



Delta Engineering/Carter Industries Joint
Venture
ATTN: Pascal Poirier
40 Studney Drive
Hay River NT X0E 0R6

Date Received: 20-SEP-15
Report Date: 21-SEP-15 15:46 (MT)
Version: FINAL

Client Phone: 867-874-6574

Certificate of Analysis

Lab Work Order #: L1675700
Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers: AIR-002354
Legal Site Desc:

Rick Zolkiewski
General Manager

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L1675700-1 AREA-A1-20150919 Sampled By: PP on 19-SEP-15 Matrix: FILTER Miscellaneous Parameters							
Air volume	2863			L		21-SEP-15	R3271482
Fibre Density							
Field Blank Correction	<0.5		0.5	f/field		21-SEP-15	R3271594
Sample Volume	2863		0	L		21-SEP-15	R3271594
Fibres/Filter	19000		3000	Fibres		21-SEP-15	R3271594
Fibre Density	48		7	Fibres/mm2		21-SEP-15	R3271594
Fibre Concentration	<0.01		0.01	Fibres/cc		21-SEP-15	R3271594
L1675700-2 DECON-20150919 Sampled By: PP on 19-SEP-15 Matrix: FILTER Miscellaneous Parameters							
Air volume	4032			L		21-SEP-15	R3271482
Fibre Density							
Field Blank Correction	<0.5		0.5	f/field		21-SEP-15	R3271594
Sample Volume	4032		0	L		21-SEP-15	R3271594
Fibres/Filter	48000		3000	Fibres		21-SEP-15	R3271594
Fibre Density	124		7	Fibres/mm2		21-SEP-15	R3271594
Fibre Concentration	0.01		0.01	Fibres/cc		21-SEP-15	R3271594
Note: >50% of filter area is covered in dust, results maybe biased low							
L1675700-3 OCC-B1-20150919 Sampled By: PP on 19-SEP-15 Matrix: FILTER Miscellaneous Parameters							
Air volume	1000			L		21-SEP-15	R3271482
Fibre Density							
Field Blank Correction	<0.5		0.5	f/field		21-SEP-15	R3271594
Sample Volume	1000		0	L		21-SEP-15	R3271594
Fibres/Filter	<3000		3000	Fibres		21-SEP-15	R3271594
Fibre Density	8		7	Fibres/mm2		21-SEP-15	R3271594
Fibre Concentration	<0.01		0.01	Fibres/cc		21-SEP-15	R3271594
L1675700-4 OCC-A1-20150919 Sampled By: PP on 19-SEP-15 Matrix: FILTER Miscellaneous Parameters							
Air volume	458			L		21-SEP-15	R3271482
Fibre Density							
Field Blank Correction	<0.5		0.5	f/field		21-SEP-15	R3271594
Sample Volume	458		0	L		21-SEP-15	R3271594
Fibres/Filter	31000		3000	Fibres		21-SEP-15	R3271594
Fibre Density	81		7	Fibres/mm2		21-SEP-15	R3271594
Fibre Concentration	0.07		0.01	Fibres/cc		21-SEP-15	R3271594
Note: >50% of filter area is covered in dust, results maybe biased low							
L1675700-5 OCC-B2-20150919 Sampled By: PP on 19-SEP-15 Matrix: FILTER Miscellaneous Parameters							
Air volume	1000			L		21-SEP-15	R3271482
Fibre Density							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
AIR VOLUME-ED	Misc.	Air volume (L)	HYGIENE METHOD
NOTE: When air concentrations of analytes are reported, they are based on air sampling information (air volume, sampling time, sampling flow rate) supplied by the client.			
ASBESTOS-FBRS/FLT-ED	Filter	Fibre Density	NIOSH 7400A
A measured volume of air is pumped through a cellulose ester filter to collect fibres. The filter is dissolved in hot acetone fumes, leaving fibres visible on a microscope slide. All fibres longer than 5µm are counted, using NIOSH 7400(A Rules). The method does not differentiate between asbestos and other fibres.			
-Sample results are corrected using field blank results.			
-When there is no field blank submitted <0.5 f/field is entered.			
Fibre Range:	5-20	>20 - 50	>50 - 100
Sr:	0.070	0.073	0.067

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
ED	ALS ENVIRONMENTAL - EDMONTON, ALBERTA, CANADA

Chain of Custody Numbers:

AIR-002354

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L1675700

Report Date: 21-SEP-15

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Client: Delta Engineering/Carter Industries Joint Venture
40 Studney Drive
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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
ASBESTOS-FBRS/FLT-ED Filter								
Batch	R3271594							
WG2175513-1 DUP	L1675700-1							
Field Blank Correction		<0.5	<0.5	RPD-NA	f/field	N/A	50	21-SEP-15
Fibres/Filter		19000	20000		Fibres	6.4	20	21-SEP-15
Fibre Density		48	52		Fibres/mm2	6.4	20	21-SEP-15
Fibre Concentration		<0.01	<0.01	RPD-NA	Fibres/cc	N/A	20	21-SEP-15

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



L1675700-COFC

AIR-002354

AIR QUALITY CHAIN OF CUSTODY / ANALYTICAL REQUEST FORM



COC # _____ Page 1 of 1

Note: All service level requests are in business days and with samples received before 3:00 pm. Statutory holidays and weekends are excluded. Emergency service is not available for all analysis - please contact laboratory before submission to confirm surcharge and availability. Please also note that for Industrial Hygiene work routine service level varies greatly depending on the analysis requested. Please check the service level and specify the date required for all submissions.

COMPANY NAME: <u>Carter Industries</u> OFFICE: _____		REGULAR SERVICE: <input type="checkbox"/> RUSH SERVICE: <input checked="" type="checkbox"/> <u>Same day X</u> DATE REQUIRED: _____ ALS WORK ORDER NUMBER: (Lab Use Only) <u>L1675700</u>	
PROJECT MANAGER: <u>Pascal Poirier</u> PROJECT #: <u>JV-14-002</u> PHONE: <u>819-210-8721</u> ACCOUNT #: <u>Carter Industries</u> QUOTATION #: <u>R5281</u> EMAIL 1: <u>pouss@hotmail.ca</u>		ANALYSIS REQUEST AIR VOLUME: <input type="checkbox"/> L <input checked="" type="checkbox"/> M <input type="checkbox"/> E MATRIX TYPE: <u>IH</u> REPORT FORMAT / DISTRIBUTION: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> PDF <input type="checkbox"/> EDD	
SAMPLE DESCRIPTION TO APPEAR ON REPORT <u>Area - A1 - 20150919</u> <u>Decon - 20150919</u> <u>OCC - B1 - 20150919</u> <u>OCC - A1 - 20150919</u> <u>OCC - B2 - 20150919</u>		METHOD REQUIREMENT STARTING PRESSURE - Pre-Sampling (Tg): _____ ENDING PRESSURE - Post-Sampling (Tg): _____ COLLECTION TIME: <u>3:40</u> <u>4:30</u> <u>5:00</u> <u>5:35</u> <u>5:00</u>	
SAMPLE DATE/TIME Date (dd-mm-yy): <u>19/09</u> Time (24hr) (hh:mm): _____		FIELD CONDITIONS (Rain/Wind/Dust/Odour) Field PID Reading <u>Rainy, Medium wind</u>	
SPECIAL INSTRUCTIONS/COMMENTS (Client Use) <u>Please send report ASAP.</u> SAMPLED BY: <u>Pascal Poirier</u> RELINQUISHED BY: _____		RECEIVED BY: _____ DATE & TIME: <u>19/09/2015 20h00</u> RECEIVED AT LAB BY: _____ DATE & TIME: _____	
SAMPLE CONDITION AS RECEIVED (Lab Use Only) FROZEN: <input type="checkbox"/> COLD: <input type="checkbox"/> COOLING INITIATED: <input type="checkbox"/> AMBIENT: <input type="checkbox"/>		MEAN TEMP: _____ SIF OBSERVATIONS: Yes <input type="checkbox"/> No <input type="checkbox"/> CUSTODY SEAL INTACT: Yes <input type="checkbox"/> No <input type="checkbox"/>	

GENERAL TERMS AND CONDITIONS:

- These terms and conditions are incorporated in and form part of the Agreement between ALS Group's Environmental Division and the party named in the Offer (the "Client").
1. Definitions. Capitalized Terms not defined in these Terms and Conditions have the definitions set out in the other Agreement documents.
 2. The Services. ALS will provide the Services to the Client as described in the Offer and in any change of custody form provided with any sample.
 3. Prices. ALS may review and change all prices, fees, surcharges or other charges set out in the Agreement if there are changes to ALS's cost beyond ALS's control, including changes in legislative requirements. Client variations of sample numbers and Client requests for changes to standard reporting requirements. Notwithstanding Condition 3, all quotations are reviewed and updated on a yearly basis.
 4. Payment Terms. The Client shall pay ALS within 30 days of the invoice date OAC. ALS may, for reasonable business reasons, require the Client to arrange for payment in advance.
 5. Quotation Numbers. The Client shall provide the quotation number to ALS (where applicable) to ensure correct pricing.
 6. Taxes. Applicable taxes are not included in prices, surcharges and additional fees and will be added at the time of invoicing.
 7. Quality Control. ALS has an extensive QA/QC program. Clients' samples are analyzed using approved, referenced procedures followed by thorough data validation prior to reporting the analytical results.
 8. Test Results are Not Guaranteed. Results are obtained from analytical measurements that are subject to inherent variability. Measurement results reflect characteristics of submitted test samples at time of analysis. The Client is responsible for informing itself on the limitation of test results and acknowledges that test results are not guaranteed.
 9. Standard of Care. ALS will use reasonable care and diligence as required by the laws of the province or territory where the sample is tested.
 10. Storage. Where possible, ALS will store samples for 30 days from the date a final report is issued to the Client, after which ALS may discard the sample.
 11. Holders. If the Client requests a sample to be placed on hold, ALS will store the sample for 30 days from the date of receipt, after which ALS may discard the sample. Longer hold periods are available upon request for an additional fee.
 12. Archives. If the Client requests a sample be archived, ALS will invoice in advance and store the sample for the period requested at the quoted price, after which ALS may discard the sample.
 13. Handling Protocol. Legal sample handling protocol must be arranged before samples are collected. ALS charges a minimum 20% surcharge on the list price plus the hourly technologist or chemist rates for legal sample protocol. Additional charges will apply for samples that require storage by ALS.
 14. Samples. The quality, condition, content and source of samples stored and tested are not known to ALS except as declared and described on the chain of custody form completed and submitted by the Client and accompanying the sample.
 15. Risk of Loss. ALS will use reasonable care to protect samples during storage, however all samples are stored at the Client's risk and the Client is responsible for obtaining appropriate insurance, if desired. The Client acknowledges that during the performance of the Services samples may be altered, lost, damaged or destroyed and the Client releases ALS from any claim the Client may have for any loss or damage to the sample.
 16. Environmental. The Client must comply with all applicable environment legislation, including labeling all hazardous samples to comply with WHMIS and TDG regulations, and must provide appropriate material safety data sheets that include the nature of the hazard and a contact name and phone number to call for information. The Client will indemnify ALS for all loss or damages, including any fine or cost of complying with an order of any government authority, resulting from the Client's breach of this paragraph.
 17. Hazardous Materials Disposal. ALS may return, at the Client's cost, hazardous material to the Client for disposal.
 18. Hazardous Materials Surcharge. ALS may apply an additional surcharge for handling of hazardous samples or samples with Naturally Occurring Radioactive Materials (NORM), H2S, CN, etc.
 19. Sample Containers. ALS may ship sample containers to the Client's location by the most cost effective means using ALS preferred courier suppliers, within the specified project timeline.
 20. Additional Charges. ALS may charge the Client (a) its cost for emergency bottle shipments and shipments to and from a remote site, and (b) where pick up and delivery services are provided, subject in each instance to a minimum charge of \$25.00.
 21. Large Bottle Orders. The Client shall provide ALS with 72 hours notice for bottle orders greater than twenty coolers.
 22. Re-Tests. ALS reserves the right to re-test any samples that remains in its possession. Re-tests requested by the Client may be charged.
 23. Waiver. The Client is responsible for making any assessment regarding the suitability of the Services and the intended results for the Client's purposes and waives any claims against ALS. It may have as a result of the interpretation of the results. The Client shall indemnify ALS for all claims made by any third party against ALS in respect of all losses however arising from the performance of the Services or the use of any report provided in the performance of the Services.
 24. Limitation of Liability. In no event shall ALS be liable for any consequential, indirect, incidental, special, exemplary or punitive damages, whether foreseeable or unforeseeable, (including claims for loss of profits or revenue or losses caused by stoppage of other work or impairment of other assets) incurred by the Client arising out of breach or failure of express or implied warranty, breach of contract, breach of warranty, misrepresentation, negligence, strict liability in tort or otherwise. In any event, the liability of ALS to the Client shall be limited to the cost of testing the sample as requested in the chain of custody form under which the sample was originally deposited. For the purposes of this paragraph and paragraphs 8, 15, 16, 23 and 25, as the applicable, "ALS" includes without limitation its directors, officers, employees and affiliates and the "Client" includes without limitation any third party that may have a claim against ALS through the Client.
 25. Notice of Liability. Notwithstanding paragraph 24, ALS shall not be liable to the Client unless the Client provides notice in writing to ALS of such loss or damage, together with full particulars thereof, within 30 days of the Client's receipt of the report of the analysis of the sample giving rise to such liability. The provisions of this paragraph allocate the risk under the Agreement between the Client and ALS, and the fees to be paid by the Client to ALS reflect this allocation of risks and the limitations of liability in this Agreement.
 26. Entire Agreement. The Agreement is the entire agreement between the parties and supersedes and takes precedence over any terms and conditions contained in any documentation provided by the Client. ALS's execution of any subsequent documentation from the Client only acknowledges receipt and not acceptance of any terms or conditions therein. If there is a conflict between these terms and conditions and any other Agreement document, these terms and conditions prevail.
 27. Term. Providing the first batch of samples to which this tender refers is submitted within three months of the starting date of this quotation, the following prices, terms and conditions will remain firm until the closing date. This offer, and terms and conditions will automatically lapse if the offer has not been accepted, and samples not delivered to ALS, within the Closing Date.
 28. Termination. (a) Either party may terminate this Agreement for any reason by giving the other party thirty (30) days written notice (Notice Period); (b) If the Agreement is terminated pursuant to clause (a), then the Client must pay ALS for all Services performed up to the expiry of the Notice Period.