



OIL REPORT

LAB NUMBER: G80331
 REPORT DATE: 6/1/2015
 CODE: 63/75

UNIT ID: N7808Z
 CLIENT ID: 49623
 PAYMENT: CC: Visa

| | | |
|-------------|--|--|
| UNIT | EQUIP. MAKE/MODEL: Lycoming O-360-C2A | OIL TYPE & GRADE: Phillips XC (A/C) 20W/50 |
| | FUEL TYPE: Gasoline (Leaded) | OIL USE INTERVAL: 28 Hours |
| | ADDITIONAL INFO: E/N: L-14529-36A, OH @ 483.7 hrs tach | |

| | | |
|---------------|----------------------------|--------------------------------|
| CLIENT | JIM DENSMORE | PHONE: (719) 535-8978 |
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| | | |

COMMENTS JIM: You listed the time on the engine as 222 hours SMOH, and 705.5 hours tach time. We can track this engine either way, so whichever is more convenient for you is fine. These metals are not so fine, though. Aluminum, chrome, and iron show piston/ring/cylinder wear, while copper is from brass/bronze parts. Universal averages show typical wear for this type of engine after ~45 hours of oil use, so these metals are quite high for a short oil run like this. Viscosity is also high but insolubles are low. Test compressions, borescope, and check back in 20 hours to monitor.

| ELEMENTS IN PARTS PER MILLION | MI/HR on Oil | 28 | UNIT / LOCATION AVERAGES | | | | | UNIVERSAL AVERAGES |
|--------------------------------------|-------------------|----------|---------------------------------|--|--|--|------|---------------------------|
| | MI/HR on Unit | 222 | | | | | | |
| | Sample Date | 5/2/2015 | | | | | | |
| | Make Up Oil Added | | | | | | | |
| | | | | | | | | |
| ALUMINUM | 11 | 10 | | | | | 5 | |
| CHROMIUM | 7 | 7 | | | | | 3 | |
| IRON | 70 | 63 | | | | | 18 | |
| COPPER | 18 | 14 | | | | | 4 | |
| LEAD | 2305 | 2375 | | | | | 3902 | |
| TIN | 1 | 1 | | | | | 1 | |
| MOLYBDENUM | 4 | 4 | | | | | 0 | |
| NICKEL | 4 | 5 | | | | | 1 | |
| MANGANESE | 1 | 1 | | | | | 0 | |
| SILVER | 0 | 0 | | | | | 0 | |
| TITANIUM | 0 | 0 | | | | | 0 | |
| POTASSIUM | 0 | 0 | | | | | 0 | |
| BORON | 0 | 1 | | | | | 0 | |
| SILICON | 8 | 7 | | | | | 6 | |
| SODIUM | 1 | 3 | | | | | 0 | |
| CALCIUM | 6 | 7 | | | | | 10 | |
| MAGNESIUM | 0 | 1 | | | | | 0 | |
| PHOSPHORUS | 0 | 0 | | | | | 196 | |
| ZINC | 1 | 1 | | | | | 2 | |
| BARIUM | 0 | 0 | | | | | 0 | |

Values Should Be*

| PROPERTIES | SUS Viscosity @ 210°F | 112.7 | 86-105 | | | | |
|-------------------|-----------------------|-------|-----------|--|--|--|--|
| | cSt Viscosity @ 100°C | 23.31 | 17.0-21.8 | | | | |
| | Flashpoint in °F | 485 | >430 | | | | |
| | Fuel % | <0.5 | <1.0 | | | | |
| | Antifreeze % | - | | | | | |
| | Water % | 0.0 | <0.1 | | | | |
| | Insolubles % | 0.2 | <0.6 | | | | |
| | TBN | | | | | | |
| | TAN | | | | | | |
| | ISO Code | | | | | | |

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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