

# Mayflower Pipeline Incident Response

## Post-Construction Sheen Monitoring Monthly Report #5: August 2015

Mayflower, Arkansas

**Period:** 08/01/2015 through 08/31/2015

**Monitoring Days:** 08/06/2015 and 08/20/2015

### Observations in Inlet Channel:

- No sheen observed in the Inlet Channel.

### Observations in Cove:

- No sheen observed in Open Water Area and downstream of Heavily Vegetated Area.
- August 6, 2015: One patch/streamer of silver gray sheen observed in Heavily Vegetated Area. Sheen did not break when disturbed ("non-brittle")<sup>1</sup>. A sheen sample was collected for laboratory analysis.
- August 6, 2015: One patch of silver gray sheen observed in Heavily Vegetated Area. Sheen broke apart when disturbed ("brittle")<sup>2</sup>.
- August 20, 2015: One cover (no particular structure) of brittle<sup>2</sup> silver gray sheen observed in Heavily Vegetated Area.

Mitigation: Non-brittle sheens were removed by sampling.

### Sheen Sampling Results<sup>3</sup>:

- The laboratory analysis of sheen net sample collected from Heavily Vegetated Area on August 6, 2015 indicated that sheen resemble crude oil from the Pegasus Pipeline.

### Path Forward for September 2015:

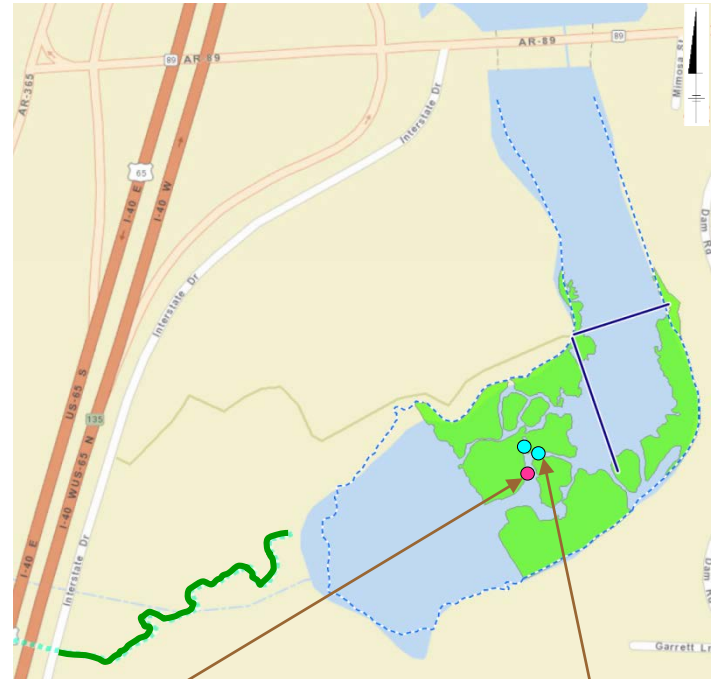
- Continue biweekly sheen monitoring in Cove.
- Complete organoclay placement in Heavily Vegetated Area.

#### Legend:

Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

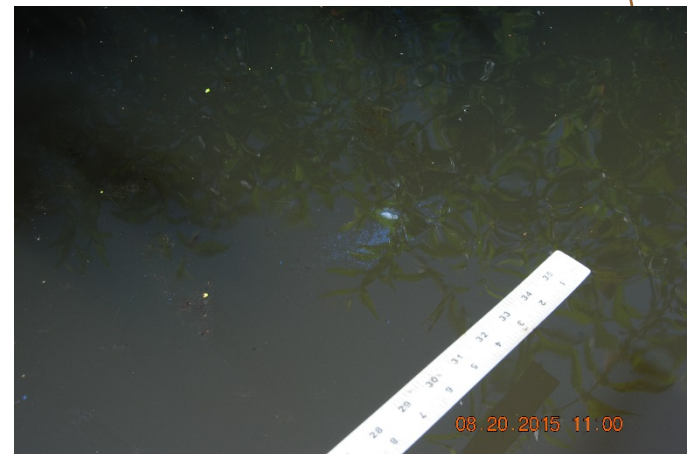
Pink Circle – Non-Brittle Sheen Location



**Cove (Summary of Observations from August 2015)**



**Silver Gray Sheen Patch/Streamer  
Observation on 08/06/2015**



**Silver Gray Sheen Cover Observation on 08/20/2015**

#### Notes:

- Non-brittle sheens are often related to anthropogenic sources, including petrogenic sources (e.g., petroleum hydrocarbons).
- Brittle sheens are often of natural biogenic origin.
- Laboratory testing is required to distinguish sheen sources (e.g., crude oil, roadway runoff, natural biologic activity).
- Sheen color (dark/metallic/rainbow/silver gray) and structure (patches/streamers/cover) terminology reference: NOAA 2007. NOAA Open Water Oil Identification Job Aid.