

Mayflower Pipeline Incident Response

Sheen Monitoring Report #42

Mayflower, Arkansas

Period: 08/04/2014 through 08/10/2014

Monitoring Days: 08/08/2014*

*Weekly sheen monitoring started on 03/11/2014.

Summary of Rainfall: A qualifying storm is defined as at least 0.25-inch rainfall in 3 hours and at least 72 hours since the previous qualifying storm.

Legend:

Green Line – No Sheen

Pink Circle – Non-Brittle Sheen Location

OW-1 – Shoreline Observation Location

Date	Maximum 3-hr Precipitation	Qualifying Storm
08/04/2014	0.00 inches	No
08/05/2014	0.00 inches	No
08/06/2014	0.00 inches	No
08/07/2014	0.00 inches	No
08/08/2014	0.07 inches	No**
08/09/2014	0.16 inches	No
08/10/2014	0.00 inches	No

**Weekly sheen monitoring and removal event was conducted on 08/08/2014.

Mitigation: Suspected petrogenic sheens were removed using absorbent materials.

Observations in Cove Inlet Channel:

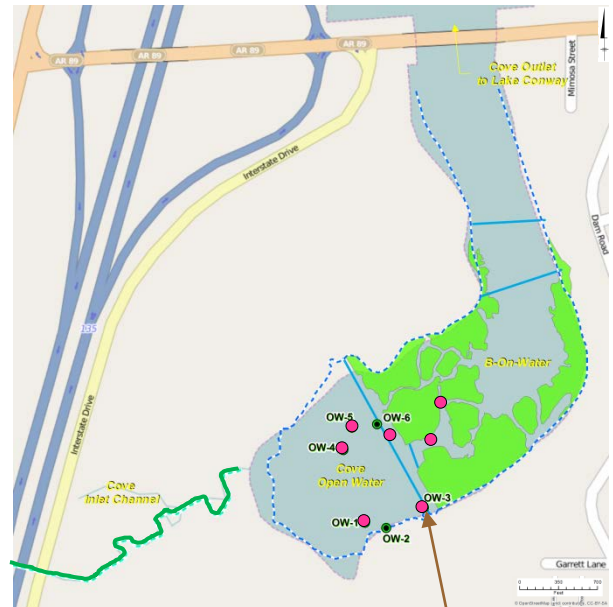
- No sheen observed.

Observations in Cove:

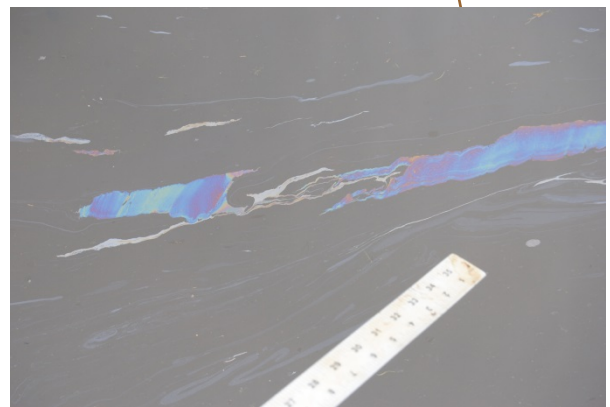
- One patch/streamer of rainbow sheen; and two patches and four patches/streamers of silver gray sheen observed. Sheens did not break when disturbed (“non-brittle”)¹.

Path Forward for 08/11/2014 through 08/17/2014:

- Conduct sheen monitoring in Cove.



Cove (Summary of Observations from 08/04/2014 through 08/10/2014)



Rainbow Sheen Patch/Streamer Observation on 08/08/2014

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 biogenic activity).
- Sheen color (dark/metallic/rainbow/silver gray) and structure (patches/streamers/cover) terminology reference: NOAA 2007. NOAA Open Water Oil Identification Job Aid.