

Mayflower Pipeline Incident Response

Sheen Monitoring Report #30

Mayflower, Arkansas

Period: 05/12/2014 through 05/18/2014

Monitoring Days: 05/12/2014* and 5/15/2014

*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
05/12/2014	1.10 inches	Yes
05/13/2014	1.13 inches	Yes
05/14/2014	0.41 inches	Yes
05/15/2014	0.00 inches	No**
05/16/2014	0.00 inches	No
05/17/2014	0.01 inches	No
05/18/2014	0.01 inches	No

**The post-rainfall monitoring and removal event for the qualifying storm from 05/12/2014 through 05/14/2014 was conducted on 05/15/2014.

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 and two patches/streamers of rainbow/silver gray sheen observed. Sheens did not break when disturbed ("non-brittle"²).

Observations in Cove:

- One cover (no particular structure) of brittle¹ silver gray sheen and one cover of brittle¹ rainbow/silver gray sheen observed.
- Four patches/streamers and one streamer of non-brittle² silver gray sheen, and two patches/streamers of non-brittle² rainbow/silver gray sheen observed.

Path Forward for 05/19/2014 to 05/25/2014:

- Conduct sheen monitoring in Cove.

Notes:

1. Brittle sheens are often of natural biogenic origin.
2. Non-brittle sheens are often related to anthropogenic sources, including petrogenic sources (e.g., petroleum hydrocarbons).
3. Laboratory testing is required to distinguish sheen sources (e.g., crude oil, roadway runoff, natural biogenic activity).
4. Sheen color (dark/metallic/rainbow/silver gray) and structure (patches/streamers/cover) terminology reference: NOAA 2007. NOAA Open Water Oil Identification Job Aid.

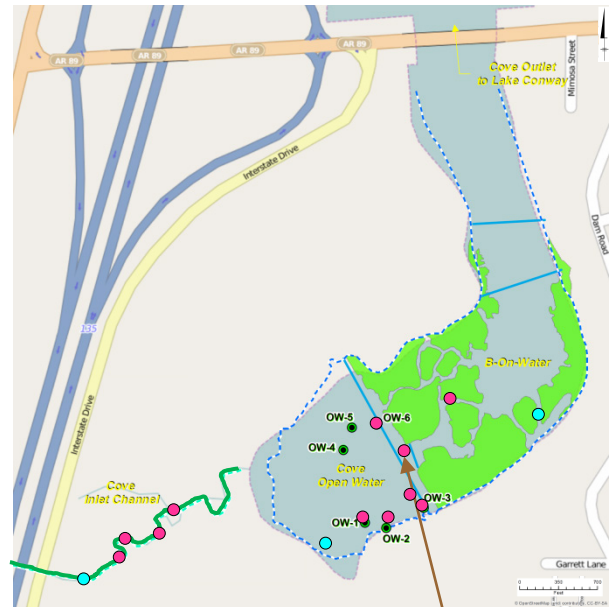
Legend:

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 05/12/2014 through 05/18/2014)



Rainbow/Silver Gray Sheen Patch/Streamer Observation on 05/12/2014