

# Mayflower Pipeline Incident Response

## Sheen Monitoring Report #26

### Mayflower, Arkansas

**Period:** 04/14/2014 through 04/20/2014

**Monitoring Days:** 04/16/2014\*

\*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
4/14/2014	0.96 inches	Yes**
4/15/2014	0.00 inches	No
4/16/2014	0.00 inches	No
4/17/2014	0.00 inches	No
4/18/2014	0.00 inches	No
4/19/2014	0.00 inches	No
4/20/2014	0.00 inches	No

\*\*Weekly monitoring and post-rainfall monitoring and removal event completed on 04/16/2014.

**Mitigation:** Suspected petrogenic sheens were removed using absorbent materials.

#### Observations in Cove Inlet Channel:

- One cover (no particular structure) of silver gray sheen observed. Sheen broke apart when disturbed ("brittle")<sup>1</sup>.
- One streamer of silver gray sheen observed. Sheen did not break when disturbed ("non-brittle")<sup>2</sup>.

#### Observations in Cove:

- Three streamers of non-brittle<sup>2</sup> silver gray sheen (two with 0.1- to 0.25-inch wide oil spots) observed.

#### Path Forward for 04/21/2014 to 04/27/2014:

- 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 biologic 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:

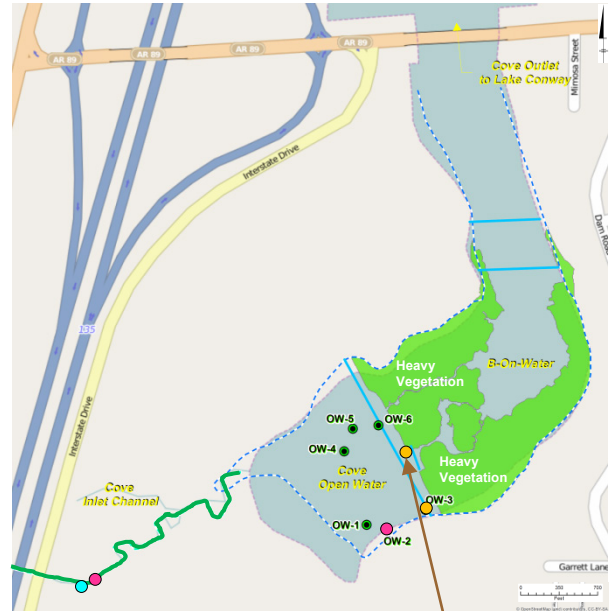
Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

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 04/14/2014 through 04/20/2014)



Silver Gray Sheen Streamers with Oil Spots (0.1- to 0.25-inch Wide) Observation on 04/16/2014