

Mayflower Pipeline Incident Response

Sheen Monitoring Report #29

Mayflower, Arkansas

Period: 05/05/2014 through 05/11/2014

Monitoring Days: 05/08/2014*

*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.

Date	Maximum 3-hr Precipitation	Qualifying Storm
05/05/2014	0.00 inches	No
05/06/2014	0.00 inches	No
05/07/2014	0.00 inches	No
05/08/2014	1.31 inches	Yes**
05/09/2014	0.04 inches	No
05/10/2014	0.00 inches	No
05/11/2014	0.07 inches	No

**Weekly monitoring was conducted on 05/08/2014.

Mitigation: Suspected petrogenic sheens were removed using absorbent materials.

Observations in Cove Inlet Channel:

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

Observations in Cove:

- Five patches/streamers and one streamer of non-brittle¹ rainbow/silver gray sheen; one patch/streamer of non-brittle¹ rainbow sheen; and one patch/streamer of non-brittle¹ silver gray sheen observed.
- One patch/cover (no particular structure) of rainbow/silver gray sheen observed. Sheen broke apart when disturbed ("brittle")².
- Two patches/streamers (one with 0.1- to 0.25-inch wide oil spots) of non-brittle¹ and brittle² rainbow/silver gray sheen observed (shown as non-brittle¹ on figure).

Path Forward for 05/12/2014 to 05/18/2014:

- 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.

Legend:

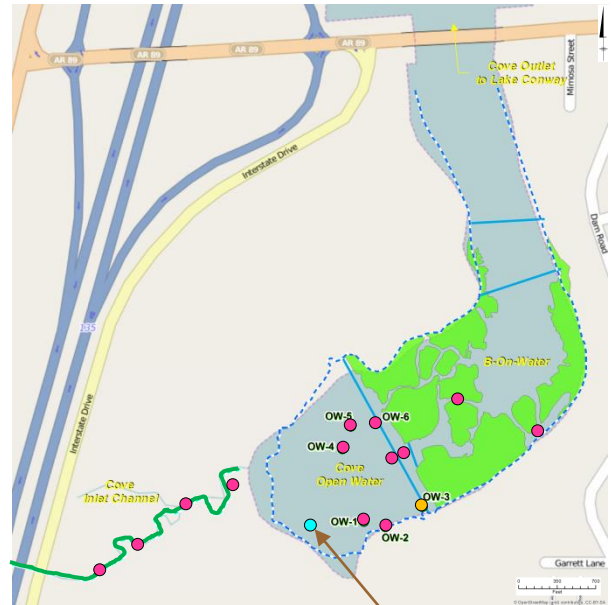
Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

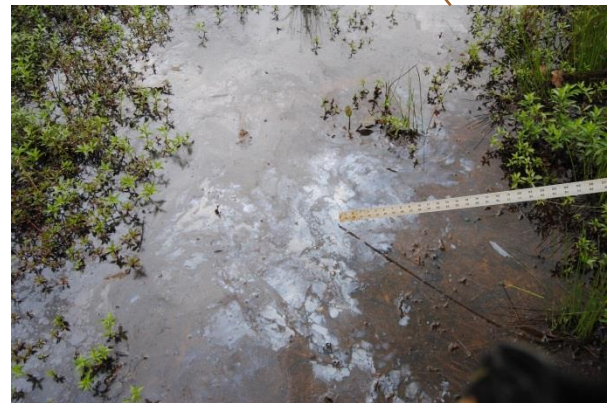
Orange Circle – Non-Brittle Sheen with Oil Spot Location

Pink Circle – Non-Brittle Sheen Location

OW-1 – Shoreline Observation Location



Cove (Summary of Observations from 05/05/2014 through 05/11/2014)



Rainbow/Silver Gray Sheen Patch/Cover Observation on 05/08/2014