



**LUBRIPORT
LABORATORIES
INC.**

1650 AIRLINE DRIVE
KENNER, LA 70062

(504) 464-1734

EDWARD ZUSKIN

SEAQUEL
PORT TRANSMISSION
BW10-13-000-003

SEA RANGER 47' TRAWLER
3838
CP #004

	SODIUM, CLUTCH METALS AND WATER CONTENT ALL HIGHER IN PORT GEAR. THESE CONCENTRATIONS DO NO INDICATE SERIOUS PROBLEM.	FURTHER INVESTIGATION OR RESAMPLE ADVISED. HIGH IRON, LIKELY FROM GEAR SURFACE WEAR, CONFIRMED BY SETTLED WEAR DEBRIS	LABEL INDICATES OIL CHANGED SINCE LAST ANALYSIS, BUT WEAR METALS NEARLY AS HIGH.
INVOICE NO.	LL-59675	LL-61948	LL-63154
REPORT DATE	AUGUST 9, 2016	NOVEMBER 8, 2017	AUGUST 1, 2018
DATE SAMPLE RECEIVED	AUGUST 8, 2016	OCTOBER 30, 2017	JULY 13, 2018
PRODUCT	LUBE OIL	ATF	ATF
HOURS ON OIL	10	100 SINCE REBUILD	38
HOURS ON ENGINE	1105.2	2650	2688
LAB NUMBER	8-206	10-910	7-326
DATE SAMPLED	8/5/16	-----	7/10/18
VISC. SUS @ 100 F	-----	140.3 SECS.	140.8 SECS.
VISC. KIN @ 100 F	-----	29.72 CST.	29.85 CST.
VISC. SUS @ 210 F	45.7 SECS.	-----	-----
VISC. KIN @ 210 F	5.93 CST.	-----	-----
PENTANE INSOLUBLES	TRACE	0.1%	0.1%
WATER BY DISTILLATION	0.1%	0.05%	0.05%
METALS			
IRON	50	810	790
SILVER	0.0	0.0	0.0
ALUMINUM	2.0	1.1	2.5
CHROMIUM	1.1	2.6	2.9
COPPER	509	80	59
MAGNESIUM	20	5.9	7.0
SODIUM	107	21	12.9
NICKEL	1.2	4.1	4.0
LEAD	267	32	20
SILICON	9.2	13.2	21
TIN	0.0	4.6	7.0
TITANIUM	0.4	1.5	1.8
BORON	12.7	87	99
BARIIUM	0.7	1.0	1.9
MOLYBDENUM	3.4	0.1	0.3
VANADIUM	0.3	0.8	0.4
ZINC	1383	180	93
MANGANESE	0.3	8.9	8.6
CALCIUM	3938	155	234
PHOSPHORUS	1284	249	232

Steph Filmer