

680641
92B/13
Smith

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 1

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #87087 A, 4 X 8.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	Pass 1	Pass 2	Pass 3
Feed Rate, T/Hr/M	5.5	4.7	4.9
Roll Type	Nd 4:1, 71.5mm		
Belt Type	GIK		
Roll Speed, RPM	200	180	160
Splitter Position	0	6	10
Feeder Setting	59	59	59
Feed to Pass	Feed	Nonmag	Nonmag
	Pass 1	Pass 2	

Results:

Product	Weight %	Chemical Analysis	Percent Distribution	
Feed (Analyzed)				
Feed (calculated)	100.00			
Magnetics, Pass 1	7.61			
Magnetics, Pass 2	3.92			
Magnetics, Pass 3	4.39			
Nonmag, Pass 3	84.08			

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 2

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #87087 A, 4 X 8.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	Pass 1	Pass 2	Pass 3
Feed Rate, T/Hr/M	2.2	2.1	2.1
Roll Type	355 Nd 4:1, 100 mm		
Belt Type	GIK		
Roll Speed, RPM	85	75	65
Splitter Position	12	13	14
Feeder Setting	50	50	50
Feed to Pass	Feed	Nonmag	Nonmag
		Pass 1	Pass 2

Results:

Product	Weight %	Chemical Analysis	Percent Distribution		
Feed (Analyzed)					
Feed (calculated)	100.00				
Magnetics, Pass 1	14.10				
Magnetics, Pass 2	7.78				
Magnetics, Pass 3	5.37				
Nonmag, Pass 3	72.75				

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 1

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #87087 B, 8 X 18.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	Pass 1	Pass 2	Pass 3
Feed Rate, T/Hr/M	6.7	6.5	6.5
Roll Type	Nd 4:1, 71.5mm		
Belt Type	GIK		
Roll Speed, RPM	220	200	180
Splitter Position	0	0	5
Feeder Setting	61	61	61
Feed to Pass	Feed	Nonmag	Nonmag
	Pass 1	Pass 2	

Results:

Product	Weight %	Chemical Analysis		Percent Distribution	
Feed (Analyzed)					
Feed (calculated)	100.00				
Magnetics, Pass 1	4.91				
Magnetics, Pass 2	6.86				
Magnetics, Pass 3	6.06				
Nonmag, Pass 3	82.17				

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 2

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #B7087 B, 8 X 18.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	Pass 1	Pass 2	Pass 3
Feed Rate, T/Hr/M	3.8	3.3	3.2
Roll Type	Nd 4:1, 71.5mm		
Belt Type	GIK		
Roll Speed, RPM	140	160	180
Splitter Position	5	12	15
Feeder Setting	53	53	55
Feed to Pass	Feed	Nonmag Pass 1	Nonmag Pass 2

Results:

Product	Weight %	Chemical Analysis		Percent Distribution	
Feed (Analyzed)					
Feed (calculated)	100.00				
Magnetics, Pass 1	18.62				
Magnetics, Pass 2	5.54				
Magnetics, Pass 3	4.70				
Nonmag, Pass 3	71.14				

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 1

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #87087 C, 18 X 30.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	!Pass 1 !	!Pass 2 !	!Pass 3 !
Feed Rate, T/Hr/M	4.8	4.8	5.0
Roll Type	Nd 4:1, 71.5mm		
Belt Type	6IK		
Roll Speed, RPM	200	180	160
Splitter Position	8	8	11
Feeder Setting	58	58	58
Feed to Pass	!Feed	!Nonmag	!Nonmag
		!Pass 1	!Pass 2

Results:

Product	Weight %	Chemical Analysis		Percent Distribution	
Feed (Analyzed)					
Feed (calculated)	100.00				
Magnetics, Pass 1	8.74				
Magnetics, Pass 2	8.00				
Magnetics, Pass 3	6.34				
Nonmag, Pass 3	76.92				

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 2

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #87087 C, 18 X 30.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	Pass 1	Pass 2	Pass 3
Feed Rate, T/Hr/M	2.3	2.3	2.2
Roll Type	Nd 4:1, 71.5mm		
Belt Type	GIK		
Roll Speed, RPM	160	140	120
Splitter Position	12	17	17
Feeder Setting	49	49	48
Feed to Pass	Feed	Nonmag	Nonmag
	Pass 1	Pass 2	

Results:

Product	Weight %	Chemical Analysis		Percent Distribution	
Feed (Analyzed)					
Feed (calculated)	100.00				
Magnetics, Pass 1	23.03				
Magnetics, Pass 2	7.81				
Magnetics, Pass 3	3.42				
Nonmag, Pass 3	65.74				

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 1

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #87087 D, 30 X 48.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	Pass 1	Pass 2	Pass 3
Feed Rate, T/Hr/M	4.8	4.8	4.9
Roll Type	Nd 4:1, 71.5mm		
Belt Type	GIK		
Roll Speed, RPM	200	180	160
Splitter Position	8	10	13
Feeder Setting	58	58	58
Feed to Pass	Feed	Nonmag	Nonmag
	Pass 1	Pass 2	

Results:

Product	Weight %	Percent Distribution	
		Chemical Analysis	
Feed (Analyzed)			
Feed (calculated)	100.00		
Magnetics, Pass 1	9.21		
Magnetics, Pass 2	5.74		
Magnetics, Pass 3	4.08		
Nonmag, Pass 3	80.97		

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 2

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #27087 D, 30 X 48.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	Pass 1	Pass 2	Pass 3
Feed Rate, T/Hr/M	2.5	2.3	2.2
Roll Type	Nd 4:1, 71.5mm		
Belt Type	GIK		
Roll Speed, RPM	160	140	140
Splitter Position	15	18	20
Feeder Setting	48	48	48
Feed to Pass	Feed	Nonmag	Nonmag
		Pass 1	Pass 2

Results:

Product	Weight %	Chemical Analysis	Percent Distribution		
Feed (Analyzed)					
Feed (calculated)	100.00				
Magnetics, Pass 1	17.84				
Magnetics, Pass 2	5.88				
Magnetics, Pass 3	4.48				
Nonmag, Pass 3	71.80				

EXHIBIT 1

MAGNETIC SEPARATION TEST NO 1

PURPOSE: To remove the contaminates from sized wollastonite material.

SAMPLE: Approximately 1250 gr of OSNA Sample #87087 E, 48 X 0.

PROCEDURE: The sample was treated on a permanent-magnetic roll separator at the following conditions.

	Pass 1	Pass 2	Pass 3
Feed Rate, T/Hr/M	1.9	1.8	1.9
Roll Type	Nd 4:1, 71.5mm		
Belt Type	GIK		
Roll Speed, RPM	220	200	180
Splitter Position	16	17	19
Feeder Setting	56	56	56
Feed to Pass	Feed	Nonmag	Nonmag
	Pass 1	Pass 2	

Results:

Product	Weight %	Chemical Analysis		Percent Distribution	
Feed (Analyzed)					
Feed (calculated)	100.00				
Magnetics, Pass 1	9.44				
Magnetics, Pass 2	7.99				
Magnetics, Pass 3	5.63				
Nonmag, Pass 3	76.94				