

## REQUEST FOR INFORMATION

RFI NUMBER	<b>JDS-RFI-004</b>
ISSUE DATE (YY/MM/DD)	February 20, 2011
PRIORITY	H <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/>
REQ'D RESPONSE DATE	February 22, 2011

Hope Bay Mining Project

Subject:	Quality Assurance Test Results	Project Zone/Area:	Doris North
Company:	SRK Consulting (Canada) Inc.	Station/Location:	North Dam
Attention:	Lowell Wade	Discipline:	Civil

AFE:		Specification Number:	Technical Specifications Rev. "E"
Related Drawings:	SRK North Dam IFC Drawing Package	Related Documents:	Section 1.1.11 Quality Assurance
			Clause 3.

Related WBS Code		WBS Code Description:	

**Information Request/Description of Issue/Approval Required:**

Technical Specifications Revision "E" Section 1.1.11 Quality Assurance

Clause 3. "All QA or other test data, collected by the Engineer, shall be made available to the EPCM Manager and Contractor on request."

**Proposed Corrective Action:**

Please ensure that all QA or other test data (and reports) be made available to the EPCM and the Contractor in a timely manner. Should the Engineer feel it necessary to make the initial submission as a "draft" this will be understood. In most instances the "draft" test results (moisture contents, particle size distribution analysis, laboratory compaction characteristics of soil using standard effort, density of soil in place by nuclear methods, bulk density, core degree of saturation, freeze back temperature and time, etc.) should be made available within 24 hours from the time of sampling/testing.

Originator: Mark Valeriotte (JDS Energy & Mining Inc.)

February 20, 2011

Print:

Sign:

Date:

Cost Impact	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Detailed Estimate attached	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Schedule Impact	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Source for Communication	<input type="checkbox"/> Owner Change	<input checked="" type="checkbox"/> Clarification/Info
	<input type="checkbox"/> Vendor Change	<input type="checkbox"/> Designer Change
		<input type="checkbox"/> Constructor Change
		<input checked="" type="checkbox"/> Other

Note: RFI's are not authorized change documents and cannot be used to direct a change in contract requirements. If Newmont's response on the RFI has cost and/or schedule effect, it is the contractor's responsibility to immediately advise Newmont. Work undertaken without Newmont written authorization is at the contractor's risk and expense

☐ Corrective Action Approved

☐ Correct as Follows:

**Response:**

Please find attached all the QA test results to date. SRK will be implementing measures, including sample tracking in the daily report, to make sure QA results including "draft" results are provided to the EPCM Manager and Contractor in a timely manner.

Responsible Newmont Representative:

Print:

Sign:

Date:

### Moisture Content Determination and Sample Description

Date Sampled: Jan 25, 2011		Date Tested: February 13, 2011		
By: John Kurylo		By: Jeff Orr		
Hole No.	Sample No.	Depth (M)	Sample Description	M/C
<b>P1</b>	9.01	0 - 0.5m	Clay, some sand, trace silt, organics, wet, brown.	34.9%
	9.02	0.5 - 1.0m	Clay, some sand, trace silt, moist, brown.	61.7%
	9.03	1.0 - 1.5m	Sand, trace silt, damp, brown.	26.5%
	9.04	1.5 - 2.0m	Sand, trace silt, damp, brown.	25.1%
	9.05	2.0 - 3.0m	Sand, moist, brown.	26.0%
	9.06	3.0 - 4.0m	Sand, trace gravel, silt, moist, brown.	17.6%
	9.07	4.0 - 5.0m	Sand, trace gravel, silt, damp, brown.	14.4%
	9.08	5.0 - 6.0m	Sand, trace gravel, silt, damp, brown.	18.0%
	9.09	6.0 - 7.0m	Sand, trace gravel, silt, damp, brown.	18.2%
	9.10	7.0 - 8.0m	Sand, trace gravel, silt, damp, brown.	18.3%
<i>Note : Drill depths based on visual observations and driller estimations of run lengths.</i>				

### Moisture Content Determination and Sample Description

Date Sampled: Jan 25, 2011		Date Tested: February 14, 2011		
By: John Kurylo		By: Garry Dang-Vuu		
Hole No.	Sample No.	Depth (M)	Sample Description	M/C
<b>P2</b>	8.01	0 - 0.5m	Sand, trace gravel, silt, damp, brown.	10.8%
	8.02	0.5 - 1.0m	Sand & Gravel (12.5mm max) trace silt, damp, brown.	6.4%
	8.03	1.0 - 1.5m	Sand, trace gravel, damp, brown.	16.2%
	8.04	1.5 - 2.0m	Sand, trace gravel, damp, light brown.	25.0%
	8.05	2.0 - 3.0m	Sand, wet, brown.	20.5%
	8.06	3.0 - 4.0m	Sand, wet, brown.	24.1%
	8.07	4.0 - 5.0m	Sand, wet, brown.	22.4%
	8.08	5.0 - 6.0m	Sand, trace gravel, brown.	18.8%
	8.09	6.0 - 7.0m	Sand, trace gravel, silt, wet, brown.	18.1%
	8.10	7.0 - 8.0m	Sand, trace gravel, wet, brown.	18.2%
<i>Note : Drill depths based on visual observations and driller estimations of run lengths.</i>				

## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]



## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]

### Moisture Content Determination and Sample Description

Date Sampled: Jan 25, 2011		Date Tested: February 15, 2011		
By: John Kurylo		By: Garry Dang-Vuu		
Hole No.	Sample No.	Depth (M)	Sample Description	M/C
<b>P13</b>	11.01	0 - 0.5m	Sand, some clay, trace silt, brown.	15.8%
	11.02	0.5 - 1.0m	Clay, some sand, trace silt, grey.	32.5%
	11.03	1.0 - 1.5m	Clay, trace sand, silt, wet, grey.	34.5%
	11.04	1.5 - 2.0m	Clay, some sand, saturated, brown.	54.6%
	11.05	2.0 - 3.0m	Clay, some sand, trace silt, saturated, dark brown.	82.9%
	11.06	3.0 - 4.0m	Clay, some sand, trace silt, wet, mottled dark grey/ brown.	34.3%
	11.07	4.0 - 5.0m	Clay, some sand, trace silt, wet, mottled grey/ brown.	35.0%
	11.08	5.0 - 6.0m	Clay, some sand, trace silt, wet, mottled grey/ brown.	34.3%
	11.09	6.0 - 7.0m	Clay, sandy, trace silt, wet, dark grey.	35.8%
	11.10	7.0 - 8.0m	Sand, trace silt, saturated, brown.	16.1%
<i>Note : Drill depths based on visual observations and driller estimations of run lengths.</i>				

## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]



## Moisture Content Determination and Sample Description

[illegible]

## Moisture Content Determination and Sample Description

[illegible]

### Moisture Content Determination and Sample Description

Date Sampled: Jan 27, 2011		Date Tested: Feb 4, 2011		
By: John Kurylo		By: Jeff Orr		
Hole No.	Sample No.	Depth (M)	Sample Description	M/C
<b>P19</b>	21.01	0 - 0.5	Sand, trace clay, trace organics, damp, brown.	14.7%
	21.02	0.5 - 1.0	Sand, trace clay, trace organics, wet, brown.	20.3%
	21.03	1.0 - 1.5	sand, water, clay, brown/grey.	84.3%
	21.04	1.5 - 2.0	Clay, water, some sand, rock pieces, grey.	58.0%
	21.05	2.0 - 3.0	Clay, trace sand, wet, grey.	37.8%
	21.06	3.0 - 4.0	Clay, trace sand, wet, grey.	45.2%
	21.07	4.0 - 5.0	Clay, trace sand, wet, grey.	49.8%
	21.08	5.0 - 6.0	Clay, rock pieces, damp, grey.	13.5%
	21.09	6.0 - 7.0	Rock pieces, trace clay, dry, grey.	3.5%
	21.10	7.0 - 8.0	Rock pieces, dry, grey.	1.3%
<i>Note : Drill depths based on visual observations and driller estimations of run lengths.</i>				

## Moisture Content Determination and Sample Description

[illegible]

### Moisture Content Determination and Sample Description

Date Sampled: Jan 26, 2011		Date Tested: Feb 2, 2011		
By: John Kurylo		By: Jeff Orr		
Hole No.	Sample No.	Depth (M)	Sample Description	M/C
<b>P21</b>	17.01	0 - 0.5	Sand, trace clay, trace organics, damp, brown.	18.5%
	17.02	0.5 - 1.0	Sand, water, trace clay, grey.	96.4%
	17.03	1.0 - 1.5	Clay, water, trace sand, grey.	113.0%
	17.04	1.5 - 2.0	Clay, water, trace sand, grey.	71.6%
	17.05	2.0 - 3.0	Clay, water, trace sand, grey.	64.3%
	17.06	3.0 - 4.0	Clay, water, trace sand, grey.	54.5%
	17.07	4.0 - 5.0	Clay, water, trace sand, grey.	60.2%
	17.08	5.0 - 6.0	Clay, trace sand, wet, grey.	56.5%
	17.09	6.0 - 7.0	Clay, trace sand, wet, grey.	58.4%
	17.1	7.0 - 8.0	Clay, sandy, Trace pebbles, wet, grey.	39.6%
<i>Note : Drill depths based on visual observations and driller estimations of run lengths.</i>				

### Moisture Content Determination and Sample Description

Date Sampled: Jan 26, 2011		Date Tested: Feb 1, 2011		
By: John Kurylo		By: Jeff Orr		
Hole No.	Sample No.	Depth (M)	Sample Description	M/C
<b>P22</b>	16.01	0 - 0.5	Peatmoss, water, brown. Some ice and snow from start of borehole drilling expected to have been present.	1126.8%
	16.02	0.5 - 1.0	Peatmoss, water, brown	346.1%
	16.03	1.0 - 1.5	Peatmoss, water, brown	180.1%
	16.04	1.5 - 2.0	Peatmoss, water, brown	309.2%
	16.05	2.0 - 3.0	Peatmoss, water, brown	75.0%
	16.06	3.0 - 4.0	Peatmoss with clay, water, trace sand, brown-grey	55.9%
	16.07	4.0 - 5.0	Clay, Tr.sand, wet, grey	50.4%
	16.08	5.0 - 6.0	Clay, Tr.sand, wet, grey	61.1%
	16.09	6.0 - 7.0	Sand & Clay, wet, grey	30.8%
	16.10	7.0 - 8.0	Sand, trace clay, wet, grey	23.6%
	16.11	8.0 - 9.0	Sand, rock pieces, wet, grey	15.4%
	16.12	9.0 - 10.0	Sand, fine grained, damp, dry	16.1%
<i>Note : Drill depths based on visual observations and driller estimations of run lengths.</i>				

### Moisture Content Determination and Sample Description

Date Sampled: Jan 26, 2011		Date Tested: Feb 1, 2011		
By: John Kurylo		By: Jeff Orr		
Hole No.	Sample No.	Depth (M)	Sample Description	M/C
<b>P23</b>	15.01	0 - 0.5	Peatmoss, wet, brown; some ice and snow incorporated at start of drilling.	491.7%
	15.02	0.5 - 1.0	Peatmoss, wet, brown.	320.9%
	15.03	1.0 - 1.5	Peatmoss, some sand, wet, brown.	74.5%
	15.04	1.5 - 2.0	Peatmoss, trace sand, wet, brown.	173.0%
	15.05	2.0 - 3.0	Peatmoss, trace sand, wet, brown.	119.4%
	15.06	3.0 - 4.0	Peatmoss, wet, brown-black.	242.6%
	15.07	4.0 - 5.0	Peatmoss with clay, trace sand, wet, grey.	61.7%
	15.08	5.0 - 6.0	Peatmoss, clay, sand, wet, grey.	36.7%
	15.09	6.0 - 7.0	Clay, sand, trace organic's, grey.	23.4%
	15.10	7.0 - 8.0	Sand, some clay, brown.	20.6%
<i>Note : Drill depths based on visual observations and driller estimations of run lengths.</i>				

### Moisture Content Determination and Sample Description

Date Sampled: Jan 28, 2011			Date Tested: Feb 2, 2011	
By: John Kurylo			By: Jeff Orr	
Hole No.	Sample No.	Depth (M)	Sample Description	M/C
<b>P24</b>	23.01	0 - 0.5	Rock pieces, trace sand, trace organics, brown.	9.2%
	23.02	0.5 - 1.0	Rock pieces, trace sand, trace clay, brown.	8.7%
	23.03	1.0 - 1.5	Rock pieces, trace sand, trace clay, wet, brown.	16.7%
	23.04	1.5 - 2.0	Sand, water, grey	54.9%
	23.05	2.0 - 2.5	Sand, rock pieces, water, grey.	16.8%
	23.06	2.5 - 3.5	Rock pieces, moist, grey.	13.7%
	23.07	3.5 - 4.5	Rock pieces, dry, grey.	0.6%
	23.08	4.5 - 5.5	Rock pieces, dry, grey.	1.0%
	23.09	5.5 - 6.5	Rock pieces, dry, grey.	1.3%
	23.10	6.5 - 7.5	Rock pieces, dry, grey.	0.5%
<i>Note : Drill depths based on visual observations and driller estimations of run lengths.</i>				



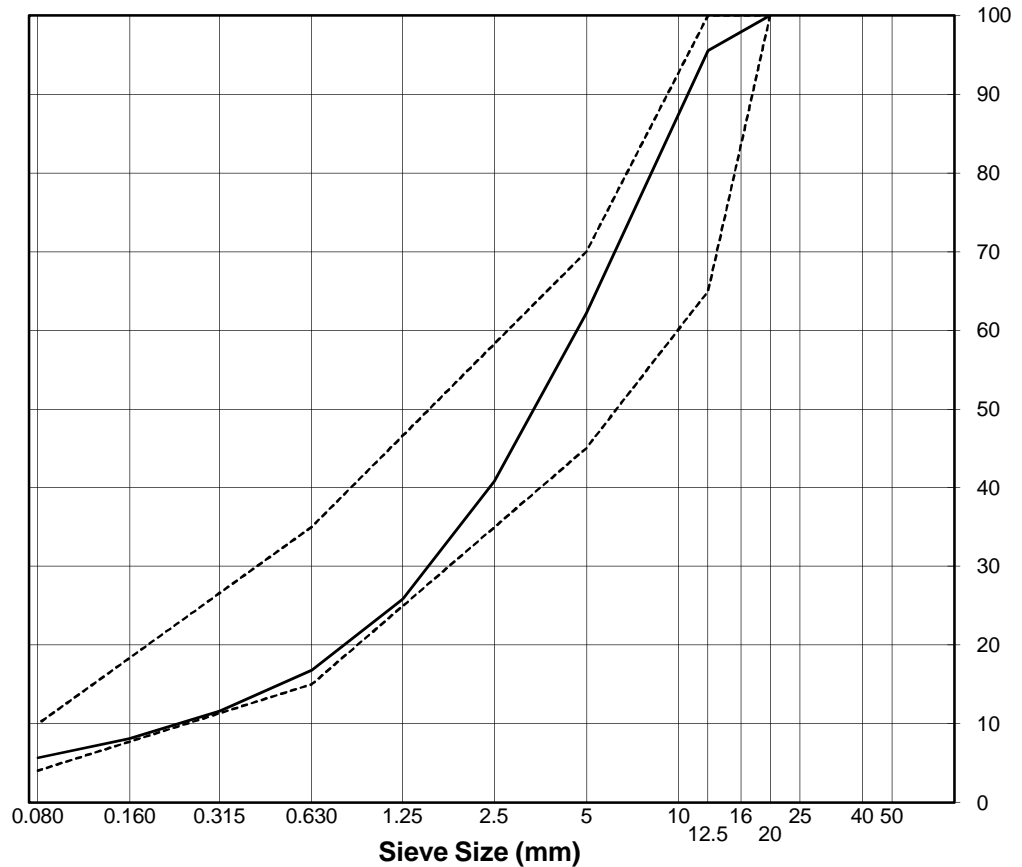
## SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.: E14101112  
Project: Doris North - North Dam  
Client: SRK Consulting  
Attention: Lowell Wade  
Email: HopeBay@SRK.com  
Description: Sand & Gravel (20mm max, crush), trace silt, grey.  
Source: Quarry 2  
Supplier: Crusher  
Sample Location: Stockpile, 35mN of Frozen Core Plant.  
Specification: SRK Consulting Specification Revision E Core Material

Sample No.: Core 01  
Date Received: February 15, 2011  
Sampled by: GDV  
Date Tested: February 16, 2011  
Tested by: GDV Office: On-site lab  
Moisture Content (as received): 2.1%  
No. Crushed Faces: Two (2) or Three (3)  
By Particle Mass: \_\_\_\_\_

Sieve Size	Percent Passing
20	100
12.5	96
5	62
2.5	41
1.25	26
0.630	17
0.315	12
0.160	8
0.080	5.6



Remarks: \_\_\_\_\_

Reviewed By: DRAFT

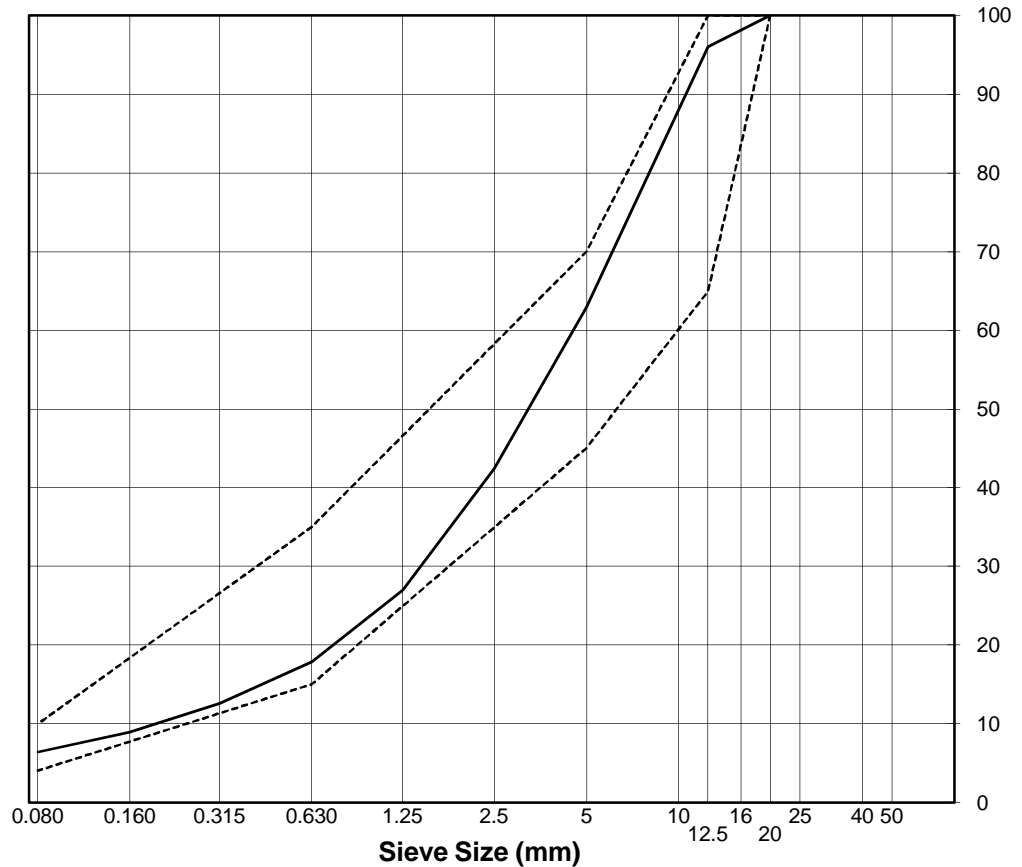
## SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.: E14101112  
Project: Doris North - North Dam  
Client: SRK Consulting  
Attention: Lowell Wade  
Email: HopeBay@SRK.com  
Description: Sand & Gravel (20mm max, crush), trace silt, grey.  
Source: Quarry 2  
Supplier: Crusher  
Sample Location: Quarry 2, BELT sample.  
Specification: SRK Consulting Specification Revision E Core Material

Sample No.: Core 02  
Date Received: February 19, 2011  
Sampled by: GDV  
Date Tested: February 19, 2011  
Tested by: GDV Office: On-site lab  
Moisture Content (as received): 1.2%  
No. Crushed Faces: Two (2) or Three (3)  
By Particle Mass: \_\_\_\_\_

Sieve Size	Percent Passing
20	100
12.5	96
5	63
2.5	42
1.25	27
0.630	18
0.315	13
0.160	9
0.080	6.4



Remarks: \_\_\_\_\_

Reviewed By: DRAFT

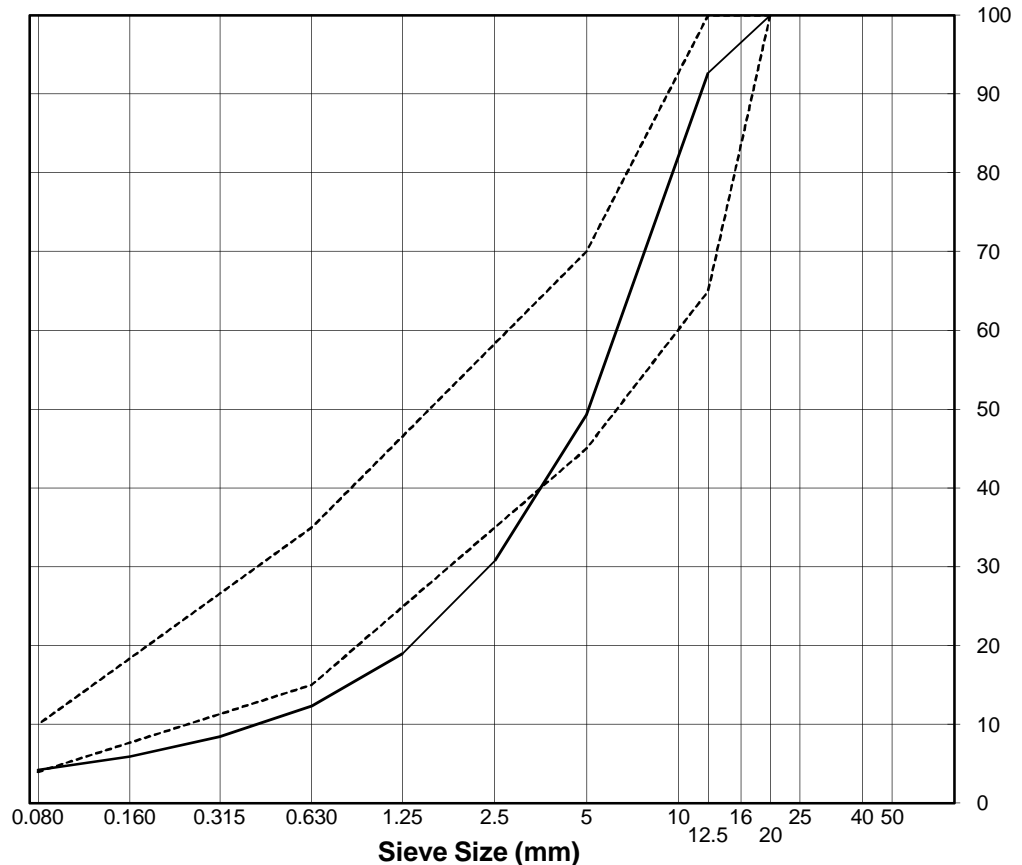
## SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.: E14101112  
Project: Doris North - North Dam  
Client: SRK Consulting  
Attention: Lowell Wade  
Email: HopeBay@SRK.com  
Description: Sand & Gravel (20mm max, crush), trace silt, grey.  
Source: Quarry 2  
Supplier: Crusher  
Sample Location: Quarry 2, BELT sample.  
Specification: SRK Consulting Specification Revision E Core Material

Sample No.: Core 03  
Date Received: February 19, 2011  
Sampled by: QC  
Date Tested: February 19, 2011  
Tested by: GDV Office: On-site lab  
Moisture Content (as received): 1.9%  
No. Crushed Faces: Two (2) or Three (3)  
By Particle Mass: \_\_\_\_\_

Sieve Size	Percent Passing
20	100
12.5	93
5	49
2.5	31
1.25	19
0.630	12
0.315	8
0.160	6
0.080	4.2



**Remarks:** This particle size analysis represents the Core blend, prior to saturation.

Sample taken by QC, time unknown.

Reviewed By: DRAFT

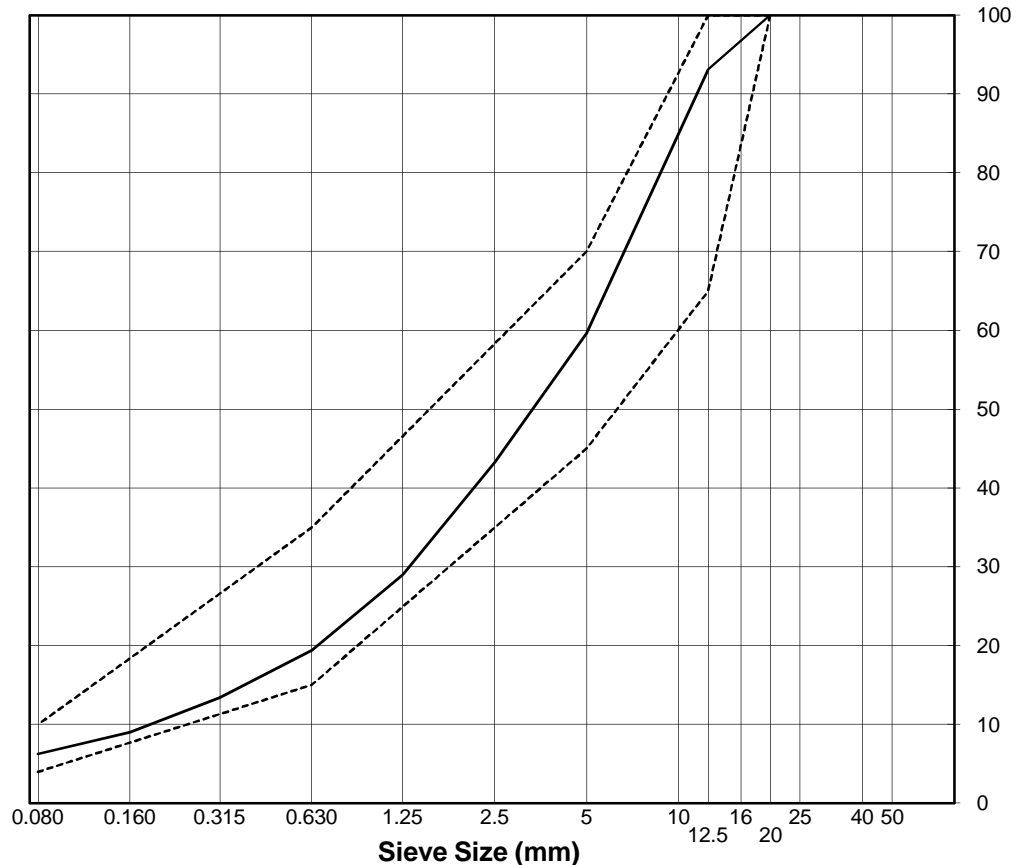
## SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.: E14101112  
Project: Doris North - North Dam  
Client: SRK Consulting  
Attention: Lowell Wade  
Email: HopeBay@SRK.com  
Description: Sand & Gravel (20mm max, crush), trace silt, grey.  
Source: Quarry 2  
Supplier: Crusher  
Sample Location: Quarry 2, BELT sample.  
Specification: SRK Consulting Specification Revision E Core Material

Sample No.: Core 04  
Date Received: February 20, 2011  
Sampled by: GDV  
Date Tested: February 20, 2011  
Tested by: GDV Office: On-site lab  
Moisture Content (as received): 1.6%  
No. Crushed Faces: Two (2) or Three (3)  
By Particle Mass: \_\_\_\_\_

Sieve Size	Percent Passing
20	100
12.5	93
5	60
2.5	43
1.25	29
0.630	19
0.315	13
0.160	9
0.080	6.2



Remarks: This particle size analysis represents the Core blend, prior to saturation.

Sample taken 0230 Hrs.

Reviewed By: DRAFT

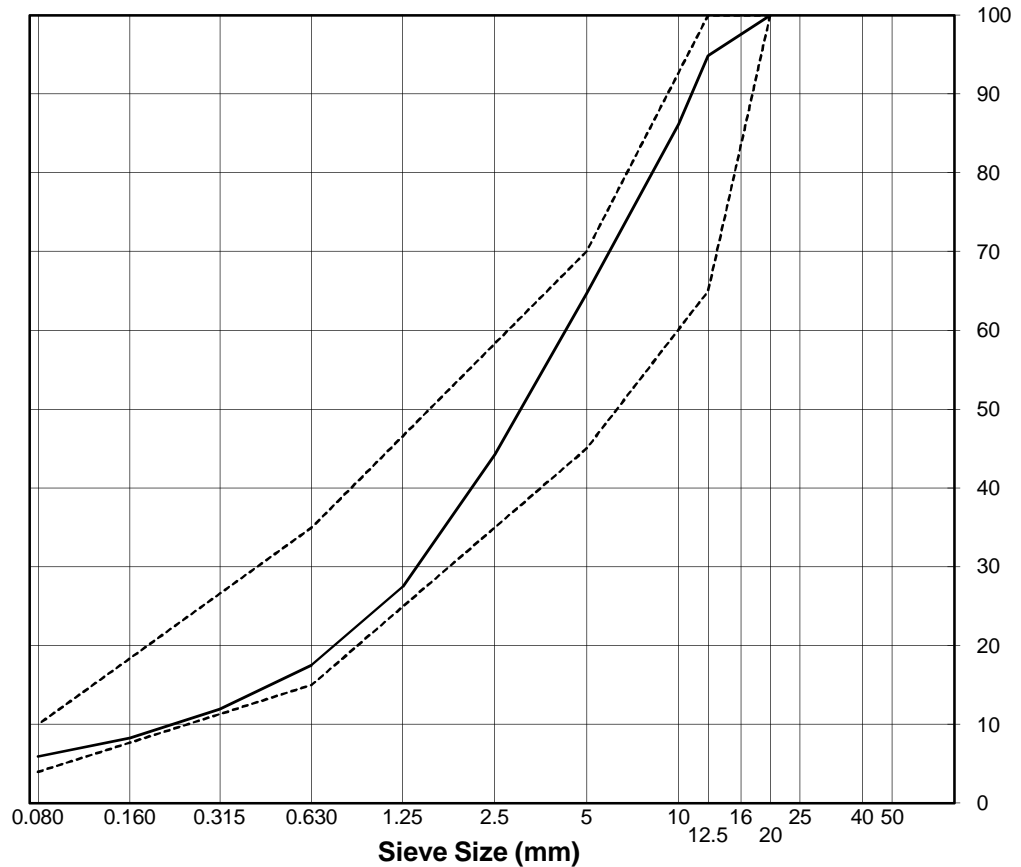
## SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.: E14101112  
Project: Doris North - North Dam  
Client: SRK Consulting  
Attention: Lowell Wade  
Email: HopeBay@SRK.com  
Description: Sand & Gravel (20mm max, crush), trace silt, grey.  
Source: Quarry 2  
Supplier: Crusher  
Sample Location: Quarry 2, BELT sample.  
Specification: SRK Consulting Specification Revision E Core Material

Sample No.: Core 05  
Date Received: February 20, 2011  
Sampled by: GDV  
Date Tested: February 20, 2011  
Tested by: GDV Office: On-site lab  
Moisture Content (as received): 1.8%  
No. Crushed Faces: Two (2) or Three (3)  
By Particle Mass: \_\_\_\_\_

Sieve Size	Percent Passing
20	100
12.5	95
10.0	86
5	65
2.5	44
1.25	27
0.630	18
0.315	12
0.160	8
0.080	5.9



**Remarks:** This particle size analysis represents the Core blend, prior to saturation.

Sample taken 0500 Hrs.

Reviewed By: DRAFT

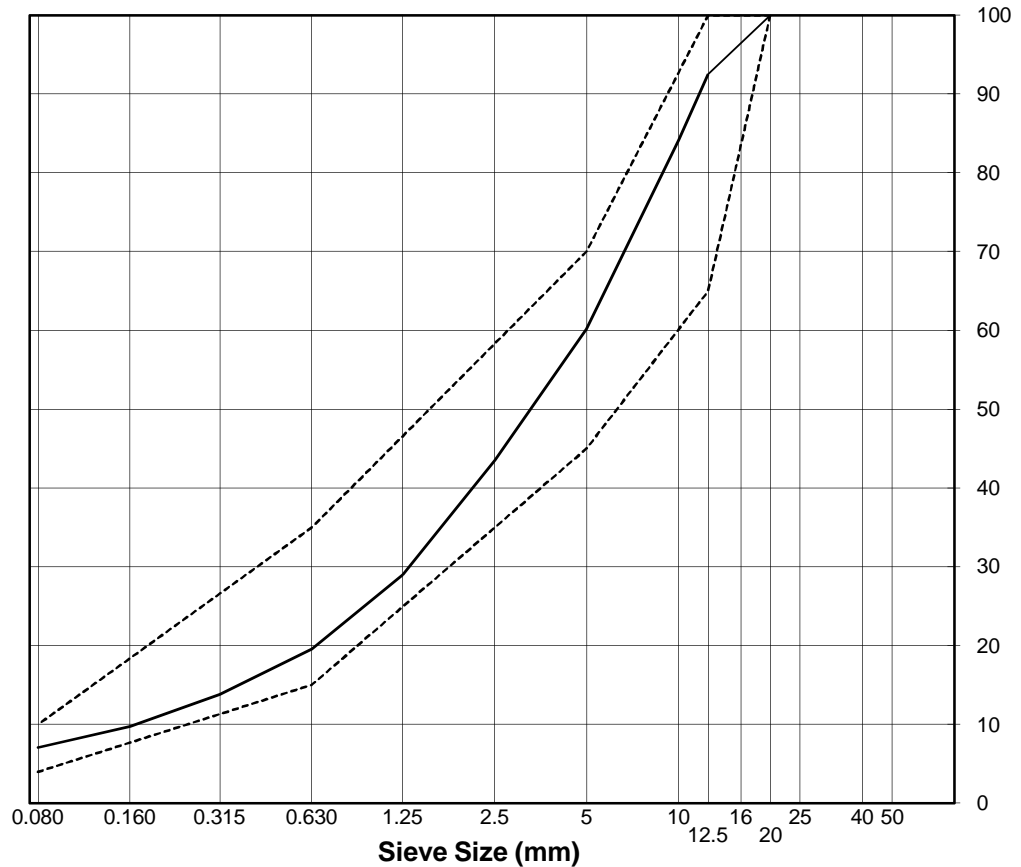
## SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.: E14101112  
Project: Doris North - North Dam  
Client: SRK Consulting  
Attention: Lowell Wade  
Email: HopeBay@SRK.com  
Description: Sand & Gravel (20mm max, crush), trace silt, grey.  
Source: Quarry 2  
Supplier: Crusher  
Sample Location: Quarry 2, BELT sample.  
Specification: SRK Consulting Specification Revision E Core Material

Sample No.: Core 06  
Date Received: February 20, 2011  
Sampled by: QC  
Date Tested: February 20, 2011  
Tested by: GDV Office: On-site lab  
Moisture Content (as received): 4.1%  
No. Crushed Faces: Two (2) or Three (3)  
By Particle Mass: \_\_\_\_\_

Sieve Size	Percent Passing
20	100
12.5	93
10.0	84
5	60
2.5	44
1.25	29
0.630	20
0.315	14
0.160	10
0.080	7.0



Remarks: This particle size analysis represents the Core blend, prior to saturation.

Sample taken 1100 Hrs.

Reviewed By: DRAFT

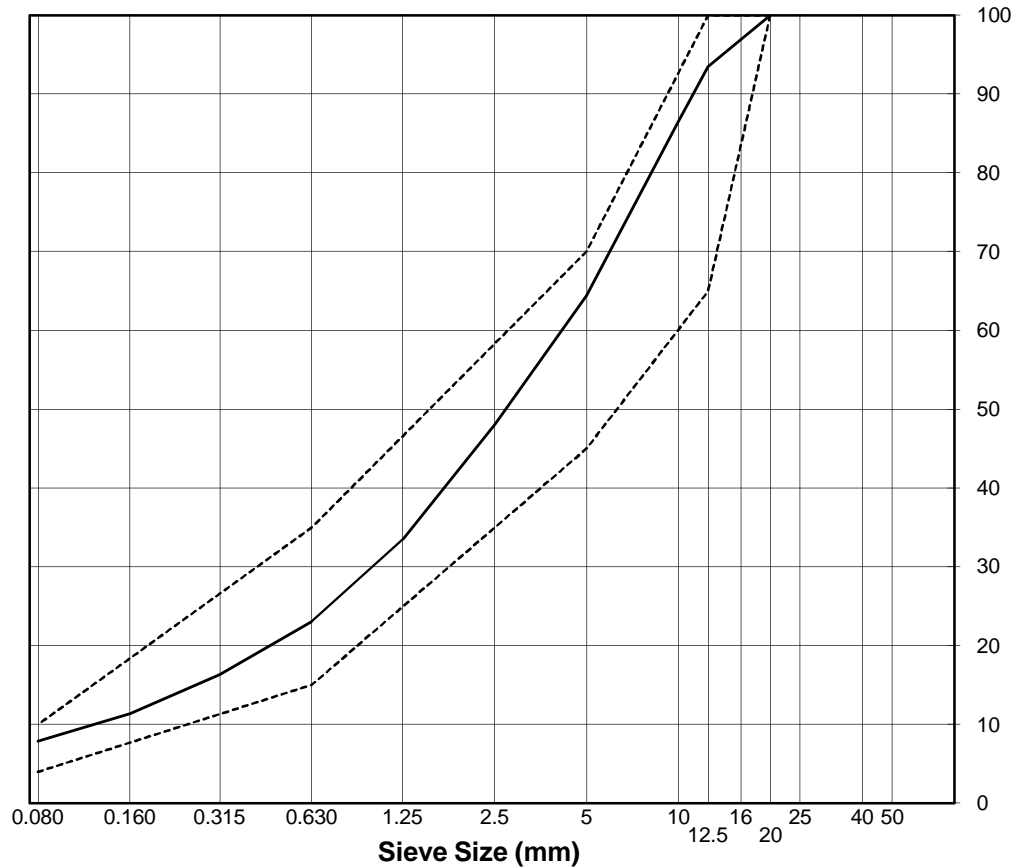
## SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.: E14101112  
Project: Doris North - North Dam  
Client: SRK Consulting  
Attention: Lowell Wade  
Email: HopeBay@SRK.com  
Description: Sand & Gravel (20mm max, crush), trace silt, grey.  
Source: Quarry 2  
Supplier: Crusher  
Sample Location: Quarry 2, BELT sample.  
Specification: SRK Consulting Specification Revision E Core Material

Sample No.: Core 07  
Date Received: February 20, 2011  
Sampled by: QC  
Date Tested: February 20, 2011  
Tested by: GDV Office: On-site lab  
Moisture Content (as received): 3.3%  
No. Crushed Faces: Two (2) or Three (3)  
By Particle Mass: \_\_\_\_\_

Sieve Size	Percent Passing
20	100
12.5	93
10.0	87
5	64
2.5	48
1.25	33
0.630	23
0.315	16
0.160	11
0.080	7.8



Remarks: This particle size analysis represents the Core blend, prior to saturation.

Sample taken 1700 Hrs.

Reviewed By: DRAFT

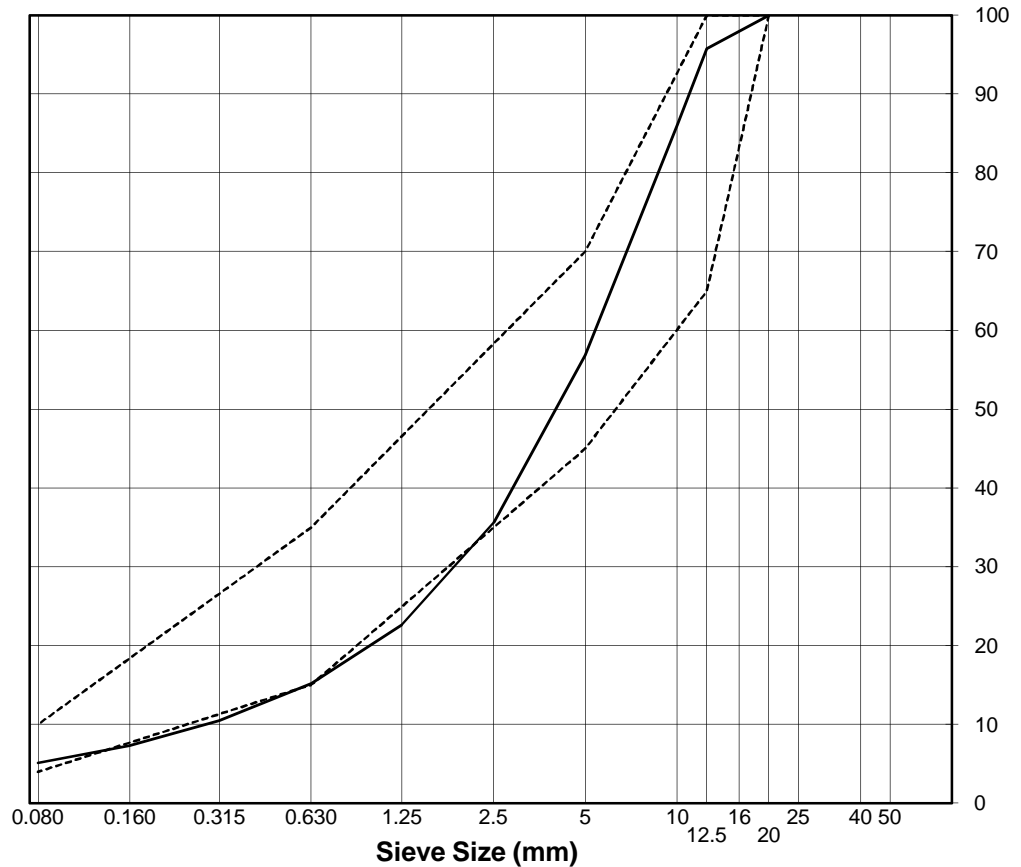
## SIEVE ANALYSIS REPORT

Washed Sieve: ASTM C136 and C117

Project No.: E14101112  
Project: Doris North - North Dam  
Client: SRK Consulting  
Attention: Lowell Wade  
Email: HopeBay@SRK.com  
Description: Sand & Gravel (20mm max, crush), trace silt, grey.  
Source: Quarry 2  
Supplier: Crusher  
Sample Location: Quarry 2, STOCKPILE sample  
Specification: SRK Consulting Specification Revision E Core Material

Sample No.: Core 08  
Date Received: February 21, 2011  
Sampled by: GDV  
Date Tested: February 21, 2011  
Tested by: GDV Office: On-site lab  
Moisture Content (as received): 2.4%  
No. Crushed Faces: Two (2) or Three (3)  
By Particle Mass: \_\_\_\_\_

Sieve Size	Percent Passing
20	100
12.5	96
10.0	86
5	57
2.5	36
1.25	23
0.630	15
0.315	10
0.160	7
0.080	5.1



Remarks: This particle size analysis represents the Core blend, prior to saturation.

Sample taken 0100 Hrs.

Reviewed By: DRAFT



## Moisture Content Determination and Sample Description

[illegible]