

San Mateo Midstream, LLC

One Lincoln Centre • 5400 LBJ Freeway • Suite 1500 • Dallas, Texas 75240
Voice 972.371.5220 • Fax 972.371.5201

Matthew V. Hairford
President

February 28, 2020

BY ELECTRONIC MAIL

Jim Griswold
State of New Mexico
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Alleged Release During Boring Activities in Section 9 of Township 24 South, Range 28
East in Eddy County, New Mexico (the "Site")

Mr. Griswold:

San Mateo Midstream, LLC ("San Mateo") is in receipt of the letter from Adrienne Sandoval, dated February 26, 2020 (the "February 26 NMOCD Letter"), regarding the alleged release of boring fluids at the Site. While San Mateo reserves its rights regarding whether the alleged release constitutes a major release under OCD Rule 19.15.29 NMAC as well as with respect to the time periods in which to respond to the items set forth in the Letter, San Mateo desires to work with the State of New Mexico and its agencies to protect human health and the environment. The letter supplements the letter delivered by San Mateo on February 27, 2020 (the "February 27 San Mateo Letter").

I truly appreciate you making time in your schedule to meet with us yesterday. We felt it was a productive meeting and are grateful for the opportunity to meet together in person. We are happy to come to your offices to meet with you in person again over the coming weeks and months if you think it would be beneficial. As mentioned in our meeting yesterday, I have been out to the Site, and plan to make subsequent visits, as have other members of San Mateo's management and staff. San Mateo takes these types of situations seriously, and we look forward to continuing to cooperate with you and the other agencies of the State of New Mexico as we move forward with continued monitoring and potential remediation.

Below is the information that was requested in the February 26 OCD Letter to be provided no later than close of business today. The information requested is restated and italicized below. Per your request, San Mateo has separately submitted an initial Form C-141 through the OCD online portal.

a. MSDS for the drilling fluid and/or the components thereof;

The MSDS for the Boring Fluids was provided to the OCD on February 27, 2020 and is attached hereto as Exhibit A. The Boring Fluids consisted of: (i) 56 bags of MAX GEL (bentonite) and 2 sacks of soda ash per (ii) 160 barrels of water.

b. Detailed lab analysis of the drilling fluid;

A sample of the Boring Fluids was collected on Wednesday, February 26, 2020 and was submitted for rush lab analysis. The results of such analysis are not yet available. San Mateo will provide such results after they are received.

c. Matador's internal response plan for human contact with the drilling fluid;

San Mateo utilizes the information in the SDS as its internal response plan in responding to human contact with the Boring Fluids. Such SDS was provided to the OCD on February 27, 2020 and is attached hereto as Exhibit A.

d. Analytical results of water samples taken during and following the release;

San Mateo took initial water samples on Monday, February 24, 2020 after learning of the alleged release. San Mateo tested these water samples for the following constituents: total petroleum hydrocarbons (including diesel range organics, gasoline range organics and motor oil range organics), chlorides, volatile organics (including benzene, toluene, ethylbenzene and xylenes) and total dissolved solids. The results of these initial water samples are attached hereto as Exhibit B.

Additional water samples are currently being collected daily pursuant to a Water Quality Monitoring and Sampling Plan and are being analyzed for the following constituents (which include those items requested by the NMED Surface Water Bureau): total petroleum hydrocarbons (including diesel range organics, gasoline range organics and motor oil range organics), chlorides, volatile organics (including benzene, toluene, ethylbenzene and xylenes), total dissolved solids, total suspended solids, turbidity, pH and sulfate. The Water Quality Monitoring and Sampling Plan is attached hereto as Exhibit C

e. The lateral extent of the area affected by the release;

On February 24, 2020, Don Norton of the New Mexico Department of Game and Fish was at the Site and stated that he estimated the affected area to be approximately 230 yards within the banks of the Black River. San Mateo has no reason to dispute this estimation at this time.

f. Identification of persons, animals, and property actually or potentially affected by the release;

San Mateo does not believe that the Boring Fluids present any material threat to human health or the environment as bentonite and soda ash are naturally occurring materials that are often used in connection with water related operations, such as lining ponds, sealing gravel packs on human consumption water wells and adjusting the pH balance of well water. Fish may be impacted, however, where the turbidity of the river is increased. San Mateo has monitored the Site and the portions of the river upstream and downstream from the Site to determine whether there has been any impact on fish or other wildlife. San Mateo has not identified any dead fish or other dead or impaired wildlife during this monitoring. San Mateo intends to continue to watch for impacts to fish or other wildlife.

- g. *Confirmation that Matador has notified all jurisdictions affected or potentially affected by the release, including the date and time of notification and the person notified and his/her contact information; and*

San Mateo or its representatives notified the jurisdictions listed below regarding the alleged release on the date and approximate time as set forth below.

Date and Time of Notification	Person who Provided Notification	Person who was Notified and Jurisdiction	Type of Notification	Contact Information
2/24/20 at approximately 1:00pm MT	Sam Whitten	Gilbert Cordero (NMOCD) Don Norton (NMDGF)	Verbal Messrs. Cordero and Norton visited the Site in person and the alleged release was discussed.	gilbert.cordero@state.nm.us donald.norton@state.nm.us
2/25/20 at 9:41am MT	Natalie Gordon	Jim Griswold (NMOCD)	Verbal Ms. Gordon called Mr. Griswold but he did not answer. Ms. Gordon left a voice message.	(505) 476-3465
2/25/20 at 9:56am MT	Natalie Gordon	Mike Bratcher (NMOCD)	Verbal Ms. Gordon called Mr. Bratcher but he did not answer. Ms. Gordon left a voice message.	(505) 748-1283
2/25/20 at 9:58am MT	Natalie Gordon	Brad Billings (NMOCD)	Verbal Ms. Gordon called Mr. Billings, but he did not answer. Ms. Gordon left a voice message.	(505) 476-3482

2/25/20 at 9:58am MT	Natalie Gordon	Mike Bratcher (NMOCD)	Verbal Mr. Bratcher returned Ms. Gordon's phone call and they discussed the alleged release.	(505) 748-1283
2/25/20 at 10:23am MT	Natalie Gordon	Davena Crosley (NMED)	Verbal Ms. Gordon called Ms. Crosley to provide notification and discuss the alleged release per Mike Bratcher's direction.	(505) 915-1172
2/25/20 at 12:38pm MT	Natalie Gordon	Jim Griswold (NMOCD) Mike Bratcher (NMOCD)	Email Ms. Gordon sent an email to Messrs. Griswold and Bratcher regarding the alleged release.	jim.griswold@state.nm.us mike.bratcher@state.nm.us
2/25/20 at 12:40pm MT	Natalie Gordon	Sarah Holcomb (NMOCD) Davena Crosley (NMOCD)	Email Ms. Gordon forwarded the email sent to Jim Griswold and Mike Bratcher to Sarah Holcomb and Davena Crosley	sarah.holcomb@state.nm.us davena.crosley@state.nm.us
2/25/20 at 1:03pm MT	Matt Hairford	Sarah Holcomb	Verbal Mr. Hairford called Ms. Holcomb but she did not answer. Mr. Hairford left a voice message.	(505) 827-2798
2/25/20 at 1:30pm MT	Matt Hairford	Sarah Holcomb	Verbal Mr. Hairford called Ms. Holcomb, and they had a phone conversation regarding the alleged release.	(505) 827-2798
2/26/20 at 11:34am MT	Natalie Gordon	Justin Riggs (US Army Corps of Engineers)	Verbal Ms. Gordon received a call from Mr. Riggs, and they discussed the alleged release.	(505) 652-4574

h. Remediation Plan

San Mateo is still awaiting the lab analysis to (i) accurately determine what substance was released into the Black River (whether it is Drilling Fluids or naturally occurring river sand and silt) and (ii) understand the impact, if any, to stated water quality standards. Accurate and complete lab data is necessary before determining the most appropriate course of action that will have the least ecological impact to the river and surrounding area. In order to obtain the information necessary to formulate an appropriate response, San Mateo hereby requests an extension until March 9, 2020 to complete all laboratory analyses and site characterization activities required to develop a complete remediation plan.

Water monitoring both upstream and downstream of the Site will continue in the interim per the Water Quality Monitoring and Sampling Plan attached hereto as Exhibit C.

Please feel free to contact me at 972-371-5420 if you have any questions or would like to discuss further.

Sincerely,

San Mateo Midstream, LLC



Matthew V. Hairford
President

BSW

cc: Adrienne Sandoval, Director, Oil Conservation Division
Mike Bratcher, EMNRD
Eric Ames, EMNRD
Rebecca Roose, NMED
Shelly Lemon, NMED
Shawn Denny, NMDGF
James Meier, San Mateo Midstream, LLC
Casey Snow, San Mateo Midstream, LLC
Matt Spicer, San Mateo Midstream, LLC
Brian Willey, San Mateo Midstream, LLC
Natalie Gordon, Vertex Resource Group
Adam Rankin, Holland & Hart LLP

EXHIBIT A

MSDS FOR THE BORING FLUIDS

[Attached]

SDS no. PID1046
Version 11
Revision date 22/Sep/2016
Supersedes date 05/May/2016



A Schlumberger Company

Safety Data Sheet MAX GEL*

1. Identification

1.1 Product identifier

Product name MAX GEL*
Product code PID1046

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Drilling fluid additive. Viscosifier.
Uses advised against Consumer use

1.3 Details of the supplier of the safety data sheet

Supplier
M-I L.L.C.

P.O.Box 42842
Houston, TX 77242
www.miswaco.slb.com
Telephone: 1 281-561-1511

M-I SWACO, A Schlumberger Company
200 - 125, 9th Avenue SE
Calgary, Alberta T2G 0P6, Canada
Telephone: 1-780-962-8221

E-mail address MISDS@slb.com

Prepared by
Global Regulatory Compliance - Chemicals (GRC - Chemicals)

1.4 Emergency Telephone Number

Emergency telephone (24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600

2. Hazards identification

2.1 Classification of the substance or mixture

GHS - Classification

Health hazards

Carcinogenicity	Category 1A
Specific target organ toxicity (repeated exposure)	Category 2

Skin contact	Wash skin thoroughly with soap and water. Get medical attention if irritation persists.
Eye contact	Promptly wash eyes with lots of water while lifting eye lids. Remove contact lenses. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

General advice	The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop, the casualty should be transferred to hospital as soon as possible.
----------------	--

Main symptoms

Inhalation	Please see Section 11. Toxicological Information for further information.
Ingestion	Please see Section 11. Toxicological Information for further information.
Skin contact	Please see Section 11. Toxicological Information for further information.
Eye contact	Please see Section 11. Toxicological Information for further information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically
--------------------	-----------------------

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing media appropriate for surrounding material.

Extinguishing media which shall not be used for safety reasons

None known.

5.2 Special hazards arising from the substance or mixture

Unusual fire and explosion hazards

None known.

Hazardous combustion products

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Special Fire-Fighting Procedures

Containers close to fire should be removed immediately or cooled with water.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. See also section 8. Evacuate personnel to safe areas.

6.2 Environmental precautions

As local regulations may vary; all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations.

Engineering measures to reduce exposure

Ensure adequate ventilation. Mechanical ventilation or local exhaust ventilation is required.

Personal protective equipment

Eye protection

Tightly fitting safety goggles.

Hand protection

Repeated or prolonged contact: Use protective gloves made of: Neoprene, Nitrile, Frequent change is advisable.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment Suitable mask with particle filter P3 (European Norm 143) At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust) All respiratory protection equipment should be used within a comprehensive respiratory protection program that meets the requirements of 29 CFR 1910.134 (U.S. OSHA Respiratory Protection Standard) or local equivalent.

Skin and body protection

Wear suitable protective clothing. Eye wash and emergency shower must be available at the work place.

Hygiene measures

Wash hands before eating, drinking or smoking, Remove and wash contaminated clothing before re-use.

9. Physical and chemical properties
9.1 Information on basic physical and chemical properties

Physical state

Solid

Appearance

Powder

Color

Tan - Gray

Odor

Odorless

Odor threshold

Not applicable

Property
Values
Remarks

pH

No information available

pH @ dilution

Melting/freezing point

No information available

Boiling point/range

No information available

Flash point

No information available

Evaporation rate (BuAc =1)

No information available

Flammability (solid, gas)

Not Applicable

Flammability Limits in Air

Upper flammability limit

No information available

Lower flammability limit

No information available

Vapor pressure

No information available

Vapor density

No information available

Specific gravity

2.3 - 2.65

Bulk density

No information available

Water solubility

Insoluble in water

Solubility in other solvents

No information available

Autoignition temperature

No information available

Decomposition temperature

No information available

Kinematic viscosity

No information available

Dynamic viscosity

No information available

Log Pow

Not determined

Explosive properties

Not Applicable

Oxidizing properties

None known.

9.2 Other information

Pour point

No information available

Molecular weight

No information available

VOC content(%)

None

Density

No information available

10. Stability and reactivity

10.1 Reactivity

Dust may form explosive mixture in air.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

Hazardous polymerization

Hazardous polymerization does not occur

10.4 Conditions to avoid

Avoid dust formation. Protect from moisture.

10.5 Incompatible materials

No materials to be especially mentioned.

10.6 Hazardous decomposition products

See Section 5.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Inhalation

Inhalation of dust in high concentration may cause irritation of respiratory system. Harmful: danger of serious damage to health by prolonged exposure through inhalation. Repeated or prolonged inhalation of crystalline silica dust can cause delayed lung injury, and other diseases, including silicosis and lung cancer.

Eye contact

Dust may cause mechanical irritation

Skin contact

Prolonged contact may cause redness and irritation.

Ingestion

Ingestion may cause stomach discomfort.

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Crystalline silica (impurity)	= 500 mg/kg (Rat)	No data available	No data available
Silica - crystalline, tridymite	No data available	No data available	No data available

Component	IARC Group 1 or 2	ACGIH - Carcinogens	OSHA listed carcinogens	NTP
Crystalline silica (impurity)	Group 1; Monograph 100C [2012] Group 1; Monograph 68 [1997] Monograph 100C [2012] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources).	A2 Suspected Human Carcinogen	Present	Known Human Carcinogen



Safety Data Sheet

Sodium Carbonate, Anhydrous

Date Reviewed: September 2015

Supersedes: February 2015

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the Canada's Workplace Hazards Materials Information System (WHMIS) and, the EC Directive, 2001/58/EC.

SECTION 1: Product and Company Identification

Product Name	Sodium Carbonate, Anhydrous
Alternate Product Name(s)	Soda Ash, Disodium Carbonate Also: Dense Soda Ash, Soda Ash Light, Synthetic Light Soda Ash, Soda Ash Liquid, Natural Light Soda Ash, Natural Light HA Soda Ash
Chemical Formula	Na_2CO_3
Product Use	Oil well drilling fluid additive. Calcium precipitation.
This chemical is certified to ANSI/NSF Standard 60, Drinking Water Chemicals – Health Effects (as packaged in the original, unopened container). Concentration not to exceed 100 ppm when used for corrosion control or scale control pH adjustment.	
Supplier	Drillchem Drilling Solutions PO Box 132107 Spring, TX 77393
Telephone No.	Ph: (281) 713-8941
Emergency No.	(24 Hours) 800-424-9300 CHEMTREC

SECTION 2: Hazards Identification


Emergency Overview:

White, odorless, granular solid. Product is non-combustible. Reacts with acids to release carbon dioxide gas and heat. May irritate skin and eyes. Dusts may irritate respiratory tract. Not expected to be toxic to the environment, nor to aquatic organisms. Avoid simultaneous exposure to soda ash and lime dust. In the presence of moisture (i.e. perspiration) the two materials combine to form caustic soda (NaOH), which may cause burns.

Hazard Classification:

Class	Category	Hazard Statement
Eye Irritant	Category 2	H319 Causes serious eye irritation

EC Labelling:

Name of Substance to appear on label	Sodium Carbonate
Symbol(s)	 Xi- irritating
Label Phrases	R36: Irritating to eyes. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S2: Keep out of reach of children S22: Do not breath dust

Potential Health Effects:

Skin	Prolonged contact may cause skin irritation (red, dry, cracked skin).
Eyes	Irritating to the eyes.
Ingestions	Although low in toxicity, ingestion may cause nausea, vomiting, stomach ache, and diarrhea.
Inhalation	Prolonged inhalation of product dusts may irritate nose, throat, and lungs.
Chronic Effects	Excessive, long term contact may produce "soda ulcers" on hands and perforation of the nasal septum. Sensitivity reactions may occur from prolonged and repeated exposure. This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

SECTION 3: Composition/Information on Ingredients

Chemical Name	CAS #	Wt%	EC No.	EC Class
Sodium Carbonate	497-19-8	99.8	207-838-8	Xi, R36

SECTION 4: First Aid Measures

Skin	Wash with plenty of soap and water. Get medical attention if irritation occurs and persists. Remove and wash contaminated clothing before re-use.
Eyes	Immediately flush with water for at least 15 minutes lifting the upper and lower eyelids intermittently. See a medical doctor or ophthalmologist as necessary.
Ingestions	Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, contact a doctor or poison control center
Inhalation	Remove to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.
Advice to Physician	While internal toxicity is low, irritant effects of high concentrations may produce corneal opacities, and vesicular skin reactions in humans with abraded skin only. Treatment is symptomatic and supportive.

SECTION 5: Firefighting measures

Extinguishing Media	Not combustible, use extinguishing method suitable for surrounding fire.
Fire/Explosion Hazards	Not applicable.
Fire Fighting Procedures	Wear full protective clothing and self-contained breathing apparatus
Flammable Limits	Not applicable
Auto-Ignition Temperature	Not applicable
Hazardous Combustion Products	Carbon dioxide.
Sensitivity to Impact	None
Sensitivity to Static Discharge	None

SECTION 6: Accidental Release Measures

Personal Precautions	Refer to Section 8 "Exposure Controls / Personal Protection"
Containment	Prevent large quantities of this product from contacting vegetation or waterways; large spills could kill vegetation and fish.
Clean Up	This product, if spilled, can be recovered and re-used if contamination does not present a problem. Vacuum or sweep up the material and collect in a suitable container for disposal. If the spilled product is unusable due to contamination, consult state or federal environmental agencies for acceptable disposal procedures and locations. See Section 13 "Disposal Considerations".
Notification Requirements	Federal regulations do not require notification for spills of this product. State and local regulations may contain different requirements; consult local authorities.

SECTION 7: Handling and Storage

Handling	<p>Use air conveying / mechanical systems for bulk transfer to storage. For manual handling of bulk transfer use mechanical ventilation to remove airborne dust from railcar, ship or truck. Use approved respiratory protection when ventilation systems are not available. Selection of respirators is based on the dust cloud generation. Keep material out of lakes, streams, ponds and sewer drains.</p> <p>Avoid eye contact or prolonged skin contact. Avoid breathing dusts. When dissolving, add to water cautiously and with stirring; solutions can get hot. Use good personal hygiene and housekeeping.</p>
Storage	<p>Store in a cool dry area, away from incompatible products (acids). Prolonged storage may cause product to cake from atmospheric moisture.</p>

SECTION 8: Exposure Controls/ Personal Protection

Engineering Controls	<p>Where possible, provide general mechanical and/or local exhaust ventilation to prevent release of airborne dust into the work environment. Eye wash facility should be provided in storage and general work area.</p>
-----------------------------	--

Personal Protective Equipment:

Eyes and Face	<p>For dusty or misty conditions, or when handling solutions where there is reasonable probability of eye contact, wear chemical safety goggles and hardhat. Under these conditions do not wear contact lenses. Otherwise, appropriate eye and face protection equipment (ANSI Z87 approved) should be selected for the particular use intended for this material. Safety glasses with side shields are recommended.</p>
Respiratory	<p>Whenever dust in the worker's breathing zone cannot be controlled with ventilation or other engineering means, workers should wear respirators or dust masks approved by NIOSH/MSHA, EU CEN or comparable certification organization to protect them against airborne dust.</p>
Hands, Body, and Arms	<p>Wear long-sleeve shirt and trousers, and impervious gloves for routine product use. Cotton gloves are sufficient for dry product; wear impervious (e.g., rubber, neoprene, etc.) gloves when handling solutions. Protective shoes or boots.</p>

Exposure Guidelines:

Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure. As with all nuisance dusts, worker breathing zone concentrations should be measured by validated sampling and analytical methods. The following limits (OSHA and MSHA) apply to this material:

Particulates Not Otherwise Regulated:

OSHA (PEL / TWA): 15 mg/m³ (total dust); 5 mg/m³ (resp fraction)
MSHA (PEL / TWA): 10 mg/m³ (total dust)

SECTION 9: Physical and Chemical Properties

Appearance	White, granular solid
Odor	Odorless
Odor Threshold	Not applicable
Formula	Na ₂ CO ₃
Molecular Weight	105.99
pH	11.3
Melting point/freezing point	854°C (1569°F)
Initial boiling point/boiling range	Decomposes
Flash point	None
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not combustible
Flammability in Air	
Upper flammability limit	No information available
Lower flammability limit	No information available
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Bulk Density (g/l)	Dense grades: 0.9 – 1.1 Natural light grade: 0.7 – 0.9 Synthetic light grade: 0.5 – 0.7
Specific Gravity	2.533 (vs. Water)
Water Solubility(ies)	212.5 g/l @ 20°C
Partition coefficient	No information available
Auto-ignition temperature	No information available
Decomposition temperature	400°C
Viscosity	
Viscosity, dynamic	No information available
Viscosity, cinematic	No information available
Percent Volatile	0%

SECTION 10: Stability and Reactivity

Stability	Stable
Conditions to Avoid	Contract with acids will release carbon dioxide, heat. Contract with lime dust in the presence of moisture can produce corrosive sodium hydroxide.
Materials to Avoid	May react with aluminum, acids, fluorine, lithium, and 2,4,6- Trinitrotoluene.
Polymerization	Will not occur.
Hazardous Decomposition	When heated to decomposition, carbon dioxide is released.
Other Precautions	When dissolving, add to water cautiously and with stirring; solutions can get hot.

SECTION 11: Toxicological Information

Eye	Severe irritant (50 mg, rabbit).
Skin	Mild irritant (500 mg/24hr, rabbit). Minor irritation may occur on abraded skin. Not a sensitizer (tested at 0.25% solution).
Oral	LD ₅₀ , rat: 4,090 mg/kg
Inhalation	LC ₅₀ , rat, 2hr 2.3 mg/l 24 – hour LC ₅₀ : 800 mg/m ³ , 20 h exposure (guinea pig) (moderate toxicity)
Chronic	Excessive, long term contact may produce "soda ulcers" on hands and perforation of the nasal septum. Sensitivity reactions may occur from prolonged and repeated exposure.
Carcinogenicity	Not designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

SECTION 12: Ecological Information

Acute Ecotoxicity	96 – hour LC ₅₀ : 265 – 565 mg/l (daphnia magna) (low toxicity) 300 – 320 mg/l (blue gill sunfish) (low toxicity) 96 – hour TL _m : 1200 mg/l (mosquito-fish) 48 – hour TL _m : 840 mg/l (mosquito-fish) 48 – hour EC ₅₀ : 265 mg/l (daphnia magna) 5 Day EC ₅₀ : 242 mg/l (Nitzscheria linearis)
Chronic Ecotoxicity	7 Day EC, biomass: 14 mg/l (phytoplankton)
Mobility	Air: Not Applicable Water: Considerable solubility and mobility. Soil / sediments: Non-significant adsorption
Abiotic Degradation	Water (hydrolysis): degradation's products: carbonate (pH>10) / carbonic acid / carbon dioxide (pH<6). Soil: Hydrolysis as a function of pH.
Biotic Degradation	Aerobic / anaerobic: Not applicable (inorganic compound)
Potential for Bioaccumulation	Not applicable (ionizable inorganic compound)

Observed effects are related to alkaline properties of the product. Product is not significantly hazardous for the environment

SECTION 13: Disposal Considerations

Disposal Method	When this product is discarded or disposed of, as purchased, it is neither a characteristic nor a listed hazardous waste according to US Federal RCRA regulations (40 CFR 261). As a non-hazardous waste the material may be disposed of in a landfill in accordance with government regulations; check local or state regulations for applicable requirements prior to disposal. Any processing, usage, alteration, chemical additions to, or contamination of, the product may alter the disposal requirements. Under Federal Regulations, it is the generator's responsibility to determine if a waste is a hazardous waste.
------------------------	---

SECTION 14: Transport Information

Proper Shipping Name	Not regulated
Primary Hazard Class/Division	Not regulated
UN/NA Number	Not applicable
Label(s), Placard(s), Marking(s)	Not applicable
Reportable Quantity (RQ)	None
49 STCC Number	Not Applicable
ADR (EU), TDG (Canada)	Not regulated
IMDG (sea), ICAO (air), IATA (air)	Not regulated

SECTION 15: Regulatory Information

SARA Title III (Superfund Amendments and Reauthorization Act)

Section 302 Extremely Hazardous Substances: 40CFR355, Appendix A	Not listed
Section 311 Hazard Class 40CFR370	Immediate (acute)
Section 312 Threshold Planning Quantity (TPQ) 40CFR370	No TPQ listed for sodium carbonate
Section 313 Reportable Ingredients 40CFR372	Not listed

CERCLA (Comprehensive Environmental Response Compensation and Liability Act):
40CFR302.4 – There is no listed RQ (reportable quantity) for this product.

TSCA (Toxic Substance Control Act)

This product is listed on the TSCA Inventory of Chemical Substances. No other TSCA rules affect this product

State Regulations:


This product does not contain any components that are regulated under California Proposition 65.

Other:

Clean Water Act (CWA) – Section 301/ 311: Not listed

Clean Air Act (CAA) – Section 112: Not regulated

CANADA:

WHMIS Classification	D2B Toxic Class E Corrosive Symbol:  This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
WHMIS Ingredient Disclosure List	Listed
DSL Status (Domestic Substances List)	Listed on DSL

EUROPEAN UNION:

EINECS Inventory	Listed: 207-838-8
Annex I (Substances Directive)	Listed: 011-005-00-2 Xi, R-36 (See label details in Section 16)
German Water Classification	Hazard class 1, low hazard to waters
EU – Food Additives Directive (95/2/EC) – Annex I – Generally Permitted for Use in Food	E500

INTERNATIONAL:

This product is also found in the chemical inventories of Australia, China, Korea, Japan and the Philippines.

SECTION 16: Other Information

HMIS (Hazardous Material Identification System)

Health	2
Flammability	0
Physical Hazard	0
Personal Protection (PPE)	B

Protection = B (Safety glasses and gloves)

4 = Severe, 3 = Serious, 2 = Moderate, 1 = Slight, 0 = Minimal

NFPA (National Fire Protection Association System)

Health	2
Flammability	0
Reactivity	0
Special	None

4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant

Other Information:

Soda ash is produced in three principal grades: Dense, natural light and synthetic light soda ash. When these products are mixed in water they may be known as liquid soda ash. These grades differ only in physical characteristics such as bulk density and size and shape of particles, which influence flow characteristics and angle of repose. Other physical properties, as well as chemical as chemical properties of solutions, are common to each grade of soda ash.

Certified to ANSI / NSF 60

Concentration not to exceed 100 ppm when used for corrosion control or scale control pH adjustment.



The information given corresponds to the current state of our knowledge and experience of the product, and is not exhaustive. This applies to product, which conforms to the specification, unless otherwise stated. In this case of combinations and mixtures one must make sure that no new dangers can arise. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and protection of human welfare and the environment.

This Safety Data Sheet is offered for your information, consideration and investigation as required by Federal Hazardous Products Act and related legislation. The information is believed to be accurate but Drillchem Drilling Solutions, LLC. provides no warranties, either expressed or implied.

EXHIBIT B

RESULTS OF WATER SAMPLES TAKEN ON FEBRUARY 24, 2020

[Attached]

Analytical Report

Lab Order 2002B19

Date Reported:

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Vertex Resource Group Ltd.**Client Sample ID:** Upstream**Project:** Ogden Rd at Black River**Collection Date:** 2/24/2020 4:20:00 PM**Lab ID:** 2002B19-001**Matrix:** AQUEOUS**Received Date:** 2/26/2020 11:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/26/2020 12:26:07 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/26/2020 12:26:07 PM
Surr: DNOP	102	70-130		%Rec	1	2/26/2020 12:26:07 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	370	10	*	mg/L	20	2/26/2020 1:05:00 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/26/2020 1:23:37 PM
Toluene	ND	1.0		µg/L	1	2/26/2020 1:23:37 PM
Ethylbenzene	ND	1.0		µg/L	1	2/26/2020 1:23:37 PM
Xylenes, Total	ND	1.5		µg/L	1	2/26/2020 1:23:37 PM
Surr: 1,2-Dichloroethane-d4	90.5	70-130		%Rec	1	2/26/2020 1:23:37 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	2/26/2020 1:23:37 PM
Surr: Dibromofluoromethane	94.1	70-130		%Rec	1	2/26/2020 1:23:37 PM
Surr: Toluene-d8	99.7	70-130		%Rec	1	2/26/2020 1:23:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/26/2020 1:23:37 PM
Surr: BFB	103	70-130		%Rec	1	2/26/2020 1:23:37 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	
ND	Not Detected at the Reporting Limit	P Analyte detected below quantitation limits
PQL	Practical Quantitative Limit	P Sample pH Not In Range
S	% Recovery outside of range due to dilution or matrix	RL Reporting Limit

Analytical Report

Lab Order 2002B19

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: Downstream

Project: Ogden Rd at Black River

Collection Date: 2/24/2020 4:25:00 PM

Lab ID: 2002B19-002

Matrix: AQUEOUS

Received Date: 2/26/2020 11:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: BRM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/26/2020 12:50:20 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/26/2020 12:50:20 PM
Surr: DNOP	1030	70-130	S	%Rec	1	2/26/2020 12:50:20 PM
EPA METHOD 300.0: ANIONS						Analyst: CAS
Chloride	460	25	*	mg/L	50	2/26/2020 2:09:00 PM
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: DJF
Benzene	ND	1.0		µg/L	1	2/26/2020 1:53:14 PM
Toluene	ND	1.0		µg/L	1	2/26/2020 1:53:14 PM
Ethylbenzene	ND	1.0		µg/L	1	2/26/2020 1:53:14 PM
Xylenes, Total	ND	1.5		µg/L	1	2/26/2020 1:53:14 PM
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%Rec	1	2/26/2020 1:53:14 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/26/2020 1:53:14 PM
Surr: Dibromofluoromethane	99.3	70-130		%Rec	1	2/26/2020 1:53:14 PM
Surr: Toluene-d8	102	70-130		%Rec	1	2/26/2020 1:53:14 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: DJF
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/26/2020 1:53:14 PM
Surr: BFB	104	70-130		%Rec	1	2/26/2020 1:53:14 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded		Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

EXHIBIT C

WATER MONITORING AND SAMPLING PLAN

[Attached]

***Water Quality Monitoring and Sampling Plan for the Black River
Longwood RB Pipeline, LLC, a subsidiary of San Mateo Midstream, LLC***

This water monitoring and sampling plan is being implemented by Longwood RB Pipeline, LLC, a subsidiary of San Mateo Midstream, LLC, in order to establish water quality and site conditions at specified locations on the Black River. Beginning on Thursday, February 27, 2020, water monitoring and sampling is being conducted one time per each 24-hour period. The initial duration of this water monitoring and sampling protocol is intended to be no less than five days.

Water quality monitoring shall take place at six locations along the lower reaches of the Black River as described in Table 1 and shown in the attached figure.

	MONITORING SAMPLING LOCATIONS	MONITORING INTERVAL
1	Approx. 100-feet downstream from the site of the bubbling of the riverbed	24 hours
2	Approx. 300-feet downstream from the site of the bubbling of the riverbed	24 hours
3	Approx. 0.5-miles downstream from site of the bubbling of the riverbed (juncture of Hwy 285 and Black River)	24 hours
4	Approx. 2.5-miles downstream from the site of the bubbling of the riverbed (at approximately the confluence of Black River with the Pecos River)	24 hours
5 (Control)	Approx. 100-feet upstream from the site of the bubbling of the riverbed	24 hours
6 (Control)	Approx. 0.7-miles upstream from the site of the bubbling of the riverbed (juncture of County Road 716/Higby Hole Road and the Black River)	24 hours

Water monitoring at each location will include the following field activities:

1. Brief description of current site conditions, including current approximate wind speed, recent precipitation events, water flow, water color and noticeable changes from previous monitoring visits, if any.
2. In-field water screening for pH, conductivity, and turbidity.
3. Water sample collection, in accordance with the methods outlined by the references listed in Subsection A of 20.6.4.14 NMAC.

Samples will be placed into laboratory-provided containers, preserved on ice, and submitted to a National Environmental Laboratory Accreditation Program (NELAP)-approved laboratory for analysis.

The water samples from each location will be analyzed for the following, per guidance provided by the NMOCD and NMED Surface Water Bureau:

1. total petroleum hydrocarbons (including diesel range organics, gasoline range organics and motor oil range organics);
2. chlorides;
3. volatile organics (including benzene, toluene, ethylbenzene and xylenes);

4. total dissolved solids;
5. total suspended solids;
6. turbidity;
7. pH; and
8. sulfate.

Laboratory data reports will be compiled and provided as part of the closure reporting process outlined in Subsection E of 19.15.29.12 NMAC.