



| | | | |
|---|-----------------------------------|------------------------|--|
|  | GILES CHEMICAL ~ PREMIER MAGNESIA | |  |
| | Lot Production Record | | |
| | Title: Lot Production Record | Number: P13-FM-100-041 | |
| | Owner: Jason Bumgarner | Revision: 07 | |
| | Effective Date: 09/03/2016 | Page: 1 of 1 | |

LOT PRODUCTION RECORD

Date _____ Lot Number _____

DAY

NIGHT

| Name | Initials | | Name | Initials |
|-------|----------|------------------|-------|----------|
| _____ | _____ | Lead Operator | _____ | _____ |
| _____ | _____ | Process Operator | _____ | _____ |
| _____ | _____ | Material Handler | _____ | _____ |
| _____ | _____ | Warehouse | _____ | _____ |
| _____ | _____ | Salt Operator | _____ | _____ |
| _____ | _____ | Salt Operator II | _____ | _____ |

Completed paper work for lot record

✓ or X

| | |
|-----------------------------------|-------|
| Daily Production Report (Day) | _____ |
| Pallet count - Work Sheet | _____ |
| Daily Production Report (Night) | _____ |
| Pallet count - Work Sheet | _____ |
| SCR Sheets (All) | _____ |

SPC Charts

| | |
|-------------------------------|-------|
| Digester pH Log | _____ |
| Digester Specific Gravity Log | _____ |
| Process Specific Gravity Log | _____ |
| Crystallizer Temperature Log | _____ |
| Dryer Salt Temperature Log | _____ |
| Dryer/Cooler Temperature Log | _____ |

Process Upkeep Logs

| | |
|----------------------------|-------|
| Process Check Log | _____ |
| Material handler Log | _____ |
| Acid Log (If applicable) | _____ |
| MgO Log (If applicable) | _____ |

Quality Documents

| | |
|--|-------|
| Daily Process Audit | _____ |
| Daily SCR Quality Audit (Mon-Fri Only) | _____ |
| CoA (Weekly Lot #) | _____ |
| Daily Affirmation Lab Results | _____ |

☐ Upon review of this batch record, initiation of a CAPA, Deviation, Non-Conformance, or OOS was noted.



#(s) _____

Production Signature _____ Initials _____ Date _____

Quality Signature _____ Initials _____ Date _____

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|---|--|---------------------------------------|--|--|-------------------------|--|---|--|
|  | | GILES CHEMICAL ~ PREMIER MAGNESIA | | | | |  | |
| | | Lot Production Record | | | | | | |
| | | Title: Daily Production Report - Days | | | Number: P12-FM-100-009a | | | |
| | | Owner: Jason Bumgarner | | | Revision: 07 | | | |
| | | Effective Date: 10/04/16 | | | | | Page: 1 of 1 | |

| | | | | | | | | | |
|--------------------------------------|--|--|----|----|----|----|----|-------|-------|
| Date and Shift ____ / ____ / ____ | | | LO | PO | MH | WO | SO | SO-II | Other |
| DAYS | | | | | | | | | |

| | | | | | | |
|-------------|----------|--------------|------|-----------------|-----|---------------|
| Super Sacks | Customer | Product Type | CO # | Amount Produced | SCR | Screened Type |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | | | | |
|-----------------------|--|----|----|-----|-----|-----|
| Total RePack Produced | | CW | RP | RPS | RPM | RPO |
| | | | | | | |

| | | | | | | |
|-------------|--|----------------------|--|--|--|--|
| Total Fines | | Weight of each TSF - | | | | |
|-------------|--|----------------------|--|--|--|--|

| | | | | | | |
|---------------------------------|-----------------------------|--------------|-------------|-----------|-----------------|---------------|
| Customers with Pre-printed bags | Customer | Product Type | CO # | SCR | Amount Produced | Screened Type |
| | | | | | | |
| | Lot# of each Film roll Used | | Start Count | End Count | Film Used | Waste |
| | | | | | | |
| | Customer | Product Type | CO # | SCR | Amount Produced | Screened Type |
| | | | | | | |
| | Lot# of each Film roll Used | | Start Count | End Count | Film Used | Waste |
| | | | | | | |
| | Customer | Product Type | CO # | SCR | Amount Produced | Screened Type |
| | | | | | | |
| | Lot# of each Film roll Used | | Start Count | End Count | Film Used | Waste |
| | | | | | | |

| | | | | | | | |
|--------------|------|-------|-------|-------|-------|-------|--|
| | 8:00 | 10:00 | 12:00 | 14:00 | 16:00 | 18:00 | |
| Total Tons @ | | | | | | | |
| Shift Rate | | | | | | | |



| | | | | | | |
|-----------------|--|--|---------------------|--|--------------|--|
| Production Goal | | | Total Tons Produced | | Liquid Loads | |
|-----------------|--|--|---------------------|--|--------------|--|

| | | | | | | |
|------------------|---------------|--|---|--|--|--|
| Salt Re-melt Log | # of Hoppers | | list of all barcodes re-melted during shift | | | |
| | # of Dust SS | | | | | |
| | # with No Tag | | | | | |

| | | | | |
|--------------------|--|---------------|--|--|
| Manager's Initials | | QA's Initials | | Any Issues resulting in loss of Production need to be addressed on Production sheet and / or Shift Transition Report |
|--------------------|--|---------------|--|--|

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|---|--|---|--|--|-------------------------|--|---|--|
|  | | GILES CHEMICAL ~ PREMIER MAGNESIA | | | | |  | |
| | | Lot Production Record | | | | | | |
| | | Title: Daily Production Report - Nights | | | Number: P12-FM-100-009b | | | |
| | | Owner: Jason Bumgarner | | | Revision: 07 | | | |
| | | Effective Date: 10/04/16 | | | | | Page: 1 of 1 | |

| | | | | | | | | | |
|--------------------------------------|--|--|----|----|----|----|----|-------|-------|
| Date and Shift ____ / ____ / ____ | | | LO | PO | MH | WO | SO | SO-II | Other |
| NIGHTS | | | | | | | | | |

| | | | | | | |
|-------------|----------|--------------|------|-----------------|-----|---------------|
| Super Sacks | Customer | Product Type | CO # | Amount Produced | SCR | Screened Type |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | | | | |
|-----------------------|--|----|----|-----|-----|-----|
| Total RePack Produced | | CW | RP | RPS | RPM | RPO |
| | | | | | | |

| | | | | | | |
|-------------|--|----------------------|--|--|--|--|
| Total Fines | | Weight of each TSF - | | | | |
|-------------|--|----------------------|--|--|--|--|

| | | | | | | |
|---------------------------------|-----------------------------|--------------|-------------|-----------|-----------------|---------------|
| Customers with Pre-printed bags | Customer | Product Type | CO # | SCR | Amount Produced | Screened Type |
| | | | | | | |
| | Lot# of each Film roll Used | | Start Count | End Count | Film Used | Waste |
| | | | | | | |
| | Customer | Product Type | CO # | SCR | Amount Produced | Screened Type |
| | | | | | | |
| | Lot# of each Film roll Used | | Start Count | End Count | Film Used | Waste |
| | | | | | | |
| | Customer | Product Type | CO # | SCR | Amount Produced | Screened Type |
| | | | | | | |
| | Lot# of each Film roll Used | | Start Count | End Count | Film Used | Waste |
| | | | | | | |

| | | | | | | | |
|--------------|-------|-------|------|------|------|------|--|
| | 20:00 | 22:00 | 0:00 | 2:00 | 4:00 | 6:00 | |
| Total Tons @ | | | | | | | |
| Shift Rate | | | | | | | |

| | | | | | | |
|-----------------|--|--|---------------------|--|--------------|--|
| Production Goal | | | Total Tons Produced | | Liquid Loads | |
|-----------------|--|--|---------------------|--|--------------|--|

| | | | | | | | |
|------------------|---------------|--|---|--|--|--|--|
| Salt Re-melt Log | # of Hoppers | | list of all barcodes re-melted during shift | | | | |
| | # of Dust SS | | | | | | |
| | # with No Tag | | | | | | |

| | | | | |
|--------------------|--|---------------|--|--|
| Manager's Initials | | QA's Initials | | Any Issues resulting in loss of Production need to be addressed on Production sheet and / or Shift Transition Report |
|--------------------|--|---------------|--|--|

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GILES CHEMICAL ~ PREMIER MAGNESIA

Lot Production Record

Title: Digester Specific Gravity

Number: P12-FM-100-006a

Owner: Jason Bumgarner

Revision: 04

Effective Date: 07/07/2016

Page: 1 of 1



| | 8:00 | 10:00 | 12:00 | 14:00 | 16:00 | 18:00 | 20:00 | 22:00 | 0:00 | 2:00 | 4:00 | 6:00 |
|---------------------|-----------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| #1 Specific Gravity | 1.410 | | | | | | | | | | | |
| | 1.404 | | | | | | | | | | | |
| | 1.398 | | | | | | | | | | | |
| | 1.391 | | | | | | | | | | | |
| | 1.385 | | | | | | | | | | | |
| | 1.378 | | | | | | | | | | | |
| | 1.372 | | | | | | | | | | | |
| | 1.366 | | | | | | | | | | | |
| | 1.359 | | | | | | | | | | | |
| | Results - | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|
| #2 Specific Gravity | 1.410 | | | | | | | | | | | |
| | 1.404 | | | | | | | | | | | |
| | 1.398 | | | | | | | | | | | |
| | 1.391 | | | | | | | | | | | |
| | 1.385 | | | | | | | | | | | |
| | 1.378 | | | | | | | | | | | |
| | 1.372 | | | | | | | | | | | |
| | 1.366 | | | | | | | | | | | |
| | 1.359 | | | | | | | | | | | |
| | Results - | | | | | | | | | | | |

| | | | | | | | | | | | | |
|---------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|
| #3 Specific Gravity | 1.410 | | | | | | | | | | | |
| | 1.404 | | | | | | | | | | | |
| | 1.398 | | | | | | | | | | | |
| | 1.391 | | | | | | | | | | | |
| | 1.385 | | | | | | | | | | | |
| | 1.378 | | | | | | | | | | | |
| | 1.372 | | | | | | | | | | | |
| | 1.366 | | | | | | | | | | | |
| | 1.359 | | | | | | | | | | | |
| | Results - | | | | | | | | | | | |

| Time | Action taken when out of limits | Time | Action taken when out of limits |
|------|---------------------------------|------|---------------------------------|
| .. | | .. | |
| .. | | .. | |
| .. | | .. | |

| | | | | | | | | | | | | |
|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Day Hopper full - x/✓ | | | | | | | | | | | | |
| ML Sp.Gr. 1.27-1.32 | | | | | | | | | | | | |
| Mud Temp 60-80C | | | | | | | | | | | | |
| Mud Sp.Gr. 1.38-1.41 | | | | | | | | | | | | |
| Brine Sp.Gr. 1.37-1.40 | | | | | | | | | | | | |
| Initials | | | | | | | | | | | | |

| | | | | | |
|-------|--|-----------------------|--|---------------|--|
| DATE: | | Production's Initials | | QA's Initials | |
|-------|--|-----------------------|--|---------------|--|

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GILES CHEMICAL ~ PREMIER MAGNESIA
Lot Production Record

Title: **Digester pH** Number: **P12-FM-100-006b**
Owner: **Jason Bumgarner** Revision: **05**
Effective Date: **07/07/2016** Page: **1 of 1**



| | 8:00 | 10:00 | 12:00 | 14:00 | 16:00 | 18:00 | 20:00 | 22:00 | 0:00 | 2:00 | 4:00 | 6:00 | |
|----------------------|--------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|--|
| #1 - 1st Digester pH | 6.9 | | | | | | | | | | | | |
| | 6.1 | | | | | | | | | | | | |
| | 5.3 | | | | | | | | | | | | |
| | 4.6 | | | | | | | | | | | | |
| | 3.8 | | | | | | | | | | | | |
| | 3.0 | | | | | | | | | | | | |
| | 2.3 | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | |
| | 0.7 | | | | | | | | | | | | |
| | Probe- | | | | | | | | | | | | |
| Paper - | | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|----------------------|--------|--|--|--|--|--|--|--|--|--|--|--|--|
| #2 - 1st Digester pH | 6.9 | | | | | | | | | | | | |
| | 6.1 | | | | | | | | | | | | |
| | 5.3 | | | | | | | | | | | | |
| | 4.6 | | | | | | | | | | | | |
| | 3.8 | | | | | | | | | | | | |
| | 3.0 | | | | | | | | | | | | |
| | 2.3 | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | |
| | 0.7 | | | | | | | | | | | | |
| | Probe- | | | | | | | | | | | | |
| Paper - | | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|----------------------|--------|--|--|--|--|--|--|--|--|--|--|--|--|
| #3 - 1st Digester pH | 6.9 | | | | | | | | | | | | |
| | 6.1 | | | | | | | | | | | | |
| | 5.3 | | | | | | | | | | | | |
| | 4.6 | | | | | | | | | | | | |
| | 3.8 | | | | | | | | | | | | |
| | 3.0 | | | | | | | | | | | | |
| | 2.3 | | | | | | | | | | | | |
| | 1.5 | | | | | | | | | | | | |
| | 0.7 | | | | | | | | | | | | |
| | Probe- | | | | | | | | | | | | |
| Paper - | | | | | | | | | | | | | |



| Time | Action taken when out of limits | Time | Action taken when out of limits |
|------|---------------------------------|------|---------------------------------|
| —:— | | —:— | |
| —:— | | —:— | |
| —:— | | —:— | |

| | | | | | | | | | | | | |
|------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Recovery | | | | | | | | | | | | |
| O/P | | | | | | | | | | | | |
| Pots Clean | | | | | | | | | | | | |
| O/P | | | | | | | | | | | | |
| Circ Loops | | | | | | | | | | | | |
| >40gpm | | | | | | | | | | | | |
| MgO Feed | | | | | | | | | | | | |
| gpm | | | | | | | | | | | | |
| ML Feed | | | | | | | | | | | | |
| 20-35gpm | | | | | | | | | | | | |
| Initials | | | | | | | | | | | | |

| | | | | | |
|-------|--|-----------------------|--|---------------|--|
| DATE: | | Production's Initials | | QA's Initials | |
|-------|--|-----------------------|--|---------------|--|

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|--|--|--|--|--|--|--|--|--|--|--|--|--|-------------------------------|--|--|--|
|  | GILES CHEMICAL ~ PREMIER MAGNESIA Lot Production Record | | | | | | | |  | | | | | | | |
| | Title: Process Specific Gravity | | | | | | | | | | | | Number: P12-FM-100-052 | | | |
| | Owner: Jason Bumgarner | | | | | | | | | | | | Revision: 01 | | | |
| | Effective Date: 07/07/2016 | | | | | | | | | | | | Page: 1 of 1 | | | |

| | | | | | | | | | | | | | |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|--|
| | 8:00 | 10:00 | 12:00 | 14:00 | 16:00 | 18:00 | 20:00 | 22:00 | 0:00 | 2:00 | 4:00 | 6:00 | |
| Mud Density | 1.410 | | | | | | | | | | | | |
| | 1.404 | | | | | | | | | | | | |
| | 1.398 | | | | | | | | | | | | |
| | 1.391 | | | | | | | | | | | | |
| | 1.385 | | | | | | | | | | | | |
| | 1.378 | | | | | | | | | | | | |
| | 1.372 | | | | | | | | | | | | |
| | 1.366 | | | | | | | | | | | | |
| | 1.359 | | | | | | | | | | | | |
| | Results - | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|---------------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|
| Brine Density | 1.410 | | | | | | | | | | | | |
| | 1.404 | | | | | | | | | | | | |
| | 1.398 | | | | | | | | | | | | |
| | 1.391 | | | | | | | | | | | | |
| | 1.385 | | | | | | | | | | | | |
| | 1.378 | | | | | | | | | | | | |
| | 1.372 | | | | | | | | | | | | |
| | 1.366 | | | | | | | | | | | | |
| | 1.359 | | | | | | | | | | | | |
| | Results - | | | | | | | | | | | | |



| | | | | | | | | | | | | | |
|----------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|
| Mother Liquor Densit | 1.330 | | | | | | | | | | | | |
| | 1.320 | | | | | | | | | | | | |
| | 1.310 | | | | | | | | | | | | |
| | 1.300 | | | | | | | | | | | | |
| | 1.290 | | | | | | | | | | | | |
| | 1.280 | | | | | | | | | | | | |
| | 1.270 | | | | | | | | | | | | |
| | 1.260 | | | | | | | | | | | | |
| | 1.250 | | | | | | | | | | | | |
| | Results - | | | | | | | | | | | | |

| | | | |
|-------------|--|-------------|--|
| <i>Time</i> | <i>Action taken when out of limits</i> | <i>Time</i> | <i>Action taken when out of limits</i> |
| 1:-- | | 1:-- | |
| 1:-- | | 1:-- | |
| 1:-- | | 1:-- | |

| | | | | | | | | | | | | |
|---|---|-----------------------|--|--|--|--|---------------|--|--|--|--|--|
| Solids | 1 | | | | | | | | | | | |
| | 2 | | | | | | | | | | | |
| | 3 | | | | | | | | | | | |
| | 4 | | | | | | | | | | | |
| | 5 | | | | | | | | | | | |
| Check yes or no if all of the items below are operating correctly | | | | | | | | | | | | |
| Fine Salt | | | | | | | | | | | | |
| City Water | | | | | | | | | | | | |
| Chiller | | | | | | | | | | | | |
| Initials | | | | | | | | | | | | |
| DATE: | | Production's Initials | | | | | QA's Initials | | | | | |

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|---|---|--|--|--|--|--|--|---------------------|---|--|--|--|-------------------------------|--|--|--|
|  | GILES CHEMICAL ~ PREMIER MAGNESIA Lot Production Record | | | | | | | |  | | | | | | | |
| | Title: Crystallizer Temperatures | | | | | | | | | | | | Number: P12-FM-100-007 | | | |
| | Owner: Jason Bumgarner | | | | | | | | | | | | Revision: 05 | | | |
| Effective Date: 07/07/2016 | | | | | | | | Page: 1 of 1 | | | | | | | | |

| | 7:00 | 9:00 | 11:00 | 13:00 | 15:00 | 17:00 | 19:00 | 21:00 | 23:00 | 1:00 | 3:00 | 5:00 |
|---------------------|--|------|-------|-------|-----------------------|-------|--|-------|---------------|------|------|------|
| 1 Crystallizer Temp | 32.88 | | | | | | | | | | | |
| | 32.16 | | | | | | | | | | | |
| | 31.44 | | | | | | | | | | | |
| | 30.72 | | | | | | | | | | | |
| | 30.00 | | | | | | | | | | | |
| | 29.28 | | | | | | | | | | | |
| | 28.56 | | | | | | | | | | | |
| | 27.84 | | | | | | | | | | | |
| | 27.12 | | | | | | | | | | | |
| | Results- | | | | | | | | | | | |
| 2 Crystallizer Temp | 32.88 | | | | | | | | | | | |
| | 32.16 | | | | | | | | | | | |
| | 31.44 | | | | | | | | | | | |
| | 30.72 | | | | | | | | | | | |
| | 30.00 | | | | | | | | | | | |
| | 29.28 | | | | | | | | | | | |
| | 28.56 | | | | | | | | | | | |
| | 27.84 | | | | | | | | | | | |
| | 27.12 | | | | | | | | | | | |
| | Results- | | | | | | | | | | | |
| 3 Crystallizer Temp | 32.88 | | | | | | | | | | | |
| | 32.16 | | | | | | | | | | | |
| | 31.44 | | | | | | | | | | | |
| | 30.72 | | | | | | | | | | | |
| | 30.00 | | | | | | | | | | | |
| | 29.28 | | | | | | | | | | | |
| | 28.56 | | | | | | | | | | | |
| | 27.84 | | | | | | | | | | | |
| | 27.12 | | | | | | | | | | | |
| | Results- | | | | | | | | | | | |
| 4 Crystallizer Temp | 32.88 | | | | | | | | | | | |
| | 32.16 | | | | | | | | | | | |
| | 31.44 | | | | | | | | | | | |
| | 30.72 | | | | | | | | | | | |
| | 30.00 | | | | | | | | | | | |
| | 29.28 | | | | | | | | | | | |
| | 28.56 | | | | | | | | | | | |
| | 27.84 | | | | | | | | | | | |
| | 27.12 | | | | | | | | | | | |
| | Results- | | | | | | | | | | | |
| 5 Crystallizer Temp | 32.88 | | | | | | | | | | | |
| | 32.16 | | | | | | | | | | | |
| | 31.44 | | | | | | | | | | | |
| | 30.72 | | | | | | | | | | | |
| | 30.00 | | | | | | | | | | | |
| | 29.28 | | | | | | | | | | | |
| | 28.56 | | | | | | | | | | | |
| | 27.84 | | | | | | | | | | | |
| | 27.12 | | | | | | | | | | | |
| | Results- | | | | | | | | | | | |
| Time | <i>Action taken when out of limits</i> | | | | | Time | <i>Action taken when out of limits</i> | | | | | |
| —:— | | | | | | —:— | | | | | | |
| —:— | | | | | | —:— | | | | | | |
| —:— | | | | | | —:— | | | | | | |
| Initials | | | | | | | | | | | | |
| DATE: | | | | | Production's Initials | | | | QA's Initials | | | |

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| | | | |
|---|--|-------------------------------|---|
|  | GILES CHEMICAL ~ PREMIER MAGNESIA Lot Production Record | |  |
| | Title: Dryer Salt Temp | Number: P12-FM-100-005 | |
| | Owner: Jason Bumgarner | Revision: 04 | |
| Effective Date: 07/07/2016 | | Page: 1 of 1 | |

| | | | | | | | | | | | | | |
|-----------------|-----------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| Dryer Salt Temp | | 7:00 | 9:00 | 11:00 | 13:00 | 15:00 | 17:00 | 19:00 | 21:00 | 23:00 | 1:00 | 3:00 | 5:00 |
| | 37.9 | | | | | | | | | | | | |
| | 37.2 | | | | | | | | | | | | |
| | 36.4 | | | | | | | | | | | | |
| | 35.7 | | | | | | | | | | | | |
| | 35.0 | | | | | | | | | | | | |
| | 34.3 | | | | | | | | | | | | |
| | 33.6 | | | | | | | | | | | | |
| | 32.8 | | | | | | | | | | | | |
| | 32.1 | | | | | | | | | | | | |
| | Reading - | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|------------------|-----------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| Cooler Salt Temp | | 7:00 | 9:00 | 11:00 | 13:00 | 15:00 | 17:00 | 19:00 | 21:00 | 23:00 | 1:00 | 3:00 | 5:00 |
| | 27.9 | | | | | | | | | | | | |
| | 27.2 | | | | | | | | | | | | |
| | 26.4 | | | | | | | | | | | | |
| | 25.7 | | | | | | | | | | | | |
| | 25.0 | | | | | | | | | | | | |
| | 24.3 | | | | | | | | | | | | |
| | 23.6 | | | | | | | | | | | | |
| | 22.8 | | | | | | | | | | | | |
| | 22.1 | | | | | | | | | | | | |
| | Reading - | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|----------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|
| 2000-lb Weight Check | | | | | | | | | | | | | |
| | 2030 | | | | | | | | | | | | |
| | 2024 | | | | | | | | | | | | |
| | 2017 | | | | | | | | | | | | |
| | 2011 | | | | | | | | | | | | |
| | 2004 | | | | | | | | | | | | |
| | 1997 | | | | | | | | | | | | |
| | 1991 | | | | | | | | | | | | |
| | 1984 | | | | | | | | | | | | |
| | 1977 | | | | | | | | | | | | |
| | Results - | | | | | | | | | | | | |

| | | | | | | | | | | | | | |
|--------------------|-----------|--|--|--|--|--|--|--|--|--|--|--|--|
| 50-lb Weight Check | | | | | | | | | | | | | |
| | 50.85 | | | | | | | | | | | | |
| | 50.68 | | | | | | | | | | | | |
| | 50.51 | | | | | | | | | | | | |
| | 50.35 | | | | | | | | | | | | |
| | 50.18 | | | | | | | | | | | | |
| | 50.01 | | | | | | | | | | | | |
| | 49.85 | | | | | | | | | | | | |
| | 49.68 | | | | | | | | | | | | |
| | 49.51 | | | | | | | | | | | | |
| | Results - | | | | | | | | | | | | |

| | | | |
|-------------|--|-------------|--|
| <i>Time</i> | <i>Action taken when out of limits</i> | <i>Time</i> | <i>Action taken when out of limits</i> |
| —:— | | —:— | |
| —:— | | —:— | |
| —:— | | —:— | |

| | | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|--|
| Initials | | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|--|

| | | | | | |
|-------|--|-----------------------|--|---------------|--|
| DATE: | | Production's Initials | | QA's Initials | |
|-------|--|-----------------------|--|---------------|--|

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GILES CHEMICAL ~ PREMIER MAGNESIA

Company Form

Title: **Material Handler Log**Number: **P12-FM-100-008**Owner: **Jason Bumgarner**Revision: **04**Effective Date: **07/07/2016**Page: **1 of 1**

| Day Shift | MgO Supply | | | Acid Supply | | | |
|-----------------------------|------------------------|---------------------|---------------------------|---------------------------|-------|---------------|-------|
| | #1 (P or B) ~ Feed : | Level : | | CHECKS | 07:00 | 11:00 | 15:00 |
| #2 (P or B) ~ Feed : | Level : | | Car, Chocks, Sign & Lock | | | | |
| #3 (P or B) ~ Feed : | Level : | | Tank Level graph | | | | |
| OFFLOADING - | | | OFFLOADING - | | | | |
| | 07:00 | 13:00 | Acid at tanks | | | | |
| MgO rotary Valve check | | | Acid Line check | | | | |
| Clean Mixing Pot | | | Acid at Digesters | | | | |
| Air Compressor | | | Boiler Checks | | | | |
| | 07:00 | 15:00 | | 07:00 | 11:00 | 15:00 | |
| Main Tank Pressure | | | Blow Down (yes / no) | | | | |
| Test Water Drain Valve | | | Pressure - Lead Boiler | | | | |
| Oil Level Check | | | Pressure - Back up Boiler | | | | |
| Visual leak check | | | Water level on #1 / #2 | | | | |
| | | | Level in Boiler Feed Tank | | | | |
| Operator - _____ Time _____ | | | | | | | |
| Night Shift | MgO Supply | | | Acid Supply | | | |
| | #1 (P or B) ~ Feed : | Level : | | CHECKS | 19:00 | 23:00 | 03:00 |
| | #2 (P or B) ~ Feed : | Level : | | Car, Chocks, Sign & Lock | | | |
| | #3 (P or B) ~ Feed : | Level : | | Tank Level graph | | | |
| | OFFLOADING - | | | OFFLOADING - | | | |
| | | 19:00 | 01:00 | Acid at tanks | | | |
| | MgO rotary Valve check | | | Acid Line check | | | |
| | Clean Mixing Pot | | | Acid at Digesters | | | |
| | Air Compressor | | | Boiler Checks | | | |
| | | 19:00 | 03:00 | | 19:00 | 23:00 | 03:00 |
| | Main Tank Pressure | | | Blow Down (yes / no) | | | |
| | Test Water Drain Valve | | | Pressure - Lead Boiler | | | |
| | Oil Level Check | | | Pressure - Back up Boiler | | | |
| Visual leak check | | | Water level on #1 / #3 | | | | |
| | | | Level in Boiler Feed Tank | | | | |
| Operator- _____ Time _____ | | | | | | | |
| Date: | ____ / ____ / ____ | Operator's Initials | | Production's Initials | | QA's Initials | |

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GILES CHEMICAL ~ PREMIER MAGNESIA
Lot Production Record



Title: **Process Check Log**
Owner: **Jason Bumgarner**
Effective Date: **10/29/2016**

Number: **P12-FM-100-055**
Revision: **03**
Page: **1 of 1**



| Day Shift | Crystal Production | | | Environmental / Regulatory | | |
|------------------------------|---------------------------|------|-----------------------|----------------------------|------|-------|
| | | 8:00 | 14:00 | | 8:00 | 14:00 |
| | Centrifuge (wash/Check) | | | Dust Collector (psi) | | |
| | Dehumidifier (O/P) | | | Scrubber 1 - (in H2O) | | |
| | Chiller (°F) | | | Doors Closed & Good Seals | | |
| | Gauges (O/P) | | | Hose, Cap & Plug Check | | |
| | Salt Condition | | | Housekeeping | | |
| | | | | Closed Process Check | | |
| | Recovery and Waste Water | | | Other | | |
| | | 8:00 | 14:00 | | 8:00 | 14:00 |
| Leak Audit | | | Screener (greased?) | | | |
| Tank Check | | | Warehouse Check | | | |
| Drain Box | | | Digesters / MgO Pots | | | |
| Drain Screen- Digester | | | Fine Salt Loops | | | |
| Drain Screen - Dryer | | | Operator Log Check | | | |
| Operator _____ - Time: _____ | | | | | | |

| Night Shift | Crystal Production | | | Environmental / Regulatory | | |
|------------------------------|---------------------------|-------|-----------------------|----------------------------|-------|------|
| | | 20:00 | 2:00 | | 20:00 | 2:00 |
| | Centrifuge (wash/Check) | | | Dust Collector (psi) | | |
| | Dehumidifier (O/P) | | | Scrubber 1 - (in H2O) | | |
| | Chiller (°F) | | | Doors Closed & Good Seals | | |
| | Gauges (O/P) | | | Hose, Cap & Plug Check | | |
| | Salt Condition | | | Housekeeping | | |
| | | | | Closed Process Check | | |
| | Recovery and Waste Water | | | Other | | |
| | | 20:00 | 2:00 | | 20:00 | 2:00 |
| Leak Audit | | | Screener (greased?) | | | |
| Tank Check | | | Warehouse Check | | | |
| Drain Box | | | Digesters / MgO Pots | | | |
| Drain Screen- Digester | | | Fine Salt Loops | | | |
| Drain Screen - Dryer | | | Operator Log Check | | | |
| Operator _____ - Time: _____ | | | | | | |

| | | | | | | |
|-----------------------------|---------------------|--|-----------------------|--|---------------|--|
| Date: _____ / _____ / _____ | Operator's Initials | | Production's Initials | | QA's Initials | |
|-----------------------------|---------------------|--|-----------------------|--|---------------|--|

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| | | | |
|---|--------------------------------------|-------------------------------|---|
|  | GILES CHEMICAL ~ PREMIER MAGNESIA | |  |
| | Lot Production Record | | |
| | Title: Pallet Count Worksheet | Number: P12-FM-100-010 | |
| | Owner: Jason Bumgarner | Revision: 05 | |
| | Effective Date: 10/29/2016 | Page: 1 of 1 | |

| | | | |
|--------|--------------------------|--------------|------|
| Lot #: | Date: ____ / ____ / ____ | Shift: D / N | S.O. |
|--------|--------------------------|--------------|------|

| | | | | | | | | | |
|----------|--|--|--|--|--|--|--|--|--|
| Fines | | | | | | | | | |
| CW/Other | | | | | | | | | |

| Bin # ID: | | | | | | | | | |
|-----------|----|----|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 | 19 |
| 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 |
| 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |

| | | | | | | | | | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Total Bags | Total Bags | Total Bags | Total Bags | Total Bags | Total Bags | Total Bags | Total Bags | Total Bags | Total Bags |
| Total Tons | Total Tons | Total Tons | Total Tons | Total Tons | Total Tons | Total Tons | Total Tons | Total Tons | Total Tons |

| | | | | | | |
|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| 8:00 | 10:00 | 12:00 | 2:00 | 4:00 | 6:00 | Total Tons |
| Total / Rate | Total / Rate | Total / Rate | Total / Rate | Total / Rate | Total / Rate | |
| / | / | / | / | / | / | |

GDP does not apply to the document

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**GILES CHEMICAL ~ PREMIER MAGNESIA****Company Form**Title: **Daily Dryer/Cooler Temperature Log**Number: **P15-FM-200-056**Owner: **Ashley Williams**Revision: **02**Effective Date: **07/07/2016**Page: **1 of 1****Date:**

From: _____ at 7:00am

To: _____ at 6:30am

DAY SHIFT

| Time | Dryer Temp | Cooler Temp | Initials |
|-------|------------|-------------|----------|
| 7:00 | | | |
| 7:30 | | | |
| 8:00 | | | |
| 8:30 | | | |
| 9:00 | | | |
| 9:30 | | | |
| 10:00 | | | |
| 10:30 | | | |
| 11:00 | | | |
| 11:30 | | | |
| 12:00 | | | |
| 12:30 | | | |
| 13:00 | | | |
| 13:30 | | | |
| 14:00 | | | |
| 14:30 | | | |
| 15:00 | | | |
| 15:30 | | | |
| 16:00 | | | |
| 16:30 | | | |
| 17:00 | | | |
| 17:30 | | | |
| 18:00 | | | |
| 18:30 | | | |

NIGHT SHIFT

| Time | Dryer Temp | Cooler Temp | Initials |
|-------|------------|-------------|----------|
| 19:00 | | | |
| 19:30 | | | |
| 20:00 | | | |
| 20:30 | | | |
| 21:00 | | | |
| 21:30 | | | |
| 22:00 | | | |
| 22:30 | | | |
| 23:00 | | | |
| 23:30 | | | |
| 0:00 | | | |
| 0:30 | | | |
| 1:00 | | | |
| 1:30 | | | |
| 2:00 | | | |
| 2:30 | | | |
| 3:00 | | | |
| 3:30 | | | |
| 4:00 | | | |
| 4:30 | | | |
| 5:00 | | | |
| 5:30 | | | |
| 6:00 | | | |
| 6:30 | | | |

Production Signature: _____

Date: _____

Quality Signature: _____

Date: _____

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