



**LUBRIPORT  
LABORATORIES  
INC.**

1650 AIRLINE DRIVE  
KENNER, LA 70062

(504) 464-1734

NEW ORLEANS PUBLIC  
BELT RAILROAD  
JOSH HARPER

LOCO 2001  
ENGINE

CP #016

OIL CHANGED SINCE  
LAST ANALYSIS.  
WEAR METALS AND  
FUEL DILUTION ARE  
REDUCED.

NO CORRECTIVE AC-  
TION NECESSARY.  
WEAR AND CONTAMI-  
NATION LEVELS ARE  
NORMAL.

FUEL DILUTION CON-  
TINUES. LITTLE  
CHANGE IN WEAR MET-  
ALS FOUND. APRIL  
RESAMPLE MAY BE  
CONSIDERED.

MINOR FUEL DILUTION  
CONTINUES. SLIGHT  
RISE IN MOST WEAR  
METALS FOUND. NO  
IMMEDIATE ACTION  
REQUIRED.

LITTLE CHANGE SINCE  
LAST ANALYSIS. NO  
IMMEDIATE ACTION  
REQUIRED.

INVOICE NO.	LL-61723	LL-62537	LL-62652	LL-63297	LL-65374
REPORT DATE:	OCTOBER 10, 2017	MARCH 26, 2018	APRIL 18, 2018	SEPTEMBER 5, 2018	OCTOBER 21, 2019
DATE SAMPLE REC'D:	SEPTEMBER 29, 2017	MARCH 6, 2018	APRIL 5, 2018	AUGUST 7, 2018	OCTOBER 1, 2019
PRODUCT	LUBE OIL	LUBE OIL	LUBE OIL	LUBE OIL	LUBE OIL
LAB NUMBER	9-952	3-235	4-169	8-284	10-1
DATE SAMPLED	9/20/17	12/22/17	3/22/18	6/25/18	9/18/19
VISC. SUS @ 210 F	72.5 SECS.	71.5 SECS.	70.6 SECS.	69.0 SECS.	70.3 SECS.
T.B.N. (D2896)	8.4	8.3	8.1	8.2	8.0
PENTANE INSOLUBLES	0.1%	0.1%	0.1%	0.1%	0.2%
WATER	0.05%	0.05%	0.1%	0.1%	0.1%
DILUTION	1%	1.5%	2%	2%	2%
METALS					
IRON	5.7	9.2	8.7	10.9	10.9
SILVER	0.0	0.0	0.3	0.3	0.5
ALUMINUM	0.7	1.4	2.4	2.7	3.0
CHROMIUM	0.9	0.8	1.7	1.7	1.1
COPPER	0.7	1.2	2.3	2.6	2.5
MAGNESIUM	7.0	9.3	9.6	11.3	12.7
SODIUM	6.9	6.9	6.3	8.3	8.1
NICKEL	0.4	0.2	1.0	1.8	1.8
LEAD	1.6	1.6	3.4	2.0	1.2
SILICON	4.2	4.5	3.8	3.6	7.1
TIN	0.0	0.0	0.0	0.0	0.0
TITANIUM	0.0	0.0	0.7	0.9	0.5
BORON	0.3	0.3	2.3	1.9	1.1
BARIUM	0.1	0.1	0.4	0.9	0.8
MOLYBDENUM	5.6	2.7	9.7	9.8	4.0
VANADIUM	0.0	0.0	0.3	0.2	0.0
ZINC	2.7	3.0	3.7	4.5	6.0
MANGANESE	0.0	0.0	0.0	0.0	0.2
CALCIUM	2921	2936	2734	3174	2987
PHOSPHORUS	3.9	2.9	5.1	12.9	14.7

*Josh Harper*