

Personal Silica Mining CEC Hearing Submission for March 6th 2023, 7:15 pm

Janine G. Gibson

Thank you for your service on this commission and for the opportunity to speak with you about my direct experiences living and working with water in Springfield, and Hanover and with the team members of Sio Silica as a community resident. I am serving as the Secretary of Our Line in the Sand Manitoba but am speaking to you tonight from my personal perspective only, not on behalf of our group.

By way of introduction, I am a mother, grandmother and auntie and have helped nourish many children to adulthood, and garden/crops to harvest, while assisting neighbours to do the same, personally, and professionally.

I have served as an agricultural consultant across North America for thirty-years through my business Creative Health Consulting, after studying Human Ecology at the U of M and Psychology at the U of WPG. I am trained in environmental Risk Assessment as a Verification Officer, accredited by the International Organic Inspectors Association. Organic Production Standards and any resulting production plans hoping to meet the standards, must be based on the Precautionary Principle, requiring safety be proven for all inputs and processes allowed. I verify as an independent third-party auditor, that management systems are using their Standard Operating Procedures (SOPs) as described or my reports list where they are not protecting their Critical Control Points, organic or otherwise and so creating risk for organic integrity. Humans don't always do what they say they plan to do. Striving for integrity, and assisting others in the process is why I have a career. I am profoundly grateful to live on this sacred land in this blessed province.

My home and office are on our co-op forest/farm, on a gravel ridge 17 km south of Steinbach here in Hanover. My co op neighbours and myself maintain 8 wells on our 240-acre parcel, 7 20-30 ft sand points and one ~380 ft hard water well into the carbonite aquifer. I have counted 72 intensive livestock operations within a 5-mile radius of our farm. Because of this I have worked with neighbours on a committee we call the Pansy Groundwater Committee, since 2002 striving to preserve groundwater purity.

I was raised just off Supton Road North of Oakbank on a sandy ridge. My parents purchased a bankrupt broiler production facility in 1966 and turned it into a horse barn and riding arena for my family's love of horses. We had constant water issues. What appeared to be orange acid drainage in the water, ate through plumbing parts regularly. Was it pyrite in the sand reacting to oxygen? Constant maintenance of the plumbing for the house and barn and well was required to keep water running. Much water treatment was required for it to be drinking quality for us and our livestock. Still our water glasses and trough bottoms would fill with orange iron precipitate.

That lived experience of the stress of maintaining the plumbing, holding the flashlight so often for my younger, then smaller brothers to squeeze down into the well, to conduct maintenance, is probably a contributing factor as to why I do not take water for granted. We chose to live very simply with walking water instead of running water, at our co-op cabins. The water here from most of our wells, also leaves orange particulate when it settles.

In my role as an Organic Verification Officer, I have reviewed water test results for potability for livestock and use in irrigation across Springfield and several of the concerned municipalities participating in these

EXHIBIT NO. H-021
 File Name: Janine Gibson
 Date: 3-6-2023
 Received by: [Signature]
 (Commission Secretary)

Hearings. I have signed confidentiality statements so I can only make general statements. I have seen a range of high arsenic levels across Springfield operations, levels near the allowable potability limits for livestock, in the yearly tests reviewed during my annual audits. Some facilities have not maintained organic certification, with water issues involved due to heavy metals. Organic livestock standards require yearly testing for quality parameters. Some areas of these municipalities show the heavy metal levels in the test results are higher than others in this same general region. An anecdotal theory based on my observations of these test results and their respective operations is that the arsenic levels appear to be connected to various amounts of heavy metal leaching rock, reacting to disturbance.

In the Spring of 2019, some colleagues in Springfield told me a commonly used hiking wilderness area just south of Vivian had changed hands and now had piles of uncovered silica, over which kids were riding their bikes. See Attachment A: Bike Tracks in Silica Pile. I was asked to assist in protecting neighbours in Vivian from the silicosis which even minute exposure to small silica particles can cause. I attended the piles in the two Vivian locations, 42053 Centreline Road and seeing no signage at all, in an area I could see had public access, I examined the areas, test wells and piles of silica closely.

I was asked to speak on CJOB with Mr. Bullen about the Proposed CanWhite Sands, now Sio Silica Mining Project. I asked Mr. Bullen directly on radio, why if they wanted to be responsible neighbours as he said, had they not erected barriers to prevent access to the potentially dangerous silica piles? Silicosis is a real thing. When handling it, preventative controls needs to be in place. He reported they had installed a gate, but it had been stolen by vandals. He stated the piles were covered but the wind had blown the tarps off.

In June 2019, I spent some time at the approaches to both properties (no signs visible anywhere) where the piles were located, and neither showed any ground disturbance for any gate posts installed or removed. Did they install a gate that hovered in the air? None of the pile ground area had any indication of any tarping structure or wind blown tarp remnants. It did not appear any spring clean up had been conducted given the debris observed, but no wind torn tarps or remnants of any kind were seen.

As there was no signage on the property which appeared freely open to the public, and as I am trained in soil and tissue sampling procedures, including maintaining chain of custody forms, I offered to collect sand samples from the silica piles in June 2020. Our hypothesis was that given our experience with wells and sand in the general area, the sand would not be as pure as CanWhite/Sio claims. Our theory was that it would likely require cleaning which results in acid drainage, to be pure enough for technical glass production. We were familiar with the damage left on Black Island for the Hollow Water First Nation.

See Attachments B- ALS Global Chain of Custody Sample Form, Attachment C- ALS Silica Test Results.

I attended 42053 Centreline Road silica piles (still with no property signage) with Mr. Dennis LeNeveu and others to collect a variety of sand samples, which we photographed during the collection process and labeled on site with chain of Custody paperwork completed for ALS Labs. The samples were sealed with tape signed with time and date and remained in my custody alone, until sent by me via UPS to ALS Global Labs in Vancouver once ALS Labs determined where the analysis would best be conducted.

See Attachments D, E, F, G -Photos of the sand samples, sampling through a fresh sand hole, sample for size grading and oolite purple share sample found on surface.

The lab test results indicated the purity results were lower than the test results published by CanWhite.

This lower purity would cause more expense environmentally and fiscally to address. The public costs would likely far outweigh any private benefits. There is no margin for risk in our drinking water. Mined areas are never successfully remediated. Mining is one of our most environmentally damaging activities which needs greater accountability.

With the best of intentions, I like all humans make mistakes, occasionally serious mistakes which I strive to immediately rectify. **The most charitable interpretation I can infer is that SIO has made serious mistakes in providing information to citizens.**

It is hubris to think such a complex proposal involving so many variables as this silica mining proposal in our drinking water, will not show us the gaps existing between theory and practise in the natural world.

Our agriculture and communities can not afford this gamble. Aquifers CAN Not BE Remediated once water quality is degraded! Corporate maleficence must be prevented.

The Sio Silica team are asking for the public trust with our drinking water. To quote Maya Angelou, "When someone shows you who they are, believe them". Actual interactions with myself as a concerned neighbour by Sio staff, have lacked respect and honest engagement. Forgiving human mistakes is different than indulging corporate greenwashing of a risky experiment with potentially devastating, irreversible consequences.

My direct experience of Sio financed ads about sharing citizen science, called spreading misinformation, of concerned neighbours asking for accountability, being called thieves and vandals, of the public media greenwashing of a dangerous corporate profit at public expense experiment, makes me wonder at the variety in world views we see around us today. I pray for compassion.

Why is it when we destroy Creation, God's creation, it is called Progress, but when one destroys what man makes it is called vandalism?

Are we ready to see we are part of Creation, part of our environment not separate from it, that what we do to our water, to our environment we do to ourselves, our children and grandchildren, in fact to all our relations?

The discoveries of quantum physics have moved us away from the oversimplification of Newtonian physics most in these Hearings were taught, where we can chop up reality and think we can see the whole by analyzing isolated parts. We now need to see the integrated whole of both our natural reality and any development proposal including long term impacts of our choices when we choose to live with integrity and responsibility. This means moving away from an extractive economy to resilient, sustainable choices.

The current Sio project proposal can not be assessed for safety with the existing gaps in the data provided. This proposal is too high risk. The Sio Silica team does not have public confidence in trusting the integrity of their theoretical models or their follow through on monitoring or capacity for remediation.

Further to that, it is a demonstration of current provincial government regulatory capture that this highly risky venture has proceeded to this level of consideration at all.

Thank you for your consideration of these concerns and for your time and attention.

Attachments A - G

Attachment A: Photo Bike Tracks in silica pile, all photos used with permission.

Attachment B: ALS LABS Silica Sample Submittal (Chain of Custody Form)

Attachment C: ALS LABS Global Sand Sample Analysis

Attachment D: Photos Sand Sampling Vivian

Attachment E: Photo Sampling through Sand Hole Vivian

Attachment F: Sand Sample for Size Grading

Attachment G: Oolite Sample from Vivian, (purple shale, showing labeling)



A



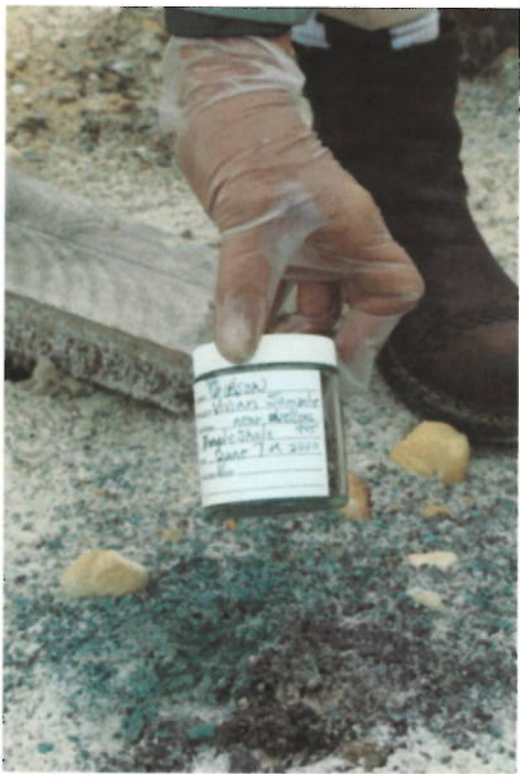
D



E



F



G

Company Name: Our Line in the Sand
Submitted by: Janine G. Gibson
Telephone: 204-434-6018
Courier/Waybill: _____
Containers: 2
Date Shipped: June 25th, 2020
PO Number: 062520

Internal Use Only

Date Received: _____
Client Code: _____
Workorder No: _____
Quote: _____
Template: _____

Standard Project: _____
Commodity: Sand, 2 samples-#4 and #7 Ore Trace Potentially Hazardous Materials
Special Instructions: Sample 4 ABA PKG 05; Sample 7 ME-MS61
Sample Type: Rock Pulp Percussion Soil Sediment Drill Core Other _____

Results to

Name: Janine G. Gibson Invoice
Email: creativehealthconsulting@gmail.com Certificate
Address: PO Box 689, Station Main QC Certificate
City: Steinbach **State:** MB Data File
Country: Canada **Zip:** R5G 1M5 Webtrieve Only

Sample Return

Pulps	Rejects
<input type="checkbox"/> Return after analysis	<input type="checkbox"/> Return after analysis
<input type="checkbox"/> Return after 90 days	<input type="checkbox"/> Return after 45 days
<input checked="" type="checkbox"/> Discard	<input checked="" type="checkbox"/> Discard
<input type="checkbox"/> Paid Storage	<input type="checkbox"/> Paid Storage

Failure to indicate pulp & reject disposition will be considered as paid storage.

Return Address: _____

Attention: _____

Copy to

Name: Dennis Leneveu Webtrieve Only
Email: Denmorley@gmail.com Certificate Data File

Copy to

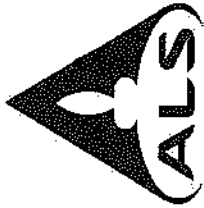
Name: _____ Webtrieve Only
Email: _____ Certificate Data File

*All shipments received are subject to inspection upon layout; all services are rendered in accordance with ALS Minerals Terms & Conditions (see the current Schedule of Services & Fees).

Authorized By:

Name: _____
Signature: _____ (Please Print)

Samples ID's		Quantity	Sample Preparation Required (Prep Code)	Analytical (Elements or Method Code)	Check here for Rush Premium Service
Start No.	Finish No.				
#4 sand		200 grams			<input type="checkbox"/> CONTACT THE LAB TO CONFIRM AVAILABILITY
#7 sand		200 grams			
Total Samples		400			



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 2103 Dollarton Hwy
 North Vancouver BC V7H 0A7
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To: OUR LINE IN THE SAND
 PO BOX 689, STATION MAIN
 STEINBACH MB R5G 1M5

Page: 1
 Total # Pages: 2 (A - E)
 Plus Appendix Pages
 Finalized Date: 17-JUL-2020
 Account: OLITSA

CERTIFICATE VA20137923

P.O. No.: 062520

This report is for 2 Sand samples submitted to our lab in Vancouver, BC, Canada on 29-JUN-2020.

The following have access to data associated with this certificate:

TANZI BELL

JANINE G. GIBSON

DENNIS LENEVEU

SAMPLE PREPARATION	
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
PUL-QC	Pulverizing QC Test
PUL-31	Pulverize up to 250g 85% <75 um
SPL-21	Split sample - riffle splitter
DISP-01	Disposal of all sample fractions

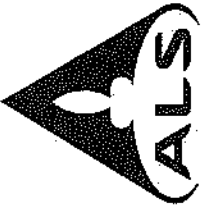
ANALYTICAL PROCEDURES		
ALS CODE	DESCRIPTION	INSTRUMENT
S-GRA06	Sulfate Sulfur-carbonate leach	WST-SEQ
C-GAS05	Inorganic Carbon (CO2)	WST-SEQ
S-GRA06a	Sulfate Sulfur (HCl leachable)	
ME-MS61	48 element four acid ICP-MS	
OA-VOL08	Basic Acid Base Accounting	
S-IR08	Total Sulphur (IR Spectroscopy)	LECO
OA-ELE07	Paste pH	
S-CAL06	Sulfide Sulfur (calculated)	LECO

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:

Saa Traxler, General Manager, North Vancouver



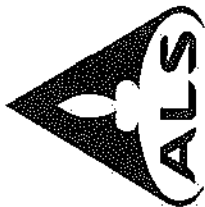
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CERTIFICATE OF ANALYSIS VA20137923

Method Analyte Units LOD	Sample Description	WEI:21 Recvd Wt. kg	0A-VOL08 MPA tCaCO3/1Kl	0A-VOL08 FLZ RAT Unity	0A-VOL08 tCaCO3/1Kt	0A-VOL08 NP tCaCO3/1Kt	0A-ELE07 pH	0A-VOL08 Ratio (N) Unity	S-IR08 S %	S-GRA06 S %	S-GRA06a S %	S-CAL06 S %	C-GAS05 C %	C-GAS05 CO2 %	ME-M561 Ag ppm	ME-M561 Al %
	#4 sand	0.88	0.6	1	0	0	8.0	0.00	0.02	<0.01	0.01	0.02	<0.05	<0.2	0.02	0.27
	#7 sand	0.92														



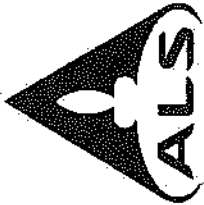
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Method Analyte Units LOD	ME-MS61 As ppm 0.2	ME-MS61 Ba ppm 10	ME-MS61 Be ppm 0.05	ME-MS61 Bi ppm 0.01	ME-MS61 Ca % 0.01	ME-MS61 Cd ppm 0.02	ME-MS61 Ce ppm 0.01	ME-MS61 Co ppm 0.1	ME-MS61 Cr ppm 1	ME-MS61 Cs ppm 0.05	ME-MS61 Cu ppm 0.2	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1
#4 sand.	0.9	10	<0.05	0.01	0.06	<0.02	5.07	0.5	5	0.11	2.0	0.47	0.64	0.05	1.8
#7 sand															



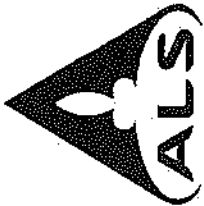
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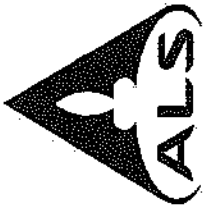
CERTIFICATE OF ANALYSIS VA20137923

Method Analyte Units LOD	ME-MS61 In ppm: 0.005	ME-MS61 K %: 0.01	ME-MS61 La ppm: 0.5	ME-MS61 Li ppm: 0.2	ME-MS61 Mg %: 0.01	ME-MS61 Mn ppm: 5	ME-MS61 Mo ppm: 0.05	ME-MS61 Na %: 0.01	ME-MS61 Nb ppm: 0.1	ME-MS61 Ni ppm: 0.2	ME-MS61 P ppm: 10	ME-MS61 Pb ppm: 0.5	ME-MS61 Rb ppm: 0.1	ME-MS61 Re ppm: 0.002	ME-MS61 S %: 0.01
#4 sand	<0.005	0.07	2.6	6.7	0.02	47	0.13	0.01	0.7	2.0	40	1.6	2.1	<0.002	0.01
#7 sand															



CERTIFICATE OF ANALYSIS VA20137923

Method Analyte Units LOD	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
Sample Description	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Ti	Ti	U	V	W	Y	Zn	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
#4 sand	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.037	0.1	1	0.1	0.1	0.1	
#7 sand	0.07	0.3	1	<0.2	5.1	<0.05	<0.05	0.82	0.037	0.02	0.037	0.5	2	0.1	2.0	3	



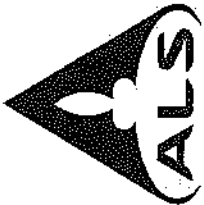
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Sample Description	Method Analyte Units LOD	
#4 sand #7 sand	ME-M661 Zr ppm 0.5	70.9



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CERTIFICATE OF ANALYSIS VA20137923

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

REEs may not be totally soluble in this method.
 ME-MS61

Applies to Method:

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
 C-GAS05 DISP-01
 OA-ELE07 OA-VOL08
 S-CAL06 S-GRA06
 SPL-21 WEI-21

ME-MS61
 PUL-QC
 S-IR08

LABORATORY ADDRESSES

LOG-22
 PUL-31
 S-GRA06a