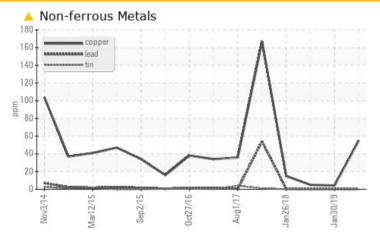


COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS | | | | | | | | | |
|--------------------------|-----|-------------|-----|----------|--------|--------|--|--|--|
| Sample Status | | | | ABNORMAL | NORMAL | NORMAL | | | |
| Copper | ppm | ASTM D5185m | >50 | <u> </u> | 4 | 5 | | | |

Customer Id: INGPAD Sample No.: MW0061389 Lab Number: 06006459 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com WEAR

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

30 Jan 2019 Diag: Don Baldridge



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





12 Nov 2018 Diag: Don Baldridge



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report





26 Jan 2018 Diag: Jonathan Hester



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.







OIL ANALYSIS REPORT

Area SANDY B Machine Id [SANDY B] 004 562531-4 Component

Port Reduction Gear Fluid SHELL ROTELLA T 40 (--- GAL)

DIAGNOSIS

A Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

🔺 Wear

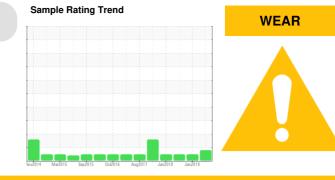
The copper level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

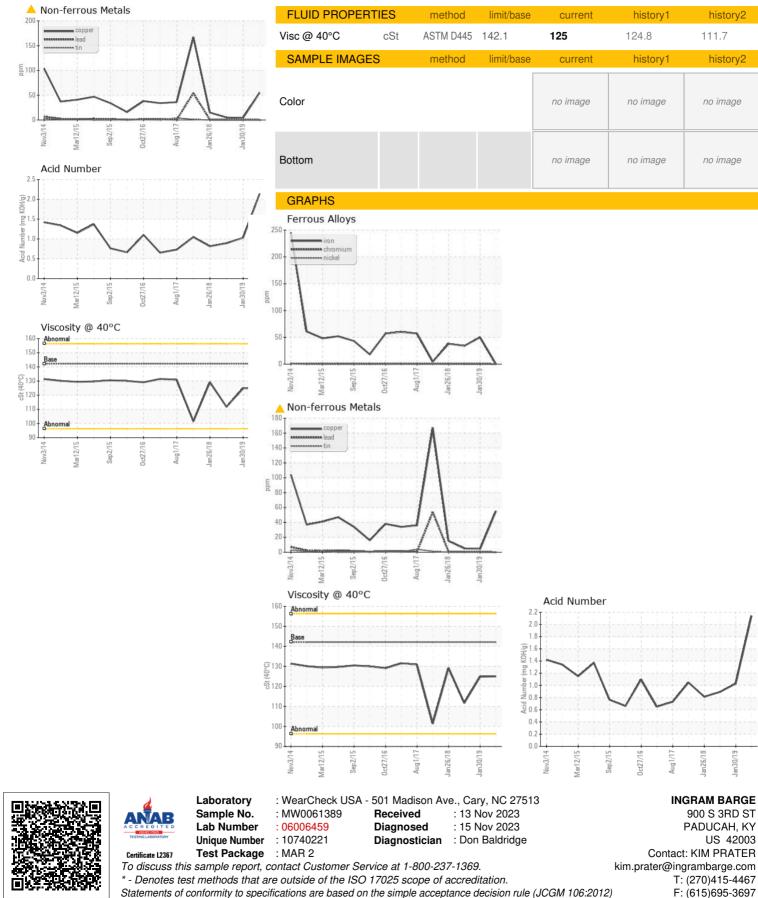
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



| Sample DateClient Info01 Nov 202330 Jan 201912 Nov 2018Machine AgehrsClient Info300700Oil AgehrsClient Info43100Oil ChangedClient Info431000Sample StatusImageClient InfoABNORMALN/AN/AWEAR METALSmethodlimi/basecurrenthistory1history2IronppmASTM 05185n>100<1<1NickelppmASTM 05185n>10000RiturnppmASTM 05185n>100<1<1SilverppmASTM 05185n>1000<1<1CopperppmASTM 05185n>50A5545CopperppmASTM 05185n>50A5000AntimonyppmASTM 05185n>50A5000AntimonyppmASTM 05185n550000AntimonyppmASTM 05185n000000AntimonyppmASTM 05185n00000AntimonyppmASTM 05185n00000AntimonyppmASTM 05185n00000AntimonyppmASTM 05185n00000ANDD11555n </th <th>SAMPLE INFORM</th> <th>MATION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th> | SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|---|------------------|---------------|-------------|------------|-------------|-------------|-------------|
| Machine Age hrs Client Info 3007 0 0 Oil Age hrs Client Info 431 0 0 Oil Changed Client Info Not Changd N/A N/A Sample Status Imathia Client Info ABNORMAL NORMAL NORMAL WEAR METALS method Imit/base current history1 history2 Iron ppm ASTMD5165m >10 0 <1 <1 Nickel ppm ASTMD5165m >10 0 0 0 Silver ppm ASTMD5165m >10 0 <1 <1 Copper ppm ASTMD5165m >100 0 <1 <1 Copper ppm ASTMD5165m >100 0 0 0 Antimory ppm ASTMD5165m >10 0 0 0 Adamium ppm ASTMD5165m >10 0 0 0 Adamium ppm ASTMD5165m 0 0 0 0 Adamium ppm ASTMD5165m 0 0 0 0 Adamium ppm ASTMD5165m 0 0 0 0 | Sample Number | | Client Info | | MW0061389 | MWM691473 | MWM693094 |
| Oil Age hrs Client Info 431 0 0 Oil Changed Client Info Not Changd N/A N/A N/A Sample Status Imitbase current history1 history2 Iron ppm ASTM D5165m >150 <1 50 34 Chromium ppm ASTM D5165m >10 0 <1 <1 Nickel ppm ASTM D5165m >10 0 0 0 Silver ppm ASTM D5165m >10 0 <1 <1 Silver ppm ASTM D5165m >10 0 <1 <1 Copper ppm ASTM D5165m >10 0 <1 <1 Cadmium ppm ASTM D5165m >10 0 <1 0 Antimony ppm ASTM D5165m >10 0 0 0 Cadmium ppm ASTM D5165m >10 0 0 0 ADDTIVES method Imitbase current history1 history2 Barium ppm ASTM D5165m 0 100 2 2 Barium ppm ASTM D5165m 0 100 <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>01 Nov 2023</th> <th>30 Jan 2019</th> <th>12 Nov 2018</th> | Sample Date | | Client Info | | 01 Nov 2023 | 30 Jan 2019 | 12 Nov 2018 |
| Oli Changed Sample StatusClient Info Client InfoNot Changed ABNORMALN/AN/AWEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM 051655>150<1 | Machine Age | hrs | Client Info | | 3007 | 0 | 0 |
| Sample Status method Imit/base current history1 history2 Iron ppm ASTM D5185m >150 <1 | Oil Age | hrs | Client Info | | 431 | 0 | 0 |
| Sample StatusImage: Mather MethodABNORMALNORMALNORMALWEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM DS185m>150<1 | Oil Changed | | Client Info | | Not Changd | N/A | N/A |
| Iron ppm ASTM D5185m >150 <1 50 34 Chromium ppm ASTM D5185m >10 0 <1 | Sample Status | | | | ABNORMAL | NORMAL | NORMAL |
| Dromium ppm ASTM D5185m >10 0 <1 | WEAR METALS | | method | limit/base | current | history1 | history2 |
| Nickel ppm ASTM D5185m >10 0 0 0 Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m 0 <1 | Iron | ppm | ASTM D5185m | >150 | <1 | 50 | 34 |
| Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m >25 0 <1 | Chromium | ppm | ASTM D5185m | >10 | 0 | <1 | <1 |
| SilverppmASTM D5185m000AluminumppmASTM D5185m>250<1 | Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Aluminum ppm ASTM D5185m >25 0 <1 <1 Lead ppm ASTM D5185m >100 0 <1 | Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Lead ppm ASTM D5185m >100 0 <1 | Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| LeadppmASTM D5185m>1000<1<1CopperppmASTM D5185m>50▲ 5545TinppmASTM D5185m>100<1 | Aluminum | ppm | ASTM D5185m | >25 | 0 | <1 | <1 |
| Copper ppm ASTM D5185m >50 55 4 5 Tin ppm ASTM D5185m >10 0 <1 | Lead | | ASTM D5185m | >100 | 0 | <1 | <1 |
| TinppmASTM D5185m>100<10AntimonyppmASTM D5185m>500VanadiumppmASTM D5185m0000CadmiumppmASTM D5185m0000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m043232227BariumppmASTM D5185m01003232ManganeseppmASTM D5185m01003232MagnesiumppmASTM D5185m432689393CalciumppmASTM D5185m432689393CalciumppmASTM D5185m9961066635651ZincppmASTM D5185m9961066635651ZincppmASTM D5185m50243SoliumppmASTM D5185m>2001PotassiumppmASTM D5185m>2001PotassiumppmASTM D5185m>2001PotassiumppmASTM D5185m>2001PotassiumppmASTM D5185m>2001PotassiumppmASTM D5185m>2001PotassiumppmASTM D5185m>2001PotassiumppmASTM D5185m>2001 </td <td>Copper</td> <td></td> <td>ASTM D5185m</td> <td>>50</td> <th><u> </u></th> <td>4</td> <td>5</td> | Copper | | ASTM D5185m | >50 | <u> </u> | 4 | 5 |
| Antimony ppm ASTM D5185n >5 0 0 Vanadium ppm ASTM D5185n 0 0 0 0 Cadmium ppm ASTM D5185n 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185n 0 43 232 227 Barium ppm ASTM D5185n 0 100 32 32 Magnese ppm ASTM D5185n 0 100 32 32 Calcium ppm ASTM D5185n 121 2813 2024 2160 Phosphorus ppm ASTM D5185n 996 1066 635 651 Zinc ppm ASTM D5185n 996 1066 635 651 Zinc ppm ASTM D5185n >50 2 4 3 Sodium ppm ASTM D5185n >20 0 | | | | | | <1 | |
| VanadiumppmASTM D5185m000CadmiumppmASTM D5185m043232227BoronppmASTM D5185m043232227BariumppmASTM D5185m0000MolybdenumppmASTM D5185m01003232MaganeseppmASTM D5185m01003232MagnesiumppmASTM D5185m432689393CalciumppmASTM D5185m1121281320242160PhosphorusppmASTM D5185m9961066635651ZincppmASTM D5185m8811238715724SulfurppmASTM D5185m50243SodiumppmASTM D5185m>20001PotassiumppmASTM D5185m>20011FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEVISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESoldu/Dirtscalar*VisualNONENONENONENONESiltscalar*Visual </td <td></td> <td></td> <td></td> <td></td> <th>-</th> <td></td> <td></td> | | | | | - | | |
| CadmiumpmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m043232227BariumppmASTM D5185m01003232ManganeseppmASTM D5185m01003232ManganeseppmASTM D5185m01003232CalciumppmASTM D5185m432689393CalciumppmASTM D5185m1121281320242160PhosphorusppmASTM D5185m9961066635651ZincppmASTM D5185m8811238715724SulfurppmASTM D5185m560243CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALMoNENONENONENONENONENONEPrecipitatescalar'Visual </td <td></td> <td></td> <td></td> <td></td> <th>0</th> <td></td> <td></td> | | | | | 0 | | |
| ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m043232227BariumppmASTM D5185m01003232ManganeseppmASTM D5185m01003232ManganeseppmASTM D5185m01003232ManganeseppmASTM D5185m1121281320242160PhosphorusppmASTM D5185m1121281320242160PhosphorusppmASTM D5185m8811238715724SulfurppmASTM D5185m8811238715724SulfurppmASTM D5185m560243SodiumppmASTM D5185m>50243PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg K0HgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYeipolatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONENONESoloutintscalar*VisualNONENONENONENONE | | | | | | | |
| Boron ppm ASTM D5185m 0 43 232 227 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 100 32 32 Manganese ppm ASTM D5185m 432 68 93 93 Calcium ppm ASTM D5185m 432 68 93 93 Calcium ppm ASTM D5185m 432 68 93 93 Calcium ppm ASTM D5185m 996 1066 635 651 Zinc ppm ASTM D5185m 996 1066 635 651 Zinc ppm ASTM D5185m 996 1066 635 651 Sulfur ppm ASTM D5185m 996 1066 635 651 Sulfur ppm ASTM D5185m >50 2 4 3 Sulfur ppm ASTM D5185m >20 0< | | ppm | | limit/base | - | | - |
| BariumppmASTM D5185m01003232ManganeseppmASTM D5185m01003232MagnesiumppmASTM D5185m432689393CalciumppmASTM D5185m1121281320242160PhosphorusppmASTM D5185m9961066635651ZincppmASTM D5185m9961066635651ZincppmASTM D5185m8811238715724SulfurppmASTM D5185m864535783117CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONE< | | | | | | | |
| Molybdenum ppm ASTM D5185m 0 100 32 32 Manganese ppm ASTM D5185m 432 68 93 93 Calcium ppm ASTM D5185m 432 68 93 93 Calcium ppm ASTM D5185m 1121 2813 2024 2160 Phosphorus ppm ASTM D5185m 996 1066 635 651 Zinc ppm ASTM D5185m 996 1066 635 651 Sulfur ppm ASTM D5185m 881 1238 715 724 Sulfur ppm ASTM D5185m 8645 3578 3117 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 0 0 1 FLUID DEGRADATION method limit/base current history1 history2 Acid Number (AN) mg KOHg ASTM D8045 < | | | | 0 | - | | |
| ManganeseppmASTM D5185m0<1<1MagnesiumppmASTM D5185m432689393CalciumppmASTM D5185m1121281320242160PhosphorusppmASTM D5185m9961066635651ZincppmASTM D5185m9961066635651ZincppmASTM D5185m8811238715724SulfurppmASTM D5185m364535783117CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m>20001PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg K0HgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYelow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAcid Nortscal | | | | | - | | |
| MagnesiumppmASTM D5185m432689393CalciumppmASTM D5185m1121281320242160PhosphorusppmASTM D5185m9961066635651ZincppmASTM D5185m9811238715724SulfurppmASTM D5185m881123835783117CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m>20001PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLQdorscalar*VisualNORMLNORMLNORMLNORMLCodorscalar*VisualNORMLNORMLNORMLNORML <td></td> <td></td> <td></td> <td>0</td> <th></th> <td></td> <td></td> | | | | 0 | | | |
| CalciumppmASTM D5185m1121281320242160PhosphorusppmASTM D5185m9961066635651ZincppmASTM D5185m8811238715724SulfurppmASTM D5185m364535783117CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m>50243PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAcid Numescalar*VisualNORMLNORMLNORMLNORMLCodorscalar*VisualNONENONENONENONESulfurscalar*VisualNORMLNORMLNORML | - | ppm | | | | | |
| PhosphorusppmASTM D5185m9961066635651ZincppmASTM D5185m8811238715724SulfurppmASTM D5185m364535783117CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m>50243PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESad/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLCodorscalar*VisualNORMLNORMLNORMLNORMLCodorscalar*VisualNORMLNORMLNORMLNORML | - | ppm | | | | | |
| ZincppmASTM D5185m8811238715724SulfurppmASTM D5185m364535783117CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m>50243PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORML | Calcium | ppm | ASTM D5185m | 1121 | 2813 | | 2160 |
| SulfurppmASTM D5185m364535783117CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m>50243PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNONENONENONENONENORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLNEGNEG | Phosphorus | ppm | ASTM D5185m | 996 | | | 651 |
| CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50243SodiumppmASTM D5185m321PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONELIGHTLIGHTYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLNORMLNEGNEG | Zinc | ppm | ASTM D5185m | 881 | 1238 | 715 | 724 |
| SiliconppmASTM D5185m>50243SodiumppmASTM D5185m321PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLNORMLNORML | Sulfur | ppm | ASTM D5185m | | 3645 | 3578 | 3117 |
| SodiumppmASTM D5185m321PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONELIGHTLIGHTYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG | CONTAMINANTS | 3 | method | limit/base | current | history1 | history2 |
| PotassiumppmASTM D5185m>20001FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONELIGHTLIGHTYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG | Silicon | ppm | ASTM D5185m | >50 | 2 | 4 | 3 |
| FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONELIGHTLIGHTYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG | Sodium | ppm | ASTM D5185m | | 3 | 2 | 1 |
| Acid Number (AN)mg KOHgASTM D80452.1411.0300.893VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONELIGHTLIGHTYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG | Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 1 |
| VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONELIGHTLIGHTYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG | FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| White Metalscalar*VisualNONENONELIGHTLIGHTYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG | Acid Number (AN) | mg KOH/g | ASTM D8045 | | 2.141 | 1.030 | 0.893 |
| Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG | VISUAL | | method | limit/base | current | history1 | history2 |
| Precipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG | White Metal | scalar | *Visual | NONE | NONE | LIGHT | |
| Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debrisscalar*VisualNONELIGHTNONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEGNEG | Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG | Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGNEG | Debris | scalar | *Visual | NONE | LIGHT | NONE | NONE |
| Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.1 NEG NEG | Appearance | scalar | *Visual | NORML | | NORML | NORML |
| Emulsified Water scalar *Visual >0.1 NEG NEG NEG | Odor | | | | | | |
| | Emulsified Water | | | | | | |
| | Free Water | scalar | *Visual | | NEG | | |



OIL ANALYSIS REPORT



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: KIM PRATER - INGPAD

an30/19