

Mayflower Pipeline Incident Response

Sheen Monitoring Report #36

Mayflower, Arkansas

Period: 06/23/2014 through 06/29/2014

Monitoring Days: 06/27/2014*

*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
06/23/2014	0.21 inches	No
06/24/2014	0.07 inches	No
06/25/2014	0.38 inches	Yes**
06/26/2014	0.45 inches	Yes**
06/27/2014	0.03 inches	No**
06/28/2014	0.24 inches	No
06/29/2014	0.03 inches	No

**Weekly monitoring and removal event for the qualifying storm was conducted on 06/27/2014 along with the weekly monitoring.

Mitigation: Suspected petrogenic sheens were removed using absorbent materials.

Observations in Cove Inlet Channel:

- One streamer of rainbow/silver gray sheen observed. Sheen did not break when disturbed ("non-brittle")¹.

Observations in Cove:

- Three patches/streamers and three streamers of non-brittle¹ silver gray sheen, and one streamer of non-brittle¹ rainbow/silver gray sheen observed.
- Two patches/covers (no particular structure) of silver gray sheen observed. Sheens broke apart when disturbed ("brittle")².

Path Forward for 06/30/2014 through 07/06/2014 :

- 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.

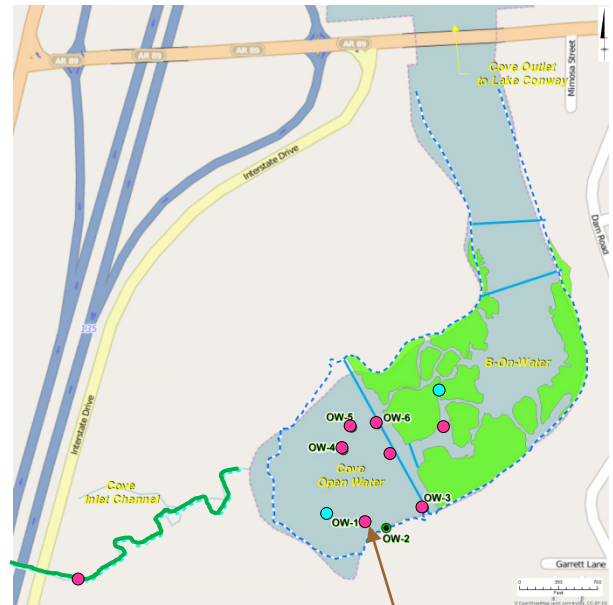
Legend:

Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

Pink Circle – Non-Brittle Sheen Location

OW-1 – Shoreline Observation Location



Cove (Summary of Observations from 06/23/2014 through 06/29/2014)



Silver Gray Sheen Patch/Streamer Observation on 06/29/2014