

OIL ANALYSIS REPORT

WHEY [1815781] SL111AG21M21 Component

Gearbox Fluic

MOBIL MOBILGEAR 600 XP 220 (--- QTS)

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.



Sample Rating Trend



| Sample Number Client Info WC0857511 WC0730359 WC0721018 Sample Date Client Info 0 0 0 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info 0 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A WEAR METALS method Imit/base current Hstory? N/A Iron ppm ASTM 051856 >15 <1 <1 <1 Iranium ppm ASTM 051856 >100 0 0 0 Silver ppm ASTM 051856 >200 <1 <1 <1 Iranium ppm ASTM 051856 >200 0 0 0 Copper ppm ASTM 051856 >10 | SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|--|---------------|--------|-------------|------------|-------------|-------------|-------------|
| Machine Age hrs Client Info 0 0 0 Oil Ghanged Client Info N/A N/A N/A Sample Status Imithos Qurrent history1 history2 Iron ppm ASTM 05185n >200 77 77 65 Chromium ppm ASTM 05185n >15 <1 <1 <1 Nickel ppm ASTM 05185n >15 0 0 0 Silver ppm ASTM 05185n >200 <1 <1 <1 Lead ppm ASTM 05185n >200 <1 <1 <1 Copper ppm ASTM 05185n >200 <1 <1 <1 Cadmium ppm ASTM 05185n >200 <1 <1 <1 Cadmium ppm ASTM 05185n >25 0 0 0 Astm 05185n <1 <1 <1 <1 <1 1 1 <td< th=""><th>Sample Number</th><th></th><th>Client Info</th><th></th><th>WC0857511</th><th>WC0783359</th><th>WC0721018</th></td<> | Sample Number | | Client Info | | WC0857511 | WC0783359 | WC0721018 |
| Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status rethod limit/base current history1 history2 Iron ppm ASTM D5185m >200 77 77 65 Chromium ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m >15 0 0 0 Silver ppm ASTM D5185m >25 0 <1 <1 Auminum ppm ASTM D5185m >25 0 <1 <1 Copper ppm ASTM D5185m >200 0 <1 <1 Tin ppm ASTM D5185m >200 0 <1 <1 Copper ppm ASTM D5185m 0 0 0 <1 Tin ppm ASTM D5185m 10 8 14 <t< th=""><th>Sample Date</th><th></th><th>Client Info</th><th></th><th>16 Sep 2023</th><th>14 Mar 2023</th><th>17 Sep 2022</th></t<> | Sample Date | | Client Info | | 16 Sep 2023 | 14 Mar 2023 | 17 Sep 2022 |
| Oil Changed Client Info N/A N/A N/A N/A Sample Status Image: Client Info NORMAL NORMAL NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >15 <1 <1 <1 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m >10 0 0 <1 Aluminum ppm ASTM D5185m >200 <1 <1 <1 Lead ppm ASTM D5185m >200 <1 <1 <1 Tin ppm ASTM D5185m >200 <1 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 <1 Vanadium ppm ASTM D5185m 10 8 14 Barium ppm ASTM D5185m 5 4 5< | Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >200 77 77 65 Chromium ppm ASTM D5185m >15 0 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Tatanium ppm ASTM D5185m >25 0 <1 <1 Aluminum ppm ASTM D5185m >200 <1 <1 <1 Lead ppm ASTM D5185m >200 <1 <1 <1 Cadmium ppm ASTM D5185m >20 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 <1 Maganese ppm ASTM D5185m 10 8 14 Baron ppm ASTM D5185m 5 4 5 | Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >200 77 77 65 Chromium ppm ASTM D5185m >15 0 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Silver ppm ASTM D5185m >25 0 <1 <1 Aluminum ppm ASTM D5185m >25 0 <1 <1 Lead ppm ASTM D5185m >200 <1 <1 <1 <1 Vanadium ppm ASTM D5185m >200 <1 <1 <1 <1 Vanadium ppm ASTM D5185m 0 0 <0 <1 Vanadium ppm ASTM D5185m 10 8 14 Barium ppm ASTM D5185m 1 <1 <1 <1 Magnesium ppm ASTM D5185m 10 | Oil Changed | | Client Info | | N/A | N/A | N/A |
| Iron ppm ASTM D5185m >200 77 77 65 Chromium ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >25 0 <1 <1 Lead ppm ASTM D5185m >200 <1 <1 <1 Lead ppm ASTM D5185m 100 0 0 0 Cadmium ppm ASTM D5185m 200 <1 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 10 8 14 Barium ppm ASTM D5185m 5 4 5 Calcium ppm ASTM D5185m 5 4 5 Calcium | Sample Status | | | | NORMAL | NORMAL | NORMAL |
| Chromium ppm ASTM D5185m >15 <1 | WEAR METALS | | method | limit/base | current | history1 | history2 |
| Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 <1 | Iron | ppm | ASTM D5185m | >200 | 77 | 77 | 65 |
| Titanium ppm ASTM D5185m O O O O Silver ppm ASTM D5185m 25 0 <1 | Chromium | ppm | ASTM D5185m | >15 | <1 | <1 | <1 |
| Silver ppm ASTM D5185m 0 <1 <1 Aluminum ppm ASTM D5185m >25 0 <1 | Nickel | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Atuminum ppm ASTM D5185m >25 0 <1 <1 Lead ppm ASTM D5185m >100 0 0 0 Copper ppm ASTM D5185m >200 <1 | Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Lead ppm ASTM D5185m >100 0 0 0 Copper ppm ASTM D5185m >200 <1 | Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Copper ppm ASTM D5185m >200 <1 <1 <1 <1 Tin ppm ASTM D5185m >25 0 0 <1 | Aluminum | ppm | ASTM D5185m | >25 | 0 | <1 | <1 |
| TinppmASTM D5185m<>2500<1VanadiumppmASTM D5185m000CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m10814BariumppmASTM D5185m00<1 | Lead | ppm | ASTM D5185m | >100 | 0 | 0 | 0 |
| Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 10 8 14 Barium ppm ASTM D5185m 0 0 <1 | Copper | | ASTM D5185m | >200 | <1 | <1 | <1 |
| CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m10814BariumppmASTM D5185m00<1MolybdenumppmASTM D5185m<1<11<1MagneseppmASTM D5185m<1<1<1<1MagnesiumppmASTM D5185m5455CalciumppmASTM D5185m331440358ZincppmASTM D5185m343436SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1SodiumppmASTM D5185m>20<10<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYelow Metalscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEYelow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONE <th>Tin</th> <th>ppm</th> <th>ASTM D5185m</th> <th>>25</th> <th>0</th> <th>0</th> <th><1</th> | Tin | ppm | ASTM D5185m | >25 | 0 | 0 | <1 |
| ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m10814BariumppmASTM D5185m00<1 | Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| BoronppmASTM D5185m10814BariumppmASTM D5185m00<1MolybdenumppmASTM D5185m<1<1<1ManganeseppmASTM D5185m<1<1<1MagnesiumppmASTM D5185m545CalciumppmASTM D5185m545CalciumppmASTM D5185m232926PhosphorusppmASTM D5185m331440358ZincppmASTM D5185m343436SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1SodiumppmASTM D5185m>20<10<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLCdorscalar*Visual | Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| BariumppmASTM D5185m00<1 | ADDITIVES | | method | limit/base | current | history1 | history2 |
| MolybdenumppmASTM D5185m<1<1<1<1ManganeseppmASTM D5185m545CalciumppmASTM D5185m545CalciumppmASTM D5185m331440358ZincppmASTM D5185m331440358ZincppmASTM D5185m343436SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1 | Boron | ppm | ASTM D5185m | | 10 | 8 | 14 |
| ManganeseppmASTM D5185m<1<1<1<1MagnesiumppmASTM D5185m545CalciumppmASTM D5185m232926PhosphorusppmASTM D5185m331440358ZincppmASTM D5185m343436SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<1 | Barium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| MagnesiumppmASTM D5185m545CalciumppmASTM D5185m232926PhosphorusppmASTM D5185m331440358ZincppmASTM D5185m343436SulfurppmASTM D5185m343436SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1 | Molybdenum | ppm | ASTM D5185m | | <1 | <1 | <1 |
| CalciumppmASTM D5185m232926PhosphorusppmASTM D5185m331440358ZincppmASTM D5185m343436SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1 | Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| PhosphorusppmASTM D5185m331440358ZincppmASTM D5185m343436SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1SodiumppmASTM D5185m>5014<1SodiumppmASTM D5185m>20<10<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLCorrscalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEG <th>Magnesium</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>5</th> <th>4</th> <th>5</th> | Magnesium | ppm | ASTM D5185m | | 5 | 4 | 5 |
| ZincppmASTM D5185m343436SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1SodiumppmASTM D5185m>5014<1PotassiumppmASTM D5185m>20<10<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESodiumscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 <th>Calcium</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>23</th> <th>29</th> <th>26</th> | Calcium | ppm | ASTM D5185m | | 23 | 29 | 26 |
| SulfurppmASTM D5185m154001845516801CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1SodiumppmASTM D5185m>5014<1PotassiumppmASTM D5185m>20<10<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESodiumscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*Visual>0.2NEGNEGNEGEmulsified Waterscalar*Visual>0.2NEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 | Phosphorus | ppm | ASTM D5185m | | 331 | 440 | 358 |
| CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>5014<1SodiumppmASTM D5185m<112PotassiumppmASTM D5185m>20<10<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 | Zinc | ppm | ASTM D5185m | | 34 | 34 | 36 |
| SiliconppmASTM D5185m>5014<1 | Sulfur | ppm | ASTM D5185m | | 15400 | 18455 | 16801 |
| SodiumppmASTM D5185m<1 | CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| PotassiumppmASTM D5185m>20<10<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 | Silicon | ppm | ASTM D5185m | >50 | 1 | 4 | |
| VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 | Sodium | ppm | ASTM D5185m | | <1 | 1 | |
| White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/basecurrenthistory1history2 | Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | <1 |
| Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 | VISUAL | | method | limit/base | current | history1 | history2 |
| Precipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/basecurrenthistory1history2 | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/basecurrenthistory1history2 | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/basecurrenthistory1history2 | Precipitate | scalar | *Visual | | NONE | NONE | NONE |
| Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/basecurrenthistory1history2 | | scalar | *Visual | NONE | | NONE | NONE |
| Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/baseCurrenthistory1history2 | | | | | | | |
| Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 | | scalar | *Visual | | | | |
| Emulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*VisualNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 | | | | | | | |
| Free Waterscalar*VisualNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2 | | | | NORML | | NORML | |
| FLUID PROPERTIES method limit/base current history1 history2 | | scalar | | >0.2 | | | |
| | Free Water | scalar | *Visual | | NEG | NEG | NEG |
| Visc @ 40°C cSt ASTM D445 220 209 213 | FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| | Visc @ 40°C | cSt | ASTM D445 | 220 | 209 | 209 | 213 |

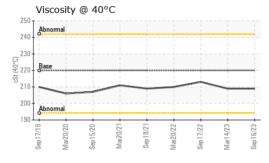
Report Id: LEPGRE [WUSCAR] 05961544 (Generated: 09/27/2023 17:29:33) Rev: 1

Submitted By: MICHAEL VILLASENOR

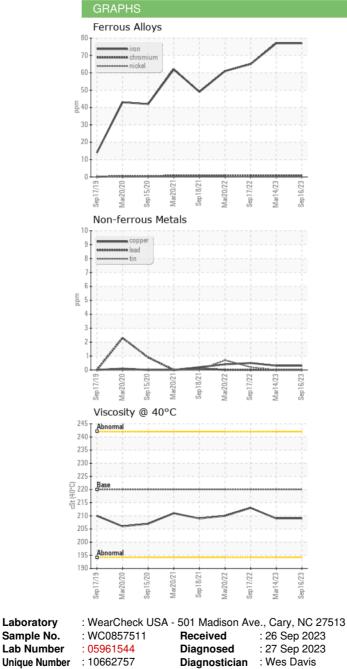
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OIL ANALYSIS REPORT







| LEPRINO FOODS-GREELEY | | | | | |
|-----------------------|---------------------|--|--|--|--|
| | 1302 1ST AVE | | | | |
| | GREELEY, CO | | | | |
| | US 80631-5909 | | | | |
| | Contact: ERIC KLINE | | | | |
| EKLINE@L | EPRINOFOODS.COM | | | | |
| | T: | | | | |
| <i>5:2012)</i> | F: (970)347-5190 | | | | |
| | | | | | |



Test Package : IND 1 Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106

Laboratory

Submitted By: MICHAEL VILLASENOR

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