



**LUBRIPORT  
LABORATORIES  
INC.**

1650 AIRLINE DRIVE  
KENNER, LA 70062

(504) 464-1734

NEW ORLEANS PUBLIC  
BELT RAILROAD  
JOSH/BANJO

LOCO 3003  
ENGINE

CP #058

THIS SEPTEMBER  
SAMPLE EXHIBITS  
SLIGHTLY HIGHER  
THAN NORMAL WEAR  
AND CONTAMINATION  
LEVELS. CALCIUM  
AND BASE NUMBER  
INCREASED.

SLIGHTLY LESS WEAR  
AND CONTAMINATION  
FOUND ON MORE RE-  
CENT DECEMBER SAM-  
PLE. NO IMMEDIATE  
ACTION REQUIRED.

INSOLUBLES REMAIN  
HIGHER ON THIS EN-  
GINE. LITTLE CHANGE  
IN WEAR METALS  
FOUND. NO CORREC-  
TIVE ACTION RE-  
QUIRED.

OIL SUITABLE FOR  
CONTINUED USE. WEAR  
AND CONTAMINATION  
LEVELS ARE NORMAL.

INSOLUBLES, VISCO-  
SITY, WEAR METALS  
AND WATER CONTENT  
ALL INCREASED.  
FEBRUARY RESAMPLE  
SUGGESTED.

|                    |                   |                   |                |                  |                   |
|--------------------|-------------------|-------------------|----------------|------------------|-------------------|
| INVOICE NO.        | LL-63933          | LL-63933          | LL-64328       | LL-65374         | LL-65932          |
| REPORT DATE:       | JANUARY 7, 2019   | JANUARY 7, 2019   | MARCH 20, 2019 | OCTOBER 21, 2019 | FEBRUARY 24, 2020 |
| DATE SAMPLE REC'D: | DECEMBER 17, 2018 | DECEMBER 17, 2018 | MARCH 11, 2019 | OCTOBER 1, 2019  | FEBRUARY 10, 2020 |
| PRODUCT            | LUBE OIL          | LUBE OIL          | LUBE OIL       | LUBE OIL         | LUBE OIL          |
| LAB NUMBER         | 12-478            | 12-479            | 3-210          | 10-3             | 2-258             |
| DATE SAMPLED       | 9/5/18            | 12/4/18           | 3/11/19        | 9/6/19           | 12/11/19          |
| VISC. SUS @ 210 F  | 76.3 SECS.        | 76.3 SECS.        | 79.3 SECS.     | 76.8 SECS.       | 79.7 SECS.        |
| VISC. KIN @ 210 F  | 14.57 CST.        | 14.57 CST.        | 15.33 CST.     | 14.72 CST.       | 15.44 CST.        |
| TBN (D2896)        | 8.3               | 8.2               | 8.1            | 8.2              | 8.1               |
| PENTANE INSOLUBLES | 0.6%              | 0.5%              | 0.5%           | 0.3%             | 0.4%              |
| WATER BY DIST.     | 0.15%             | 0.1%              | 0.15%          | 0.1%             | 0.15%             |
| SAE WEIGHT         | 40 WT.            | 40 WT.            | 40 WT.         | 40 WT.           | 40 WT.            |
| DILUTION           | TRACE             | TRACE             | NIL            | TRACE            | NIL               |
| METALS             |                   |                   |                |                  |                   |
| IRON               | 34                | 29                | 30             | 20               | 30                |
| SILVER             | 0.1               | 0.1               | 0.1            | 0.2              | 0.0               |
| ALUMINUM           | 3.1               | 2.9               | 3.0            | 4.5              | 4.1               |
| CHROMIUM           | 8.7               | 6.8               | 7.3            | 8.1              | 9.1               |
| COPPER             | 50                | 42                | 39             | 40               | 52                |
| MAGNESIUM          | 11.7              | 10.3              | 11.6           | 13.7             | 15.2              |
| SODIUM             | 42                | 33                | 36             | 42               | 42                |
| NICKEL             | 1.0               | 0.5               | 1.2            | 0.7              | 0.5               |
| LEAD               | 8.0               | 4.0               | 5.3            | 2.2              | 3.2               |
| SILICON            | 8.8               | 6.9               | 6.9            | 6.1              | 8.3               |
| TIN                | 0.0               | 0.0               | 0.0            | 0.0              | 0.0               |
| TITANIUM           | 0.4               | 0.1               | 0.0            | 0.1              | 0.3               |
| BORON              | 0.8               | 0.9               | 0.1            | 0.0              | 1.9               |
| BARIIUM            | 1.0               | 0.5               | 1.1            | 0.4              | 0.1               |
| MOLYBDENUM         | 18.9              | 14.0              | 7.3            | 5.6              | 4.0               |
| VANADIUM           | 0.2               | 0.1               | 0.0            | 0.0              | 0.0               |
| ZINC               | 9.6               | 10.5              | 12.3           | 10.2             | 9.2               |
| MANGANESE          | 0.2               | 0.0               | 0.0            | 0.0              | 0.6               |
| CALCIUM            | 3472              | 3259              | 2982           | 2942             | 2929              |
| PHOSPHORUS         | 20                | 20                | 21             | 20               | 12.4              |

*Josh Fisher*