



## INDUSTRIAL FLUID SYSTEMS

### Mobile Micro Filtration Oil Purification Cart

#### Typical applications

Hydraulic/Lube Systems

50 to 700 Gallons

-Gear Boxes

-CNC Machines

-Stamping Presses

-Servo Controlled Sys.

Batch Recycling

-High Speed Spindle Oil

-Lube Oil

-Hydraulic Oil

-Transmission Fluid

#### Equipment Specifications

1.10GPM, 4.2L/M

Process Flow Rate

1.2 kW Heater w/

Temperature Gauge

Electrical Control w/

"On" & "Off" Push Buttons

Power Requirement:

120V-15 Amps

2, 5 or 15 Micron Elements

High Pressure Alarm

High Temperature Alarm

10ft. Electrical Cord

10ft. Inlet & Outlet Hoses

#### Optional Features

Cycle Timer

Remote Level Sensors

Particle Counter

Moisture Sensor

The Mobile Micro Filtration Oil Purification System is designed to keep your equipment running at maximum efficiency. Contaminated oil destroys bearings, seals, pumps and servo valves causing premature wear, down time and high maintenance costs. The Micro Filter removes solids, micro solids and small amounts of water extending the life of the oil and the equipment. The system runs on 120 volt, 15 amp power. Industrial Fluid Systems custom build a system to meet your requirements.

:



INDUSTRIAL FLUID SYSTEMS

22200 Ryan Road

Warren, MI 48091

Phone: 800-343-8106

Fax: 586-754-8284

[www.industrialfluidsystems.com](http://www.industrialfluidsystems.com)

**Model: PFC-1/2-F58NTZ-120-1.2KW**



## INDUSTRIAL FLUID SYSTEMS

### Mobile Micro Filtration Oil Purification Cart

#### EXAMPLE:

**PFC - 1/2 - F58NTZ - 120 - 1.2KW**

**PORTABLE FILTER CART = PFC**

**PIPE SIZE**

1/2-inch female NPT

= 1/2

**NTZ FILTER SIZE**

2.1 liters per minute

4.2 liters per minute

= F29NTZ

= F58NTZ

**POWER SOURCE**

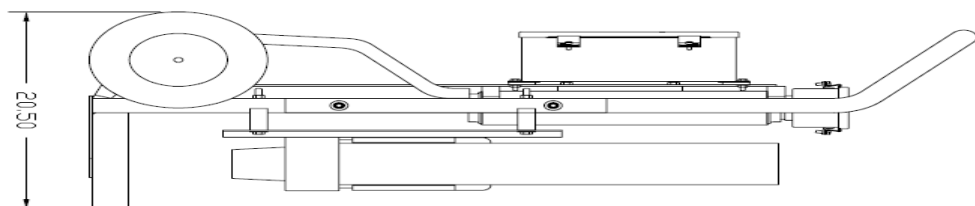
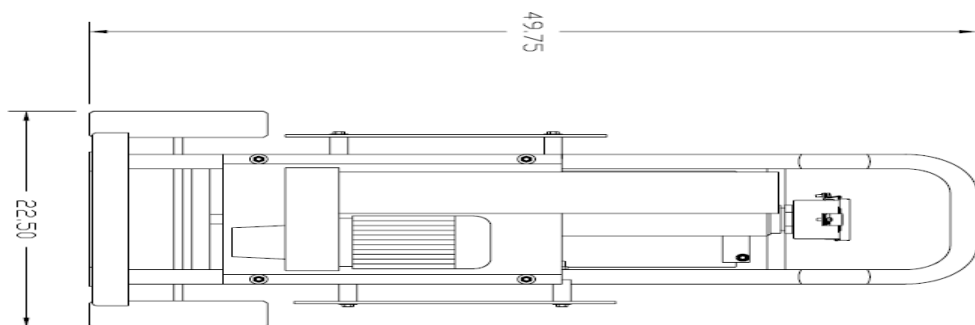
120V

= 120

**HEATER ELEMENT**

1.2KW = 1.2 Kilowatt

X.XKW = X.X Kilowatt



INDUSTRIAL FLUID SYSTEMS

22200 Ryan Road

Warren, MI 48091

Phone: 800-343-8106

Fax: 586-754-8284

[www.industrialfluidsystems.com](http://www.industrialfluidsystems.com)

**Model: PFC-1/2-F58NTZ-120-1.2KW**



# OIL REPORT

LAB NUMBER: E09947  
REPORT DATE: 4/20/2010  
CODE: 1/319

UNIT ID: AFTER POLISHNG  
CLIENT ID: 1314  
PAYMENT: Verbal, Paul

|      |                              |  |
|------|------------------------------|--|
| UNIT | MAKE/MODEL: Hydraulic System | OIL TYPE & GRADE: Mobil DTE 24 Hydraulic |
|      | FUEL TYPE:                   | OIL USE INTERVAL:                        |
|      | ADDITIONAL INFO:             |  |

|        |                          |  |
|--------|--------------------------|--|
| CLIENT | PAUL HAMPTON             | PHONE: (586) 754-8220                      |
|        | INDUSTRIAL FLUID SYSTEMS | FAX: (586) 754-8284                        |
|        | 22200 RYAN RD            | ALT PHONE:                                 |
|        | WARREN, MI 48091         | EMAIL: phampton@industrialfluidsystems.com |
|        |                          |  |

|          |  |
|----------|--|
| COMMENTS | PAUL: Wear read low but we found a high amount of silicon in this oil. The ISO code is 12/11/18, which is fairly clean for a hydraulic oil. We suspect the silicon is harmless, and if you agree then we think this oil can stay in use. |
|          |  |

|                               | MI/HR on Oil      |          | UNIT /<br>LOCATION<br>AVERAGES |  |  |  |  |  | UNIVERSAL<br>AVERAGES |
|-------------------------------|-------------------|----------|--------------------------------|--|--|--|--|--|-----------------------|
|                               | MI/HR on Unit     |          |                                |  |  |  |  |  |                       |
|                               | Sample Date       | 04/16/10 |                                |  |  |  |  |  |                       |
|                               | Make Up Oil Added |          |                                |  |  |  |  |  |                       |
| ELEMENTS IN PARTS PER MILLION | ALUMINUM          | 0        | 0                              |  |  |  |  |  | 0                     |
|                               | CHROMIUM          | 0        | 0                              |  |  |  |  |  | 0                     |
|                               | IRON              | 1        | 15                             |  |  |  |  |  | 6                     |
|                               | COPPER            | 1        | 46                             |  |  |  |  |  | 8                     |
|                               | LEAD              | 1        | 2                              |  |  |  |  |  | 2                     |
|                               | TIN               | 1        | 1                              |  |  |  |  |  | 0                     |
|                               | MOLYBDENUM        | 0        | 0                              |  |  |  |  |  | 1                     |
|                               | NICKEL            | 0        | 0                              |  |  |  |  |  | 0                     |
|                               | MANGANESE         | 0        | 0                              |  |  |  |  |  | 0                     |
|                               | SILVER            | 0        | 0                              |  |  |  |  |  | 0                     |
|                               | TITANIUM          | 0        | 0                              |  |  |  |  |  | 0                     |
|                               | POTASSIUM         | 0        | 3                              |  |  |  |  |  | 0                     |
|                               | BORON             | 1        | 5                              |  |  |  |  |  | 6                     |
|                               | SILICON           | 20       | 8                              |  |  |  |  |  | 4                     |
|                               | SODIUM            | 1        | 6                              |  |  |  |  |  | 5                     |
|                               | CALCIUM           | 57       | 96                             |  |  |  |  |  | 187                   |
|                               | MAGNESIUM         | 7        | 4                              |  |  |  |  |  | 20                    |
|                               | PHOSPHORUS        | 453      | 446                            |  |  |  |  |  | 374                   |
|                               | ZINC              | 474      | 590                            |  |  |  |  |  | 412                   |
|                               | BARIUM            | 1        | 1                              |  |  |  |  |  | 13                    |

Values  
Should Be\*

|            |                       |         |         |  |  |  |  |  |
|------------|-----------------------|---------|---------|--|--|--|--|--|
| PROPERTIES | SUS Viscosity @ 210°F | 49.1    | 44-49   |  |  |  |  |  |
|            | cSt Viscosity @ 100°C | 7.00    | 5.4-7.3 |  |  |  |  |  |
|            | Flashpoint in °F      | 430     | >405    |  |  |  |  |  |
|            | Fuel %                | -       |         |  |  |  |  |  |
|            | Antifreeze %          | -       |         |  |  |  |  |  |
|            | Water %               | 0.0     | 0.0     |  |  |  |  |  |
|            | Insolubles %          | 0.0     | <0.1    |  |  |  |  |  |
|            | TBN                   |         |         |  |  |  |  |  |
|            | TAN                   |         |         |  |  |  |  |  |
|            | ISO Code              | 12/11/8 |         |  |  |  |  |  |
|            |                       |         |         |  |  |  |  |  |
|            |                       |         |         |  |  |  |  |  |

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com



# OIL REPORT

LAB NUMBER: E09946  
REPORT DATE: 4/20/2010  
CODE: 1/319

UNIT ID: BEFORE POLISHNG  
CLIENT ID: 1314  
PAYMENT: Verbal, Paul

|      |                              |  |
|------|------------------------------|--|
| UNIT | MAKE/MODEL: Hydraulic System | OIL TYPE & GRADE: Mobil DTE 24 Hydraulic |
|      | FUEL TYPE:                   | OIL USE INTERVAL:                        |
|      | ADDITIONAL INFO:             |  |

|        |                          |  |
|--------|--------------------------|--|
| CLIENT | PAUL HAMPTON             | PHONE: (586) 754-8220                      |
|        | INDUSTRIAL FLUID SYSTEMS | FAX: (586) 754-8284                        |
|        | 22200 RYAN RD            | ALT PHONE:                                 |
|        | WARREN, MI 48091         | EMAIL: phampton@industrialfluidsystems.com |
|        |                          |  |

|          |  |
|----------|--|
| COMMENTS | PAUL: A lot of silicon was found in this sample. It doesn't appear to be abrasive, since wear is so low. The ISO code was 20/19/16 which is dirty for a hydraulic oil. You could try filtering this oil, but 0.3% insolubles is generally more than can be removed through filtration. Due to insolubles, this Mobil DTE oil should probably be changed. |
|          |  |

|                               | UNIT / LOCATION AVERAGES |               | UNIVERSAL AVERAGES |  |  |     |
|-------------------------------|--------------------------|---------------|--------------------|--|--|-----|
|                               | MI/HR on Oil             | MI/HR on Unit |                    |  |  |     |
|                               | Sample Date              | 04/16/10      |                    |  |  |     |
|                               | Make Up Oil Added        |               |                    |  |  |     |
| ELEMENTS IN PARTS PER MILLION | ALUMINUM                 | 0             | 0                  |  |  | 0   |
|                               | CHROMIUM                 | 0             | 0                  |  |  | 0   |
|                               | IRON                     | 2             | 15                 |  |  | 6   |
|                               | COPPER                   | 2             | 46                 |  |  | 8   |
|                               | LEAD                     | 2             | 2                  |  |  | 2   |
|                               | TIN                      | 0             | 1                  |  |  | 0   |
|                               | MOLYBDENUM               | 0             | 0                  |  |  | 1   |
|                               | NICKEL                   | 0             | 0                  |  |  | 0   |
|                               | MANGANESE                | 0             | 0                  |  |  | 0   |
|                               | SILVER                   | 0             | 0                  |  |  | 0   |
|                               | TITANIUM                 | 0             | 0                  |  |  | 0   |
|                               | POTASSIUM                | 0             | 3                  |  |  | 0   |
|                               | BORON                    | 13            | 5                  |  |  | 6   |
|                               | SILICON                  | 26            | 8                  |  |  | 4   |
|                               | SODIUM                   | 3             | 6                  |  |  | 5   |
|                               | CALCIUM                  | 73            | 96                 |  |  | 187 |
|                               | MAGNESIUM                | 2             | 4                  |  |  | 20  |
|                               | PHOSPHORUS               | 494           | 446                |  |  | 374 |
|                               | ZINC                     | 496           | 590                |  |  | 412 |
|                               | BARIUM                   | 3             | 1                  |  |  | 13  |

Values  
Should Be\*

|            |                       |          |         |  |  |  |
|------------|-----------------------|----------|---------|--|--|--|
| PROPERTIES | SUS Viscosity @ 210°F | 47.6     | 44-49   |  |  |  |
|            | cSt Viscosity @ 100°C | 6.52     | 5.4-7.3 |  |  |  |
|            | Flashpoint in °F      | 410      | >405    |  |  |  |
|            | Fuel %                | -        |         |  |  |  |
|            | Antifreeze %          | -        |         |  |  |  |
|            | Water %               | 0.0      | 0.0     |  |  |  |
|            | Insolubles %          | 0.3      | <0.1    |  |  |  |
|            | TBN                   |          |         |  |  |  |
|            | TAN                   |          |         |  |  |  |
|            | ISO Code              | 20/19/16 |         |  |  |  |
|            |                       |          |         |  |  |  |
|            |                       |          |         |  |  |  |

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com