

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 Numb	er	
DAY			NIGHT	Γ_
Name	Initials		Name	Initial
		Lead Operator		
		Process Operator		
	·	Material Handler		
		Warehouse		<u> </u>
		Salt Operator		
		Salt Operator II		
	Comple	ted paper work for lot	record	
		✓	or X	
Daily Production	on Report (	Day )		
Pallet co	ount - Worl	Sheet		
Daily Production	Report ( N	Night)		
Pallet co	ount - Worl	Sheet		
	SCR Sheet	as (All)		
		SPC Charts		
	Digester p	oH Log		
Digester Spe	ecific Gravi	ty Log		
Process Spe	ecific Gravi			
•	er Tempatu	· · ·		
•	Temperatu			
Dryer/Cooler	-			
<b>,</b>	r	Process Upkeep Lo	98	
Pr	ocess Chec		50	
	erial handle			
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	g ( If applic g ( If applic			
WigO Lo	g ( 11 appin	Quality Document	<u> </u>	
Do	ilu Dragga	•	5	
	ily Process			
Daily SCR Quality Audi	•	• •		
	A (Weekly			
Daily Affirm	iation Lab i	Xesuits		
☐ Upon review of this batch	record, initia	tion of a CAPA, Deviation, I	Non-Conformance, or O	OS was noted.
	#(s)			
Production Signature		Initials	Date	
i i o du cu o ii o i gii au u i c			Duic	
Quality Signature		Initials	Date	

Controlled Document



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 a	nd Shift	_	LO	PO	MH	WO	SO	SO-II	Othe	r
	/	/		DAYS								
S	Custon	ner	Pr	oduct Type	CO#		ount luced	SO	CR		reened Гуре	
Super Sacks												
ıper												
S												
То	otal RePack		<u> </u>	CW	RP	Ri	PS	RF	PM	ì	RPO	
	Produced											
Т	otal Fines			Weight of each TSF -								
	Custon	ner	Pr	oduct Type	CO#	SC	CR		ount uced		reened Γype	
ags	Lo	ot# of eac	ch Film roi	ll Used	Start Count	End (	Count	Film	Used	V	Vaste	
ted b			1					A			1	
-prin	Custon	ner	Pr	oduct Type	CO#	SC	CR		ount		reened Гуре	
ı Pre					G. G.	F 1.		F:1	**			
s with	<i>L</i> a	ot# of eac	ch Film roi	li Used	Start Count	Ena	Count	Film	Usea	V	Vaste	
Customers with Pre-printed bags	Custon	ner	Pr	oduct Type	CO#	SC	CR		ount	1	reened Гуре	
Cus												
	La	ot# of eac	ch Film roi	ll Used	Start Count	End (	Count	Film	Used	V	Vaste	
		8	3:00	10:00	12:00	14	:00	16	:00	18	:00	
To	tal Tons @											
SI	hift Rate											
	Product	ion Goa	l		Total Tons Produced			Liq Lo	uid ads			
	Salt	# of I	Hoppers		list of all							
	Re-melt	# of 1	Dust SS		barcodes re-melted							
	Log	# with	No Tag		during shift							
N	Manager's Initials		Q <i>I</i> Init		Any Issues rea					o be addr n Report		



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 a	nd Shift		LO	PO	MH	WO	SO	SO-II	Othe	r
	/	/		NIGHTS								
S	Custom	ner	Pro	oduct Type	CO#		ount luced	SC	CR		reened Type	
Super Sacks												
ıper												
Su												
То	otal RePack			CW	RP	R	PS	RF	PM	Ì	RPO	
]	Produced											
Т	otal Fines			Weight of each TSF -								
	Custon	ner	Pro	oduct Type	CO#	SC	CR	Am Prod	ount	1	reened Гуре	
ags	La	pt# of eac	h Film rol	l Used	Start Count	End (	Count	Film	Used	V	Vaste	
ed b												
print	Custom	ner	Pro	oduct Type	CO#	SC	CR	Am Prod	ount uced	1	reened Гуре	
Pre-												
with	La	ot# of eac	ch Film rol	l Used	Start Count	End (	Count	Film	Used	V	Vaste	
Customers with Pre-printed bags	Custon	ner	Pro	oduct Type	CO#	SO	CR	Am Prod	ount	1	reened Гуре	
Cust											71	
	La	ot# of eac	h Film rol	l Used	Start Count	End (	Count	Film	Used	V	Vaste	
		20	0:00	22:00	0:00	2:	00	4:	00	6:	00	
	tal Tons @											
SI	hift Rate				Total Tons			Liq	mid			
	Product	ion Goal			Produced			Los	-			
	Salt	# of I	Hoppers		list of all							
	Re-melt	# of I	Oust SS		barcodes re-melted							
	Log	# with	No Tag		during shift							
N	Manager's Initials		Q <i>A</i> Initi		Any Issues res	_				o be addr on Report		



## 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



	1.410	8:00	10:00	12:00	14:00	16:00	18:00	20:00	22:00	0:00	2:00	4:00	6:00
vity	1 404												
Grav													
#1 Specific Gravity	1.385												
peci	1.378												
1. S	1.366												
#	1.359												
Re	esults -												
y													
#2 Specific Gravity	1 398												
5	1.391												
cifi	1 378												
Spe	1.372												
#2	1.359												
Re	esults -												
	1 410												
#3 Specific Gravity	1.404		. — — —										
Gra	1 391												
ific	1.385												
bec	1.378 1.372												
#3 8	1.366 1.359												
_													
	esults -				211							211	
Time ·		Action	taken w	hen out o	of limits		Time .		Action	taken wh	ien out o	f limits	
-:							<del>·</del>						
_: <b>-</b>							· _:						
Day H	opper												
	l - ×/√												
ML Sp	7-1.32												
Mud T	emp												
Mud S	0-80C												
1.38	8-1.41												
Brine S	Sp.Gr. 7-1.40												
Initi													
DAT					I	Productio	n's Initial	S		Ç	A's Initia	ls	<u> </u>



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



	6.9	8:00	10:00	12:00	14:00	16:00	18:00	20:00	22:00	0:00	2:00	4:00	6:00
	6.1												
- 1st Digester pH	5.3 4.6												
ster	3.8 3.0												
)ige	2.3 1.5												
st D	0.7												
- 1	Probe-												
#1													
	Paper -												
	6.9 6.1												
H	5.3												
er p	4.6 3.8												
gest	3.0 2.3												
Dig	1.5												
1st	0.7												
#2 - 1st Digester pH	Probe-												
"-	Paper -												
	6.9												
	6.1 5.3												
E pE	4.6												
ste	3.8 3.0												
)i ge	2.3 1.5												
#3 - 1st Digester pH	0.7		•										
3 - 1	Probe-												
#	Paper -												
<i>a</i> :	1 upor						/D'			, ,			
Time ·		Action	taken wh	en out oj	limits		Time .		Action t	aken wn	en out of	umits	
-:-							· -·-						
							:- 						
<u>-</u>	******												
Reco	O/P												
Pots	Clean												
Cina	0/P												
Circ	Loops >40gpm												
MgO	Feed												
	gpm												
ML I	Feed 0-35gpm												
	itials												
	-				-	, .		. [		_			
l DA	ATE:				Pr	oduction	a's Initia	ls		Q.	A's Initia	ls	



Lot Production Record

Title: Process Specific Gravity Number: P12-FM-100-052
Owner: Jason Bumgarner Revision: 01

Owner: Jason Bumgarner Revision: 01
Effective Date: 07/07/2016 Page: 1 of 1



	1.410	8:00	10:00	12:00	14:00	16:00	18:00	20:00	22:00	0:00	2:00	4:00	6:00
×	1.404												
ensit	1 201												
Mud Density	1.385 1.378												
Mı	1.372 1.366												
	1.359		<u> </u>				<u> </u>				<u> </u>		
F	Results -												
	1.410 1.404												
nsity	1 391												
Brine Density	1.385												
Brin	1.372												
	1.359		 I										
F	Results -												
nsit													_
Mother Liquor Densit	1 310												
iquo	1 290												
her L	1.270												
Mot	1.260 1.250												
F	Results -												
Time		Action	taken w	hen out o	of limits		Time		Action	taken wh	ien out oj	f limits	
_ <del>:</del>							. –:—						
_:							<del>`</del> _:						
	1												
Solids	3												
Sc	<u>4</u> 5												
	3		Check y	es or no	if all o	f the ite	ms belo	w are o	perating	correct	ily		
Fine	Salt												
City	Water												
	iller												
Ini	tials												
DA	ATE:					Productio	n's Initials			(	QA's Initial	S	

#### GILES CHEMICAL ~ PREMIER MAGNESIA Lot Production Record Number: P12-FM-100-007 Title: Crystallizer Temperatures Owner: Jason Bumgarner Revision: 05 Effective Date: 07/07/2016 Page: 1 of 1 7:00 11:00 13:00 15:00 17:00 19:00 21:00 23:00 1:00 3:00 5:00 32.16 Crystallizer 31.44 30.72 30.00 29.28 28.56 27.84 27.12 Results-32.88 32.16 2 Crystallizer 31.44 30.72 30.00 29.28 28.56 27.84 27.12 Results-32.88 32.16 Crystallizer 31.44 30.72 30.00 29.28 28.56 27.84 27.12 Results-4 Crystallizer 31.44 30.72 30.00 29.28 28.56 27.84 27.12 Results-32.88 32.16 5 Crystallizer 31.44 30.72 30.00 29.28 28.56 27.84 27.12 Results-Action taken when out of limits Action taken when out of limits Time Time **Initials** DATE: Production's Initials QA's Initials



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



				Date. 07/0				rage. I			Ш		
		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												
dı	37.2												
L C													
Te	35.7												
ılt	25.7												
Ss	24.2												
er	34.3												
Dryer Salt Temp	33.6												
			1		ī	T		ī	1	1	1	Ī	
R	eading -												
		7:00	9:00	11:00	13:00	15:00	17:00	19:00	21:00	23:00	1:00	3:00	5:00
	27.0			11.00			17.00	19.00	21.00	23.00	1.00	3.00	3.00
р	27.9												
Cooler Salt Temp	21.2												
Te	26.4												
r]t	25.7												
S	25.0												
er	24.3												
	23.6												_
ŭ													
	22.1												
R	eading -												
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~	2030												
2000-lb Weight Check	2024												
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ght Check	50.51												
]	50.35												
ej.	50.18												-
50-lb Wei	50.01												_
유	49.85												
50													
	49.51		_				_						
I	Results -												
Time		Actio	n taken v	when out c	of limits		Time		Action	taken wl	hen out o	f limits	
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Inı	tials												
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D P	ATE:					Production	on's Initia	S		I (	QA's Initia	us	



**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



	Mg(	O Supply			Acid Su	pply	
	#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			
ft	MgO rotary Valve check			Acid Line check			
Shį	Clean Mixing Pot			Acid at Digesters			
Day Shift	Air C	ompressor			Boiler Cl	necks	
		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			
				1	C	perator	_Time
	Mg(	O Supply			Acid Su	pply	
	#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			
ift	MgO rotary Valve check			Acid Line check			
t Shift	Clean Mixing Pot			Acid at Digesters			
Night	Air C	ompressor			Boiler Cl	necks	
V		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			
					0	perator	Time
Date:	//	Operator's Initials		Production's Initials		QA's Initials	



Lot Production Record

Title: Process Check Log

Number: P12-FM-100-055

Owner: Jason Bumgarner

Effective Date: 10/29/2016

Page: 1 of 1



**Environmental / Regulatory Crystal Production** 8:00 14:00 8:00 14:00 Centrifuge ( wash/Check ) Dust Collector (psi) Dehumidifier (O/P) Scrubber 1 - (in H20) 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?)

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

Day 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 H20) 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:

Dotos	/ /	Operator's	Production's	QA's	
Date:	//	Initials	Initials	Initials	

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Lot Production Record

Page: 1 of 1

Title: Pallet Count Worksheet Number: P12-FM-100-010

Owner: Jason Bumgarner Revision: 05 Effective Date: 10/31/2016



Lot #:			Date:	/_	/	Shift:	D/N	S.O.	
Fines									
CW/Other									
:i									
Bin #		-							
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
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	<del>'</del>	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 / Ra	te Tot	al / Rate	Total / Ra		/ Rate	Total / Ra		/ Rate	
/		/	/		/	/		/	



**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	Dat	te	
------	-----	----	--

From:	at 7:00am	To:	at 6:30am
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DAY SHIFT				
Time	Dryer Temp	Cooler Temp	Initials	
7:00	Tomp	Tomp		
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				
	Dryer	Cooler		
Time	Temp	Temp	Initials	
19:00				
19:30				
20:00				
20:30				
21:00				
21:30				
22:00				
22:30				
23:00				
23:30				
0:00				
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4:30				
5:00				
5:30				
6:00				
6:30				

Production Signature:	Date:
Ouality Signature:	Date: