

## Sheen Monitoring Report #23

**Period:** 03/24/2014 through 03/30/2014

**Monitoring Days:** 03/24/2014\* and 03/29/2014\*\*

\*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
3/24/2014	0.00 inches	No
3/25/2014	0.00 inches	No
3/26/2014	0.00 inches	No
3/27/2014	0.33 inches	Yes**
3/28/2014	0.70 inches	Yes**
3/29/2014	0.12 inches	No
3/30/2014	0.00 inches	No

\*\*Post-rainfall monitoring and removal event completed on 3/29/2014

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

### Observations in Dawson Cove Inlet Channel:

- Eight covers (no particular structure) of silver gray sheens and one cover of metallic/silver gray sheens observed. Sheens broke apart when disturbed ("brittle")<sup>1</sup>.
- Two patches and one streamer of silver gray sheens observed. Sheens did not break when disturbed ("non-brittle")<sup>2</sup>.

### Observations in Dawson Cove:

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

### Path Forward for 03/31/2014 to 04/06/2014:

- Conduct sheen monitoring in Dawson Cove.

### Notes:

- Brittle sheens are often of natural biogenic origin.
- Non-brittle sheens are often related to anthropogenic sources, including petrogenic sources (e.g., petroleum hydrocarbons).
- 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:

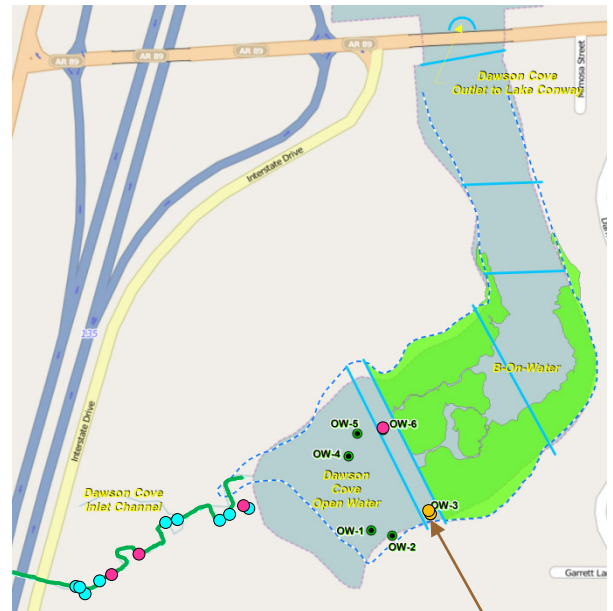
Green Line – No Sheen

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



**Dawson Cove (Summary of Observations from 03/24/2014 through 03/30/2014)**



**Silver Gray Sheen Patch/Streamer with Oil Spots (0.1- to 0.25-inch wide) Observation on 03/24/2014**