



7160 Irving St. Westminster, CO 80030

Mrs, Erin Scott
Water Quality Control Division-Industrial Permits
Colorado Dept. of Public Health and Environment
WQCD-PE-B2
4300 Cherry Creek Dr. S.
Denver, CO 80246-1530

Dear Mrs. Scott,

Enclosed please find attachments containing the amendments to our Industrial Discharge Permit application for the Rifle, Colorado facility.

Please feel free to contact me should you have any questions regarding the contents of this amendment.

Regards,

Mark A Marcin

Corporate Technical Officer

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Produced Water Solutions Inc.



7160 Irving St. Westminster, CO 80030

Amendments to Industrial Discharge Permit Application for Rifle, Colorado facility

Item 2 – Name and address of property owner; Complete Production Services c/o Jeff Kaufman 3770 Puritan Way, Suite E Frederick, CO 80516 303-800-1104

Item 3 – 4233 Centennial Parkway, Rifle, CO 81650, Weld County, Facility Name: Leeds Energy, 6S, 94W, 23, Lot 1,

Location of Plant, latitude and longitude - N 39 31', 02.6", W 107 50' 47.0" Location of Equalization Tank - N 39 31' 02.8" W 107 50' 47.2" Location of Discharge into Colorado - N 39 30' 56.3" W 107 50' 34.7" Outfall 001 Location of Discharge into Drainage Ditch - N 39 31'01.8" W 107 50' 37.6"

Item 6 – Maximum discharge, 0.84 MGD

Item 8 – Other Environmental Permits – Yes, (g) Air Pollution Control permits will be required for the condensate storage tank, ferric chloride storage tank, boiler and the produced water equalization tank. Permits have not yet been applied for, presently selecting Emission Control Devices for VOC control. Permits will be in place prior to start-up

Item 9 - Attached

Item 10 - Attached

Item 11 - Attached





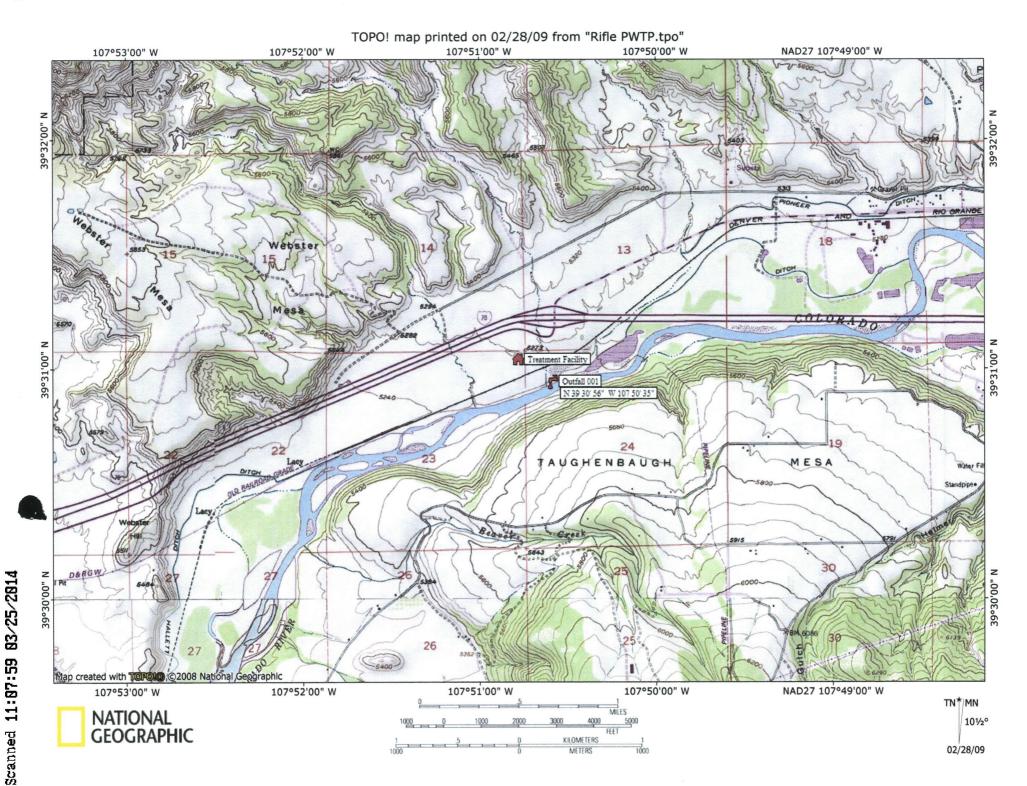
7160 Irving St. Westminster, CO 80030

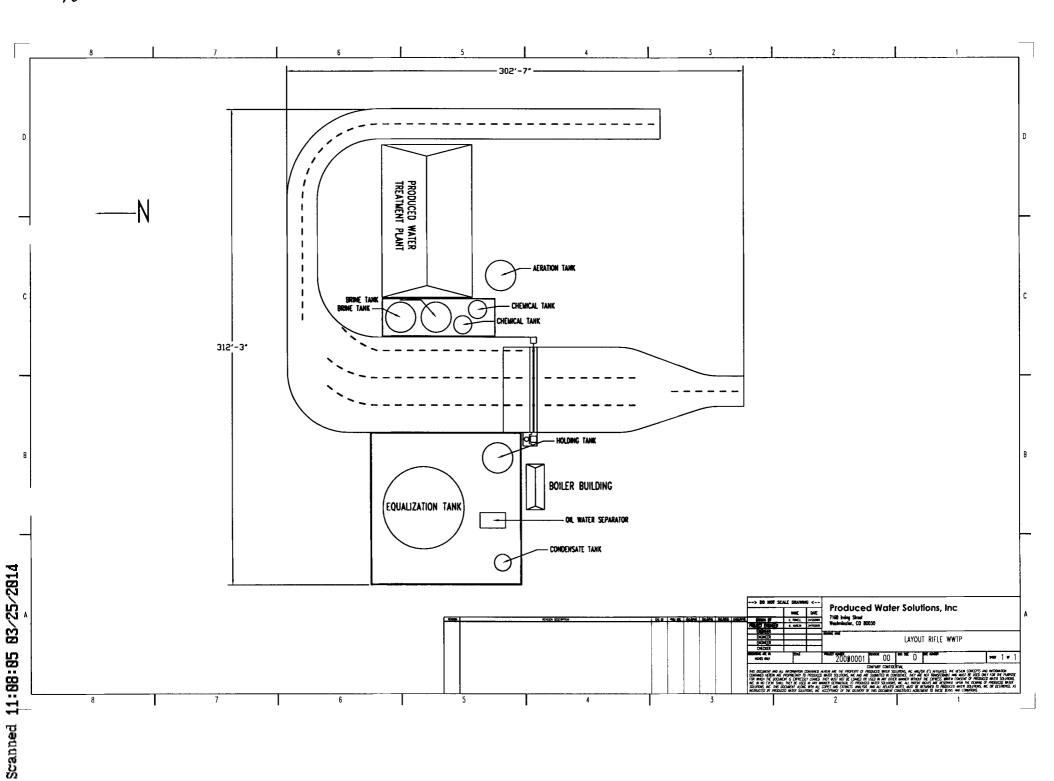
Item 13- Chemical Inventory, Added FKD 1000 MSDS, See attached

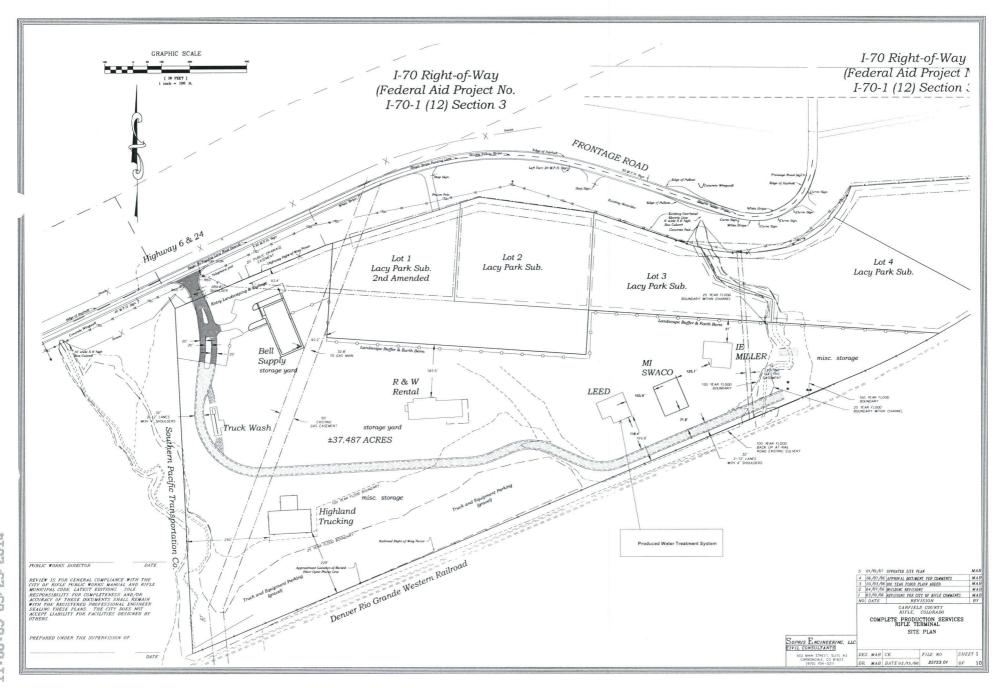
Item 18 - Attached

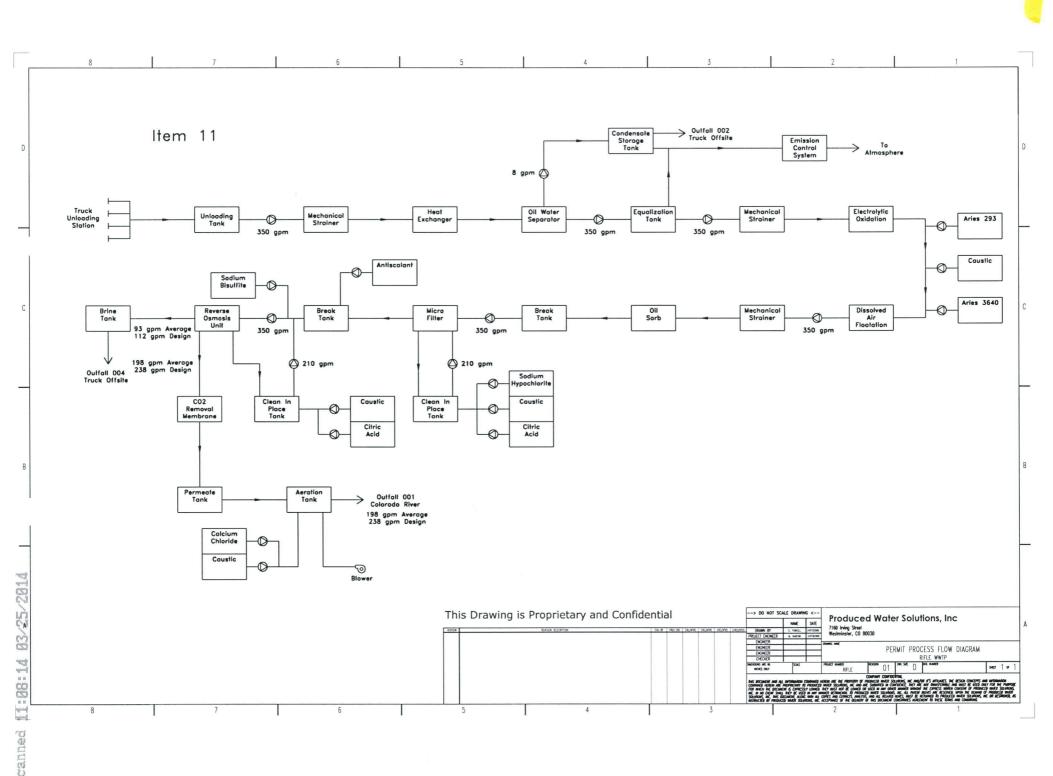
Item 19 - Outfall # 001, See Attached, N 39 degrees 30' minutes, 56.3" seconds W 107 degrees 50'minutes 34.7" seconds, Colorado River

Item 28 – Stormwater Discharges – Does the facility fall under any of the industries listed? No









Item 13

Material Safety Data Sheet

FKD 1000 and MKD 1000 Organic Solids Digestion/Odor Control

MSDS No. FKDMKD

Date of Preparation: 07-2003

Revision: 0

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: FKD 1000 and MKD 1000 Organic Solids Digestion/Odor Control

Chemical Formula: Proprietary.

CAS Number: N/A

Other Designations: Liquid mixed enzyme concentrate.

General Use: Catalytic bio-oxidation of organic contaminants in aqueous systems.

Manufacturer: EPC International, LLC, 1301 NE Highway 99W, #292, McMinnville, OR 97128. Tel: (541) 557-4108, Fax:

(866) 374-7966 (emergency/informational telephone/fax numbers).

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt <i>or</i> % vol	
The precise composition of FKD 1000 and MKD 1000 Organic Solids	N/A	N/A	
Digestion/Odor Control is proprietary information. A more complete disclosure			
will be made to an attending physician in the event of a medical emergency			
involving this product. When utilized in accordance with EPC International,			
LLC instructions, FKD 1000 and MKD 1000 Organic Solids Digestion/Odor			
Control are considered to be nontoxic and minimally hazardous.			

Trace Impurities: None.

-	OSHA	A PEL	ACGII	ACGIH TLV NIOSH REL		NIOSH REL	
Ingredient	TWA	STEL_	TWA	STEL	TWA	STEL	IDLH
Mixed enzymes	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Section 3 - Hazards Identification

FKD 1000 and MKD 1000 Organic Solids Digestion/Odor Control are severe, though temporary, eye irritants and if ingested may cause significant gastrointestinal irritation.

HMIS H 1 F 0 R 0

†Sec. 8

Potential Health Effects

Primary Entry Routes: By ingestion and through skin contact.

Target Organs: None known.

Acute Effects
Inhalation: None.

Eye: Severe, temporary irritation.

Skin: Drying and defatting of contacted skin surfaces.

Ingestion: Gastrointestinal irritation with possible nausea and diarrhea.

Carcinogenicity: IARC, NTP, and OSHA do not list FKD 1000 and MKD 1000 Organic Solids Digestion/Odor Control as

carcinogens.

Medical Conditions Aggravated by Long-Term Exposure: None known.

Chronic Effects: There are no known chronic effects.

Section 4 - First Aid Measures

Inhalation: In the improbable event of product(s) mist inhalation, remove the affected individual to fresh air and provide artificial respiration as required.

Eye Contact: Flush thoroughly with water for five minutes and obtain medical attention if irritation of eye membranes persists.

Skin Contact: Wash contacted areas with soap and water and apply emollient skin cream to minimize dryness.

Ingestion: Drink several glasses of water. Obtain medical attention if gastrointestinal irritation, nausea or diarrhea persist.

After first aid, get appropriate in-plant, paramedic, or community medical support if exposure symptoms persist.

Note to Physicians: Under normal use and human exposure conditions, the products are considered nontoxic and minimally hazardous.

Special Precautions/Procedures: None.

MSDS No. FKDMKD

FKD and MKD

Revision: 0

NFPA

Section 5 - Fire-Fighting Measures

Flash Point: None.
Flash Point Method: N/A
Burning Rate: N/A

Autoignition Temperature: N/A

LEL: N/A UEL: N/A

Flammability Classification: Nonflammable.

Extinguishing Media: N/A

Unusual Fire or Explosion Hazards: None.

Hazardous Combustion Products: Thermal oxidative decomposition of the products may release toxic fumes of CO, CO2 and

 NO_x

Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing

apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures:

Small Spills: Flush small spills of less than five gallons with water to a sanitary sewer.

Large Spills

Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Cleanup: Use vacuum or absorbent methods to recover bulk of spilled material. Flush residual spilled product to a sanitary

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Wear appropriate eye and glove protection to minimize exposure.

Storage Requirements: Do not store with oxidizing materials, at temperatures below freezing or above 110° F, or expose to environments with a pH of < 3.0 or > 11.0 to prevent degradation of enzyme components.

Regulatory Requirements: None.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: In the improbable event of product(s) misting, provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: If product misting occurs, follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove material from your shoes and clean personal protective equipment after use.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using these materials, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.



Revision: 0 FKD 1000 and MKD 1000 MSDS No. FKDMKD

Section 9 - Physical and Chemical Properties

Physical State: Liquid.

Appearance and Odor: Amber with characteristic

pleasant odor.

Odor Threshold: Unknown.

Vapor Pressure: < 10.0 mm Hg at 68°F (20°C).

Vapor Density (Air=1): > 1.0 Formula Weight: N/A

Density: 9.17 lbs./gallon, typical.

Specific Gravity (H₂O=1, at 4 °C): 1.10 typical.

pH: 3.85 - 4.15

Water Solubility: Complete in all proportions. Other Solubilities: Insoluble in hydrocarbons.

Boiling Point: 212°F (Typical).

Freezing/Melting Point: 30°F (Typical).

Viscosity: Not determined. Refractive Index: Not determined. Surface Tension: Not determined.

% Volatile: > 50.0%.

Evaporation Rate: < 1.0 (Butyl Acetate = 1.0)

Section 10 - Stability and Reactivity

Stability: FKD 1000 and MKD 1000 Organic Solids Digestion/Odor Control are stable at room temperature in closed

containers under normal storage and handling conditions. Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Direct contact with oxidizing materials. Conditions to Avoid: Environments with a pH < 3.0 and > 11.0.

Hazardous Decomposition Products: Thermal oxidative decomposition of FKD 1000 and MKD 1000 Organic Solids

Digestion/Odor Control can produce CO, CO₂ and NO_x.

Section 11- Toxicological Information

Toxicity Data:

Eye Effects: Severe but temporary irritation of eye membranes. No permanent effects are

anticipated.

Skin Effects: Drying and defatting of exposed skin surfaces, reversible with soap and water washing and emollient cream application.

Ingestion: Possible gastrointestinal irritation.

Acute Inhalation Effects:

Human, inhalation, TC_{I,0}: Not established.

Acute Oral Effects:

Rat, oral, LD50: Not established. Chronic Effects: None known. Carcinogenicity: None known. Mutagenicity: None known. Teratogenicity: None known.

Section 12 - Ecological Information

Ecotoxicity: Specific data not established. In extreme cases of bulk product spillage into marine or land environments, some lower life-form kill-off may occur. Under these conditions, the product will not be toxic to reptilian and mammalian creatures.

Environmental Fate

Environmental Transport: Water or soil.

Environmental Degradation: Complete product biodegradation will occur within several days at environment temperatures

Soil Absorption/Mobility: Product will completely biodegrade within several days at above freezing temperatures, with minimal leaching, if released on soil.

Section 13 - Disposal Considerations

Disposal: Contact EPC International, LLC, your local supplier or a licensed contractor for detailed recommendations. Recovered spilled product may be disposed of by either landfill or incineration. Follow applicable Federal, state, and local regulations.

Disposal Regulatory Requirements: None.

Container Cleaning and Disposal: Thoroughly clean empty containers with water and recycle. Do not use empty containers for food storage.

MSDS No. FKDMKD

FKD and MKD

Revision: 0

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Cleaning

Compound NOI.
Shipping Symbols: None.

Hazard Class: Nonhazardous.

ID No.: None.
Packing Group: N/A
Label: None.

Special Provisions (172.102):

None.

Packaging Authorizations

- a) Exceptions: N/A
- b) Non-bulk Packaging: N/A
- c) Bulk Packaging: N/A

Quantity Limitations

- a) Passenger, Aircraft, or Railcar: None.
- b) Cargo Aircraft Only: None.

Vessel Stowage Requirements

a) Vessel Stowage: None.

b) Other: N/A

Section 15 - Regulatory Information

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33) RCRA Hazardous Waste Classification (40 CFR 261): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec.

307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ): None.

SARA 311/312 Codes: Not listed.

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed OSHA Specifically Regulated Substance (29 CFR 1910): Not listed.

State Regulations: None.

Section 16 - Other Information

Prepared By: R. J. Kersey

Revision Notes:

Additional Hazard Rating Systems: None.

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72003

19. For each outfall to surface water or discharge to ground water provide the latitude, longitude and receiving water.

OUTFALL	LATITUDE			LONGITUDE			RECEIVING WATERS*	
JOHNSE	DEGREES	MINUTES	SECONDS	DEGREES	MINUTES	SECONDS	ABEBANANG WATER	
001	39	30	56.3	107	50	34.7	Colorado River	
		l		* Civa Formation Name for Discharges to Casa				

^{*} Give Formation Name for Discharges to Ground Water

18. Average flows and treatment: Please provide a narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall including process wastewater, cooling waters, domestic wastewater and stormwater runoff; the average, maximum and design flow which each process contributes; and a description of the treatment the wastewater receives including the ultimate disposal of any solid or fluid wastes other than by discharge. Processes, operations or production areas may be described in general terms. The average flow of point sources composed of stormwater may be estimated. The basis for the rainfall event and the method of estimation must be indicated.

Use additional pages as needed.

OUTFALL NUMBER	WASTEWATER SOURCE	TREATMENT USED		DESIGN** FLOW, MGD	DAILY MAX FLOW,MGD
001	Produced Water/Permeate	See attached description	0.285	0.342	0.42
002	Produced Water /Condensa	te See attached description	0.0035	0.010	0.015
003	Produced Water/DAF Sludg	e See attached description	5213 lbs	7800 lbs	20852 lbs
004	Produced Water/ Brine	See attached description	0.134	0.161	0.42
				i	

^{*}MGD - Million gallons/day

^{**}If sediment pond, indicate approximate volume of water



Produced Water Solutions Inc., 7160 Irving St, Westminster, CO 80030

The information contained below is proprietary and confidential

Item 18 - Detailed Process Description-

Outfall # 001-

1.	, 5		
2.			
3.			



Outfall # 002 -

2.

3.

Outfall #3-

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Outfall #4-

- 1.
- 2.
- 3.