



May 7, 2012

ENGINEERING LABORATORY TEST REPORT

| | | | |
|------------------|--|-----------------|--|
| Send to: | Canplas Industries Ltd. 500 Veterans Drive Barrie ON L4M 4V3 Canada Attn: Tim Bach | Plant: | Canplas Industries Ltd. 31 Patterson Road Barrie ON L4M 4V3 Canada Attn: Mrs. Elizabeth Miller |
| Client #: | C0006197 | Plant #: | C0006199 |

NSF Job#: J-00111494

Description of Test Sample: Model GT500 Grease Interceptor (25 gpm)
Configuration #1: Solids interceptor filled with gravel
Configuration #2: Solids interceptor empty with coarse screen

Sample Received: April 13, 2012 – Submitted in good condition by client

Date of Test: April 18-27, 2012

Location of Test: NSF International, Ann Arbor, MI

Test Protocol: PDI G101-2010 Grease Interceptors - Special testing for South Africa performed with a 1-1/2" P-trap instead of a flow control orifice.

Results: Configuration #1: Solids interceptor filled with gravel **INCOMPLETE**
Configuration #2: Solids interceptor empty **FAIL**

Report Authorization: _____
Manager, Engineering Laboratory

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PDI G101 Section 5.1 Media Analysis

COMPLETE

| | |
|-----------------------|---------|
| pH value | n/a |
| Lard specific gravity | 0.874 |
| Viscosity | 6.83 cP |

PDI G101 Section 5.4 Flow Rate Verification

Not Applicable

| | | |
|--------------------------------------|------|--------|
| Type of Grease Interceptor | N/A | |
| Size of Flow Controller | None | inches |
| Flow Time 1 Sink 1+2 | N/A | sec |
| Flow Time 2 Sink 1+2 | N/A | sec |
| Flow Time 3 Sink 1+2 | N/A | sec |
| Flow Time Average Sink 1+2 | N/A | sec |
| Flow Rate Average Sink 1+2 | N/A | gpm |
| Deviation from Req Average Sink 1+2 | N/A | % |
| Flow Time 1 Sink 2+1 | N/A | sec |
| Flow Time 2 Sink 2+ 1 | N/A | sec |
| Flow Time 3 Sink 2+ 1 | N/A | sec |
| Flow Time Average Sink 2+1 | N/A | sec |
| Flow Rate Average Sink 2+1 (gpm) | N/A | gpm |
| Deviation from Req Average Sink 2+1 | N/A | % |
| Max allowable deviation from average | N/A | % |
| Max allowable deviation between runs | N/A | % |
| Max deviation between runs | N/A | % |
| Flow rate acceptable? | N/A | |

Note: Flow rates were controlled by a 1-1/2 inch P-trap and not calibrated with an external flow control orifice. Refer to Figure 1.



PDI G101 Section 7 Rating Test (Grease Retention Capacity)

Configuration #1: Solids interceptor filled with gravel

INCOMPLETE*

| | | |
|--|----------------|-------------|
| Model | GT500 (25 gpm) | |
| Flow | 23.4** | GPM |
| Flow Restrictor ID | None | inches |
| Breakdown Increment Number | 5 | |
| Pounds Grease Retained at Breakdown | 23.14 | lbs. |
| Incremental Efficiency | 89.4 | % |
| Average Efficiency | 93.0 | % |
| Required Total Amount of Grease Retained | 56.25 | lbs. |
| Actual Total Amount of Grease Retained | 23.14 | lbs. |

* Testing is INCOMPLETE because the test was stopped before breakdown.

Configuration #2: Solids interceptor empty with coarse screen removed

FAIL

| | | |
|--|----------------|-------------|
| Model | GT500 (25 gpm) | |
| Flow | 23.3** | GPM |
| Flow Restrictor ID | None | inches |
| Breakdown Increment Number | 2 | |
| Pounds Grease Retained at Breakdown | 9.34 | lbs. |
| Incremental Efficiency | 86.8 | % |
| Average Efficiency | 93.4 | % |
| Required Total Amount of Grease Retained | 56.25 | lbs. |
| Actual Total Amount of Grease Retained | 9.34 | lbs. |

** The flow rate through the 1-1/2" P-trap was significantly lower than required by the PDI G101 test protocol.



Figure 1 - P-trap (1-1/2 inch pipe size)



Figure 2 - GT500 Grease Interceptor

| GREASE INTERCEPTOR RATING TEST FORM | | | | | | | | | | | | | | | |
|---|------|--------|--------|-------------------------------|--------------------------------------|-------------|--------------|------------------------------------|---------------------------------------|-------------|------------------------|----------------------|--|---|--|
| Interceptor ID Canplas GT500 (GI 25) Grease Interceptor with gravel in solids strainer basket | | | | | | | | | | | Report No.: J-00111494 | | | | |
| Capacity No. 1 | | 35 | | Test Vehicle: | | | | ***** Flow Control Data ***** | | | | | | Page 5 of 6 | |
| Capacity No. 2 | | 35 | | Spec. Gravity: 0.874 | | | | Observers: Jon McGaugh | | | | Test Date: 4/18/2012 | | | |
| Separate No. 1 | | na | | Viscosity: 6.83 cP | | | | Kane Vincent | | | | | | Notes: Drainage gauged on clear compartment. Tabulated "amounts retained" is a calculation of Added minus "Skimmed." Tabulated "skim amounts" includes pro-rata addition for reclaimed from skim tank after chilling. All weights taken after de-watering by Separatory funnel chilling. | |
| Separate No. 2 | | na | | Test Temperature: 150-160 ° F | | | | | | | | | | | |
| Simultaneous | | 23.3 | | Water : 160 | | | | Orifice Size: 1 1/2" P-trap | | | | | | | |
| Simultaneous | | 23.4 | | Test Temperature: 150-160 ° F | | | | Air Intake: 1" Max: Height 28.125" | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | ***** INCREMENTAL ***** | | | | *****ACCUMULATED ***** | | | | | | |
| | | | | | (drop-skim)/ drop x 100 = efficiency | | | | (drop-skim) / drop x 100 = efficiency | | | | | | |
| No. | Test | Clear | Sec. | Rate:GPM | lb. Added | lb. Skimmed | lb. Retained | Efficiency | lb. Added | lb. Skimmed | lb. Retained | Efficiency | | | |
| 1 | 1 | 2 | 171.59 | 23.3 | 5 | 0.01 | 4.99 | 99.8 | 5.00 | 0.01 | 4.99 | 100 | | | |
| 2 | 2 | 1 | 169.98 | 23.5 | 5 | 0.29 | 4.71 | 94.2 | 10.00 | 0.30 | 9.70 | 97 | | | |
| 3 | 1 | 2 | 171.06 | 23.3 | 5 | 0.52 | 4.48 | 89.6 | 15.00 | 0.82 | 14.18 | 95 | | | |
| 4 | 2 | 1 | 170.65 | 23.4 | 5 | 0.51 | 4.49 | 89.8 | 20.00 | 1.33 | 18.67 | 93 | | | |
| 5 | 1 | 2 | 171.00 | 23.3 | 5 | 0.53 | 4.47 | 89.4 | 25.00 | 1.86 | 23.14 | 93 | | | |
| 6 | 2 | 1 | | | | | | | | | | | | | |
| 7 | 1 | 2 | | | | | | | | | | | | | |
| 8 | 2 | 1 | | | | | | | | | | | | | |
| 9 | 1 | 2 | | | | | | | | | | | | | |
| 10 | 2 | 1 | | | | | | | | | | | | | |
| 11 | 1 | 2 | | | | | | | | | | | | | |
| 12 | 2 | 1 | | | | | | | | | | | | | |
| 13 | 1 | 2 | | | | | | | | | | | | | |
| 14 | 2 | 1 | | | | | | | | | | | | | |
| 15 | 1 | 2 | | | | | | | | | | | | | |
| 16 | 2 | 1 | | | | | | | | | | | | | |
| 17 | 1 | 2 | | | | | | | | | | | | | |
| 18 | 2 | 1 | | | | | | | | | | | | | |
| 19 | 1 | 2 | | | | | | | | | | | | | |
| 20 | 2 | 1 | | | | | | | | | | | | | |
| 21 | 1 | 2 | | | | | | | | | | | | | |
| 22 | 2 | 1 | | | | | | | | | | | | | |
| 23 | 1 | 2 | | | | | | | | | | | | | |
| 24 | 2 | 1 | | | | | | | | | | | | | |
| 25 | 1 | 2 | | | | | | | | | | | | | |
| 26 | 2 | 1 | | | | | | | | | | | | | |
| 27 | 1 | 2 | | | | | | | | | | | | | |
| 28 | 2 | 1 | | | | | | | | | | | | | |
| 29 | 1 | 2 | | | | | | | | | | | | | |
| 30 | 2 | 1 | | | | | | | | | | | | | |
| 31 | 1 | 2 | | | | | | | | | | | | | |
| Average Or Total | | 170.86 | | 23.4 | | 25 | | 1.86 | | 23.14 | | | | INCOMPLETE | |

Notes: Drainage gauged on clear compartment.
Tabulated "amounts retained" is a calculation of Added minus "Skimmed."
Tabulated "skim amounts" includes pro-rata addition for reclaimed from skim tank after chilling.
All weights taken after de-watering by Separatory funnel chilling.

Summary & Adjusted Results based on the totals at the increment when Grease retained equals 2 1/4 times rated capacity

| | | |
|----------------------------------|--|--------------|
| = | | 78.75 |
| Increment No. | | 5 |
| 1) Total Skimmed: | | 1.86 |
| 2) Total Retained : | | 23.14 |
| 3) Total Added: | | 25.00 |
| Eff. = (line 3 - line1) / line 3 | | |
| Efficiency % = | | 92.6 |

Summary and Adjusted Results based on the totals at Break down point.

| | |
|----------------------------------|-------------|
| Break down | |
| Increment No. | 5 |
| Pounds Retained : | 23.14 |
| 1) Total Skimmed : | 1.86 |
| 2) Total Retained : | 23.14 |
| 3) Total Added : | 25.00 |
| Eff. = (line 3 - line1) / line 3 | |
| Efficiency % = | 92.6 |

GPM: N/A
INCOMPLETE

| GREASE INTERCEPTOR RATING TEST FORM | | | | | | | | | | | | | | | |
|---|------|--------|--------|-------------------------------|--------------------------------------|-------------|--------------|------------------------------------|---------------------------------------|-------------|------------------------|----------------------|--|---|--|
| Interceptor ID Canplas GT500 (GI 25) Grease Interceptor with solids intceptor and coarse strainer removed | | | | | | | | | | | Report No.: J-00111494 | | | | |
| Capacity No. 1 | | 25 | | Test Vehicle: | | | | ***** Flow Control Data ***** | | | | | | Page 6 of 6 | |
| Capacity No. 2 | | 25 | | Spec. Gravity: 0.874 | | | | Observers: Jon McGaugh | | | | Test Date: 4/27/2012 | | | |
| Separate No. 1 | | na | | Viscosity: 6.83 cP | | | | Trey Allen | | | | | | Notes: Drainage gauged on clear compartment. Tabulated "amounts retained" is a calculation of Added minus "Skimmed." Tabulated "skim amounts" includes pro-rata addition for reclaimed from skim tank after chilling. All weights taken after de-watering by Separatory funnel chilling. | |
| Separate No. 2 | | na | | Test Temperature: 150-160 ° F | | | | | | | | | | | |
| Simultaneous | | 23.1 | | Water : 160 | | | | Orifice Size: 1 1/2" P-trap | | | | | | | |
| Simultaneous | | 23.4 | | Test Temperature: 150-160 ° F | | | | Air Intake: 1" Max: Height 28.125" | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | ***** INCREMENTAL ***** | | | | ***** ACCUMULATED ***** | | | | | | |
| | | | | | (drop-skim)/ drop x 100 = efficiency | | | | (drop-skim) / drop x 100 = efficiency | | | | | | |
| No. | Test | Clear | Sec. | Rate:GPM | lb. Added | lb. Skimmed | lb. Retained | Efficiency | lb. Added | lb. Skimmed | lb. Retained | Efficiency | | | |
| 1 | 1 | 2 | 124.88 | 22.8 | 5 | 0.00 | 5.00 | 100.0 | 5.00 | 0.00 | 5.00 | 100 | | | |
| 2 | 2 | 1 | 121.02 | 23.5 | 5 | 0.66 | 4.34 | 86.8 | 10.00 | 0.66 | 9.34 | 93 | | | |
| 3 | 1 | 2 | 121.98 | 23.4 | 5 | 1.13 | 3.87 | 77.4 | 15.00 | 1.79 | 13.21 | 88 | | | |
| 4 | 2 | 1 | 121.74 | 23.4 | 5 | 1.50 | 3.50 | 70.0 | 20.00 | 3.29 | 16.71 | 84 | | | |
| 5 | 1 | 2 | 123.25 | 23.1 | 5 | 1.55 | 3.45 | 69.0 | 25.00 | 4.84 | 20.16 | 81 | | | |
| 6 | 2 | 1 | 122.57 | 23.3 | 5 | 1.30 | 3.70 | 74.0 | 30.00 | 6.14 | 23.86 | 80 | | | |
| 7 | 1 | 2 | | | | | | | | | | | | | |
| 8 | 2 | 1 | | | | | | | | | | | | | |
| 9 | 1 | 2 | | | | | | | | | | | | | |
| 10 | 2 | 1 | | | | | | | | | | | | | |
| 11 | 1 | 2 | | | | | | | | | | | | | |
| 12 | 2 | 1 | | | | | | | | | | | | | |
| 13 | 1 | 2 | | | | | | | | | | | | | |
| 14 | 2 | 1 | | | | | | | | | | | | | |
| 15 | 1 | 2 | | | | | | | | | | | | | |
| 16 | 2 | 1 | | | | | | | | | | | | | |
| 17 | 1 | 2 | | | | | | | | | | | | | |
| 18 | 2 | 1 | | | | | | | | | | | | | |
| 19 | 1 | 2 | | | | | | | | | | | | | |
| 20 | 2 | 1 | | | | | | | | | | | | | |
| 21 | 1 | 2 | | | | | | | | | | | | | |
| 22 | 2 | 1 | | | | | | | | | | | | | |
| 23 | 1 | 2 | | | | | | | | | | | | | |
| 24 | 2 | 1 | | | | | | | | | | | | | |
| 25 | 1 | 2 | | | | | | | | | | | | | |
| 26 | 2 | 1 | | | | | | | | | | | | | |
| 27 | 1 | 2 | | | | | | | | | | | | | |
| 28 | 2 | 1 | | | | | | | | | | | | | |
| 29 | 1 | 2 | | | | | | | | | | | | | |
| 30 | 2 | 1 | | | | | | | | | | | | | |
| 31 | 1 | 2 | | | | | | | | | | | | | |
| Average Or Total | | 122.57 | | 23.3 | | 30 | | 6.14 | | 23.86 | | FAIL | | | |

Notes: Drainage gauged on clear compartment.
Tabulated "amounts retained" is a calculation of Added minus "Skimmed."
Tabulated "skim amounts" includes pro-rata addition for reclaimed from skim tank after chilling.
All weights taken after de-watering by Separatory funnel chilling.

Summary & Adjusted Results based on the totals at the increment when Grease retained equals 2 1/4 times rated capacity

| | | |
|----------------------------------|-------------|-------|
| = | | 56.25 |
| Increment No. | 2 | |
| 1) Total Skimmed: | 0.66 | |
| 2) Total Retained : | 9.34 | |
| 3) Total Added: | 10.00 | |
| Eff. = (line 3 - line1) / line 3 | | |
| Efficiency % = | 93.4 | |

Summary and Adjusted Results based on the totals at Break down point.

| | |
|----------------------------------|-------------|
| Break down | |
| Increment No. | 2 |
| Pounds Retained : | 9.34 |
| 1) Total Skimmed : | 0.66 |
| 2) Total Retained : | 9.34 |
| 3) Total Added : | 10.00 |
| Eff. = (line 3 - line1) / line 3 | |
| Efficiency % = | 93.4 |

GPM: N/A
FAIL