

## Sheen Monitoring Report #16

# Mayflower Pipeline Incident Response

## Mayflower, Arkansas

**Monitoring Period:** Daily\* from 02/03/2014 through 02/09/2014

\* Limited sheen monitoring due to cold and icy weather conditions.

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

### Observations in Drainage Ways:

- A-Main
  - Three covers (no particular structure) of silver gray sheens observed. Sheens broke apart when disturbed ("brittle")<sup>1</sup>.
- A-365W
  - No sheens observed.
- A-365E
  - One cover (no particular structure) of brittle<sup>1</sup> silver gray sheens observed.

### Observations in Dawson Cove Inlet Channel:

- No sheens observed.

**Legend:**

Green Line – No Sheen

Aqua Circle – Brittle Sheen Location

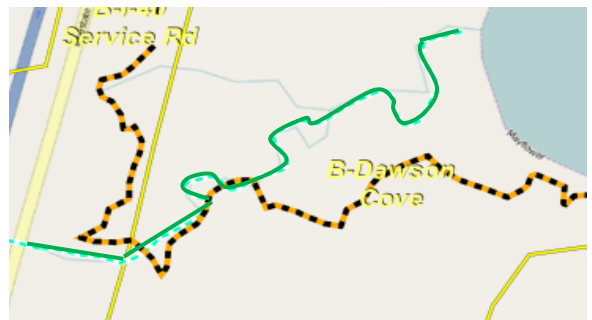
Pink Circle – Non-Brittle Sheen Location



**Drainage Ways (Summary of Observations from 02/03/2014 through 02/09/2014)**



**Silver Gray Sheen Cover Observation on 02/06/2014**



**Dawson Cove Inlet Channel (Summary of Observations from 02/03/2014 through 02/09/2014)**

**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.

# Mayflower Pipeline Incident Response

## Sheen Monitoring Report #16 (continued)

### Mayflower, Arkansas

**Monitoring Period:** Daily\* from 02/03/2014 through 02/09/2014

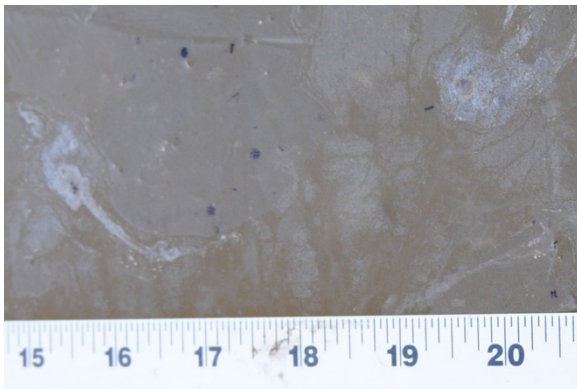
\* Limited sheen monitoring due to cold and icy weather conditions.

### Observations in Dawson Cove:

- One streamer (with 0.25-inch wide oil spots) of silver gray sheens and one streamer (with 0.1- to 0.5-inch wide oil spots) of rainbow/silver gray sheens observed. Sheens did not break when disturbed ("non-brittle")<sup>2</sup>.

**Legend:**

- 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



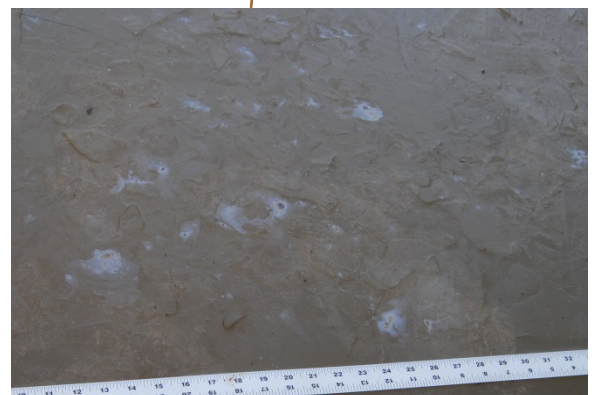
Silver Gray Sheen Streamer with Oil Spots (0.25-inch Wide) Observation on 02/03/2014



Dawson Cove (Summary of Observations from 02/03/2014 through 02/09/2014)

### Path Forward for 02/10/2014 to 02/16/2014:

- Continue sheen monitoring in all areas.



Rainbow/Silver Gray Sheen Streamer with Oil Spots (0.1- to 0.5-inch Wide) Observation on 02/06/2014

**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.