

Sheen Monitoring Report #31

Period: 05/19/2014 through 05/25/2014

Monitoring Days: 05/22/2014*

*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
05/19/2014	0.00 inches	No
05/20/2014	0.00 inches	No
05/21/2014	0.00 inches	No
05/22/2014	0.00 inches	No**
05/23/2014	0.00 inches	No
05/24/2014	0.00 inches	No
05/25/2014	0.00 inches	No

**Weekly monitoring was conducted on 05/22/2014.

Mitigation: Suspected petrogenic sheens were removed using absorbent materials.

Observations in Cove Inlet Channel:

- One cover (no particular structure) of metallic sheen observed. Sheen broke apart when disturbed ("brittle")¹.
- Two patches/streamers of silver gray sheen (one with 0.1-inch wide oil spot) and one patch/streamer of rainbow sheen observed. Sheens did not break when disturbed ("non-brittle")².

Observations in Cove:

- Three covers (no particular structure) of brittle¹ silver gray sheen observed.
- One patch/streamer with 0.1- to 0.5-inch wide oil spots and one streamer of non-brittle² rainbow sheen, and one streamer and four patches/streamers of non-brittle² silver gray sheen observed.

Path Forward for 05/26/2014 to 06/01/2014:

- Conduct sheen monitoring in Cove.

Notes:

- Brittle sheens are often of natural biogenic origin.
- Non-brittle sheens are often related to anthropogenic sources, including petrogenic sources (e.g., petroleum hydrocarbons).
- 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:

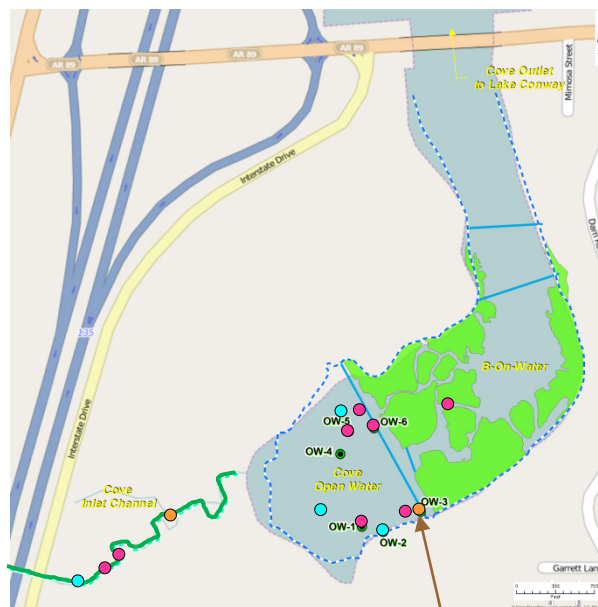
Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

Orange Circle – Non-Brittle Sheen Location with Oil Spot

Pink Circle – Non-Brittle Sheen Location

OW-1 – Shoreline Observation Location



Cove (Summary of Observations from 05/19/2014 through 05/25/2014)



Rainbow Sheen Patch/Streamer with Oil Spot (0.1- to 0.5-inch Wide) Observation on 05/22/2014