

Mayflower Pipeline Incident Response

Sheen Monitoring Report #20

Monitoring Period: Daily* from 03/03/2014 through 03/09/2014 *Limited sheen monitoring due to unsafe weather conditions.

Mayflower, Arkansas

Legend: Green Line – No Sheen Aqua Circle – Brittle Sheen Location Pink Circle – Non-Brittle Sheen Location

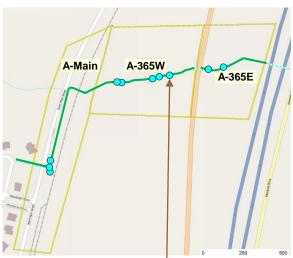
<u>Mitigation:</u> Suspected petrogenic sheens were removed using absorbent materials.

Observations in Drainage Ways:

- A-Main
 - Two covers (no particular structure) of silver gray sheens and one cover of metallic/silver gray sheens observed. Sheens broke apart when disturbed ("brittle")¹.
- A-365W
 - Five covers (no particular structure) of brittle¹ silver gray sheens observed.
- A-365E
 - Two covers (no particular structure) of brittle¹ silver gray sheens observed.

Observations in Dawson Cove Inlet Channel:

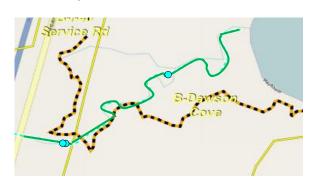
 Two covers (no particular structure) of brittle¹ metallic sheens and one cover of brittle¹ silver gray sheens observed.



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



Silver Gray Sheen Cover Observation on 03/08/2014



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

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

Mayflower, Arkansas

Sheen Monitoring Report #20 (continued)

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Observations in Dawson Cove:

 Six streamers (two with 0.25-inch wide oil spots) and one patch of non-brittle² silver gray sheens; and one patch of non-brittle² rainbow/silver gray sheens observed. Sheens did not break when disturbed ("non-brittle")².

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 Patch Observation on 03/09/2014

Path Forward for 03/10/2014 to 03/16/2014:

· Continue sheen monitoring in all areas



03/03/2014 through 03/09/2014)



Silver Gray Sheen Streamer Observation on 03/08/2014

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- Sheen color (dark/metallic/rainbow/silver gray) and structure (patches/streamers/cover) terminology reference: NOAA 2007. NOAA Open Water Oil Identification Job Aid.