

	GILES CHEMICAL ~ PREMIER MAGNESIA Lot Production Record											
	Title: Crystallizer Temperatures				Number: ?							
	Owner: Jason Bumgarner				Revision: 01							
Effective Date: 06-01-13				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
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1 Crystallizer Temp

32.88														
32.16														
31.44														
30.72														
30.00														
29.28														
28.56														
27.84														
27.12														
Results-	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>													

2 Crystallizer Temp

32.88														
32.16														
31.44														
30.72														
30.00														
29.28														
28.56														
27.84														
27.12														
Results-	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>													

3 Crystallizer Temp

32.88														
32.16														
31.44														
30.72														
30.00														
29.28														
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4 Crystallizer Temp

32.88														
32.16														
31.44														
30.72														
30.00														
29.28														
28.56														
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Time	Action taken when out of limits	Time	Action taken when out of limits
__:__		__:__	
__:__		__:__	
__:__		__:__	

Solids 130-160												
Fine Salt on/off												
Initials												

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



Title: Digester Specific Gravity

Number: ?

Owner: Jason Bumgarner

Revision: 01

Effective Date: 06-01-13

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 -												

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

	8:00	10:00	12:00	14:00	16:00	18:00	20:00	22:00	0:00	2:00	4:00	6:00	
#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: ?

Owner: Jason Bumgarner

Revision: 01

Effective Date: 06-01-13

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: Dryer Salt Temp	Number: ?	
	Owner: Jason Bumgarner	Revision: 01	
Effective Date: 06-01-13		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 -												

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00	
2000-lb Weight Check	2030												
	2024												
	2017												
	2011												
	2004												
	1997												
	1991												
	1984												
	1977												
	Results -												

	7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00	
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>
1:--		1:--	
1:--		1:--	
1:--		1:--	

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: Dryer Salt Temp	Number: ?	
	Owner: Jason Bumgarner	Revision: 01	
	Effective Date: 06-01-13	Page: 1 of 1	

Date and Shift ____/____/____ DAYS		LO	SO	MH	AO-1	AO-2
SCR Code	Number of Bags produced	Product ID	Customer		Screened yes / no	O - M - MO - F Overs/Middle/No Fines/Fines
Total Fines			Weight of each TSF -			
Total RePack Sacks Ran			CW	RP	RPS	RPM
						RPO
Production Goal			Total Tons Produced		Liquid Loads	

	8:00	10:00	12:00	14:00	16:00	18:00
Dust Collector						
>25						
Dehumidifier						
x/✓						
Guage Check						
x/✓						
Product						
Type						
Rate Check						
Total Tons						
Initials						

Label Control	Beginning of Shift	Beginning of shift	Produced	End of Shift	Waste	+ / -
	1					
	2					
	3					
	4					
	6					

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: Dryer Salt Temp	Number: ?	
	Owner: Jason Bumgarner	Revision: 01	
	Effective Date: 06-01-13	Page: 1 of 1	

Date and Shift ____/____/____ NIGHTS		LO	SO	MH	AO-1	AO-2
SCR Code	Number of Bags produced	Product ID	Customer		Screened yes / no	O - M - MO - F Overs/Middle/No Fines/Fines
Total Fines			Weight of each TSF -			
Total RePack Sacks Ran			CW	RP	RPS	RPM
						RPO
Production Goal			Total Tons Produced		Liquid Loads	

	20:00	22:00	0:00	2:00	4:00	6:00	
Dust Collector							
>25							
Dehumidifier							
x/✓							
Guage Check							
x/✓							
Product							
Type							
Rate Check							
Total Tons							
Initials							

Label Control	Beginning of Shift	Beginning of shift	Produced	End of Shift	Waste	+ / -
	1					
	2					
	3					
	4					
	6					

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: Material Handler Log Number: ?
Owner: Jason Bumgarner Revision: 01
Effective Date: 06-01-13 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			
		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			
		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	