

Mayflower Pipeline Incident Response

Post-Construction Sheen Monitoring Monthly Report #3: June 2015

Mayflower, Arkansas

Period: 06/01/2015 through 06/30/2015

Monitoring Days: 06/05/2015, 06/12/2015, and 06/23/2015

Legend:

Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

Pink Circle – Non-Brittle Sheen Location

Observations in Inlet Channel:

- No sheen observed in the Inlet Channel.

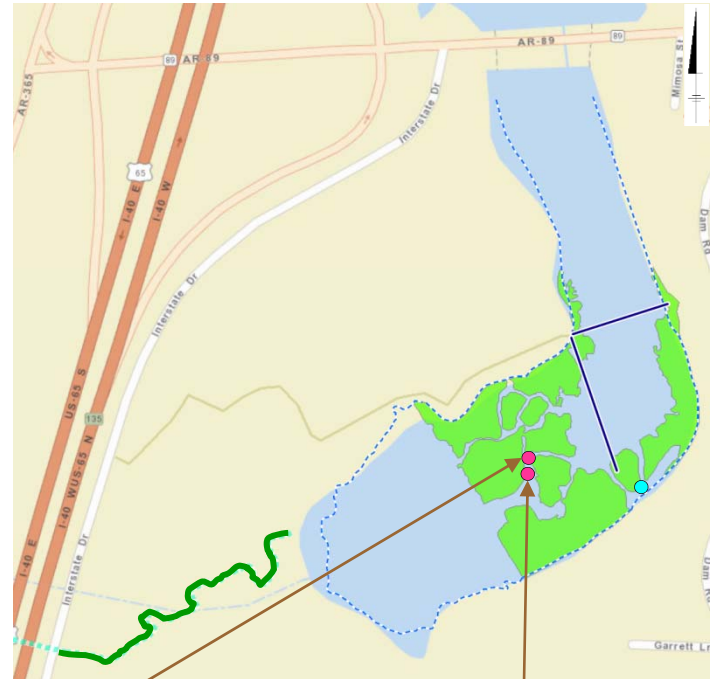
Observations in Cove:

- No sheen observed in Open Water Area.
- June 12, 2015: One patch/streamer of silver gray sheen observed in Heavily Vegetated Area. Sheen did not break when disturbed ("non-brittle")¹. A sheen sample was collected for laboratory analysis.
- June 12, 2015: One cover (no particular structure) of silver gray sheen observed downstream of Heavily Vegetated Area. Sheen broke apart when disturbed ("brittle")².
- June 23, 2015: One patch/streamer of non-brittle¹ silver gray sheen observed in Heavily Vegetated Area. A sheen sample was collected for laboratory analysis.

Mitigation: Sheens were removed.

Sheen Sampling Results³:

- The laboratory analysis of sheen net samples collected from Heavily Vegetated Area on May 19, June 12, and June 23, 2015 indicated that sheens resemble to crude oil from the Pegasus Pipeline.

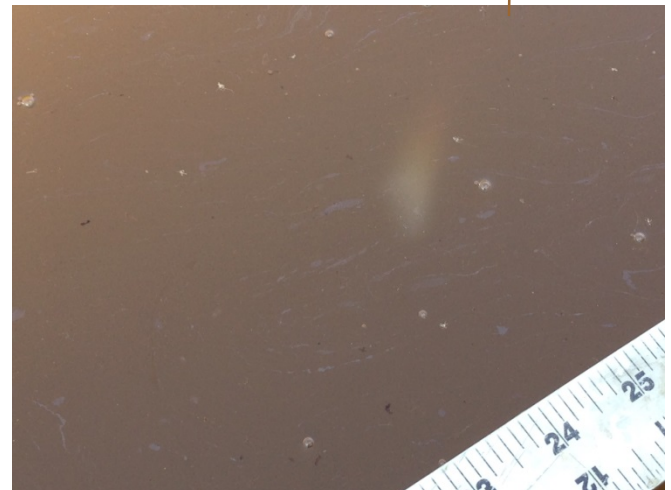


Cove (Summary of Observations from June 2015)

Path Forward for July 2015: Continue biweekly sheen monitoring in cove.



Silver Gray Sheen Cover Observation on 06/12/2015



Silver Gray Sheen Patch/Streamer Observation on 06/23/2015

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.