
	GILES CHEMICAL ~ PREMIER MAGNESIA		
	Lot Production Record		
	Title: Lot Production Record	Number: P13-FM-100-041	
	Owner: Jason Bumgarner	Revision: 04	
	Effective Date: 07/21/15	Page: 1 of 1	

LOT PRODUCTION RECORD

Date		
Lot Number		
	DAY	NIGHT
Lead Operator		
Warehouse Operator		
Material Handler		
Salt Operator		
Assistant Operator II		

Completed paper work for lot record

✓ or ✕

Daily Production Report (Day)	
Pallet count - Work Sheet	
Daily Production Report (Night)	
Pallet count - Work Sheet	

^4 SPC Charts

Digester pH log	
Digester Specific Gravity Log	
Process Specific Gravity Log	
Crystallizer Temperature Log	
Dryer Salt Temperature Log	

^3 Process Upkeep Logs



Process Check Log	
Material handler Log	
Acid Log (If applicable)	
MgO Log (If applicable)	

All daily records are to be completed, signed, dated and stapled together with this cover sheet. The Night shift Lead Operator is responsible for the daily lot record

Lead Days		Lead Nights		Manager's Initials		QA's Initials	
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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: 04	
	Effective Date: 07/21/15	Page: 1 of 1	

Date and Shift ____/____/____ Days		LO	SO	MH	AO-1	AO-2	
Customer		Product Type	CO #	Amount Produced	SCR	Screened Type	
Pre-Label Film							
	Count						
		Start	New Roll	New Roll	Finished	Used	Waste
	Roll Lot #						
	Count						
		Start	New Roll	New Roll	Finished	Used	Waste
	Roll Lot #						
	Count						
Start		New Roll	New Roll	Finished	Used	Waste	
Roll Lot #							
Super Sacks	Customer		Product Type	CO #	Amount Produced	SCR	Screened Type
Total Fines		Weight of each TSF -					
Total RePack Sacks Ran		CW	RP	RPS	RPM	RPO	
Total Tons @	8:00	10:00	12:00	14:00	16:00	18:00	
Sift Rate							
Production Goal			Total Tons Produced		Liquid Loads		
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: 04	
	Effective Date: 07/21/15	Page: 1 of 1	

Date and Shift ____ / ____ / ____		NIGHTS	LO	SO	MH	AO-1	AO-2
Customer		Product Type	CO #	Amount Produced	SCR	Screened Type	
Pre-Label Film							
	<i>Count</i>						
		<i>Start</i>	<i>New Roll</i>	<i>New Roll</i>	<i>Finished</i>	<i>Used</i>	<i>Waste</i>
	<i>Roll Lot #</i>						
	<i>Count</i>						
		<i>Start</i>	<i>New Roll</i>	<i>New Roll</i>	<i>Finished</i>	<i>Used</i>	<i>Waste</i>
	<i>Roll Lot #</i>						
	<i>Count</i>						
		<i>Start</i>	<i>New Roll</i>	<i>New Roll</i>	<i>Finished</i>	<i>Used</i>	<i>Waste</i>
	<i>Roll Lot #</i>						
Super Sacks	Customer	Product Type	CO #	Amount Produced	SCR	Screened Type	
<i>Total Fines</i>		<i>Weight of each TSF -</i>					
Total RePack Sacks Ran		<i>CW</i>	<i>RP</i>	<i>RPS</i>	<i>RPM</i>	<i>RPO</i>	
	20:00	22:00	0:00	2:00	4:00	6:00	
<i>Total Tons @</i>							
<i>Sift Rate</i>							
Production Goal			Total Tons Produced		Liquid Loads		
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: **03**
Effective Date: **12/11/14** 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 <i>full - x/✓</i>												
ML Sp.Gr. <i>1.27-1.32</i>												
Mud Temp <i>60-80C</i>												
Mud Sp.Gr. <i>1.38-1.41</i>												
Brine Sp.Gr. <i>1.37-1.40</i>												
Initials												

DATE:		Lead's Initials		Manager'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: **03**
Effective Date: **12/11/14** 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												
	Results -												

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

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



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

Recovery												
x/√												
Pots Clean												
x/√												
Circ Loops												
>40gpm												
MgO Feed												
gpm												
ML Feed												
20-35gpm												
Initials												

DATE:		Lead's Initials		Manager'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: 0							
Effective Date: 12/11/14				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												
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DATE:		Lead's Initials		Manager'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: 04			
	Effective Date: 12/11/14												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:					Lead's Initials		Manager'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: **03**

Effective Date: **12/11/14**

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
Dryer Salt Temp	37.9											
	37.2											
	36.4											
	35.7											
	35.0											
	34.3											
	33.6											
	32.8											
	32.1											
	Reading -											

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
Cooler Salt Temp	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 -											

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

Initials												
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DATE:		Lead's Initials		Manager'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: **03**
Effective Date: **12/11/14** 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			
	OFLOADING -			OFLOADING -			
		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			
	OFLOADING -			OFLOADING -			
		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: _____ / _____ / _____	Lead's Initials		Manager's Initials		QA's Initials	
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	GILES CHEMICAL ~ PREMIER MAGNESIA		
	Lot Production Record		
	Title: Process Check Log	Number: P15-FM-100-055	
	Owner: Jason Bumgarner	Revision: 0	
	Effective Date: 07/21/15	Page: 1 of 1	

Day Shift	Crystal Production			Environmental		
		07:00	13:00		07:00	13:00
	Gauges (✕/✓)			Dust Collector (psi)		
	Dehumidifier (✕/✓)			Scrubber 1 - (in H2O)		
	Chiller (°F)			Scrubber 2 - (in H2O)		
	Salt Condition					
	Recovery and Waste Water			Other		
		07:00	13:00		07:00	13:00
	Tank Check			Screener (greased?)		
	Drain Box			Centrifuge (wash/Check)		
	Drain Screen- Digester					
	Drain Screen - Dryer					
				Operator - _____ Time _____		

Night Shift	Crystal Production			Environmental		
		19:00	1:00		19:00	1:00
	Gauges (✕/✓)			Dust Collector (psi)		
	Dehumidifier (✕/✓)			Scrubber 1 - (in H2O)		
	Chiller (°F)			Scrubber 2 - (in H2O)		
	Salt Condition					
	Recovery and Waste Water			Other		
		19:00	1:00		19:00	1:00
	Tank Check			Screener (greased?)		
	Drain Box			Centrifuge (wash/Check)		
	Drain Screen- Digester					
	Drain Screen - Dryer					
				Operator - _____ Time _____		

DATE: _____ / _____ / _____	Lead's Initials		Manager's Initials		

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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: **01**Effective Date: **09/23/2015**Page: **1 of 1****Date:**

From: _____ at 7:00am

To: _____ at 6:30am

Time	Dryer Temp	Cooler Temp	Time	Dryer Temp	Cooler Temp
7:00			19:00		
7:30			19:30		
8:00			20:00		
8:30			20:30		
9:00			21:00		
9:30			21:30		
10:00			22:00		
10:30			22:30		
11:00			23:00		
11:30			23:30		
12:00			0:00		
12:30			0:30		
13:00			1:00		
13:30			1:30		
14:00			2:00		
14:30			2:30		
15:00			3:00		
15:30			3:30		
16:00			4:00		
16:30			4:30		
17:00			5:00		
17:30			5:30		
18:00			6:00		
18:30			6:30		

Manager Signature: _____

Date: _____

Quality Signature: _____

Date: _____

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