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## LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

Transformer Oil Sampling McGill Ball Park 56 South 4th Street McGill, Nevada NDEP Contract #10-008 Task M25-12

**Prepared** for:

State of Nevada Department of Conservation and Natural Resources Division of Environmental Protection Bureau of Corrective Actions 901 S. Stewart Street, Suite 4001 Carson City, Nevada 89701-5249

On behalf of:

White Pine County

June 28, 2012

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## EXECUTIVE SUMMARY

*McGinley & Associates (MGA) conducted transformer oil sampling (Assessment) on pole-mounted transformers located within the McGill Ball Park facility at 56 S. 4<sup>th</sup> Street, McGill, Nevada. The site is located on one parcel of land identified as White Pine County Assessor's Parcel Number (APN) 004-034-01. The objective of the sampling activities was to assess for the presence of poly-chlorinated biphenyls (PCBs) within dielectric fluid found inside the eight pole-mounted transformers formerly utilized by the ball park. Data from the Assessment will be utilized to determine the method by which the transformers will be disposed.* 

For the Assessment, transformer oil samples were collected from inside each accessible transformer. A construction lift was utilized to provide access to six of eight transformers located on the subject property. Samples were not collected from two transformers due to site conditions at those locations. Transformers at the site are comprised of three Westinghouse transformers and five General Electric (GE) transformers. Each transformer contained approximately 20 gallons of dielectric fluid at the time of sampling. All collected oil samples were delivered to Alpha Analytical, Inc. (the laboratory) under proper Chain of Custody (COC) protocol and samples were analyzed for PCBs.

The results of the analysis indicate that PCB concentrations within three Westinghouse Type S transformers found at the McGill Ball Park were below 5 mg/Kg. Concentrations within GE transformers ranged from 60 mg/Kg to 270 mg/Kg of Aroclor 1260. The two transformers that were not accessible during the Assessment appeared to be similar in size, shape, and design as the three GE transformers from which samples were collected. It is estimated that oil within those transformers is contaminated with Aroclor 1260 within the range of 60 - 270 mg/Kg.

The Toxic Substances Control Act of 1976 (TSCA) is the governing federal statute which provides the basis for disposal of PCB wastes. The TSCA PCB disposal regulations as promulgated under 40 CFR 761.60 are required to be met for out of service PCB equipment once it is determined that the equipment is no longer useful. Under these regulations, the following disposal methods are required:

- < 50 mg/Kg: A transformer with oil containing less than 50 mg/Kg of PCBs is considered to be a non-PCB transformer. Transformers designated as such must be disposed of in a responsible manner; that is, they may be disposed of in a municipal waste landfill or equivalent. However, when disposing of any PCB waste material, potential Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability should be considered.
- 50 mg/Kg to < 500 mg/Kg: A transformer with oil containing greater than 50 mg/Kg of PCBs but less than 500 mg/Kg of PCBs is considered to be a PCB-contaminated transformer. Transformers designated as such may be disposed of in a chemical waste landfill once they have been drained of free-flowing liquid PCBs. The liquid PCBs at these concentrations may be disposed of via an EPA-approved high-efficiency boiler or in a TSCA incinerator.
- **500 mg/Kg or greater**: A transformer with oil containing 500 mg/Kg of PCBs or greater is considered to be a PCB transformer. Transformers designated as such shall be disposed in a TSCA incinerator or a chemical waste landfill once all free-flowing fluid has been removed, the transformer filled with a solvent, and allowed to stand for at least 18 continuous hours with subsequent and thorough removal of the solvent. All fluid/solvent shall be disposed of in a TSCA incinerator.

Upon conclusion of our Assessment, and based on analytical laboratory data for samples collected at the site, MGA has determined that the three Westinghouse transformers found at the McGill Ball Park may be considered non-PCB transformers. Additionally, based on the analytical laboratory data, the five GE transformers found at the McGill Ball Park are considered PCB-contaminated transformers. Therefore, MGA recommends that the transformers be disposed of utilizing the above stated methods corresponding to each individual transformer and its concentration of oil found within.

#### 1. INTRODUCTION

McGinley & Associates (MGA) conducted a Transformer Oil Sampling Assessment (Assessment) on eight pole-mounted transformers in place at the McGill Ball Park facility in McGill, Nevada. The site exists on one parcel of land that is listed with White Pine County, Nevada as Assessor's Parcel Number (APN) 010-420-06.

#### 2. OBJECTIVES AND SCOPE OF SERVICES

The objective of the Assessment activities was to assess for the presence of PCBs within dielectric fluid found inside the eight pole-mounted transformers formerly utilized by the ball park. As required by the State of Nevada Administrative Code (NAC) 459, all MGA services were supervised and reviewed by a Nevada Certified Environmental Manager (CEM).

The Assessment activities performed by MGA consisted of the following:

- Collection of transformer oil samples from six of eight pole-mounted transformers formerly utilized by the ball park;
- Laboratory analysis of these samples; and
- Preparation of a technical report complete with findings and recommendations.

#### 3. BACKGROUND

The McGill Ball Park is one of the oldest ball parks in the State of Nevada. It was constructed by Nevada Consolidated Copper (NCC) in the early 1900s, providing its employees with a place for recreational activities. The park has a rich history of hosting state tournaments for town leagues and high school. In the past, NCC performed construction renovations to make the ball field more modern, including the installation of light poles with lights and a roof for the bleachers. In 1961, the ball park became the property of White Pine County School District when the company ceased operations. In 1994, the Board of County Commissioners was granted the property via quit claim.

Recently, the White Pine County Commissioners received a grant to update and renovate the McGill Ball Park. The proposed renovation includes the replacement of the lighting system. As a result, the transformers currently located at the facility will be placed out of use and will require proper disposal.

In May of 2012, a Phase I Environmental Site Assessment was performed by MGA on the subject property. The assessment discovered recognized environmental conditions (RECs) which included the following:

• Based on the estimated age of the aerial transformers, there is a high likelihood that PCBs are present within the eight transformers found at the park.

The Phase I ESA was not able to ascertain the manufacturing date of the aerial transformers. With the date not determined and the manufacturing date estimated to be prior to July 2, 1979, any person must assume that the transformer contains greater than 500 mg/Kg PCBs. As this designation requires a significantly more expensive disposal method, the dielectric fluid within each transformer was proposed to be sampled and analyzed to determine the actual concentration of PCBs within the fluid.

#### 4. ENVIRONMENTAL INVESTIGATION

Assessment field activities were performed by MGA personnel on June 12, 2012. Prior to sampling, an electrical contractor determined that the transformers were disconnected from the existing power grid. Once each transformer was determined to be disconnected, sample collection was performed by MGA staff utilizing ASTM D923: Standard Practices for Sampling Electrical Insulating Liquids. For each transformer, a sampling system comprised of a one-use sampling apparatus consisting of a NORM-JECT plastic syringe with environmental sampling grade low density polyethylene (LDP) tubing was utilized. Further, two pair of 8 mil nitrile exam gloves, disposable towel wipes, and a Tyvek protective suit was utilized for collection of oil fluid from each transformer. The apparatus and accompanying sampling materials were collected into a five gallon steel drum after each use for subsequent disposal. The location of each transformer in relation to the entire facility is shown on Figure 2.

### 5. ANALYTICAL TESTING

Collected transformer oil samples were delivered under chain-of-custody protocol to Alpha Analytical, Inc. (Alpha) located in Sparks, Nevada. The following analyses were requested to be performed on the samples submitted:

• PCBs: EPA Method SW8082;

The chain-of-custody records for the soil samples are provided in Appendix A.

## 6. ANALYTICAL RESULTS

#### 6.1 Summary of Results

Each collected sample was analyzed for PCBs ranging from Aroclor 1016 to Aroclor 1260. The analytical results for the oil samples are summarized in Table 1.

#### 6.2 PCBs

The results of the analysis indicate that PCB concentrations within three Westinghouse Type S transformers found at the McGill Ball Park were below 5 mg/Kg. Concentrations within GE transformers ranged from 60 mg/Kg to 270 mg/Kg (Aroclor 1260).

Location ID	Transformer Type	PCBs (mg/Kg)
TF-1	Westinghouse (cuboid)	< 5
TF-2	GE (cylinder)	130
TF-3	GE (cylinder)	60
TF-4	Westinghouse (cuboid)	< 5
TF-5	Westinghouse (cylinder w/ fins)	< 5
TF-6	GE (cylinder)	270
TF-7	GE (cylinder)*	NS
TF-8	GE (cylinder)*	NS

#### **Table 1: PCB Concentrations in Transformer Oil**

NS = Not Sampled

\* Transformer appeared to be similar in size, shape, and design as the other three General Electric transformers

The two transformers that were not accessible during the Assessment appeared to be similar in size, shape, and design as the three GE transformers from which samples were collected. It is estimated that oil within those transformers is contaminated with Aroclor 1260 and within the range of 60 - 270 mg/Kg.

### 7. DATA QUALITY

#### 7.1 Transformer Oil Sampling

The transformer oil samples were collected in accordance with ASTM Method D923 and MGA standard operating procedures (SOPs). Care was taken to minimize sample disturbance and cross-contamination between collection of samples. Transformer oil samples were preserved in a cooler until they were received by the laboratory (see chain-of-custody records provided in Appendix A).

### 7.2 Laboratory Analytical Data for Transformer Oils

The laboratory analytical data for the transformer oil samples were in compliance with the data quality objectives established in the laboratory's SOP. According to the QC Summary Report supplied by Alpha Analytical, no data qualifiers were noted in the analysis of the sample matrix spike (MS) and sample matrix spike duplicate (MSD). In addition, analysis of the method blank and laboratory control spike (LCS) samples were all within control limits. Quality Control data can be found within the laboratory analytical package in Appendix A.

### 8. SUMMARY OF FIELD ACTIVITIES

- Transformer oil samples were collected from six of eight pole-mounted transformers located within the McGill Ball Park facility;
- Collected samples were placed into a dedicated paint can within a dedicated cooler at a temperature of 4°C; and
- Investigation derived waste (IDW) from each sampling location was discarded into a five gallon metal drum after each sampling event for subsequent disposal.

### 9. FINDINGS

- Transformer oil samples were analyzed for PCBs;
- Analytical results are summarized in Table 1;
- All three samples collected from Westinghouse transformers did not contain PCB concentrations greater than the laboratory reporting limit of 5 mg/Kg;
- Three samples collected from GE transformers contained PCB concentrations between 60 mg/Kg and 270 mg/Kg (Aroclor 1260);

#### **10. CONCLUSIONS AND RECOMMENDATIONS**

McGinley & Associates was contracted by the NDEP on behalf of White Pine County to perform transformer oil sampling on eight pole-mounted transformers located within the McGill Ball Park at 56 South 4<sup>th</sup> Street, in McGill, Nevada. The ball park facility exists on one parcel of land that is listed with White Pine County, Nevada as APN 004-034-01. The ESA activities were supervised and reviewed by a Nevada Certified Environmental Manager (CEM) as required by the State of Nevada NAC 459.

The field work conducted by MGA included collection of transformer oil samples from six of eight pole-mounted transformers located within the facility. Samples were not collected from two transformers due to inaccessibility issues during the Assessment activities. However, the transformers not sampled were noted to be similar in size, shape, and design as the three GE transformers from which samples were collected.

For each transformer, a sampling system comprised of a one-use sampling apparatus consisting of a NORM-JECT plastic syringe with environmental sampling grade low density polyethylene (LDPE) tubing was utilized. Further, two pair of 8 mil nitrile exam gloves, disposable towel wipes, and a Tyvek protective suit was utilized for collection of oil fluid from each transformer. The apparatus and accompanying sampling materials were collected into a five gallon steel drum after each sample was collected for subsequent disposal.

Laboratory analytical results determined that three Westinghouse transformers do not contain PCB concentrations above the laboratory reporting limit of 5 mg/Kg. In addition, the three GE transformers were determined to contain PCB concentrations ranging from 60 mg/Kg to 270 mg/Kg (Aroclor 1260).

The Toxic Substances Control Act of 1976 (TSCA) is the governing federal statute which provides the basis for disposal of PCB wastes. The TSCA PCB disposal regulations as promulgated under 40 CFR 761.60 are required to be met for out of service PCB equipment once it is determined that the equipment is no longer useful. Under these regulations, the following disposal methods are required:

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Upon conclusion of our Assessment, and based on analytical laboratory data for samples collected at the site, MGA has determined that the three Westinghouse transformers found at the McGill Ball Park may be considered non-PCB transformers. Additionally, based on the analytical laboratory data, the five GE transformers found at the McGill Ball Park are considered PCB-contaminated transformers. Therefore, MGA recommends that the transformers be disposed of utilizing the above stated methods corresponding to each individual transformer and the corresponding concentration of oil found within.

#### 11. LIMITATIONS

The conclusions presented herein are based on analytical data and observations. MGA makes no warranties or guarantees as to the accuracy or completeness of information provided or compiled by others. The results reported herein are applicable to the time the sampling occurred.

It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact science. Judgments and opinions leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. Additional information not found or unavailable to MGA at the time of writing this report may result in a modification to the conclusions and recommendations contained herein.

This report is not a legal opinion. The services performed by MGA have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

The use of the word "certify" in this document constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification and does not constitute a warranty or guarantee, either expressed or implied.

### 12. CLOSING

Should you have any questions regarding this report please contact Brett Bottenberg at (702) 260-4961.

Respectfully submitted,

McGinley and Associates, Inc.

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations, and ordinances.

Brett C. Bottenberg, C.E.M. #1690, Exp. 10/07/13 Senior Project Manager

Reviewed by:

Joseph M. McGinley, P.E., C.E.M. #1036, Exp. 11/12 Principal

#### 13. REFERENCES

ASTM Designation: D923-07, Standard Practices for Sampling Electrical Insulating Liquids., ASTM International, 2007.

Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. Subpart D – Storage and Disposal. Code of Federal Regulations Title 40: Protection of Environment, Part 761, United States Federal Government.



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# APPENDIX A

Chain-of-Custody Records and Laboratory Reports for Transformer Oil Samples



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

#### ANALYTICAL REPORT

McGinley & Associates 6280 S. Valley View Blvd Las Vegas, NV 89118

 Attn:
 Brett Bottenberg

 Phone:
 (702) 260-4961

 Fax:
 (702) 260-4968

 Date Received : 06/15/12

#### Job: LVBRN015/ McGill Ball Park

	Polycl	alorinated Biphenyls (PCBs) in EPA Method SW8082	Oil		
	Parameter	Concentration	Reporting	Date	Date
			Limit	Extracted	Analyzed
Client ID: LVBRN015-TF-1					
Lab ID : MGA12061503-01A	Aroclor 1016	ND	50 mg/Kg	06/19/12	06/20/12
Date Sampled $06/12/12$ 13.27	Aroclor 1221	ND	5 () mg/Kg	06/19/12	06/20/12
Dute Sumplea 00/12/12 15.27	Aroclor 1232	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1242	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1248	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1254	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1260	ND	5.0 mg/Kg	06/19/12	06/20/12
	Surr: Tetrachloro-m-xylene	94	(41-152) %REC	06/19/12	06/20/12
	Surr: Decachlorobiphenyl	101	(39-163) %REC	06/19/12	06/20/12
Client ID: LVBRN015-TF-2					
Lab ID : MGA12061503-02A	Aroclor 1016	ND	5.0 mg/Kg	06/19/12	06/20/12
Date Sampled 06/12/12 13:40	Aroclor 1221	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1232	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1242	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1248	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1254	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1260	130	5.0 mg/Kg	06/19/12	06/20/12
	Surr: Tetrachloro-m-xylene	94	(41-152) %REC	06/19/12	06/20/12
	Surr: Decachlorobiphenyl	91	(39-163) %REC	06/19/12	06/20/12
Client ID: LVBRN015-TF-3					
Lab ID : MGA12061503-03A	Aroclor 1016	ND	5.0 mg/Kg	06/19/12	06/20/12
Date Sampled 06/12/12 13:55	Aroclor 1221	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1232	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1242	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1248	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1254	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1260	60	5.0 mg/Kg	06/19/12	06/20/12
	Surr: Tetrachloro-m-xylene	101	(41-152) %REC	06/19/12	06/20/12
	Surr: Decachlorobiphenyl	97	(39-163) %REC	06/19/12	06/20/12
Client ID: LVBRN015-TF-4					
Lab ID : MGA12061503-04A	Aroclor 1016	ND	5.0 mg/Kg	06/19/12	06/20/12
Date Sampled 06/12/12 14:15	Aroclor 1221	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1232	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1242	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1248	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1254	ND	5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1260	ND	5.0 mg/Kg	06/19/12	06/20/12
	Surr: Tetrachloro-m-xylene	97	(41-152) %REC	06/19/12	06/20/12
	Surr: Decachlorobiphenyl	102	(39-163) %REC	06/19/12	06/20/12



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#### Client ID: LVBRN015-TF-5

Lab ID : MGA12061503-05A	Aroclor 1016	ND		5.0 mg/Kg	06/19/12	06/20/12
Date Sampled 06/12/12 14:45	Aroclor 1221	ND		5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1232	ND		5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1242	ND		5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1248	ND		5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1254	ND		5.0 mg/Kg	06/19/12	06/20/12
	Aroclor 1260	ND		5.0 mg/Kg	06/19/12	06/20/12
	Surr: Tetrachloro-m-xylene	94		(41-152) %REC	06/19/12	06/20/12
	Surr: Decachlorobiphenyl	91		(39-163) %REC	06/19/12	06/20/12
Client ID: LVBRN015-TF-6						
Lab ID : MGA12061503-06A	Aroclor 1016	ND	v	10 mg/Kg	06/19/12	06/20/12
Date Sampled 06/12/12 15:05	Aroclor 1221	ND	v	10 mg/Kg	06/19/12	06/20/12
	Aroclor 1232	ND	V	10 mg/Kg	06/19/12	06/20/12
	Aroclor 1242	ND	v	10 mg/Kg	06/19/12	06/20/12
	Aroclor 1248	ND	Ŷ	10 mg/Kg	06/19/12	06/20/12
	Aroclor 1254	ND	v	10 mg/Kg	06/19/12	06/20/12
	Aroclor 1260	270		10 mg/Kg	06/19/12	06/20/12
	Surr: Tetrachloro-m-xylene	102		(41-152) %REC	06/19/12	06/20/12
	Surr: Decachlorobiphenyl	106		(39-163) %REC	06/19/12	06/20/12

V = Reporting Limits were increased due to high concentrations of target analytes.

Sample results were calculated on a wet weight basis. ND = Not Detected

Roger Scholl

Kandy Soulmer

Walter Alm

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise. Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered an any way. Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV00016.

6/21/12 Report Date



255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

<b>Date:</b> 21-Jun-12		QC Su	ımmar	y Repor	t				<b>Work Ord</b> 12061503	er:
Method Blank File ID: 12062021.D		Туре: <b>М</b>	BLK T	est Code: El atch ID: 2894	PA Met 42	hod SW80	982 Analy	sis Date:	06/20/2012 17:34	
Analyte	Units : <b>mg/</b> Result	Kg PQL	Run ID: E( SokVal	CD_1_12061 SokRefVal	9A %REC	LCL(ME)	Prep UCL(ME)	Date: RPDRef\	06/19/2012 14:34 /al %RPD(Limit)	Qual
Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260 Surr: Tetrachloro-m-xylene	ND ND ND ND ND ND ND ND ND 0.743	5 5 5 5 5 5 5 5 5	0.8		93	41	152			
Surr: Decachlorobiphenyl	0.805	•	0.8		101	39	163			
Laboratory Control Spike File ID: 12062022.D	e	Type: LO	CS T	est Code: El	PA Met	hod SW80	82 Analy	sis Date:	06/20/2012 17:46	·
Analyte	Result	∧g PQL	SpkVal	SpkRefVal	9A %REC	LCL(ME)	UCL(ME)	RPDRef	/al %RPD(Limit)	Qual
Aroclor 1016 Aroclor 1260 Surr: Tetrachloro-m-xylene Surr: Decachlorobiphenyl	19.2 22 0.78 0.822	5 5	20 20 0.8 0.8		96 110 98 103	40 40 41 39	157 157 152 163			
Sample Matrix Spike		Type: M	<b>s</b> т	est Code: El	PA Met	nod SW80	82			
File ID: 12062024.D			Ва	atch ID: 2894	42		Analy	sis Date:	06/20/2012 18:11	
Sample ID: 12061503-02A	MS Units : mg/l	Kg	Run ID: E(	D_1_12061	9A		Prep	Date:	06/19/2012 14:34	Quel
Aroclor 1016 Aroclor 1260 Surr: Tetrachloro-m-xylene Surr: Decachlorobiphenyl	18.3 148 0.725 0.704	5 5	20 20 0.8 0.8	0 132.7	92 78 91 88	32 32 41 39	165 165 152 163	REDRei		
Sample Matrix Spike Dup	olicate	Type: M	SD T	est Code: EF	PA Met	nod SW80	82			
File ID: 12062027.D			B	atch ID: 2894	12		Analy	sis Date:	06/20/2012 18:48	
Sample ID: 12061503-02A	MSD Units : mg/	Kg	Run ID: <b>E(</b>	CD_1_12061	9A		Prep	Date:	06/19/2012 14:34	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %RPD(Limit)	Qual
Aroclor 1016 Aroclor 1260 Surr: Tetrachloro-m-xylene Surr: Decachlorobiphenyl	18 150 0.71 0.687	5 5	20 20 0.8 0.8	0 132.7	90 85 89 86	32 32 41 39	165 165 152 163	18.3 148.3	1.8(44) 3 1.0(44)	

#### Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Phone : (775) 355-1044 FAX : (775) 355-0406 Sample Receipt Checklist

Date Report is due to Client : 6/21/2012

Date of Notice : 6/15/2012 11:50:14 AM

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: McGinley & Associates	Project ID :	L	VBRN015/ N	ИсGi	n Ban Park
Project Manager: Brett Bottenberg	Client's EMai	l:b	bottenberg@	)) ) 61	gin.com Client's FAX: (702) 260-4968
Work Order Number: MGA12061503	Date Receive	ed: 6	62)200-400 6/15/2012	01	Received by: Sara Coffee
Chai	n of Custody (	CO	C) Informati	on	· · · · · · · · · · · · · · · · · · ·
Carrier name: OnTrac					
Chain of custody present ?	Yes	✓		No	
Custody seals intact on shippping container/cooler ?	Yes	✓		No	Not Present
Custody seals intact on sample bottles ?	Yes	✓		No	Not Present
Chain of custody signed when relinquished and received ?	Yes	✓		No	
Chain of custody agrees with sample labels ?	Yes	✓		No	
Sample ID noted by Client on COC ?	Yes			No	
Date and time of collection noted by Client on COC ?	Yes	✓		No	
Samplers's name noted on COC ?	Yes	✓		No	
Internal Chain of Custody (COC) requested ?	Yes		$\checkmark$	No	
Sub Contract Lab Used :	None	✓		See	e Comments
	Sample Recei	pt in	formation		
Shipping container/cooler in good condition?	Yes	✓		No	Not Present
Samples in proper container/bottle?	Yes	✓		No	
Sample containers intact?	Yes	✓		No	
Sufficient sample volume for indicated test?	Yes	✓		No	
Sample Pres	ervation and I	lold	Time (HT) I	nfor	mation
All samples received within holding time?	Yes	⊻		No	Cooler Temperature
Container/Temp Blank temperature in compliance (0-6°C)?	Yes	✓		No	0 °C
Samples arrived in a timely manner?	Yes	✓		No	
Client attempted to be contacted?	Yes			No	If YES : see Comments
Water - VOA vials have zero headspace / no bubbles?	Yes	$\checkmark$		No	N/A D No VOA vials submitted
Sample labels checked for correct preservation?	Yes	✓		No	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes			No	N/A
Are NV non-SDWA 314 samples field filtered ( $0.2\mu$ )?	Yes			No	N/A 🗹
Ana	lytical Require	me	nt Informati	on	
Are non-Standard or Modified methods requested ?	Yes			No	
Are there client specific Project requirements ?	Yes			No	If YES : see the Chain of Custody (COC)
Is this a Drinking Water regulatory sample ?	Yes			No	
Comments :					

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Logged in by: Almuloffle	Signature
Java lottel	Print Name
Alpha Analytical, Inc.	Company
6/15/12 15 45	Date/Time

Security seals intact. Frozen Ice. :

Comments:

QC Level : S3       = Final Rpt, MBLK, LCS, MS/MSD With Surrogates         Alpha       Client       Collection No. of Bottles         8082_0       Requested Tests
Alpha Client Collection No. of Bottles 8082_0 Requested Tests
Alpha Client Collection No. of Bottles 8082_0
Sample ID Sample ID Matrix Date Alpha Sub TAT Sample Remarks
MGA12061503-01A LVBRN015-TF-1 OL 06/12/12 1 0 4 PCB
MGA12061503-02A LVBRN015-TF-2 OL 06/12/12 1 0 4 PCB 13:40
MGA12061503-03A LVBRN015-TF-3 OL 06/12/12 1 0 4 PCB 13:55
MGA12061503-04A LVBRN015-TF-4 OL 06/12/12 1 0 4 PCB 1 14:15
MGA12061503-05A LVBRN015-TF-5 OL 06/12/12 1 0 4 PCB
MGA12061503-06A LVBRN015-TF-6 OL 06/12/12 1 0 4 PCB 15:05

Page: 1 of 1

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Billing Information :

CHAIN-OF-CUSTODY RECORD

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778 TEL: (775) 355-1044 FAX: (775) 355-0406

Alpha Analytical, Inc.

PO

Las Vegas, NV 89118

6280 S. Valley View Blvd McGinley & Associates

Ste 604

Client:

Report Attention Brett Bottenberg

Phone Number

EMail Address

Report Due By : 5:00 PM On : 21-Jun-12 WorkOrder : MGAL12061503

(702) 260-4961 x 7003 bbottenberg@mcgin.com

EDD Required : Yes

Sampled by : Biren P

Cooler Temp

Samples Received 15-Jun-12

Date Printed

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of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.