

Sheen Monitoring Report #43

Period: 08/11/2014 through 08/17/2014

Monitoring Days: 08/15/2014*

*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.

Date	Maximum 3-hr Precipitation	Qualifying Storm
08/11/2014	0.00 inches	No
08/12/2014	0.00 inches	No
08/13/2014	0.00 inches	No
08/14/2014	0.00 inches	No
08/15/2014	0.00 inches	No**
08/16/2014	0.00 inches	No
08/17/2014	0.62 inches	Yes***

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

***The post-rainfall monitoring and removal event for the qualifying storm will be addressed in next sheen monitoring report.

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/silver gray sheen with 0.25- to 1-inch wide oil spots; and two patches/streamers of silver gray sheen observed. Sheens did not break when disturbed ("non-brittle")¹.
- One patch of silver gray sheen observed. Sheens broke apart when disturbed ("brittle")².
- Two patches of non-brittle¹ and brittle² silver gray sheen observed (shown as non-brittle on the figure).

Path Forward for 08/18/2014 through 08/24/2014:

- Conduct sheen monitoring in Cove.

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.

Mayflower Pipeline Incident Response

Mayflower, Arkansas

Legend:

Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

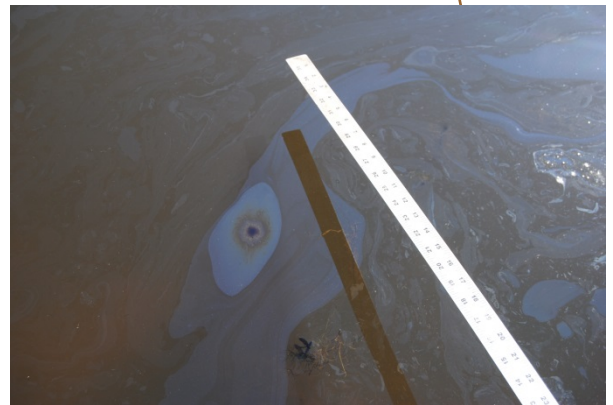
Pink Circle – Non-Brittle Sheen Location

Orange Circle – Non-Brittle Sheen Location with Oil Spot

OW-1 – Shoreline Observation Location



Cove (Summary of Observations from 08/11/2014 through 08/17/2014)



Rainbow/Silver Gray Sheen Patch/Streamer with Oil Spots (0.25- to 1-inch Wide) Observation on 08/15/2014