



Reno Office

815 Maestro Drive
Reno, Nevada 89511
Ph: 775.829.2245

Las Vegas Office

6280 South Valley View Boulevard
Suite 604
Las Vegas, Nevada 89118
Ph: 702.260.4961

www.mcgin.com

- | Site Remediation
- | Soil & Groundwater Investigations
- | Closure Optimization
- | Brownfields Redevelopment
- | Permitting & Compliance
- | Phase I Assessments
- | Storm Water & Spill Plans
- | Underground Tank Services
- | Toxic Release Inventory
- | Geographic Information Systems
- | Groundwater Modeling
- | Litigation Support & Expert Witness

ASBESTOS AND LEAD ASSESSMENT

**Former Eagle Gas
1395 US Hwy 395 North
Gardnerville, Nevada 89410
Nevada Brownfields Program
Task MA-02-14**

Prepared for:

*Nevada Division of Environmental Protection
Nevada Brownfields Program
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701*

April 4, 2014

TABLE OF CONTENTS

1.	INTRODUCTION	1
2.	SCOPE OF SERVICES	1
3.	ASBESTOS CONTAINING MATERIAL INSPECTION	1
4.	ASBESTOS ANALYTICAL RESULTS	1
5.	LEAD-BASED PAINT ASSESSMENT	2
6.	LEAD-BASED PAINT XRF ANALYZER RESULTS	3
7.	CONCLUSIONS/RECOMMENDATIONS	3
	7.1 Asbestos Containing Material Inspection.....	3
	7.2 Lead-Based Paint Assessment	4
8.	LIMITATIONS.....	4
9.	CLOSING	5

FIGURES

- Figure 1 Project Location Map
Figure 2 Site Map Showing Locations of Sample Collection

APPENDICES

- Appendix A Laboratory Analytical Results
Appendix B Chain-of-Custody Record
Appendix C XRF Field Notes

1. INTRODUCTION

McGinley & Associates, Inc. (MGA) submits this report which presents the findings of our asbestos and lead based paint assessment of the “Former Eagle Gas” facility located in Gardnerville, Nevada. The assessment was conducted for the Town of Gardnerville in conjunction with the Nevada Division of Environmental Protection (NDEP) Brownfields program. The location of the subject site is indicated in Figure 1.

2. SCOPE OF SERVICES

The following scope of services were conducted as part of our asbestos and lead based paint assessment:

- Collection of five bulk samples of suspect asbestos containing material (ACM) building materials;
- Analytical testing of the suspect ACM;
- Conducting a lead based paint assessment using a XRF analyzer; and
- Preparation of this report of findings.

Each of these services are discussed in the following sections.

3. ASBESTOS CONTAINING MATERIAL INSPECTION

On January 9, 2014, an EPA accredited, and State of Nevada licensed asbestos inspector conducted an asbestos inspection and assessment at the above referenced location for the purpose of determining if asbestos was present in suspect building materials.

Five (5) representative bulk samples were collected from materials identified to have the potential to contain asbestos. Suspect materials that were sampled during this inspection included; floor tile with mastic, ceramic tile grout, ceramic tile mortar/thin set and roofing materials.

This inspection was conducted in accordance with accepted EPA and OSHA regulations. All samples were submitted under approved chain-of-custody protocol, and analyzed at Asbestos TEM Laboratories, Inc. in Sparks, Nevada. The suspect ACM samples were analyzed for asbestos fibers utilizing Polarized Light Microscopy (PLM). The laboratory analytical report is attached in Appendix A, and the chain of custody record is provided in Appendix B.

4. ASBESTOS ANALYTICAL RESULTS

In accordance with OSHA 29 CFR 1926.1101 and NESHAPS 40 CFR 61.141 the definition of an asbestos containing material is “any material which contains more than one percent asbestos by weight”.

Analytical results indicated that one of the five bulk samples that were collected during this inspection was positive for containing asbestos in excess of one percent. Sample #RM-5 (roof penetration mastic) contained 5-10% Chrysotile asbestos. All other materials sampled during this investigation were “None Detected” for containing asbestos. Analytical results and the laboratory chain-of-custody are provided in Appendix A and B respectively.

These sample results are limited to the materials that were identified and sampled during this inspection. If additional materials are discovered that have not been sampled and will be disturbed during the restoration project, then these materials would require additional sampling and analysis.

5. LEAD-BASED PAINT ASSESSMENT

On January 9, 2014, a lead-based paint inspector conducted a lead-based paint assessment of suspect painted surface coatings at the above referenced location. The lead-based paint assessment was accomplished by utilizing an Innov-X Alpha Series X-Ray Fluorescence (XRF) analyzer. XRF analyzers determine the chemistry of a sample by measuring the spectrum of the characteristic x-ray emitted by the different elements in the sample when it is illuminated by x-rays. When a sample is measured using XRF, each element present in the sample emits its own unique fluorescent x-ray energy spectrum. By simultaneously measuring the fluorescent x-rays emitted by the different elements in the sample, the XRF analyzer can rapidly determine the elements present in the sample and their relative concentrations.

The XRF analyzer was utilized on all colors of paint on the interior and exterior of the gas station building and associated gas pump canopy. Multiple readings were taken of each color of paint identified at the following locations:

Inside Gas Station Building

- Door Trim - Blue Paint
- Office/Sink Room - Olive Green Paint
- Walls and Ceilings - White Paint
- Cement Floor - Red Paint

Exterior of Gas Station Building

- Rear CMU Block Wall - Grey Paint
- Exterior Walls, soffits and Roof Facia - Blue/White Paint
- Structural Beams on Roof - Red Paint

Gas Pump Canopy

- Canopy Facia - White, Blue, Cream and Beige Paint
- Canopy Structural Poles - Blue Paint
- Gas Pump Bollards - Yellow Paint
- Structural Beams on Roof - Red Paint

6. LEAD-BASED PAINT XRF ANALYZER RESULTS

The EPA definition of lead-based paint is when painted surface coatings contain 1.0 mg/cm² or greater, when using an XRF analyzer.

Readings from the XRF analyzer indicated that painted surface coatings located on the gas pump bollards, and on the canopy structural poles contained 1.0 mg/cm² of lead or greater. All other painted surface coatings located on the canopy and gas station building contained less than 1.0 mg/cm² of lead. Field notes providing XRF data from the assessment are provided in Appendix C.

7. CONCLUSIONS/RECOMMENDATIONS

As a result of information obtained from conducting this ACM inspection and LBP assessment, MGA recommends that procedures are acknowledged in order to maintain State of Nevada OSHA, federal OSHA and EPA regulatory compliance, and reduce liability and health concerns. The sections below describe those procedures for both asbestos containing material and lead-based paint.

7.1 Asbestos Containing Material Inspection

As a result of conducting this asbestos inspection, penetration mastics located on the roof of the gas station building were identified to contain greater than one percent asbestos. At the time of this inspection, the penetration mastics appeared to be in good condition, and, as long as the materials are not disturbed, do not appear to pose a health risk.

Roof penetration mastics are considered to be a non-friable material for the EPA and Nevada OSHA, and a non-classified material for federal OSHA. As a result, a Nevada certified asbestos abatement contractor is not required in order to remove or disturb these materials.

However, in order to maintain regulatory compliance and reduce liability and health concerns, MGA recommends that persons with asbestos training be utilized to perform any activities that would disturb the roofing penetration mastic materials.

7.2 Lead-Based Paint Assessment

As a result of information obtained from conducting this lead-based paint assessment, readings from the XRF analyzer indicated that that painted surface coatings located on the gas pump bollards and the canopy structural poles contained 1.0 mg/cm² of lead or greater. At the time of this assessment, the painted surfaces were in good condition and currently do not appear to pose a threat to human health. However, any future work activities that would disturb the painted surfaces should be conducted in accordance with OSHA Standard 1926.26 by individuals with proper training and personal protective equipment.

8. LIMITATIONS

MGA is not responsible for any claims or damages associated with the interpretation of information provided during this inspection. This report should not be regarded as a guarantee that no further lead-based paint or asbestos containing materials exists beyond that which was suspected, visually inspected and/or sampled during this inspection. In addition, asbestos and lead may not be distributed evenly throughout a particular material and MGA cannot guarantee that all materials sampled are exactly as represented throughout the entire building. In the event that renovation or demolition activities uncover materials that were previously hidden or inaccessible during the time of this inspection, additional sample collection and analysis may be required. In the event that materials that were previously hidden or inaccessible during the time of this inspection are disturbed and an exposure occurs, MGA shall be held harmless and will not be responsible for any claims made, financial or otherwise.

MGA makes no warranties or guarantees as to the accuracy or completeness of information obtained from, provided by, or compiled by others. It is possible that information exists beyond the scope of this investigation. 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 licensed by the State of Nevada to perform this work, and practicing under similar conditions. No other warranty, expressed or implied, is made

9. CLOSING

MGA appreciates the opportunity to work with NDEP on this project. Should you have any questions regarding this report please contact the undersigned at (702) 260-4961.

Respectfully submitted,
McGinley and Associates, Inc.



Gene E. Johnson
Certified Nevada Asbestos Consultant
License No. IJPM0604

Reviewed by:

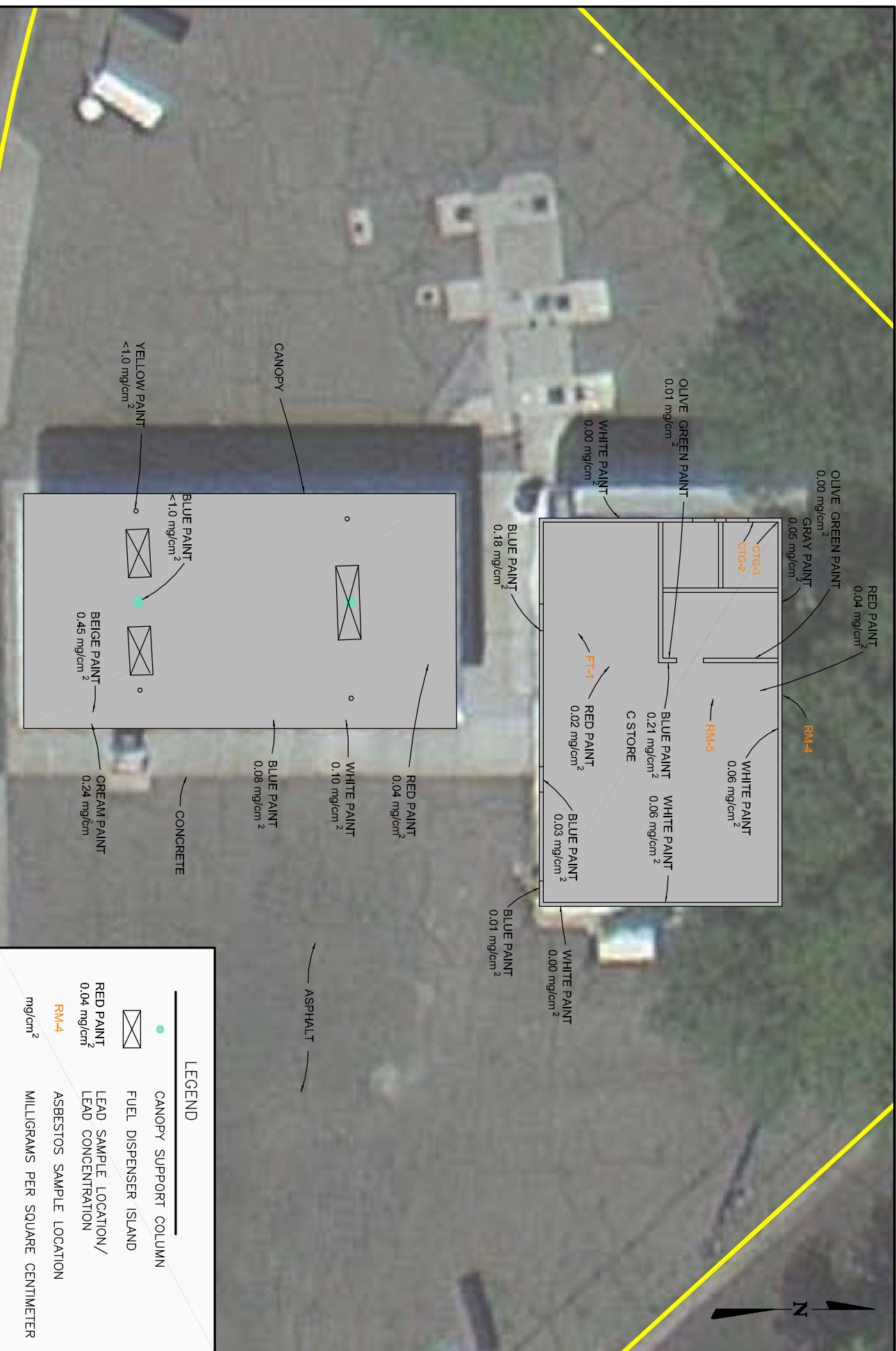
I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable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



Brett Bottenberg, C.E.M. #1690, Exp. 10/07/2015
Senior Project Manager



REVISIONS	NO.	BY	DATE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108			
109			
110			
111			
112			
113			
114			
115			
116			
117			
118			
119			
120			
121			
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
151			
152			
153			
154			
155			
156			
157			
158			
159			
160			
161			
162			
163			
164			
165			
166			
167			
168			
169			
170			
171			
172			
173			
174			
175			
176			
177			
178			
179			
180			
181			
182			
183			
184			
185			
186			
187			
188			
189			
190			
191			
192			
193			
194			
195			
196			
197			
198			
199			
200			
201			
202			
203			
204			
205			
206			
207			
208			
209			
210			
211			
212			
213			
214			
215			
216			
217			
218			
219			
220			
221			
222			
223			
224			
225			
226			
227			
228			
229			
230			
231			
232			
233			
234			
235			
236			
237			
238			
239			
240			
241			
242			
243			
244			
245			
246			
247			
248			
249			
250			
251			
252			
253			
254			
255			
256			
257			
258			
259			
260			
261			
262			
263			
264			
265			
266			
267			
268			
269			
270			
271			
272			
273			
274			
275			
276			
277			
278			
279			
280			
281			
282			
283			
284			
285			
286			
287			
288			
289			
290			
291			
292			
293			
294			
295			
296			
297			
298			
299			
300			
301			
302			
303			
304			
305			
306			
307			
308			
309			
310			
311			
312			
313			
314			
315			
316			
317			
318			
319			
320			
321			
322			
323			
324			
325			
326			
327			
328			
329			
330			
331			
332			
333			
334			
335			
336			
337			
338			
339			
340			
341			
342			
343			
344			
345			
346			
347			
348			
349			
350			
351			
352			
353			
354			
355			
356			
357			
358			
359			
360			
361			
362			
363			
364			
365			
366			
367			
368			
369			
370			
371			
372			
373			
374			
375			
376			
377			
378			
379			
380			
381			
382			
383			
384			
385			
386			
387			
388			
389			
390			
391			
392			
393			
394			
395			
396			
397			
398			
399			
400			
401			
402			
403			
404			
405			
406			
407			
408			
409			
410			
411			
412			
413			
414			
415			
416			
417			
418			
419			
420			
421			
422			
423			
424			
425			
426			
427			
428			
429			
430			
431			
432			
433			
434			
435			
436			
437			
438			
439			
440			
441			
442			
443			
444			
445			
446			
447			
448			
449			
450			
451			
452			
453			
454			
455			
456			
457			
458			
459			
460			
461			
462			
463			
464			
465			
466			
467			
468			
469			
470			
471			</



REVISIONS		DESCRIPTION		BY	DATE
No.					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					

FIGURE 2

SITE MAP

LEAD AND ASBESTOS SAMPLE LOCATIONS

EAGLE GAS GARDNERVILLE

1395 US HWY 395 NORTH

GARDNERVILLE, NEVADA

McGinley & Associates

Environmental Engineering and Science

RENO | LAS VEGAS | www.mcgln.com

APPENDIX A

Laboratory Analytical Results

POLARIZED LIGHT MICROSCOPY ANALYTICAL REPORT

EPA Method 600/R-93/116 or 600/M4-82-020

Page: 1 of 1

Contact: Gene Johnson	Samples Indicated: 5	Report No. 124726		
Address: C & G Environmental Consulting, P.O. Box 19476 Reno, NV 89511	Reg. Samples Analyzed: 5 Split Layers Analyzed: 5 Job Site / No. 13695 Main Street, Gardnerville 04010913	Date Submitted: Jan-13-14 Date Reported: Jan-15-14		
SAMPLE ID		ASBESTOS TYPE	OTHER DATA 1) Non-Asbestos Fibers 2) Matrix Materials 3) Date/Time Collected 4) Date Analyzed	DESCRIPTION FIELD LAB
FT-1 Lab ID # 867-02108-001A	None Detected		1) 1-5% Cellulose 2) 95-99% Plast, Calc, Qtz, Other m.p.	Station - entryway, floor tile/black mastic
			3) Jan-15-14 4) Jan-15-14	Floor Tile-Brown
FT-1 Lab ID # 867-02108-001B	None Detected		1) 1-5% Cellulose 2) 95-99% Tar, Other m.p.	Station - entryway, floor tile/black mastic
			3) Jan-15-14 4) Jan-15-14	Mastic-Black
CTG-2 Lab ID # 867-02108-002A	None Detected		1) <1% Cellulose 2) 100-100% Qtz, Calc, Other m.p.	Bathroom, grout/mortar
			3) Jan-15-14 4) Jan-15-14	Grout-Tan
CTG-2 Lab ID # 867-02108-002B	None Detected		1) 1-5% Cellulose 2) 95-99% Qtz, Calc, Other m.p.	Bathroom, grout/mortar
			3) Jan-15-14 4) Jan-15-14	Mortar-Tan
CTG-3 Lab ID # 867-02108-003A	None Detected		1) None Detected 2) 99-100% Clay, Gyp, Other m.p.	Bathroom, ceramic tile/thin set
			3) Jan-15-14 4) Jan-15-14	CerTile-Red/White
CTG-3 Lab ID # 867-02108-003B	None Detected		1) <1% Cellulose 2) 100-100% Calc, Qtz, Gyp, Other m.p.	Bathroom, ceramic tile/thin set
			3) Jan-15-14 4) Jan-15-14	Thin Set-Grey
RM-4 Lab ID # 867-02108-004A	None Detected		1) 20-30% Cellulose 2) 70-80% Tar, Qtz, Other m.p.	North roof, asphalt roofing/felt/tar
			3) Jan-15-14 4) Jan-15-14	Roofing-Black/Grey
RM-4 Lab ID # 867-02108-004B	None Detected		1) 1-5% Cellulose 2) 95-99% Tar, Other m.p.	North roof, asphalt roofing/felt/tar
			3) Jan-15-14 4) Jan-15-14	Tar-Black
RM-4 Lab ID # 867-02108-004C	None Detected		1) 50-60% Fiberglass 2) 40-50% Tar, Other m.p.	North roof, asphalt roofing/felt/tar
			3) Jan-15-14 4) Jan-15-14	Roofing Felt/Tar-Black
RM-5 Lab ID # 867-02108-005	5-10% Chrysotile		1) 1-5% Cellulose 2) 85-94% Tar, Other m.p.	North roof, penetration mastic
			3) Jan-15-14 4) Jan-15-14	Mastic-Black/Grey

Limit of Quantitation of Method is Estimated to be 1% Asbestos Using a Visual Area Estimation Technique

Laboratory Analyst

Greg Hanes

ASBESTOS TEM LABORATORIES, INC. 1350 Freeport Blvd., Unit 104, Sparks, NV 89431 (775) 359-3377
 With Main Office in Berkeley, CA (510) 704-8930

APPENDIX B

Chain-of-Custody Record

C&G ENVIRONMENTAL CONSULTING, INC.

P.O. Box 19476

Reno, NV 89511

Ph: (775) 746-3838

Fax: (775) 787-6846

*** BULK SAMPLE SUBMISSION FORM / CHAIN-OF-CUSTODY REPORT ***

Analysis Type:

PLM

Point Count

TEM

Lead

Turnaround:

2-hrs 4-hrs

8-hrs

24-hrs

(2 Days)

3 Days

Job Site: 1345 MAIN Street, GARONVILLE

Job No: 04010913

P.O. #:

Contact person:

[illegible]

Special Instructions:

Relinquished By	Date / Time	Received By	Date / Time
Name/Company <i>Gene E. Johnson/C&G Fur Const.</i>	<i>1-11-14</i>	Name/Company <i>A. Conn A&M</i>	<i>1/15/14</i>
Signature <i>Gene E. Johnson</i>	<i>11:58 AM</i>	Signature	<i>8:30</i>
Name/Company		Name/Company	<i>Long box</i>
Signature		Signature	

Send Original to Lab - Keep Yellow Copy

APPENDIX C

XRF Field Notes

Former Eagle Gas Station – 1395 Main Street Gardnerville

January 9, 2014 – XRF Lead Sampling Inspection Field Notes:

Station Interior Readings

Door Trim - Blue Paint – 0.18 mg/cm²
Door Trim - Blue Paint – 0.21 mg/cm²
Office/Sink Room - Olive Green Paint – 0.00 mg/cm²
Office/Sink Room - Olive Green Paint – 0.01 mg/cm²
North Wall - White Paint – 0.08 mg/cm²
East Wall – White Paint – 0.06 mg/cm²
Cement Floor - Red Paint – 0.02 mg/cm²

Station Exterior Readings

Rear CMU Block Wall - Grey Paint – 0.05 mg/cm²
East Exterior Wall – White Paint – 0.00 mg/cm²
West Exterior Wall – White Paint – 0.00 mg/cm²
South Soffit – Blue Paint – 0.01 mg/cm²
South Roof Facia - Blue Paint – 0.03 mg/cm²
Structural Beams on Roof - Red Paint – 0.04 mg/cm²

Canopy

Canopy Facia White Paint – 0.10 mg/cm²
 Blue Paint - 0.08 mg/cm²
 Cream Paint - 0.24 mg/cm²
 Beige Paint – 0.45 mg/cm²

Canopy Structural Poles - Blue Paint - >1.0 mg/cm²
Gas Pump Bollards - Yellow Paint - >1.0 mg/cm²
Structural Beams on Roof - Red Paint – 0.04 mg/cm²