# Marshall Environmental Management, Incorporated

Established in 1987
Certified Industrial Hygiene
Environmental Science
Occupational Health & Safety
Asbestos Management
Toxic & Hazardous Waste
Medical Hazards Management
Research & Consultation

March 2, 2015

Jared Jakubowski, Associate Planner City of Moore Community Development 301 North Broadway Moore, OK 73160

#### RE: ROYAL PARK REDEVELOPMENT TRACT – ASBESTOS & LEAD SOIL SAMPLING

Dear Mr. Jakubowski:

Marshall Environmental Management, Incorporated (MEM) has completed the review of the analytical data resulting from the environmental soil sampling that took place on February 19, 2015 of the Royal Park Redevelopment Tract located in Moore, Oklahoma. This soil-sampling event was accomplished for the purpose of evaluating the soil for the presence of asbestos or lead-based paint contamination following the May 2013 tornado. Composite soil samples representative of each pad site were collected so that a strategy that follows the regulations set forth by the Environmental Protection Agency (EPA) may be prepared for the management and/or abatement (i.e. the removal and disposal) of material(s) that may contain asbestos or lead-based paint.

According to the Environmental Protection Agency (EPA) with regard to *Target Housing and Child-Occupied Facilities*<sup>1</sup>, a LBP Hazard² is any condition that creates or has the potential to create an exposure to lead-contaminated dust, soil or paint by means of deterioration, friction and/or impact, which could result in adverse human-health effects. As such, soil collected from *High Contact Play Areas* that contains concentrations of lead that are equal to or greater than 400-milligrams per kilogram (≥400-mg/kg), and ≥1,200-mg/kg for soil collected from *Other Residential Yard Areas*, are defined as LBP Hazards. Furthermore, the EPA and the Oklahoma Department of Labor define an Asbestos-Containing Material (ACM) as any material that contains asbestos in concentrations greater than one percent (>1%). As such, asbestos was detected in trace amounts (i.e. less than 1%) in samples 13A & 14A, therefore is not considered asbestos containing material. Subsequently, the lead-based paint and asbestos concentration detected in the soil samples were below the aforementioned levels. On pad sites where asbestos was detected in the soil, recommendations suggest visual inspection and resampling to determine where the contamination originated. Reference the tables on the following page for a summary of the laboratory analyses.

In conclusion, the sample collection process and the determination of compliance were carried out in accordance with *Good Industrial Practices* under the direction of Jamie Marshall, Certified Industrial (CIH) and President of MEM. The Chain of Custody and associated laboratory analyses are provided for your records as an attachment to this report. Once you have had a chance to review, please email or call with any questions. Thank you for allowing Marshall Environmental Management Incorporated the opportunity to be of service.

Sincerely,

Marshall Environmental Management, Incorporated

President

Attachments

<sup>1</sup> Requirements for Lead-based Paint Activities in Target Housing and Child-occupied Facilities (40 Code of Federal Regulations [CFR] Part 745

<sup>&</sup>lt;sup>2</sup> 40-CFR, Part 745.65 Lead-Based Paint Hazards <a href="http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=ac762921cec2401d59ba7e2e6c419dbc&n=40y32.0.1.1.14&r=PART&ty=HTML#40:32.0.1.1.14.2.1.3">http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=ac762921cec2401d59ba7e2e6c419dbc&n=40y32.0.1.1.14&r=PART&ty=HTML#40:32.0.1.1.14.2.1.3</a>

#### ANALYTICAL SUMMARY

TABLE I: LEAD-BASED PAINT SOIL CONCENTRATION - ANALYTICAL SUMMARY

LAB ID	SAMPLE LOCATION	SIDE/AREA	RESULTS	ACCEPTABLE LEVEL
1L	701 SW 14 <sup>TH</sup> STREET	COMPOSITE	<38.2 – mg/kg	400-mg/kg
2L	703 SW 14 <sup>TH</sup> STREET	COMPOSITE	<38.0 – mg/kg	400-mg/kg
3L	705 SW 14 <sup>TH</sup> STREET	COMPOSITE	<40.1 – mg/kg	400-mg/kg
4L	707 SW 14 <sup>TH</sup> STREET	COMPOSITE	<37.7 – mg/kg	400-mg/kg
5L	709 SW 14 <sup>TH</sup> STREET	COMPOSITE	<39.3 – mg/kg	400-mg/kg
6L	711 SW 14 <sup>TH</sup> STREET	COMPOSITE	<36.2 – mg/kg	400-mg/kg
7L	713 SW 14 <sup>TH</sup> STREET	COMPOSITE	<39.5 – mg/kg	400-mg/kg
8L	715 SW 14 <sup>TH</sup> STREET	COMPOSITE	<39.5 – mg/kg	400-mg/kg
9L	700 SW 14 <sup>TH</sup> STREET	COMPOSITE	<36.4 – mg/kg	400-mg/kg
10L	704 SW 14 <sup>TH</sup> STREET	COMPOSITE	<35.7 – mg/kg	400-mg/kg
11L	708 SW 14 <sup>TH</sup> STREET	COMPOSITE	<35.4 – mg/kg	400-mg/kg
12L	712 SW 14 <sup>TH</sup> STREET	COMPOSITE	<35.7 – mg/kg	400-mg/kg
13L	716 SW 14 <sup>TH</sup> STREET	COMPOSITE	<34.0 – mg/kg	400-mg/kg
14L	720 SW 14 <sup>TH</sup> STREET	COMPOSITE	<38.5 – mg/kg	400-mg/kg
15L	724 SW 14 <sup>TH</sup> STREET	COMPOSITE	<38.4 – mg/kg	400-mg/kg
16L	1701 MACLAREN	COMPOSITE	<35.6 – mg/kg	400-mg/kg
17L	1703 MACLAREN	COMPOSITE	<38.9 – mg/kg	400-mg/kg
18L	1705 MACLAREN	COMPOSITE	<38.1 – mg/kg	400-mg/kg
19L	1707 MACLAREN	COMPOSITE	<39.5 – mg/kg	400-mg/kg
20L	1709 MACLAREN	COMPOSITE	<35.7 – mg/kg	400-mg/kg
21L	1711 MACLAREN	COMPOSITE	<38.9 – mg/kg	400-mg/kg
22L	1713 MACLAREN	COMPOSITE	<39.0 – mg/kg	400-mg/kg
23L	1715 MACLAREN	COMPOSITE	<37.8 – mg/kg	400-mg/kg
24L	1717 MACLAREN	COMPOSITE	<38.9 – mg/kg	400-mg/kg
25L	1719 MACLAREN	COMPOSITE	<38.9 – mg/kg	400-mg/kg
26L	1721 MACLAREN	COMPOSITE	<35.6 – mg/kg	400-mg/kg
27L	1718 MACLAREN	COMPOSITE	<39.1 – mg/kg	400-mg/kg
28L	1716 MACLAREN	COMPOSITE	<38.9 – mg/kg	400-mg/kg
29L	1714 MACLAREN	COMPOSITE	<39.4 – mg/kg	400-mg/kg
30L	1708 MACLAREN	COMPOSITE	<36.4 – mg/kg	400-mg/kg
31L	1704 MACLAREN	COMPOSITE	<39.6 – mg/kg	400-mg/kg
32L	1716 KENT CIRCLE	COMPOSITE	<38.3 – mg/kg	400-mg/kg
33L	1700 MACLAREN	COMPOSITE	<35.0 – mg/kg	400-mg/kg
34L	1705 JANEWAY	COMPOSITE	<37.2 – mg/kg	400-mg/kg
35L	1709 JANEWAY	COMPOSITE	<37.0 – mg/kg	400-mg/kg
36L	1713 JANEWAY	COMPOSITE	<37.9 – mg/kg	400-mg/kg
37L	1719 JANEWAY	COMPOSITE	<38.2 – mg/kg	400-mg/kg
38L	1723 JANEWAY	COMPOSITE	<36.8 – mg/kg	400-mg/kg
39L	1731 JANEWAY	COMPOSITE	<37.4 – mg/kg	400-mg/kg
40L	1735 JANEWAY	COMPOSITE	<37.4 – mg/kg	400-mg/kg
41L	701 SW 17 <sup>TH</sup>	COMPOSITE	<35.3 – mg/kg	400-mg/kg

42L	700 SW 13 <sup>TH</sup>	COMPOSITE	<36.2 – mg/kg	400-mg/kg
43L	702 SW 13 <sup>TH</sup>	COMPOSITE	<39.4 – mg/kg	400-mg/kg
44L	704 SW 13 <sup>TH</sup>	COMPOSITE	<37.3 – mg/kg	400-mg/kg
45L	706 SW 13 <sup>TH</sup>	COMPOSITE	<38.8 – mg/kg	400-mg/kg
46L	708 SW 13 <sup>TH</sup>	COMPOSITE	<37.8 – mg/kg	400-mg/kg
47L	710 SW 13 <sup>TH</sup>	COMPOSITE	<39.6 – mg/kg	400-mg/kg
48L	712 SW 13 <sup>TH</sup>	COMPOSITE	<39.4 – mg/kg	400-mg/kg
49L	714 SW 13 <sup>TH</sup>	COMPOSITE	<35.8 – mg/kg	400-mg/kg
50L	716 SW 13 <sup>TH</sup>	COMPOSITE	<36.9 – mg/kg	400-mg/kg
51L	711 SW 13 <sup>TH</sup>	COMPOSITE	<37.8 – mg/kg	400-mg/kg
52L	709 SW 13 <sup>TH</sup>	COMPOSITE	<36.2 – mg/kg	400-mg/kg
53L	707 SW 13 <sup>TH</sup>	COMPOSITE	<39.0 – mg/kg	400-mg/kg
54L	705 SW 13 <sup>TH</sup>	COMPOSITE	<35.9– mg/kg	400-mg/kg
55L	703 SW 13 <sup>TH</sup>	COMPOSITE	<39.3– mg/kg	400-mg/kg
56L	701 SW 13 <sup>TH</sup>	COMPOSITE	<38.5- mg/kg	400-mg/kg
57L	1307 JANEWAY	COMPOSITE	<38.4– mg/kg	400-mg/kg
58L	1303 JANEWAY	COMPOSITE	<38.8- mg/kg	400-mg/kg

#### TABLE II: ASBESTOS SOIL CONCENTRATION - ANALYTICAL SUMMARY

LAB ID	SAMPLE LOCATION	SIDE/AREA	RESULTS	ASBESTOS CONTAINING MATERIAL
1A	701 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
2A	703 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
3A	705 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
4A	707 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
5A	709 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
6A	711 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
7A	713 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
8A	715 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
9A	700 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
10A	704 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
11A	708 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
12A	712 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
13A	716 SW 14 <sup>TH</sup> STREET	COMPOSITE	<1% CHRYSOTILE	>1%
14A	720 SW 14 <sup>TH</sup> STREET	COMPOSITE	<1% CHRYSOTILE	>1%
15A	724 SW 14 <sup>TH</sup> STREET	COMPOSITE	N/D	>1%
16A	1701 MACLAREN	COMPOSITE	N/D	>1%
17A	1703 MACLAREN	COMPOSITE	N/D	>1%
18A	1705 MACLAREN	COMPOSITE	N/D	>1%
19A	1707 MACLAREN	COMPOSITE	N/D	>1%
20A	1709 MACLAREN	COMPOSITE	N/D	>1%
21A	1711 MACLAREN	COMPOSITE	N/D	>1%
22A	1713 MACLAREN	COMPOSITE	N/D	>1%
23A	1715 MACLAREN	COMPOSITE	N/D	>1%
24A	1717 MACLAREN	COMPOSITE	N/D	>1%
25A	1719 MACLAREN	COMPOSITE	N/D	>1%

26A	1721 MACLAREN	COMPOSITE	N/D	>1%
27A	1718 MACLAREN	COMPOSITE	N/D	>1%
27A	1716 MACLAREN	COMPOSITE	N/D	>1%
28A	1714 MACLAREN	COMPOSITE	N/D	>1%
30A	1708 MACLAREN	COMPOSITE	N/D	>1%
31A	1704 MACLAREN	COMPOSITE	N/D	>1%
32A	1716 KENT CIRCLE	COMPOSITE	N/D	>1%
33A	1700 MACLAREN	COMPOSITE	N/D	>1%
34A	1705 JANEWAY	COMPOSITE	N/D	>1%
35A	1709 JANEWAY	COMPOSITE	N/D	>1%
36A	1713 JANEWAY	COMPOSITE	N/D	>1%
37A	1719 JANEWAY	COMPOSITE	N/D	>1%
38A	1723 JANEWAY	COMPOSITE	N/D	>1%
39A	1731 JANEWAY	COMPOSITE	N/D	>1%
40A	1735 JANEWAY	COMPOSITE	N/D	>1%
41A	701 SW 17 <sup>TH</sup>	COMPOSITE	N/D	>1%
42A	700 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
43A	702 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
44A	704 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
45A	706 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
46A	708 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
47A	710 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
48A	712 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
49A	714 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
50A	716 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
51A	711 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
52A	709 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
53A	707 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
54A	705 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
55A	703 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
56A	701 SW 13 <sup>TH</sup>	COMPOSITE	N/D	>1%
57A	1307 JANEWAY	COMPOSITE	N/D	>1%
58A	1303 JANEWAY	COMPOSITE	N/D	>1%

ND - NONE DETECTED

1601 SW 89TH STREET, SUITE A-100

OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

FMAII · marshenv@swhell net

PROJECT INFORMATION		REPORT TO		INVOICE TO	
PROJECT ID PROJECT TYPE	0028-EN-021615 Environmental	CLIENT/ COMPANY	City - Chile - and Community Dovidonment	CLIENT/ COMPANY	
		ATTENTION	Jared Jakubowski	ATTENTION	Jared Jakubowski
PROJECT NAME	Royal Park Development Tract	TITLE	Associate Planner	TITLE	Associate Planner
PROJECT ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160
SITE CONTACT	Jared Jakubowski, Associate Planner	PHONE #		PHONE #	:
PHONE #		MOBILE #		MOBILE #	
MOBILE #		ALTERNATE #		ALTERNATE#	
EMAIL ADDRESS		EMAIL ADDRESS		EMAIL ADDRESS	:

SAMPLE IDENTIFICATION #		ON#		SAMPLE LOCATION	SAMPLE COMPOSITIO		
LAB#	SAMPLE DATE	FIELD#	SAMPLE DESCRIPTION	SAME DE DOCATION	COLOR	CONDITION	TYPE
0023	2-19-15	LA	1701 - SOIL	Lot - 701 SW 14th Street	Brown	Good	Misc.
		2A	703-8011	703 SW 14th street			
		3A	705-8011	705 SW 14th Street			
		44	707 - 8011	707 SW14th Street			
		5A	709-8011	709 SW 14#0 Street			
		UA	711 -8011	711 SW14+4-Streat			
		7À	713 -soil	713 SW 14th Stree	88		
		8 A	715 - Soil	715 SW14th Street			
		9A	Soil	700 SWI4th Street			
$\square$	V	10 A	5011	704 SW14# Street	4 ~	V	<b>₩</b>

Collected By	eovanie VIIavalla Initials Tim	Reimquished By	Anthara	Date Time N/A
Received By	Print Dat Initials Time	Reinquished By	N/A Print Initials	Date Time N/A

12	TURN-ARC	UND-TIME
	5-7 Business Days	
	Rush	Nest Day
	Immediate	Same Day

Good	Good
Damaged	Damaged
S. Dam.	Significantly Damaged

20 0000000	SAMPLE TYPE	
Misc.	Miscellaneous Material	
Surfacing	Surfacing Material	
TSI	Thermal System Insulation	

SAMPLE NOTES	Acceptable
METHOD OF SHIPMENT	Hand delivery
PAGE NUMBERS	

1601 SW 89TH STREET, SUITE A-100

OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

PI	ROJECT INFORMATION		REPORT TO		INVOICE TO
PROJECT ID PROJECT TYPE	0028-EN-021615 Environmental	CLIENT/ COMPANY	City of Moore - Community Development	CLIENT/ COMPANY	
		ATTENTION	Jared Jakubowski	ATTENTION	Jared Jakubowski
PROJECT NAME	Royal Park Development Tract	TITLE	Associate Planner	TITLE	Associate Planner
PROJECT ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160
SITE CONTACT	Jared Jakubowski, Associate Planner	PHONE #		PHONE #	
PHONE #		MOBILE#		MOBILE#	
MOBILE#		ALTERNATE#		ALTERNATE#	
EMAIL ADDRESS		EMAIL ADDRESS		EMAIL ADDRESS	

CA.	MPLE IDENTIFICATI	ON#			SAM	PLE COMPOS	ITION
LAB#	SAMPLE DATE	FIELD#	SAMPLE DESCRIPTION	SAMPLE LOCATION	COLOR	CONDITION	TYPE
0023	2-19-15	liA	Soil	708 - SW 14th st.	Brown	brood	misc
		12A		112 - SW 14thst.			
		13A		710 - SW 14th St.			
		144		720 -SW14th st.			
		15A		724-SW 14th Strice	-		
		IVA		1701 - Maclaren St			
		17A		1703 - Maclarenst.			<del>                                     </del>
		18A		1705 - Maclarenst			
		19A		1707 - Maclaren st.		<u> </u>	<del>                                     </del>
V	7	20 A	1	1709 - Macjarenst.	$  \Lambda  $	1	

Collected By Stephanie VIIIANCI	Nitifals Time 2-19-15	Relinquished By N/A	Print Date Initials Time N/A
CO C	Print Date	Relinguished By N/A	Print Date N/A
Received By	Initials Time	Remiquisited by	Initials Time

Standard	5-7 Business Days
 Rush	Nest Day
Immediate	Same Day

Good	Good	21	9 15 m
Damaged	Damaged		
S. Dam.	Significantly Damaged	100	

10	SAMPLE TYPE
Misc.	Miscellaneous Material
Surfacing	Surfacing Material
TSI	Thermal System Insulation

11	SAMPLE NOTES	Acce	ptab	le		
	METHOD OF SHIPMENT	HO	ne	del	iver	u
:::	PAGE NUMBERS	7		of	(/	$\Sigma$

1601 SW 89TH STREET, SUITE A-100

OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

Pl	ROJECT INFORMATION		REPORT TO		INVOICE TO
PROJECT ID PROJECT TYPE	0028-EN-021615 Environmental	CLIENT/ COMPANY	City of Moore - Community Development	CLIENT/ COMPANY	
	D 1D 1D 1D	ATTENTION	Jared Jakubowski	ATTENTION	Jared Jakubowski
PROJECT NAME	Royal Park Development Tract	TITLE	Associate Planner	TITLE	Associate Planner
PROJECT	301 North Broadway	, p.p.n.r.cc	301 North Broadway	ADDRESS	301 North Broadway
ADDRESS	Moore, OK 73160	ADDRESS	Moore, OK 73160	ADDRESS	Moore, OK 73160
SITE CONTACT	Jared Jakubowski, Associate Planner	PHONE #		PHONE #	
PHONE #		MOBILE #		MOBILE #	
MOBILE #		ALTERNATE #		ALTERNATE#	
EMAIL ADDRESS		EMAIL ADDRESS		EMAIL ADDRESS	

SAN	APLE IDENTIFICATION	ON#	CLASSIC PROGRAMMON	SAMPLE LOCATION	SAM	PLE COMPOS	ITION
LAB#	SAMPLE DATE	FIELD#	SAMPLE DESCRIPTION	SAMPLE LOCATION	COLOR	CONDITION	TYPE
0023	2-19-15	21A	80i I	1711 - Maclaren st.	Brown	Grood	misc.
		22A		1713 - Maclaren St.			<u> </u>
2 28		23A		1715 - Maclaren St.			
		24A		1717 - Macjarenst.			
		25A		1719 - Naciaren st.			
		20A		1721 - Maclaren St.			
		27A		1718 - Maciaren Street			
		28A		1714 - Lot -Maclarenst			
		29A		1714 - Maclaren st.			
4		30 A	<b>∀</b>	1908 - Maclaren st.	<u> </u>	7	$  \psi  $

Collected By Stephanie Villanella	Print Date Duties Time 2-19-15	Relinquished By N/A	Print Date N/A Initials Time
Received By	Print Date Initials Time	Relinquished By N/A	Print Date Initials Time N/A

	TURN-ARC	UND-TIME
	Standard	5-7 Business Days
200	Rush	Nest Day
	Immediate	Same Day

	SAMPLE CONDITION
Good	Good
Damaged	Damaged
S. Dam.	Significantly Damaged

Misc.	Miscellaneous Material
Surfacing	Surfacing Material
TSI	Thermal System Insulation

SAMPLE NOTES	Acceptal	ole	
METHOD OF SHIPMENT	Hand	iddi	rem
PAGE NUMBERS	ス	of	4

1601 SW 89TH STREET, SUITE A-100

OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

EMAIL: marshen	ROJECT INFORMATION		REPORT TO		INVOICE TO
PROJECT ID PROJECT TYPE	0028-EN-021615 Environmental	CLIENT/ COMPANY	City of Moore - Community Development	CLIENT/ COMPANY	
		ATTENTION	Jared Jakubowski	ATTENTION	Jared Jakubowski
PROJECT NAME	Royal Park Development Tract	TITLE	Associate Planner	TITLE	Associate Planner
PROJECT ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160
SITE CONTACT	Jared Jakubowski, Associate Planner	PHONE #		PHONE #	
PHONE #		MOBILE#		MOBILE #	
MOBILE#		ALTERNATE#		ALTERNATE #	
EMAIL ADDRESS		EMAIL ADDRESS		EMAIL ADDRESS	1.

C'A M	PLE IDENTIFICATIO	N#			SAM	PLE COMPOS	ITION
LAB#	SAMPLE DATE	FIELD#	SAMPLE DESCRIPTION	SAMPLE LOCATION	COLOR	CONDITION	TYPE
0023	2-19-15	31 A	Soil	+708-1704-Madaren St.	Brown	67000	misc
		35A32A 33A33A 34A33F 35A		Hod 17			
		33A32A		1716-House-Kent Circle			
		34A 33F		1700-Madaren St.			<u> </u>
		35 A		1705-Janeway			
		35A 3077		1709-Janeway			
		35A 30A 31A		1713 - Janeway			<u> </u>
		30 A 37A		1719- Janeway	\		
		439A		1723- Janeway			11,
V	1	39A 401A	V	1731 - Janavay			1

Collected By Sephanie	Print Date	2-19-15 Relinquished By	N/A Initials	Time N/A
Received By	Print Date Initials Time	Relinquished By	N/A Print Initials	Date Time N/A

	Standard	5-7 Business Days
20 20	Rush	Nest Day
	Immediate	Same Day

Good	Good
Damaged	Damaged
S. Dam.	Significantly Damaged

	SAMPLE TYPE
Misc. Miscellaneous Material	
Surfacing Surfacing Material	
TSI	Thermal System Insulation

SAMPLE NOTES	Accepta	ible	
METHOD OF SHIPMENT	Hand	dilly	iem
PAGE NUMBERS	4	of	W

1601 SW 89TH STREET, SUITE A-100

OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

EMAIL: marshen	ROJECT INFORMATION		REPORT TO		INVOICE TO
PROJECT ID PROJECT TYPE	0028-EN-021615 Environmental	CLIENT/ COMPANY	City of Moore - Community Development	CLIENT/ COMPANY	
		ATTENTION	Jared Jakubowski	ATTENTION	Jared Jakubowski
PROJECT NAME	Royal Park Development Tract	TITLE	Associate Planner	TITLE	Associate Planner
PROJECT ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160
SITE CONTACT	Jared Jakubowski, Associate Planner	PHONE #		PHONE #	
PHONE #		MOBILE#		MOBILE #	
MOBILE#	****	ALTERNATE#		ALTERNATE#	
EMAIL ADDRESS		EMAIL ADDRESS		EMAIL ADDRESS	

EVIAIL ADDRES					SAM	PLE COMPOS	ITION
SAM LAB#	PLE IDENTIFICATION SAMPLE DATE	ON# FIELD#	SAMPLE DESCRIPTION	SAMPLE LOCATION	COLOR	CONDITION	TYPE
0023	2-19-15	40A	Soil	1735- Janeway	Brown	Good	misc.
		418		701-08ice > PT	-		
		42A		700			
11		43 A		702			
		44 A		704			<del>                                     </del>
		45 A		700			<del>                                     </del>
		46 A		708			
		47 A		710-SW13th Street			<u> </u>
		48 A		712		<u> </u>	Ц—
$\overrightarrow{\lor}$	1	49 R	<b>√</b>	714	1	1	V

	Print Date		Print Date N/A
Collected By Slechon (1)	lanella hitials Time 7-19-15	Relinquished By N/A	Initials Time
Stephanie VII	Print Date	<b>)</b>	Print Date N/A
Received By	Initials Time	Relinquished By N/A	Initials Time
1			SAMPLE

TURN-ARC	UND-TIME
Standard	5-7 Business Days
Rush	Nest Day
Immediate	Same Day
	Standard Rush

	SAMPLE CONDITION		
Good	Good	100	
Damaged	Damaged		
S. Dam.	Significantly Damaged		

	SAMPLE TYPE
Misc.	Miscellaneous Material
Surfacing	Surfacing Material
TSI	Thermal System Insulation

SAMPLE NOTES	Acceptable
METHOD OF SHIPMENT	Hand duiven
PAGE NUMBERS	of Q

1601 SW 89TH STREET, SUITE A-100

OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

EMAIL: marsnen	ROJECT INFORMATION		REPORT TO	INVOICE TO		
PROJECT ID PROJECT TYPE	0028-EN-021615 Environmental	CLIENT/ COMPANY	City of Manya Community Davidonment	CLIENT/ COMPANY	4	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ATTENTION	Jared Jakubowski	ATTENTION	Jared Jakubowski	
PROJECT NAME	Royal Park Development Tract	TITLE	Associate Planner	TITLE	Associate Planner	
PROJECT ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160	ADDRESS	301 North Broadway Moore, OK 73160	
SITE CONTACT	Jared Jakubowski, Associate Planner	PHONE #		PHONE #		
PHONE #		MOBILE #		MOBILE#		
MOBILE#		ALTERNATE#		ALTERNATE#		
EMAIL ADDRESS		EMAIL ADDRESS		EMAIL ADDRESS		

SAMPLE IDENTIFICATION #  LAB # SAMPLE DATE FIELD #		(A)1 ((				SAMPLE COMPOSITION				
			SAMPLE DESCRIPTION SAMPLE LOCATION		COLOR	CONDITION	TYPE			
023	2-19-15	50A	1 108	7110-SN 13th		Crood	Misc			
		51A		711 - SW 18th	<u> </u>					
		52A		709 -SW 13th						
		53A		707-SW 13th						
		54A		705 - SW 13th						
		55A		703 - SW 13th						
		50 A		701-8W 13th						
		51A		1307 - Janeuray						
	<b>₩</b>	58A	٧	1303 - Janeway	7	1	<u> </u>			
V						<u> </u>				

Collected By Stephanier Villaneila	Print Date Initials Time 7-19-15	Relinquished By N/A	Print Date Initials Time
Received By	Print Date Initials Time	Relinquished By N/A	Print Date Initials Time

TURN-ARO	UND-TIME
Standard	5-7 Business Days
 Rush	Nest Day
Immediate	Same Day

	SAMPLE CONDITION
Good	Good
Damaged	Damaged
S. Dam.	Significantly Damaged

	SAMPLE TYPE
Misc.	Miscellaneous Material
Surfacing	Surfacing Material
TSI	Thermal System Insulation

SAMPLE NOTES	Acc	eŗ	tab.	le	
METHOD OF SHIPMENT			_		
PAGE NUMBERS	COLUMN TO	7	T	of	10
<del></del>		Υt	7		-

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

#### BULK ASBESTOS ANALYSIS REPORT

	PROJECT LOCATION		PROJECT LOCATION INVOICE TO						REPO	RT T	0	
Proje	ect Id.	No.	0028-	EN-021615	Client			Client				
roje	ect Na	me	Royal	Park Development Tract	Chent	ent		Chent				nity Development
Proje	ect Ty	ne	Envir	onmental	Attention	Jared Jakubows		Attentio		ared Jakubowski		
roje		, , , , , , , , , , , , , , , , , , ,			Title	Associate Plann		Title		Associate Planner		
Proje	ect Ad	dress		North Broadway	Address	301 North Broa		Address		801 North Broads		
Cont	not			e, OK 73160 Jakubowski	Phone	Moore, OK 731	60	Phone	Г	Moore, OK 73160	J	
Phon			Jaicu	Jakubowski	Fax			Fax				
Cell					Other			Other				
email					email			email				
		r h		SAMPLE DESCRIPTION/LO	CATION	SAM	PLE COMPOSITION			NO ASBES	STOS I	DETECTED
ER	-1A	Ĭ	15	701		COLOR	Brown				5%	Root/Plant Matter
M	Ľ	/IPI	, 20	SW 14th Street		CONDITION	Good				5%	Cellulose
LAB LOG NUMBER	0023-21915-PLM-1A	DATE OF SAMPLING	February 19, 2015	Soil		TYPE	Miscellaneous				45%	Quartz/Sand
0	219	OF	ruar			NOTE					20%	Clay
₽ PBI	023-	TE	Feb								20%	Silt
Ţ	0	DA									5%	Aggregate Rock
		- 1		SAMPLE DESCRIPTION/LO	CATION	SAM	PLE COMPOSITION			NO ASBES		DETECTED
ER	-2A	NI	15	703		COLOR	Brown	<1% C	alcar	eous Material	5%	Root/Plant Matte
LAB LOG NUMBER	0023-21915-PLM-2A	DATE OF SAMPLING	February 19, 2015	SW 14th Street		CONDITION	Good				4%	Cellulose
Z U	15-I	SA	y 15	Soil		ТҮРЕ	Miscellaneous				45%	Quartz/Sand
Š	-215	OF	าเนล			NOTE					20%	Clay
ΨP	023	\TE	Feb				•				20%	Silt
1		ZQ									5%	Aggregate Rock
		לז		SAMPLE DESCRIPTION/LO	CATION	SAM	PLE COMPOSITION			NO ASBES		DETECTED
LAB LOG NUMBER	[-3A	DATE OF SAMPLING	15	705		COLOR	Brown			•	5%	Root/Plant Matte
E E	J.	MP	, 20	SW 14th Street		CONDITION	Good				5%	Cellulose
Z	15-1	SA	y 15	Soil		ТҮРЕ	Miscellaneous				45%	Quartz/Sand
Š	0023-21915-PLM-3A	OF	February 19, 2015			NOTE					20%	Clay
ΨP	023	\TE	Feb				•				20%	Silt
Τ		Õ									5%	Aggregate Rock
		رح		SAMPLE DESCRIPTION/LO	CATION	SAM	PLE COMPOSITION			NO ASBES	1	DETECTED
LAB LOG NUMBER	[-4A	DATE OF SAMPLING	15	707		COLOR	Brown				5%	Root/Plant Matte
E E	0023-21915-PLM-4A	MP	February 19, 2015	SW 14th Street		CONDITION	Good				5%	Cellulose
Z U	15-1	SA	y 15	Soil		ТҮРЕ	Miscellaneous				45%	Quartz/Sand
ΓO	-215	OF	ıruar			NOTE					20%	Clay
AB	023	<b>VTE</b>	Feb								20%	Silt
Т		Ď									5%	Aggregate Rock

Dr. Charles Marshall, Ph.D	Charles 2 Mahre	February 25, 2015
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

SAMPLE COMPOSITION

Miscellaneous

Brown

Good

Polarized Light Microscopy Asbestos Analysis Test Method:

DATE OF SAMPLING

February 19, 2015

LAB LOG NUMBER 0023-21915-PLM-5A SAMPLE DESCRIPTION/LOCATION

709

SW 14th Street

Soil

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

COLOR

ТҮРЕ

NOTE

CONDITION

Lab Accreditation: AIHA PAT ID# 102334

5% Aggregate Rock

5% Root/Plant Matter

Quartz/Sand

5% Aggregate Rock

5% Cellulose

NO ASBESTOS DETECTED

45%

20% Clay 20% Silt

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

#### **BULK ASBESTOS ANALYSIS REPORT**

		PR	OJE	CT LOCATION		INVO	OICE TO			REPO	RT T	O
roje	ct Id.	No.	0028-	EN-021615	Client			Client				
roje	ect Nai	me	Royal	Park Development Tract		Jared Jakubows	i.:		City of Moore -		- Community Development	
roje	ect Typ	pe	Envir	onmental	Attention Title	Associate Plann		Attenti Title	ion	Associate Planne		
			301 N	orth Broadway		301 North Broad				301 North Broad		
	ect Ado	aress		e, OK 73160	Address	Moore, OK 731	60	Addres	SS	Moore, OK 7316	60	
onta hon			Jared	Jakubowski	Phone Fax			Phone	Phone Fax			
ell					Other			Other				
nail					email			email				
				SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION			NO ASBE	STOS 1	DETECTED
LAB LOG NUMBER	6A	SAMPLING	5	711	0.1110.1	COLOR	Brown			110 11022	1	Root/Plant Matter
TVI.	Ţ	4PL	, 201	SW 14th Street		CONDITION	Good				5%	Cellulose
7.1.5	15-P	SAI	y 19,	Soil		ТҮРЕ	Miscellaneous				45%	Quartz/Sand
1	0023-21915-PLM-6A	OF	February 19, 2015			NOTE	1				20%	Clay
	)023	DATE OF	Feb								20%	-
	٥	D/									5%	Aggregate Rock
_		ליז		SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION			NO ASBE	STOS	DETECTED
	I-7A	0023-21915-PLM-7A  ATE OF SAMPLING  February 19, 2015		713		COLOR	Brown	1%	Asph	alt	5%	Root/Plant Matte
	PLN	DATE OF SAMPLING	), 20	SW 14th Street		CONDITION	Good	1%	Fibro	us Glass	3%	Cellulose
,	915-1		ry 15	Soil		ТҮРЕ	Miscellaneous				45%	Quartz/Sand
	3-219		orua			NOTE					20%	Clay
	0053	ATE	Fel								20%	Silt
		D									5%	Aggregate Rock
		G		SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION			NO ASBE	STOS I	DETECTED
	√8-I	LIN	)15	715		COLOR	Brown				5%	Root/Plant Matte
	.PLN	MP	9, 20	SW 14th Street		CONDITION	Good				5%	Cellulose
,	915	F SA	ury 1	Soil		TYPE	Miscellaneous				45%	Quartz/Sand
	0023-21915-PLM-8A	DATE OF SAMPLING	February 19, 2015			NOTE					20%	Clay
	002	AT	F								20%	Silt
		I								1		Aggregate Rock
	∢	Ş.		SAMPLE DESCRIPTION/LO	CATION		PLE COMPOSITION			NO ASBE		DETECTED
	15-PLM-9A	SAMPLING	2015	700		COLOR	Brown				+	Root/Plant Matte
	5-PL	AM	y 19, 2015	SW 14th Street		CONDITION	Good					Cellulose
	191		ıary	Soil		TYPE	Miscellaneous				+	Quartz/Sand
	0023-219	DATE OF	Februar			NOTE	1				20%	Clay
	00	DA.	I								20%	Aggregate Rock
				SAMPLE DESCRIPTION/LO	CATION	CAMI	PLE COMPOSITION			NO ACDE		DETECTED
	10A	ING	5	704	C.111011	COLOR	Brown	1		110 ASDE		Root/Plant Matte
	,M-1	(PL)	201.	SW 14th Street		COLOR	Good				5%	Cellulose
	0023-21915-PLM-10A	DATE OF SAMPLING	February 19, 2015	Soil		ТҮРЕ	Miscellaneous				45%	Quartz/Sand
)	2191	OF.	ruary	~ ~ ~ ~		NOTE					20%	Clay
	)23-2	TE	Febi				1				20%	
İ	ŏ	DA										Aggregate Rock
_	<u> </u>	ı			0.000						1	

Dr. Charles Marshall, Ph.D	Charles 2 Mohale	February 25, 2015
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

#### **BULK ASBESTOS ANALYSIS REPORT**

		PR	OJE	CT LOCATION		INVO	DICE TO		REPOR'	ΤТ	0
Proje	ect Id.	No.	0028-	EN-021615	CII: 4			GI: 4			
Proje	ect Na	me	Royal	Park Development Tract	Client			Client	City of Moore - Con	nmui	nity Development
Proje	ect Ty	na	Envir	onmental	Attention	Jared Jakubows	ki	Attention	Jared Jakubowski		
roje	ct Iy	pe	LIIVII	onnentai	Title	Associate Plann		Title	Associate Planner		
roje	ect Ad	drece		orth Broadway	Address	301 North Broad	•	Address	301 North Broadway		
		ui css	Moore, OK 73160			Moore, OK 731	60		Moore, OK 73160		
		Jared	Jakubowski	Phone		Phone					
	hone			Fax			Fax				
Cell					Other			Other			
mail	l				email			email			
		r.		SAMPLE DESCRIPTION/LOCATION		SAMPLE COMPOSITION			NO ASBEST	os i	DETECTED
BER	-11⊿	CIN	2015	708		COLOR	Brown			5%	Root/Plant Matter
NUMBER	-PLM	SAMPLING		SW 14th Street		CONDITION	Good			5%	Cellulose
Z	15		ry 19,	Soil		TYPE	Miscellaneous		4	45%	Quartz/Sand
$\Gamma$ 0	-219	OF	February			NOTE			2	20%	Clay
LAB LOG	0023	DATE	Fel							20%	Silt
I	)	D.								5%	Aggregate Rock
	_	לז		SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION		NO ASBEST	os i	DETECTED
ER	12A	ING	2	712		COLOR	Brown			5%	Root/Plant Matter

	15.	SA	ry 1	Soil	TYPE	Miscellaneous			45%	Quartz/Sand
10	-215	301	February 1		NOTE				20%	Clay
LAB LOG N	0023-21915-	DATE OF SA	Fe						20%	Silt
		D							5%	Aggregate Rock
١	1	G		SAMPLE DESCRIPTION/LOCATION	SAMP	LE COMPOSITION		NO ASB	ESTOS I	DETECTED
BEF	-12/	SAMPLING	15	712	COLOR	Brown			5%	Root/Plant Matter
M	УĽМ	MP	9, 20	SW 14th Street	CONDITION	Good			5%	Cellulose
B	15-F	SA	ry 19	Soil	TYPE	Miscellaneous			45%	Quartz/Sand
LAB LOG NUMBER	0023-21915-PLM-12A	DATE OF	February 19, 2015		NOTE				20%	Clay
'AB	023	ATE	Fel						20%	Silt
		D							5%	Aggregate Rock
	,	ڻ ر		SAMPLE DESCRIPTION/LOCATION	SAMP	LE COMPOSITION		<1% ASBEST	OS DET	ECTED
LAB LOG NUMBER	0023-21915-PLM-13A	DATE OF SAMPLING	115	716	COLOR	Brown	<1%	Chrysotile	5%	Root/Plant Matter
M	УĽМ	MP	February 19, 2015	SW 14th Street	CONDITION	Good			4%	Cellulose
S S	15-F	SA	ry 19	Soil	TYPE	Miscellaneous			45%	Quartz/Sand
ГО	-219	10 E	brua		NOTE				20%	Clay
AB	023	ATE	Е						20%	Silt
_		D							5%	Aggregate Rock
~	_	G		SAMPLE DESCRIPTION/LOCATION	SAMP	LE COMPOSITION		<1% ASBEST	OS DET	ECTED
LAB LOG NUMBER	0023-21915-PLM-14A	DATE OF SAMPLING	115	720	COLOR	Brown	<1%	Chrysotile	5%	Root/Plant Matter
M	J.	MP	February 19, 2015	SW 14th Street	CONDITION	Good			4%	Cellulose
C S	15-1	SA	ry 1	Soil	TYPE	Miscellaneous			45%	Quartz/Sand
ГО	-219	10 E	brua		NOTE				20%	Clay
AB	0023	ATE	Fe						20%	Silt
I	0	Q							5%	Aggregate Rock
	_	G		SAMPLE DESCRIPTION/LOCATION	SAMP	LE COMPOSITION		NO ASB	ESTOS I	DETECTED
~					COLOR	Brown			5%	Root/Plant Matter
BER	-15A		115	724	COLOR	Brown				
UMBER	PLM-15A	MPLIN	9, 2015	SW 14th Street	COLOR	Good			5%	Cellulose
G NUMBER	15-PLM-15A	SAMPLIN	ry 19, 2015	,=-						Cellulose Quartz/Sand
LOG NUMBER	-21915-PLM-15A	E OF SAMPLIN	bruary 19, 2015	SW 14th Street	CONDITION	Good			45%	
LAB LOG NUMBER	0023-21915-PLM-15A	DATE OF SAMPLING	February 19, 2015	SW 14th Street	CONDITION TYPE	Good			45% 20%	Quartz/Sand

Dr. Charles Marshall, Ph.D	Charles 2 Mohale	February 25, 2015
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

#### BULK ASBESTOS ANALYSIS REPORT

EMA	AIL: m	narshe	nv@s	swbell.net									
		PR	OJE	CT LOCATION		INVO	OICE TO			REPO	RT T	O	
_	ect Id.			EN-021615	Client			Client					
Proje	ect Nai	me	Royal	Park Development Tract		Jared Jakubows	Li			City of Moore - C Jared Jakubowski		nity Development	
Proje	ect Typ	ре	Envir	onmental	Attention Title	Associate Plann		Attent Title	ion	Associate Planne			
<u> </u>		_	301 N	orth Broadway		301 North Broad				301 North Broad			
Proje	ect Ado	dress		e, OK 73160	Address	Moore, OK 731	50	Addre	SS	Moore, OK 7316	0		
Conta			Jared		Phone			Phone					
Phone Cell	e				Fax Other			Fax Other					
email	l				email			email					
				SAMPLE DESCRIPTION/LOG	CATION	SAMI	PLE COMPOSITION			NO ASPE	STOS DETECTED		
ER	6A	DATE OF SAMPLING	10	1701	ATION	COLOR	Brown	<1%	<1% Insect Exoskeleton			I	
LAB LOG NUMBER	0023-21915-PLM-16A	[PL]	February 19, 2015	Maclaren Street		CONDITION	Good	<170	mscci	EXOSKCICTOII	5% 4%	Cellulose	
NU	2-PL	, AM	19,	Soil		TYPE	Miscellaneous				45%	Quartz/Sand	
0G	191	OF S	uary	5011		NOTE	Wiscenaneous				20%	Clay	
BL	23-2	ľE (	∃ebr⊓			NOIE					20%	Silt	
LA	000	DA'										Aggregate Rock	
				SAMPLE DESCRIPTION/LOG	SATION	SAMI	PLE COMPOSITION			NO ASPE		DETECTED	
ER	7A	NG	10	1703	ATION	COLOR	Brown			NO ASBE		I	
MB	M-1	PLI	February 19, 2015	Maclaren Street		COLOR	Good				5%	Cellulose	
NU	LAB LOG NUMBER 0023-21915-PLM-17A DATE OF SAMPLING	19,			TYPE								
90		)FS	ıary	Soil			Miscellaneous				45%	Quartz/Sand	
ВГ	3-2	Œ	ebn			NOTE					20%	Clay	
LA	000	DAT	H								20%	Silt	
				CAMBLE DESCRIPTION/LOC	NATION	CAMI	DI E COMPOSITION			NO ACRE		Aggregate Rock  DETECTED	
3.8	8A	NG	16	SAMPLE DESCRIPTION/LOC 1705	ATION	COLOR	PLE COMPOSITION			NO ASBE		Root/Plant Matter	
LAB LOG NUMBER	0023-21915-PLM-18A	DATE OF SAMPLING	February 19, 2015				Brown Good						
NU	-PL	AM	19,	Maclaren Street Soil		CONDITION					5%	Cellulose	
90	1915	)FS	ıary	3011		NOTE	Miscellaneous				45%	Quartz/Sand	
ВГ	23-2	LE (	ebn			NOTE					20%	Clay	
LA	000	DA	Ι								20%		
				SAMPLE DESCRIPTION/LOC	SATION	CAMI	PLE COMPOSITION			NO ACDE		Aggregate Rock  DETECTED	
ER	9A	NG	16	1707	ATION	COLOR	Brown	<10/	Tor D	aper Felt	5%	1	
G NUMBER	0023-21915-PLM-19A	F SAMPLING	February 19, 2015	Maclaren Street		COLOR	Good	<1%	1 at F	aper ren	4%	Cellulose	
NO	5-PL	, AM	19,	Soil		TYPE	Miscellaneous					Quartz/Sand	
	191	OF S	uary	3011		NOTE	Wiscenaneous					Clay	
LAB LO	23-2	DATE O	∃ebr			NOIL					20%	-	
Γγ	00	DA'										Aggregate Rock	
				SAMPLE DESCRIPTION/LOG	TATION	SAMI	PLE COMPOSITION			NO ASRE		DETECTED	
ER	30A	DATE OF SAMPLING	5	1709	A11UI	COLOR	Brown			110 ABBE		Root/Plant Matter	
MB	.W.	IPL	201	Maclaren Street		CONDITION	Good				5%		
NU	5-PL	SAIN	. 19,	Soil		TYPE	Miscellaneous					Quartz/Sand	
90′	191.	OF (	uary	Son		NOTE						Clay	
LAB LOG NUMBER	0023-21915-PLM-20A	TE (	February 19, 2015								20%		
LA	00,	DA.	I								1	Aggregate Rock	
											5%	Aggregate Kock	

Dr. Charles Marshall, Ph.D	Charles 2 Mahree	February 26, 2015
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

1601 SOUTHWEST 89TH ST., STE.  $100\mbox{-A}$  OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

#### BULK ASBESTOS ANALYSIS REPORT

		PR	OJE	CT LOCATION		INVO	DICE TO		REPOR	RT T	O	
	ect Id.			EN-021615	Client			Client				
Proje	ect Na	me	Royal	Park Development Tract	Attention	Jared Jakubows	ki	Attention	City of Moore - Co Jared Jakubowski	mmui	nity Development	
roje	ect Ty	pe	Envir	onmental	Title	Associate Plann		Title	Associate Planner			
) mai	ect Ad	duoss	301 N	Torth Broadway	Address	301 North Broa		Address	301 North Broadwa	ay		
		uress		e, OK 73160		Moore, OK 731	60		Moore, OK 73160	Moore, OK 73160		
Cont Phon			Jared	Jakubowski	Phone Fax			Phone Fax				
Cell					Other			Other				
mai	l				email			email				
		z h		SAMPLE DESCRIPTION/I	LOCATION	SAMI	PLE COMPOSITION		NO ASBEST	TOS I	DETECTED	
ER	21A	SAMPLING	15	1711		COLOR	Brown				Root/Plant Matter	
ME	LM-	MPL	, 201	Maclaren Street		CONDITION	Good			5%	Cellulose	
Z	15-P	SAI	y 19	Soil		TYPE	Miscellaneous			45%	Quartz/Sand	
Š	0023-21915-PLM-21A	OF	February 19, 2015			NOTE				20%	Clay	
LAB LOG NUMBER	023-	DATE	Feb				•			20%	Silt	
_	0	Ď								5%	Aggregate Rock	
~	_	SAMPLE DESCRIPTION/LOCATION SAMPLE COMPOSE				PLE COMPOSITION	,	NO ASBEST	TOS I	DETECTED		
BEF	-22₽	Ľ	115	1713		COLOR	Brown			5%	Root/Plant Matte	
Ĭ	LAB LOG NUMBER 0023-21915-PLM-22A	MP	February 19, 2015	Maclaren Street		CONDITION	Good			5%	Cellulose	
Z U		SA	ry 19	Soil		TYPE	Miscellaneous			45%	Quartz/Sand	
2	-219	0023-21915-PLM-22A DATE OF SAMPLING	brua			NOTE				20%	Clay	
CAB	LAD 1	ATI	Fe							20%	Silt	
		D								5%	Aggregate Rock	
~	4:	9		SAMPLE DESCRIPTION/I	LOCATION	SAMI	PLE COMPOSITION		NO ASBES	FOS I	DETECTED	
LAB LOG NUMBER	1-23,	OF SAMPLING	315	1715		COLOR	Brown			5%	Root/Plant Matter	
\$	PLN	MP.	9, 2(	Maclaren Street		CONDITION	Good			5%	Cellulose	
ğ	915-	F S/	ary 1	Soil		TYPE	Miscellaneous			45%	Quartz/Sand	
3 LC	0023-21915-PLM-23A	Ε 0	February 19, 2015			NOTE				20%	Clay	
ΓĄ	005	DATE	Æ							20%		
		I									Aggregate Rock	
2	Ą.	وِّ		SAMPLE DESCRIPTION/I	LOCATION		PLE COMPOSITION		NO ASBEST		ı	
NUMBER	5-PLM-24A	SAMPLING	19, 2015	1717		COLOR	Brown				Root/Plant Matter	
	-PLI	AM	19, 2	Maclaren Street		CONDITION	Good				Cellulose	
		)FS		Soil		TYPE	Miscellaneous				Quartz/Sand	
LAB LOG	0023-2191	DATE OF	February			NOTE					Clay	
LA	000	DAT	I							20%		
				SAMPLE DESCRIPTION/I	OCATION	CABAT	PLE COMPOSITION		NO ASBEST		Aggregate Rock	
ER	5A	ING	2	1719	DUATION	COLOR	Brown		INO ASDES		Root/Plant Matte	
MB	.M-2	IPL)	201	Maclaren Street		COLOR	Good			- , .	Cellulose	
LAB LOG NUMBER	0023-21915-PLM-25A	SAMPLING	February 19, 2015	Soil		TYPE	Miscellaneous				Quartz/Sand	
500	191:	OF!	чагу	501		NOTE					Clay	
BI	123-2	DATE OF	Febr							20%		
4	. 0	- ▼	Fet			ļ		-		_0 /0	<u> </u>	

Dr. Charles Marshall, Ph.D

ANALYST NAME (PRINT)

ANALYST SIGNATURE

DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

#### BULK ASBESTOS ANALYSIS REPORT

		PR	OJE	CT LOCATION		INVO	OICE TO			REPO	RT T	0
	ect Id.			EN-021615	Client			Client	t			
Proje	ect Nai	me	Royal	Park Development Tract	Attention	Jared Jakubows	L.	Atten		City of Moore - C Jared Jakubowsk		nity Development
roje	ect Typ	pe	Envir	onmental	Title	Associate Plann		Title	uon	Associate Planne		
			301 N	orth Broadway		301 North Broa				301 North Broad		
roje	ect Ado	aress		e, OK 73160	Address	Moore, OK 731	60	Addre		Moore, OK 7316	0	
ont			Jared	Jakubowski	Phone			Phone	•			
hon ell	<u>e</u>				Fax Other			Fax Other	<b>.</b>			
mai	<u> </u>				email			email				
				SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION			NO ASBE	STOS I	DETECTED
ER	26A	ING	5	1721	CHILOT	COLOR	Brown			TTO HODE		Root/Plant Matter
LAB LOG NUMBER	-W	IPL	201	Maclaren Street		CONDITION	Good				5%	
Š	5-PI	SAN	, 19,	Soil		ТҮРЕ	Miscellaneous					Quartz/Sand
Ó	191	OF S	uary	5011		NOTE	Wiscontineous	-			20%	`
JB 1	0023-21915-PLM-26A	DATE OF SAMPLING	February 19, 2015								20%	
Ľ	00	DA										Aggregate Rock
				SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION			NO ASBES		
		1718		COLOR	Brown			TIO ASSE		Root/Plant Matter		
E E	0023-21915-PLM-27A	[PL]	February 19, 2015	Maclaren Street		CONDITION	Good	-				Cellulose
	5-PL	SAIM.	19,	Soil Soil		TYPE	Miscellaneous					Quartz/Sand
LAB LOG NUMBER	191	JF 5	uary	5011		NOTE	Wiscentaneous					Clay
	23-2	DATE	Febr			NOIE					20%	
LA	00	DA'										Aggregate Rock
	$\vdash$			SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION			NO ASRE	1	DETECTED
E K	8A	NG	15	1716	CATION	COLOR	Brown	20/	Eibro	ous Glass		Root/Plant Matte
9	M-2	[]	201	Maclaren Street		CONDITION	Good			netic Fibers	2%	
$\mathbf{z}$	0023-21915-PLM-28A	SAMPLING	February 19, 2015	Soil Soil		TYPE	Miscellaneous	<170	Synta	ictic Fibers	45%	
Ŏ G	191	OF S	uary	5011		NOTE	Wiscentaneous				20%	`
LAB LOG NUMBER	23-2	DATE	Febr			NOIE					20%	
L	000	DA'										Aggregate Rock
	<u> </u>			SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION			NO ASDE		DETECTED
R	9A	SAMPLING	16	1714	CATION	COLOR	Brown			NO ASBE		Root/Plant Matter
==	15-PLM-29A	IPL)	19, 2015	Maclaren Street		CONDITION	Good					
9	-PL	AM	19,	Soil		TYPE		_			5%	Quartz/Sand
		r-	February	3011		NOTE	Miscellaneous					Clay
ۍ	1915	1 =	гq			NOIE					20%	
G	23-21915	LE O	rT.									Aggregate Rock
r G	0023-21915	DATE OF	Fe									
r G	0023-21915	DATE O	Fe	SAMDLE DESCRIPTIONALO	CATION	CAMI	DI E COMPOSITION			NO ASPE		
LABLOG	0023-219			SAMPLE DESCRIPTION/LO	CATION		PLE COMPOSITION  Recovery	201	Com		STOS 1	DETECTED
LABLOG	0023-219			1708	CATION	COLOR	Brown	2%	Ceme	NO ASBE	STOS I	PROOT/Plant Matte
LABLOG	0023-219			1708 Maclaren Street	CATION	COLOR CONDITION	Brown Good	2%	Ceme		5% 3%	PETECTED  Root/Plant Matte  Cellulose
LAB LOG	0023-219			1708	CATION	COLOR CONDITION TYPE	Brown	2%	Ceme		5% 3% 45%	PETECTED  Root/Plant Matte  Cellulose  Quartz/Sand
LAB LOG NUMBER   LAB LOG NUMBER	0023-219			1708 Maclaren Street	CATION	COLOR CONDITION	Brown Good	2%	Ceme		5% 3% 45% 20%	Root/Plant Matter Cellulose Quartz/Sand Clay
LAB LOG	0023-21915-PLM-30A 0023-21915	DATE OF SAMPLING DATE OF	February 19, 2015 Fe	1708 Maclaren Street	CATION	COLOR CONDITION TYPE	Brown Good	2%	Ceme		5% 3% 45% 20% 20%	Root/Plant Matter Cellulose Quartz/Sand Clay

ANALYST NAME (PRINT)

ANALYST SIGNATURE

DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

1601 SOUTHWEST 89TH ST., STE.  $100\mbox{-A}$  OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

#### BULK ASBESTOS ANALYSIS REPORT

EMA	AIL: n	narshe	nv@s	swbell.net									
		PR	OJE	CT LOCATION		INVO	ICE TO			REPO	RT T	0	
	ect Id.			EN-021615	Client			Client					
Proje	ect Na	me	Royal	Park Development Tract		Jared Jakubowsl	lei .			City of Moore - Co Jared Jakubowski	ommui	nity Development	
Proje	ect Ty	pe	Envir	onmental	Attention Title	Associate Plann		Attenti Title	ion	Associate Planner			
Duois	of Ad	duoga	301 N	Jorth Broadway	Address	301 North Broad	-		Address 301 North Broady		/ay		
_	ect Ad	uress		e, OK 73160		Moore, OK 7310	50		55	Moore, OK 73160			
Conta			Jared	Jakubowski	Phone Fax			Phone Fax	Phone				
Cell					Other			Other					
email	l				email			email					
	_	ליז		SAMPLE DESCRIPTION/LOG	CATION	SAMI	PLE COMPOSITION		NO ASBES			STOS DETECTED	
BER	-31A	IN	15	1704		COLOR	Brown	<1%	Perlit	e	5%	Root/Plant Matter	
LAB LOG NUMBER	0023-21915-PLM-31A	DATE OF SAMPLING	February 19, 2015	Maclaren Street		CONDITION	Good				4%	Cellulose	
GN	15-F	SA	ry 15	Soil		TYPE	Miscellaneous				45%	Quartz/Sand	
го	-219	OF	oruai			NOTE					20%	Clay	
'AB	023	ATE	Fel								20%	Silt	
1	0	D.									5%	Aggregate Rock	
~	_	ڻ ن		SAMPLE DESCRIPTION/LOG	CRIPTION/LOCATION SAMPLE COMPOSITION NO ASBEST				TOS I	OS DETECTED			
LAB LOG NUMBER	0023-21915-PLM-32A	DATE OF SAMPLING	115	1716		COLOR	Brown				5%	Root/Plant Matter	
UM	J.	MP	9, 20	House - Kent Circle		CONDITION	Good				5%	Cellulose	
GN	15-1	SA	ry 1	Soil		TYPE	Miscellaneous				45%	Quartz/Sand	
100	3-219	E 01	February 19, 2015			NOTE					20%	Clay	
LAB	0023	AT	Fe								20%	Silt	
		D										Aggregate Rock	
R	A	J.		SAMPLE DESCRIPTION/LOG	CATION		PLE COMPOSITION					DETECTED	
IBE	A-33	LI	015	1700		COLOR	Brown	<1%	Anim	al Skeletal Matter		Root/Plant Matter	
ĀŪ	PLN	AMI	19, 2	Maclaren Street		CONDITION	Good				5%	Cellulose	
LAB LOG NUMBER	0023-21915-PLM-33A	FS/	February 19, 2015	Soil		TYPE	Miscellaneous				45%	Quartz/Sand	
3 T(	3-21	ΕO	ebru			NOTE					20%	Clay	
[V]	002	DATE OF SAMPLING	Υ.								20%	Silt	
												Aggregate Rock	
ĸ	tA	NG		SAMPLE DESCRIPTION/LOG	CATION		PLE COMPOSITION					DETECTED	
G NUMBER	0023-21915-PLM-34A	SAMPLING	February 19, 2015	1705		COLOR	Brown	1%	Nylor	Fibers	5%	Root/Plant Matter	
N	-PL	AM	19,	Janeway		CONDITION	Good				4%	Cellulose	
90	1915	)FS	ıary	Soil		TYPE	Miscellaneous					Quartz/Sand	
LAB LO	23-2	DATE OF	-ebn			NOTE					20%	Clay	
LA	000	DA	I									Aggregate Rock	
				SAMPLE DESCRIPTION/LOG	CATION	CAMI	PLE COMPOSITION			NO ASPES		DETECTED	
ER	5A	ING	10	1709	CATION	COLOR	Brown			NO ASBES		Root/Plant Matter	
MB	E-W	IPL)	201:	Janeway		CONDITION	Good				5%	Cellulose	
NC:	5-PL	SAIV	February 19, 2015	Soil		ТҮРЕ	Miscellaneous				45%	Quartz/Sand	
00	191	OF:	nary	5011		NOTE						Clay	
LAB LOG NUMBER	0023-21915-PLM-35A	DATE OF SAMPLING	Febi			-	1				20%	_	
$\Gamma_{\ell}$	00	DA										Aggregate Rock	
<u> </u>		l .				l		1 1			570	00 10 11	

Dr. Charles Marshall, Ph.D	Charles 2 Mahree	February 26, 2015
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

#### **BULK ASBESTOS ANALYSIS REPORT**

		PR	OJE	CT LOCATION		INVO	ICE TO		REPOI	RT T	O
roje	ect Id.	No.	0028-	EN-021615	lient			Client	T		
Proj€	ect Nai	me	Royal	Park Development Tract		7 1711			City of Moore - Co	ommui	nity Development
roje	ect Ty	pe	Envir	onmental	ttention itle	Jared Jakubows Associate Plann		Attention Title	Jared Jakubowski Associate Planner		
			301 N	Jorth Broadway		301 North Broad			301 North Broadway		
	ect Ad	aress		e, OK 73160	ddress	Moore, OK 731	60	Address	Moore, OK 73160		
Cont Chon			Jared		hone ax			Phone Fax			
Cell	ie				other			Other			
mai	l			e	mail			email			
		z h		SAMPLE DESCRIPTION/LOC	ATION	SAMI	PLE COMPOSITION		NO ASBES	TOS I	DETECTED
3ER	36A	ING	15	1713		COLOR	Brown				Root/Plant Matter
LAB LOG NUMBER	LM-	MPI.	, 201	Janeway		CONDITION	Good			5%	Cellulose
Ź	15-P	SAI	y 19	Soil		ТҮРЕ	Miscellaneous			45%	Quartz/Sand
ž	219	OF	February 19, 2015			NOTE				20%	Clay
γP	0023-21915-PLM-36A	DATE OF SAMPLING	Fet				•			20%	Silt
_	0	D,								5%	Aggregate Rock
× ✓ ♥ SAMPLE DESCRIPTION/I		SAMPLE DESCRIPTION/LOCA	ATION	SAMI	PLE COMPOSITION		NO ASBES	TOS I	DETECTED		
BEF	-37/	Ë	15	1719		COLOR	Brown			5%	Root/Plant Matter
<u> </u>	0023-21915-PLM-37A	MP	9, 20	Janeway		CONDITION	Good			5%	Cellulose
Z S		SA	February 19, 2015	Soil		TYPE	Miscellaneous			45%	Quartz/Sand
2		E 01	brua			NOTE				20%	Clay
LAB		AT	윤							20%	Silt
		Ω									Aggregate Rock
2	Ą	Ğ		SAMPLE DESCRIPTION/LOCA	ATION		PLE COMPOSITION		NO ASBES		
LAB LOG NUMBER	0023-21915-PLM-38A	L	February 19, 2015	1723		COLOR	Brown	1% Plas	tic Tape	5%	Root/Plant Matter
É	PLN	₩.	19, 2	Janeway		CONDITION	Good			4%	Cellulose
_ 	915	F S.	ary	Soil		TYPE	Miscellaneous			45%	Quartz/Sand
BĽ	3-21	ΈO	ebru			NOTE				20%	Clay
ΓĄ	000	DATE OF SAMPLING	щ							20%	Silt
				CAMPLE DESCRIPTION/LOC	TION	CANE	DI E COMPOSITION		NO AGREG		Aggregate Rock
K K	9A	NG	16	SAMPLE DESCRIPTION/LOCA 1731	ATION	COLOR	PLE COMPOSITION Brown	10/ Colo	NO ASBES		Root/Plant Matter
NUMBER	5-PLM-39A	[L]	201:	Janeway		COLOR	Good	1 % Care	arcous ividicitai		Cellulose
2	5-PL	SAMPLING	y 19, 2015	Soil		TYPE	Miscellaneous				Quartz/Sand
LAB LOG			nary	5011		NOTE	- Institutions			20%	Clay
AB I	0023-2191	DATE OF	February							20%	
Ĭ	90	DA									Aggregate Rock
		7 h		SAMPLE DESCRIPTION/LOCA	ATION	SAMI	PLE COMPOSITION		NO ASBES		DETECTED
3ER	40A	DATE OF SAMPLING	15	1735		COLOR	Brown				Root/Plant Matter
W	0023-21915-PLM-40A	MPI	February 19, 2015	Janeway		CONDITION	Good			5%	Cellulose
Z U	15-P	SA	y 19	Soil		ТҮРЕ	Miscellaneous			45%	Quartz/Sand
LAB LOG NUMBER	219	OF	ruar			NOTE				20%	Clay
γP	023-	ATE	Fet				•			20%	Silt
_	0	Ď	Fe							50%	Aggregate Rock

Dr. Charles Marshall, Ph.D February 26, 2015 Kinley 2 Montal ANALYST SIGNATURE DATE ANALYZED ANALYST NAME (PRINT)

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

#### BULK ASBESTOS ANALYSIS REPORT

		PR	OJE	CT LOCATION		INVO	ICE TO			REPO	RT T	O'	
	ect Id.			EN-021615	lient			Client					
Proje	ect Na	me	Royal	Park Development Tract		Investigation 1	L		_	•	ommu	nity Development	
Proje	ect Ty	pe	Envir	onmental	attention Title	Jared Jakubowsł Associate Planne		Attentio Title		ared Jakubowski Associate Planner			
			301 N	Iorth Broadway		301 North Broad			3	01 North Broadw			
Proje	ect Ad	dress		e, OK 73160	ddress	Moore, OK 7316	50	Address	s N	Moore, OK 73160	)		
Cont			Jared		hone			Phone					
Phon Cell	ie				ax Other			Fax Other					
mai	1				mail			email					
				SAMPLE DESCRIPTION/LOCA	ATION	SAME	PLE COMPOSITION			NO ASRES	ESTOS DETECTED		
ER	41A	ING	5	701	111011	COLOR	Brown			I TO HODE		Root/Plant Matte	
LAB LOG NUMBER	Ľ	Æ	, 201	Office - SW 17th Street		CONDITION	Good				5%	Cellulose	
Z	0023-21915-PLM-41A	DATE OF SAMPLING	February 19, 2015	Soil		TYPE	Miscellaneous				10%		
Š	2191	OF	ruar			NOTE					60%	`	
AΒ	023-:	VTE	Feb								15%	-	
T	Ŏ	DĄ									5%	Aggregate	
		۲ħ		SAMPLE DESCRIPTION/LOCA	ATION	SAMP	PLE COMPOSITION			NO ASBES		DETECTED	
3ER	0023-21915-PLM-42A	DATE OF SAMPLING	15	700		COLOR	Brown			l .	5%	Root/Plant Matte	
	ĽW	MPI	, 20	SW 13th Street		CONDITION	Good				5%	Cellulose	
Z U	15-P	SA	February 19, 2015	Soil		ТҮРЕ	Miscellaneous				10%	Quartz/Sand	
LAB LOG NUMBER	-219	OF	oruar			NOTE					60%	Clay	
'AB	023-	4TE	Feb				1				15%	Silt	
1	0	'n									5%	Aggregate	
	_	r.		SAMPLE DESCRIPTION/LOCA	ATION	SAMP	PLE COMPOSITION			NO ASBES	TOS I	DETECTED	
BEF	-43/	Ž	115	702		COLOR	Brown	<1% A	Asphal	t/Tar	5%	Root/Plant Matte	
<u>¥</u>	LM	MP	9, 20	SW 13th Street		CONDITION	Good				4%	Cellulose	
Z U	15-F	SA	ry 19	Soil		TYPE	Miscellaneous				10%	Quartz/Sand	
LAB LOG NUMBER	0023-21915-PLM-43A	DATE OF SAMPLING	February 19, 2015			NOTE					60%	Clay	
(AB	)023	ATE	Fe								15%	Silt	
_		ū										Aggregate	
~	4:	5		SAMPLE DESCRIPTION/LOCA	ATION	SAMP	PLE COMPOSITION			NO ASBES	TOS I	DETECTED	
BE	1-44	LIN	)15	704		COLOR	Brown				5%	Root/Plant Matte	
OG NUMBER	1915-PLM-44A	DATE OF SAMPLING	lary 19, 2015	SW 13th Street		CONDITION	Good				5%	Cellulose	
9	915-]	F SA	uy 1	Soil		TYPE	Miscellaneous				10%	Quartz/Sand	
		E 0]	Februa			NOTE						Clay	
LAB L	0023-2	AT	Fe								15%	Silt	
	Ļ	ū									5%	Aggregate	
~	A	5		SAMPLE DESCRIPTION/LOCA	ATION	SAMP	PLE COMPOSITION			NO ASBES		DETECTED	
[BE]	1-45,	LIN	015	706		COLOR	Brown				5%	Root/Plant Matte	
LOG NUMBER	5-PLM-45A	IMP	9, 2(	SW 13th Street		CONDITION	Good				5%		
Ğ		OF SAMPLING	bruary 19, 2015	Soil		TYPE	Miscellaneous				10%		
ĭ	-2191	0 3	bru			NOTE					60%	Clay	

Dr. Charles Marshall, Ph.D	Charles 2 Mahree	February 26, 2015
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

15% Silt
5% Aggregate

1601 SOUTHWEST 89TH ST., STE.  $100\mbox{-A}$  OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

EMAIL: marshenv@swbell.net

#### BULK ASBESTOS ANALYSIS REPORT

		PR	OJE	CT LOCATION		INVO	ICE TO			REPO	RT T	O	
	ect Id.			EN-021615	lient			Client					
Proje	ect Na	me	Royal	Park Development Tract						•		nity Development	
Proje	ect Ty	pe	Envir	onmental	attention Title	Jared Jakubowsk Associate Planne		Attenti Title		ed Jakubowski sociate Planner			
			301 N	orth Broadway		301 North Broad			30	North Broady			
Proje	ect Ad	dress		e, OK 73160	ddress	Moore, OK 7316	•	Addres	C .	ore, OK 73160	-		
Cont			Jared		hone			Phone					
Phon	e				ax			Fax					
Cell mail	1				Other mail			Other email					
		ı	 	J*				Cinaii	1 1				
2	Ϋ́	Š		SAMPLE DESCRIPTION/LOCA	ATION	**	LE COMPOSITION	1.				DETECTED	
BE	4-46	LI.	015	708		COLOR	Brown	Trace 1	Fibrous (	Glass		Root/Plant Matte	
LAB LOG NUMBER	·PLN	\M	19, 2	SW 13th Street		CONDITION	Good				5%	Cellulose	
<u>5</u>	915-	F S.	ary	Soil		TYPE	Miscellaneous				10%	Quartz/Sand	
3 1	0023-21915-PLM-46A	DATE OF SAMPLING	February 19, 2015			NOTE					60%	Clay	
Y	005	AT	Ľ								15%		
		1										Aggregate	
~	Ą	وَ		SAMPLE DESCRIPTION/LOCA	ATION		PLE COMPOSITION			NO ASBES		DETECTED	
BE	I-47	Ĭ	015	710		COLOR	Brown				5%	Root/Plant Matte	
<u> </u>	PLN	ME	9, 2	SW 13th Street		CONDITION	Good				5%	Cellulose	
ي	915-	F S.	ury 1	Soil		TYPE	Miscellaneous				10%	Quartz/Sand	
2	0023-21915-PLM-47A	DATE OF SAMPLING	February 19, 2015			NOTE						_	
LAB LOG NUMBER	0023	AT	光								15%	Silt	
		O D									5%	Aggregate	
<b>~</b>	4	5		SAMPLE DESCRIPTION/LOCA	ATION	SAMP	LE COMPOSITION			NO ASBES	STOS I	DETECTED	
(B)	0023-21915-PLM-48A	DATE OF SAMPLING	315	712		COLOR	Brown				5%	Root/Plant Matte	
LAB LOG NUMBER	PLN	M	9, 2(	SW 13th Street		CONDITION	Good				5%	Cellulose	
٥	15-	FSA	February 19, 2015	Soil		TYPE	Miscellaneous				10%	Quartz/Sand	
2	-216	E 0]	brua			NOTE					60%	Clay	
[AB	0023	ΑT	윤								15%	Silt	
	)	D									5%	Aggregate	
~	4	٦		SAMPLE DESCRIPTION/LOCA	ATION	SAMP	LE COMPOSITION			NO ASBES	STOS I	DETECTED	
BE	1915-PLM-49A	LIN	)15	714		COLOR	Brown	2%	Concrete		5%	Root/Plant Matte	
2	PLM	MP	lary 19, 2015	SW 13th Street		CONDITION	Good				3%	Cellulose	
OG NUMBER	15-1	SA	ry 1	Soil		TYPE	Miscellaneous				10%	Quartz/Sand	
		DATE OF SAMPLING	Februa			NOTE					60%	Clay	
LAB L	0023-2	ATI	Fel								15%	Silt	
_		D									5%	Aggregate	
~	<i>-</i>	G		SAMPLE DESCRIPTION/LOCA	ATION	SAMP	PLE COMPOSITION			NO ASBES	STOS I	DETECTED	
LOG NUMBER	21915-PLM-50A	OF SAMPLING	115	716		COLOR	Brown	1%	Concrete		5%	Root/Plant Matte	
Μ	ĽW	MP	9, 20	SW 13th Street		CONDITION	Good				4%	Cellulose	
Z U	15-F	SA	oruary 19, 2015	Soil		TYPE	Miscellaneous				10%	Quartz/Sand	
2	219	OF	rua			NOTE					60%	Clay	

Dr. Charles Marshall, Ph.D	Charles 2 Mahree	February 26, 2015
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

15% Silt

5% Aggregate

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

#### **BULK ASBESTOS** ANALYSIS REPORT

		PR	OJE	CT LOCATION		INVO	OICE TO		REPO	RT T	O'
	ect Id.			EN-021615	Client			Client			
roje	ect Na	me	Royal	Park Development Tract							nity Development
roje	ect Ty	pe	Envir	onmental	Attention Title	Jared Jakubows Associate Plann		Attention Title	Jared Jakubowsk Associate Planne		
			301 N	Jorth Broadway		301 North Broad		1	301 North Broad		
roje	ect Ad	dress	Moor	e, OK 73160	Address	Moore, OK 731	60	Address	Moore, OK 7316	0	
Conta			Jared	Jakubowski	Phone			Phone			
Phon Cell	e				Fax Other			Fax Other			
mail	l I				email			email			
				SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION		NO ASRE	I ZOTZ	DETECTED
EK	51A	ING	5	711	2111011	COLOR	Brown	<1% Cal	careous Material	1	Root/Plant Matter
MB	3-M.	[PL]	201:	SW 13th Street		CONDITION	Good	\170 Cai	careous material	4%	
Š	5-PL	SAM	. 19,	Soil		ТУРЕ	Miscellaneous			10%	
LAB LOG NUMBER	0023-21915-PLM-51A	DATE OF SAMPLING	February 19, 2015	501		NOTE				60%	`
\BI	23-2	ΤE	Febr							15%	
ĭ	00	DA									Aggregate
		- 1		SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION	L	NO ASBE	1	DETECTED
ER	52A	DATE OF SAMPLING	5	709		COLOR	Brown		I		Root/Plant Matte
	0023-21915-PLM-52A	ΊΡΙ	February 19, 2015	SW 13th Street		CONDITION	Good			5%	Cellulose
Z	15-P	SAI	y 19	Soil		TYPE	Miscellaneous			10%	Quartz/Sand
Š	219	OF	ruar			NOTE				60%	Clay
LAB LOG NUMBER	023-	ATE	Feb				1			15%	Silt
1	0	7Q								5%	Aggregate
	_	ප		SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION	•	NO ASBE	STOS I	DETECTED
BER	-53∆	Ľ	15	707		COLOR	Brown			5%	Root/Plant Matter
M	ĽM	MP	э, 20	SW 13th Street		CONDITION	Good			5%	Cellulose
Z U	15-F	SA	February 19, 2015	Soil		TYPE	Miscellaneous			10%	Quartz/Sand
$\Gamma$ 0	-219	OF	brua			NOTE				60%	Clay
LAB LOG NUMBER	0023-21915-PLM-53A	DATE OF SAMPLING	Fel							15%	Silt
		Ω								5%	Aggregate
~	4:	5		SAMPLE DESCRIPTION/LO	CATION	SAMI	PLE COMPOSITION		NO ASBE	STOS	DETECTED
LAB LOG NUMBER	0023-21915-PLM-54A	DATE OF SAMPLING	315	705		COLOR	Brown			5%	Root/Plant Matte
E E	PLM	MP	9, 20	SW 13th Street		CONDITION	Good			5%	Cellulose
G G	915-]	F SA	February 19, 2015	Soil		TYPE	Miscellaneous			10%	Quartz/Sand
) T	3-215	E 01	brua			NOTE				60%	Clay
LAB	0023	AT	Fe							15%	Silt
.—										5%	Aggregate

		5% Aggregate
Dr. Charles Marshall, Ph.D	Charles 2 Mohale	February 26, 2015
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

SAMPLE COMPOSITION

Miscellaneous

Brown

Good

Polarized Light Microscopy Asbestos Analysis Test Method:

AB LOG NUMBER 0023-21915-PLM-55A

February 19, 2015

ATE OF SAMPLING

SAMPLE DESCRIPTION/LOCATION

703

SW 13th Street

Soil

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

COLOR

ТҮРЕ

NOTE

CONDITION

Lab Accreditation: AIHA PAT ID# 102334

5% Root/Plant Matter

Quartz/Sand

Cellulose

Clay Silt 15%

NO ASBESTOS DETECTED

5%

10%

1601 SOUTHWEST 89TH ST., STE. 100-A OKLAHOMA CITY, OK 73159

PHONE: 405.616.0401 FAX: 405.681.6753

#### BULK ASBESTOS ANALYSIS REPORT

		PR	OJE	CT LOCATION		INVO	ICE TO		REPO	RT T	O	
_	ct Id.			EN-021615	Client			Client				
roje	ect Nai	me	Royal	Park Development Tract					City of Moore - Co	ommu	nity Development	
roje	ct Typ	pe	Envir	onmental	Attention Title	Jared Jakubows Associate Plann		Attention Title	Jared Jakubowski Associate Planner			
_			301 N	Jorth Broadway		301 North Broad			301 North Broadw	/ay		
roje	ect Ado	dress		e, OK 73160	Address	Moore, OK 731		Address	Moore, OK 73160			
ont			Jared	Jakubowski	Phone			Phone				
hon ell	e				Fax Other			Fax Other				
en nail					email			email				
		<u> </u>		CAMPLE DESCRIPTION	-	CAME	DI E COMPOSITION		NO ACRES	ESTOS DETECTED		
X.	6A	NG	,,	SAMPLE DESCRIPTION/I	OCATION	COLOR	PLE COMPOSITION Brown		NO ASBES		Root/Plant Matter	
LAB LOG NUMBER	0023-21915-PLM-56A	DATE OF SAMPLING	February 19, 2015	SW 13th Street		COLOR	Good				Cellulose	
S Z	-PL	ΑM	19,	Soil		TYPE	Miscellaneous			5%	Quartz/Sand	
5	1915	)FS	ıary	5011		NOTE	Miscenaneous			10%		
9	23-2	IE (	ebru			NOTE				60%	-	
į	000	DA.	I							15%		
				SAMPLE DESCRIPTION/I	OCATION	CAMI	DI E COMPOSITION		NO ACRES		Aggregate	
4	7A	NG	16	1307	LOCATION	COLOR	PLE COMPOSITION Brown		NO ASBES		Root/Plant Matter	
2	0023-21915-PLM-57A	DATE OF SAMPLING	February 19, 2015			COLOR	Good			5%	Cellulose	
LAB LUG NUMBER	5-PL	'AM	19,	Janeway Soil		TYPE	Miscellaneous			10%	Quartz/Sand	
٥	1915	OF S	uary	3011		NOTE	Miscenaneous			60%	Clay	
9	23-2	IE (	-ebri			NOTE				15%		
F	000	DA'									Aggregate	
				SAMPLE DESCRIPTION/I	OCATION	SAMI	PLE COMPOSITION		NO ASPES		DETECTED	
¥ ¥	8A	NG	16	1303	OCATION	COLOR	Brown		NO ASBES		Root/Plant Matter	
<u> </u>	M-5	PL	201	Janeway		COLOR	Good			5%		
LAB LOG NUMBER	2-PL	'AM	19,	Soil		TYPE	Miscellaneous			10%	Quartz/Sand	
ڻ ح	0023-21915-PLM-58A	DATE OF SAMPLING	February 19, 2015	3011		NOTE	Miscenaneous			60%	Clay	
9	23-2	TE (	Febr			NOTE				15%	·	
¥.	00	DA'									Aggregate	
										370	riggiegate	
							-					
											<u>l</u>	
									1			
	<u> </u>	<u> </u>				l .					L	

ANALYST NAME (PRINT)

Polarized Light Microscopy Asbestos Analysis Test Method:

40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

ANALYST SIGNATURE

Lab Accreditation:
AIHA PAT ID# 102334

DATE ANALYZED



# LEAD CHAIN OF CUSTODY

Page 1 of

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502 (800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

For Lab Use Only
Lab No. 246793

#### www.QuanTEM.com

# LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Contact Inform	nation	Project Information	Report Results (☑ one box)
Company: Marshall Environmental	Phone: (405) 616-0401	Project Name: Royal Park	QuanTEM Website
Contact: Rachel Woods	Cell Phone: (405) 315-4305	Project Location: SW 19th and Telephone Rd Moore, OK	Other
Account #:	E-mail: marshenv@swbell.net	Project ID: 0028-EN-020615	

Sampled By: Rachel Woods		Date: 02/19/2015		
RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
XW DVV 0	2/19/18/15:15		Shitwa	2/19/15 4/10
			0	

	REQUESTED SERVICES (Pleas						se ☑ the Appropriate Boxes)										
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)		ume Area ngth x Width)	mple			Ur E	nits (🛚 0		/ft² og ak	/ m³	/ cm²	A	Sample Matrix Codes Soil Paint Chips	
1	A [ ]	901 5W 14th	NIA	1	/A	Sa (see	Pb			I b	×	mg	hg	μg	mg	С	Surface / Dust Wipes
,	71	701 3W 1411	17/17	- 1	1/15	AL	+			X		-			-	D	Bulk Miscellaneous  Air Cassette

						Samp see ma		PPM	t %	) g	/ft	l / n	) g	В	Paint Chips
							Pb	18	۸	mg	bп	hg	mg	C	Surface / Dust Wipes
1	DIL	901 3W 14th	NIA	1	/A	AI	X	IX						D	Bulk Miscellaneous
2	2	703 SW 14th	j		1	)	Ì	TI						Е	Air Cassette
3	31	705 SW 14th						TT						-	9
4	4L	707 SW 14th						T							
5	51	709 SW 14th						T							
6	lg L	711 SW 14th						T							
7	71	713 SW 14th						TT							
8	8L	715 SW 14th					П	T						TUI	RNAROUND TIME
9	91	700 SW. 14th						П							Same Day
10	101	704 S.W. 14th						11							24 - Hour
11	IIL	708 SW 14th						TT							3 - Day
12	124	712 SW 14th			V	V	V	1						V	5 - Day



**Project Information** 

# LEAD CHAIN OF CUSTODY

Page 2 of \_\_\_\_

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502 (800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

# LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

For Lab Use Only
Lab No. 246793
Accept Reject

Compa	ny: Marshall Envir	ronmental	Project Name: Royal Park				Proj	iect Loc	ation:	SW	19th	and	Tele	phone	e Rd Moore, OK
		RE	QUESTED SERVICES (P	lease 🗹 the Ap	ase ☑ the Appropriate Boxes)										
					Matrix code box)	Ar	nalysis	Ur	nits (l	☑ OI	NE bo	ox or	T		Sample Matrix Codes
No.	Sample ID (10 Characters Max)	Sample Description	Volume (Liters)	Volume Area (Length x Width)	ole N						2	n <sup>3</sup>	/ cm <sup>2</sup>	Α	Soil
				(Leligar A Water)	Sample (see matrix of			PPM	Wt %	g / I	1 /ft²	1 / m <sup>3</sup>	g / c	В	Paint Chips
	, 4	(1)				Pb		4	>	mg	рц	рц	mg	С	Surface / Dust Wipes
13	131	716 SW 14th	NIA	NIA	A	X		X						D	Bulk Miscellaneous
14	141	720 SW 14th				1								E	Air Cassette
15	154	724 SW 14th													
16	166	1701 Maclaren													
17	171	1703 Maclaven													
18	18L	1705 Waclaren													
19	196	1707 Maclaren													
20	26L	1709 Maclaven													
21	211	1711 Maciaren													
22	22L	1713 Maclaren													



# LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502 (800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

Page 3 of 4

For Lab Use Only
Lab No. 246793

Accept Reject

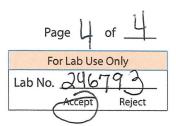
	Proje	ct Information																
	Compar	y: Marshall Envir	ronmental	Project Name	Royal Park	(				Pro	ject Loc	ation:	sw	19th	and	Tele	ohone	e Rd Moore, OK
			R	ase 🗹 the Appropriate Boxes)														
								Sample Matrix (see matrix code box)	An	alysis	Ur	nits ([	✓ ON	NE bo	x on			Sample Matrix Codes
	No.	Sample ID (10 Characters Max)	Sample Description		Volume (Liters)		lume Area	ple Natrix co					-	/ft²	/ m <sub>3</sub>	cm <sup>2</sup>	A	Soil Paint Chips
								Sample (see matrix	Pb		PPM	Wt %	mg/	// 6rl	/ brl	mg/	В	Surface / Dust Wipes
31	13	311	1704 Maclarer	)	NA		NIA	A	X		Y						D	Bulk Miscellaneous
32	<del>1</del> 4	ろ2し	714 Kerth Cour	-	)			ſ									Е	Air Cassette
33	<del>15</del>	33L	1700 Maclard	$\cap$														
34	16	34L	1705 Janewa	W					Ш									
3° 32	K	3ŠL	1709 Janewa	i ()							$\bot$							
	10.	366	1713 Janewa	7							1							
37		374	1719 Janew						Ш		4	-						
38	20	381	1723 Janew	aug				11	H		+	-	-					
39	N	391	1731 Janeu	Jay.				-			+		-					
40	35	401	1735 Janey	Jary					H		+	-	-					
41	23	411	701 SW 1717	V		+-		++	H		+	-	-					
43	24	42L	700 300 13			+		++	H		+	-						
44	25	456	7011 0 1 27	h		+-			H		+				-			
45	26 27	441		m							+	-						
46	28	406	1-2 041 10	m				+	H		+							
47	20	747	710 SW 13th	)			<del>                                     </del>	++			++	+						
		1 ( ) 2 :	710 311	<u> </u>	(1)	+		1	1		1	/	-	+	-	-		



# LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502 (800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

# LEGAL DOCUMENT - PLEASE PRINT LEGIBLY



	Proje	ct Information															Day of A	
	Compar	y: Marshall Envir	ronmental	Project Nam	e: Royal Park	(				Pro	ect Loc	ation:	sw	19th	and	Tele	phon	e Rd Moore, OK
			e ☑ the Ap	propr	iate Bo	(es)												
	No.	Sample ID	Carrala Danis is					Natrix ode box)	Anal	ysis	Ur	nits (l	<b>IO</b>	NE bo	ox on			Sample Matrix Codes
	INO.	(10 Characters Max)	Sample Description		Volume (Liters)		lume Area	Sample Matrix (see matrix code box)			PPM	Wt %	g / I	μg /ft²	1 / m <sub>3</sub>	g / cm²	A B	Soil Paint Chips
49		110.1	H III S. I latto		11.10		h 1 / -	The second second	Pb		В	>	mg	6 <sub>H</sub>	bµ	mg	С	Surface / Dust Wipes
	1	49 L	714 SW 13th		N/A	-	NIA	A	X		X						D	Bulk Miscellaneous
50	,	50 L	716 SW 13th					$\perp$		-	$\sqcup$						E	Air Cassette
51	15	516	7/1 SW 13th							-	$\sqcup$							
52 33	18	524	709 SW13th						Ш.		Ш							
	ìχ	<u>55</u> L	707 SW13th								Ш							
59	18.	54L	705 SW 15th								Ш							
22	19	556	703 SW 13th	٦														
26	_	5le L	701 SW 131															
57	24	571	1307 Janew	uy														
58	22	58L	1303 Janew	ars	J		2	V	1		V							
	23			0								4						
	24																	
	25																	
	26																	
	27																	
	28																	
	29																	
	30																	



# **Environmental Chemistry Analysis Report**

**QuanTEM Set ID:** 246793

**Date Received:** 02/19/15

Received By: Sherrie Leftwich

**Date Sampled:** 

Time Sampled:

Analyst: CC

Date of Report: 2/27/2015 Project: Ro

AIHA ID: 101352

**Acct. No.:** A331

Client:

**Project:** Royal Park

Location: SW 19th and Telephone Rd., Moore, OK

Marshall Environmental Management, Inc.

1601 SW 89th Street, Ste. A-100

Oklahoma City, OK 73159

**Project No.:** 0028-EN-020615

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	1L	Soil	Lead	<38.2	38.2	ppm	02/23/15 15:00	Soil EPA 7000B (1)
002	2L	Soil	Lead	<38.0	38	ppm	02/23/15 15:00	Soil EPA 7000B (1)
003	3L	Soil	Lead	<40.1	40.1	ppm	02/23/15 15:00	Soil EPA 7000B (1)
004	4L	Soil	Lead	<37.7	37.7	ppm	02/23/15 15:00	Soil EPA 7000B (1)
005	5L	Soil	Lead	<39.3	39.3	ppm	02/23/15 15:00	Soil EPA 7000B (1)
006	6L	Soil	Lead	<36.2	36.2	ppm	02/23/15 15:00	Soil EPA 7000B (1)
007	7L	Soil	Lead	<39.5	39.5	ppm	02/23/15 15:00	Soil EPA 7000B (1)
008	8L	Soil	Lead	<39.5	39.5	ppm	02/23/15 15:00	Soil EPA 7000B (1)
009	9L	Soil	Lead	<36.4	36.4	ppm	02/23/15 15:00	Soil EPA 7000B (1)
010	10L	Soil	Lead	<35.7	35.7	ppm	02/23/15 15:00	Soil EPA 7000B (1)
011	11L	Soil	Lead	<35.4	35.4	ppm	02/23/15 15:00	Soil EPA 7000B (1)
012	12L	Soil	Lead	<35.7	35.7	ppm	02/23/15 15:00	Soil EPA 7000B (1)
013	13L	Soil	Lead	<34.0	34	ppm	02/23/15 15:00	Soil EPA 7000B (1)
014	14L	Soil	Lead	<38.5	38.5	ppm	02/23/15 15:00	Soil EPA 7000B (1)
015	15L	Soil	Lead	<38.4	38.4	ppm	02/23/15 15:00	Soil EPA 7000B (1)
016	16L	Soil	Lead	<35.6	35.6	ppm	02/23/15 15:00	Soil EPA 7000B (1)
017	17L	Soil	Lead	<38.9	38.9	ppm	02/23/15 15:00	Soil EPA 7000B (1)

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified



# **Environmental Chemistry Analysis Report**

**QuanTEM Set ID:** 246793

**Date Received:** 02/19/15

Received By: Sherrie Leftwich

**Date Sampled:** 

Time Sampled:

Analyst: CC

**Date of Report:** 2/27/2015

AIHA ID: 101352

Client:

Marshall Environmental Management, Inc.

1601 SW 89th Street, Ste. A-100

Oklahoma City, OK 73159

Acct. No.: A331

Project: Royal Park

**Location:** SW 19th and Telephone Rd., Moore, OK

**Project No.:** 0028-EN-020615

QuanTEM					Reporting		Date/Time	
ID	Client ID	Matrix	Parameter	Results	Limits	Units	Analyzed	Method
018	18L	Soil	Lead	<38.1	38.1	ppm	02/23/15 15:00	Soil EPA 7000B (1)
019	19L	Soil	Lead	<39.5	39.5	ppm	02/23/15 15:00	Soil EPA 7000B (1)
020	20L	Soil	Lead	<35.7	35.7	ppm	02/23/15 15:00	Soil EPA 7000B (1)
021	21L	Soil	Lead	<38.9	38.9	ppm	02/24/15 13:00	Soil EPA 7000B (1)
022	22L	Soil	Lead	<39.0	39	ppm	02/24/15 13:00	Soil EPA 7000B (1)
023	23L	Soil	Lead	<37.8	37.8	ppm	02/24/15 13:00	Soil EPA 7000B (1)
024	24L	Soil	Lead	<38.9	38.9	ppm	02/24/15 13:00	Soil EPA 7000B (1)
025	25L	Soil	Lead	<38.9	38.9	ppm	02/24/15 13:00	Soil EPA 7000B (1)
026	26L	Soil	Lead	<35.6	35.6	ppm	02/24/15 13:00	Soil EPA 7000B (1)
027	27L	Soil	Lead	<39.1	39.1	ppm	02/24/15 13:00	Soil EPA 7000B (1)
028	28L	Soil	Lead	<38.9	38.9	ppm	02/24/15 13:00	Soil EPA 7000B (1)
029	29L	Soil	Lead	<39.4	39.4	ppm	02/24/15 13:00	Soil EPA 7000B (1)
030	30L	Soil	Lead	<36.4	36.4	ppm	02/24/15 13:00	Soil EPA 7000B (1)
031	31L	Soil	Lead	<39.6	39.6	ppm	02/24/15 13:00	Soil EPA 7000B (1)
032	32L	Soil	Lead	<38.3	38.3	ppm	02/24/15 13:00	Soil EPA 7000B (1)
033	33L	Soil	Lead	<35.0	35	ppm	02/24/15 13:00	Soil EPA 7000B (1)
034	34L	Soil	Lead	<37.2	37.2	ppm	02/24/15 13:00	Soil EPA 7000B (1)

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified



# **Environmental Chemistry Analysis Report**

**QuanTEM Set ID:** 246793

**Date Received:** 02/19/15

Received By: Sherrie Leftwich

**Date Sampled:** 

Time Sampled:

Analyst: CC

**Date of Report:** 2/27/2015

AIHA ID: 101352

Client:

Marshall Environmental Management, Inc.

1601 SW 89th Street, Ste. A-100

Oklahoma City, OK 73159

Acct. No.: A331

**Project:** Royal Park

**Location:** SW 19th and Telephone Rd., Moore, OK

**Project No.:** 0028-EN-020615

QuanTEM					Reporting		Date/Time	
ID	Client ID	Matrix	Parameter	Results	Limits	Units	Analyzed	Method
035	35L	Soil	Lead	<37.0	37	ppm	02/24/15 13:00	Soil EPA 7000B (1)
036	36L	Soil	Lead	<37.9	37.9	ppm	02/24/15 13:00	Soil EPA 7000B (1)
037	37L	Soil	Lead	<38.2	38.2	ppm	02/24/15 13:00	Soil EPA 7000B (1)
038	38L	Soil	Lead	<36.8	36.8	ppm	02/24/15 13:00	Soil EPA 7000B (1)
039	39L	Soil	Lead	<37.4	37.4	ppm	02/24/15 13:00	Soil EPA 7000B (1)
040	40L	Soil	Lead	<37.4	37.4	ppm	02/24/15 13:00	Soil EPA 7000B (1)
041	41L	Soil	Lead	<35.3	35.3	ppm	02/25/15 15:00	Soil EPA 7000B (1)
042	42L	Soil	Lead	<36.2	36.2	ppm	02/25/15 15:00	Soil EPA 7000B (1)
043	43L	Soil	Lead	<39.4	39.4	ppm	02/25/15 15:00	Soil EPA 7000B (1)
044	44L	Soil	Lead	<37.3	37.3	ppm	02/25/15 15:00	Soil EPA 7000B (1)
045	45L	Soil	Lead	<38.8	38.8	ppm	02/25/15 15:00	Soil EPA 7000B (1)
046	46L	Soil	Lead	<37.8	37.8	ppm	02/25/15 15:00	Soil EPA 7000B (1)
047	47L	Soil	Lead	<39.6	39.6	ppm	02/25/15 15:00	Soil EPA 7000B (1)
048	48L	Soil	Lead	<39.4	39.4	ppm	02/25/15 15:00	Soil EPA 7000B (1)
049	49L	Soil	Lead	<35.8	35.8	ppm	02/25/15 15:00	Soil EPA 7000B (1)
050	50L	Soil	Lead	<36.9	36.9	ppm	02/25/15 15:00	Soil EPA 7000B (1)
051	51L	Soil	Lead	<37.8	37.8	ppm	02/25/15 15:00	Soil EPA 7000B (1)

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified



# **Environmental Chemistry Analysis Report**

**QuanTEM Set ID:** 246793

**Date Received:** 02/19/15

Received By: Sherrie Leftwich

**Date Sampled:** 

Time Sampled:

Analyst: CC

**Date of Report:** 2/27/2015

AIHA ID: 101352

057

058

57L

58L

Soil

Soil

Lead

Lead

Client:

Marshall Environmental Management, Inc.

1601 SW 89th Street, Ste. A-100

Oklahoma City, OK 73159

Acct. No.: A331

**Project:** Royal Park

**Location:** SW 19th and Telephone Rd., Moore, OK

**Project No.:** 0028-EN-020615

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
052	52L	Soil	Lead	<36.2	36.2	ppm	02/25/15 15:00	Soil EPA 7000B (1)
053	53L	Soil	Lead	<39.0	39	ppm	02/25/15 15:00	Soil EPA 7000B (1)
054	54L	Soil	Lead	<35.9	35.9	ppm	02/25/15 15:00	Soil EPA 7000B (1)
055	55L	Soil	Lead	<39.3	39.3	ppm	02/25/15 15:00	Soil EPA 7000B (1)
056	56L	Soil	Lead	<38.5	38.5	ppm	02/25/15 15:00	Soil EPA 7000B (1)

<38.4

<38.8

38.4

38.8

Authorized Signature:

ppm

ppm

Benton Miller, Analyst

02/25/15 15:00 Soil EPA 7000B (1)

02/25/15 15:00 Soil EPA 7000B (1)

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. QuanTEM is not responsible for user-supplied data used in calculations.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified. EPA 7000B Analysis Modified

# Supplemental Report QAQC Results

**QA ID:** 12745 **Date:** 2/23/2015 **Lab Number:** 246793

Test: Lead Matrix: Soil Approved By: Benton Miller

**Date Approved:** 2/23/2015

**Notes:** 

#### Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

#### **Standards Data:**

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.7	5.5
FCV	4.5	4.8	5.5
ICV	0.9	0.99	1.1
RLVS	0.128	0.146	0.192

#### **Duplicate Data:**

Sample Number	Result	Duplicate	% RPD
246822-004	0.463	0.428	7.9

#### **Recovery Data:**

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
246793-001	0.000	2.000	1.794	89.7			
LCS-B2	0.000	5.433	4.389	80.8			
LCS-S1	0.000	5.412	4.693	86.7	4.590	84.8	2.2
LCS-S1	0.000	5.412	4.693	86.7	4.669	86.3	0.5
246822-004	0.463	2.000	2.433	98.5			

Authorized Signature:

Page 1 of 3 Benton Miller, Analyst

# Supplemental Report QAQC Results

**QA ID:** 12749 **Date:** 2/24/2015 **Lab Number:** 246793

Test:LeadMatrix:SoilApproved By:Benton MillerDate Approved:2/24/2015

**Notes:** 

#### Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

#### **Standards Data:**

Standard	Low Limit	Obtained	High Limit
CCV	4.5	4.6	5.5
FCV	4.5	4.5	5.5
ICV	0.9	1.09	1.1
RLVS	0.128	0.181	0.192

#### **Duplicate Data:**

Sample Number	Result	Duplicate	% RPD	
246823-010	2.163	1.929	11.5	

#### **Recovery Data:**

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
LCS-S1	0.000	5.488	4.637	84.5	4.636	84.5	0.0
LCS-S2	0.000	5.488	5.155	93.9	5.664	103.2	9.4
246793-037	0.035	2.000	2.288	112.6			

Authorized Signature:

Page 2 of 3 Benton Miller, Analyst

# Supplemental Report QAQC Results

**Date:** 2/25/2015 **Lab Number:** 246793

Test: Lead Matrix: Soil Approved By: Benton Miller

**Date Approved:** 2/25/2015

**Notes:** 

QA ID:

#### Blank Data:

Type of Blank	Blank Value
FCB	0
Matrix Blank	0

#### **Standards Data:**

Standard	Low Limit	Obtained	High Limit	
CCV	4.5	5.2	5.5	
FCV	4.5	5.4	5.5	
ICV	0.9	0.92	1.1	
RLVS	0.128	0.136	0.192	

#### **Duplicate Data:**

#### **Recovery Data:**

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
246793-058	0.000	2.000	2.188	109.4			
LCS-S1	0.000	5.412	5.246	96.9	5.561	102.7	5.8

Authorized Signature:

Page 3 of 3 Benton Miller, Analyst



Environmental Soil Sample Location Map Royal Park Redevelopment Tract Source: Google Maps Scale: Not to Scale

