

			Document Control			Stage 1: Initial Check	Stage 2: Screening Assessment							Risk Assessment			Assessed Drilling Activity					
Chemical Name	CAS No.	Contained in the following drilling fluids:	Initial Chemical Assessment Date	Independent Peer Review	Chemical Re-evaluation Date	Previously Assessed as low hazard by NICNAS? Y/N	Listed as a COC on relevant databases?	Persistence Tier	Bioaccumulation Tier	Acute toxicity Tier	Chronic toxicity tier	Overall Tier	Concern/Risk Level	Toxicological profile?	Qualitative risk assessment?	Quantitative risk assessment?	Drilling additive - CSG production well	Drilling additive - completion and workover	Drilling additive - exploration and core holes	Drilling additive for abandonment	Production Operations	Monitoring Wells
Boric Acid	10043-35-3	FOAM-X-ACX-145	25/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X	X	X			X
Calcium chloride	10043-52-4	CM600	23/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		
Calcium Sulfate Dihydrate	10101-41-4	Blended cement	26/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		
2,2-dibromo-3-nitrilopropionamide	10222-01-2	DNBPA 20%	15/11/2023			N	No	1	1	3	3	2	POTENTIAL	YES	YES	N/A					X	
Triethanolamine	102-71-6	FOAM-X-ACX-143, CM601	25/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X	X	X	X		X
2-Ethyl-1-hexanol	104-76-7	COHO Defoam, Foam-X ACB 143	25/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X	X	X			X
Ethylene Glycol	107-21-1	CM500	25/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		
Glyoxal	107-22-2	Duo-Vis	26/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X	X	X			X
N,N'-methylenediacrylamide	110-26-9	FOAM-X- ACS-141	15/11/2023			N	No	1	1	2	-	2	POTENTIAL	YES	YES	N/A		X				
Glutaraldehyde	111-30-8	Glutaraldehyde 25%, ALDACIDE G, COHO Glute 9	16/11/2023			N	No	1	1	2	1	2	POTENTIAL	YES	YES	N/A	X	X	X	X	X	X
Diethanolamine,	111-42-2	CM601, FOAM-X ACB-143	26/10/2023			N	No	1				1	LOW	YES	N/A	N/A	X	X	X	X		X
2-Butoxyethanol	111-76-2	FOAM-X ACF-147	26/10/2023			N	No	1				1	LOW	YES	N/A	N/A		X				
1-Octanol	111-87-5	CM401	15/11/2023			N	No	1	1	1	-	1	LOW	YES	N/A	N/A				X		
1-Decanol	112-30-1	CM401	15/11/2023			N	No	1	2	2	2	2	POTENTIAL	YES	YES	N/A				X		
Ammonium Sulfate 2-(2-butoxyethoxy)ethanol	112-34-5	Foam-X ACF-144	20/11/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X	X	X			X
Xanthan gum	11138-66-2	Duo-Vis	23/10/2023			Y (NICNAS 2017)	N/A	N/A	N/A	N/A	N/A	N/A	LOW	N/A	N/A	N/A	X	X	X			X
triethylamine	121-44-8	THPS 5-%	15/11/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A					X	
Bentonite	1302-78-9	CM300	23/10/2023			Y (NICNAS 2017)	N/A	N/A	N/A	N/A	N/A	N/A	LOW	N/A	N/A	N/A				X		
Calcium Oxide	1305-78-8	Blended cement	26/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		
Potassium hydroxide	1310-58-3	Foam-X ACX-145, Foam-X ACB-143	26/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X	X	X			X
Sodium Hydroxide	1310-73-2	Caustic Soda	26/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		
Limestone	1317-65-3	Blended cement	23/10/2023			Y (NICNAS 2017)	N/A	N/A	N/A	N/A	N/A	N/A	LOW	N/A	N/A	N/A				X		
Kaolin	1332-58-7	Contingency Program	15/11/2023			N	No	1	N/A	1	1	1	LOW	YES	N/A	N/A	X		X			X
Sodium Silicate solution	1344-09-8	CM301	26/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		

			Document Control			Stage 1: Initial Check	Stage 2: Screening Assessment							Risk Assessment			Assessed Drilling Activity					
Chemical Name	CAS No.	Contained in the following drilling fluids:	Initial Chemical Assessment Date	Independent Peer Review	Chemical Re-evaluation Date	Previously Assessed as low hazard by NICNAS? Y/N	Listed as a COC on relevant databases?	Persistence Tier	Bioaccumulation Tier	Acute toxicity Tier	Chronic toxicity tier	Overall Tier	Concern/Risk Level	Toxicological profile?	Qualitative risk assessment?	Quantitative risk assessment?	Drilling additive - CSG production well	Drilling additive - completion and workover	Drilling additive - exploration and core holes	Drilling additive for abandonment	Production Operations	Monitoring Wells
Wollastonite (Ca(SiO ₃))	13983-17-0	FORM-A-BLOK	15/11/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X		X			X
Monoethanolamine	141-43-5	Nuosept 78	26/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X		X			X
Ethylenediaminetetra (methylenephosphonic acid)	1429-50-1	CM102	17/11/2023			N	No	2	1	1	-	2	LOW	YES	N/A	N/A				X		
Crystalline silica (impurity)	14808-60-7	BARACARB 1200, STOPPIT, Blended Cement, Safe-Carb 250, Fiber (F/M/C)	27/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X		X	X		X
2-Acrylamido-2-methyl-1-propanesulfonic acid	15214-89-8	CM502	15/11/2023			N	No	2	-	1	-	2	POTENTIAL	YES	YES	N/A				X		
Chromium (6+)	18540-29-9	Blended cement	16/11/2023			N	No	2	2	3	-	2	POTENTIAL	YES	YES	N/A				X		
Dipropylene glycol	25265-71-8	DNBPA 20%	15/11/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A					X	
Polypropylene Glycol	25322-69-4	CM401	15/11/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		
Polyethylene glycol diacrylate	26570-48-9	Foam-X ACS-141	15/11/2023			N	No	1	-	1	-	1	LOW	YES	N/A	N/A	X	X	X			X
Hexanedioic acid, compd. with 1,6-hexanediamine (1:1) Molecular Formula	3323-53-3	COHO F2V N12, COHO Floc C	14/11/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X		X			X
Calcium Carbonate	471-34-1	Safe-Carb 250	27/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X		X			X
s-Triazine-1,3,5-triethanol	4719-04-4	Nuosept 78	15/11/2023			N	No	1	1	1	-	1	LOW	YES	N/A	N/A	X		X			X
Sodium Carbonate	497-19-8	Soda Ash	27/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A	X		X			X
Tetrakis (Hydroxymethyl)Phosphonium Sulfate	55566-30-8	THPS 50%, IDCIDE-20	27/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A		X			X	
Nitrogen containing Polysaccharide	56780-58-6	COHO F2V CS	17/11/2023			N	No	-	-	-	-	2	POTENTIAL	YES	YES	N/A	X		X			X
Stearic Acid	57-11-4	CM401	17/11/2023			N	No	1	2	1	1	2	POTENTIAL	YES	YES	N/A				X		
Potassium Carbonate	584-08-7	Foam-X ACX-145	15/11/2023			N	No	1	-	1	1	1	LOW	YES	N/A	N/A	X	X	X			X
Cocoamidopropyl betaine	61789-40-0	Foam-X ACF-147	27/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A		X				
Polyethylene Glycol Monotallate	61791-00-2	CM401	20/11/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		
Polycarboxylic acid, sodium salt	62601-60-9	CM200	14/11/2023			N	No	-	-	-	-	2	POTENTIAL	YES	YES	N/A				X		
Petroleum Gas Oil	64741-44-2	CM401	16/11/2023			N	No	2	-	2	3	2	POTENTIAL	YES	YES	N/A				X		
Hydrotreated Light Distillate	64742-47-8	CM401, FOAM-X ACG-1412	27/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		

			Document Control			Stage 1: Initial Check	Stage 2: Screening Assessment							Risk Assessment			Assessed Drilling Activity					
Chemical Name	CAS No.	Contained in the following drilling fluids:	Initial Chemical Assessment Date	Independent Peer Review	Chemical Re-evaluation Date	Previously Assessed as low hazard by NICNAS? Y/N	Listed as a COC on relevant databases?	Persistence Tier	Bioaccumulation Tier	Acute toxicity Tier	Chronic toxicity tier	Overall Tier	Concern/Risk Level	Toxicological profile?	Qualitative risk assessment?	Quantitative risk assessment?	Drilling additive - CSG production well	Drilling additive - completion and workover	Drilling additive - exploration and core holes	Drilling additive for abandonment	Production Operations	Monitoring Wells
Granulated Blast Furnace Slag	65996-69-2	Blended cement	17/11/2023			N	No	2	1	1	1	2	POTENTIAL	YES	YES	N/A				X		
Hydraulic Silicate Cement	65997-15-1	Blended cement	31/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A				X		
Methanol	67-56-1	ALDACIDE G	31/10/2023			N	No	1	1	1	1	1	LOW	YES	N/A	N/A		X		X		
Ethoxylated C6-C10 Alcohol	68037-05-8	Foam-X ACF-144	14/11/2023			N	No	-	1	-	-	2	POTENTIAL	YES	YES	N/A	X	X	X			X
Coal Fly Ash	68131-74-8	Blended cement	17/11/2023			N	No	2	1	1	1	2	POTENTIAL	YES	YES	N/A				X		
Potassium Chloride	7447-40-7	Potassium Chloride	23/10/2023			Y (NICNAS 2017)	N/A	N/A	N/A	N/A	N/A	N/A	LOW	N/A	N/A	N/A	X	X	X			X
Ammonium Persulfate	7727-54-0	FOAM-X ACB-144	31/10/2023			N	No	1				1	LOW	YES	N/A	N/A	X	X	X			X
Water Ultrapur	7732-18-5	IDCIDE-20	23/10/2023			Y (NICNAS 2017)	N/A	N/A	N/A	N/A	N/A	N/A	LOW	N/A	N/A	N/A		X			X	
Sodium Acid Pyrophospate	7758-16-9	COHO SAPP	20/11/2023			N	No	1				1	LOW	YES	N/A	N/A		X		X		
Paraffin (hard)	8002-74-2	CM401	15/11/2023			N	No	2	2	1	1	2	POTENTIAL	YES	YES	N/A				X		
Polyacrylamide	9003-5-8	COHO Floc C	23/10/2023			Y (NICNAS 2017)	N/A	N/A	N/A	N/A	N/A	N/A	LOW	N/A	N/A	N/A	X					
Cellulose	9004-34-6	FORM-A-BLOK	15/11/2023			N	No	2	1	1	1	2	POTENTIAL	YES	YES	N/A	X		X			X
Corn Starch	9005-25-8	COHO AUS DEX	2/11/2023			N	No	1	1	1	1	1	LOW	Yes	N/A	N/A	X		X			X
2-Propanol	67-63-0	InFlow	08/07/2024			N	No	1	1	1	1	1	Low	Yes	N/A	N/A	X	X	X	X		
Alcohols, C12-15, Ethoxylated	68131-39-5	InFlow	08/07/2024			N	No	1	1	2	2	2	POTENTIAL	Yes	Yes	N/A	X	X	X	X		

Notes:
COC = chemical of concern

Attachment 3
Chemical Register

Chemical Name	CAS No.	Contained in the following drilling fluids:	Document Control			Stage 1: Initial Check	Stage 2: Screening Assessment							RISK ASSESSMENT			Assessed Drilling Activity(ies)					
			Initial Chemical Assessment Date	Independent Peer Review	Chemical Re-evaluation Date	Previously Assessed as low hazard by NICNAS? Y/N	Listed as a COC on a relevant database?	Persistence Tier	Bioaccumulation Tier	Acute Toxicity Tier ¹	Chronic Toxicity Tier ¹	Overall Tier	Concern/Risk Level	Toxicological Profile?	Qualitative Risk Assessment?	Quantitative Risk Assessment?	Drilling additive - CSG Production Well	Drilling Additive - Completion and Workover	Drilling Additive - Exploration and Core Holes	Drilling Additive - Abandonment	Production Operations	Monitoring Wells
Sodium sulfite	7757-83-7	SuperScavenger	20/03/2025			N	No	1	1	1	1	1	Low	YES	N/A	N/A				X	X	
Trizinc bis(orthophosphate)	7779-90-0	SuperScavenger	20/03/2025			N	No	1	1	3	2 (fish & inv), 3 (algae)	2 ^a	Potential	YES	YES	N/A				X	X	
Tetrakis(hydroxymethyl)phosphonium sulfate (THPS)	55566-30-8	SuperScavenger	20/03/2025			N	No	1	1	1 (fish, inv); 3 (algae)	2 (fish); 3 (inv, algae)	1 ^b	Low	YES	N/A	N/A				X	X	

Footnotes:
1 - Acute and chronic aquatic toxicity evaluated consistent with assessment criteria (see Framework).
3 – Tier 1 – Hazard Assessment only based on the preponderance of test data greatly exceeding the toxicity screening criterion
a - Preponderance of data indicates appropriateness of Tier 2. See dossier for more information
b - Preponderance of data indicates appropriateness of Tier 1. See dossier for more information.
Notes:
PBT = Persistent, Bioaccumulative and Toxic
B = bioaccumulative
P = persistent
T = toxic

Attachment 3
Chemical Register

Chemical Name	CAS No.	Overall PBT Assessment ¹	Chemical Databases of Concern Assessment Step		Persistence Assessment Step		Bioaccumulative Assessment Step	Toxicity Assessment Step			Tier ³	Risk Level	Assessed Drilling Activity(ies)					
			Listed as a COC on relevant databases?	Identified as Polymer of Low Concern	P criteria fulfilled?	Other P Concerns	B criteria fulfilled?	T criteria fulfilled?	Acute Toxicity ²	Chronic Toxicity ²			Completion and Workover	Exploration and Core Holes	Production Operations	Monitoring Wells	Drilling additive - CSG Production Well	Abandonment
Triethanolamine	102-71-6	Not a PBT	No	No	No	No	No	No	1	1	1	Low	X	X	X		X	X

Footnotes:
1 - PBT Assessment based on PBT Framework.
2 - Acute and chronic aquatic toxicity evaluated consistent with assessment criteria (see Framework).
3 – Tier 1 – Hazard Assessment only

Notes:
PBT = Persistent, Bioaccumulative and Toxic
B = bioaccumulative
P = persistent
T = toxic

Attachment 3
Chemical Register

Chemical Name	CAS No.	Overall PBT Assessment ¹	Chemical Databases of Concern Assessment Step		Persistence Assessment Step		Bioaccumulative Assessment Step	Toxicity Assessment Step			Tier ³	Risk Level	Assessed Drilling Activity(ies)					
			Listed as a COC on relevant databases?	Identified as Polymer of Low Concern	P criteria fulfilled?	Other P Concerns	B criteria fulfilled?	T criteria fulfilled?	Acute Toxicity ²	Chronic Toxicity ²			Completion and Workover	Exploration and Core Holes	Production Operations	Monitoring Wells	Drilling additive - CSG Production Well	Abandonment
Sodium metasilicate, pentahydrate	10213-79-3	Not a PBT	No	No	NA	No	No	No	1	1	1	Low					X	X

Footnotes:
1 - PBT Assessment based on PBT Framework.
2 - Acute and chronic aquatic toxicity evaluated consistent with assessment criteria (see Framework).
3 – Tier 1 – Hazard Assessment only

Notes:
PBT = Persistent, Bioaccumulative and Toxic
B = bioaccumulative
P = persistent
T = toxic

Attachment 3
Chemical Register

Chemical Name	CAS No.	Overall PBT Assessment ¹	Chemical Databases of Concern Assessment Step		Persistence Assessment Step		Bioaccumulative Assessment Step	Toxicity Assessment Step			Tier ³	Risk Level	Assessed Drilling Activity(ies)					
			Listed as a COC on relevant databases?	Identified as Polymer of Low Concern	P criteria fulfilled?	Other P Concerns	B criteria fulfilled?	T criteria fulfilled?	Acute Toxicity ²	Chronic Toxicity ²			Completion and Workover	Exploration and Core Holes	Production Operations	Monitoring Wells	Drilling additive - CSG Production Well	Abandonment
2-Butoxyethanol	111-76-2	Not a PBT	No	No	No	No	No	No	1	1	1	Low	X	X	X		X	X
1H-Imidazole-1-ethanol, 4,5-dihydro-, 2-nortall-oil alkyl derivs. (INCI)	61791-39-7	Not a PBT	No	No	No	No	Yes	Yes	3 (fish, inv, algae)	3 (algae)	3	High	X	X	X		X	X
Propylene glycol	57-55-6	Not a PBT	No	No	No	No	No	No	1	1	1	Low	X	X	X		X	X
Acetic acid	64-19-7	Not a PBT	No	No	No	No	No	No	1	1	1	Low	X	X	X		X	X
Sodium thiosulphate pentahydrate	10102-17-7	Not a PBT	No	No	NA	No	No	No	1	1	1	Low	X	X	X		X	X

Footnotes:
1 - PBT Assessment based on PBT Framework.
2 - Acute and chronic aquatic toxicity evaluated consistent with assessment criteria (see Framework).
3 – Tier 1 – Hazard Assessment only
Tier 3 - Quantitative Risk Assessment: Complete PBT, qualitative and quantitative assessment of risk.

Notes:
PBT = Persistent, Bioaccumulative and Toxic
B = bioaccumulative
P = persistent
T = toxic