DAVY CROCKETT DATA and OPERATIONS (5/6/11)

Barge History:

- The Barge DAVY CROCKETT is a 432’ converted Liberty Ship built in 1942
- Liberty Ship sold by Maritime Administration in 1969 to American Ship Dismantlers for scrap
- Converted to a barge in the 1980’s & brought to Portland in 1993
- May 2008: Owner requested Temporary Load Line Certificate to tow to Mexico to scrap
- April 2009: Barge came loose at anchorage & Captain of the Port (COTP) Order issued requiring a marine inspector to survey the hull/mooring arrangement
- April 2009: Letter of Concern drafted by Coast Guard urging owner to remove all free oil
- October 2010: Barge sold to current owner
- During the timeframe between December 2010 and January 2011 illegal scrapping operations caused the number 3 hold on the Davy Crocket to buckle resulting in a sheen
- Additional king tides further degraded the structural integrity of the barge and weakened the keel resulting in further oil discharges

Response Timeline

Jan 20: An oil sheen was reported from the Barge Davy Crockett. Coast Guard and WA Ecology responded to scene

Jan 21: An Administrative Order issued to owner to remove visible oil and oily products from barge due to sheening.

Jan 24: Owner met requirements of Administrative Order and no sheen observed

Jan 27: New sheen reported. Pollution investigators observed vessel partially submerged with an oil sheen in vicinity. Sector Columbia River established an incident command post at MSU Portland with WA Ecology, and OR DEQ

Jan 28: Response federalized, giving Coast Guard, WA Ecology and OR DEQ authority concerning cleanup and removal efforts.

Jan 31: Contractors attempting to stabilize vessel to enable divers to inspect tanks, voids and other spaces.

Feb 2: Deployed 8 concrete anchors (4 each to port and starboard sides) to steady stern section in order to conduct ballasting operations.

Feb 3: Pumped nearly 600,000 gallons of river water into the after holds of the barge to sink the stern into the river bottom in order to further stabilize the vessel.

Feb 16: Received CG Commandant Approval to remove/destroy the barge

Mar 4: Stern removal plan approved

Mar 22: Unable to locate suitable dry dock facility that will agree to accept the barge for destruction. Unified Command (UC) decides to pursue the option of cutting up the vessel and removing it in place.

Mar 24: UC agrees to proceed with building cofferdam around the wreck and destroying/remove the vessel on site.

Apr 1: Cofferdam construction begins
Apr 18: Cofferdam completed including the installation of the impermeable barrier.
April 22: The separation cut to separate the stern section of the vessel from the midsection completed.
April 27: Lightering operations to de-water and re-float the stern begin.

**Diving Systems:**
- Two dive stations set up on-site, rotate 3 divers per station, total 6 dives per day (on a normal working day).
- Working depths depend on what work is being performed. Average depth 18 feet.
- Decon stations: after a dive is completed each diver is put through extensive decontamination (Dive helmet, Viking dry suit, all tools, etc.)

**Burning Systems:**
- Top side burning crews using torches to cut the steel are on board the floating stern, dismantling in a very strategic mode. Based on weight disbursements.
- Fire watch is a big part of the top side burning operations, watching for any hot steel, debris catching on fire.
- Gases used for the burning operation are a propylene and liquid oxygen, for cutting steel at a very high temperature.

**Baker Filtration system (diagram sent separately with tech specs):**
- System used to de-water ship spaces and holds.
- System is designed to remove hydrocarbons, PCB’s, heavy metals, and particulates.
- Can filter water to drinking specifications at a rate of 600 gallons per minute.

**Comms**
- Communications network set up that includes over 42 hand held radios in operations throughout the site.
- Video Surveillance systems

**Decon stations:**
- Four decon stations for divers and other workers as needed
- Each dive decon station is comprised of a series of 2 pools where divers and equipment are scrubbed down twice and then rinsed. Diving helmet is then scrubbed by hand again for a final decontamination.
- Numerous decon stations throughout vessel to remove lead paint, PCB’s or any other contaminants that might be present from boots.

**Crane Barges**
- Rated to lift a maximum of 135 Long Tons.
- Has the ability to boom 30-50 ton cuts or sections from any location on the DAVY CROCKETT.

**Deck Barges(2)**
- 135 Long Ton capacity

- one loaded with (6) 20 yard boxes to load bricks and timber (that was originally used for ballast)
- One loaded with (4) Baker tanks (each tank has 21,000 gallon capacity) to continue pumping operations and water removal from the machinery space.

**Total recovered oily water:** 1,322,055 gallons (as of Monday 02 May 2011)

**Total recovered debris:** 949,067 lbs (474 tons) (as of Monday 02 May 2011)
Davy Crockett Wreck Profile

Scale 1" = approximately 40'

Shaft Alley
Full of River Water
from Ballast Ops

#3 Deep Tank, Port
Approx. 8,000 Gallons
River Water from Ballast Ops

#3 Cargo Hold
Flooded with River Water
Light Oil Film on Surface

Machinery Space
Flooded with River Water
from Ballast Ops

#2 Cargo Hold
Flooded with River Water

#1 Cargo Hold
Flooded with River Water

#1 P&S
Deep Tank
Unknown

#2 P&S
Deep Tank
Unknown

Portpeak
Flooded with River Water

After Peak
50% Full
River Water

No 5 Hold
Full of River
Water from Ballast Ops

#5 Cargo Hold
Full of River Water
from Ballast Ops

Machinery Space

No 4 Hold
Full of River Water
from Ballast Ops

No 3 Hold

No 2 Hold

#4 Cargo Hold
Full of River Water
from Ballast Ops

#4 Cargo Hold

Deep Tanks
Unknown

#3 Deep Tank, Stbd
Approx. 75% Full of River
Water from Ballast Ops

Day Tanks, P&S
Full of Contaminated Water
Pumped Approx. 200 Gallons of Oil Off Top of Each Tank

All Double-Block Tanks Have Centerline Bulkheads

#6 Double Bottom P&S
Full of Mix Oil/Water

#5 Double Bottom P&S
Full of Mix Oil/Water

#4 Double Bottom P&S
Unknown

#3 Double Bottom P&S
Unknown

P&S, Unknown

P&S, Unknown

#2 Double Bottom P&S
Unknown

#1 Double Bottom P&S
Unknown

P&S, Unknown

P&S, Unknown

Portpeak
Flooded with River Water

Goto Ship's Bottom (No Double Bottom)
Port and Stbd Separated by Centerline Bulkhead
Double Bottom Eaxes, Tank Tops Removed