:12 ug/L 01/23/15 15:12 Dibromochloromethane ND 1.0 ug/L Ethylbenzene ND 10 01/23/15 15:12 ug/L Methylene chloride ug/L ND 1.0 01/23/15 15:12 Styrene ug/L ND 1.0 01/23/15 15:12 Tetrachloroethene ug/L ND 1.0 01/23/15 15:12 Toluene ND 1.0 01/23/15 15:12 ug/L trans-1,2-Dichloroethene ND 01/23/15 15:12 ug/L 10 trans-1,3-Dichloropropene ug/L ND 1.0 01/23/15 15:12 Trichloroethene ug/L ND 1.0 01/23/15 15:12 Vinyl chloride ug/L ND 1.0 01/23/15 15:12 Xylene (Total) ug/L ND 30 01/23/15 15:12 102 1,2-Dichloroethane-d4 (S) % 80-120 01/23/15 15:12 4-Bromofluorobenzene (S) % 100 80-120 01/23/15 15:12 % Toluene-d8 (S) 100 80-120 01/23/15 15:12

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH AR

Pace Project No.: 60186563

LABORATORY CONTROL SAMPLE: 1510746

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.3	102	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-121	
1,1,2-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	20.2	101	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	20.6	103	80-120	
2-Butanone (MEK)	ug/L	100	100	100	67-122	
2-Hexanone	ug/L	100	102	102	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	102	102	76-120	
Acetone	ug/L	100	95.9	96	72-120	
Benzene	ug/L	20	22.1	111	80-120	
Bromodichloromethane	ug/L	20	21.3	107	80-120	
Bromoform	ug/L	20	20.3	102	73-138	
Bromomethane	ug/L	20	14.1	71	38-137	
Carbon disulfide	ug/L	20	21.5	107	71-129	
Carbon tetrachloride	ug/L	20	20.6	103	67-146	
Chlorobenzene	ug/L	20	22.0	110	80-120	
Chloroethane	ug/L	20	17.9	89	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	16.0	80	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.5	103	80-120	
Dibromochloromethane	ug/L	20	20.9	105	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	22.1	110	80-123	
Tetrachloroethene	ug/L	20	21.0	105	80-123	
Toluene	ug/L	20	21.5	108	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	20.7	103	80-120	
Vinyl chloride	ug/L	20	18.3	92	62-125	
Xylene (Total)	ug/L	60	65.7	109	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			104	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: FORT SMITH AR

Pace Project No.: 60186563

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67171

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

		Analytica
Pace Project No.:	60186563	
Project:	FORT SMITH AR	

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Batch
60186563001	MW-174-GW-20150120	EPA 5030B/8260	MSV/67171		
60186563002	VP-06-GW-20150120	EPA 5030B/8260	MSV/67171		



Sample Condition Upon Receipt

WO#:60186563

Client Name: Ewina					Optional
Courier: Fed Ex 2 UPS USPS Client	Commercial 🗆	l Pac	e 🗆 Other 🗆		Proi Due Date:
Tracking #: 5689 1283 9504 Pa	ce Shipping L	abel Us	ed? Yes 🗆 🛚	No 🗗	Proi Name:
Custody Seal on Cooler/Box Present: Yes V No	Seals inta	ict: Ye	s, E No 🗆		
Packing Material: Bubble Wrap Bubble Bags	s 🗆 🛛 Р	Foam 🖬	✓ None □	Other	
Thermometer Used: 7-239 / T-194 Type	e of Ice:	🔊 Blue	e None 🗆 Sam	ples received	on ice, cooling process has begun.
Cooler Temperature: 1->		(circle	one)	Date and in	itials of person examining
Temperature should be above freezing to 6°C				contents:	Jun 1/21/15
Chain of Custody present:	ØYes □No [⊐n/a			
Chain of Custody filled out:	Derfes □No [⊐n/a	2.		
Chain of Custody relinquished:	Yes 🗆 No [□n/A	3.		
Sampler name & signature on COC:	⊠Yes □No [□n/a	4.		
Samples arrived within holding time:	⊠Yes □No [□n/a	5,		
Short Hold Time analyses (<72hr):	⊡Yes ⊠‱ I		6.		
Rush Turn Around Time requested:	□Yes 🗹 No [□n/a	7.		
Sufficient volume:	⊠Yes □No	□n/a	В.		
Correct containers used:	[™] Yes □No I	□n/a			
Pace containers used:	Yes 🗆 No 🛛	□n/a	9.		
Containers intact:	⊠Yes ⊡No I	□n/a	10.		
Unpreserved 5035A soils frozen w/in 48hrs?	□Yes □No		11		
Filtered volume received for dissolved tests?	□Yes ⊡¶o	□n/a	12.		
Sample labels match COC:	t TYes □No	□n/a			
Includes date/time/ID/analyses Matrix:	m		13.		
All containers needing preservation have been checked.	□Yes □No				
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No -		14.		
Exceptions: KOR, coliform, TOC, O&G, WI-DRO (water), Phenolics	⊡Yes ⊡No		Initial when completed		_ot # of added
Trip Blank present:	TYes □No	□n/A			
Pace Trip Blank lot # (if purchased):	/		15.		
Headspace in VOA vials (>6mm):	□Yes 杞No	□n/a	16.		
Project sampled in USDA Regulated Area:	□Yes □No -	ETN/A	17. List State:		
Client Notification/ Resolution: Copy COC	C to Client?	Y / N	Field Data	a Required?	Y / N
Person Contacted: Date	e/Time:				
Comments/ Resolution:					
Project Manager Review:			Date: 12110	+	



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section / Required (Client Information:	Section B Required Project Information:	Section C Invoice Information:		Page:	o	
Company:	Environ	Report To: Wendy Stonestreet	Attention: Tamara Gleason	Г			
Address;	7500 College Blvd., Ste. 925	Copy To: Tamara Gleason	Company Name:	DECI NATON AC	ENCV		
	Overland Park, KS 66210	tgleason@environcorp.com	Address:		ROLIND WATER		CING WATED
Email To:	wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote				
Phone: 9	13-553-5926 Fax:	Project Name: Fort Smith, AR	Reterance: Pace Project MJ WallS	Site Location			
Requested	I Due Date/TAT: S/DAU/DALD	Project Number: 3434446A	Pace Profile #: 7444 water, 7709 soil	STATE:	AR		
ŀ			Request	ed Analysis Filtered (Y	IN) VIII		
Ο Ř	ection D Valid Matrix C Network Client Information MATRIX	Codes code () COLLECTED	Preservatives				
	PRINKING WATER WATER WASER WASER WASER PRODUCT SOLSOLD				(N/A		
	SAMPLE ID WIFE (A-Z, 0-9 /) OTHER Sample IDs MUST BE UNIQUE TISSUE	5 중 옷 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	TAINERS Ved 5 Tost 1 Safficilist) əninolri;	1 6100	£.15.
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2	17-06 - 6w - 201501	120 25 31 1/20/15/1520	5 3 X			1411	100
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Susses .	ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION DATE	TIME ACCEPTED BY / AFFILIATION	DATE TIM		SAMPLE CON	SNOILIO
		MULTIAN CANEGON 1/20/15	SILI SILI	April Valis 830	+-1	7 7	٢
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Pa		SAMPLER NAME AND SIGNATUR	SE CONTRACTOR			()	act
ige 1		PRINT Name of SAMPLER:	Michael Eddings	-). uj d	(N\Y) 692 (I	(N/) (N/)
3 of		SIGNATURE of SAMPLER:	: IVAA 2 (MM/DD/Y)	1/20/15	meT	eol eol	() IdmeS
13	*Important Note: By signing this form you are accepting Pa	ace's NET 30 day payment terms and agreeing to late charges of 1,5% per month for	or any invoices not paid within 30 days		F-ALL-Q-0	20rev.07, 15-Fe	h-2007

F-ALL-Q-020rev.07, 15-Feb-2007



2655 Park Center Dr., Suite A Simi Valley, CA 93065 T: +1 805 526 7161 F: +1 805 526 7270 www.alsglobal.com

LABORATORY REPORT

January 29, 2015

Wendy Stonestreet Environ International Corporation 7500 College Boulevard, Suite 925 Overland Park, KS 66210

RE: Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on January 21, 2015. For your reference, these analyses have been assigned our service request number P1500238.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at <u>www.alsglobal.com</u>. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 4:49 pm, Jan 29, 2015

Kelly Horiuchi Laboratory Director



2655 Park Center Dr., Suite A Simi Valley, CA 93065 T: +1 805 526 7161 F: +1 805 526 7270 www.alsglobal.com

Client:Environ International CorporationProject:Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A

Service Request No: P1500238

CASE NARRATIVE

The sample was received intact under chain of custody on January 21, 2015 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa canister was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.


2655 Park Center Dr., Suite A Simi Valley, CA 93065 **T:** +1 805 526 7161 **F:** +1 805 526 7270 <u>www.alsglobal.com</u>

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm_	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp- services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	838341
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaborat oryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413- 14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA01627201 4-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at <u>www.alsglobal.com</u>, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

DETAIL SUMMARY REPORT

Client: Project ID:	Environ Internat Whirlpool, Ft Si	tional Cor nith 1st Q	poration Quarter Vapo	or / 3434399.	A			Service Request: P1500238
Date Received:	1/21/2015							
Time Received:	09:35		Date	Time	Container	Pi1	Pf1	D-15 - VOC SIM
Client Sample ID	Lab Code	Matrix	Collected	Collected	ID	(psig)	(psig)	DI
VP-05-201501	P1500238-001	Air	1/16/2015	17:30	SC01520	-1.00	3.69	X

	2655 Park Center Dr Simi Valley, Californi Phone (805) 526-716	ive, Suite / a 93065 31	4	Requested Turnarour	rd Time in Business	Days (Surcharge	s) please circle			ALS Project N	Cicos Ci
	⁻ ax (805) 526-7270			1 Day (100%) 2 Day (7	5%) 3 Day (50%) 4	Day (35%) 5 Day	(25%) 10-Day-St	andard	ALS Contact.		
Company Name & Address (Reporting Informs ENV/RON	ation)			Project Name	1 FI Smi	th lst	Quarter	Valor	Analysis	H Method	
7500 College Biva Ste 48 Muerhind Park, KS 6	15 10210			Project Number	t.			-			
Project Manager TOMMY GIEas	QD			F.O. # / Billing Informat	TSDO Colle	Dr Blud	SK 925		ç		
Phone 913-553-5926	ax			Dverland F	dik, KS	u stanes	heeteen	1) Norvol	51-10 5		Comments e.g. Actual
Email Address for Result Reporting	e talcara	Renvi	concorp.	Sampler (Print & Sign)					01.0		Preservative
Client Sample ID	Laboratory I ID Number Col	Jate	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	70M		specific instructions
VP-05-201501	-11/ -11/	115	130	5001520	0A00976	-30 "Ha	-5" Ha	25	\times		Normal TAT
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Report Tier I - Results (Default in not specified)	Тіег Levels - plea: Tier III (Results + QC & Tier IV (Date Validatior	se select Calibration Package) 1	Summaries)0% Surcharge		EDD required YES	/ No Units:		Chain of C INTACT	ustody Seal: (C BROKEN AR	ircle) BSENT	Project Requirements (MRLs, QAPP)
Relinquished by: (Signature) NMM NO	NUSHIEL		111,15-	Time	Received by: (Signatur	(L)	depo		Date:	Time:	
Refinquished by: (Signature)	- ASA		late:	Time:	Received by: (Signature				Date	Time.	Cooler / Blank Temperature°C
	, ,										

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Page

Air - Chain of Custody Record & Analytical Service Request

ALS Environmental Sample Acceptance Check Form

Client:	Environ Intern	ational Corporation	~	F		Work order:	P1500238			
Project:	Whirlpool, Ft S	Smith 1st Quarter Var	or / 3434399	A						
Sample(s) received on:	1/21/15		I	Date opened:	1/21/15	by:	ADAV	ĪD	
Note: This	form is used for <u>all</u>	samples received by ALS.	The use of this fe	orm for custody se	als is strictly me	ant to indicate prese	nce/absence and no	ot as an in	dication	of
compliance	or nonconformity.	Thermal preservation and p	pH will only be e	valuated either at t	he request of the	e client and/or as requ	uired by the method	d/SOP. Yes	No	N/A
1	Were sample (containers properly n	oarked with cl	ient sample ID'	n					\square
2	Container(s) st	unnlied by ALS?		ent sample in	•					
2	Did sample co	ntainers arrive in goo	od condition?					X		
4	Were chain-of	-custody papers used	and filled out	:?				X		
5	Did sample co	ntainer labels and/or	tags agree wi	th custody pap	ers?			X		
6	Was sample v	olume received adequ	ate for analys	is?				X		
7	Are samples w	ithin specified holding	g times?					X		
8	Was proper ter	mperature (thermal p	reservation) o	of cooler at rece	pipt adhered t	.0?				X
9	Was a trip bla	nk received?							X	
10	Were custody	seals on outside of co	oler/Box?					X		
		Location of seal(s)?					Sealing Lid?	X		
	Were signature	and date included?						X		
	Were seals inta	act?						X		
	Were custody a	seals on outside of sar	nple container	ť?					X	
		Location of seal(s)?					Sealing Lid?			X
	Were signature	and date included?								X
	Were seals inta	act?								X
11	Do container	rs have appropriate pr	reservation, a	ccording to me	thod/SOP or	Client specified	information?			X
	Is there a clier	nt indication that the s	ubmitted samp	ples are pH pre	served?					X
	Were <u>VOA vi</u>	als checked for prese	nce/absence of	f air bubbles?						X
	Does the client	t/method/SOP require	that the analy	st check the sar	mple pH and	if necessary alter	r it?			X
12	Tubes:	Are the tubes capp	ed and intact?	?						X
		Do they contain m	noisture?							X
13	Badges:	Are the badges pr	operly capped	l and intact?						X
	-	Are dual bed badg	ges separated a	and individually	y capped and	intact?				X
Lah	Somula ID	Container	Doquired	Deceived	Adjusted	VOA Headspace	Receiu	at / Dros	restion	
Lau	Sample ID	Container	Kequiteu	Ketelveu	Aujusteu	VOA Heauspace	Keten	n / 1 lese	A vation	1

Lab Sample ID	Description	pH *	pH	pH	(Presence/Absence)	Comments
P1500238-001.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Page 1 of 1

Client:	Environ International Corporation		
Client Sample ID:	VP-05-201501	ALS Project ID: P1	500238
Client Project ID:	Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A	ALS Sample ID: P1	500238-001
Test Code:	EPA TO-15 SIM	Date Collected: 1/	16/15
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received: 1/2	21/15
Analyst:	Wida Ang	Date Analyzed: 1/2	23/15
Sample Type:	6.0 L Summa Canister	Volume(s) Analyzed:	1.00 Liter(s)
Test Notes:			
Container ID:	SC01520		
	Initial Pressure (psig): -1.00 Final Pressure	(psig): 3.69	

Canister Dilution Factor: 1.34

CAS #	Compound	Result	MRL	Result	MRL	Data
		μg/m³	µg∕m³	ppbV	ppbV	Qualifier
75-01-4	Vinyl Chloride	4.6	0.034	1.8	0.013	
75-35-4	1,1-Dichloroethene	0.85	0.034	0.21	0.0085	
156-60-5	trans-1,2-Dichloroethene	0.15	0.034	0.038	0.0085	
75-34-3	1,1-Dichloroethane	ND	0.034	ND	0.0083	
156-59-2	cis-1,2-Dichloroethene	0.084	0.034	0.021	0.0085	
107-06-2	1,2-Dichloroethane	0.20	0.034	0.050	0.0083	
71-55-6	1,1,1-Trichloroethane	ND	0.034	ND	0.0061	
79-01-6	Trichloroethene	0.84	0.034	0.16	0.0062	
127-18-4	Tetrachloroethene	0.79	0.034	0.12	0.0049	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Page 1 of 1

Client:	Environ International Corporation		
Client Sample ID:	Method Blank	ALS Project ID: P1500238	
Client Project ID:	Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A	ALS Sample ID: P150123-MB	
Test Code:	EPA TO-15 SIM	Date Collected: NA	
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received: NA	
Analyst:	Wida Ang	Date Analyzed: 1/23/15	
Sample Type:	6.0 L Summa Canister	Volume(s) Analyzed: 1.00 Liter	(s)
Test Notes:			

Canister Dilution Factor: 1.00

CAS #	Compound	Result	MRL	Result	MRL	Data
		μg/m³	µg∕m³	ppbV	ppbV	Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client:Environ International CorporationClient Project ID:Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A

ALS Project ID: P1500238

Test Code:	EPA TO-15 SIM	
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date(s) Collected: 1/16/15
Analyst:	Wida Ang	Date(s) Received: 1/21/15
Sample Type:	6.0 L Summa Canister(s)	Date(s) Analyzed: 1/23/15
Test Notes:		

		1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene		
Client Sample ID	ALS Sample ID	%	%	%	Acceptance	Data
		Recovered	Recovered	Recovered	Limits	Qualifier
Method Blank	P150123-MB	96	106	92	70-130	
Lab Control Sample	P150123-LCS	97	89	94	70-130	
VP-05-201501	P1500238-001	90	94	71	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client:	Environ International Corporation	
Client Sample ID:	Lab Control Sample	ALS Project ID: P1500238
Client Project ID:	Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A	ALS Sample ID: P150123-LCS
Test Code:	EPA TO-15 SIM	Date Collected: NA
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received: NA
Analyst:	Wida Ang	Date Analyzed: 1/23/15
Sample Type:	6.0 L Summa Canister	Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:		

					ALS	
CAS #	Compound	Spike Amount	Result	% Recovery	Acceptance	Data
		μg/m³	μg/m³		Limits	Qualifier
75-01-4	Vinyl Chloride	4.04	3.55	88	63-120	
75-35-4	1,1-Dichloroethene	4.28	4.44	104	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	3.93	93	66-115	
75-34-3	1,1-Dichloroethane	4.16	4.03	97	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	4.18	98	66-116	
107-06-2	1,2-Dichloroethane	4.20	3.67	87	61-118	
71-55-6	1,1,1-Trichloroethane	4.16	4.01	96	65-114	
79-01-6	Trichloroethene	4.16	3.78	91	66-116	
127-18-4	Tetrachloroethene	3.96	3.86	97	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result. Reported results are shown in concentration units and as a result of the calculation, may vary slightly.



Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 (913)599-5665

January 27, 2015

Wendy Stonestreet Environ International Corporation 7500 College Blvd Ste 925 Overland Park, KS 66210

RE: Project: FORT SMITH AR VOCs Pace Project No.: 60186566

Dear Wendy Stonestreet:

Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Myercels

Mary Jane Walls maryjane.walls@pacelabs.com PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation





CERTIFICATIONS

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219 WY STR Certification #: 2456.01 Arkansas Certification #: 13-012-0 Illinois Certification #: 003097 Iowa Certification #: 118 Kansas/NELAP Certification #: E-10116 Louisiana Certification #: 03055 Nevada Certification #: KS000212008A Oklahoma Certification #: 9205/9935 Texas Certification #: T104704407 Utah Certification #: KS00021



SAMPLE SUMMARY

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186566001	MW-175-GW-20150120	Water	01/20/15 13:45	01/21/15 08:30
60186566002	ТВ-02	Water	01/20/15 13:45	01/21/15 08:30



SAMPLE ANALYTE COUNT

Project:FORT SMITH AR VOCsPace Project No.:60186566

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186566001	MW-175-GW-20150120	EPA 5030B/8260	PRG	38
60186566002	ТВ-02	EPA 5030B/8260	PRG	38



PROJECT NARRATIVE

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

Method: EPA 5030B/8260

Description:8260 MSVClient:Environ_ARDate:January 27, 2015

General Information:

2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable): All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

Sample: MW-175-GW-20150120	Lab ID:	60186566001	Collecte	d: 01/20/18	5 13:45	Received: 07	1/21/15 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 5	5030B/8260						
Acetone	16.1 ug	g/L	10.0	5.0	1		01/24/15 01:38	67-64-1	
Benzene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	71-43-2	
Bromodichloromethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	75-27-4	
Bromoform	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	75-25-2	
Bromomethane	ND ug	g/L	5.0	2.5	1		01/24/15 01:38	74-83-9	
2-Butanone (MEK)	ND ug	g/L	10.0	5.0	1		01/24/15 01:38	78-93-3	
Carbon disulfide	ND ug	g/L	5.0	2.5	1		01/24/15 01:38	75-15-0	
Carbon tetrachloride	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	56-23-5	
Chlorobenzene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	108-90-7	
Chloroethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	75-00-3	
Chloroform	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	67-66-3	
Chloromethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	74-87-3	
Dibromochloromethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	124-48-1	
1,1-Dichloroethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	75-34-3	
1,2-Dichloroethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	107-06-2	
1,1-Dichloroethene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	75-35-4	
cis-1,2-Dichloroethene	2.0 ug	g/L	1.0	0.50	1		01/24/15 01:38	156-59-2	
trans-1,2-Dichloroethene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	156-60-5	
1,2-Dichloropropane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	78-87-5	
cis-1,3-Dichloropropene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	10061-01-5	
trans-1,3-Dichloropropene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	10061-02-6	
Ethylbenzene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	100-41-4	
2-Hexanone	ND ug	g/L	10.0	5.0	1		01/24/15 01:38	591-78-6	
Methylene chloride	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug	g/L	10.0	2.5	1		01/24/15 01:38	108-10-1	
Styrene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	79-34-5	
Tetrachloroethene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	127-18-4	
Toluene	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	108-88-3	
1,1,1-Trichloroethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	71-55-6	
1,1,2-Trichloroethane	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	79-00-5	
Trichloroethene	123 ug	g/L	1.0	0.50	1		01/24/15 01:38	79-01-6	
Vinyl chloride	ND ug	g/L	1.0	0.50	1		01/24/15 01:38	75-01-4	
Xylene (Total)	ND ug	g/L	3.0	1.5	1		01/24/15 01:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96 %		80-120		1		01/24/15 01:38	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %		80-120		1		01/24/15 01:38	17060-07-0	
Toluene-d8 (S)	101 %		80-120		1		01/24/15 01:38	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		01/24/15 01:38		



ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

Sample: TB-02	Lab ID: 6	60186566002	Collecte	d: 01/20/15	5 13:45	Received: 01	/21/15 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical M	lethod: EPA 5	030B/8260						
Acetone	ND ug	/L	10.0	5.0	1		01/23/15 21:55	67-64-1	
Benzene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	71-43-2	
Bromodichloromethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	75-27-4	
Bromoform	ND ug	/L	1.0	0.50	1		01/23/15 21:55	75-25-2	
Bromomethane	ND ug	/L	5.0	2.5	1		01/23/15 21:55	74-83-9	
2-Butanone (MEK)	ND ug	/L	10.0	5.0	1		01/23/15 21:55	78-93-3	
Carbon disulfide	ND ug	/L	5.0	2.5	1		01/23/15 21:55	75-15-0	
Carbon tetrachloride	ND ug	/L	1.0	0.50	1		01/23/15 21:55	56-23-5	
Chlorobenzene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	108-90-7	
Chloroethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	75-00-3	
Chloroform	ND ug	/L	1.0	0.50	1		01/23/15 21:55	67-66-3	
Chloromethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	74-87-3	
Dibromochloromethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	124-48-1	
1,1-Dichloroethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	75-34-3	
1,2-Dichloroethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	107-06-2	
1,1-Dichloroethene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	75-35-4	
cis-1,2-Dichloroethene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	156-59-2	
trans-1,2-Dichloroethene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	156-60-5	
1,2-Dichloropropane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	78-87-5	
cis-1,3-Dichloropropene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	10061-01-5	
trans-1,3-Dichloropropene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	10061-02-6	
Ethylbenzene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	100-41-4	
2-Hexanone	ND ug	/L	10.0	5.0	1		01/23/15 21:55	591-78-6	
Methylene chloride	ND ug	/L	1.0	0.50	1		01/23/15 21:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug	/L	10.0	2.5	1		01/23/15 21:55	108-10-1	
Styrene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	79-34-5	
Tetrachloroethene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	127-18-4	
Toluene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	108-88-3	
1,1,1-Trichloroethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	71-55-6	
1,1,2-Trichloroethane	ND ug	/L	1.0	0.50	1		01/23/15 21:55	79-00-5	
Trichloroethene	ND ug	/L	1.0	0.50	1		01/23/15 21:55	79-01-6	
Vinyl chloride	ND ug	/L	1.0	0.50	1		01/23/15 21:55	75-01-4	
Xylene (Total)	ND ug	/L	3.0	1.5	1		01/23/15 21:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101 %		80-120		1		01/23/15 21:55	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %		80-120		1		01/23/15 21:55	17060-07-0	
Toluene-d8 (S)	98 %		80-120		1		01/23/15 21:55	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		01/23/15 21:55		

REPORT OF LABORATORY ANALYSIS



QUALITY CONTROL DATA

EPA 5030B/8260

8260 MSV Water 10 mL Purge

Analysis Method:

Analysis Description:

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

QC Batch:	MSV/67172
QC Batch Method:	EPA 5030B/

QC Batch Method: EPA 5030B/8260 Associated Lab Samples: 60186566001, 60186566002

METHOD BLANK: 1510757 Matrix: Water Associated Lab Samples: 60186566001, 60186566002 Blank Reporting Result Limit Qualifiers Parameter Units Analyzed 1,1,1-Trichloroethane ND 1.0 01/23/15 21:25 ug/L 1,1,2,2-Tetrachloroethane ug/L ND 10 01/23/15 21:25 1,1,2-Trichloroethane ug/L ND 1.0 01/23/15 21:25 ND 01/23/15 21:25 1,1-Dichloroethane ug/L 1.0 1,1-Dichloroethene ug/L ND 1.0 01/23/15 21:25 1,2-Dichloroethane ug/L ND 1.0 01/23/15 21:25 1,2-Dichloropropane ug/L ND 1.0 01/23/15 21:25 2-Butanone (MEK) ug/L ND 10.0 01/23/15 21:25 2-Hexanone ug/L ND 10.0 01/23/15 21:25 4-Methyl-2-pentanone (MIBK) ug/L ND 10.0 01/23/15 21:25 Acetone ND 10.0 01/23/15 21:25 ug/L Benzene ND 1.0 01/23/15 21:25 ug/L Bromodichloromethane ND 01/23/15 21:25 ug/L 10 01/23/15 21:25 ND Bromoform 1.0 ug/L ND 5.0 01/23/15 21:25 Bromomethane ug/L Carbon disulfide ug/L ND 5.0 01/23/15 21:25 Carbon tetrachloride ug/L ND 1.0 01/23/15 21:25 Chlorobenzene ug/L ND 1.0 01/23/15 21:25 Chloroethane ND 1.0 01/23/15 21:25 ug/L Chloroform 01/23/15 21:25 ug/L ND 1.0 Chloromethane ND 1.0 01/23/15 21:25 ug/L cis-1,2-Dichloroethene ND 1.0 01/23/15 21:25 ug/L cis-1,3-Dichloropropene ND 1.0 01/23/15 21:25 ug/L ND 01/23/15 21:25 Dibromochloromethane ug/L 1.0 Ethylbenzene ND 10 01/23/15 21:25 ug/L Methylene chloride ug/L ND 1.0 01/23/15 21:25 Styrene ug/L ND 1.0 01/23/15 21:25 Tetrachloroethene ug/L ND 1.0 01/23/15 21:25 Toluene ND 1.0 01/23/15 21:25 ug/L trans-1,2-Dichloroethene ND 01/23/15 21:25 ug/L 10 trans-1,3-Dichloropropene ug/L ND 1.0 01/23/15 21:25 Trichloroethene ug/L ND 1.0 01/23/15 21:25 Vinyl chloride ug/L ND 1.0 01/23/15 21:25 Xylene (Total) ug/L ND 30 01/23/15 21:25 101 1,2-Dichloroethane-d4 (S) % 80-120 01/23/15 21:25 4-Bromofluorobenzene (S) % 100 80-120 01/23/15 21:25 % Toluene-d8 (S) 99 80-120 01/23/15 21:25

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS



QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

LABORATORY CONTROL SAMPLE: 1510758

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	73-121	
1,1,2-Trichloroethane	ug/L	20	20.4	102	80-120	
1,1-Dichloroethane	ug/L	20	20.5	103	80-120	
1,1-Dichloroethene	ug/L	20	20.6	103	80-120	
1,2-Dichloroethane	ug/L	20	21.2	106	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	101	101	67-122	
2-Hexanone	ug/L	100	99.7	100	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	109	109	76-120	
Acetone	ug/L	100	101	101	72-120	
Benzene	ug/L	20	21.9	110	80-120	
Bromodichloromethane	ug/L	20	21.7	109	80-120	
Bromoform	ug/L	20	20.0	100	73-138	
Bromomethane	ug/L	20	15.4	77	38-137	
Carbon disulfide	ug/L	20	22.3	112	71-129	
Carbon tetrachloride	ug/L	20	21.5	108	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	19.3	97	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	80-120	
Dibromochloromethane	ug/L	20	20.4	102	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	20.3	102	80-120	
Styrene	ug/L	20	21.8	109	80-123	
Tetrachloroethene	ug/L	20	20.6	103	80-123	
Toluene	ug/L	20	20.3	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.7	104	80-129	
Trichloroethene	ug/L	20	20.4	102	80-120	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	65.3	109	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

MATRIX SPIKE & MATRIX SPI	IKE DUPLI	CATE: 15107	59		1510760							
		60186403027	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.1	22.4	111	112	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.0	19.9	95	100	78-116	5	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.7	20.6	93	103	84-112	10	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS



QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

MATRIX SPIKE & MATRIX SI	PIKE DUPLIC	CATE: 15107	59		1510760							
			MS	MSD								
		60186403027	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1-Dichloroethane	ug/L		20	20	20.8	20.6	104	103	82-121	1	9	
1,1-Dichloroethene	ug/L	ND	20	20	21.8	21.7	109	109	78-124	0	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.5	21.3	103	107	79-121	4	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.6	20.3	98	102	82-119	4	10	
2-Butanone (MEK)	ug/L	ND	100	100	86.1	91.4	86	91	66-114	6	13	
2-Hexanone	ug/L	ND	100	100	86.7	93.5	87	94	71-116	8	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	95.6	97.7	96	98	72-122	2	12	
Acetone	ug/L	ND	100	100	111	86.8	109	85	65-113	24	27	
Benzene	ug/L	ND	20	20	22.6	21.9	113	109	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	21.1	21.0	106	105	77-127	0	10	
Bromoform	ug/L	ND	20	20	18.5	19.2	93	96	70-125	4	11	
Bromomethane	ug/L	ND	20	20	12.2	15.8	61	79	41-140	25	30	
Carbon disulfide	ug/L	ND	20	20	24.8	23.2	124	116	68-140	7	10	
Carbon tetrachloride	ug/L	ND	20	20	22.7	22.6	114	113	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	21.0	21.4	105	107	83-121	2	9	
Chloroethane	ug/L	ND	20	20	20.9	17.3	105	86	69-126	19	19	
Chloroform	ug/L	ND	20	20	20.1	20.2	101	101	86-119	0	9	
Chloromethane	ug/L	ND	20	20	19.1	13.0	96	65	23-168	38	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.8	20.8	102	103	85-117	0	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.5	19.9	98	99	74-115	2	12	
Dibromochloromethane	ug/L	ND	20	20	19.0	19.7	95	98	65-134	4	11	
Ethylbenzene	ug/L	ND	20	20	21.2	20.9	106	104	51-148	2	14	
Methylene chloride	ug/L	ND	20	20	19.7	18.3	99	92	75-118	7	11	
Styrene	ug/L	ND	20	20	21.3	21.2	107	106	17-174	1	10	
Tetrachloroethene	ug/L	12.2	20	20	32.1	33.3	100	105	78-127	3	9	
Toluene	ug/L	ND	20	20	20.9	21.3	105	106	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.7	21.5	108	108	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.7	19.7	93	98	71-120	5	10	
Trichloroethene	ug/L	0.82J	20	20	21.2	21.1	102	102	70-135	0	10	
Vinyl chloride	ug/L	ND	20	20	21.5	19.5	107	97	58-130	10	11	
Xylene (Total)	ug/L	ND	60	60	65.6	64.0	109	107	39-158	2	15	
1,2-Dichloroethane-d4 (S)	%						102	101	80-120			
4-Bromofluorobenzene (S)	%						98	102	80-120			
Toluene-d8 (S)	%						98	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS



QUALIFIERS

Project: FORT SMITH AR VOCs

Pace Project No.: 60186566

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:FORT SMITH AR VOCsPace Project No.:60186566

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186566001 60186566002	MW-175-GW-20150120 TB-02	EPA 5030B/8260 EPA 5030B/8260	MSV/67172 MSV/67172		



Sample Condition Upon Receipt

WO#:60186566

Client Name: Environ			Optional
Courier: Fed Ex UPS USPS Client	Commercial 🗆 P	ace 🗆 Other 🗆	Proi Due Date:
Tracking #: 5689 1283 9504	Pace Shipping Label	Used? Yes 🗆 No 🗗	Proj Name:
Custody Seal on Cooler/Box Present: Yes Dr No	□ Seals intact:	Yes, 🖉 No 🗆	
Packing Material: Bubble Wrap Bubble Ba	ags 🗆 🛛 Foam	None 🗆 Other I	
Thermometer Used: 7239 / T-194 Ty	ype of Ice: Mer B	ue None Samples received	on ice, cooling process has begun.
Cooler Temperature: 1-7	(circ	e one) Date and in	itials of person examining
Temperature should be above freezing to 6°C			Mr 12113
Chain of Custody present:	ZYes No N/A	1.	
Chain of Custody filled out:		2.	
Chain of Custody relinquished:	Tyes No N/A	3.	
Sampler name & signature on COC:	ØYes □No □N/A	4.	
Samples arrived within holding time:	Yes No N/A	5.	
Short Hold Time analyses (<72hr):	□Yes ☑No □N/A	6.	
Rush Turn Around Time requested:	□Yes □No □N/A	7.	
Sufficient volume:	⊠Yes □No □N/A	8.	
Correct containers used:	[™] Yes □No □N/A		
Pace containers used:	TYes No N/A	9.	
Containers intact:	ØYes □No □N/A	10.	
Unpreserved 5035A soils frozen w/in 48hrs?	□Yes □No BN/A	11.	
Filtered volume received for dissolved tests?	□Yes ⊡¶o □N/A	12.	
Sample labels match COC:	Yes No N/A		
Includes date/time/ID/analyses Matrix:	m.	13.	
All containers needing preservation have been checked.	□Yes □No ₽Ń/A		
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No ₽Ń/A	14.	
Exceptions: KOR, coliform, TOC, O&G, WI-DRO (water),	₽Yes □No	Initial when I_ completed p	ot # of added
Trip Blank present:	TYes No N/A		
Pace Trip Blank lot # (if purchased): CCT 09 20	14	15.	
Headspace in VOA vials (>6mm):	□Yes ₽NO □N/A		
		16.	
Project sampled in USDA Regulated Area:	□Yes □No +1N/A	17. List State:	
Client Notification/ Resolution: Copy CO	OC to Client? Y /	N Field Data Required?	Y / N
Person Contacted: Da	ate/Time:		
Comments/ Resolution:			
		Ibite	
Project Manager Review:		Date: Vorus	

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Sectio Require	IA I Client Information:	Section B Required Project Information:			Sectio	on C				E C	ige:	of	-	
Compar	v. Environ	Report To: Wendy Stonest	reet		Attenti	on: Tam	iara Gleason		Г					
Address	7500 College Blvd., Ste. 925	Copy To: Tamara Gleaso	Ę	_	Сотра	iny Name:			REGULATO	RY AGENC	X	The second		
	Overland Park, KS 66210	tgleason@envii	oncorp.com		Addres	10			L NPDES	GROL	JND WATER		NKING WATEF	ſ
Email Tt	wstonestreet@environcorp.com	Purchase Order No.:			Pace Q	Jote ce:			L UST	F RCRA		L OTH	ER	
Phone:	913-553-5926 Fax:	Project Name: Fort Smith,	AR		Pace Pr Manage	oject MJ	Valls		Site Locatio	E				
Reques	ed Due Date TAT: Standard TAT	Project Number 3434	446.4		Pace Pr	ofile #: 744.	t water, 7709	soil	STATE					
								Requeste	d Analysis Filte	ered (Y/N)				
	Section D Valid Matrix Co Required Client Information MATRIX	odes codes code code	COLLECTI	ED		Pres	ervatives	1 N /A		in T				
	WATER WATER WASTE WASTE PRODUCT SOLLSOLD	및 2 주 및 대 의 인 J 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	MPOSITE	COMPOSITE END/GRAB				Saire			(N/A)			
	SAMPLE ID WIPE (A-Z, 0-9 / .) OTHER Sample IDs MUST BE UNIQUE TISSUE	2 단 분 년 (G=C 20DE (se	-		25 TA 9M3 2932NIATI	рәл		is Test) eninoldO	601	99298	
# WƏLI		D XIATAM SAMPLE T B B B B B B B B B B B B B B B B B B B	TIME	TIME		HUO ³ H ^S 2O ⁴ Oublezel	HOR Na ₂ S ₂ O ₃ Nethanol Ionarthanol	zylsnA1 ₁₉ ineilo 082) Isubisə7	Dare Droi	act No / I sh	5
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	ADDILIONAL COMMENTS	RELINQUISHED BY	/ AFFILIATION	DATE	WILL	ш	ACCEPTE	D BY / AFFILIATION	DATE	TIME		SAMPLE CC	ONDITIONS	
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ge 1			PRINT	Name of SAMPLE	N N	ck 2	Lurwell	er			. uj di		es Ini	(N/2
4 of			SIGNA	TURE of SAMPLE		1 M) and the	DATE Signed	1/20/15		meT	eol eol	dme2	

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"Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007



2655 Park Center Dr., Suite A Simi Valley, CA 93065 T: +1 805 526 7161 F: +1 805 526 7270 www.alsglobal.com

LABORATORY REPORT

January 29, 2015

Wendy Stonestreet Environ International Corporation 7500 College Boulevard, Suite 925 Overland Park, KS 66210

RE: Whirlpool Fort Smith / 3433244 A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on January 20, 2015. For your reference, this analysis has been assigned our service request number P1500228.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at <u>www.alsglobal.com</u>. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Keen An By Kelly Horiachi at 4:50 pm, Jan 29, 2015

Kelly Horiuchi Laboratory Director



2655 Park Center Dr., Suite A Simi Valley, CA 93065 T: +1 805 526 7161 F: +1 805 526 7270 www.alsglobal.com

Client: Environ International Corporation Project: Whirlpool Fort Smith / 3433244 A Service Request No: P1500228

CASE NARRATIVE

The sample was received intact under chain of custody on January 20, 2015 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa canister was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



2655 Park Center Dr., Suite A Simi Valley, CA 93065 **T:** +1 805 526 7161 **F:** +1 805 526 7270 <u>www.alsglobal.com</u>

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp- services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	838341
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaborat oryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413- 14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA01627201 4-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at <u>www.alsglobal.com</u>, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

DETAIL SUMMARY REPORT

Client:	Environ Internation	tional Cor	poration					Service Request: P1500228	
Project ID:	Whirlpool Fort	Smith / 3	433244 A						
Date Received:	1/20/2015								
Time Received:	10:10								
								MI	
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								O N	
			Date	Time	Container	Pi1	Pf1	-1(
Client Sample ID	Lab Code	Matrix	Collected	Collected	ID	(psig)	(psig)	LU	
VP-7-201501	P1500228-001	Air	1/19/2015	18:20	SC01519	-3.44	3.90	х	

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	2222	-				¢(``	Commen e.g. Actui	Preservati	specific the instruction	eltent sp						P.			1	,	4	-		Project Require (MRLs, QAPP)		Cooler / Blank Temperature
	ALS Project N		Mathod				- -			and the second					-, ⁻					-0 ³			, k	Circle) \BSENT	Time:	Time: 10191
	2	ALS Contact:	Analveid		(-0_	oads L K	45.	(1) (2) (2) (2)	R							5					ý.ř		Custody Seal: (Date:	Date
	tandard		3	1				N	Sample Volume	20												*		Chain of 0 INTACT		
	es) please circle (25%) 10-Day-S			· ·				En Sun	Canister End Pressure "Hg/psig	Ŕ	ų ·														i i v	Cn
	Days (Surcharg Day (35%) 5 Day	<	The second	Wind wind					Canister Start Pressure "Hg	27.5														/ No Units:	. (Geen Am
	nd Time in Business 5%) 3 Day (50%) 41		t	101	A	tion .	14 14	urueller	Flow Controller ID (Bầr code # - FC #)	AV603498		ł		<i></i>		-		-		17			-	EDD required YES	Received by: (Signature	Received by: (Signature
	Requested Turnarou 1 Day (100%) 2 Day (7		Project Name	100	Project Number 3433244	P.O. # / Billing Informa		Sampler (Print & Sign)	Canister ID (Bar code # - AC, SC, etc.) -	01901	lin.	*	¥.					1	-						Time: 1845	Time:
C D				-				rp. Com	Time Collected	1820								2						t on Summaries)) 10% Surcharge	Date: 19/15	Date:
enter«Drive, Suit	zalifornia 93000 526-7161 5-7270	2	Ċ	925	010			virenco	Date Collected	51/61/1			•		-							1		- please selec + QC & Calibratic alidation Package		
2655 Park C	- Phone (805) - Phone (805) Fax (805) 52(The line in	mation)	· Sarth	663	lason	Fax	FFR en	Laboratory ID Number	0														art Tier Levels Tier III (Results Tier IV (Date V	N	
	3		eporting Infor	Blud	K. NS	a CI	9	En uiron			a.			•	n V ¹		J.							cified)		
	(ALS)		Company Name & Address (Re どいパペシン	7500 Collogo	Overland Par	Project Manager Tamar	1101e 913-553-593	inail Address for Result Reporting	ilent Sample ID	VP-7-201501														Tier 1 - Results (Default in not spec Tier II (Results + QC Summaries	Relinquished by: (Signature)	Relinquished by: (Signature)

5 of 10

ALS Environmental Sample Acceptance Check Form

Client	: Environ Intern	ational Corporation				Work order:	P1500228			
Project	: Whirlpool For	rt Smith / 3433244 A								
Sample	(s) received on:	1/20/15		. I	Date opened:	1/20/15	by:	KKEL	PE	
<u>Note:</u> This	form is used for <u>all</u>	samples received by ALS.	The use of this for	orm for custody se	als is strictly me	eant to indicate prese	ence/absence and n	ot as an in	dication	of
compliance	e or nonconformity.	Thermal preservation and	pH will only be e	valuated either at t	he request of the	e client and/or as rec	juired by the metho	od/SOP. Yes	No	N/A
1	Were sample (containers properly n	narked with cli	ient sample ID	?			X		
2	Container(s) s	applied by ALS?		·····				X		
3	Did sample co	intainers arrive in gor	od condition?					X		
4	Were chain-of	i-custody papers used	and filled out	:?				X		
5	Did sample co	ntainer labels and/or	tags agree wi	th custody pap	ers?			X		
6	Was sample v	olume received adequ	ate for analys	is?				X		
7	Are samples w	ithin specified holding	g times?					X		
8	Was proper te	mperature (thermal p	preservation) o	of cooler at rece	eipt adhered t	:0?				X
9	Was a trip bla	nk received?							X	
10	Were custody	seals on outside of cc	oler/Box?						X	
		Location of seal(s)?					Sealing Lid?			X
	Were signature	e and date included?								X
	Were seals inta	act?								X
	Were custody	seals on outside of sar	mple container	ť?					X	
		Location of seal(s)?					Sealing Lid?			X
	Were signature	e and date included?								X
	Were seals inta	act?								X
11	Do container	rs have appropriate pr	reservation, a	ccording to me	thod/SOP or	Client specified	information?			X
	Is there a clier	nt indication that the s	ubmitted samp	ples are pH pre	served?					X
	Were <u>VOA vi</u>	ials checked for prese	nce/absence of	f air bubbles?						X
	Does the client	t/method/SOP require	that the analy	st check the sa	mple pH and	if necessary alte	er it?			X
12	Tubes:	Are the tubes capp	ped and intact?	?						X
		Do they contain m	noisture?							X
13	Badges:	Are the badges pr	operly capped	and intact?						X
		Are dual bed badg	ges separated a	and individually	y capped and	intact?				X
Lab Sample ID Container Required Received Adjusted VOA Headspace Receipt / Preservat						ervatior				

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1500228-001.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Page 1 of 1

Client:	Environ International Corporation				
Client Sample ID:	VP-7-201501	ALS Project ID: P1500228			
Client Project ID:	Whirlpool Fort Smith / 3433244 A	ALS Sample ID: P1500228-001			
Test Code:	EPA TO-15 SIM	Date Collected: 1/19/15			
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received: 1/20/15			
Analyst:	Wida Ang	Date Analyzed: 1/23/15			
Sample Type:	6.0 L Summa Canister	Volume(s) Analyzed: 1.00 Liter(s)			
Test Notes:					
Container ID:	SC01519				
	Initial Pressure (psig): -3.44 Fina	l Pressure (psig): 3.90			
		Canister Dilution Factor: 1.65			

CAS #	Compound	Result	MRL	Result	MRL	Data
		μg/m³	$\mu g/m^3$	ppbV	ppbV	Qualifier
75-01-4	Vinyl Chloride	1.5	0.041	0.58	0.016	
75-35-4	1,1-Dichloroethene	0.42	0.041	0.11	0.010	
156-60-5	trans-1,2-Dichloroethene	ND	0.041	ND	0.010	
75-34-3	1,1-Dichloroethane	ND	0.041	ND	0.010	
156-59-2	cis-1,2-Dichloroethene	0.25	0.041	0.063	0.010	
107-06-2	1,2-Dichloroethane	0.20	0.041	0.049	0.010	
71-55-6	1,1,1-Trichloroethane	ND	0.041	ND	0.0076	
79-01-6	Trichloroethene	2.8	0.041	0.52	0.0077	
127-18-4	Tetrachloroethene	0.44	0.041	0.065	0.0061	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Page 1 of 1

Client:	Environ International Corporation	
Client Sample ID:	Method Blank	ALS Project ID: P1500228
Client Project ID:	Whirlpool Fort Smith / 3433244 A	ALS Sample ID: P150123-MB
Test Code:	EPA TO-15 SIM	Date Collected: NA
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received: NA
Analyst:	Wida Ang	Date Analyzed: 1/23/15
Sample Type: Test Notes:	6.0 L Summa Canister	Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result	MRL	Result	MRL	Data
		μg/m³	µg∕m³	ppbV	ppbV	Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client:Environ International CorporationClient Project ID:Whirlpool Fort Smith / 3433244 A

ALS Project ID: P1500228

Test Code:	EPA TO-15 SIM	
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date(s) Collected: 1/19/15
Analyst:	Wida Ang	Date(s) Received: 1/20/15
Sample Type:	6.0 L Summa Canister(s)	Date(s) Analyzed: 1/23/15
Test Notes:		

		1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene		
Client Sample ID	ALS Sample ID	%	%	%	Acceptance	Data
		Recovered	Recovered	Recovered	Limits	Qualifier
Method Blank	P150123-MB	96	106	92	70-130	
Lab Control Sample	P150123-LCS	97	89	94	70-130	
VP-7-201501	P1500228-001	92	87	93	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client:	Environ International Corporation	
Client Sample ID:	Lab Control Sample	ALS Project ID: P1500228
Client Project ID:	Whirlpool Fort Smith / 3433244 A	ALS Sample ID: P150123-LCS
Test Code:	EPA TO-15 SIM	Date Collected: NA
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received: NA
Analyst:	Wida Ang	Date Analyzed: 1/23/15
Sample Type:	6.0 L Summa Canister	Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:		

					ALS	
CAS #	Compound	Spike Amount	Result	% Recovery	Acceptance	Data
		$\mu g/m^3$	μg/m³		Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.04	3.55	88	63-120	
75-35-4	1,1-Dichloroethene	4.28	4.44	104	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	3.93	93	66-115	
75-34-3	1,1-Dichloroethane	4.16	4.03	97	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	4.18	98	66-116	
107-06-2	1,2-Dichloroethane	4.20	3.67	87	61-118	
71-55-6	1,1,1-Trichloroethane	4.16	4.01	96	65-114	
79-01-6	Trichloroethene	4.16	3.78	91	66-116	
127-18-4	Tetrachloroethene	3.96	3.86	97	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result. Reported results are shown in concentration units and as a result of the calculation, may vary slightly.



Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 (913)599-5665

January 27, 2015

Wendy Stonestreet Environ International Corporation 7500 College Blvd Ste 925 Overland Park, KS 66210

RE: Project: FORT SMITH AR VOCs Pace Project No.: 60186564

Dear Wendy Stonestreet:

Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Myercels

Mary Jane Walls maryjane.walls@pacelabs.com PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation





CERTIFICATIONS

Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219 WY STR Certification #: 2456.01 Arkansas Certification #: 13-012-0 Illinois Certification #: 003097 Iowa Certification #: 118 Kansas/NELAP Certification #: E-10116 Louisiana Certification #: 03055 Nevada Certification #: KS000212008A Oklahoma Certification #: 9205/9935 Texas Certification #: T104704407 Utah Certification #: KS00021



SAMPLE SUMMARY

Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186564001	MW-176-GW-20150120	Water	01/20/15 16:15	01/21/15 08:30
60186564002	VP-10-GW-20150120	Water	01/20/15 15:55	01/21/15 08:30



SAMPLE ANALYTE COUNT

Project:FORT SMITH AR VOCsPace Project No.:60186564

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186564001	MW-176-GW-20150120	EPA 5030B/8260	PRG	38
60186564002	VP-10-GW-20150120	EPA 5030B/8260	PRG	38


PROJECT NARRATIVE

Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

Method: EPA 5030B/8260

Description:8260 MSVClient:Environ_ARDate:January 27, 2015

General Information:

2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable): All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67208

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

Sample: MW-176-GW-20150120	Lab ID:	60186564001	Collected	d: 01/20/15	5 16:15	Received: 01	I/21/15 08:30 Ma	atrix: Water	
			Report						
Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 5	030B/8260						
Acetone	ND u	ıg/L	10.0	5.0	1		01/24/15 01:08	67-64-1	
Benzene	ND u	ıg/L	1.0	0.50	1		01/24/15 01:08	71-43-2	
Bromodichloromethane	ND u	ıg/L	1.0	0.50	1		01/24/15 01:08	75-27-4	
Bromoform	ND u	ıg/L	1.0	0.50	1		01/24/15 01:08	75-25-2	
Bromomethane	ND u	ıg/L	5.0	2.5	1		01/24/15 01:08	74-83-9	
2-Butanone (MEK)	ND u	ig/L	10.0	5.0	1		01/24/15 01:08	78-93-3	
Carbon disulfide	ND u	ig/L	5.0	2.5	1		01/24/15 01:08	75-15-0	
Carbon tetrachloride	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	56-23-5	
Chlorobenzene	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	108-90-7	
Chloroethane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	75-00-3	
Chloroform	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	67-66-3	
Chloromethane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	74-87-3	
Dibromochloromethane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	124-48-1	
1,1-Dichloroethane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	75-34-3	
1,2-Dichloroethane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	107-06-2	
1,1-Dichloroethene	2.6 u	ig/L	1.0	0.50	1		01/24/15 01:08	75-35-4	
cis-1,2-Dichloroethene	16.8 u	ig/L	1.0	0.50	1		01/24/15 01:08	156-59-2	
trans-1,2-Dichloroethene	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	156-60-5	
1,2-Dichloropropane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	78-87-5	
cis-1,3-Dichloropropene	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	10061-01-5	
trans-1,3-Dichloropropene	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	10061-02-6	
Ethylbenzene	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	100-41-4	
2-Hexanone	ND u	ig/L	10.0	5.0	1		01/24/15 01:08	591-78-6	
Methylene chloride	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND u	ig/L	10.0	2.5	1		01/24/15 01:08	108-10-1	
Styrene	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	79-34-5	
Tetrachloroethene	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	127-18-4	
Toluene	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	108-88-3	
1,1,1-Trichloroethane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	71-55-6	
1,1,2-Trichloroethane	ND u	ig/L	1.0	0.50	1		01/24/15 01:08	79-00-5	
Trichloroethene	720 u	ig/L	10.0	5.0	10		01/27/15 01:46	79-01-6	
Vinyl chloride	0.57J u	ig/L	1.0	0.50	1		01/24/15 01:08	75-01-4	
Xylene (Total)	ND u	ig/L	3.0	1.5	1		01/24/15 01:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100 %	6	80-120		1		01/24/15 01:08	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %	6	80-120		1		01/24/15 01:08	17060-07-0	
Toluene-d8 (S)	101 %	6	80-120		1		01/24/15 01:08	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		01/24/15 01:08		



ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

Sample: VP-10-GW-20150120	Lab ID: 601	86564002 Collecte	d: 01/20/1	5 15:55	Received: 0'	1/21/15 08:30 Ma	atrix: Water	
		Report						
Parameters	Results L	Jnits Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Met	hod: EPA 5030B/8260						
Acetone	5.8J ug/L	10.0	5.0	1		01/24/15 01:23	67-64-1	
Benzene	ND ug/L	1.0	0.50	1		01/24/15 01:23	71-43-2	
Bromodichloromethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	75-27-4	
Bromoform	ND ug/L	1.0	0.50	1		01/24/15 01:23	75-25-2	
Bromomethane	ND ug/L	5.0	2.5	1		01/24/15 01:23	74-83-9	
2-Butanone (MEK)	ND ug/L	10.0	5.0	1		01/24/15 01:23	78-93-3	
Carbon disulfide	ND ug/L	5.0	2.5	1		01/24/15 01:23	75-15-0	
Carbon tetrachloride	ND ug/L	1.0	0.50	1		01/24/15 01:23	56-23-5	
Chlorobenzene	ND ug/L	1.0	0.50	1		01/24/15 01:23	108-90-7	
Chloroethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	75-00-3	
Chloroform	ND ug/L	1.0	0.50	1		01/24/15 01:23	67-66-3	
Chloromethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	74-87-3	
Dibromochloromethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	124-48-1	
1,1-Dichloroethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	75-34-3	
1,2-Dichloroethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	107-06-2	
1,1-Dichloroethene	2.8 ug/L	1.0	0.50	1		01/24/15 01:23	75-35-4	
cis-1,2-Dichloroethene	18.8 ug/L	1.0	0.50	1		01/24/15 01:23	156-59-2	
trans-1,2-Dichloroethene	0.51J ug/L	1.0	0.50	1		01/24/15 01:23	156-60-5	
1,2-Dichloropropane	ND ug/L	1.0	0.50	1		01/24/15 01:23	78-87-5	
cis-1,3-Dichloropropene	ND ug/L	1.0	0.50	1		01/24/15 01:23	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	0.50	1		01/24/15 01:23	10061-02-6	
Ethylbenzene	ND ug/L	1.0	0.50	1		01/24/15 01:23	100-41-4	
2-Hexanone	ND ug/L	10.0	5.0	1		01/24/15 01:23	591-78-6	
Methylene chloride	ND ug/L	1.0	0.50	1		01/24/15 01:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	2.5	1		01/24/15 01:23	108-10-1	
Styrene	ND ug/L	1.0	0.50	1		01/24/15 01:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	79-34-5	
Tetrachloroethene	ND ug/L	1.0	0.50	1		01/24/15 01:23	127-18-4	
Toluene	ND ug/L	1.0	0.50	1		01/24/15 01:23	108-88-3	
1,1,1-Trichloroethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	71-55-6	
1,1,2-Trichloroethane	ND ug/L	1.0	0.50	1		01/24/15 01:23	79-00-5	
Trichloroethene	636 ug/L	10.0	5.0	10		01/27/15 02:01	79-01-6	
Vinyl chloride	0.61J ug/L	1.0	0.50	1		01/24/15 01:23	75-01-4	
Xvlene (Total)	ND ug/L	3.0	1.5	1		01/24/15 01:23	1330-20-7	
Surrogates	- 0							
4-Bromofluorobenzene (S)	99 %	80-120		1		01/24/15 01:23	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %	80-120		1		01/24/15 01:23	17060-07-0	
Toluene-d8 (S)	95 %	80-120		1		01/24/15 01:23	2037-26-5	
Preservation pH	1.0	0.10	0.10	1		01/24/15 01:23		

REPORT OF LABORATORY ANALYSIS



Analysis Method:

Analysis Description:

EPA 5030B/8260

8260 MSV Water 10 mL Purge

Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

QC Batch:	MSV/67172
QC Batch Method:	EPA 5030B/

QC Batch Method: EPA 5030B/8260 Associated Lab Samples: 60186564001, 60186564002

METHOD BLANK: 1510757	7	Matrix:	Water		
Associated Lab Samples:	60186564001, 60186564002				
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 21:25	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 21:25	
2-Hexanone	ug/L	ND	10.0	01/23/15 21:25	
4-Methyl-2-pentanone (MIBK) ug/L	ND	10.0	01/23/15 21:25	
Acetone	ug/L	ND	10.0	01/23/15 21:25	
Benzene	ug/L	ND	1.0	01/23/15 21:25	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 21:25	
Bromoform	ug/L	ND	1.0	01/23/15 21:25	
Bromomethane	ug/L	ND	5.0	01/23/15 21:25	
Carbon disulfide	ug/L	ND	5.0	01/23/15 21:25	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 21:25	
Chlorobenzene	ug/L	ND	1.0	01/23/15 21:25	
Chloroethane	ug/L	ND	1.0	01/23/15 21:25	
Chloroform	ug/L	ND	1.0	01/23/15 21:25	
Chloromethane	ug/L	ND	1.0	01/23/15 21:25	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 21:25	
Ethylbenzene	ug/L	ND	1.0	01/23/15 21:25	
Methylene chloride	ug/L	ND	1.0	01/23/15 21:25	
Styrene	ug/L	ND	1.0	01/23/15 21:25	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 21:25	
Toluene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Vinyl chloride	ug/L	ND	1.0	01/23/15 21:25	
Xylene (Total)	ug/L	ND	3.0	01/23/15 21:25	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/23/15 21:25	
4-Bromofluorobenzene (S)	%	100	80-120	01/23/15 21:25	
Toluene-d8 (S)	%	99	80-120	01/23/15 21:25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS



Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

LABORATORY CONTROL SAMPLE: 1510758

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	73-121	
1,1,2-Trichloroethane	ug/L	20	20.4	102	80-120	
1,1-Dichloroethane	ug/L	20	20.5	103	80-120	
1,1-Dichloroethene	ug/L	20	20.6	103	80-120	
1,2-Dichloroethane	ug/L	20	21.2	106	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	101	101	67-122	
2-Hexanone	ug/L	100	99.7	100	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	109	109	76-120	
Acetone	ug/L	100	101	101	72-120	
Benzene	ug/L	20	21.9	110	80-120	
Bromodichloromethane	ug/L	20	21.7	109	80-120	
Bromoform	ug/L	20	20.0	100	73-138	
Bromomethane	ug/L	20	15.4	77	38-137	
Carbon disulfide	ug/L	20	22.3	112	71-129	
Carbon tetrachloride	ug/L	20	21.5	108	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	19.3	97	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	80-120	
Dibromochloromethane	ug/L	20	20.4	102	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	20.3	102	80-120	
Styrene	ug/L	20	21.8	109	80-123	
Tetrachloroethene	ug/L	20	20.6	103	80-123	
Toluene	ug/L	20	20.3	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.7	104	80-129	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	65.3	109	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

MATRIX SPIKE & MATRIX SI	PIKE DUPLI	CATE: 15107	59		1510760							
			MS	MSD								
		60186403027	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.1	22.4	111	112	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.0	19.9	95	100	78-116	5	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.7	20.6	93	103	84-112	10	10	
1,1-Dichloroethane	ug/L	ND	20	20	20.8	20.6	104	103	82-121	1	9	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS



Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

MATRIX SPIKE & MATRIX S	PIKE DUPLI	CATE: 15107	59		1510760							
			MS	MSD								
		60186403027	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1-Dichloroethene	ug/L	ND	20	20	21.8	21.7	109	109	78-124	0	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.5	21.3	103	107	79-121	4	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.6	20.3	98	102	82-119	4	10	
2-Butanone (MEK)	ug/L	ND	100	100	86.1	91.4	86	91	66-114	6	13	
2-Hexanone	ug/L	ND	100	100	86.7	93.5	87	94	71-116	8	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	95.6	97.7	96	98	72-122	2	12	
Acetone	ug/L	ND	100	100	111	86.8	109	85	65-113	24	27	
Benzene	ug/L	ND	20	20	22.6	21.9	113	109	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	21.1	21.0	106	105	77-127	0	10	
Bromoform	ug/L	ND	20	20	18.5	19.2	93	96	70-125	4	11	
Bromomethane	ug/L	ND	20	20	12.2	15.8	61	79	41-140	25	30	
Carbon disulfide	ug/L	ND	20	20	24.8	23.2	124	116	68-140	7	10	
Carbon tetrachloride	ug/L	ND	20	20	22.7	22.6	114	113	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	21.0	21.4	105	107	83-121	2	9	
Chloroethane	ug/L	ND	20	20	20.9	17.3	105	86	69-126	19	19	
Chloroform	ug/L	ND	20	20	20.1	20.2	101	101	86-119	0	9	
Chloromethane	ug/L	ND	20	20	19.1	13.0	96	65	23-168	38	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.8	20.8	102	103	85-117	0	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.5	19.9	98	99	74-115	2	12	
Dibromochloromethane	ug/L	ND	20	20	19.0	19.7	95	98	65-134	4	11	
Ethylbenzene	ug/L	ND	20	20	21.2	20.9	106	104	51-148	2	14	
Methylene chloride	ug/L	ND	20	20	19.7	18.3	99	92	75-118	7	11	
Styrene	ug/L	ND	20	20	21.3	21.2	107	106	17-174	1	10	
Tetrachloroethene	ug/L	12.2	20	20	32.1	33.3	100	105	78-127	3	9	
Toluene	ug/L	ND	20	20	20.9	21.3	105	106	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.7	21.5	108	108	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.7	19.7	93	98	71-120	5	10	
Vinyl chloride	ug/L	ND	20	20	21.5	19.5	107	97	58-130	10	11	
Xylene (Total)	ug/L	ND	60	60	65.6	64.0	109	107	39-158	2	15	
1,2-Dichloroethane-d4 (S)	%						102	101	80-120			
4-Bromofluorobenzene (S)	%						98	102	80-120			
Toluene-d8 (S)	%						98	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS



Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

Toluene-d8 (S)

%

QC Batch: MS	SV/67208		Analysis	Method:	EF	PA 5030B/826	30		
QC Batch Method: EP	A 5030B/8260	1	Analysis	Descriptio	n: 82	60 MSV Wat	er 10 mL Puro	ge	
Associated Lab Samples:	60186564	001, 60186564002							
METHOD BLANK: 1511	906		Ма	trix: Wate	r				
Associated Lab Samples:	60186564	001, 60186564002							
			Blank	Rep	porting				
Parameter		Units	Result	L	.imit	Analyze	d Qua	lifiers	
Trichloroethene		ug/L		ND	1.0	01/26/15 2	1:49		
1,2-Dichloroethane-d4 (S)	%	1	01	80-120	01/26/15 21	1:49		
4-Bromofluorobenzene (S	5)	%		98	80-120	01/26/15 21	1:49		
Toluene-d8 (S)		%		97	80-120	01/26/15 21	1:49		
LABORATORY CONTRO	L SAMPLE:	1511907							
			Spike	LCS		LCS	% Rec		
Parameter		Units	Conc.	Result	0	% Rec	Limits	Qualifiers	
Trichloroethene		ug/L	20	:	20.3	101	80-120)	
1,2-Dichloroethane-d4 (S)	%				97	80-120)	
4-Bromofluorobenzene (S	5)	%				104	80-120)	

98

80-120

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: FORT SMITH AR VOCs

Pace Project No.: 60186564

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67208

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:FORT SMITH AR VOCsPace Project No.:60186564

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186564001	MW-176-GW-20150120	EPA 5030B/8260	MSV/67172		
60186564001	MW-176-GW-20150120	EPA 5030B/8260	MSV/67208		
60186564002	VP-10-GW-20150120	EPA 5030B/8260	MSV/67172		
60186564002	VP-10-GW-20150120	EPA 5030B/8260	MSV/67208		



Sample Condition Upon Receipt

WO#:60186564

Client Name: Environ Optional
Courier: Fed Ex Z UPS USPS Client Commercial Pace Other Proj Due Date:
Tracking #: 5689 1283 9504 Pace Shipping Label Used? Yes D No Proj Name:
Custody Seal on Cooler/Box Present: Yes 🖉 No 🗆 Seals intact: Yes 🖉 No 🗆
Packing Material: Bubble Wrap 🗆 Bubble Bags 🗆 Foam 🗗 None 🗆 Other 🗆
Thermometer Used: T-194 Type of Ice: Blue None Samples received on ice, cooling process has begun.
Cooler Temperature: 1-7 (circle one) Date and initials opperson examining
emperature should be above freezing to 6°C
Chain of Custody present:
Chain of Custody filled out:
Chain of Custody relinquished:
Sampler name & signature on COC: ØYes □No □N/A 4.
Samples arrived within holding time:
Short Hold Time analyses (<72hr):
Rush Turn Around Time requested:
Sufficient volume:
Correct containers used:
Pace containers used:
Containers intact:
Jnpreserved 5035A soils frozen w/in 48hrs? □Yes □No ☑N/A 11.
Filtered volume received for dissolved tests?
Sample labels match COC:
Includes date/time/ID/analyses Matrix: 13.
Il containers needing preservation have been checked.
Il containers needing preservation are found to be in \Box Yes \Box No \Box N/A 14
initial when Lot # of added
rip Blank present:
Pace Trip Blank lot # (if purchased): 00 09 204 15
leadspace in VOA vials (>6mm):
16
Project sampled in USDA Regulated Area;
ilient Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N
erson Contacted: Date/Time
comments/ Resolution:
roject Manager Review: Date: 12115

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section	A Dient Information:	Section B Required Proje	ct Inform	nation:				ώĒ	ection (imation.							Pa	:efi			
Company.	Environ	Report To: We	andy St	tonestree	¥.			A	tention:	Tan	lara G	eason			Г					1	
Address.	7500 College Blvd., Ste. 925	Copy To: Tar	nara G	Sleason				<u>s</u>	mpany h	ame;					REGU	ATORY	AGENC			1000	
	Overland Park, KS 66210	tgle	ason@	Denviron	corp.co	Ę		Ac	idress.							DES	GROI	ND WATE	L		AVÀ TED
Email To:	wstonestreet@environcorp.com	Purchase Order	No					a d	ce Quote										_ L		
Phone:	13-553-5926 Fax	Project Name:	Fort	Smith, Al	<u>م</u>			Pa	ce Project	ſW	Valls				Site L	ocation					
Requester	Due DateTAT: Standard TAT	Project Number.	34	HA E	101	-		Pa	de Profile	744	4 water	, 7709	soil			TATE:	AF	2000			
Ľ		1												Requeste	d Analysi	s Filtere	(NIA) F				
v) 02	ection D Valid Matrix C equired Clerit Information MATRIX	to left)	(amc)		COLI	ECTED				Pres	ervative	s	† N /A								
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	Sample IDS MUST BE UNIQUE TISSUE	:CODE (র হ হ হ	e) agyt					O TA 9M9T C	рәли			I	JSOT Sis)ell ouroada				Chlorine	loc	1863	roy
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	RW-176-GW-2015012	0 WT	Ŵ			510711	1615	: (a)		1×	1	D V						Я	Pace	roject No.	/ Lab I.D.
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世でと	ADDITIONAL COMMENTS	RELIN	IHSIND	ED BY / A	FFILIATIO	NC	DATE		TIME		AC	CEPTED	BY / AI	FILIATION	- °	1	JIME		SAMPLE	CONDITION	2
		N	N	12	ENVI	Ron	21/22/1	-	512	V				124	12/1	V V	3	41	7	7	7
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15	*Important Note: By signing this form you are accepting Par	ce's NET 30 day pay	ment terr	ms and agre	eing to late	e charges of	5% per month	for any in	voices no	paid with	in 30 days								2007		

F-ALL-Q-020rev.07, 15-Feb-2007



2655 Park Center Dr., Suite A Simi Valley, CA 93065 T: +1 805 526 7161 F: +1 805 526 7270 www.alsglobal.com

LABORATORY REPORT

January 29, 2015

Wendy Stonestreet Environ International Corporation 7500 College Boulevard, Suite 925 Overland Park, KS 66210

RE: Whirlpool Fort Smith / 3433244A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on January 20, 2015. For your reference, this analysis has been assigned our service request number P1500223.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at <u>www.alsglobal.com</u>. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

Kelly Hmu

Kelly Horiuchi Laboratory Director



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Client: Environ International Corporation Project: Whirlpool Fort Smith / 3433244A Service Request No: P1500223

CASE NARRATIVE

The sample was received intact under chain of custody on January 20, 2015 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The response for the Chlorobenzene-d5 internal standard in the sample was unacceptable because of suspected matrix interference. The Bromofluorobenzene surrogate recovery was below the acceptance limit due to Chlorobenzene-d5 response. Since the target compounds reported were not associated with this internal standard, the data quality has not been affected. No corrective action was necessary.

The Summa canister was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



2655 Park Center Dr., Suite A Simi Valley, CA 93065 **T:** +1 805 526 7161 **F:** +1 805 526 7270 <u>www.alsglobal.com</u>

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm_	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp- services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	838341
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaborat oryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413- 14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA01627201 4-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at <u>www.alsglobal.com</u>, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

DETAIL SUMMARY REPORT

Client:	Environ Internation	tional Cor	rporation					Service Request: P1500223
Project ID:	Whirlpool Fort	Smith / 34	433244A					
Date Received:	1/20/2015							
Time Received	10.10							
	10.10							M
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								00
								-
			Date	Time	Container	Pi1	Pf1	-15
Client Sample ID	Lab Code	Matrix	Collected	Collected	ID	(psig)	(psig)	DT
VP-9-201501	P1500223-001	Air	1/19/2015	16:05	SC02030	-3.04	3.78	Х

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-	2000 Park Ce Simi Vallev, Ce	anter Urive, Su alifornia 9306	urte A 5									
(ALS)	Phone (805) 5 Fax (805) 526-	526-7161 -7270		Requested Turnaro 1 Day (100%) 2 Day (und Time in Business 75%) 3 Day (50%) 4	Days (Surcharg Day (35%) 5 Day	es) please circle (25%) 10-Day-S	tandard	ł	ALS Project N	10 P15 00223	
	V	,			,				ALS Contact:			
EAVIZAN				Whirlpool	Fort Smi	¥	·		Analysis	Method		-
overland Park, KS	66210	2		Project Number 3433244					(~; 51			
Project Manager Tamarq Glea	Son			P.O. # / Billing Inform	ation	Same and the second second second			HJ> -01	·		
913-553-5926	Fax				- C - Company				ads.		Comments e.a. Actual	
Email Address for Result Reporting Leune	105 Pr Cor	141 race	werden &	Sampler (Print & Sign)	rueller	N	Sunt		-15 644 1426		Preservative	
Dient Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)-	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure *Hg/psig	Sample Volume	(ch Nod		specific instructions	
105102-P-9V		1605	1/61/1	004288	AV GOUNTS	-27	54	62	ど	1	client speck	23
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Tier I - Results (Default in not specified) Tier II (Results + QC Summaries	ort Tier Levels - Tier III (Results 4 Tier IV (Date Val	- please selec + QC & Calibrati Ilidation Package	on Summaries)		EDD required YES	/ No Units:		Chain of C INTACT	ustody Seal: (C BROKEN AE	rcle) SENT	Project Requirements (MRLs, QAPP)	
Relinquished by: (Sighature)	Rull	-	Date: Ulight 5	Time: RYS	Received by: (Signature		i i i i		Date:	Time:	9	
Relinquished by: (Signature)			Date:	Time:	Received by: (Signature	eees three	0		Date: Date: Date: Date: D	rime: 10/0am	Cooler / Blank Temperature°C	

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ALS Environmental Sample Acceptance Check Form

Client:	Environ Intern	ational Corporation	_	-		Work order:	P1500223			
Project:	Whirlpool For	t Smith / 3433244A								
Sample((s) received on:	1/20/15		. I	Date opened:	1/20/15	by:	KKEL	PE	
Note: This	form is used for <u>all</u>	samples received by ALS.	The use of this fo	orm for custody se	als is strictly me	ant to indicate prese	ence/absence and n	ot as an in	dication	of
compliance	or nonconformity.	Thermal preservation and p	oH will only be ev	valuated either at t	he request of the	e client and/or as rec	juired by the metho	od/SOP. Yes	No	N/A
1	Were sample (containers properly m	parked with cli	ient sample ID'	?			X		
2	Container(s) s	applied by ALS?		on surres -	,			\mathbf{X}		
3	Did sample co	intainers arrive in goo	od condition?					X		
4	Were chain-of	i-custody papers used	and filled out	:?				X		
5	Did sample co	ntainer labels and/or	tags agree wit	th custody pape	ers?			X		
6	Was sample v	olume received adequ	ate for analysi	is?				X		
7	Are samples w	vithin specified holding	g times?					X		
8	Was proper ter	mperature (thermal p	reservation) o	of cooler at rece	eipt adhered to	.0?				X
9	Was a trip bla	nk received?							X	
10	Were custody	seals on outside of co	oler/Box?						X	
		Location of seal(s)?					Sealing Lid?			X
	Were signature	e and date included?								X
	Were seals inta	act?								X
	Were custody a	seals on outside of san	nple container	r?					X	
		Location of seal(s)?					Sealing Lid?			X
	Were signature	e and date included?								X
	Were seals inta	act?								X
11	Do container	rs have appropriate pr	eservation, a	ccording to me	thod/SOP or	Client specified	information?			X
	Is there a clier	nt indication that the si	abmitted samp	ples are pH pre	served?					X
	Were <u>VOA vi</u>	ials checked for preser	nce/absence of	f air bubbles?						X
	Does the client	t/method/SOP require	that the analy	st check the sar	mple pH and	if necessary alte	er it?			X
12	Tubes:	Are the tubes capp	ed and intact?	?	-					X
		Do they contain m	oisture?							X
13	Badges:	Are the badges pr	operly capped	l and intact?						X
		Are dual bed badg	jes separated a	and individually	y capped and	intact?				X
Lab	Sample ID	Container	Required	Received	Adjusted	VOA Headspac	e Recei	pt / Pres	ervatior	1

Lab Sample ID	Description	pH *	pH	pH	(Presence/Absence)	Comments
P1500223-001.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

RESULTS OF ANALYSIS

Page 1 of 1

Client:	Environ International Corporation	
Client Sample ID:	VP-9-201501	ALS Project ID: P1500223
Client Project ID:	Whirlpool Fort Smith / 3433244A	ALS Sample ID: P1500223-001
Test Code:	EPA TO-15 SIM	Date Collected: 1/19/15
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received: 1/20/15
Analyst:	Wida Ang	Date Analyzed: 1/23/15
Sample Type:	6.0 L Summa Canister	Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:		
Container ID:	SC02030	
	Initial Pressure (psig): -3.04 Final Press	sure (psig): 3.78
		Canister Dilution Factor: 1.58

CAS #	Compound	Result	MRL	Result	MRL	Data
		μg/m³	$\mu g/m^3$	ppbV	ppbV	Qualifier
75-01-4	Vinyl Chloride	4.1	0.040	1.6	0.015	
75-35-4	1,1-Dichloroethene	1.7	0.040	0.42	0.010	
156-60-5	trans-1,2-Dichloroethene	0.14	0.040	0.035	0.010	
75-34-3	1,1-Dichloroethane	0.36	0.040	0.089	0.0098	
156-59-2	cis-1,2-Dichloroethene	0.14	0.040	0.035	0.010	
107-06-2	1,2-Dichloroethane	2.3	0.040	0.56	0.0098	
71-55-6	1,1,1-Trichloroethane	0.045	0.040	0.0083	0.0072	
79-01-6	Trichloroethene	31	0.040	5.8	0.0074	
127-18-4	Tetrachloroethene	0.29	0.040	0.043	0.0058	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

RESULTS OF ANALYSIS

Page 1 of 1

Client:	Environ International Corporation		
Client Sample ID:	Method Blank	ALS Project ID: 1	P1500223
Client Project ID:	Whirlpool Fort Smith / 3433244A	ALS Sample ID:	P150123-MB
Test Code:	EPA TO-15 SIM	Date Collected:	NA
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received:	NA
Analyst:	Wida Ang	Date Analyzed:	1/23/15
Sample Type: Test Notes:	6.0 L Summa Canister	Volume(s) Analyzed:	1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result	MRL	Result	MRL	Data
		μg/m³	µg∕m³	ppbV	ppbV	Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

Client:Environ International CorporationClient Project ID:Whirlpool Fort Smith / 3433244A

ALS Project ID: P1500223

Test Code:	EPA TO-15 SIM	
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date(s) Collected: 1/19/15
Analyst:	Wida Ang	Date(s) Received: 1/20/15
Sample Type:	6.0 L Summa Canister(s)	Date(s) Analyzed: 1/23/15
Test Notes:		

		1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene		
Client Sample ID	ALS Sample ID	%	%	%	Acceptance	Data
		Recovered	Recovered	Recovered	Limits	Qualifier
Method Blank	P150123-MB	96	106	92	70-130	
Lab Control Sample	P150123-LCS	97	89	94	70-130	
VP-9-201501	P1500223-001	92	90	16	70-130	S

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery. S = Surrogate recovery not within specified limits.

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client:	Environ International Corporation		
Client Sample ID:	Lab Control Sample	ALS Project ID: P150	0223
Client Project ID:	Whirlpool Fort Smith / 3433244A	ALS Sample ID: P150	123-LCS
Test Code:	EPA TO-15 SIM	Date Collected: NA	
Instrument ID:	Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19	Date Received: NA	
Analyst:	Wida Ang	Date Analyzed: 1/23/	15
Sample Type:	6.0 L Summa Canister	Volume(s) Analyzed: 0.	125 Liter(s)
Test Notes:			

					ALS	
CAS #	Compound	Spike Amount	Result	% Recovery	Acceptance	Data
		μg/m³	μg/m³		Limits	Qualifier
75-01-4	Vinyl Chloride	4.04	3.55	88	63-120	
75-35-4	1,1-Dichloroethene	4.28	4.44	104	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	3.93	93	66-115	
75-34-3	1,1-Dichloroethane	4.16	4.03	97	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	4.18	98	66-116	
107-06-2	1,2-Dichloroethane	4.20	3.67	87	61-118	
71-55-6	1,1,1-Trichloroethane	4.16	4.01	96	65-114	
79-01-6	Trichloroethene	4.16	3.78	91	66-116	
127-18-4	Tetrachloroethene	3.96	3.86	97	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result. Reported results are shown in concentration units and as a result of the calculation, may vary slightly.