TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100214 - EPA 5035B [P/T]** | | | | | | | | | | |
| **Blank (7100214-BLK1)** | | | | Prepared & Analyzed: 10/15/07 | | | | | | |
| Vinyl chloride | ND | 5.00 | ug/kg wet | | | | | | | |
| Total Xylenes | ND | 10.0 | " | | | | | | | |
| *Surrogate: Dibromofluoromethane* | *38.5* | | *"* | *50.0* | | *76.9* | *40-110* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *42.7* | | *"* | *50.0* | | *85.5* | *45-110* | | | |
| *Surrogate: Toluene-d8* | *33.3* | | *"* | *50.0* | | *66.7* | *30-110* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *39.6* | | *"* | *50.0* | | *79.2* | *40-110* | | | |
| **LCS (7100214-BS1)** | | | | Prepared & Analyzed: 10/15/07 | | | | | | |
| Isopropylbenzene | 45.7 | 5.00 | ug/kg wet | 50.0 | | 91.4 | 20-140 | | 40 | |
| Acetone | 43.6 | 25.0 | " | 100 | | 43.6 | 15-150 | | | |
| Benzene | 33.4 | 5.00 | " | 50.0 | | 66.8 | 60-130 | | | |
| Bromodichloromethane | 36.9 | 5.00 | " | 50.0 | | 73.8 | 60-120 | | | |
| Bromoform | 29.8 | 5.00 | " | 50.0 | | 59.6 | 65-120 | | | L |
| Bromomethane | 44.3 | 5.00 | " | 50.0 | | 88.6 | 30-150 | | | |
| 2-Butanone | 56.3 | 20.0 | " | 100 | | 56.3 | 30-145 | | | |
| Carbon disulfide | 72.2 | 5.00 | " | 100 | | 72.2 | 40-150 | | | |
| Carbon tetrachloride | 37.7 | 5.00 | " | 50.0 | | 75.4 | 40-145 | | | |
| Chlorobenzene | 39.0 | 5.00 | " | 50.0 | | 78.0 | 60-130 | | | |
| Chlorodibromomethane | 27.4 | 5.00 | " | 50.0 | | 54.8 | 60-120 | | | L |
| Chloroethane | 55.2 | 5.00 | " | 50.0 | | 110 | 50-150 | | | |
| Chloroform | 41.1 | 5.00 | " | 50.0 | | 82.1 | 70-135 | | | |
| Chloromethane | 54.3 | 5.00 | " | 50.0 | | 109 | 45-150 | | | |
| 1,1-Dichloroethane | 47.4 | 5.00 | " | 50.0 | | 94.7 | 45-145 | | | |
| 1,2-Dichloroethane | 38.4 | 5.00 | " | 50.0 | | 76.9 | 65-140 | | | |
| 1,1-Dichloroethene | 35.5 | 5.00 | " | 50.0 | | 71.1 | 55-150 | | | |
| cis-1,2-Dichloroethene | 34.2 | 5.00 | " | 50.0 | | 68.4 | 60-130 | | | |
| trans-1,2-Dichloroethene | 40.3 | 5.00 | " | 50.0 | | 80.7 | 55-135 | | | |
| 1,2-Dichloropropane | 40.2 | 5.00 | " | 50.0 | | 80.4 | 70-120 | | | |
| 1,3-Dichloropropene (cis + trans) | 67.9 | 3.00 | " | 100 | | 67.9 | 50-140 | | | |
| Ethylbenzene | 39.7 | 5.00 | " | 50.0 | | 79.4 | 50-125 | | | |
| 2-Hexanone | 76.5 | 10.0 | " | 100 | | 76.5 | 40-145 | | | |
| Methylene chloride | 50.8 | 5.00 | " | 50.0 | | 102 | 50-150 | | | |
| 4-Methyl-2-pentanone | 90.2 | 10.0 | " | 100 | | 90.2 | 40-135 | | | |
| Methyl tert-butyl ether | 42.0 | 5.00 | " | 50.0 | | 84.1 | 15-140 | | | |
| Styrene | 35.9 | 5.00 | " | 50.0 | | 71.8 | 50-120 | | | |
| 1,1,2,2-Tetrachloroethane | 37.6 | 5.00 | " | 50.0 | | 75.3 | 60-130 | | | |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100214 - EPA 5035B [P/T]** | | | | | | | | | | |
| **LCS (7100214-BS1)** | | | | Prepared & Analyzed: 10/15/07 | | | | | | |
| Tetrachloroethene | 33.8 | 5.00 | ug/kg wet | 50.0 | | 67.5 | 60-130 | | | |
| Toluene | 39.2 | 5.00 | " | 50.0 | | 78.3 | 50-130 | | | |
| 1,1,1-Trichloroethane | 43.5 | 5.00 | " | 50.0 | | 87.0 | 50-135 | | | |
| 1,1,2-Trichloroethane | 35.4 | 5.00 | " | 50.0 | | 70.8 | 60-130 | | | |
| Trichloroethene | 34.0 | 5.00 | " | 50.0 | | 68.0 | 65-125 | | | |
| Trichlorofluoromethane | 57.1 | 5.00 | " | 50.0 | | 114 | 55-150 | | | |
| Vinyl acetate | 4.81 | 10.0 | " | 100 | | 4.81 | 10-120 | | | L |
| Vinyl chloride | 58.5 | 5.00 | " | 50.0 | | 117 | 55-150 | | | |
| Total Xylenes | 117 | 10.0 | " | 150 | | 77.7 | 45-125 | | | |
| *Surrogate: Dibromofluoromethane* | *29.4* | | *"* | *50.0* | | *58.9* | *40-110* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *32.9* | | *"* | *50.0* | | *65.7* | *45-110* | | | |
| *Surrogate: Toluene-d8* | *27.9* | | *"* | *50.0* | | *55.9* | *30-110* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *27.9* | | *"* | *50.0* | | *55.8* | *40-110* | | | |
| **LCS Dup (7100214-BSD1)** | | | | Prepared & Analyzed: 10/15/07 | | | | | | |
| Isopropylbenzene | 38.9 | 5.00 | ug/kg wet | 50.0 | | 77.9 | 20-140 | 16.0 | 40 | |
| Acetone | 37.1 | 25.0 | " | 100 | | 37.1 | 15-150 | 16.2 | 35 | |
| Benzene | 34.9 | 5.00 | " | 50.0 | | 69.8 | 60-130 | 4.45 | 20 | |
| Bromodichloromethane | 37.8 | 5.00 | " | 50.0 | | 75.7 | 60-120 | 2.51 | 15 | |
| Bromoform | 24.6 | 5.00 | " | 50.0 | | 49.1 | 65-120 | 19.3 | 20 | L |
| Bromomethane | 45.6 | 5.00 | " | 50.0 | | 91.2 | 30-150 | 2.91 | 25 | |
| 2-Butanone | 47.8 | 20.0 | " | 100 | | 47.8 | 30-145 | 16.4 | 35 | |
| Carbon disulfide | 74.1 | 5.00 | " | 100 | | 74.1 | 40-150 | 2.67 | 20 | |
| Carbon tetrachloride | 43.1 | 5.00 | " | 50.0 | | 86.3 | 40-145 | 13.5 | 25 | |
| Chlorobenzene | 31.9 | 5.00 | " | 50.0 | | 63.8 | 60-130 | 20.1 | 20 | H |
| Chlorodibromomethane | 27.5 | 5.00 | " | 50.0 | | 55.0 | 60-120 | 0.292 | 20 | L |
| Chloroethane | 54.7 | 5.00 | " | 50.0 | | 109 | 50-150 | 0.911 | 25 | |
| Chloroform | 41.7 | 5.00 | " | 50.0 | | 83.4 | 70-135 | 1.57 | 20 | |
| Chloromethane | 53.3 | 5.00 | " | 50.0 | | 107 | 45-150 | 1.90 | 25 | |
| 1,1-Dichloroethane | 47.1 | 5.00 | " | 50.0 | | 94.2 | 45-145 | 0.572 | 20 | |
| 1,2-Dichloroethane | 38.1 | 5.00 | " | 50.0 | | 76.1 | 65-140 | 0.993 | 20 | |
| 1,1-Dichloroethene | 35.7 | 5.00 | " | 50.0 | | 71.5 | 55-150 | 0.561 | 20 | |
| cis-1,2-Dichloroethene | 35.0 | 5.00 | " | 50.0 | | 70.0 | 60-130 | 2.40 | 20 | |
| trans-1,2-Dichloroethene | 40.0 | 5.00 | " | 50.0 | | 80.0 | 55-135 | 0.872 | 20 | |
| 1,2-Dichloropropane | 40.4 | 5.00 | " | 50.0 | | 80.8 | 70-120 | 0.447 | 20 | |
| 1,3-Dichloropropene (cis + trans) | 67.4 | 3.00 | " | 100 | | 67.4 | 50-140 | 0.680 | 30 | |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100214 - EPA 5035B [P/T]** | | | | | | | | | | |
| **LCS Dup (7100214-BSD1)** | | | | Prepared & Analyzed: 10/15/07 | | | | | | |
| Ethylbenzene | 33.3 | 5.00 | ug/kg wet | 50.0 | | 66.5 | 50-125 | 17.6 | 20 | |
| 2-Hexanone | 60.2 | 10.0 | " | 100 | | 60.2 | 40-145 | 23.8 | 35 | |
| Methylene chloride | 50.4 | 5.00 | " | 50.0 | | 101 | 50-150 | 0.831 | 25 | |
| 4-Methyl-2-pentanone | 83.7 | 10.0 | " | 100 | | 83.7 | 40-135 | 7.53 | 30 | |
| Methyl tert-butyl ether | 41.3 | 5.00 | " | 50.0 | | 82.6 | 15-140 | 1.73 | 35 | |
| Styrene | 30.3 | 5.00 | " | 50.0 | | 60.6 | 50-120 | 16.8 | 15 | H |
| 1,1,2,2-Tetrachloroethane | 33.6 | 5.00 | " | 50.0 | | 67.3 | 60-130 | 11.2 | 20 | |
| Tetrachloroethene | 28.4 | 5.00 | " | 50.0 | | 56.8 | 60-130 | 17.3 | 20 | L |
| Toluene | 32.7 | 5.00 | " | 50.0 | | 65.3 | 50-130 | 18.1 | 25 | |
| 1,1,1-Trichloroethane | 44.4 | 5.00 | " | 50.0 | | 88.9 | 50-135 | 2.11 | 20 | |
| 1,1,2-Trichloroethane | 28.3 | 5.00 | " | 50.0 | | 56.7 | 60-130 | 22.1 | 20 | LH |
| Trichloroethene | 33.8 | 5.00 | " | 50.0 | | 67.6 | 65-125 | 0.561 | 20 | |
| Trichlorofluoromethane | 58.2 | 5.00 | " | 50.0 | | 116 | 55-150 | 2.05 | 20 | |
| Vinyl acetate | 2.84 | 10.0 | " | 100 | | 2.84 | 10-120 | 51.5 | 35 | LH |
| Vinyl chloride | 61.4 | 5.00 | " | 50.0 | | 123 | 55-150 | 4.80 | 20 | |
| Total Xylenes | 98.1 | 10.0 | " | 150 | | 65.4 | 45-125 | 17.3 | 25 | |
| *Surrogate: Dibromofluoromethane* | *29.0* | | *"* | *50.0* | | *57.9* | *40-110* | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *32.2* | | *"* | *50.0* | | *64.3* | *45-110* | | | |
| *Surrogate: Toluene-d8* | *23.1* | | *"* | *50.0* | | *46.2* | *30-110* | | | |
| *Surrogate: 4-Bromofluorobenzene* | *23.6* | | *"* | *50.0* | | *47.2* | *40-110* | | | |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100197 - EPA 3550B** | | | | | | | | | | |
| **Blank (7100197-BLK1)** | | | | Prepared & Analyzed: 10/12/07 | | | | | | |
| Acenaphthene | ND | 100 | ug/kg wet | | | | | | | |
| Acenaphthylene | ND | 100 | " | | | | | | | |
| Aniline | ND | 100 | " | | | | | | | |
| Anthracene | ND | 100 | " | | | | | | | |
| Benzoic acid | ND | 500 | " | | | | | | | |
| Benz (a) anthracene | ND | 100 | " | | | | | | | |
| Benzo (a) pyrene | ND | 58.0 | " | | | | | | | |
| Benzo (b) fluoranthene | ND | 100 | " | | | | | | | |
| Benzo (ghi) perylene | ND | 100 | " | | | | | | | |
| Benzo (k) fluoranthene | ND | 100 | " | | | | | | | |
| Benzyl alcohol | ND | 100 | " | | | | | | | |
| Bis(2-chloroethoxy)methane | ND | 100 | " | | | | | | | |
| Bis(2-chloroethyl)ether | ND | 100 | " | | | | | | | |
| Bis(2-chloroisopropyl)ether | ND | 100 | " | | | | | | | |
| Bis(2-ethylhexyl)phthalate | ND | 330 | " | | | | | | | |
| 4-Bromophenyl phenyl ether | ND | 100 | " | | | | | | | |
| Butyl benzyl phthalate | ND | 330 | " | | | | | | | |
| Carbazole | ND | 100 | " | | | | | | | |
| 4-Chloroaniline | ND | 100 | " | | | | | | | |
| 4-Chloro-3-methylphenol | ND | 100 | " | | | | | | | |
| 2-Chloronaphthalene | ND | 100 | " | | | | | | | |
| 2-Chlorophenol | ND | 100 | " | | | | | | | |
| 4-Chlorophenyl phenyl ether | ND | 100 | " | | | | | | | |
| Chrysene | ND | 100 | " | | | | | | | |
| Dibenz (a,h) anthracene | ND | 58.0 | " | | | | | | | |
| Dibenzofuran | ND | 100 | " | | | | | | | |
| 1,2-Dichlorobenzene | ND | 100 | " | | | | | | | |
| 1,3-Dichlorobenzene | ND | 100 | " | | | | | | | |
| 1,4-Dichlorobenzene | ND | 100 | " | | | | | | | |
| 3,3´-Dichlorobenzidine | ND | 500 | " | | | | | | | |
| 2,4-Dichlorophenol | ND | 100 | " | | | | | | | |
| Diethyl phthalate | ND | 100 | " | | | | | | | |
| 2,4-Dimethylphenol | ND | 100 | " | | | | | | | |
| Dimethyl phthalate | ND | 100 | " | | | | | | | |
| Di-n-butyl phthalate | ND | 330 | " | | | | | | | |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100197 - EPA 3550B** | | | | | | | | | | |
| **Blank (7100197-BLK1)** | | | | Prepared & Analyzed: 10/12/07 | | | | | | |
| 4,6-Dinitro-2-methylphenol | ND | 500 | ug/kg wet | | | | | | | |
| 2,4-Dinitrophenol | ND | 500 | " | | | | | | | |
| 2,4-Dinitrotoluene | ND | 100 | " | | | | | | | |
| 2,6-Dinitrotoluene | ND | 100 | " | | | | | | | |
| Di-n-octyl phthalate | ND | 330 | " | | | | | | | |
| Fluoranthene | ND | 100 | " | | | | | | | |
| Fluorene | ND | 100 | " | | | | | | | |
| Hexachlorobenzene | ND | 100 | " | | | | | | | |
| Hexachlorobutadiene | ND | 100 | " | | | | | | | |
| Hexachlorocyclopentadiene | ND | 100 | " | | | | | | | |
| Hexachloroethane | ND | 100 | " | | | | | | | |
| Indeno (1,2,3-cd) pyrene | ND | 100 | " | | | | | | | |
| Isophorone | ND | 100 | " | | | | | | | |
| 2-Methylnaphthalene | ND | 100 | " | | | | | | | |
| o-Cresol | ND | 100 | " | | | | | | | |
| m,p-Cresols | ND | 100 | " | | | | | | | |
| Naphthalene | ND | 100 | " | | | | | | | |
| 2-Nitroaniline | ND | 500 | " | | | | | | | |
| 3-Nitroaniline | ND | 500 | " | | | | | | | |
| 4-Nitroaniline | ND | 500 | " | | | | | | | |
| Nitrobenzene | ND | 70.0 | " | | | | | | | |
| 2-Nitrophenol | ND | 100 | " | | | | | | | |
| 4-Nitrophenol | ND | 500 | " | | | | | | | |
| N-Nitrosodi-n-propylamine | ND | 100 | " | | | | | | | |
| N-Nitrosodiphenylamine | ND | 100 | " | | | | | | | |
| Pentachlorophenol | ND | 500 | " | | | | | | | |
| Phenanthrene | ND | 100 | " | | | | | | | |
| Phenol | ND | 100 | " | | | | | | | |
| Pyrene | ND | 100 | " | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 100 | " | | | | | | | |
| 2,4,5-Trichlorophenol | ND | 500 | " | | | | | | | |
| 2,4,6-Trichlorophenol | ND | 100 | " | | | | | | | |
| *Surrogate: 2-Fluorophenol* | *979* | | *"* | *1640* | | *59.6* | *20-120* | | | |
| *Surrogate: Phenol-d6* | *1120* | | *"* | *1640* | | *68.0* | *30-120* | | | |
| *Surrogate: Nitrobenzene-d5* | *374* | | *"* | *822* | | *45.5* | *20-110* | | | |

TestAmerica - Buffalo Grove, IL

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100197 - EPA 3550B** | | | | | | | | | | |
| **Blank (7100197-BLK1)** | | | | Prepared & Analyzed: 10/12/07 | | | | | | |
| *Surrogate: 2-Fluorobiphenyl* | *324* | | *ug/kg wet* | *822* | | *39.4* | *20-110* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *884* | | *"* | *1640* | | *53.8* | *10-130* | | | |
| *Surrogate: p-Terphenyl-d14* | *389* | | *"* | *822* | | *47.3* | *30-110* | | | |
| **LCS (7100197-BS1)** | | | | Prepared & Analyzed: 10/12/07 | | | | | | |
| Acenaphthene | 476 | 100 | ug/kg wet | 857 | | 55.5 | 60-110 | | | L |
| Acenaphthylene | 433 | 100 | " | 857 | | 50.5 | 50-110 | | | |
| Aniline | 377 | 100 | " | 860 | | 43.8 | 20-110 | | | |
| Anthracene | 488 | 100 | " | 857 | | 57.0 | 60-110 | | | L |
| Benzoic acid | 676 | 500 | " | 860 | | 78.5 | 10-130 | | | |
| Benz (a) anthracene | 504 | 100 | " | 857 | | 58.9 | 60-110 | | | L |
| Benzo (a) pyrene | 649 | 58.0 | " | 857 | | 75.7 | 50-110 | | | |
| Benzo (b) fluoranthene | 717 | 100 | " | 857 | | 83.6 | 50-110 | | | |
| Benzo (ghi) perylene | 677 | 100 | " | 857 | | 79.0 | 40-110 | | | |
| Benzo (k) fluoranthene | 661 | 100 | " | 857 | | 77.1 | 60-110 | | | |
| Benzyl alcohol | 587 | 100 | " | 860 | | 68.3 | 50-110 | | | |
| Bis(2-chloroethoxy)methane | 437 | 100 | " | 857 | | 51.0 | 50-110 | | | |
| Bis(2-chloroethyl)ether | 452 | 100 | " | 857 | | 52.7 | 60-110 | | | L |
| Bis(2-chloroisopropyl)ether | 580 | 100 | " | 857 | | 67.8 | 60-110 | | | |
| Bis(2-ethylhexyl)phthalate | 589 | 330 | " | 857 | | 68.7 | 50-120 | | | |
| 4-Bromophenyl phenyl ether | 451 | 100 | " | 857 | | 52.7 | 60-110 | | | L |
| Butyl benzyl phthalate | 586 | 330 | " | 857 | | 68.4 | 60-110 | | | |
| 4-Chloroaniline | 329 | 100 | " | 857 | | 38.4 | 20-110 | | | |
| 4-Chloro-3-methylphenol | 485 | 100 | " | 857 | | 56.6 | 50-110 | | | |
| 2-Chloronaphthalene | 453 | 100 | " | 857 | | 52.9 | 60-120 | | | L |
| 2-Chlorophenol | 509 | 100 | " | 857 | | 59.4 | 55-110 | | | |
| 4-Chlorophenyl phenyl ether | 466 | 100 | " | 857 | | 54.4 | 50-110 | | | |
| Chrysene | 486 | 100 | " | 857 | | 56.7 | 60-110 | | | L |
| Dibenz (a,h) anthracene | 634 | 58.0 | " | 857 | | 74.0 | 40-110 | | | |
| Dibenzofuran | 476 | 100 | " | 857 | | 55.6 | 50-110 | | | |
| 1,2-Dichlorobenzene | 452 | 100 | " | 857 | | 52.8 | 50-110 | | | |
| 1,3-Dichlorobenzene | 445 | 100 | " | 857 | | 51.9 | 50-110 | | | |
| 1,4-Dichlorobenzene | 451 | 100 | " | 857 | | 52.6 | 50-110 | | | |
| 3,3´-Dichlorobenzidine | 730 | 500 | " | 1720 | | 42.4 | 40-110 | | | |
| 2,4-Dichlorophenol | 475 | 100 | " | 857 | | 55.4 | 50-110 | | | |
| Diethyl phthalate | 531 | 100 | " | 857 | | 62.0 | 60-110 | | | |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100197 - EPA 3550B** | | | | | | | | | | |
| **LCS (7100197-BS1)** | | | | Prepared & Analyzed: 10/12/07 | | | | | | |
| 2,4-Dimethylphenol | 507 | 100 | ug/kg wet | 857 | | 59.2 | 50-110 | | | |
| Dimethyl phthalate | 479 | 100 | " | 857 | | 55.9 | 60-110 | | | L |
| Di-n-butyl phthalate | 552 | 330 | " | 857 | | 64.4 | 50-110 | | | |
| 4,6-Dinitro-2-methylphenol | 722 | 500 | " | 857 | | 84.3 | 20-130 | | | |
| 2,4-Dinitrophenol | 864 | 500 | " | 857 | | 101 | 10-120 | | | |
| 2,4-Dinitrotoluene | 562 | 100 | " | 857 | | 65.6 | 50-110 | | | |
| 2,6-Dinitrotoluene | 466 | 100 | " | 857 | | 54.4 | 50-110 | | | |
| Di-n-octyl phthalate | 609 | 330 | " | 857 | | 71.1 | 40-120 | | | |
| Fluoranthene | 511 | 100 | " | 857 | | 59.6 | 60-110 | | | L |
| Fluorene | 496 | 100 | " | 857 | | 57.9 | 60-110 | | | L |
| Hexachlorobenzene | 439 | 100 | " | 857 | | 51.3 | 60-110 | | | L |
| Hexachlorobutadiene | 464 | 100 | " | 857 | | 54.2 | 50-110 | | | |
| Hexachlorocyclopentadiene | 360 | 100 | " | 857 | | 42.0 | 15-110 | | | |
| Hexachloroethane | 550 | 100 | " | 857 | | 64.1 | 50-110 | | | |
| Indeno (1,2,3-cd) pyrene | 670 | 100 | " | 857 | | 78.2 | 40-110 | | | |
| Isophorone | 462 | 100 | " | 857 | | 54.0 | 50-110 | | | |
| 2-Methylnaphthalene | 456 | 100 | " | 857 | | 53.2 | 60-110 | | | L |
| o-Cresol | 484 | 100 | " | 857 | | 56.5 | 60-110 | | | L |
| m,p-Cresols | 570 | 100 | " | 857 | | 66.5 | 60-120 | | | |
| Naphthalene | 441 | 100 | " | 857 | | 51.5 | 50-110 | | | |
| 2-Nitroaniline | 527 | 500 | " | 857 | | 61.5 | 50-110 | | | |
| 3-Nitroaniline | 605 | 500 | " | 857 | | 70.6 | 50-110 | | | |
| 4-Nitroaniline | 688 | 500 | " | 857 | | 80.3 | 50-110 | | | |
| Nitrobenzene | 542 | 70.0 | " | 857 | | 63.2 | 50-110 | | | |
| 2-Nitrophenol | 533 | 100 | " | 857 | | 62.2 | 50-110 | | | |
| 4-Nitrophenol | 735 | 500 | " | 857 | | 85.8 | 40-110 | | | |
| N-Nitrosodi-n-propylamine | 538 | 100 | " | 857 | | 62.8 | 60-110 | | | |
| N-Nitrosodiphenylamine | 515 | 100 | " | 857 | | 60.1 | 60-110 | | | |
| Pentachlorophenol | 357 | 500 | " | 857 | | 41.6 | 30-130 | | | |
| Phenanthrene | 471 | 100 | " | 857 | | 54.9 | 60-110 | | | L |
| Phenol | 529 | 100 | " | 857 | | 61.7 | 50-110 | | | |
| Pyrene | 493 | 100 | " | 857 | | 57.5 | 60-110 | | | L |
| 1,2,4-Trichlorobenzene | 426 | 100 | " | 857 | | 49.7 | 50-110 | | | L |
| 2,4,5-Trichlorophenol | 483 | 500 | " | 857 | | 56.4 | 50-110 | | | |
| 2,4,6-Trichlorophenol | 501 | 100 | " | 857 | | 58.5 | 50-110 | | | |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100197 - EPA 3550B** | | | | | | | | | | |
| **LCS (7100197-BS1)** | | | | Prepared & Analyzed: 10/12/07 | | | | | | |
| *Surrogate: 2-Fluorophenol* | *1020* | | *ug/kg wet* | *1710* | | *59.6* | *20-120* | | | |
| *Surrogate: Phenol-d6* | *1150* | | *"* | *1710* | | *66.9* | *30-120* | | | |
| *Surrogate: Nitrobenzene-d5* | *404* | | *"* | *857* | | *47.2* | *20-110* | | | |
| *Surrogate: 2-Fluorobiphenyl* | *357* | | *"* | *857* | | *41.7* | *20-110* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *1030* | | *"* | *1710* | | *60.1* | *10-130* | | | |
| *Surrogate: p-Terphenyl-d14* | *412* | | *"* | *857* | | *48.1* | *30-110* | | | |
| **Matrix Spike (7100197-MS1)** | | **Source: BQJ0106-01** | | Prepared & Analyzed: 10/12/07 | | | | | | |
| Acenaphthene | 443 | 101 | ug/kg dry | 982 | ND | 45.1 | 30-110 | | | |
| Acenaphthylene | 411 | 101 | " | 982 | ND | 41.8 | 20-110 | | | |
| Aniline | 421 | 101 | " | 986 | ND | 42.7 | 10-110 | | | |
| Anthracene | 434 | 101 | " | 982 | ND | 44.2 | 30-115 | | | |
| Benzoic acid | 298 | 507 | " | 986 | ND | 30.2 | 10-110 | | | |
| Benz (a) anthracene | 439 | 101 | " | 982 | ND | 44.7 | 30-120 | | | |
| Benzo (a) pyrene | 548 | 58.8 | " | 982 | ND | 55.7 | 30-120 | | | |
| Benzo (b) fluoranthene | 616 | 101 | " | 982 | ND | 62.7 | 30-120 | | | |
| Benzo (ghi) perylene | 555 | 101 | " | 982 | ND | 56.5 | 20-110 | | | |
| Benzo (k) fluoranthene | 559 | 101 | " | 982 | ND | 56.9 | 30-120 | | | |
| Benzyl alcohol | 628 | 101 | " | 986 | ND | 63.6 | 40-120 | | | |
| Bis(2-chloroethoxy)methane | 466 | 101 | " | 982 | ND | 47.4 | 30-110 | | | |
| Bis(2-chloroethyl)ether | 491 | 101 | " | 982 | ND | 50.0 | 30-120 | | | |
| Bis(2-chloroisopropyl)ether | 607 | 101 | " | 982 | ND | 61.8 | 40-110 | | | |
| Bis(2-ethylhexyl)phthalate | 538 | 335 | " | 982 | ND | 54.8 | 30-130 | | | |
| 4-Bromophenyl phenyl ether | 424 | 101 | " | 982 | ND | 43.2 | 50-115 | | | L |
| Butyl benzyl phthalate | 535 | 335 | " | 982 | ND | 54.5 | 30-120 | | | |
| 4-Chloroaniline | 363 | 101 | " | 982 | ND | 36.9 | 10-110 | | | |
| 4-Chloro-3-methylphenol | 510 | 101 | " | 982 | ND | 51.9 | 40-120 | | | |
| 2-Chloronaphthalene | 430 | 101 | " | 982 | ND | 43.7 | 60-120 | | | L |
| 2-Chlorophenol | 547 | 101 | " | 982 | ND | 55.7 | 30-115 | | | |
| 4-Chlorophenyl phenyl ether | 437 | 101 | " | 982 | ND | 44.5 | 30-110 | | | |
| Chrysene | 418 | 101 | " | 982 | ND | 42.6 | 30-120 | | | |
| Dibenz (a,h) anthracene | 549 | 58.8 | " | 982 | ND | 55.9 | 30-110 | | | |
| Dibenzofuran | 439 | 101 | " | 982 | ND | 44.7 | 50-110 | | | L |
| 1,2-Dichlorobenzene | 438 | 101 | " | 982 | ND | 44.6 | 35-110 | | | |
| 1,3-Dichlorobenzene | 424 | 101 | " | 982 | ND | 43.1 | 30-110 | | | |
| 1,4-Dichlorobenzene | 427 | 101 | " | 982 | ND | 43.4 | 30-110 | | | |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100197 - EPA 3550B** | | | | | | | | | | |
| **Matrix Spike (7100197-MS1)** | | **Source: BQJ0106-01** | | Prepared & Analyzed: 10/12/07 | | | | | | |
| 3,3´-Dichlorobenzidine | 693 | 507 | ug/kg dry | 1970 | ND | 35.1 | 10-110 | | | |
| 2,4-Dichlorophenol | 499 | 101 | " | 982 | ND | 50.7 | 40-110 | | | |
| Diethyl phthalate | 514 | 101 | " | 982 | ND | 52.3 | 30-115 | | | |
| 2,4-Dimethylphenol | 538 | 101 | " | 982 | ND | 54.8 | 40-110 | | | |
| Dimethyl phthalate | 506 | 101 | " | 982 | ND | 51.5 | 40-110 | | | |
| Di-n-butyl phthalate | 491 | 335 | " | 982 | ND | 50.0 | 30-120 | | | |
| 4,6-Dinitro-2-methylphenol | 715 | 507 | " | 982 | ND | 72.8 | 10-120 | | | |
| 2,4-Dinitrophenol | 648 | 507 | " | 982 | ND | 65.9 | 20-110 | | | |
| 2,4-Dinitrotoluene | 565 | 101 | " | 982 | ND | 57.5 | 40-110 | | | |
| 2,6-Dinitrotoluene | 486 | 101 | " | 982 | ND | 49.5 | 50-110 | | | L |
| Di-n-octyl phthalate | 557 | 335 | " | 982 | ND | 56.7 | 30-130 | | | |
| Fluoranthene | 451 | 101 | " | 982 | ND | 45.9 | 30-130 | | | |
| Fluorene | 455 | 101 | " | 982 | ND | 46.3 | 60-120 | | | L |
| Hexachlorobenzene | 402 | 101 | " | 982 | ND | 40.9 | 30-110 | | | |
| Hexachlorobutadiene | 420 | 101 | " | 982 | ND | 42.8 | 30-110 | | | |
| Hexachlorocyclopentadiene | 309 | 101 | " | 982 | ND | 31.4 | 10-110 | | | |
| Hexachloroethane | 498 | 101 | " | 982 | ND | 50.7 | 40-110 | | | |
| Indeno (1,2,3-cd) pyrene | 570 | 101 | " | 982 | ND | 58.0 | 30-110 | | | |
| Isophorone | 501 | 101 | " | 982 | ND | 50.9 | 30-110 | | | |
| 2-Methylnaphthalene | 420 | 101 | " | 982 | ND | 42.8 | 20-120 | | | |
| o-Cresol | 520 | 101 | " | 982 | ND | 53.0 | 30-120 | | | |
| m,p-Cresols | 603 | 101 | " | 982 | ND | 61.3 | 50-120 | | | |
| Naphthalene | 422 | 101 | " | 982 | ND | 43.0 | 20-110 | | | |
| 2-Nitroaniline | 560 | 507 | " | 982 | ND | 57.0 | 35-110 | | | |
| 3-Nitroaniline | 673 | 507 | " | 982 | ND | 68.5 | 30-110 | | | |
| 4-Nitroaniline | 747 | 507 | " | 982 | ND | 76.1 | 30-115 | | | |
| Nitrobenzene | 577 | 71.0 | " | 982 | ND | 58.7 | 30-110 | | | |
| 2-Nitrophenol | 569 | 101 | " | 982 | ND | 57.9 | 30-110 | | | |
| 4-Nitrophenol | 734 | 507 | " | 982 | ND | 74.7 | 20-120 | | | |
| N-Nitrosodi-n-propylamine | 586 | 101 | " | 982 | ND | 59.7 | 35-120 | | | |
| N-Nitrosodiphenylamine | 494 | 101 | " | 982 | ND | 50.3 | 30-110 | | | |
| Pentachlorophenol | 286 | 50.7 | " | 982 | ND | 29.1 | 30-120 | | | L |
| Phenanthrene | 427 | 101 | " | 982 | ND | 43.4 | 50-120 | | | L |
| Phenol | 568 | 101 | " | 982 | ND | 57.9 | 50-110 | | | |
| Pyrene | 435 | 101 | " | 982 | ND | 44.3 | 50-115 | | | L |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1380 Busch Parkway
Buffalo Grove, Illinois 60089

Phone: (847) 808-7766
Fax: (847) 808-7772

| | | | |
|---|---|---|---|
| Weaver Boos Consultants | Project: | JLM Chemical | |
| 70 West Madison, Suite 4250 | Project Number: | N/A | **Lab ID:** BQJ0102 |
| Chicago, IL 60602 | Project Manager: | Carolyn Feltz | **Reported:** 10/30/07 14:21 |

# Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

## TestAmerica - Buffalo Grove, IL

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 7100197 - EPA 3550B** | | | | | | | | | | |
| **Matrix Spike (7100197-MS1)** | | **Source: BQJ0106-01** | | Prepared & Analyzed: 10/12/07 | | | | | | |
| 1,2,4-Trichlorobenzene | 405 | 101 | ug/kg dry | 982 | ND | 41.2 | 40-110 | | | |
| 2,4,5-Trichlorophenol | 494 | 507 | " | 982 | ND | 50.3 | 25-120 | | | |
| 2,4,6-Trichlorophenol | 530 | 101 | " | 982 | ND | 53.9 | 45-110 | | | |
| *Surrogate: 2-Fluorophenol* | *1100* | | *"* | *1960* | | *55.9* | *20-120* | | | |
| *Surrogate: Phenol-d6* | *1210* | | *"* | *1960* | | *61.5* | *30-120* | | | |
| *Surrogate: Nitrobenzene-d5* | *415* | | *"* | *982* | | *42.3* | *20-110* | | | |
| *Surrogate: 2-Fluorobiphenyl* | *272* | | *"* | *982* | | *27.7* | *20-110* | | | |
| *Surrogate: 2,4,6-Tribromophenol* | *965* | | *"* | *1960* | | *49.1* | *10-130* | | | |
| *Surrogate: p-Terphenyl-d14* | *311* | | *"* | *982* | | *31.7* | *30-110* | | | |
| **Matrix Spike Dup (7100197-MSD1)** | | **Source: BQJ0106-01** | | Prepared & Analyzed: 10/12/07 | | | | | | |
| Acenaphthene | 474 | 117 | ug/kg dry | 990 | ND | 47.9 | 30-110 | 6.77 | 30 | |
| Acenaphthylene | 434 | 117 | " | 990 | ND | 43.8 | 20-110 | 5.40 | 30 | |
| Aniline | 448 | 117 | " | 994 | ND | 45.1 | 10-110 | 6.14 | 30 | |
| Anthracene | 471 | 117 | " | 990 | ND | 47.5 | 30-115 | 8.03 | 25 | |
| Benzoic acid | 340 | 586 | " | 994 | ND | 34.2 | 10-110 | 13.2 | 30 | |
| Benz (a) anthracene | 476 | 117 | " | 990 | ND | 48.1 | 30-120 | 8.18 | 30 | |
| Benzo (a) pyrene | 591 | 68.0 | " | 990 | ND | 59.7 | 30-120 | 7.62 | 30 | |
| Benzo (b) fluoranthene | 659 | 117 | " | 990 | ND | 66.6 | 30-120 | 6.70 | 30 | |
| Benzo (ghi) perylene | 591 | 117 | " | 990 | ND | 59.7 | 20-110 | 6.27 | 30 | |
| Benzo (k) fluoranthene | 607 | 117 | " | 990 | ND | 61.3 | 30-120 | 8.33 | 30 | |
| Benzyl alcohol | 685 | 117 | " | 994 | ND | 68.9 | 40-120 | 8.72 | 20 | |
| Bis(2-chloroethoxy)methane | 509 | 117 | " | 990 | ND | 51.5 | 30-110 | 8.89 | 20 | |
| Bis(2-chloroethyl)ether | 537 | 117 | " | 990 | ND | 54.2 | 30-120 | 8.86 | 20 | |
| Bis(2-chloroisopropyl)ether | 652 | 117 | " | 990 | ND | 65.9 | 40-110 | 7.12 | 25 | |
| Bis(2-ethylhexyl)phthalate | 585 | 387 | " | 990 | ND | 59.2 | 30-130 | 8.38 | 30 | |
| 4-Bromophenyl phenyl ether | 450 | 117 | " | 990 | ND | 45.5 | 50-115 | 6.01 | 20 | L |
| Butyl benzyl phthalate | 572 | 387 | " | 990 | ND | 57.7 | 30-120 | 6.53 | 25 | |
| 4-Chloroaniline | 388 | 117 | " | 990 | ND | 39.2 | 10-110 | 6.85 | 30 | |
| 4-Chloro-3-methylphenol | 569 | 117 | " | 990 | ND | 57.5 | 40-120 | 10.8 | 20 | |
| 2-Chloronaphthalene | 448 | 117 | " | 990 | ND | 45.2 | 60-120 | 4.14 | 30 | L |
| 2-Chlorophenol | 584 | 117 | " | 990 | ND | 59.0 | 30-115 | 6.63 | 30 | |
| 4-Chlorophenyl phenyl ether | 460 | 117 | " | 990 | ND | 46.5 | 30-110 | 5.08 | 25 | |
| Chrysene | 448 | 117 | " | 990 | ND | 45.3 | 30-120 | 6.86 | 30 | |
| Dibenz (a,h) anthracene | 592 | 68.0 | " | 990 | ND | 59.9 | 30-110 | 7.64 | 30 | |
| Dibenzofuran | 462 | 117 | " | 990 | ND | 46.7 | 50-110 | 5.20 | 25 | L |



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

**Reviewed & Approved by:** Robin S. Promisel

Robin Promisel For Margaret Kniest