LUBRIPORT LABORATORIES INC.

1650 AIRLINE DRIVE
KENNER, LA 70062

(504) 464-1734

NEW ORLEANS PUBLIC BELT RAILROAD
JOSH HARPER

UNIT #1501
ENGINE

CP #022

	NO CORRECTIVE ACTION NECESSARY. COPPER INCREASED. LITTLE CHANGE IN REMAINING WEAR LEVELS INDICATED.	NORMAL INCREASE IN WEAR METALS FOUND. INSOLUBLES ALSO SLIGHTLY HIGHER. SERIOUS PROBLEM UNLIKELY.	FUEL DILUTION INCREASED SLIGHTLY. MOST WEAR METALS ARE REDUCED. NO CORRECTIVE ACTION NECESSARY.	CONDITION OF OIL IS RELATIVELY STABLE. RESAMPLE AT NORMAL TIME.	THIS MORE RECENT OF 2 SAMPLES FROM ENGINE ARE NEARLY IDENTICAL, OTHER THAN REDUCED CALCIUM AND BASE NUMBER.
INVOICE NO.	LL-61277	LL-62139	LL-63025	LL-65932	LL-65932
REPORT DATE:	JUNE 22, 2017	DECEMBER 26, 2017	JULY 9, 2018	FEBRUARY 21, 2020	FEBRUARY 21, 2020
DATE SAMPLE REC'D:	JUNE 13, 2017	DECEMBER 8, 2017	JUNE 15, 2018	FEBRUARY 10, 2020	FEBRUARY 10, 2020
PRODUCT	LUBE OIL	LUBE OIL	LUBE OIL	LUBE OIL	LUBE OIL
LAB NUMBER	6-449	12-326	6-557	2-246	2-247
DATE SAMPLED	5/25/17	11/21/17	5/21/18	11/11/19	2/5/20
VISC. SUS @ 210 F	76.7 SECS.	75.5 SECS.	73.2 SECS.	73.1 SECS.	72.5 SECS.
T.B.N. (D2896)	8.2	8.3	8.2	8.2	8.0
PENTANE INSOLUBLES	0.2%	0.3%	0.2%	0.2%	0.2%
WATER	0.1%	0.1%	0.1%	0.05%	0.05%
SAE WEIGHT	40 WT.	40 WT.	40 WT.	40 WT.	40 WT.
DILUTION	TRACE	TRACE	1%	1%	1%
METALS IN PPM IRON	18.0	25	16.1	17.6	16.9
SILVER	0.0	0.0	0.0	0.0	0.0
ALUMINUM	2.3	2.5	4.2	4.2	4.2
CHROMIUM	1.7	2.0	2.1	1.6	2.1
COPPER	19.0	20	11.8	14.8	14.1
MAGNESIUM	11.0	12.4	9.3	10.9	11.1
SODIUM	10.5	10.7	8.6	5.4	5.4
NICKEL	0.8	1.1	0.6	0.2	0.0
LEAD	7.8	8.4	5.6	1.6	3.5
SILICON	3.6	4.8	8.4	9.9	10.2
TIN	0.0	0.0	0.0	0.0	0.0
TITANIUM	0.0	0.0	0.0	0.0	0.0
BORON	0.0	0.3	0.0	1.0	1.0
BARIUM	0.6	0.4	0.3	0.0	0.1
MOLYBDENUM	57	54	18.1	6.0	2.6
VANADIUM	0.1	0.1	0.1	0.0	0.0
ZINC	5.7	7.2	8.0	5.9	3.9
MANGANESE	0.0	0.0	0.0	0.0	0.0
CALCIUM	3017	3129	2995	2924	2803
PHOSPHORUS	39	42	14.4	3.5	3.4

Floyd Finlay

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