
	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 -				
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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	
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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: **05**Effective Date: **02/02/2017**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 Sp Gr	1.410											
	1.400											
	1.390											
	1.380											
	1.370											
	1.360											
1.350												
Results -												
ML Feed												

#2 Sp Gr	1.410											
	1.400											
	1.390											
	1.380											
	1.370											
	1.360											
1.350												
Results -												
ML Feed												

#3 Sp Gr	1.410											
	1.400											
	1.390											
	1.380											
	1.370											
	1.360											
1.350												
Results -												
ML Feed												

#4 Sp Gr	1.410											
	1.400											
	1.390											
	1.380											
	1.370											
	1.360											
1.350												
Results -												
ML Feed												



Time	Action taken when out of limits	Time	Action taken when out of limits
._:._		._:._	
._:._		._:._	
._:._		._:._	

Initials												
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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: 06							
Effective Date: 02/02/17				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	7.0											
	6.0											
	5.0											
	4.0											
	3.0											
	2.0											
	1.0											
	0.0											
	Probe-											
	Paper -											
MgO -												

#2 - 1st Digester pH	7.0											
	6.0											
	5.0											
	4.0											
	3.0											
	2.0											
	1.0											
	0.0											
	Probe-											
	Paper -											
MgO -												

#3 - 1st Digester pH	7.0											
	6.0											
	5.0											
	4.0											
	3.0											
	2.0											
	1.0											
	0.0											
	Probe-											
	Paper -											
MgO -												

#4 - 1st Digester pH	7.0											
	6.0											
	5.0											
	4.0											
	3.0											
	2.0											
	1.0											
	0.0											
	Probe-											
	Paper -											
MgO -												



Time	Action taken when out of limits	Time	Action taken when out of limits

Initials											
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DATE:		Operator's Initials		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: 02							
	Effective Date: 02/02/2017				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 -												
Temp-													

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

Mother Liquor Density	1.330												
	1.320												
	1.310												
	1.300												
	1.290												
	1.280												
	1.270												
	1.260												
	1.250												
	Results -												
Temp-													

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

Check yes or no if all of the items below are operating correctly												
City Water												
Chiller												
Initials												

DATE:		Production's Initials		QA's Initials	
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GILES CHEMICAL ~ PREMIER MAGNESIA
Lot Production Record

Title: Crystallizers 1-3 Temperatures Number: P12-FM-100-007a
Owner: Jason Bumgarner Revision: 06
Effective Date: 01/17/2017 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	35.00												
	34.00												
	33.00												
	32.00												
	31.00												
	30.00												
	29.00												
	28.00												
	27.00												
	Results-												
2 Crystallizer Temp	35.00												
	34.00												
	33.00												
	32.00												
	31.00												
	30.00												
	29.00												
	28.00												
	27.00												
	Results-												
3 Crystallizer Temp	35.00												
	34.00												
	33.00												
	32.00												
	31.00												
	30.00												
	29.00												
	28.00												
	27.00												
	Results-												
Fine Salt		7:00	11:00	15:00	19:00	23:00	3:00						
	C1												
	C2												
	C3												
Solids	C1												
	C2												
	C3												
Time	Action taken when out of limits	Time	Action taken when out of limits										
—:—	_____	—:—	_____										
—:—	_____	—:—	_____										
—:—	_____	—:—	_____										
Initials													
DATE:		Production's Initials						QA's Initials					

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		GILES CHEMICAL ~ PREMIER MAGNESIA Lot Production Record															
		Title: Crystallizers 4-6 Temperatures												Number: P12-FM-100-007b			
		Owner: Jason Bumgarner												Revision: 00			
		Effective Date: 01/17/2017												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	
#4 Crystallizer Temp	35.00												
	34.00												
	33.00												
	32.00												
	31.00												
	30.00												
	29.00												
	28.00												
	27.00												
	Results-												

#5 Crystallizer Temp	35.00												
	34.00												
	33.00												
	32.00												
	31.00												
	30.00												
	29.00												
	28.00												
	27.00												
	Results-												

#6 Crystallizer Temp	35.00												
	34.00												
	33.00												
	32.00												
	31.00												
	30.00												
	29.00												
	28.00												
	27.00												
	Results-												

Fine Salt		7:00	11:00	15:00	19:00	23:00	3:00
	C4						
	C5						
	C6						

Solids	C4						
	C5						
	C6						



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

Initials											
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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											
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DATE:		Production's Initials		QA's Initials	
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GILES CHEMICAL ~ PREMIER MAGNESIA
Lot Production Record

Title: Material Handler Log Number: P12-FM-100-008
Owner: Jason Bumgarner Revision: 05
Effective Date: 02/02/2017 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			
CAR # OFFLOADING -			CAR # OFFLOADING -			
	07:00	13:00	Acid at tanks			
MgO rotary Valve check			Acid Line check			
Day Hopper Full			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			
CAR # OFFLOADING -			CAR # OFFLOADING -			
	19:00	01:00	Acid at tanks			
MgO rotary Valve check			Acid Line check			
Day Hopper Full			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** Number: **P12-FM-100-055**
Owner: **Jason Bumgarner** Revision: **03**
Effective Date: **10/29/2016** Page: **1 of 1**




<i>Day Shift</i>	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: _____						

<i>Night Shift</i>	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: 10/31/2016	Page: 1 of 1



Lot #:	Date: ____ / ____ / ____	Shift: D / N	S.O.
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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			
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Production Signature: _____

Date: _____

Quality Signature: _____

Date: _____

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