DERRICK WILSON COCONINO COUNTY

PHONE: FAX:

SAMPLE TYPE: OIL.

SAMPLE SHIP TIME (days):

CT STOMER EQUIPMENT 18 COMPANY NAME: COCONINO COUNTY

COMMINGRATIVE ALL WAVE ENGINE MANUFACTURER: FREIGHTLINER SERIAL NUMBER: 1FUYFCYB4TP869157

MODEL: D120064CD_FREIGHTLIN

CSA ACTIVE: JOB SITE:

COMPARTMENT MODEL:

SAMPLE LABEL NUM:

FLUID TYPE:

SHOP JOB NUM:

COMP MANUFACTURER:

FLUID BRAND/WEIGHT: Mobil Delvac/15W-40

COMP SERIAL NUM:

CSA EXPIRATION:

Telephone, (480) 633-4835 Mesa, AZ 85210 ISO 9001:2015 Registered http://empire.cat.com 1725 S. Country Club Drive

| H160-49330-0212 | H160-50134-0177 | H160-50258-0003 | H160-51123-0140 | Wear Metals (ppm) | No Action Required | H160-49330-0212 | No Action Required | H160-50134-0177 | No Action Required | H160-50258-0003 | No Action Required | H160-51123-0140 | LAB CONTROL NUMBER |
|-----------------|---|-----------------|-----------------|-------------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|---------------------|
| 2 | ю | - | ស្វា | Copper | NO PF | | NO PF | | NO PR | | NO PR | | |
| 12 | 3 | φ | 18 | fron | ROBLEMS PF | 20-Nov-2019 | (OBLEMS PF | 08-May-2020 | (OBLEMS PR | 09-Sep-2020 | OBLEMS PF | 28-Apr-2021 | SAMPLE DATE |
| _ | _ | o | _ | Chrome | RESENTLY A | 019 | RESENTLY A | 020 | RESENTLY A | 020 | RESENTLY A | 121 | DATE |
| _ | Ø | Φ | tu | Alum | SSOCIATEL | 26-Nov-2019 | SSOCIATEL | 13-May-2020 | SSOCIATED | 14-Sep-2020 | SSOCIATED | 03-May-2021 | PROCESS DATE |
| Çn. | 4 | 4- | 4 | Silicon |) WITH THIS | 019 | SIHT HTIW | 020 | SIHT HTIM | 020 | SIHTHTMS | 021 | DATE |
| - | ٥ | Đ | o | Lead | NO PROBLEMS PRESENTLY ASSOCIATED WITH THIS SAMPLE. CONTINUE SAMPLING AT THE NORMAL INTERVAL. | | NO PROBLEMS PRESENTLY ASSOCIATED WITH THIS SAMPLE. CONTINUE SAMPLING AT THE NORMAL INTERVAL. NO ACTION REQUIRED. | | NO PROBLEMS PRESENTLY ASSOCIATED WITH THIS SAMPLE. CONTINUE SAMPLING AT THE NORMAL INTERVAL. NO ACTION REQUIRED. | ట | NO PROBLEMS PRESENTLY ASSOCIATED WITH THIS SAMPLE. CONTINUE SAMPLING AT THE NORMAL INTERVAL. NO ACTION REQUIRED. | | EQUIPM |
| o | ======================================= | 0 | 191 | Sodium | ONTINUE S | 21588 MI | ONTINUE S. | 30800 MI | ONTINUE S, | 34974 MI | ONTINUE S/ | 44944 MI | EQUIPMENT METER |
| 0 | 0 | 0 | ٥ | Tin | AMPLING AT | | AMPLING AT | | AMPLING AT | | AMPLING AT | | æ |
| - | Ф | N | | Nickel | THE NORM | 645 | THE NORM | 9201 MI | THE NORM | 4174 MI | THE NORM | 997 | METER ON FLUID |
| 0 | 9 | 0 | 0 | Barium | AL INTERV | 6451 MI | AL INTERV | <u>≅</u> . | AL INTERVA | ≅ | AL INTERVA | 9970 MI | N FLUID |
| 0 | -4 | 0 | Đ | Silver | F | | IL NO ACTI | | IL. NO ACTI | | IL. NO ACTI | | FLU |
| 883 | 895 | 1027 | 834 | Zinc | | Yes | ON REQUIR | Yes | ON REQUIR | ĕs | ON REQUIR | Yes | FLUID CHANGED |
| 51 | 8 | 15 | ä | Boron | | | ED. | | <u>.</u> | | Ë | | ED |
| 1642 | 1560 | 1707 | 1255 | Calcium | | | | | | | | _ | MAKE UP FLUID |
| 756 | 786 | 907 | 722 | Phospor 8 | | | | | | 11 | | ⇉ | PFLUID |
| 520 | 718 | 912 | 748 | Magnesm | | | | | | | | | MAK |
| 12 | ω | o | Сh | Potasum N | | | | | | GAL | | GAL | MAKE UP FLUID UNITS |
| # | 18 | φ | 7 | Molybdm 1 | | | | | | | | | STINUC |
| o | ٥ | 0 | 0 | Titanum | | | | | | | | | FILTE |
| 0 | Đ | o | ٠ | Vanadm | | Yes | | Yes | | Yes | | Yes | FILTER CHANGED |

| H160-49330-0212 | H160-50134-0177 | H160-50258-0003 | H160-51123-0140 | Oil Condition <i>I</i> Particle Count (ct/ml) |
|-----------------|-----------------|-----------------|-----------------|---|
| _ | 0 | o | ø | ST |
| 22 | ₩ | 15 | 益 | OXI |
| 7 | 99 | œ | φ | N. |
| 23 | 26 | 22 | 20 | SUL |
| z | z | z | z | ₩ |
| z | z | z | z | > |
| z | z | z | z | 71 |
| 12.9 | 13.1 | 13.0 | 14.1 | V100 |

A = Antifreeze, F = Fuel, W = Water, P = Positive, N = Negative, T = Trace, E = Excessive, NIT = Nitration, OXI = Oxidation, ST = Soot, SUL = Sulfation, ISO = ISO Rating, PQI = PQI Index, TRN = Total Acid Number, TBN = Total Base Number, H2O = Kerl Fisher result, V100 = Viscosity@100C, V40 = Viscosity@40C, ST_WT = %SOOT by Weight, PFC = Percent Fuel Content, PVI = Particle Volume Index

J HAMMIT **COCONINO COUNTY PUBLIC WORKS**

SAMPLE SHIP TIME (days): SAMPLE TYPE:

COOLANT - RAD_1

PHONE:

FAX:

CLINEOUS EQUIPMENT COMPARIMENT SAME COMPANY NAME: COCONINO COUNTY

COMPARTMENT MODEL:

FLUID BRAND/WEIGHT SAMPLE LABEL NUM.

SHOP JOB NUM

COMP MANUFACTURER:

MANUFACTURER: FREIGHTLINER SERIAL NUMBER: 1FUYFCYB4TP869157

MODEL: D120064CD_FREIGHTLIN

CSA ACTIVE : JOB SITE :

COMP SERIAL NUM:

CSA EXPIRATION FLUID TYPE

ISO 9001:2015 Registered Telephone, (480) 633-4835 Mesa, AZ 85210 1725 S. Country Club Drive http://empire.cat.com

| No Action Required | H160-48096-1023 | No Action Required | H160-49331-1018 | Monitor Compartment | H160-50255-1023 | LAB CONTROL NUMBER |
|---|-----------------|---|-----------------|----------------------|---|---------------------|
| ALL LEVEL 1 TESTS APPEAR | 04-Apr-2018 | ALL LEVEL 1 TESTS APPEAR | 18-Nov-2019 | MONITOR COMPARTMENT. | 09-Sep-2020 | SAMPLE DATE |
| WITHIN RANGE FOR THI | 06-Apr-2018 | WITHIN RANGE FOR THI | 27-Nov-2019 | | 11-Sep-2020 COULD BE ASSOCIATED I | PROCESS DATE |
| ALL LEVEL 1 TESTS APPEAR WITHIN RANGE FOR THIS COOLANT. CONTINUE TO USE THIS COOLANT. SAMPLE AGAIN AT THE | 724092 HR | ALL LEVEL 1 TESTS APPEAR WITHIN RANGE FOR THIS COCLANT. CONTINUE TO USE THIS COCLANT. SAMPLE AGAIN AT THE REGULAR INTERVAL TO MONITOR THE COCLING SYSTEM. | 740269 HR | | 09-Sep-2020 11-Sep-2020 34974 HR 34974 HR 34974 HR NO NO SUISPENDED SOLIDS. ALL OTHER LEVEL 1 TESTS APPEAR WITHIN RANGE FOR THIS COOLANT. | EQUIPMENT METER |
| THIS COOLANT. SAMPLE AGAI | 724092 HR | THIS COOLANT. SAMPLE AGAII | 171707 HR | | 34974 HR SUSPENDED SOLIDS, ALL OT | METER ON FLUID |
| N AT THE REGULAR INTERVA | N ₀ | N AT THE REGULAR INTERVA | No | | No No APPEA | FLUID CHANGED |
| REGULAR INTERVAL TO MONITOR THE COOLING SYSTEM | | L TO MONITOR THE COOL | | | R WITHIN RANGE FOR THIS | MAKE UP FLUID |
| ING SYSTEM. | | ING SYSTEM. | | | COOLANT. | MAKE UP FLUID UNITS |

| H160-48096-1023 | H160-49331-1018 | H160-50255-1023 | Other | |
|---------------------|------------------------|------------------------|-------|---|
| 815 | 815 | 680 | NO2 | |
| norm | nom | norm | Odor | l |
| red/ fluorescent | orange/ fluorescent | orange/ fluorescent | Color | l |
| dear | dear | sl claudy | App | l |
| norm | nom | nom | Foam | l |
| none | | | 2 | l |
| none | none | none | PAmt | ı |

H160-48096-1023

8

56

7.7 7.8 7.8

5577 5382 6071

H160-49331-1018 H160-50255-1023

> 109 100 무

48 47

> 57 57

Metals (ppm)

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Al = Aluminum, Cu = Copper, Fe = Iron, K = Potassium, Na = Sodium, Pb = Lead, Sn = Tin, V = Vanadium, Zn = Zinc, BO3 = Borate, CaC = Ca as CaCO3, MgC = Mg as CaCO3, MgO4 = Molybdate, PO4 = Phosphate, SiO3 = Silicate, Th = Total Hardness, CL = Chloride, CO3 = Carbonate, GLO = Glycolate, NO2 = Nitrite, NO3 = Nitrate, PO4 = Phosphate, SAC = Sebacic Acid, SO4 = Sulfate, TT = Tolytriazole, BP = Boil Point(°C), FP = Freeze Point(°C). GL = Glycol, CON = Conductivity, App = Appearance, PAmt = Precipitate Amount, PApp = Precipitate Appearance, PCol = Precipitate Color, PProp = Precipitate Property