

Client	: Rabaska Limited Partnership	File no	: 603333-KELL / T-1050-B
	:	Sample no	: 001 to 018
Project	: Rabaska Project – Phase 2	Client ref.	:
	: Levis (Quebec)	Date	: 2005-04-19

1.0 GENERAL INFORMATION

Sample	: Rock core (DC)
Equipments	: Microscope, coloration, acid etching
Others informations	: 18 samples identified in Section 2.0-Results

2.0 RESULTS

1.0 MANDATE

The petrographic examination was carried out on 18 rock samples of the Levis site for the determination of the swelling potential due to the presence of iron sulfur (pyrite, pyrrhotite, etc.).

This was carried out in the perspective that the material would eventually be used as granular backfill of would serve as rock foundation of structure.

2.0 METHODOLOGY

Rock cores were selected from nine (9) boreholes. The 18 selected rock cores were crushed to the calibration of a 0-20 mm crushed stone.

The petrographic facies were then identified and the SPPI (Swelling Potential Petrographic Index) was determined in compliance with the Quebec Standard NQ 2560-500.

3.0 RESULTS

The results are summarized in Table 1.

Client	: Rabaska Limited Partnership	File no	: 603333-KELL / T-1050-B
	:	Sample no	: 001 to 018
Project	: Rabaska Project – Phase 2	Client ref.	:
	: Levis (Quebec)	Date	: 2005-04-19

2.0 RESULTS (continuation)
TABLE 1

Sample	Borehole	Depth	Main facies	SPPI	% eq. pyrite
1	BH-101-05	10 m	Light grey calcareous mudstone	12	0.11
2	BH-101-05	10-13 m	Greenish to grey mudstone	34	0.11
3	BH-102-05	10.5 m	Black shale	56	2.06
4	BH-102-05	12.5 m	Black shale / light grey mudstone	39	0.54
5	BH-104-05	9 m	Mudstone / black shale	35	0.05
6	BH-104-05	12 m	Grey calcareous mudstone	18	0.02
7	BH-106-05	7 m	Grey mudstone / black shale	43	0.11
8	BH-106-05	11.5 m	Black shale / calcareous sandstone	56	0.92
9	BH-107-05	8.7 m	Red and grey mudstone	44	0.03
10	BH-107-05	11-12.7 m	Grey mudstone	23	0.11
11	BH-108-05	9 m	Grey mudstone	17	0.03
12	BH-108-05	12.2 m	Red and grey mudstone	44	0.02
13	BH-109-05	8 m	Red mudstone	50	0.03
14	BH-109-05	10-13 m	Grey and red mudstone	21	0.05
15	BH-110-05	8 m	Grey mudstone	28	0.07
16	BH-110-05	12.5 m	Red mudstone	50	0.03
17	BH-103-05	11.5-11.8 m	Grey mudstone	25	0.06
18	BH-103-05	12.5-12.9 m	Grey mudstone	25	0.05

Client	: Rabaska Limited Partnership	File no	: 603333-KELL / T-1050-B
	:	Sample no	: 001 to 018
Project	: Rabaska Project – Phase 2	Client ref.	:
	: Levis (Quebec)	Date	: 2005-04-19

2.0 RESULTS (continuation)

4.0 CLASSIFICATION

To be classified as having a swelling potential, a sample needs to present a high SPPI and a high percentage of equivalent pyrite.

Non swelling

Samples 1 and 2, 5 to 7, and 9 to 18 are classified as stable and are not presenting any swelling potential due to the presence of pyrite. In all these samples, the equivalent pyrite is very low.

Potentially swelling

Samples 3 and 4 of Borehole BH-102-05, and sample 8 from Borehole BH-106-05 are classified as having a high swelling potential due to the presence of pyrite.

5.0 CONCLUSION

The rock of Borehole BH-102-05 and BH-106-05 should not be use as granular backfill or as rock foundation.

The rock of the others boreholes analyzed can be use as granular backfill or as rock foundation as long that they meet the physical requirement.


 Realized by : Terratech

Approved by :

Alain Blanchette, geol., M.A.Sc.
 Project manager
 Material Engineering

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 001
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-101-05 at 10 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Light grey calcareous mudstone	0.1	88	8.8						
Greenish to grey mudstone	0.25	12	3.0						
SPPI per fraction			11.8						
Final SPPI	: <u>12</u>								

REMARQS

- Equivalent pyrite percentage : 0.11%


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**SWELLING POTENTIAL
PETROGRAPHIC INDEX
DETERMINATION
NQ 2560-500**

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 002
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-101-05, between 10 and 13 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Greenish to grey mudstone with imbedded black shale	0.5	35	17.5						
Greenish to grey mudstone	0.25	65	16.25						
SPPI per fraction			33.75						
Final SPPI : _____			34						

REMARQS

- Equivalent pyrite percentage : 0.11%



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Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 003
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-102-05 at 10.5 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Black shale	0.75	70	52.5						
Light grey calcareous mudstone	0.1	30	3.0						
SPPI per fraction			55.5						
Final SPPI	: <u>56</u>								

REMARKS

- Equivalent pyrite percentage : 2.06%




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 Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 004
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-102-05 at 12.5 meters


Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Light grey calcareous mudstone	0.1	55	5.5						
Black shale	0.75	45	33.75						
SPPI per fraction			39.25						
Final SPPI	: _____ 39 _____								

REMARQS

- Equivalent pyrite percentage : 0.54%


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Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 005
Levis (Quebec)	Client ref. : -

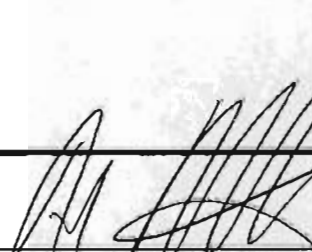

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-104-05 at 9 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Greenish to grey mudstone with imbedded black shale	0.5	40	20.0						
Greenish to grey mudstone	0.25	60	15.0						
SPPI per fraction			35.0						
Final SPPI	: <u>35</u>								

REMARQS

- Equivalent pyrite percentage : 0.05%

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Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 006
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-104-05 at 12 meters

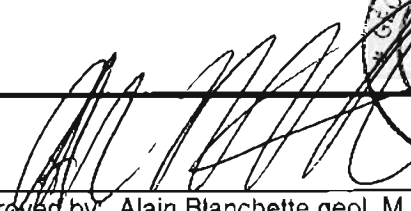
Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Brownish to red mudstone	0.5	20	10.0						
Light grey calcareous mudstone	0.1	80	8.0						
SPP1 per fraction			18.0						
Final SPPI		: <u>18</u>							

REMARKS

- Equivalent pyrite percentage : 0.02%


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 Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 007
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-106-05 at 7 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Greenish to grey mudstone	0.25	65	16.25						
Black shale	0.75	35	26.25						
SPPI per fraction			42.5						
Final SPPI	: _____ 43 _____								

REMARQS

- Equivalent pyrite percentage : 0.11%



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Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 008
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-106-05 at 11.5 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Black shale	0.75	75	56.25						
Slight calcareous sandstone	0	25	0						
SPPI per fraction			56.25						
Final SPPI : _____			56						

REMARQS

- Equivalent pyrite percentage : 0.92%


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**SWELLING POTENTIAL
PETROGRAPHIC INDEX
DETERMINATION
NQ 2560-500**

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2) Levis (Quebec)	Labo no : 009 Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-107-05 at 8.75 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Brownish to red mudstone	0.5	75	37.5						
Greenish to grey mudstone	0.25	25	6.25						
SPPI per fraction			43.75						
Final SPPI	: 44								

REMARQS

- Equivalent pyrite percentage : 0.03%



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**SWELLING POTENTIAL
 PETROGRAPHIC INDEX
 DETERMINATION
 NQ 2560-500**

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 010
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-107-05, between 11 and 12.75 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Greenish to grey mudstone	0.25	85	21.25						
Light grey calcareous mudstone	0.1	15	1.5						
SPPI per fraction			22.75						
Final SPPI	: 23								

REMARQS

- Equivalent pyrite percentage : 0.13%



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Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 011
Levis (Quebec)	Client ref. : -

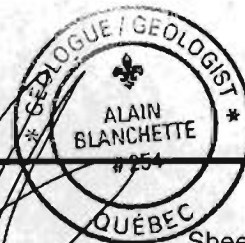
Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-108-05 at 9 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Greenish to grey mudstone	0.25	45	11.25						
Light grey calcareous mudstone	0.1	55	5.5						
SPPI per fraction			16.75						
Final SPPI : _____			17						

REMARQS

- Equivalent pyrite percentage : 0.03%


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 Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 012
Levis (Quebec)	Client ref. : -

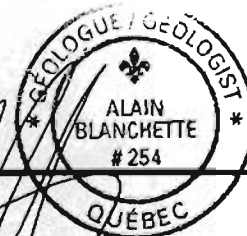
Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-108-05 at 12.25 meters


Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Brownish to red mudstone	0.5	75	37.5						
Greenish to grey mudstone	0.25	25	6.25						
SPPI per fraction			43.75						
Final SPPI		: 44							

REMARQS

- Equivalent pyrite percentage : 0.02%


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**SWELLING POTENTIAL
 PETROGRAPHIC INDEX
 DETERMINATION
 NQ 2560-500**

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 013
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-109-05 at 8 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Brownish to red mudstone	0.5	100	50.0						
SPPI per fraction			50.0						
Final SPPI : _____			50						

REMARQS

- Equivalent pyrite percentage : 0.03%



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Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 014
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-109-05, between 10 and 13 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Greenish to grey mudstone	0.25	25	6.25						
Brownish to red mudstone	0.5	30	15.0						
Slight calcareous sandstone	0	45	0						
SPPI per fraction			21.25						
Final SPPI : _____			21						

REMARQS

- Equivalent pyrite percentage : 0.05%


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Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 015
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-110-05, at 8 meters

Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Brownish to red mudstone	0.5	20	10.0						
Greenish to grey mudstone	0.25	70	17.5						
Slight calcareous sandstone	0	10	0						
SPPI per fraction			27.5						
Final SPPI		: <u>28</u>							

REMARQS

- Equivalent pyrite percentage : 0.07%


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 Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 016
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-110-05 at 12.5 meters


Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Brownish to red mudstone	0.5	100	50.0						
SPPI per fraction			50.0						
Final SPPI : _____									

REMARQS

- Equivalent pyrite percentage : 0.03%


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 Sheet 1 of 1

Client : Rabaska Limited Partnership	Date : 2005/04/01
	File : 603333-KELL
Project : Rabaska Project (Phase 2)	Labo no : 017
Levis (Quebec)	Client ref. : -

Sample : Core drill
Source : Rabaska Project: West Option Site
Sampling by : Terratech
Localisation : Borehole BH-103-05, between 11.52 and 11.82 meters

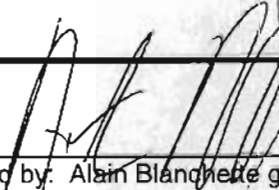
Weight used					
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g
Passing	mm	Retained	mm	Weight	g

Results									
Petrographic facies	PI	retained 100 %	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Greenish to grey mudstone	0.25	100	25.0						
SPPI per fraction			25.0						
Final SPPI : _____			25						

REMARQS

- Equivalent pyrite percentage : 0.06%


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Sheet 1 of 1

Client	: Rabaska Limited Partnership	File no	: T-1050-A (603333-RABA)
	:	Sample no	: W-002-04 (SS-4), W-005-04 (DC-5)
	:		W-006-04 (DC-3)
Project	: Rabaska Project (Phase 1)	Lab. no	: 013, 014, 015
	: Levis / Beaumont, Quebec	Date	: 3 March 2005

1.0 GENERAL INFORMATION

Samples	: Split spoon (SS) and core drilled (DC)
Equipments	: Microscope, coloration, acid etching
Others informations	: Lab. no 013: Split spoon : W-002-04 (SS-4) from 2.29 to 2.69 m
	: Lab. no 014: Core drilled : W-005-04 (DC-5) from 3.02 to 3.81 m
	: Lab. no 015: Core drilled : W-006-04 (DC-3) from 0.99 to 1.73 m

2.0 RESULTS

1.0 MANDATE

The petrographic examination was carried out on 3 rock samples of the West Option Site for the determination of the swelling potential due to the presence of pyrite, in the perspective that the materials would eventually be used as granular backfill or would serve as rock foundation of structures.

2.0 METHODOLOGY

Megascopic examination was performed on the 3 samples. The petrographic facies were identified and the SPPI values (Swelling Potential Petrographic Index) were determined in compliance to NQ 2560-500 standard.

3.0 RESULTS

3.1 Sample W-002-04 (SS-4) from 2.29 to 2.69 m

This is a split spoon sample. The material consists of a dark grey or **black shale** (slightly carbonated). The computed SPPI value is 50, and the equivalent pyrite percentage is 2.6%.

Consequently, the tested material is classified as having an average to high swelling potential due to the presence of pyrite.

3.2 Sample W-005-04 (DC-5) from 3.02 to 3.81 m

The tested sample is a rock core. The rock was identified as a **red shale** with thin laminations of grey or greenish shale. The computed SPPI value is 50, and the equivalent pyrite percentage is only 0.03%.

Due to its low percentage of pyrite, the tested material was classified as stable and not presenting any swelling potential due to the presence of pyrite.

Client	: Rabaska Limited Partnership	File no	: T-1050-A (603333-RABA)
	:	Sample no	: W-002-04 (SS-4), W-005-04 (DC-5)
	:		W-006-04 (DC-3)
Project	: Rabaska Project (Phase 1)	Lab. no	: 013, 014, 015
	: Levis / Beaumont, Quebec	Date	: 3 March 2005

2.0 RESULTS (cont'd)

3.3 Sample W-006-04 (DC-3) from 0.99 to 1.73 m

The tested sample is a rock core. The rock was identified as a *grey and red shale* with surficial traces of oxidation. The computed SPPI value is 25, and the equivalent pyrite percentage is only 0.08%.

Due to its low percentage of pyrite, this material was classified as stable and not presenting any swelling potential due to the presence of pyrite.


4.0 CONCLUSION

Relatively high SPPI values were obtained on all three tested samples, due to the high content in clay mineral.

However, only the *black shale* (W-002-04) has a high equivalent pyrite percentage, and consequently was found to have an average to high swelling potential.

The *red shale* (W-005-04) and *grey and red shale* (W-006-04) do not contain enough pyrite to cause any swelling, and are thus classified as stable.



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**SWELLING POTENTIAL
 PETROGRAPHIC INDEX
 DETERMINATION
 NQ 2560-500**

Client : Rabaska Limited Partnership	Date : 2 November 2004
	File : T-1050-A (603333-RABA)
Project : Rabaska Project (Phase 1) Levis / Beaumont, Quebec	Sample : W-002-04 (SS-4) 2.29 – 2.69 m
	Lab. no : 013

Sample : Split spoon
Source : Rabaska Project : West Option Site
Sampled by : Terratech Date: 22 and 23 September 2004
Location : Borehole W-002-04

Weight used					
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G

Results									
Petrographic facies	PI	retained 10 mm	SPPI	retained 5 mm	SPPI	retained 2.5 mm	SPPI	retained mm	SPPI
Black clayey shale	0.5	100	50.0	100	50.0	100	50.0		
SPPI per fraction			50.0		50.0		50.0		
Final SPPI : _____									

REMARKS

- The sample breaks down following the thin laminations. This tendency increases after water immersion of the sample.
- Pyrite equivalent percentage: 2.6%



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**SWELLING POTENTIAL
 PETROGRAPHIC INDEX
 DETERMINATION
 NQ 2560-500**

Client : Rabaska Limited Partnership	Date : 2 November 2004
	File : T-1050-A (603333-RABA)
Project : Rabaska Project (Phase 1) Levis / Beaumont, Quebec	Sample : W-005 (DC-5) 3.02 – 3.81 m
	Lab. no : 014

Sample : Core drilled
Source : Rabaska Project : West Option Site
Sampled by : Terratech Date : 29 September 2004
Location : Borehole W-005-04

Weight used					
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G

Results									
Petrographic facies	PI	retained 100%	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Red clayey shale with thin green shale laminations	0.5	100	50.0						
SPPi per fraction			50.0						
Final SPPI	: 50								

REMARKS

- The sample breaks down following the thin laminations. This tendency increases after water immersion of the sample.
- Pyrite equivalent percentage: 0.03%

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**SWELLING POTENTIAL
PETROGRAPHIC INDEX
DETERMINATION
NQ 2560-500**

Client : Rabaska Limited Partnership	Date : 2 November 2004
	File : T-1050-A (603333-RABA)
Project : Rabaska Project (Phase 1) Levis / Beaumont, Quebec	Sample : W-006-04 (DC-3) 0.99 – 1.73 m Lan. No : 015

Sample : Core drilled	
Source : Rabaska Project : West Option Site	
Sampling by : Terratech	Date : 28 September 2004
Localisation : Borehole W-006-04	

Weight used					
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G
Passing	mm	Retained	mm	Weight	G

Results									
Petrographic facies	PI	retained 100%	SPPI	retained mm	SPPI	retained mm	SPPI	retained mm	SPPI
Grey and reddish clayey shale	0.25	100	25.0						
SPPI per fraction			25.0						
Final SPPI : 25									

REMARKS

- The sample breaks down following the thin laminations after water immersion.
- Pyrite equivalent percentage: 0.08%



Realized by : Terratech

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