DEPARTMENT OF ECOLOGY
State of Washington

Application for a State Waste Discharge Permit to Discharge Industrial Wastewater to a Publicly-Owned Treatment Works (POTW)

This application is for a state waste discharge permit for a discharge of industrial wastewater to a publicly-owned treatment works (POTW) as required by Chapter 90.48 RCW and Chapter 173-216 WAC. It is designed to provide Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, and the flow characteristics of the discharge.

Ecology may request additional information to clarify the conditions of this discharge. The applicant should reference information previously submitted to Ecology that applies to this application in the appropriate section.

SECTION A. GENERAL INFORMATION

1. Applicant Name: SHAWN LIETZ

2. Facility Name: SAKATA SEED AMERICA INC.
(if different from Applicant)

3. Applicant Mail Address: 11857 BAY RIDGE DR.
Street

BURLINGTON WA 98233
City/State Zip

4. Facility Location Address: 11857 BAY RIDGE DR
(if different from 3 above) Street

BURLINGTON WA 98233
City/State Zip

5. UBI No. 603-186-298

Sometimes called a registration, tax, "C," or resale number, the Unified Business Identifier (UBI) number is a nine-digit number used to identify persons engaging in business activities. The number is assigned when a person completes a Master Business Application to register with or obtain a license from state agencies. The Departments of Revenue, Licensing, Employment Security, Labor and Industries, and the Corporations Division of the Secretary of State are among the state agencies participating in the UBI program.

6. Latitude/longitude of the facility as decimal degrees (NAD83/WGS84):

48.474 / -122.402

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DEPARTMENT OF ECOLOGY

FOR OFFICE USE ONLY	Check One:	New/Renewal ☐	Modification ☐
Date Application Received ____	Date Fee Paid ____	Application/ Permit No. ____	Date Application Accepted ____

7. Person to contact who is familiar with the information contained in this application:

SHAWN LIETZ — Name
OPERATIONS MANAGER — Title
360. 941. 4005 — Telephone number
– — Fax number

8. Check One:

☐ **Permit Renewal** (including renewal of temporary permits)

Does this application request a greater amount of wastewater discharge, a greater amount of pollutant discharge, or a discharge of different pollutants than specified in the last permit application for this facility? ☐ YES ☐ NO

For permit renewals, the current permit is an attachment, by reference, to this application.

☐ **Permit Modification**

☐ **Existing Unpermitted Discharge**

☒ **Proposed Discharge**

Anticipated date of discharge: 12/31/19

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment for knowing violations.

Signature* — 8/21/19 Date — OPS MGR. Title

SHAWN LIETZ
Printed Name

*Applications must be signed as follows: corporations, by a principal executive officer of at least the level of vice-president; partnership, by a general partner; sole proprietorship, by the proprietor. If these titles do not apply to your organization, the person who makes budget decisions for this facility must sign the application.

The application signatory may delegate signature authority for submittals required by the permit, such as monthly reports, to a suitable employee. You can delegate this authority to a qualified individual or to a position, which you expect to fill with a qualified individual. If you wish to delegate signature authority, please complete the following:

Signature of delegated employee — 3/10/20 Date — OPS MGR Title or function at the facility

SHAWN Lietz
Printed name

SECTION B. PRODUCT INFORMATION

1. Briefly describe all manufacturing processes and products, and/or commercial activities, at this facility. Provide the applicable Standard Industrial Category (SIC) and the North American Industry Classification System (NAICS) Code(s) for each activity (see *North American Industrial Classification System,* 2007 ed.). You can find the 1997 NAICS codes and the corresponding 1987 Standard Industry Category (SIC) codes at (http://www.census.gov/epcd/naics/frames3.htm).

Description:

SIC #5191, NAICS # 424910

AT OUR FACILITY WE RECEIVE VEGETABLE SEEDS (OUR INTERNAL GENETICS) FROM A GROWER WE CONTRACT WITH TO GROW OUR SEEDS, CLEAN THE SEEDS, CHEMICALLY ENHANCE THE SEEDS IF NEEDED, THEN PACKAGE THE SEEDS FOR WORLD WIDE SALES.

2. List raw materials and products used at his facility:

Type	RAW MATERIALS	Quantity
Grapes (Example) YEAR TO YEAR MAY VARY		*1,000 tons per year*
VARIOUS VEG SEEDS:		
SPINACH SEEDS		750,000 lbs
BEET SEEDS		750,000 lbs
CARROT SEED		250,000 lbs

Type	PRODUCTS	Quantity
Grape Juice(Example)		*300,000 gallons per year*
SPINACH SEEDS		550,000 lbs
BEET SEEDS		550,000 lbs
CARROT SEED		175,000 lbs

SECTION C. PLANT OPERATIONAL CHARACTERISTICS

1. For each process listed in B.1. that generates wastewater, list the process, assign the waste stream a name and an ID # and describe whether it is a batch or continuous flow.

Process	Waste Stream Name	Waste Stream ID#	Batch (B) or Continuous (C) Process
Chemically Enhance	DISINFECTION WASTE WATER	1	C

2. On a separate sheet, produce a schematic drawing showing production processes, water flow through the facility, wastewater treatment devices and waste streams as named above. The drawing should indicate the source of intake water and show the operations contributing wastewater to the effluent. The treatment units should be labeled. Construct a water balance by showing average flows between intakes, operations, treatment units, and points of discharge to the POTW. *(See the example on page 16 of this application form.)*

ATTACH -

3. What is the maximum daily wastewater discharge flow? 25,000 gallons/day

   What is the maximum average monthly wastewater discharge flow (daily flows averaged over a month)? 18,333 gallons/day

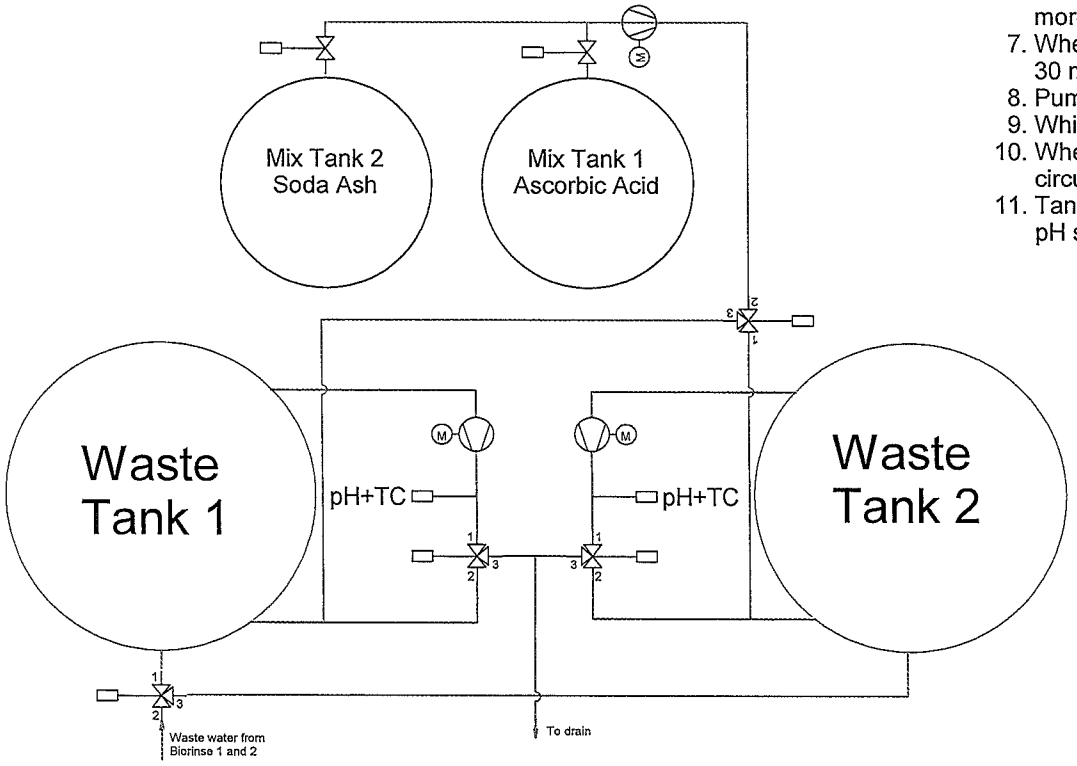
4. Describe any planned wastewater treatment improvements or changes in wastewater disposal methods, and the schedule for these improvements. *(Use additional sheets, if necessary and label as attachment C4.)*

THIS IS A Completely NEW, from the ground up, treatment PROCESS W/ All Current Industry STANDARD Control Methods. THIS PROCESS IS Computer Controled & Regulated TO SAFE guard AGAINST NOT TREATING THE WATER CORRECTLY. IF THE PROPER CRITERIA IS NOT MET, THE SYSTEM will NOT DISCHARGE ANY WATER TO THE POTW, IT WILL ALSO LOG levels for documentation Purposes.

SECTION C #2 (C2)

Waste water treatment
- Waste water from Biorinse is pumped into Waste tank 1 or 2 (depening on status of tank)
- When the tank is filled to desired level, neutralization sequence starts.
- In the meanwile, waste water from Biorinse is pumped into the other tank

1. 3-way valve is in position 1-2 (circulating in tank)
2. pH and total chlorine (TC) is measured continuously.
3. A calculated amount of ascorbic acid, based on amount of liquid in tank and chlorine level, is added to the tank, based on protocol Sakata
4. A calculated amount of soda ash, based on pH and amount of liquid in tank, is added to the tank, based on protocol Sakata
5. Pump keeps circulating, sensors keep measuring.
6. When pH and/or TC are not at the desired level after a while of mixing, more ascorbic acid and/or soda ash are added
7. When pH and TC are both at the desired level for a certain time (for example 30 minutes of circulating), the 3-way valve goes to position 1-3.
8. Pump capacity is lowered to permitted flow rate and the fluid is pumped into the drain.
9. While pumping into the drain, fluid still goes through the pH and TC sensor.
10. When pH and TC levels are out of acceptable range, 3-way valve goes back to circulating immediately, and the cycle restarts from step 5.
11. Tank is not emptied completely, because the chlorine and pH sensors need to be kept in the fluid.



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www.hoopman-equipment.nl

Benaming: Waste water treatment
Biorinse setup Sakata Burlington
Schaal: Materiaal:
Am. Proj. Afwerking:
Datum: 24-9-2019
Get. bep Conf. Tek. nr. E7504180 Pos 003 Rev. C
Art. nr. Aantal Form. A2

5. If production processes are subject to seasonal variations, provide the following information. The combined value for each month should equal the estimated total monthly flow. Please indicate the proper flow unit by checking one of the following boxes:

☐ gallons per day ☐ gallons per month ☒ million gallons per month

Waste Stream ID#	MONTHS											
	J	F	M	A	M	J	J	A	S	O	N	D
1	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
Estimated Total Monthly Flow (GPD)	18,333	18,333	18,333	18,333	18,333	18,333	18,333	18,333	18,333	18,333	18,333	18,333

6. How many hours a day does this facility typically operate? 8

How many days a week does this facility typically operate? 5

How many weeks per year does this facility typically operate? 52

7. List all incidental materials, such as oil, paint, grease, solvents, and cleaners, that are used or stored on site (*list only those with quantities greater than 10 gallons for liquids and 50 pounds for solids).* For solvents and solvent-based cleaners, include a copy of the material safety data sheet and estimate the quantity used. (*Use additional sheets, if necessary, and label as attachment C.7.)*

Materials/Quantity Stored:

SEE ATTACHED SHEET C-7

C-7

	Annual usage amount	
Materials greater than 10 gallons or 50 lbs	**Quantity**	**UOM**
HYDROCHLORIC ACID`	3800	KG
SODIUM HYPOCHLORITE	660	GAL
SEPIRET BLUE 3342 POLYMER	800	GAL
THIRAM 42S	175	GAL
APRON XL	5	GAL
CAPTAN 400	30	GAL
ROVRAL	15	GAL
TOPSIN	30	LBS
Tween 20	30	GAL
CITRIC ACID	40	LBS
CELLULASE	20	KG
ISOPROPYL ALCOHOL	55	GAL
ASCORBIC ACID	1212	LBS
SODA ASH	2100	LBS
SEPIRET 4350 GREEN	785	GAL
SEPIRET 4351 BLUE	705	GAL
SEPIRET 1494 (PREMIXED)	20	GAL

		Yes	No
8.	Some types of facilities are required to have spill or waste control plans. Does this facility have:		
a.	A spill prevention, control, and countermeasure plan (40 CFR 112)?	☒	☐
b.	An Oil Spill Contingency Plan (chapter 173-182 WAC)?	☐	☒
c.	An emergency response plan (per WAC 173-303-350)?	☒	☐
d.	A runoff, spillage, or leak control plan (per WAC 173-216-110(f))?	☐	☒
e.	Any spill or pollution prevention plan required by local, state or federal authorities? If yes specify: _____	☐	☒
f.	A solid waste control plan?	☐	☒
g.	A Slug Discharge Control Plan (40 CFR 403.8(f)(2)(v))?	☐	☒

SECTION D. WATER CONSUMPTION AND WATER LOSS

1. Potable water source(s):

☒ Public System (Specify) Skagit County PUD

☐ Private Well ☐ Surface Water

a. Water Right Permit Number: _____

b. Legal Description of Water Source

_____ ¼S, _____ ¼E, _____, Section, _____ TWN, _____ R

2. Potable water use

a. Indicate total water use____

Gallons per day (average) 15,000

Gallons per day (maximum) 25,000

b. Is water metered?

☒ YES ☐ NO

SECTION E. WASTEWATER INFORMATION

1. How are the water intake and effluent flows measured?

   Intake: THROUGH PUD METER

   Effluent THROUGH FLOW CONTROL DEVICE

2. Describe the collection method for the samples analyzed below. (*i.e.*, grab, 24-hour composite). Applicants must collect grab samples (not composites) for analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including E. coli), and Enterococci (previously known as fecal streptococcus at § 122.26 (d)(2)(iii)(A)(3)),or volatile organics.

3. Has the effluent been analyzed for any other parameters than those identified in question E.4.? ☐ YES ☒ NO
   If yes, attach results and label as attachment E.4. This data must clearly show the date, method and location of sampling. *(Note: Ecology may require additional testing.)*

4. Provide measurements or range of measurements for treated wastewater prior to discharge to the POTW for the parameters with an "X" in the left column. If you obtain the application from the internet, contact Ecology's regional office to see if testing for a subset of these parameters is permissible. All analyses (except pH) must be conducted by a laboratory registered or accredited by Ecology (WAC 173-216-125). If this is an application for permit renewal, provide data for the last year for those parameters that are routinely measured. For parameters measured only for this application, place the values under "Maximum." Report the values with units as specified in the parameter name or in the detection level.

   The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table unless Ecology approves an alternate method or the method used produces measurable results in the sample and EPA has listed it as an EPA approved method in 40 CFR Part 136. If the Permittee uses an alternative method as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

   See attachments - J.S.

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19th,20th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	BOD (5 day)					SM 5210 B	/2 mg/l
	COD					SM 5220 D	/10 mg/l
	Total suspended solids					SM 2540 D	/5 mg/l
	Fixed Dissolved Solids					SM 2540 E	
	Total dissolved solids					SM 2540 C	
	Conductivity (micromhos/cm)					SM 2510 B	
	Ammonia-N as N					SM 4500-NH_3 C	/0.3 mg/L
	pH					SM 4500-H	0.1 standard units
	Fecal coliform (organisms/100 mL)					SM 9221 E or 9222 D	
	Total coliform (organisms/100 mL)					SM 9221 B or 9222 B	
	Dissolved oxygen					SM 4500-O C/G	
	Nitrate + nitrite-N as N					SM 4500-NO_3 E	100 µg/L
	Total kjeldahl N as N					SM 4500-N_{org} C/E/FG	300 µg/l
	Ortho-phosphate-P as P					SM 4500-P E/F	10 µg/l
	Total-phosphorous-P as P					SM 4500-P E/P/F	10 µg/l
	Total Oil & grease					EPA 1664A	1.4/5 mg/l
	NWTPH - Dx					Ecology NWTPH Dx	250/250 µg/l
	NWTPH - Gx					Ecology NWTPH Gx	250/250 µg/l
	Calcium					EPA 200.7	10 µg/l
	Chloride					SM 4500-Cl C	0.15 µg/l
	Fluoride					SM 4500-F E	.025/0.1 mg/l
	Magnesium					EPA 200.7	10/50 µg/l
	Potassium					EPA 200.7	700/ µg/l
	Sodium					EPA 200.7	29/ µg/l
	Sulfate					SM 4500-SO_4 C/D	/200 µg/l
	Arsenic(total)					EPA 200.8	0.1/0.5 µg/l

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19th,20th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	Barium (total)					EPA 200.8	0.5/2 µg/l
	Cadmium (total)					EPA 200.8	.05/.25 µg/l
	Chromium (total)					EPA 200.8	0.2/1 µg/l
	Copper (total)					EPA 200.8	0.4/2 µg/l
	Lead (total)					EPA 200.8	0.1/.5 µg/l
	Mercury (total) pg/L					EPA 1631E	0.2/0.5 pg/l
	Molybdenum(total)					EPA 200.8	0.1/0.5 µg/l
	Nickel(total)					EPA 200.8	0.1/0.5 µg/l
	Selenium (total)					EPA 200.8	1/1 µg/l
	Silver (total)					EPA 200.8	.04/.2 µg/l
	Zinc (total)					EPA 200.8	0.5/2.5 µg/l

6. Does this facility use any of the following chemicals as raw materials or produce them as part of the manufacturing process, or are they present in the wastewater? ☐ YES ☒ NO

(*The number in the column next to the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.*)

If yes, specify how the chemical is used and the quantity used or produced:

METALS, CYANIDE & TOTAL PHENOLS			
Antimony, Total	7440-36-0	Nickel, Total	7440-02-0
Arsenic, Total	7440-38-2	Selenium, Total	7782-49-2
Beryllium, Total	7440-41-7	Silver, Total	7440-22-4
Cadmium, Total	7440-43-9	Thallium, Total	7440-28-0
Chromium (hex) dissolved	18540-29-9	Zinc, Total	7440-66-6
Chromium, Total	7440-47-3		
Copper, Total	7440-50-8	Cyanide, Total	57-12-5
Lead, Total	7439-92-1	Cyanide, Weak Acid Dissociable	
Mercury, Total	7439-97-6)	Phenols, Total	

PESTICIDES			
Aldrin	309-00-2	Endrin	72-20-8
alpha-BHC	319-84-6	Endrin Aldehyde	7421-93-4
beta-BHC	319-85-7	Heptachlor	76-44-8
gamma-BHC	58-89-9	Heptachlor Epoxide	1024-57-3
delta-BHC	319-86-8	PCB-1242	53469-21-9
Chlordane	57-74-9	PCB-1254	11097-69-1
4,4'-DDT	50-29-3	PCB-1221	11104-28-2
4,4'-DDE	72-55-9	PCB-1232	11141-16-5
4,4' DDD	72-54-8	PCB-1248	12672-29-6
Dieldrin	60-57-1	PCB-1260	11096-82-5
alpha-Endosulfan	959-98-8	PCB-1016	12674-11-2
beta-Endosulfan	33213-65-9	Toxaphene	8001-35-2
Endosulfan Sulfate	1031-07-8		

VOLATILE COMPOUNDS			
Acrolein	107-02-8		
Acrylonitrile	107-13-1	1,1-Dichloroethylene	75-35-4
Benzene	71-43-2	1,2-Dichloropropane	78-87-5
Bromoform	75-25-2	1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene)	542-75-6
Carbon tetrachloride	56-23-5	Ethylbenzene	100-41-4
Chlorobenzene	108-90-7	Methyl bromide (Bromomethane)	74-83-9
Chloroethane	75-00-3	Methyl chloride (Chloromethane)	74-87-3
2-Chloroethylvinyl Ether	110-75-8	Methylene chloride)	75-09-2
Chloroform	67-66-3	1,1,2,2-Tetrachloroethane	79-34-5
Dibromochloromethane	124-48-1	Tetrachloroethylene	127-18-4
1,2-Dichlorobenzene	95-50-1	Toluene (108-88-3)	
1,3-Dichlorobenzene	(541-73-1)	1,2-Trans-Dichloroethylene (Ethylene dichloride)	156-60-5
1,4-Dichlorobenzene	106-46-7	1,1,1-Trichloroethane	71-55-6
Dichlorobromomethane	75-27-4	1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethane	75-34-3	Trichloroethylene	79-01-6
1,2-Dichloroethane	107-06-2	Vinyl chloride	75-01-4

ACID COMPOUNDS			
2-Chlorophenol	95-57-8	4-nitrophenol	100-02-7
2,4-Dichlorophenol	120-83-2	Parachlorometa cresol (4-chloro-3-methylphenol)	59-50-7
2,4-Dimethylphenol	105-67-9	Pentachlorophenol	87-86-5
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	534-52-1	Phenol	108-95-2
2,4 dinitrophenol	51-28-5	2,4,6-Trichlorophenol	88-06-2
2-Nitrophenol	88-75-5		

BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene	83-32-9	3,3-Dichlorobenzidine	91-94-1
Acenaphthylene	208-96-8	Diethyl phthalate	84-66-2
Anthracene	120-12-7	Dimethyl phthalate	131-11-3
Benzidine	92-87-5	Di-n-butyl phthalate)	84-74-2
Benzyl butyl phthalate	85-68-7	2,4-dinitrotoluene	121-14-2
Benzo(*a*)anthracene	56-55-3	2,6-dinitrotoluene	606-20-2
Benzo(b)fluoranthene (3,4-benzofluoranthene)	205-99-2	Di-n-octyl phthalate	117-84-0
Benzo(j)fluoranthene	**205-82-3**	1,2-Diphenylhydrazine (*as Azobenzene*)	122-66-7
Benzo(k)fluoranthene (11,12-benzofluoranthene)	207-08-9	Fluoranthene	206-44-0
Benzo(r,s,t)pentaphene	**189-55-9**	Fluorene	86-73-7
Benzo(*a*)pyrene	50-32-8	Hexachlorobenzene	118-74-1
Benzo(*ghi*)Perylene	191-24-2	Hexachlorobutadiene	87-68-3
Bis(*2-chloroethoxy*)methane	111-91-1	Hexachlorocyclopentadiene	77-47-4
Bis(*2-chloroethyl*)ether	111-44-4	Hexachloroethane	67-72-1
Bis(*2-chloroisopropyl*)ether	39638-32-9	Indeno(*1,2,3-cd*)Pyrene	193-39-5
Bis(*2-ethylhexyl*)phthalate	117-81-7	Isophorone	78-59-1
4-Bromophenyl phenyl ether	101-55-3	**3-Methyl cholanthrene**	**56-49-5**
2-Chloronaphthalene	91-58-7	Naphthalene	91-20-3
4-Chlorophenyl phenyl ether	7005-72-3	Nitrobenzene	98-95-3
Chrysene	218-01-9	N-Nitrosodimethylamine	62-75-9
Dibenzo (a,j)acridine	**224-42-0**	N-Nitrosodi-n-propylamine	621-64-7
Dibenzo (a,h)acridine	**226-36-8**	N-Nitrosodiphenylamine	86-30-6
Dibenzo(a-*h*)anthracene (1,2,5,6-dibenzanthracene)	53-70-3	**Perylene**	**198-55-0**
Dibenzo(a,e)pyrene	192-65-4	Phenanthrene	85-01-8
Dibenzo(a,h)pyrene	189-64-0	Pyrene	129-00-0
		1,2,4-Trichlorobenzene	120-82-1

7. Are any other pesticides, herbicides or fungicides used at this facility? ☒ YES ☐ NO

If yes, specify the material and quantity used:

SEE NEXT PAGE

8 Are there other pollutants that you know of or believe to be present? ☐ YES ☒ NO

If yes, specify the pollutants and their concentration if known
(attach laboratory analyses if available as Attachment E8):

9. Is the wastewater being discharged, or proposed for discharge, to the POTW designated as a dangerous waste according to the procedures in Chapter 173-303 WAC?

☐ YES ☐ NO ☒ DON'T KNOW

10. If the answer to question 9 above is yes, how did the waste designate as a dangerous waste *(check appropriate box)*?

For Listed and TCLP Characteristic Wastes only, also provide the Dangerous Waste Number(s).

Listed Waste ☐ Dangerous Waste Number(s) ____

Characteristic Wastes Dangerous Waste Number(s) ____

- Ignitable ☐
- Reactive ☐
- Corrosive ☐
- TCLP ☐

State Only Dangerous Wastes Dangerous Waste Number(s) ____

- Toxicity ☐
- Persistent ☐

For questions about waste designation under the *Dangerous Waste Regulations*, Chapter 173-303 WAC, contact Ecology's Hazardous Waste and Toxics Program at:

Northwest Regional Office - Bellevue	(425) 649-7000
Southwest Regional Office - Lacey	(360) 407-6300
Central Regional Office - Yakima	(509) 575-2490
Eastern Regional Office - Spokane	(509) 329-3400

SECTION F. SEWER INFORMATION

1. Is an inspection and sampling manhole or similar structure available on-site? ☒ YES ☐ NO
   If yes, attach a map or hand drawing of the facility that shows the location of these structures (Label as attachment F1 or this may be combined with map in H8, if H8 is applicable to your facility.)

SECTION G. OTHER PERMITS

1. List all environmental control permits or approvals needed for this facility; for example, air emission permits.

STATE WASTE DISCHARGE PERMIT TO DISCHARGE INDUSTRIAL WASTEWATER TO A Publicly-OWNED TREATMENT WORKS (POTW)

SECTION H. STORMWATER

1. Do you have coverage under the Washington State Industrial Stormwater NPDES General Permit? ☐ YES ☒ NO
   If yes, please list the permit number here. _____

   If no, have you applied for a Washington State Stormwater Industrial Stormwater General Permit? ☐ YES ☒ NO

   If you answered no to both questions above, complete the following questions 2 through 5.

2. Does your facility discharge stormwater: *(Check all that apply)*

   ☐ To storm sewer system *(provide name of storm sewer system operator:* _____

   ☐ Directly to any surface waters of Washington State *(e.g., river, lake, creek, estuary, ocean).*

   Specify waterbody name(s) _____

   ☒ Indirectly to surface waters of Washington State *(i.e., flows over adjacent properties first).*

   ☐ To a Sanitary Sewer

   ☐ Directly to ground waters of Washington State via:

   ☐ Dry well

   ☐ Drainfield

   ☐ Other

3. Areas with industrial activities at facility: *(check all that apply)*

   ☒ Manufacturing Building

   ☒ Material Handling

   ☒ Material Storage

   ☐ Hazardous Waste Treatment, Storage, or Disposal *(Refers to RCRA, Subtitle C Facilities Only)*

   ☐ Waste Treatment, Storage, or Disposal

   ☐ Application or Disposal of Wastewaters

   ☒ Storage and Maintenance of Material Handling Equipment

   ☒ Vehicle Maintenance

   ☒ Areas Where Significant Materials Remain

   ☒ Access Roads and Rail Lines for Shipping and Receiving

   ☐ Other (please specify): _____

4. Material handling/management practices

a. Types of materials handled and/or stored outdoors: *(check all that apply)*

- ☐ Solvents
- ☐ Scrap Metal
- ☐ Petroleum or Petrochemical Products
- ☐ Plating Products
- ☐ Pesticides
- ☐ Hazardous Wastes
- ☒ Acids or Alkalies – on containment
- ☐ Paints/Coatings
- ☐ Woodtreating Products
- ☐ Other *(please list)*: _____

b. Identify existing management practices employed to reduce pollutants in industrial stormwater discharges: *(check all that apply)*

- ☐ Oil/Water Separator
- ☒ Containment
- ☒ Spill Prevention
- ☐ Surface Leachate Collection
- ☒ Overhead Coverage
- ☐ Detention Facilities
- ☐ Infiltration Basins
- ☐ Operational BMPs
- ☐ Vegetation Management
- ☐ Other *(please list)*: _____

5. Attach a facility site map showing stormwater drainage/collection areas, disposal areas and discharge points. This may be a hand-drawn map if no other site map is available *(See example on page 16 of this application). Label this as attachment H.5.*

SECTION I. OTHER INFORMATION

1. Describe liquid wastes or sludges being generated by your facility that are not disposed of in the waste stream(s) and how they are being disposed of. For each type of waste, provide type of waste and the name, address, and phone number of the hauler. N/A

2. Describe storage areas for raw materials, products, and wastes.

All products are stored on Containment Pallets.

3. Have you designated the wastes described above according to the applicable procedures of Dangerous Waste Regulations, Chapter 173-303 WAC? ☐ YES ☒ NO

pH

SECTION J. CERTIFICATIONS

1. **Approval by Publicly-Owned Treatment Works [required by WAC 173-216-070(4)(b)]**

I approve of the discharge as described in this application. The applicant is:

(Please check the appropriate box below.)

☐ A Significant Industrial User (see Definitions at the end of this Section)

☐ A Categorical Industrial User

☐ Neither of the above

Name and location of sewer system to which this project will be tributary:

Treatment Works Owner: _____

Street: _____

City/State: _____ Zip: _____

_____ _____ _____

Signature of Treatment Works Authority | Date | Title

_____

Printed Name

2. **Application review by Intermediate Sewer Owner at point of discharge (if applicable)**

I hereby acknowledge that I have reviewed the application for discharge to this sewer system.

Name and location of sewer system to which this project will be tributary:

Sewer System Owner: _____

Street: _____

City/State: _____ Zip: _____

_____ _____ _____

Signature of Sewer System Authority | Date | Title

_____

Printed Name

SECTION J. CERTIFICATIONS

1. **Approval by Publicly-Owned Treatment Works [required by WAC 173-216-070(4)(b)]**

I approve of the discharge as described in this application. The applicant is:

(Please check the appropriate box below.)

☒ A Significant Industrial User (see Definitions at the end of this Section)

☐ A Categorical Industrial User

☐ Neither of the above

Name and location of sewer system to which this project will be tributary:

Treatment Works Owner: City of BURLINGTON

Street: 900 S. SECTION ST.

City/State: BURLINGTON, WA Zip: 98233

Signature of Treatment Works Authority	Date	Title
	2/20/20	WWTP SUPERVISOR

DON ERICKSON
Printed Name

2. **Application review by Intermediate Sewer Owner at point of discharge (if applicable)**

I hereby acknowledge that I have reviewed the application for discharge to this sewer system.

Name and location of sewer system to which this project will be tributary:

Sewer System Owner: _____

Street: _____

City/State: _____ Zip: _____

Signature of Sewer System Authority	Date	Title

Printed Name

DEFINITIONS

Significant Industrial User (SIU)--

1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and

2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

   Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

Control Authority - means the Washington State Department of Ecology in the case of non-delegated POTWs or means the POTW in the case of delegated POTWs.

Categoric Industrial User (CIU): An industrial user subject to national categorical pretreatment standards promulgated by EPA (40 CFR 403.6 and40 CFR parts 405-471).

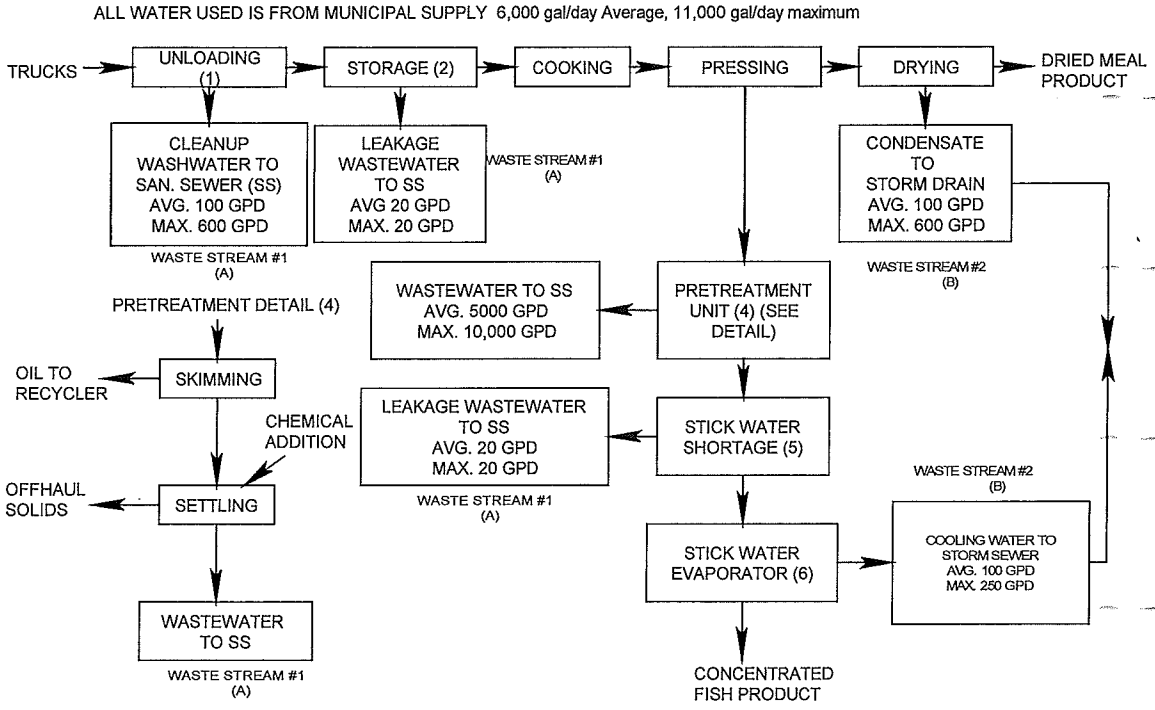
Summary of Attachments That May be Required for This Application:

(Please check those attachments that are included)

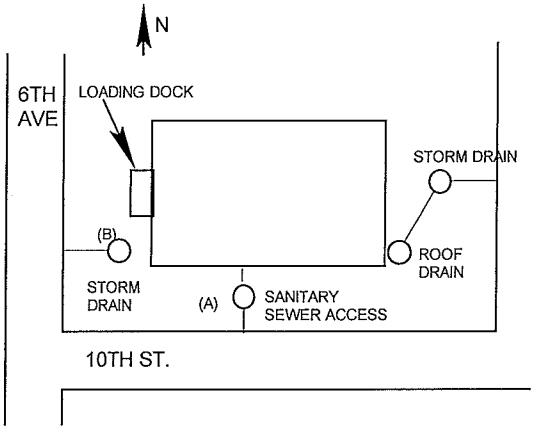
- [X] C.2. Production schematic flow diagram and water balance
- [X] C.4. Wastewater treatment improvements
- [X] C.7. Additional incidental materials
- [ ] E.8. Additional results of effluent testing
- [X] F.1. Facility site map
- [X] H.5. Stormwater drainage map

If you need this document in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Example 1 for application section C.2. (SCHEMATIC DIAGRAM)



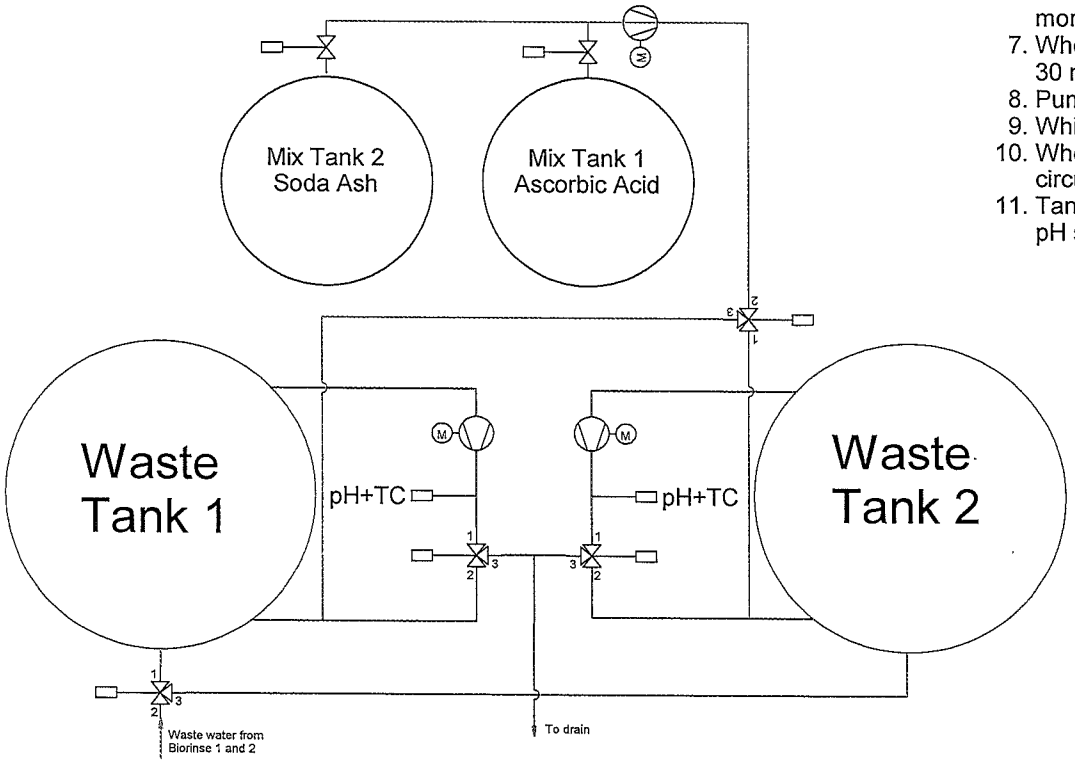
Example 2 for application section F1 or H8 (FACILITY SITE MAP)



C-2

Waste water treatment
- Waste water from Biorinse is pumped into Waste tank 1 or 2 (depening on status of tank)
- When the tank is filled to desired level, neutralization sequence starts.
- In the meanwile, waste water from Biorinse is pumped into the other tank

1. 3-way valve is in position 1-2 (circulating in tank)
2. pH and total chlorine (TC) is measured continuously.
3. A calculated amount of ascorbic acid, based on amount of liquid in tank and chlorine level, is added to the tank, based on protocol Sakata
4. A calculated amount of soda ash, based on pH and amount of liquid in tank, is added to the tank, based on protocol Sakata
5. Pump keeps circulating, sensors keep measuring.
6. When pH and/or TC are not at the desired level after a while of mixing, more ascorbic acid and/or soda ash are added
7. When pH and TC are both at the desired level for a certain time (for example 30 minutes of circulating), the 3-way valve goes to position 1-3.
8. Pump capacity is lowered to permitted flow rate and the fluid is pumped into the drain.
9. While pumping into the drain, fluid still goes through the pH and TC sensor.
10. When pH and TC levels are out of acceptable range, 3-way valve goes back to circulating immediately, and the cycle restarts from step 5.
11. Tank is not emptied completely, because the chlorine and pH sensors need to be kept in the fluid.



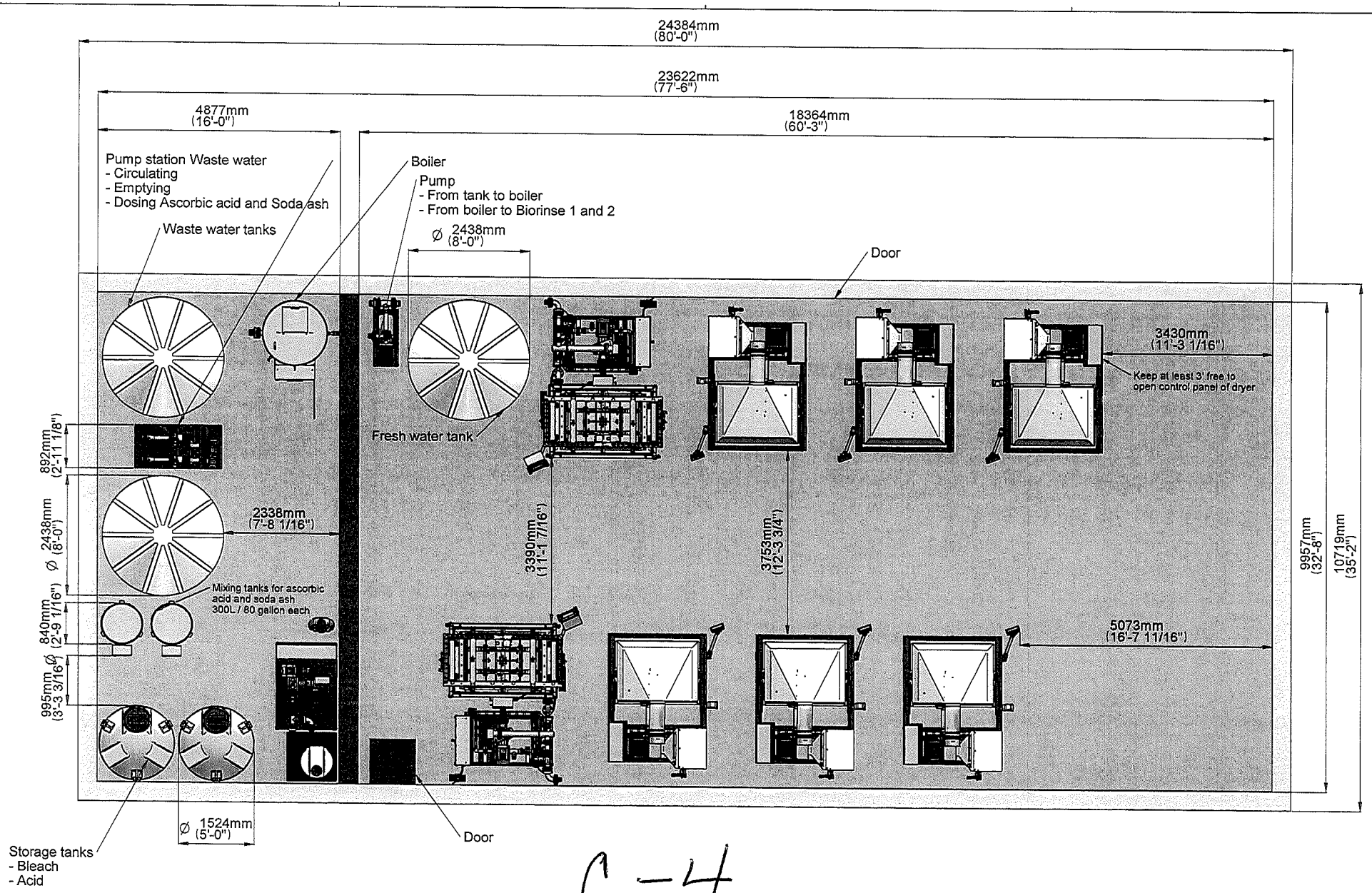
hoopman

Hoopman equipment & engineering b.v.
Dinxperlosestraatweg 145
NL - 7122 JP Aalten
Tel.: +31(0)543-466224
Fax: +31(0)543-466464
@ : info@hoopman-equipment.nl
www.hoopman-equipment.nl

Am. Proj.

Benaming: Waste water treatment
Biorinse setup Sakata Burlington

Schaal | Materiaal:
Datum: 24-9-2019 | Afwerking:
Get. bep | Contr. | Tek. nr. E7504180 | Pos. 003 | Rev. C
Art. nr. | Aantal | Form. A2



C-4

hoopman

Hoopman equipment & engineering b.v.
Dingelstadstraat 145
NL - 7122 JP Aalten
Tel.: +31(0)543-448224
Fax: +31(0)543-448444
E: info@hoopman-equipment.nl
www.hoopman-equipment.nl

Aan. PRG

Omschrijving: Biorinse Setup Sakata US

schaal: 1 : 35

datum: 26-10-2018

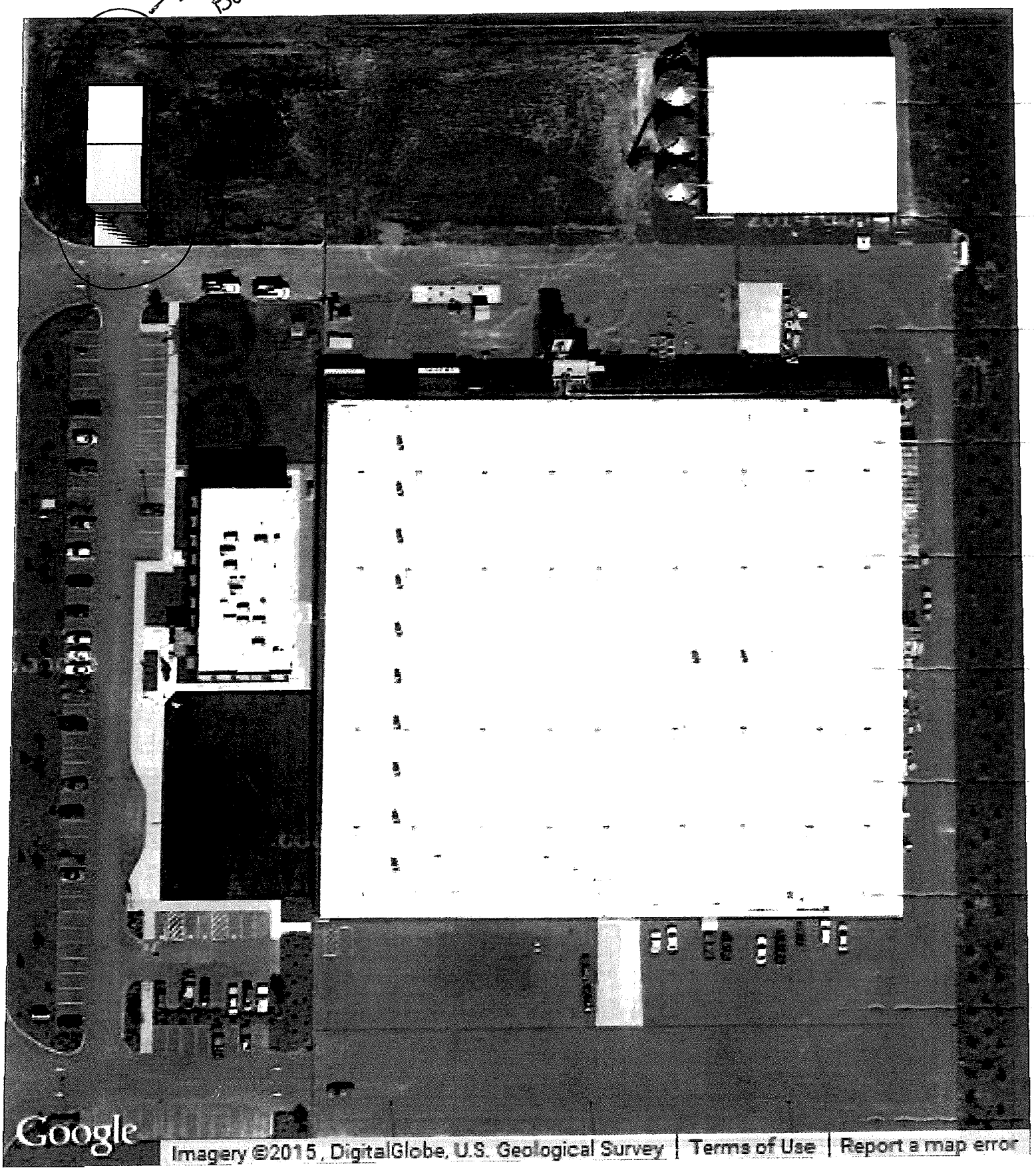
door: bep

dwg. nr.: E7504101

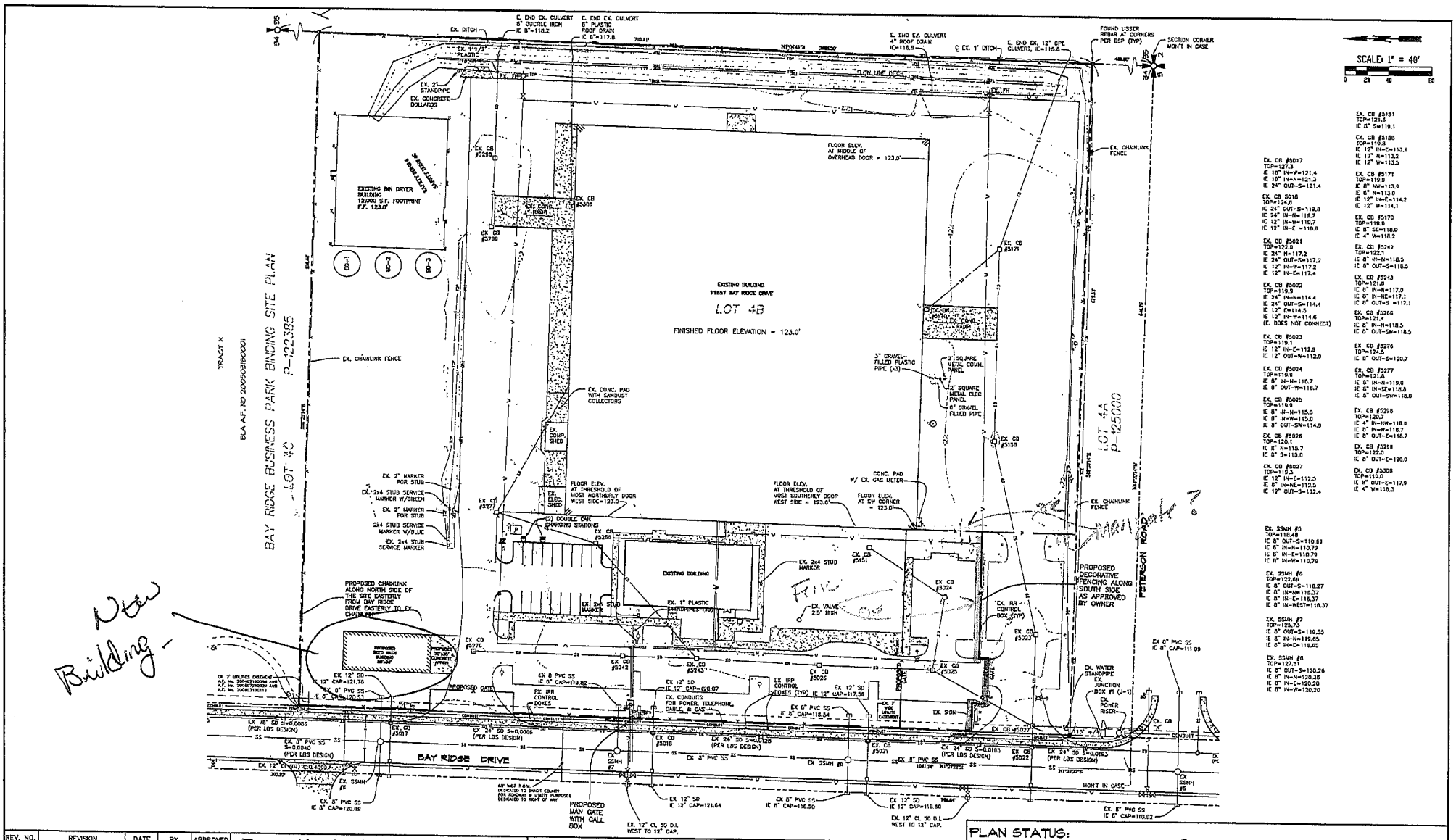
rev.: 02A

blad: A1

F - 1


New Building
Google
Imagery ©2015, DigitalGlobe, U.S. Geological Survey | Terms of Use | Report a map error

A-5



New Building -

REV. NO.	REVISION	DATE	BY	APPROVED

Ravnik & Associates, Inc.
CIVIL ENGINEERING & LAND-USE PLANNING
1633 LINDAMOOD LANE/P.O. BOX 361
BURLINGTON, WA 98233
PH: (360) 707-2048 FAX: (360) 707-2216

SHEET DESCRIPTION:

PRELIMINARY SITE PLAN

PLAN STATUS:

SCALE: 1"=30'

DRAWN BY: D. REMSEN

CHECKED BY: J. RAVNIK

DATE: 09.30.19

SHEET TITLE:

SAKATA SEED - SEED WASH BUILDING
FOR
CHAD FISHER CONSTRUCTION
SECTION 34 T. 35 N., R. 03 E., W.M.

DRAWING NO. 19009.SITE.dwg

JOB NO. 19009

SHEET NO. 2 OF 2

Chain of Custody / Analysis Request (Please complete all applicable shaded sections)

Report to:	Sakata Seed America	Bill to:	Sakata Seed America SAK03
Ship Address:	11857 Bay Ridge Dr.	Address:	11857 Bay Ridge Dr.
City:	Burlington St: WA Zip: 98233	City:	Burlington St: WA Zip: 98233
Attn:	Cal Mundell	Phone:	FAX:
Phone:	360.336-9727 FAX:	P.O.#:	Attn:
Email:	cmundell@sakata.com	☐ Visa ☐ M/C ☐ A/E	Expires /
Project	NPDES Testing	Card#:	

R 20-00626
1180 - 1181

Check Regulatory Program
- ☐ Safe Drinking Water Act
- ☐ Clean Water Act
- ☐ RCRA / CERCLA
- ☐ Other

EDGE ANALYTICAL

Main Lab (800-755-9295)
1620 South Walnut St. Burlington, WA 98233
Microbiology (888-725-1212)
805 W. Orchard Dr. Suite 4 Bellingham, WA 98225
Wilsonville Lab (503-682-7802)
9150 SW Pioneer Ct. Suite W Wilsonville, OR 97070
Corvallis Lab (541-753-4946)
1100 NE Circle Blvd, Ste 130, Corvallis, OR 97330
Bend Lab (541-639-8425)
20332 Empire Ave Ste F4, Bend, OR 97703

Instructions

1. Use one line per sample Location.
2. Be specific in analysis requests.
3. *(NEW)* **List each metal individually** *(NEW)*
4. Check off analyses to be performed for each sample Location.
5. Enter number of containers.

Turn Around Time Required
- ☐ Standard
- ☐ Half-time (50% surcharge)
- ☐ Quickest (100% surcharge) Phone Call Req.
- ☐ Emergency (Phone Call Req.)

Analyses Requested

CO042892

	Field ID	Location	Grab/ Comp.	Sample Matrix*	Date	Time	1631E (Mercury)	1664 (O&G)	BOD (ONLY)	COD,NH3,TKN,NO3+NO2,Tota l-P	DO	Minerals/Metals	NWTPH-Dx	NWTPH-G/BTEX	Number of Containers	Special Instructions Conditions on Receipt
1	TANK	DIPPING AREA			1-7	2:40	☐	☐	☐	☐	☐	☐	☐	☐		
2							☐	☐	☐	☐	☐	☐	☐	☐		
3							☐	☐	☐	☐	☐	☐	☐	☐		
4							☐	☐	☐	☐	☐	☐	☐	☐		
5							☐	☐	☐	☐	☐	☐	☐	☐		
6							☐	☐	☐	☐	☐	☐	☐	☐		
7							☐	☐	☐	☐	☐	☐	☐	☐		
8							☐	☐	☐	☐	☐	☐	☐	☐		
9							☐	☐	☐	☐	☐	☐	☐	☐		

****Are there known hazardous or dangerous wastes in these samples? YES / NO If YES, indicate type on reverse of this form; samples may be returned to you.**

Total Containers

Sampled by: Phone: FAX: Email:

Sample Receipt Request (Must include FAX or Email) ☐

* **W** - water **SW** - surface water **WW** - waste water **SL** - salt water
DW - drinking water **ST** - storm water **S** - soil **OL** - oil Other:

**Relinquished by	Date	Time	Received by	Date	Time
			MWE	1-7-20	1529

	Yes	No	N/A
Custody seals intact	☐	☐	—
Sample temp 13.5 C satisfactory	—	☐	☐
Samples received intact	—	☐	
Chain of custody & labels agree	—	☐	

FORM. COC 6-27-2018

edge

Chain of Custody / Analysis Request (Please complete all applicable shaded sections)

Report to:	Sakata Seed America	Bill to:	Sakata Seed America	SAK03	**For Lab Use Only**
Ship Address:	11857 Bay Ridge Dr.	Address:	11857 Bay Ridge Dr.		Ref #
City:	Burlington St: WA Zip: 98233	City:	Burlington St: WA	Zip: 98233	**Check Regulatory Program**
Attn:	Cal Mundell	Phone:	FAX:		☐ Safe Drinking Water Act
Phone:	360.336-9727 FAX:	P.O.#:	Attn:		☐ Clean Water Act
Email:	cmundell@sakata.com	☐ Visa ☐ M/C ☐ A/E	Expires /		☐ RCRA / CERCLA
Project	NPDES Testing	Card#:			☐ Other

ANALYTICAL
Main Lab (800-755-9295)
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20332 Empire Ave Ste F4, Bend, OR 97703

Instructions

1. Use one line per sample Location.
2. Be specific in analysis requests.
3. *(NEW)* **List each metal individually** *(NEW)*
4. Check off analyses to be performed for each sample Location.
5. Enter number of containers.

Turn Around Time Required
☐ Standard
☐ Half-time (50% surcharge)
☐ Quickest (100% surcharge) Phone Call Req.
☐ Emergency (Phone Call Req.)

Analyses Requested

CO042892

	Field ID	Location	Grab/ Comp.	Sample Matrix*	Date	Time	SM9221B,E Total Coliform+Fecal (MPN)	TRIP BLANK (VOCs)	TSS,pH,Eo,o-PO4,F,Cl,SO4,T DS,FDS						Number of Containers	Special Instructions Conditions on Receipt
1							☐	☐	☐	☐	☐	☐	☐	☐		
2							☐	☐	☐	☐	☐	☐	☐	☐		
3							☐	☐	☐	☐	☐	☐	☐	☐		
4							☐	☐	☐	☐	☐	☐	☐	☐		
5							☐	☐	☐	☐	☐	☐	☐	☐		
6							☐	☐	☐	☐	☐	☐	☐	☐		
7							☐	☐	☐	☐	☐	☐	☐	☐		
8							☐	☐	☐	☐	☐	☐	☐	☐		
9							☐	☐	☐	☐	☐	☐	☐	☐		

****Are there known hazardous or dangerous wastes in these samples? YES / NO If YES, indicate type on reverse of this form; samples may be returned to you.** Total Containers

Sampled by: Phone: FAX: Email:

Sample Receipt Request (Must include FAX or Email) ☐

* **W** - water **SW** - surface water **WW** - waste water **SL** - salt water
DW - drinking water **ST** - storm water **S** - soil **OL** - oil Other:

****Relinquished by**	Date	Time	Received by	Date	Time
			NWE	1720	1529

	Yes	No	N/A
Custody seals intact	☐	☐	☐
Sample temp_____C satisfactory	☐	☐	
Samples received intact	☐	☐	
Chain of custody & labels agree	☐	☐	

FORM: COC 6-27-2018

Sakata

Hocatron

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19th,20th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	BOD (5 day)					SM 5210 B	/2 mg/l
	COD					SM 5220 D	/10 mg/l
	Total suspended solids					SM 2540 D	/5 mg/l
	Fixed Dissolved Solids					SM 2540 E	
	Total dissolved solids					SM 2540 C	
	Conductivity (micromhos/cm)					SM 2510 B	
	Ammonia-N as N					SM 4500-NH_3 C	/0.3 mg/L
	pH					SM 4500-H	0.1 standard units
	Fecal coliform (organisms/100 mL)					SM 9221 E or 9222 D	
	Total coliform (organisms/100 mL)					SM 9221 B or 9222 B	
	Dissolved oxygen					SM 4500-O C/G	
	Nitrate + nitrite-N as N					SM 4500-NO_3 E	100 µg/L
	Total kjeldahl N as N					SM 4500-N_{org} C/E/FG	300 µg/l
	Ortho-phosphate-P as P					SM 4500-P E/F	10 µg/l
	Total-phosphorous-P as P					SM 4500-P E/P/F	10 µg/l
	Total Oil & grease					EPA 1664A	1.4/5 mg/l
	NWTPH - Dx					Ecology NWTPH Dx	250/250 µg/l
	NWTPH - Gx					Ecology NWTPH Gx	250/250 µg/l
	Calcium					EPA 200.7	10 µg/l
	Chloride					SM 4500-Cl C	0.15 µg/l
	Fluoride					SM 4500-F E	.025/0.1 mg/l
	Magnesium					EPA 200.7	10/50 µg/l
	Potassium					EPA 200.7	700/ µg/l
	Sodium					EPA 200.7	29/ µg/l
	Sulfate					SM 4500-SO_4 C/D	/200 µg/l
	Arsenic(total)					EPA 200.8	0.1/0.5 µg/l

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19th,20th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	Barium (total)					EPA 200.8	0.5/2 µg/l
	Cadmium (total)					EPA 200.8	.05/.25 µg/l
	Chromium (total)					EPA 200.8	0.2/1 µg/l
	Copper (total)					EPA 200.8	0.4/2 µg/l
	Lead (total)					EPA 200.8	0.1/.5 µg/l
	Mercury (total) pg/L					EPA 1631E	0.2/0.5 pg/l
	Molybdenum(total)					EPA 200.8	0.1/0.5 µg/l
	Nickel(total)					EPA 200.8	0.1/0.5 µg/l
	Selenium (total)					EPA 200.8	1/1 µg/l
	Silver (total)					EPA 200.8	.04/.2 µg/l
	Zinc (total)					EPA 200.8	0.5/2.5 µg/l

6. Does this facility use any of the following chemicals as raw materials or produce them as part of the manufacturing process, or are they present in the wastewater? ☐ YES ☒ NO

(The number in the column next to the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.)

If yes, specify how the chemical is used and the quantity used or produced:

Fwd: Permit Testing Requirements

From: Cal Mundell <cmundell@sakata.com>
Sent: Tue, Jan 7, 2020 at 10:17 am
To: receiving@edgeanalytical.com

image001_emz (1.5 KB) ATT00001.htm (< 1 KB) oledata.mso (638.2 KB) ATT00002.htm (< 1 KB) **– Download all**

Sent from my iPhone

Begin forwarded message:

> **From:** Cal Mundell <cmundell@sakata.com>
> **Date:** December 17, 2019 at 10:42:00 AM PST
> **To:** Shawn Lietz <slietz@sakata.com>
> **Subject: FW: Permit Testing Requirements**

Cost FYI

From: Lawrence J Henderson <ljh@edgeanalytical.com>
Sent: Tuesday, December 17, 2019 9:56 AM
To: Cal Mundell <cmundell@sakata.com>
Subject: Permit Testing Requirements

Hi Cal,

When I started putting this together the cost started to grow much more than I expected. I applied a 20% discount to the total cost. The '-' indicates no additional charge as they are part of another test.

Parameter	Analytical Method	Cost Per Sample
BOD5	SM5210 B	$ 63.00
COD	SM5220 D	$ 45.00
TSS	I-3765-85	$ 24.00
Fixed Dissolved Solids	SM2540 E	$ 28.00
TDS	SM2540 C	-
Conductivity	SM2510 B	$ 25.00
Ammonia-N	350.1	$ 26.00
pH	SM4500-H+ B	$ 15.00
Fecal Coliforms	SM 9221 B, E	$ 54.00
Total Coliforms	SM 9221 B, E	-
Dissolved Oxygen	SM4500-O G	$ 26.00
Nitrate+Nitrite-N	SM4500-NO3 F	$ 26.00
Total Kjeldahl Nitrogen-N	351.2	$ 40.00
o-Phosphate-P	SM4500-P F	$ 26.00
Total Phosphorus-P	SM4500-P F	$ 29.00
Oil & Grease	1664A	$ 80.00
NWTPH-Dx	NWTPH-Dx	$ 107.00
NWTPH-Gx	NWTPH-Gx	$ 132.00
Minerals (Ca, Mg,K,Na)	200.7	-
Anions (F, Cl, SO4)	300.0	$ 72.00
Total Metals (As,Ba,Cd,Cr,Cu,Pb,Mo,Ni,Se,Ag,Zn)	200.8	$ 198.00

Mercury (Low Level)	1631E	$	132.00
	Total	$	1,148.00
	Total with 20% discount	$	**918.40**

Regards,

Larry

Lawrence J Henderson, PhD
Director of Laboratories/Vice President
360-757-1400 office extension 107
360-770-0154 cell
www.edgeanalytical.com

Chain of Custody / Analysis Request

(Please complete all applicable shaded sections)

Page_____ of_____

EDGE ANALYTICAL

Main Lab (800-755-9295)
1620 South Walnut St. Burlington, WA 98233
Microbiology (888-725-1212)
805 W. Orchard Dr. Suite 4 Bellingham, WA 98225
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Corvallis Lab (541-753-4946)
1100 NE Circle Blvd, Ste 130, Corvallis, OR 97330
Bend Lab (541-639-8425)
20332 Empire Ave Ste F4, Bend, OR 97703

Report to: Sakata Seed America	Bill to: Sakata Seed America SAK03	**For Lab Use Only**	
Ship Address: 11857 Bay Ridge Dr.	Address: 11857 Bay Ridge Dr.	Ref # 20-00626	
City: Burlington St: WA Zip: 98233	City: Burlington St: WA Zip: 98233	**Check Regulatory Program**	
Attn: Cal Mundell	Phone: FAX:	☐ Safe Drinking Water Act	
Phone: 360.336-9727 FAX:	P.O.#: Attn:	☐ Clean Water Act	
Email: cmundell@sakata.com	☐ Visa ☐ M/C ☐ A/E Expires /	☐ RCRA / CERCLA	
Project: NPDES Testing	Card#:	☐ Other	

Instructions

1. Use one line per sample Location.
2. Be specific in analysis requests.
3. *(NEW)* **List each metal individually** *(NEW)*
4. Check off analyses to be performed for each sample Location.
5. Enter number of containers.

Turn Around Time Required
- ☐ Standard
- ☐ Half-time (50% surcharge)
- ☐ Quickest (100% surcharge) Phone Call Req.
- ☐ Emergency (Phone Call Req.)

CO042892

	Field ID	Location	Grab/ Comp.	Sample Matrix*	Date	Time	1631E (Mercury)	1664 (O&G)	BOD (ONLY)	COD,NH3,TKN,NO3+NO2,Tota i-P	DO	Minerals/Metals	NWTPH-Dx	NWTPH-G/BTEX	Number of Containers	Special Instructions Conditions on Receipt
1	TANK	DIPPING AREA			1-7-20	2:40	☐	☐	☐	☐	☐	☐	☐	☐		
2							☐	☐	☐	☐	☐	☐	☐	☐		
3							☐	☐	☐	☐	☐	☐	☐	☐		
4							☐	☐	☐	☐	☐	☐	☐	☐		
5							☐	☐	☐	☐	☐	☐	☐	☐		
6							☐	☐	☐	☐	☐	☐	☐	☐		
7							☐	☐	☐	☐	☐	☐	☐	☐		
8							☐	☐	☐	☐	☐	☐	☐	☐		
9							☐	☐	☐	☐	☐	☐	☐	☐		

Analyses Requested

****Are there known hazardous or dangerous wastes in these samples? YES / NO If YES, indicate type on reverse of this form; samples may be returned to you:**

Total Containers:

Sampled by: Phone: FAX: Email:

Sample Receipt Request (Must include FAX or Email) ☐

* **W** - water **SW** - surface water **WW** - waste water **SL** - salt water
DW - drinking water **ST** - storm water **S** - soil **OL** - oil Other:

**Relinquished by	Date	Time	Received by	Date	Time
			MME	1/7/20	1529
			RML 10.1°	1/7/20	1633

	Yes	No	N/A
Custody seals intact	☐	☐	☑
Sample temp 13.5 C satisfactory	☑	☐	☐
Samples received intact	☑	☐	
Chain of custody & labels agree	☑	☐	

FORM: COC 6-27-2018

edge

Chain of Custody / Analysis Request (Please complete all applicable shaded sections)

Report to: Sakata Seed America	Bill to: Sakata Seed America SAK03	For Lab Use Only Ref# 20-00626
Ship Address: 11857 Bay Ridge Dr.	Address: 11857 Bay Ridge Dr.	
City: Burlington St: WA Zip: 98233	City: Burlington St: WA Zip: 98233	Check Regulatory Program
Attn: Cal Mundell	Phone: FAX:	☐ Safe Drinking Water Act
Phone: 360 336-9727 FAX:	P.O.#: Attn:	☐ Clean Water Act
Email: cmundell@sakata.com	☐ Visa ☐ M/C ☐ A/E Expires /	☐ RCRA / CERCLA
Project NPDES Testing	Card#:	☐ Other

EDGE ANALYTICAL
Main Lab (800-755-9295)
1620 South Walnut St. Burlington, WA 98233
Microbiology (888-725-1212)
805 W. Orchard Dr. Suite 4 Bellingham, WA 98225
Wilsonville Lab (503-682-7802)
9150 SW Pioneer Ct. Suite W Wilsonville, OR 97070
Corvallis Lab (541-753-4946)
1100 NE Circle Blvd, Ste 130, Corvallis, OR 97330
Bend Lab (541-639-8425)
20332 Empire Ave Ste F4, Bend, OR 97703

Instructions

1. Use one line per sample Location.
2. Be specific in analysis requests.
3. *(NEW)* **List each metal individually** *(NEW)*
4. Check off analyses to be performed for each sample Location.
5. Enter number of containers.

Turn Around Time Required
- ☐ Standard
- ☐ Half-time (50% surcharge)
- ☐ Quickest (100% surcharge) Phone Call Req.
- ☐ Emergency (Phone Call Req.)

Analyses Requested

CO042892

	Field ID	Location	Grab/ Comp.	Sample Matrix*	Date	Time	SM9221B,E Total Coliform+Fecal (MPN)	TRIP BLANK (VOCs)	TSS,pH,Ec,o-PO4,F,Cl,SO4,T DS,FDS					Number of Containers	Special Instructions Conditions on Receipt
1							☐	☐	☐	☐	☐	☐	☐		
2							☐	☐	☐	☐	☐	☐	☐		
3							☐	☐	☐	☐	☐	☐	☐		
4							☐	☐	☐	☐	☐	☐	☐		
5							☐	☐	☐	☐	☐	☐	☐		
6							☐	☐	☐	☐	☐	☐	☐		
7							☐	☐	☐	☐	☐	☐	☐		
8							☐	☐	☐	☐	☐	☐	☐		
9							☐	☐	☐	☐	☐	☐	☐		

****Are there known hazardous or dangerous wastes in these samples? YES / NO If YES, indicate type on reverse of this form; samples may be returned to you.** Total Containers

Sampled by: Phone: FAX: Email:

Sample Receipt Request (Must include FAX or Email) ☐

* **W** - water **SW** - surface water **WW** - waste water **SL** - salt water
DW - drinking water **ST** - storm water **S** - soil **OL** - oil Other:

**Relinquished by	Date	Time	Received by	Date	Time
			MME	1720	1529

	Yes	No	N/A
Custody seals intact	☐	☐	☐
Sample temp_____C satisfactory	☐	☐	☐
Samples received intact	☐	☐	
Chain of custody & labels agree	☐	☐	

FORM: COC 6-27-2018

ANALYTICAL

Burlington, WA *Corporate Laboratory (a)*
1620 S Walnut St - Burlington, WA 98233 - **800.755.9295** • 360.757.1400

Bellingham, WA *Microbiology (b)*
805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212

Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7802

Corvallis, OR *Microbiology/Chemistry (d)*
1100 NE Circle Blvd, Ste 130 - Corvallis, OR 97330 - 541.753.4946

Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

January 20, 2020

Cal Mundell
Sakata Seed America
11857 Bay Ridge Dr.
Burlington, WA 98233

RE: 20-00626 - NPDES Testing

Dear Cal Mundell,

Your project: NPDES Testing, was received on Tuesday January 07, 2020.

All samples were analyzed within the accepted holding times and were appropriately preserved and analyzed according to approved analytical protocols, unless noted in the data or QC reports. The quality control data was within laboratory acceptance limits, unless specified in the data or QC reports.

If you have questions phone us at 800 755-9295.

Respectfully

Bryce Jensen
Chief Inorganic Chemist

Enclosures: Data Report
QC Reports
Chain of Custody

ANALYTICAL

Burlington, WA	*Corporate Laboratory (a)*	1620 S Walnut St	Burlington, WA 98233	**800.755.9295** • 360.757.1400
Bellingham, WA	*Microbiology (b)*	805 Orchard Dr Ste 4	Bellingham, WA 98225	360.715.1212
Portland, OR	*Microbiology/Chemistry (c)*	9150 SW Pioneer Ct Ste W	Wilsonville, OR 97070	503.682.7802
Corvallis, OR	*Microbiology (d)*	540 SW Third Street	Corvallis, OR 97333	541.753.4946

January 20, 2020

Case Narrative

Reference: **20-00626**

Lab Sample ID	Sample Information
1180	**Tank - Dipping Area**

Analytical Method	Notes	Created by
NWTPH-Dx	Diesel and Motor oil range peaks detected at reported concentrations, however the chromatograms did not match reference standards.	SMM

Analytical Method	Notes	Created by
SM5210 B	BOD: Sample dilution series did not meet criteria of at least 1.0mg/L residual dissolved oxygen. Result is an estimate. Dilution series will be adjusted for future samples. BSP 1/14/20	BSP

ANALYTICAL

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1100 NE Circle Blvd, Ste 130 - Corvallis, OR 97330 - 541.753.4946

Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Data Report

Client Name: Sakata Seed America
11857 Bay Ridge Dr.
Burlington, WA 98233

Reference Number: **20-00626**
Project: NPDES Testing

Report Date: 1/20/20

Date Received: 1/7/20
Approved by: ajw,bj,bsp,jln,ljh
Authorized by:

Bryce Jensen
Chief Inorganic Chemist

Sample Description: Tank Dipping Area — Matrix W — Sample Date: 1/7/20 2:40 pm
Lab Number: 1180 — Sample Comment: — Collected By:

CAS ID#	Parameter	Result	PQL	MDL	Units	DF	Method	Lab	Analyzed	Analyst	Batch	Comment
7439-97-6	**MERCURY - clean**	14.7	0.5	0.2	ng/L	1.0	1631		1/15/20	ETL	ANA1631_200115	Analyzed by Anatek
E-10140	**OIL AND GREASE**	7.0	2.5	1.3	mg/L	1.0	1664	a	1/9/20	AJW	1664_200109A	
7440-70-2	**CALCIUM**	7.2	0.5	0.009	mg/L	1.0	200.7/3010A	a	1/10/20	BJ	200.7_200110A	
7439-95-4	**MAGNESIUM**	13.1	0.5	0.001	mg/L	1.0	200.7/3010A	a	1/10/20	BJ	200.7_200110A	
7440-09-7	**POTASSIUM**	65.8	0.5	0.1	mg/L	1.0	200.7/3010A	a	1/10/20	BJ	200.7_200110A	
7440-23-5	**SODIUM**	3370	0.5	0.05	mg/L	1.0	200.7/3010A	a	1/10/20	BJ	200.7_200110A	
7440-38-2	**ARSENIC**	0.0004 J	0.0005	2.18E-05	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7440-39-3	**BARIUM**	0.0348	0.001	1.49E-05	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7440-43-9	**CADMIUM**	0.0023	0.00025	1.13E-05	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7440-47-3	**CHROMIUM**	0.0175	0.001	2.03E-05	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7440-50-8	**COPPER**	0.0209	0.002	2.76E-05	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7439-92-1	**LEAD**	0.00072	0.0005	6.66E-06	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7439-98-7	**MOLYBDENUM**	0.0040	0.001	0.0005	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7440-02-0	**NICKEL**	0.0048	0.0005	1.62E-05	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7782-49-2	**SELENIUM**	0.0308	0.001	2.66E-05	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7440-22-4	**SILVER**	0.00006 J	0.0002	1.17E-05	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
7440-66-6	**ZINC**	0.0304	0.0025	0.00055	mg/L	1.0	200.8/3010A	a	1/10/20	BJ	200.8_200110A2	
16887-00-6	**CHLORIDE**	3870	10	9.44	mg/L	100.0	300.0	a	1/8/20	AJW	IC02_200108A	
16984-48-8	**FLUORIDE**	15 IM	10	3.69	mg/L	100.0	300.0	a	1/8/20	AJW	IC02_200108A	
14808-79-8	**SULFATE**	120	20	4.31	mg/L	100.0	300.0	a	1/8/20	AJW	IC02_200108A	
7664-41-7	**AMMONIA-N**	0.52	0.020	0.014	mg/L	2.0	350.1	a	1/9/20	BSP	350.1_200109	
E-10264	**TOTAL KJELDAHL NITROGEN**	7.21	2	0.49	mg/L	10.0	351.2	a	1/16/20	BSP	351.2_200116	
E-10162	**TOTAL SUSPENDED SOLIDS**	47	4		mg/L	1.0	I-3765-85	a	1/9/20	AJW	TSS_200109	
E-10184	**ELECTRICAL CONDUCTIVITY**	17200	100		uS/cm	10.0	SM2510 B	a	1/9/20	BSP	EC_200109	
E-10173	**TOTAL DISSOLVED SOLIDS (TDS)**	15060	50		mg/L	5.0	SM2540 C	a	1/10/20	AJW	TDS_200108	

Notes:

ND = Not detected above the listed practical quantitation limit (PQL) or not above the Method Detection Limit (MDL), if requested.
PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
D.F. - Dilution Factor

If you have any questions concerning this report contact us at the above phone number.

Form: cRslt_2.rpt

ANALYTICAL

Reference Number: **20-00626**
Report Date: 1/20/20

Data Report

	FIXED DISSOLVED SOLIDS	9330	1		mg/L	1.0	SM2540 E	a	1/20/20	AJW	FDS_200108	
E-10139	**HYDROGEN ION (pH)**	6.54 H5			pH Units	1.0	SM4500-H+ B	a	1/7/20	BSP	PH_200107	Temp (C) : 25.3
E-10128	**TOTAL NITRATE/NITRITE**	1.70	0.01	0.004	mg/L	1.0	SM4500-NO3 F	a	1/16/20	BSP	NO3NO2_200116	
E-14539	**DISSOLVED OXYGEN**	2.98			mg/L	1.0	SM4500-O G	a	1/7/20	BSP	DO_200107	
14265-44-2	**ORTHO-PHOSPHATE**	0.58	0.02	0.00741	mg/L	2.0	SM4500-P F	a	1/8/20	BSP	OPHOS_200108	
7723-14-0	**TOTAL PHOSPHORUS**	0.929	0.100	0.026	mg/L	10.0	SM4500-P F/SM4500-P B(5)	a	1/9/20	BSP	tphos_200109	
E-10106	**5-Day BOD Test**	>519 N1	1.0		mg/L	1.0	SM5210 B	a	1/13/20	BSP	BOD_200108	
E-10117	**CHEMICAL OXYGEN DEMAND**	6400	500	9	mg/L	25.0	SM5220 D	a	1/16/20	BSP	COD_200116	
	TOTAL COLIFORM	18	1.8		MPN/100mL	1.0	SM9221 B/MTF	b	1/11/20	JFH	MTTC_200107fcb	
E-14551	**FECAL COLIFORM**	<18	1.8		MPN/100ml	1.0	SM9221 E/MTF	b	1/10/20	JFH	MTTC_200107fcb	

Sample Description: 1631E Field Blank Dipping Area — Matrix W — Sample Date: 1/7/20 2:40 pm
Lab Number: 1181 — Sample Comment: — Collected By:

CAS ID#	Parameter	Result	PQL	MDL	Units	DF	Method	Lab	Analyzed	Analyst	Batch	Comment
7439-97-6	**MERCURY - clean**	0.84	0.5	0.2	ng/L	1.0	1631		1/14/20	ETL	ANA1631_200115	Analyzed by Anatek

See 2 pages back - CASE NARRATIVE

Notes:

ND = Not detected above the listed practical quantitation limit (PQL) or not above the Method Detection Limit (MDL), if requested.
PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
D.F. - Dilution Factor

ANALYTICAL

Burlington, WA *Corporate Laboratory (e)*
1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400

Bellingham, WA *Microbiology (b)*
805 Orchard Dr Ste 4 - Bellingham, WA 98225 - 360.715.1212

Portland, OR *Microbiology/Chemistry (c)*
9150 SW Pioneer Ct Ste W - Wilsonville, OR 97070 - 503.682.7602

Corvallis, OR *Microbiology/Chemistry (d)*
1100 NE Circle Blvd, Ste 130 - Corvallis, OR 97330 - 541.753.4946

Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Hydrocarbon Data Report

Client Name: Sakata Seed America
11857 Bay Ridge Dr.
Burlington, WA 98233

Reference Number: **20-00626**
Project: NPDES Testing
Report Date: 1/20/20
Date Received: 1/7/20
Approved By: hy,pdm
Authorized by:

Bryce Jensen
Chief Inorganic Chemist

Sample Description: Tank - Dipping Area
Lab Number: 1180
Date Analyzed: 1/14/20

Sample Date: 1/7/20 14:40
Collected By:
Analyzed By: HY

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Gx											
BENZENE	**ND**		5	0.005	0.0020	0.0007	mg/L	8260C/5030B	a	GXW_200114	
TOLUENE	**ND**		5	1.00	0.0020	0.00035	mg/L	8260C/5030B	a	GXW_200114	
ETHYLBENZENE	**ND**		5	0.70	0.0020	0.00045	mg/L	8260C/5030B	a	GXW_200114	
TOTAL XYLENES	**ND**		5	1.00	0.0040		mg/L	8260C/5030B	a	GXW_200114	
GASOLINE (C8 - C12)	**ND**		5	1	0.50		mg/L	8260C/5030B	a	GXW_200114	

Notation:
ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.
PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
D.F. - Dilution Factor
Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001
The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.
Form: cHCID.rpt

ANALYTICAL

Burlington, WA *Corporate Laboratory (a)*
1620 S Walnut St - Burlington, WA 98233 - 800.755.9295 • 360.757.1400

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Bend, OR *Microbiology (e)*
20332 Empire Blvd Ste 4 - Bend, OR 97701 - 541.639.8425

Hydrocarbon Data Report

Client Name: Sakata Seed America
11857 Bay Ridge Dr.
Burlington, WA 98233

Reference Number: **20-00626**
Project: NPDES Testing
Report Date: 1/20/20
Date Received: 1/7/20
Approved By: hy,pdm
Authorized by:

Bryce Jensen
Chief Inorganic Chemist

Sample Description: Tank - Dipping Area
Lab Number: 1180
Date Analyzed: 1/10/20

Sample Date: 1/7/20 14:40
Collected By:
Analyzed By: SMM

Parameter	Result	Flag	DF	Cleanup Level	PQL	MDL	Units	Method	Lab	Batch	Comment
NWTPH-Dx											
DIESEL (C12 - C24)	**0.4**	N1	1	0.5	0.1	0.07	mg/L	NWTPH-Dx/35 10C	a	DXW_200108	
HEAVIER OILS (>C24)	**0.5**	N1	1	0.5	0.1		mg/L	NWTPH-Dx/35 10C	a	DXW_200108	

Notation:
ND - A result of "ND" indicates that the compound was not detected above the Lab's Method Reporting Limit - MRL.
PQL = Practical Quantitation Limit is the lowest level that can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions.
D.F. - Dilution Factor
Cleanup Level - The regulatory limit for Method A Cleanup Levels (MTCA, Chapter173-340 WAC) contaminants in the specified matrix. Amended Feb 12, 2001
The Cleanup level for Gasoline Range Organics (GRO) is 100 mg/Kg for gas mixtures without benzene and when the total ethylbenzene, toluene and xylenes are less than 1% of the gasoline concentration. The Cleanup level for GRO is 30 mg/Kg for all other mixtures.

If you have any questions concerning this report contact us at the above phone number.
Form: cHCID.rpt

ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Calibration Check

Reference Number: **20-00626**
Report Date: 01/20/20

Batch		Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
200.7_200110A	2	CALCIUM	10.9	11	mg/L	200.7	99	90-110		CAL	
	2	MAGNESIUM	11.1	11	mg/L	200.7	101	90-110		CAL	
	2	POTASSIUM	9.9	10	mg/L	200.7	99	90-110		CAL	
	2	SODIUM	11.1	11	mg/L	200.7	101	90-110		CAL	
200.8_200110A2	0	ARSENIC	0.00103	0.001	mg/L	200.8	103	80-120		CAL	
	0	BARIUM	0.00097	0.001	mg/L	200.8	97	80-120		CAL	
	0	CADMIUM	0.00101	0.001	mg/L	200.8	101	80-120		CAL	
	0	CHROMIUM	0.00097	0.001	mg/L	200.8	97	80-120		CAL	
	0	COPPER	0.001	0.001	mg/L	200.8	100	80-120		CAL	
	0	LEAD	0.00096	0.001	mg/L	200.8	96	80-120		CAL	
	0	MOLYBDENUM	0.00105	0.001	mg/L	200.8	105	80-120		CAL	
	0	NICKEL	0.00098	0.001	mg/L	200.8	98	80-120		CAL	
	0	SELENIUM	0.00104	0.001	mg/L	200.8	104	80-120		CAL	
	0	SILVER	0.00103	0.001	mg/L	200.8	103	80-120		CAL	
	0	ZINC	0.00101	0.001	mg/L	200.8	101	80-120		CAL	
350.1_200109	0	AMMONIA-N	2.64	2.50	mg/L	350.1	106	90-110		CAL	
351.2_200116	0	TOTAL KJELDAHL NITROGEN	2.55	2.50	mg/L	351.2	102	90-110		CAL	
EC_200109	0	ELECTRICAL CONDUCTIVITY	1413	1413	uS/cm	SM2510 B	100	85-115		CAL	
	1	ELECTRICAL CONDUCTIVITY	10.94	10.00	uS/cm	SM2510 B	109	85-115		CAL	
IC02_200108A	0	CHLORIDE	1	1	mg/L	300.0	100	90-110		CAL	
	0	SULFATE	1.9	2	mg/L	300.0	95	90-110		CAL	
	0	FLUORIDE	0.92	1	mg/L	300.0	92	90-110		CAL	
NO3NO2_20011(	0	TOTAL NITRATE/NITRITE	1.01	1.00	mg/L	SM4500-NO3 F	101	90-110		CAL	
ophos_200108	0	ORTHO-PHOSPHATE	1.05	1.00	mg/L	SM4500-P F	105	85-115		CAL	
pH_200107	0	HYDROGEN ION (pH)	8.03	8.00	pH Units	SM4500-H+ B	100	80-120		CAL	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Calibration Check

Reference Number: **20-00626**
Report Date: 01/20/20

Batch		Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
pH_200107	1	HYDROGEN ION (pH)	8.05	8.00	pH Units	SM4500-H+ B	101	80-120		CAL	
	2	HYDROGEN ION (pH)	7.97	8.00	pH Units	SM4500-H+ B	100	80-120		CAL	
	3	HYDROGEN ION (pH)	8.02	8.00	pH Units	SM4500-H+ B	100	80-120		CAL	
tphos_200109	0	TOTAL PHOSPHORUS	0.093	0.100	mg/L	SM4500-P F	93	85-115		CAL	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Laboratory Fortified Blank

Reference Number: **20-00626**
Report Date: 01/20/20

Batch		Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
1664_200109A	0	OIL AND GREASE	37	40	mg/L	1664	93	78-114		LFB	
200.7_200110A	1	CALCIUM	13.2	13	mg/L	200.7	102	85-115		LFB	
	1	MAGNESIUM	13.3	13	mg/L	200.7	102	85-115		LFB	
	1	POTASSIUM	17.4	17.5	mg/L	200.7	99	85-115		LFB	
	1	SODIUM	13.2	13	mg/L	200.7	102	85-115		LFB	
200.8_200110A2	0	ARSENIC	0.0243	0.025	mg/L	200.8	97	85-115		LFB	
	0	BARIUM	0.0263	0.025	mg/L	200.8	105	85-115		LFB	
	0	CADMIUM	0.0247	0.025	mg/L	200.8	99	85-115		LFB	
	0	CHROMIUM	0.027	0.025	mg/L	200.8	108	85-115		LFB	
	0	COPPER	0.0265	0.025	mg/L	200.8	106	85-115		LFB	
	0	LEAD	0.0256	0.025	mg/L	200.8	102	85-115		LFB	
	0	MOLYBDENUM	0.0269	0.025	mg/L	200.8	108	85-115		LFB	
	0	NICKEL	0.0265	0.025	mg/L	200.8	106	85-115		LFB	
	0	SELENIUM	0.0213	0.025	mg/L	200.8	85	85-115		LFB	
	0	SILVER	0.0138	0.0125	mg/L	200.8	110	85-115		LFB	
	0	ZINC	0.0221	0.025	mg/L	200.8	88	85-115		LFB	
351.2_200116	0	TOTAL KJELDAHL NITROGEN	2.02	2.00	mg/L	351.2	101	90-110		LFB	
COD_200116	0	CHEMICAL OXYGEN DEMAND	47	50	mg/L	SM5220 D	94	90-110		LFB	
DXW_200108	0	DIESEL (C12 - C24)	5.4	5	mg/L	NWTPH-Dx	108	70-130		LFB	
GXW_200114	0	BENZENE	0.0034	0.004	mg/L	8260C	85	80-120		LFB	
	0	ETHYLBENZENE	0.0035	0.004	mg/L	8260C	88	80-120		LFB	
	0	GASOLINE (C8 - C12)	0.258	0.25	mg/L	8260C	103	80-120		LFB	
	0	TOLUENE	0.0033	0.004	mg/L	8260C	83	80-120		LFB	
	0	TOTAL XYLENES	0.0104	0.012	mg/L	8260C	87	80-120		LFB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Laboratory Reagent Blank

Reference Number: **20-00626**
Report Date: 01/20/20

Batch		Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
200.7_200110A	0	CALCIUM	ND		mg/L	200.7		0-0		LRB	
	0	MAGNESIUM	ND		mg/L	200.7		0-0		LRB	
	0	POTASSIUM	ND		mg/L	200.7		0-0		LRB	
	0	SODIUM	ND		mg/L	200.7		0-0		LRB	
200.8_200110A2	0	ARSENIC	ND		mg/L	200.8		0-0		LRB	
	0	BARIUM	ND		mg/L	200.8		0-0		LRB	
	0	CADMIUM	ND		mg/L	200.8		0-0		LRB	
	0	CHROMIUM	ND		mg/L	200.8		0-0		LRB	
	0	COPPER	ND		mg/L	200.8		0-0		LRB	
	0	LEAD	ND		mg/L	200.8		0-0		LRB	
	0	MOLYBDENUM	ND		mg/L	200.8		0-0		LRB	
	0	NICKEL	ND		mg/L	200.8		0-0		LRB	
	0	SELENIUM	ND		mg/L	200.8		0-0		LRB	
	0	SILVER	ND		mg/L	200.8		0-0		LRB	
	0	ZINC	ND		mg/L	200.8		0-0		LRB	
350.1_200109	0	AMMONIA-N	ND		mg/L	350.1		0-0		LRB	
351.2_200116	0	TOTAL KJELDAHL NITROGEN	ND		mg/L	351.2		0-0		LRB	
IC02_200108A	0	CHLORIDE	ND		mg/L	300.0		0-0		LRB	
	0	SULFATE	ND		mg/L	300.0		0-0		LRB	
	0	FLUORIDE	ND		mg/L	300.0		0-0		LRB	
ophos_200108	0	ORTHO-PHOSPHATE	ND		mg/L	SM4500-P F		0-0		LRB	
tphos_200109	0	TOTAL PHOSPHORUS	ND		mg/L	SM4500-P F		0-0		LRB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

EDGE ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Blank

Reference Number: **20-00626**
Report Date: 01/20/20

Batch		Analyte	Result	True Value	Units	Method	% Recovery	QC Limits*	QC Qualifier	QC Type	Comment
1664_200109A	0	OIL AND GREASE	ND		mg/L	1664		0-1		MB	
200.7_200110A	0	CALCIUM	ND		mg/L	200.7		0-0		MB	
	0	MAGNESIUM	ND		mg/L	200.7		0-0		MB	
	0	POTASSIUM	ND		mg/L	200.7		0-0		MB	
	0	SODIUM	ND		mg/L	200.7		0-0		MB	
200.8_200110A2	0	ARSENIC	ND		mg/L	200.8		0-0		MB	
	0	BARIUM	ND		mg/L	200.8		0-0		MB	
	0	CADMIUM	ND		mg/L	200.8		0-0		MB	
	0	CHROMIUM	ND		mg/L	200.8		0-0		MB	
	0	COPPER	ND		mg/L	200.8		0-0		MB	
	0	LEAD	ND		mg/L	200.8		0-0		MB	
	0	MOLYBDENUM	ND		mg/L	200.8		0-0		MB	
	0	NICKEL	ND		mg/L	200.8		0-0		MB	
	0	SELENIUM	ND		mg/L	200.8		0-0		MB	
	0	SILVER	ND		mg/L	200.8		0-0		MB	
	0	ZINC	ND		mg/L	200.8		0-0		MB	
350.1_200109	0	AMMONIA-N	ND		mg/L	350.1		0-0		MB	
351.2_200116	0	TOTAL KJELDAHL NITROGEN	ND		mg/L	351.2		0-0		MB	
BOD_200108	0	5-Day BOD Test	ND		mg/L	SM5210 B		0-0		MB	
COD_200116	0	CHEMICAL OXYGEN DEMAND	ND		mg/L	SM5220 D		0-3		MB	
DXW_200108	0	DIESEL (C12 - C24)	ND		mg/L	NWTPH-Dx		0-0		MB	
	0	HEAVIER OILS (>C24)	ND		mg/L	NWTPH-Dx		0-0		MB	
EC_200109	0	ELECTRICAL CONDUCTIVITY	ND		uS/cm	SM2510 B		0-10		MB	
GXW_200114	0	BENZENE	ND		mg/L	8260C		0-0		MB	TB 20-00626

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Blank

Reference Number: **20-00626**
Report Date: 01/20/20

Batch		Analyte	Result	True Value	Units	Method	% Recovery	QC Limits*	QC Qualifier	QC Type	Comment
GXW_200114	0	ETHYLBENZENE	ND		mg/L	8260C		0-0		MB	TB 20-00626
	0	GASOLINE (C8 - C12)	ND		mg/L	8260C		0-0		MB	TB 20-00626
	0	TOLUENE	ND		mg/L	8260C		0-0		MB	TB 20-00626
	0	TOTAL XYLENES	ND		mg/L	8260C		0-0		MB	TB 20-00626
NO3NO2_20011€	0	TOTAL NITRATE/NITRITE	ND		mg/L	SM4500-NO3 F		0-0		MB	
ophos_200108	0	ORTHO-PHOSPHATE	ND		mg/L	SM4500-P F		0-0		MB	
TDS_200108	0	TOTAL DISSOLVED SOLIDS (TDS)	ND		mg/L	SM2540 C		0-3		MB	
tphos_200109	0	TOTAL PHOSPHORUS	ND		mg/L	SM4500-P F		0-0		MB	
TSS_200109	0	TOTAL SUSPENDED SOLIDS	ND		mg/L	I-3765-85		0-2		MB	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Method Detection Limit Sample

Reference Number: **20-00626**
Report Date: 01/20/20

Batch		Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
GXW_200114	0	BENZENE	0.44	0.4	ug/L	8260C	110	50-150		MDL	
	0	ETHYLBENZENE	0.44	0.4	ug/L	8260C	110	50-150		MDL	
	0	TOLUENE	0.45	0.4	ug/L	8260C	113	50-150		MDL	
	0	TOTAL XYLENES	1.40	1.2	ug/L	8260C	117	50-150		MDL	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Quality Control Sample

Reference Number: **20-00626**
Report Date: 01/20/20

Batch		Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
200.7_200110A	1	CALCIUM	20.3	20	mg/L	200.7	102	95-105		QCS	
	1	MAGNESIUM	20.7	20	mg/L	200.7	104	95-105		QCS	
	1	POTASSIUM	20.3	20	mg/L	200.7	102	95-105		QCS	
	1	SODIUM	20.7	20	mg/L	200.7	104	95-105		QCS	
200.8_200110A2	0	ARSENIC	0.0396	0.04	mg/L	200.8	99	90-110		QCS	
	0	BARIUM	0.0398	0.04	mg/L	200.8	100	90-110		QCS	
	0	CADMIUM	0.0409	0.04	mg/L	200.8	102	90-110		QCS	
	0	CHROMIUM	0.0403	0.04	mg/L	200.8	101	90-110		QCS	
	0	COPPER	0.0401	0.04	mg/L	200.8	100	90-110		QCS	
	0	LEAD	0.0392	0.04	mg/L	200.8	98	90-110		QCS	
	0	MOLYBDENUM	0.0385	0.04	mg/L	200.8	96	90-110		QCS	
	0	NICKEL	0.0407	0.04	mg/L	200.8	102	90-110		QCS	
	0	SELENIUM	0.0402	0.04	mg/L	200.8	101	90-110		QCS	
	0	SILVER	0.021	0.02	mg/L	200.8	105	90-110		QCS	
	0	ZINC	0.0401	0.04	mg/L	200.8	100	90-110		QCS	
350.1_200109	0	AMMONIA-N	3.81	4.00	mg/L	350.1	95	85-115		QCS	
351.2_200116	0	TOTAL KJELDAHL NITROGEN	3.05	2.78	mg/L	351.2	110	85-115		QCS	
BOD_200108	0	5-Day BOD Test	212	198	mg/L	SM5210 B	107	70-130		QCS	
COD_200116	0	CHEMICAL OXYGEN DEMAND	372	362	mg/L	SM5220 D	103	90-110		QCS	
EC_200109	0	ELECTRICAL CONDUCTIVITY	139.7	146.9	uS/cm	SM2510 B	95	90-110		QCS	
	1	ELECTRICAL CONDUCTIVITY	138.4	146.9	uS/cm	SM2510 B	94	90-110		QCS	
IC02_200108A	0	CHLORIDE	6	6	mg/L	300.0	100	90-110		QCS	
	0	SULFATE	29.9	30	mg/L	300.0	100	90-110		QCS	
	0	FLUORIDE	3.9	4	mg/L	300.0	98	90-110		QCS	
NO3NO2_20011(	0	TOTAL NITRATE/NITRITE	0.97	1.00	mg/L	SM4500-NO3 F	97	90-110		QCS	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

ANALYTICAL

SAMPLE INDEPENDENT QUALITY CONTROL REPORT

Quality Control Sample

Reference Number: **20-00626**
Report Date: 01/20/20

Batch	Analyte	Result	True Value	Units	Method	% Recovery	Limits*	QC Qualifier	QC Type	Comment
ophos_200108	0 ORTHO-PHOSPHATE	0.45	0.50	mg/L	SM4500-P F	90	90-110		QCS	
TDS_200108	0 TOTAL DISSOLVED SOLIDS (TDS)	520	500	mg/L	SM2540 C	104	80-120		QCS	
tphos_200109	0 TOTAL PHOSPHORUS	0.179	0.181	mg/L	SM4500-P F	99	90-110		QCS	
TSS_200109	0 TOTAL SUSPENDED SOLIDS	470	500	mg/L	I-3765-85	94	80-120		QCS	

*Notation:

% Recovery = (Result of Analysis)/(True Value) * 100

NA = Indicates % Recovery could not be calculated.

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

EDGE ANALYTICAL

Reference Number: **20-00626**
Report Date: 1/20/2020

SAMPLE DEPENDENT
QUALITY CONTROL REPORT
Duplicate, Matrix Spike/Matrix Spike Duplicate and Confirmation Result Report

Batch	Sample	Analyte	Result	Duplicate Result	Units	%RPD	Limits	QC Qualifier	Type	Comments
Duplicate										
200.7_200110A										
7440-70-2	433	CALCIUM	0.06	0.06	mg/L	**0.0**	0-20		DUP	
7439-95-4	433	MAGNESIUM	0.04	0.03	mg/L	**28.6**	0-20	IEV	DUP	
7440-09-7	433	POTASSIUM	1200	1250	mg/L	**4.1**	0-20		DUP	
7440-23-5	433	SODIUM	286	297	mg/L	**3.8**	0-20		DUP	
7440-70-2	1180	CALCIUM	7.2	7.1	mg/L	**1.4**	0-20		DUP	
7439-95-4	1180	MAGNESIUM	13.1	13.0	mg/L	**0.8**	0-20		DUP	
7440-09-7	1180	POTASSIUM	65.8	66.8	mg/L	**1.5**	0-20		DUP	
7440-23-5	1180	SODIUM	3370	3330	mg/L	**1.2**	0-20		DUP	
200.8_200110A2										
7440-38-2	427	ARSENIC	0.00006	0.0002	mg/L	**107.7**	0-20	IEV	DUP	
7440-39-3	427	BARIUM	0.0043	0.0044	mg/L	**2.3**	0-20		DUP	
7439-92-1	427	LEAD	0.0001	0.00005	mg/L	**66.7**	0-20	IEV	DUP	
7440-66-6	427	ZINC	ND	ND	mg/L	NA	0-20		DUP	
7440-38-2	433	ARSENIC	0.0013	0.0012	mg/L	**8.0**	0-20		DUP	
7440-39-3	433	BARIUM	0.0010	0.00094	mg/L	**6.2**	0-20		DUP	
7440-43-9	433	CADMIUM	ND	ND	mg/L	NA	0-20		DUP	
7440-47-3	433	CHROMIUM	0.0092	0.0081	mg/L	**12.7**	0-20		DUP	
7440-50-8	433	COPPER	0.0137	0.0129	mg/L	**6.0**	0-20		DUP	
7439-92-1	433	LEAD	0.00016	0.00015	mg/L	**6.5**	0-20		DUP	
7439-98-7	433	MOLYBDENUM	0.0093	0.0082	mg/L	**12.6**	0-20		DUP	
7440-02-0	433	NICKEL	0.0037	0.0034	mg/L	**8.5**	0-20		DUP	
7782-49-2	433	SELENIUM	0.0001	0.0002	mg/L	**66.7**	0-20	IEV	DUP	
7440-22-4	433	SILVER	ND	ND	mg/L	NA	0-20		DUP	
7440-66-6	433	ZINC	0.0144	0.0136	mg/L	**5.7**	0-20		DUP	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of a analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

Batch	Sample	Analyte	Result	Duplicate Result	Units	%RPD	Limits	QC Qualifier	Type	Comments
7440-38-2	957	ARSENIC	0.61	0.52	ug/L	**15.9**	0-20		DUP	
7440-66-6	957	ZINC	2.2	2.2	ug/L	**0.0**	0-20		DUP	
7440-38-2	1180	ARSENIC	0.0004	0.0003	mg/L	**28.6**	0-20	IEV	DUP	
7440-39-3	1180	BARIUM	0.0348	0.0344	mg/L	**1.2**	0-20		DUP	
7440-43-9	1180	CADMIUM	0.0023	0.0023	mg/L	**0.0**	0-20		DUP	
7440-47-3	1180	CHROMIUM	0.0175	0.0170	mg/L	**2.9**	0-20		DUP	
7440-50-8	1180	COPPER	0.0209	0.0265	mg/L	**23.6**	0-20		DUP	
7439-92-1	1180	LEAD	0.00072	0.00071	mg/L	**1.4**	0-20		DUP	
7439-98-7	1180	MOLYBDENUM	0.0040	0.0041	mg/L	**2.5**	0-20		DUP	
7440-02-0	1180	NICKEL	0.0048	0.0049	mg/L	**2.1**	0-20		DUP	
7782-49-2	1180	SELENIUM	0.0308	0.0337	mg/L	**9.0**	0-20		DUP	
7440-22-4	1180	SILVER	0.00006	0.00009	mg/L	**40.0**	0-20	IEV	DUP	
7440-66-6	1180	ZINC	0.0304	0.0308	mg/L	**1.3**	0-20		DUP	
350.1_200109										
7664-41-7	427	AMMONIA-N	ND	ND	mg/L	**NA**	0-20		DUP	
7664-41-7	429	AMMONIA-N	2.68	2.72	mg/L	**1.5**	0-20		DUP	
7664-41-7	94575	AMMONIA-N	0.12	0.13	mg/L	**8.0**	0-20		DUP	
351.2_200116										
E-10264	518	TOTAL KJELDAHL NITROGEN	ND	ND	mg/L	**NA**	0-20		DUP	
BOD_200108										
E-10106	742	5-Day BOD Test	561	546	mg/L	**2.7**	0-20		DUP	
E-10106	1179	5-Day BOD Test	109	107	mg/L	**1.9**	0-20		DUP	
E-10106	1470	5-Day BOD Test	14516	14833	mg/L	**2.2**	0-20		DUP	
COD_200116										
E-10117	1643	CHEMICAL OXYGEN DEMAND	194	196	mg/L	**1.0**	0-20		DUP	
E-10117	2118	CHEMICAL OXYGEN DEMAND	ND	ND	mg/L	**NA**	0-20		DUP	
E-10117	3014	CHEMICAL OXYGEN DEMAND	262	267	mg/L	**1.9**	0-20		DUP	
DXW_200108										
NA	935	DIESEL (C12 - C24)	ND	ND	mg/L	**NA**	0-30		DUP	
NA	935	HEAVIER OILS (>C24)	ND	ND	mg/L	**NA**	0-30		DUP	
EC_200109										
E-10184	518	ELECTRICAL CONDUCTIVITY	ND	ND	uS/cm	**NA**	0-20		DUP	
E-10184	914	ELECTRICAL CONDUCTIVITY	362	361	uS/cm	**0.3**	0-20		DUP	
IC02_200108A										

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of a analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

Batch	Sample	Analyte	Result	Duplicate Result	Units	%RPD	Limits	QC Qualifier	Type	Comments
16887-00-6	1425	CHLORIDE	13.4	13.4	mg/L	**0.0**	0-20		DUP	
NO3NO2_200116										
E-10128	2026	TOTAL NITRATE/NITRITE	0.01	0.01	mg/L	**0.0**	0-20		DUP	
E-10128	2148	TOTAL NITRATE/NITRITE	ND	ND	mg/L	**NA**	0-20		DUP	
E-10128	2151	TOTAL NITRATE/NITRITE	0.57	0.56	mg/L	**1.8**	0-20		DUP	
E-10128	2157	TOTAL NITRATE/NITRITE	ND	ND	mg/L	**NA**	0-20		DUP	
OPHOS_200108										
14265-44-2	957	ORTHO-PHOSPHATE	0.085	0.083	mg/L	**2.4**	0-20		DUP	
PH_200107										
E-10139	830	HYDROGEN ION (pH)	6.55	6.51	pH Units	**0.6**	0-45		DUP	
TDS_200108										
E-10173	1180	TOTAL DISSOLVED SOLIDS (TDS)	15060	14705	mg/L	**2.4**	0-5		DUP	
TPHOS_200109										
7723-14-0	711	TOTAL PHOSPHORUS	0.258	0.255	mg/L	**1.2**	0-20		DUP	
7723-14-0	712	TOTAL PHOSPHORUS	0.255	0.271	mg/L	**6.1**	0-20		DUP	
TSS_200109										
E-10162	427	TOTAL SUSPENDED SOLIDS	5	5	mg/L	**0.0**	0-5		DUP	
E-10162	1418	TOTAL SUSPENDED SOLIDS	152	152	mg/L	**0.0**	0-5		DUP	

%RPD = Relative Percent Difference

NA = Indicates %RPD could not be calculated

Matrix Spike (MS)/Matrix Spike Duplicate (MSD) analyses are used to determine the accuracy (MS) and precision (MSD) of a analytical method in a given sample matrix. Therefore, the usefulness of this report is limited to samples of similar matrices analyzed in the same analytical batch.

Only Duplicate sample with detections are listed in this report

Limits are intended for water matrices only. These criteria are for guidance only when reported with soils/solids.

FORM: QC Dependent.rpt

Batch/CAS	Sample	Analyte	Result	Spike Result	Duplicate Spike Result	Spike Conc	Units	Percent Recovery MS	Percent Recovery MSD	Limits*	%RPD	Limits*	QC Qualifier	Type	Comments
7782-49-2	1180	SELENIUM	0.0308	0.0548		0.025	mg/L	96		70-130	NA	0-20		LFM	
7440-22-4	1180	SILVER	0.00006	0.0107		0.0125	mg/L	85		70-130	NA	0-20		LFM	
7440-66-6	1180	ZINC	0.0304	0.0490		0.025	mg/L	74		70-130	NA	0-20		LFM	
350.1_200109															
7664-41-7	427	AMMONIA-N	ND	0.97	0.95	1.00	mg/L	97	95	70-130	2.1	0-20		LFM	
7664-41-7	429	AMMONIA-N	2.68	3.62	3.55	1.00	mg/L	94	87	70-130	7.7	0-20		LFM	
7664-41-7	94575	AMMONIA-N	0.12	1.16	1.15	1.00	mg/L	104	103	70-130	1.0	0-20		LFM	
351.2_200116															
E-10264	518	TOTAL KJELDAHL NITROGEN	ND	2.04		2.00	mg/L	102		70-130	NA	0-20		LFM	
COD_200116															
E-10117	1643	CHEMICAL OXYGEN DEMAND	194	235	235	50	mg/L	82	82	70-130	0.0	0-20		LFM	
E-10117	2118	CHEMICAL OXYGEN DEMAND	18	65	64	50	mg/L	94	92	70-130	2.2	0-20		LFM	
E-10117	3014	CHEMICAL OXYGEN DEMAND	262	301	297	50	mg/L	78	70	70-130	10.8	0-20		LFM	
IC02_200108A															
16887-00-6	1425	CHLORIDE	13.4	14.3		1	mg/L	90		90-110	NA	0-20		LFM	
NO3NO2_200116															
E-10128	2026	TOTAL NITRATE/NITRITE	0.01	0.95	0.96	1.00	mg/L	94	95	80-120	1.1	0-20		LFM	
E-10128	2148	TOTAL NITRATE/NITRITE	ND	0.97	0.96	1.00	mg/L	97	96	80-120	1.0	0-20		LFM	
E-10128	2151	TOTAL NITRATE/NITRITE	0.57	1.62	1.64	1.00	mg/L	105	107	80-120	1.9	0-20		LFM	
E-10128	2157	TOTAL NITRATE/NITRITE	ND	0.97	0.96	1.00	mg/L	97	96	80-120	1.0	0-20		LFM	
OPHOS_200108															
14265-44-2	957	ORTHO-PHOSPHATE	0.09	0.97	0.96	1.00	mg/L	88	87	70-130	1.1	0-20		LFM	
TPHOS_200109															
7723-14-0	711	TOTAL PHOSPHORUS	0.258	0.301	0.306	0.050	mg/L	86	96	70-130	11.0	0-20		LFM	
7723-14-0	712	TOTAL PHOSPHORUS	0.255	0.311	0.307	0.050	mg/L	112	104	70-130	7.4	0-20		LFM	

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FORM: QC Dependent.rpt

QUALITY CONTROL REPORT
SURROGATE REPORT

Reference Number: 20-00626
Report Date: 01/20/20

Lab No	Analyte	Result	Qualifier	Units	Method	Limit
DXW_200108						
1180	O-TERPHENYL	83		%	NWTPH-Dx	Acceptance Limits: 50-150%
GXW_200114						
1180	d8-TOLUENE (Surr)	102		%	8260C	Acceptance Range: 50-150%

*Notation:

A surrogate is a pure compound added to a sample in the laboratory just before processing so that the overall efficiency of a method can be determined.

The Acceptance Limits (or Control Limits) approximate a 99% confidence interval around the mean recovery.

ANALYTICAL

Qualifier Definitions

Reference Number: 20-00626
Report Date: 01/20/20

Qualifier	Definition
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
IEV	Acceptance criteria do not apply to estimated values
IM	Matrix induced bias assumed
INH	The sample was non-homogeneous
IS	The ratio of the spike concentration to sample background was too low to meet performance criteria
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
N1	See case narrative.

Note: Some qualifier definitions found on this page may pertain to results or QC data which are not printed with this report.