

CUSTOMER:	DANIEL MACKEY	
PLANT:	DANIEL TEST	
MACHINE NAME:	LEXUS RC F	Machine Condition NORMAL
LOCATION	ROSELLE, IL.	
MACHINE TYPE:	GAS ENGINE	
LUBE TYPE:	UNK UNKNOWN OIL	
MACH MFGR:	LEXUS	
MACH MOD:	RC F	Lubricant Condition MARGINAL
RECEIVED:	01-JUN-17	
CONTACT 1:	DANIEL	
REPORT:	07-JUN-17 14:54:53	
SAMPLE NO:	5-175-4-3	
PO NUMBER:	FREE	

RECOMMENDATIONS

- Locate and eliminate the source of water entry and resample.
- The type of lubricant (brand and manufacturer) was not specified on the sample bottle label. Kindly supply this information as it can DRAMATICALLY alter the diagnostic which takes into consideration comparison results with your unused lube specs.

LOGIC

- Viscosity level determined cannot be compared to the unused lubricant value as the specs of lube in service are not known.

MISCELLANEOUS

- Lubricant refers to oil, fuel, biofuel, grease, coolant or varnish.
- The infrared analysis is limited to the interpretation of Joint Oil Analysis Program (JOAP), US Military Specs for this type of oil.
- Trend analysis could not be performed. (Min. 4 tests required)
- Our database indicates no site contaminant for this unit. Please advise laboratory if this is not the case.
- Due to lubricant type submitted and registered as unknown, condition of lubricant is given as Normal by default as lubricant is self-referenced. Condition of lubricant might change upon receipt of updated lubricant information. Kindly submit this information.
- Tank capacity 2.45 gallon(s).

SAMPLING HISTORY

LabNo	SAMPLE DATE MM-DD-YYYY	TIME ON OIL / TSN	TIME SINCE OVER- HAUL / TSO	OIL CHANGED (Y/N)	PREVIOUS CONDI- TION MACH/OIL
2279165	06-01-2017	6300	18950	N	(n/a)
2262723	04-11-2017	4969	12627	N	N/M
2245906	02-18-2017	999	999	N	N/M

(SP) SPECTROSCOPIC ANALYSIS [ASTM D5185] (elements seen in ppm)

TESTED ELEMENTS ARE:Fe, Cu, Pb, Sn, Cr, Al, Ni, Ti, Ag, V, Mg, Si, B, Na, Ba, Ca, P, Mn, Zn, Mo, Cd, K.

Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
Fe-IRON	11	15	47						-
Cu-COPPER	11	16	34						-
Sn-TIN	-	1.0	-						-
Al-ALUMINUM	3.0	3.0	6.0						-
Cr-CHROMIUM	-	-	1.0						-
Ni-NICKEL	-	-	1.0						-
Mo-MOLYBDENUM	21	81	69						-
Si-SILICON	5.0	7.0	24						-
Mg-MAGNESIUM	157	600	53						-
B-BORON	61	63	18						-
Na-SODIUM	-	3.0	-						-
Ba-BARYUM	-	1.0	4.0						-
Ca-CALCIUM	2271	1347	2317						-
P-PHOSPHORUS	1056	738	742						-
Mn-MANGANESE	-	-	1.0						-
Zn-ZINC	1213	891	878						-

(FTIR) FOURIER TRANSFORM INFRARED ANALYSIS (Absorbance)

Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
SOOT	5	4	3						-
AW/EP	34	15	15						-
OXIDATION	105	11	10						-
SULFATE	96	18	18						-
NITRATION	11	9	6						-
GLYCOL	0	0	0						-
FUEL/DILUTION	204	245	216						-
WATER	19	14	14						-

Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
SOOT (%)	0.15	0.13	0.12						-

VISCOSITY/40 [ASTM D445]

Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
in cSt 40°C	57.22	51.43	47.14						-

VISCOSITY/100 [ASTM D445]

Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
in cSt 100°C	10.18	9.47	8.31						-

TBN [ASTM D4739] (mg KOH/g)									
Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
TOTAL BASE NO	7.48	6.00	5.45						-

TAN [ASTM D974 OR D664] (mg KOH/g)									
Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
TOTAL ACID NO	2.68	1.93	0.61						-

KARL FISHER (%)									
Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
WATER KF	0.094	0.075	0.064						-

VISCOSITY INDEX [ASTM D2270]									
Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
VISCOSITY INDEX	167.00	170.00	152.00						-

FUEL(%)									
Date(MM/DD/YY)	06-01-17	04-11-17	02-18-17	(n/a)	(n/a)	(n/a)	(n/a)	(n/a)	REF
Labno	2279165	2262723	2245906						
FUEL	2.95	3.50	3.86						-

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