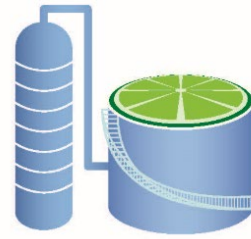


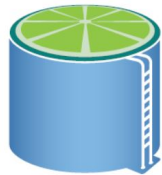
**LIMETREE BAY**  
TERMINALS, LLC



**LIMETREE BAY**  
REFINING, LLC

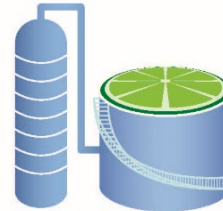


# LIMETREE BAY ENERGY



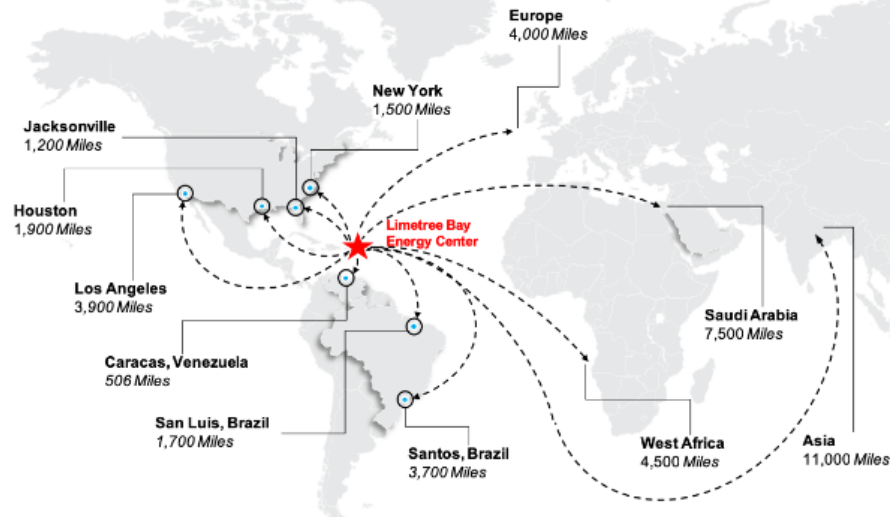
**LIMETREE BAY**  
TERMINALS, LLC

- PURCHASED FACILITY 2016
- MERCHANT TERMINAL
- MULTIPLE CUSTOMERS



**LIMETREE BAY**  
REFINING, LLC

- RE-START IN 2019
- CUSTOMER OF TERMINAL
- SHARED SERVICES W / TERMINAL



# LIMETREE BAY TERMINALS



# TERMINAL TANKAGE SUMMARY

<u>Description</u>	<u>No. of Tanks</u>	<u>Capacity MBBLS</u>
Crude	24	11,985
Products		
Propane	8	56
Butane	3	77
Gasoline	19	2,401
Jet	5	808
#2 Oil / ULSD	11	2,377
#6 Oil	<u>15</u>	<u>5,409</u>
Total Product	61	11,128
Water	3	609
RCO / Bottoms	6	1,058
<b><u>Total Crude &amp; Product</u></b>	<b><u>94</u></b>	<b><u>24,780</u></b>

# CRUDE STORAGE TANKS



***Capacity: 11.9 Million Barrels***

# FINISHED PRODUCT STORAGE



***Capacity: 11.1 Million Barrels***

# PROPANE / BUTANE STORAGE SPHERES



***Capacity: 133,000 Barrels***

# TERMINAL TRUCK LOADING RACK



*Gasoline, Jet Fuel, Ultra Low Sulfur Diesel & Propane*



# TERMINAL DOCKS

## DOCK SERVICE

<u>No.</u>	<u>Service</u>	<u>Draft</u>
2	Crude (VLCC)	55'
2	Product	45'
3	Product	43'
1	Product	35'
1	Pet Coke	42'
1	Product/Sulphur	38'
<u>1</u>	<u>Dry Cargo (RoRo)</u>	17'
<b>11</b>	<b>TOTAL</b>	

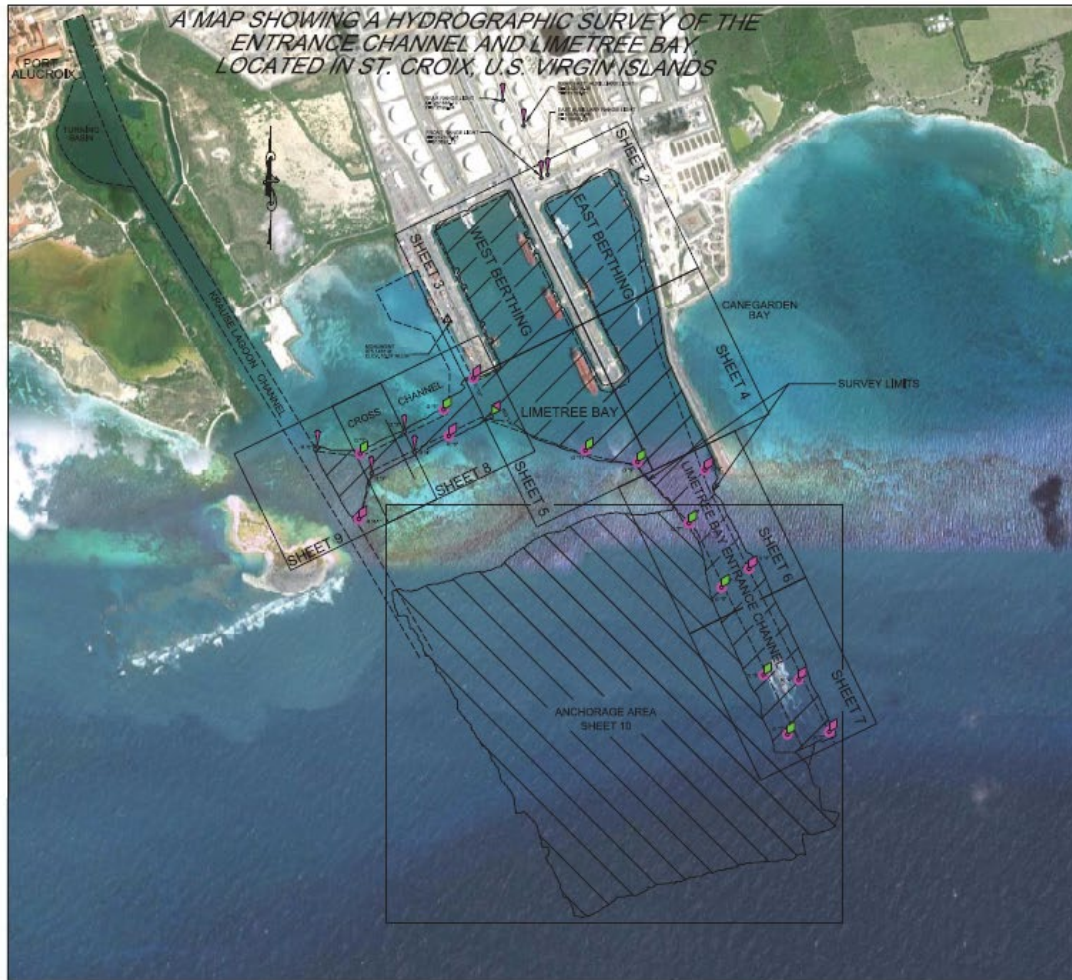


# PORT OPERATIONS



*Limetree Bay Channel*

# HYDROGRAPHIC SURVEY - 2019



**NAVIGATION AIDS TABULATION**

NO. TO NAVIGATION	NAME	COORDINATES	LATITUDE	LONGITUDE
<b>ENTRANCE CHANNEL</b>				
101	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
102	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
103	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
104	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
105	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
106	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
107	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
108	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
109	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
110	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
<b>LIMETREE BAY</b>				
111	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
112	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
113	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
114	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
115	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
116	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
117	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
118	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
119	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W
120	RED LIGHTED BUOY	18° 42' 00" N	107° 42' 00" W	107° 42' 00" W

- SURVEY NOTES**
- REFER TO SURVEY NO. 16-01-08.
  - ALL BEACONS AND LIGHTS ARE REFERRED TO MEAN LOWER LOW WATER.
  - ALL BEACONS AND LIGHTS ARE REFERRED TO MEAN LOWER LOW WATER UNLESS OTHERWISE NOTED.
  - PLANE COORDINATES ARE BASED ON THE NORTH AMERICAN DATUM OF 1983.
  - THE HYDROGRAPHIC SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE U.S. NAVY HYDROGRAPHIC SURVEYING HANDBOOK, 1993 EDITION.

VESSEL	DATE OF SURVEY	AREA
HONDA 1	JANUARY 31, 2019	HONOLULU COCK AND ENTRANCE CHANNEL

- REFER TO NAVIGATION AIDS LOCATED DURING THIS SURVEY.
- THE INFORMATION CONTAINED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS APPROXIMATE TO THE GENERAL CHARACTER AT THAT TIME.
- SURVEY QUALITY CONTROL, REVISIONS AND EQUIPMENT CALIBRATIONS WERE FOLLOWING CURRENT BEST PRACTICES AT THE TIME OF THE SURVEY.
- CHANNEL LIMITS SHOWN ON THIS MAP ARE FOR GRAPHICAL PURPOSES ONLY. THE CHANNEL WIDTH IS NOT GUARANTEED BY THE U.S. NAVY. THE CHANNEL WIDTH IS BASED ON A SQUARE METER MEASUREMENT. THERE ARE NOT TO BE USED FOR NAVIGATION.
- WOOD PILES AND DEPTH MEASUREMENTS BY THE CLIENT.
- WOOD PILES AND DEPTH MEASUREMENTS BY THE CLIENT.

**LEGEND / ABBREVIATIONS**

- CONTROL MONUMENT
- GREEN LIGHTED BUOY
- RED LIGHTED BUOY
- LIGHTED BEACON
- RED/GREEN LIGHTED BEACON
- MLLW MEAN LOWER LOW WATER
- NAD NORTH AMERICAN DATUM
- POINT OF BEGINNING
- STATION
- RANGE
- NORTH
- E



**Arc**  
ARC SURVEYING & MAPPING, INC.  
1000 West 10th Street  
Annapolis, MD 21401  
410-291-1000

U.S. VIRGIN ISLANDS, ST. CROIX  
HYDROGRAPHIC CONDITION SURVEY  
LIMETREE BAY TERMINALS  
ST. CROIX

PROJECT NO.  
16-01-08

FILE NO.

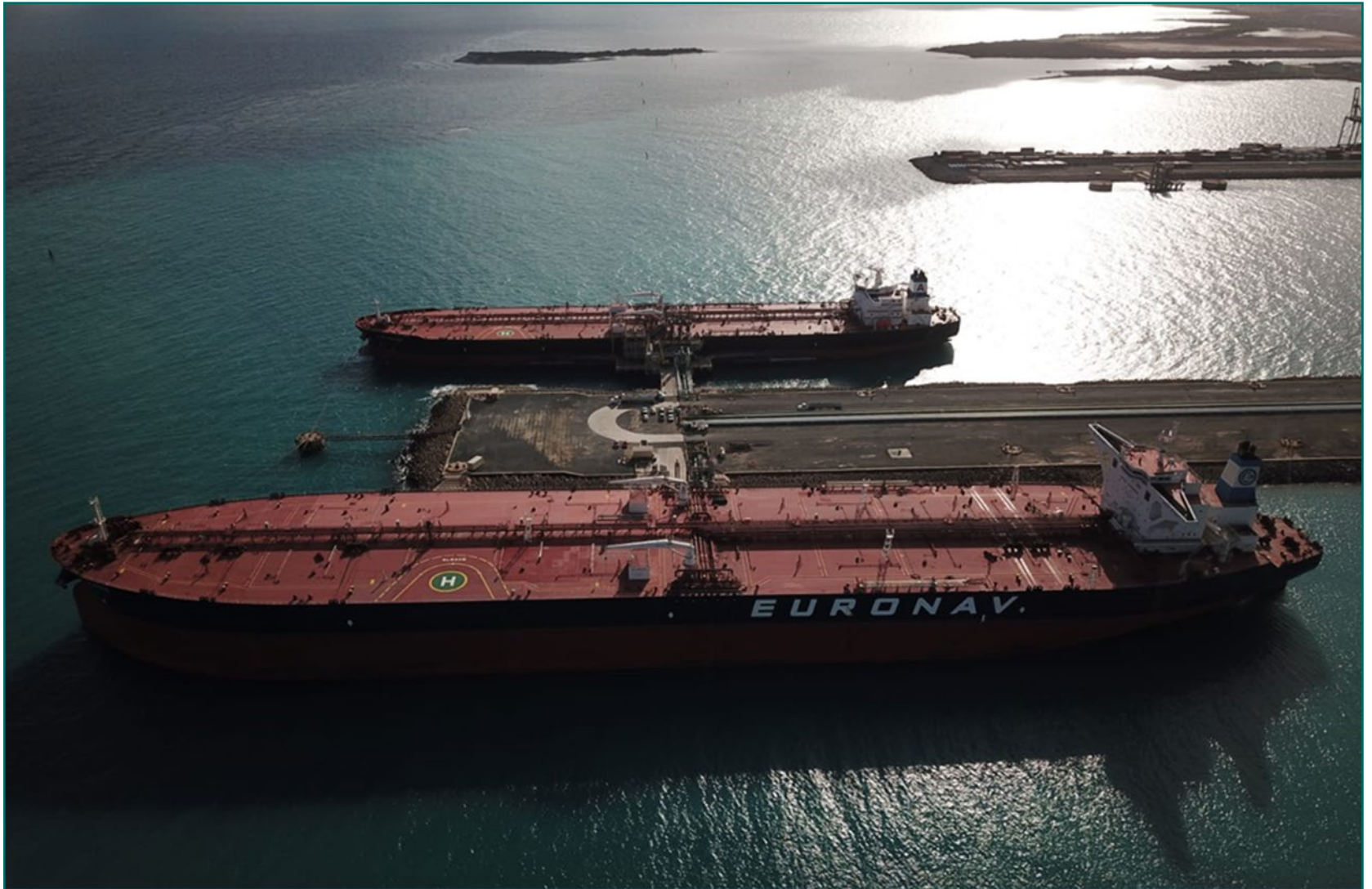
SHEET 1 OF 33



## Limetree Bay Channel



# CRUDE VESSELS AT BERTH DWT: 300,800 - 150,000



# FINISHED PRODUCT VESSEL DWT: 9,990

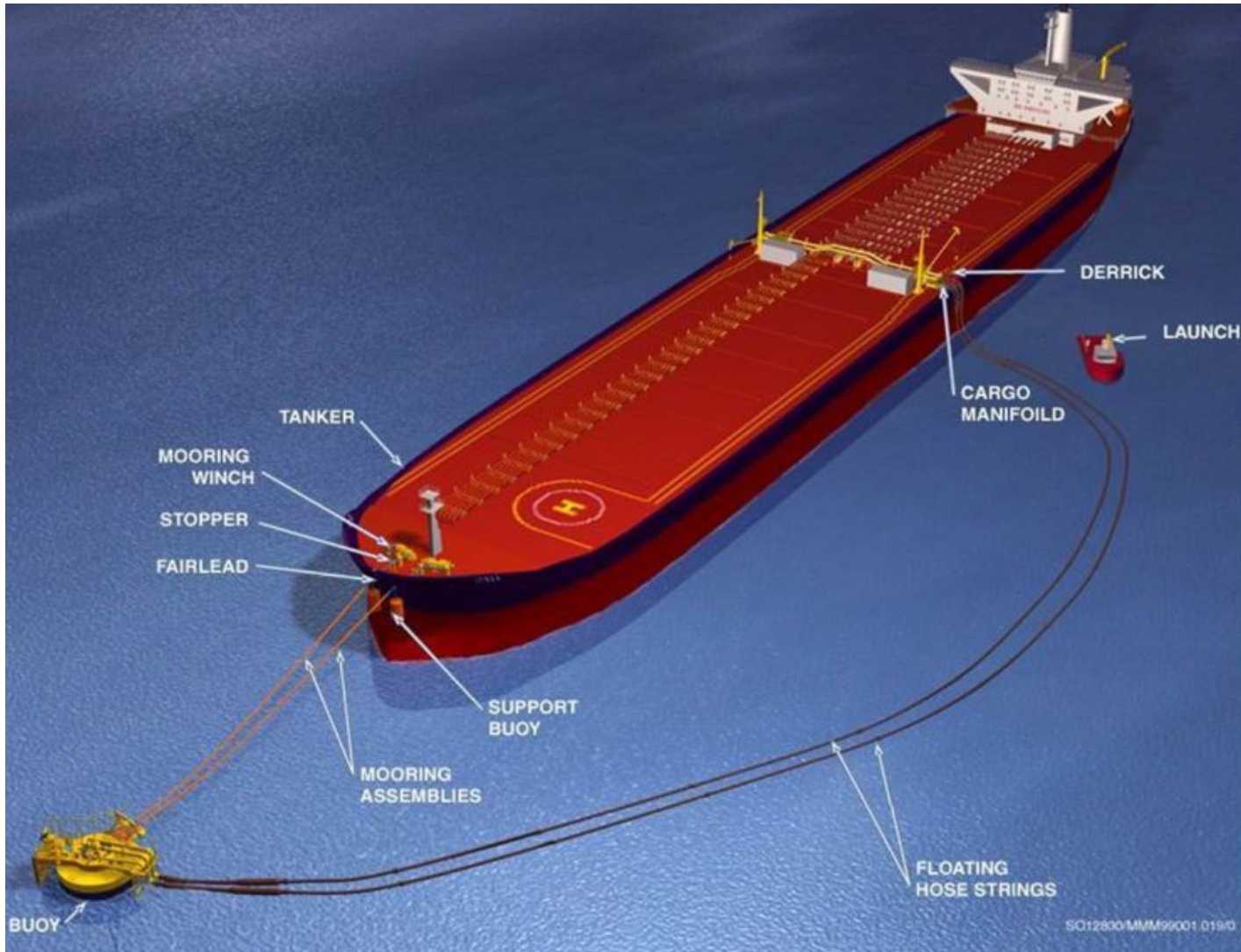


# MARINE VAPOR COMBUSTOR UNIT

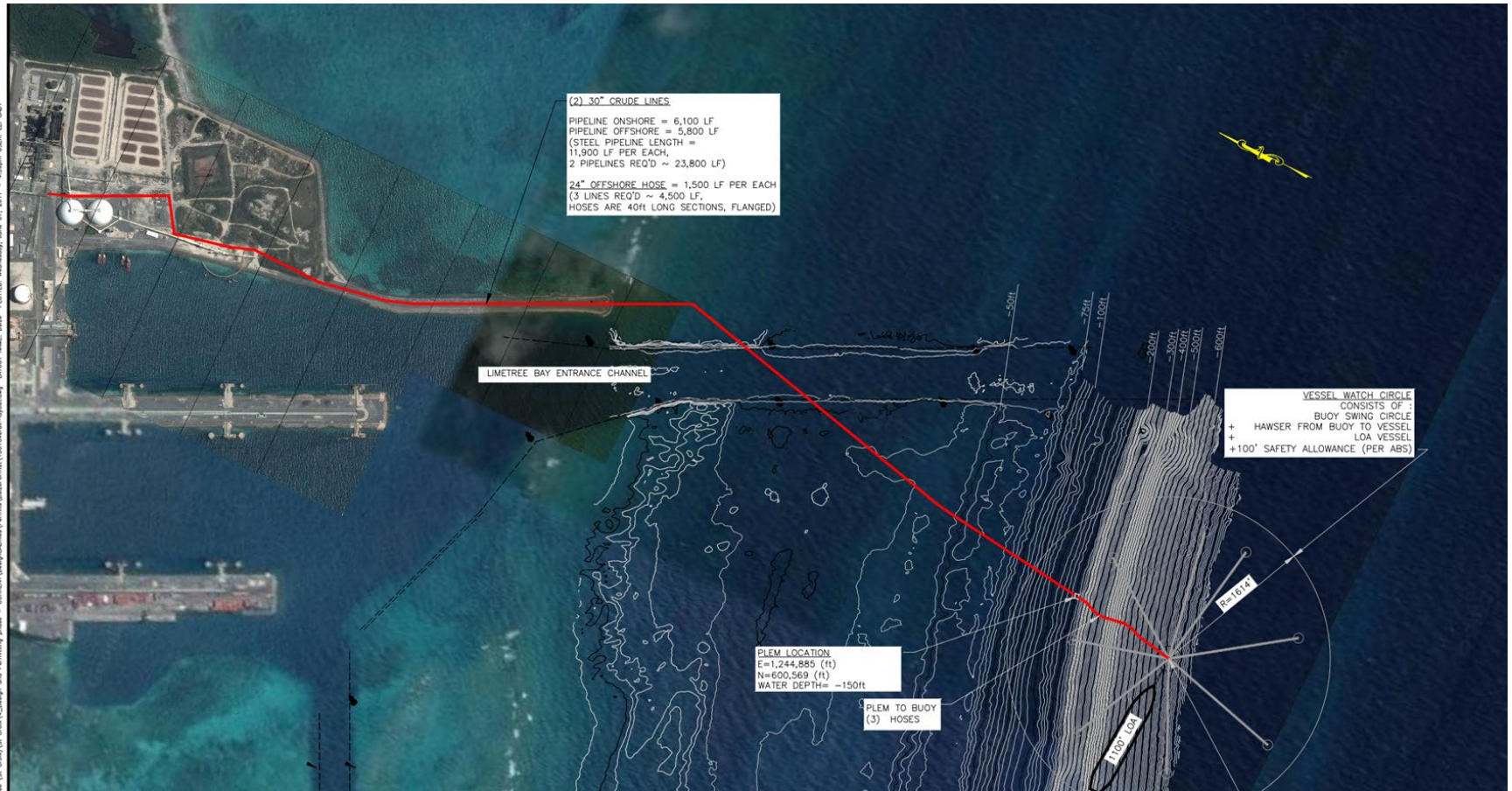
- JOHN ZINK MVCU
- DOCK SKID UNITS (3 DOCKS)
- COMBUSTOR UNIT
- GASOLINE VAPOR RECOVERY



# SINGLE POINT MOORING



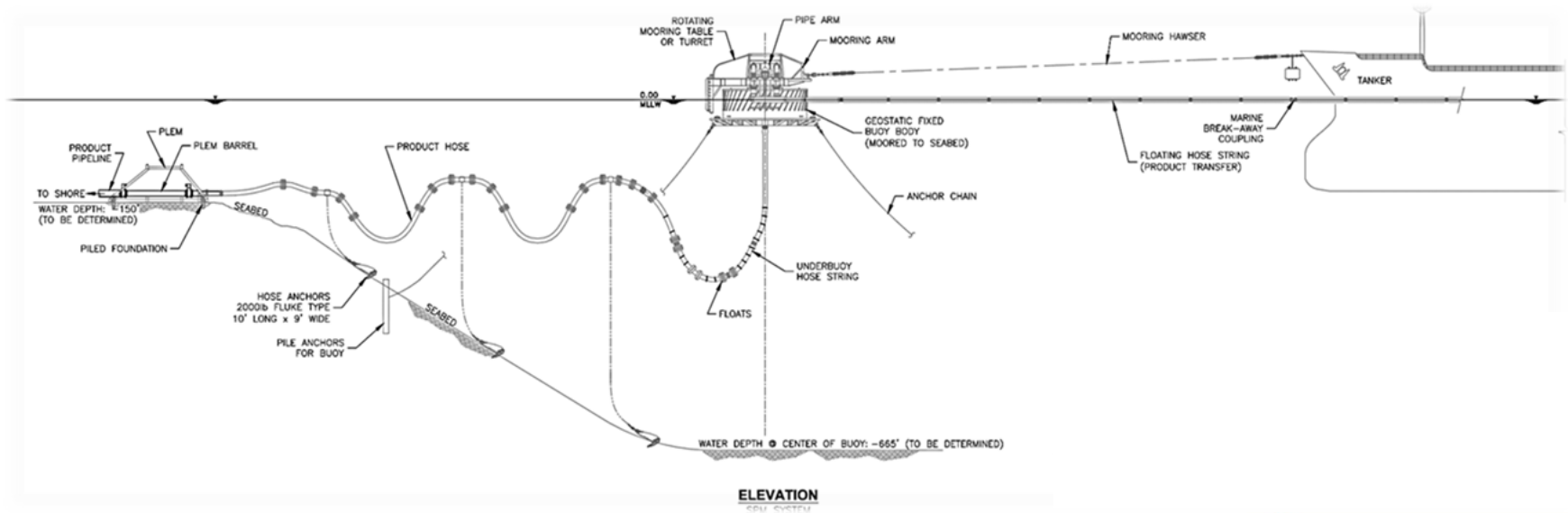
# SINGLE POINT MOORING





# SINGLE POINT MOORING CONSTRUCTION

- PIPELINE COMPLETE - JUNE
- BUOY AND PLEM COMPLETE - JULY
- COMMISSIONING JULY 2019



# LIMETREE BAY REFINING

## Partial Refinery Re-Start

- Turn-around and Revamp Completion 2019
- 180,000 bbl per day
- Tolling Agreement
- Village Housing Area



## Units To Be Restarted

- Crude #5
- Vacuum Unit #3
- Par-Isom Unit
- Platformer Unit
- Sulfur Recovery Units
- Coker Unit
- Hydro-treating Units 6, 7, 9
- RO Water Plant
- Gas Turbines # 9, 10, 13



# LIMETREE BAY VILLAGE



# CRUDE UNIT



# PARISOM UNIT



# COKER UNIT



# GAS TURBINE 13





# REGULATORY COMPLIANCE

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## EPA / VI DPNR Requirements

- Clean Air Act: Air Emissions Control / Permitting / Title V Fees
- Clean Water Act: Wastewater Treatment / TPDES Program
- Safe Drinking Water Act
- Resource Conservation and Recovery Act: Solid Waste Management, Underground Storage Tanks
- Product Release Prevention Program : Equipment Inspections / Testing / Repair
- Fence Line Monitoring (Benzene)

## Coast Guard Requirements

- Oil Spill Response Readiness / Integrated Contingency Plan / Drill Deployment & Table Top Exercises
- Vessel & Equipment Inspections / Testing / Repair
- Harbor Hydrographic Survey Completed in 2019

## Department of Homeland Security Requirements

- Modified Facility Access Control
- Enhanced Perimeter Security System
- TWIC Procedures

## OSHA Requirements

- Training / Procedures
- Incident Management & Emergency Response Teams / Training
- Equipment Inspections / Testing / Repair
- Hazard Communication
- Work Permits / Confined-Space Entry Permits / Lockout / Tagout
- Personal Protective Equipment (PPE)
- Process Safety Management (PSM) / Management of Change (MOC) Process



# WASTE WATER TREATMENT



## Treatment:

- Physical oil and water separation
- Biological in above ground tanks
- All wastewater (recovered ground water, roof drains, tank cleaning, line flushing, maintenance activities, and ship ballast) and stormwater are treated before reuse or discharge into the TPDES permitted outfall

## Monitoring:

- Analyzed for 12 different parameters
- 6 stormwater Outfalls sampled monthly when sufficient flow
- Annual WET test for Limetree Bay Terminals completed in May 2019
- Applying for new TPDES Permit to align with Refinery influents and effluents



**Currently operating under DPNR issued TPDES Permit - transferred to Limetree Bay Terminals on April 1, 2016**

# AIR COMPLIANCE



## Leak Detection and Repair (LDAR) Program

- Monitoring, inspecting and repairing process piping equipment leaks (valves, flanges, pump seals) throughout Terminal

## Benzene NESHAPs

- Monitoring, inspecting and repairing wastewater equipment throughout Terminal
- Reinstating benzene strip towers for refinery restart

## PRI Consent Decree:

- Enhanced LDAR and BWON

## VRU CEM

- Truck Loading Rack Control and Continuous Emissions Monitor

## MVCU - Marine Vapor Combustion Unit

- Removed 99% of NOX emissions during gasoline loading



# EMERGENCY SERVICES



## Facility Incident Management Team

- Facility IMT members have certification, training and experience with incident management
- Terminal, QI, IC, Planning, and Operations Section Chiefs certified in position-specific training
- Primary ICP located at the Limetree Bay Terminals, Main Administration Building
- Hosted 2017 Regional PREP Exercise and training

# 2017 Regional PREP Exercise Host Facility



# OIL SPILL RESPONSE

---

The Limetree Bay Terminals has an integrated oil spill response prevention and recovery cleanup plan in compliance with the Oil Pollution Act of 1990 (OPA-90). As a part of that plan, Limetree Bay Terminals has trained Emergency Response and Incident Command personnel and maintains an inventory of oil spill containment boom, oil absorbent material, vacuum trucks, oil spill response vessels, oil spill skimmers, oil spill recovery pumps and oil spill containment barges. This equipment and personnel is available 24/7 and can be deployed as required by Limetree Bay Terminals and the National Response Corporation (NRC).

# OIL SPILL RESPONSE ORGANIZATION (OSRO)

---

- Located at Limetree Bay Terminals Facility
- 24 / 7 Readiness
- Oil recovery equipment
- Oil containment booms
- Sea-going recovery vessels
- Sea-going oil recovery barges
- Trained and certified personnel on-watch
- Ability to deploy equipment throughout the area



# OIL SPILL BOOM STORED AT LIMETREE BAY TERMINALS

## Ocean Boom Stored on Limetree Property

### Limetree Bay Terminals

Dock 3	2,000 24" Containment Boom
Trailer 1	2,000 24" Containment Boom
Trailer 2	2,000 24" Containment Boom
Trailer 3	2,000 24" Containment Boom
Trailer 4	2,000 24" Containment Boom
Trailer 5	2,000 24" Containment Boom
Trailer 6	2,000 24" Containment Boom
	<u>14,000</u>

NRC	2,000 42" Inflatable Ocean Boom on OSRV SENTRY
	1,000 42" Inflatable Ocean Boom in compound box
	<u>2,000 42" Inflatable Ocean Boom on 2 boom reels near Dock 8</u>
	<u>5,000</u>

1,600 24" Containment Boom	Stored in container at Dock 4
4,000 24" Containment Boom	Stored in container at Dock 9
3,500 24" Containment Boom	Stored in blue trailer at Dock 9
2,000 24" Containment Boom	Stored in open Trailer on west side
2,000 24" Containment Boom	Stored in container on west side.
1,800 24" Containment Boom	Stored in mobile Response Trailer
800 24" Containment Boom	Stored on two Quick Response Trailers
<u>15,700</u>	

Total	<u>5,000 42" Inflatable Ocean Boom</u>
	<u>29,700 24" Containment Boom</u>



Values shown in feet

# OIL SPILL RESPONSE EQUIPMENT



*NRC and MSRC*



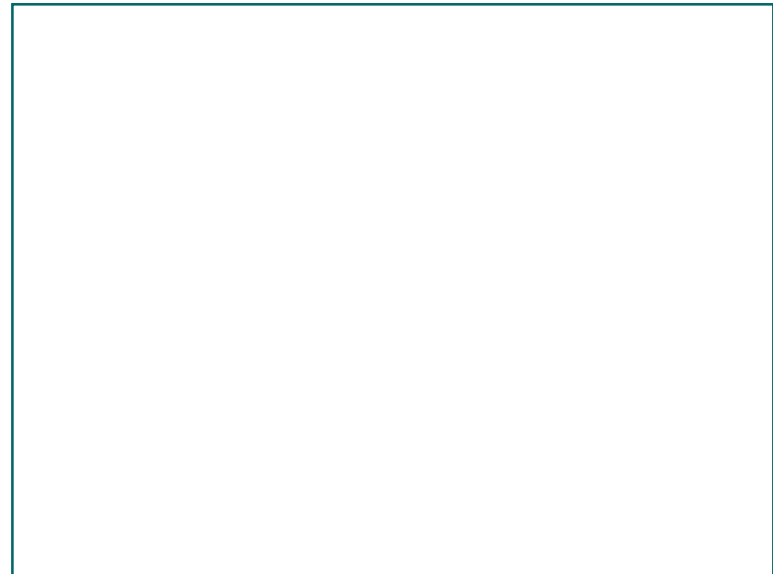
# ON GOING WILDLIFE PROTECTION

- 40 Ft Wildlife Response Trailer
- Partner with Tri-State Bird Rescue and Research
- A Sponsor of the 13th International Effects of Oil on Wildlife Conference
- Participate and share bird counts at the facility with local and federal Fish and Wildlife
- Monitor and de-mark areas with Least Tern activity to minimize disturbance
- Members of STAR (Sea Turtle Assistance and Rescue network)



# TERMINAL SECURITY DEPARTMENT

<u>Administrative Services</u>	<u>Field Services</u>	<u>Compliance</u>
<ul style="list-style-type: none"><li>• Personnel Credentialing</li><li>• Lock and Keys</li><li>• Command Center: 1</li></ul>	<ul style="list-style-type: none"><li>• Fixed Post: 3</li><li>• Roving Patrols: 2</li><li>• Investigations / Public Safety</li></ul>	<ul style="list-style-type: none"><li>• Facility Security Officer/Plan</li><li>• Marine Unit</li><li>• Training</li><li>• TWIC (Entire Facility)</li></ul>



# TERMINAL SECURITY DEPARTMENT

## Agency Partners & Key Stakeholders

- U.S. Coast Guard
- Department of Homeland Security
- Customs and Border Protection
- Immigration and Customs Enforcement
- Federal Bureau of Investigation
- Virgin Islands Police Department
- Transportation Security Administration
- Port Authority Police Department
- Department of Planning and Natural Resources Police
- U.S. Marshals Service
- VI Attorney Generals Office of Special Investigations
- Department of Defense



# QUESTIONS?

