Report Forms Test Method D 7038 L-33-1 Version **Conducted For**

| | | V = Valid | | | |
|----------------|------------------|--------------------------|-------------------------------------|--|--|
| | | I = Invalid | | | |
| | | N = Results Cannot Be In | nterpreted (See C | comment Section) | |
| | | | Non-Reference T Reference Oil Re | | |
| | | Te | st Number | | |
| Motori | ng | | Storage Box: | Storage Box Run: | |
| Date Comple | eted: | | EOT Time: | [2302.4 | |
| Oil Cod | | | | | |
| Formul | lation/Stand Cod | le: | | | |
| Alterna | ate Codes: | | | | |
| | | | | accordance with ASTM Test Method D 70 uded in this report describe the anomalies | |
| | | Submitted By: | | Testing Laboratory | |
| | | | | Signature | |
| | | | | Typed Name | |
| | | | | Title | |
| | | | | Section | |

Test Method D 7038 L-33-1 Form 1 Test Result Summary

| Oil Test | | | | | | | |
|---|--------------------------------|-------------------------|-------------|--|--|--|--|
| Lab | Lab Motoring Stand Storage Box | | | | | | |
| | | | | | | | |
| Start Date | Date Completed | End of Test Time | Test Length | | | | |
| | | | | | | | |
| TMC Oil Code | Laborato | Viscosity Grade | | | | | |
| | | | | | | | |
| Oil Code: | | | | | | | |
| Formulation Star | nd Code: | | | | | | |
| Latest Information Letter Test Was Run Under: | | | | | | | |
| Gear Version: | | | | | | | |
| Pinion Batch: Ring Batch: | | | | | | | |

| Last Reference Oil Calibrating Stand Information - Fill Out For Non-reference Oil Tests Only | | | | | | |
|--|---------------|-------------|--|--|--|--|
| Motoring Stand: Storage Box : Storage Box Run: | | | | | | |
| Date Completed: | TMC Oil Code: | | | | | |
| Gear Version: | Pinion Batch: | Ring Batch: | | | | |

| Rust/Corrosion Pass/Fail Parameters | | | | | | | |
|--|--|--|--|--|--|--|--|
| Final Area 4 Lowest of Areas 1-3, 5-10 | | | | | | | |
| Original Merit Results | | | | | | | |
| Correction Factor A | | | | | | | |
| Severity Adjustments | | | | | | | |
| Final Merit Results | | | | | | | |

 $^{^{\}mathrm{A}}$ At the present time there are no industry correction factors, enter 0.00.

Test Method D 7038 L-33-1 Form 2 Rating Summary

| Lab: | Motoring Stand: |
|--------------|------------------|
| Storage Box: | Storage Box Run: |
| Oil Code: | |

| Rater's | Initia | ıls (Afte | er Te | est) | | | |
|------------|--------|-----------|-------|---------------|------------------------------|---|------------------------|
| | | | | / | Rust/Corro | sion | |
| | L | ocation | | | | | |
| DI | FFEF | RENTL | AL C | CASE: | RUST A | WEIGHTING FACTOR | WEIGHTED RUST |
| 1. At Pi | nion (| Contact | t | | | * .087 | |
| 2. Diff. | Gear | Contac | et | | | * .193 | |
| 3. Diff. | Gears | (Side) | | | | * .094 | |
| 4. Axle | | | | | | * .169 | |
| 5. Drive | | |) | | | * .079 | |
| 6. Drive | | ` ' | , | | | * .079 | |
| Bearing | ξ: | | | | | • | • |
| 7. Drive | Pinic | on Roll | er | | | * .051 | |
| 8. Drive | Pinic | on Cup | S | | | * .083 | |
| 9. Diff. | | | | | | * .071 | |
| 10. Diff | | | | | | * .094 | |
| | | | n Me | rit Rating | | | |
| A Rust Lev | | | | | | • | |
| None | = | 10 | | | | | |
| Trace | = | 9 | = | | six spots, each less than 1m | | |
| Light | = | 8 | = | | | iameter or, one(1) or more spots great | |
| | | | | | | ots no greater than 1% of the total rat | ted component surface. |
| Moderate | | | | | | | |
| Heavy | = | 0 | = | covering more | than 5% of considered surfa | ace | |

 $\pmb{Remarks:} \ \text{Note presence, location and amount of additional deposit-stain, sludge, etc.}$

Test Method D7038 L-33-1 Form 3 Operational Validity Summary

| Lab: | Motoring Stand : |
|---------------|------------------|
| Storage Box : | Storage Box Run: |
| Oil Code: | |

Operator's Initials

| TURNING TORQUES: | | |
|------------------------|-------|------|
| Pinion, lbf-in. | Break | Turn |
| Full Assembly, lbf-in. | Break | Turn |

| Warm-Up: | | |
|--------------------|-------|--------|
| Time (h) | Start | Finish |
| Oil Temperature °F | Start | Finish |

| MOTORING PHASE: | | | | | | |
|---------------------|-------|--------|------|--|--|--|
| Time (h) | Start | Finish | | | | |
| Pinion Speed, r/min | Avg. | Max. | Min. | | | |
| Oil Temperature, °F | Avg. | Max. | Min. | | | |

| STORAGE PHASE: | STORAGE PHASE: | | | | | | |
|---------------------|----------------|--------|------|--|--|--|--|
| Time (h) | Start | Finish | | | | | |
| Oil Temperature, °F | Avg. | Max. | Min. | | | | |

| Percent Deviation | | | | | | | |
|----------------------|-----------------|----------------------|-----------------------------|--------------------|--------------------|-----------------------------|--|
| | N | Notoring Phas | e | Storage Phase | | | |
| Controlled Parameter | Allowable % Out | This Test % Out | Actual Time Out min:s | Allowable % Out | This Test % Out | Actual Time Out min:s | |
| Oil Temperature | 5 | | | 4 | | | |

Test Method D 7038 L-33-1 Form 4 Pre Test Rating ^A

| Lab: | | Motoring Stand: | | | |
|------------------------------|--------------|------------------|--|--|--|
| Storage Box: | | Storage Box Run: | | | |
| Oil Code: | | | | | |
| | | | | | |
| Match No.: | Date: | Rated By: | | | |
| Differential Case | | | | | |
| Area 1. At Pinion Contact: | | | | | |
| Area 2. At Differential Gear | · Contact: | | | | |
| | | | | | |
| Area 3. Differential Gears (| Side Gears): | | | | |
| Area 4. Axle Housing Cover | : | | | | |
| Area 5. Drive Gears (Ring): | | | | | |
| Area 6. Drive Pinion: | | | | | |
| Area 7. Drive Pinion Rollers | S: | | | | |
| Area 8. Drive Pinion Cups: | | | | | |
| Area 9. Differential Case Ro | ollers: | | | | |
| Area 10. Differential Case C | Cups: | | | | |

^A After Abrasive Blasting

Test Method D 7038 L-33-1 Form 5 Lost Time and Comments

Lab:

Motoring Stand:

| Storage Box: | | | Storage Box Run: | | | |
|---------------|------------|-------------|------------------------|--|--|--|
| Oil Code: | | | | | | |
| | | | | | | |
| | | | | | | |
| Number of | f Downtime | Occurrences | | | | |
| Test Hours | Date | Downtime | Reasons | | | |
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| | | | Total Downtime (hours) | | | |
| | | <u> </u> | | | | |
| Othe | er Commen | ts | | | | |
| | of Commen | | | | | |
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Test Method D 7038 L-33-1 Form 5A Lost Time and Comments

| Lab: | | | Motoring Stand: | | |
|--------------|------------|-------------|------------------------|--|--|
| Storage Box: | | | Storage Box Run: | | |
| Oil Code: | | | | | |
| | | | | | |
| Number of 1 | Downtime C | Occurrences | | | |
| Test | | | D. | | |
| Hours | Date | Downtime | Reasons | | |
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| | | | Total Downtime (hours) | | |
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| | Comments | | | | |
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Test Method D 7038 L-33-1 Form 5B Lost Time and Comments

| Lab: | Motoring Stand : |
|--------------|------------------|
| Storage Box: | Storage Box Run: |
| Oil Code: | |

| Number of Downtime Occurrences | | ccurrences | |
|---------------------------------------|------|------------|------------------------|
| Test Hours | Date | Downtime | Reasons |
| | | | |
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| · | | | Total Downtime (hours) |

| Other Comments | | | |
|-------------------------|--|--|--|
| Number of Comment Lines | | | |
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