

## Sheen Monitoring Report #38

**Period:** 07/07/2014 through 07/13/2014

**Monitoring Days:** 07/09/2014\* and 07/11/2014

\*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
07/07/2014	0.00 inches	No
07/08/2014	1.34 inches	Yes**
07/09/2014	0.19 inches	No
07/10/2014	0.48 inches	Yes***
07/11/2014	0.01 inches	No
07/12/2014	0.00 inches	No
07/13/2014	0.00 inches	No

\*\*Sheen monitoring and removal event for qualifying storm was conducted on 07/09/2014 along with the weekly monitoring event.

\*\*\*Sheen monitoring and removal event for qualifying storm was conducted on 07/11/2014.

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

### Observations in Cove Inlet Channel:

- No sheen observed.

### Observations in Cove:

- Four patches/streamers, one patch, and two streamers of silver gray sheen; and four patches/streamers (one with 0.25- to 1-inch wide oil spots) of rainbow/silver gray sheen observed. Sheens did not break when disturbed ("non-brittle")<sup>1</sup>.
- One cover (no particular structure) of silver gray sheen observed. Sheen broke apart when disturbed ("brittle")<sup>2</sup>.

### Path Forward for 07/14/2014 through 07/20/2014:

- 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.

# Mayflower Pipeline Incident Response

## Mayflower, Arkansas

### Legend:

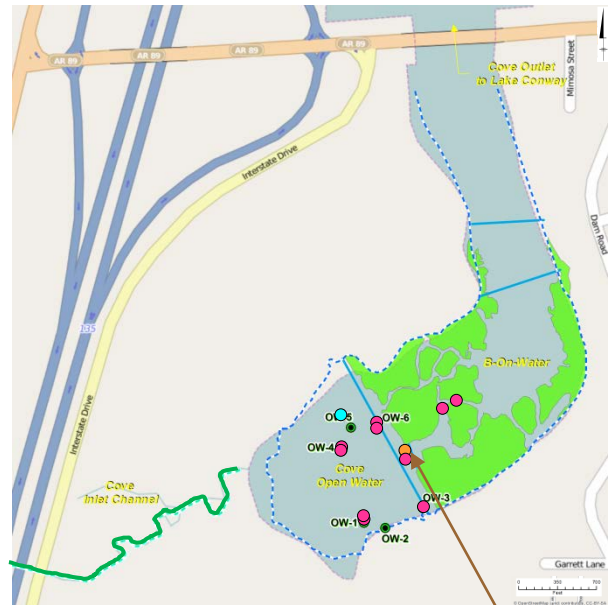
Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

Pink Circle – Non-Brittle Sheen Location

Orange Circle – Non-Brittle Sheen with Oil Spot Location

OW-1 – Shoreline Observation Location



**Cove (Summary of Observations from 07/07/2014 through 07/13/2014)**



**Rainbow/Silver Gray Sheen Patch/Streamer with Oil Spots (0.25- to 1-inch wide) Observation on 07/09/2014**