

Sheen Monitoring Report #40

Period: 07/21/2014 through 07/27/2014

Monitoring Days: 07/24/2014*

*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
07/21/2014	0.00 inches	No
07/22/2014	0.00 inches	No
07/23/2014	0.95 inches	Yes**
07/24/2014	0.01 inches	No
07/25/2014	0.00 inches	No
07/26/2014	0.00 inches	No
07/27/2014	0.00 inches	No

**Sheen monitoring and removal event for qualifying storm was conducted on 07/24/2014 along with the weekly monitoring event.

Mitigation: Suspected petrogenic sheens were removed using absorbent materials.

Observations in Cove Inlet Channel:

- No sheen observed.

Observations in Cove:

- Two patches/streamers of silver gray sheen (one with 0.1- to 0.5-inch wide oil spots) and two streamers of rainbow sheen observed. Sheens did not break when disturbed ("non-brittle")¹.
- One streamer of non-brittle¹ rainbow/silver gray sheen with oil spots (0.1- to 0.15-inch wide) observed.
- One patch/streamer of non-brittle¹ silver gray sheen observed. Sheen also broke apart when disturbed ("brittle")². It is shown as non-brittle¹ on the figure.

Path Forward for 07/28/2014 through 08/03/2014:

- 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:

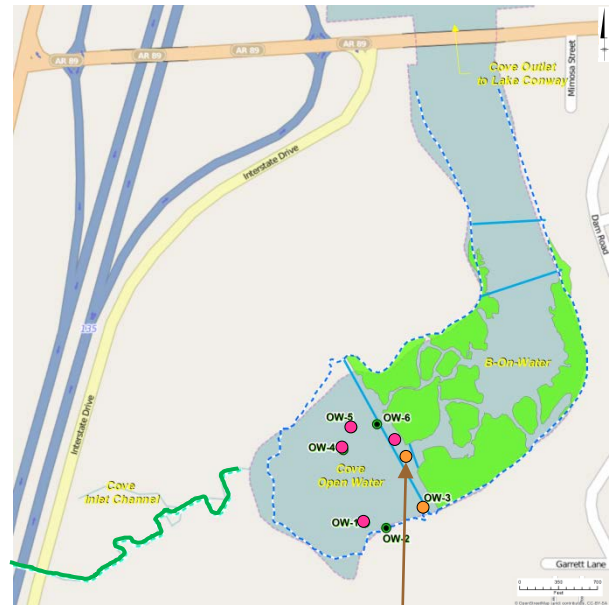
Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

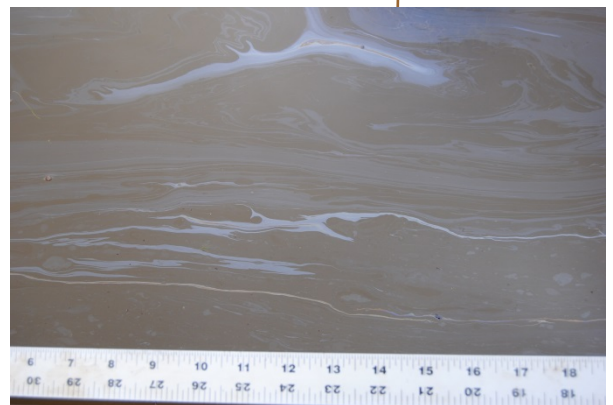
Pink Circle – Non-Brittle Sheen Location

Orange Circle – Non-Brittle Sheen with Oil Spot Location

OW-1 – Shoreline Observation Location



Cove (Summary of Observations from 07/21/2014 through 07/27/2014)



Rainbow/Silver Gray Sheen Streamer with Oil Spots (0.1- to 0.15-inch Wide) Observation on 07/24/2014