

Sheen Monitoring Report #6

Monitoring Period: Daily from 11/25/2013 through 12/01/2013

Mitigation: Suspected petrogenic sheens were removed using absorbent materials.

Observations in Drainage Ways:

- A-Main
 - Six patches and three streamers of metallic sheens observed. Sheens broke apart when disturbed ("brittle")¹.
 - Two streamers and four patches of metallic sheens observed. Sheens did not break when disturbed ("non-brittle")².
- A365W
 - Two patches of brittle¹ metallic sheens observed.
 - One patch of non-brittle² metallic sheens observed.
- A365E
 - Four patches of brittle¹ metallic sheens observed.
 - One patch of non-brittle² metallic sheens observed.

Observations in Dawson Cove Inlet Channel:

- One streamer and two patches of brittle¹ metallic sheens observed.
- Six patches of non-brittle² metallic sheens observed.

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

Legend:

Green Line – No Sheen

Aqua Circle – "Brittle" Sheen Location

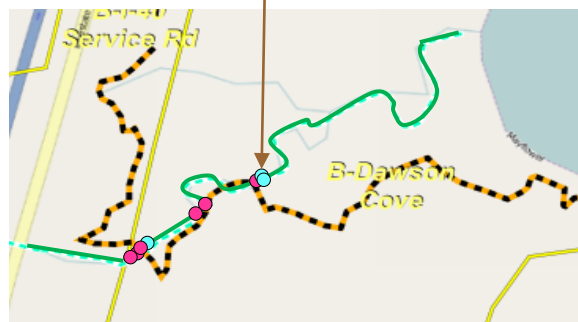
Pink Circle – "Non-Brittle" Sheen Location



Drainage Ways (Summary of Observations from 11/25/2013 to 12/01/2013)



Metallic Sheen Patch Observation on 11/30/2013



Dawson Cove Inlet Channel (Summary of Observations from 11/25/2013 to 12/01/2013)

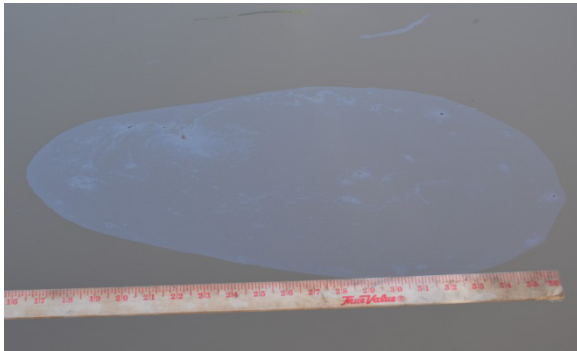
Sheen Monitoring Report #6 (continued)

Mayflower, Arkansas

Monitoring Period: Daily from 11/25/2013 through 12/01/2013

Observations in Dawson Cove:

- One patch of brittle¹ rainbow sheens observed.
- One streamer (with 0.25-inch wide oil spots) and eight patches (four with small oil spots – 0.1-, 0.25-, and 0.5-inch wide) of non-brittle² rainbow sheens; seven patches (one with 0.1-inch wide oil spots) and two patches/streamers of non-brittle² metallic sheens; and seven patches and one patch/streamer of non-brittle² metallic/rainbow sheens with small oil spots (0.1- and 0.25-inch wide) observed.



Metallic Sheen Patch with Small Oil Spots (0.1-inch Wide) Observation on 11/30/2013

Path Forward for 12/02/2013 to 12/08/2013:

- Continue sheen monitoring in all areas.

Legend:

- Aqua Circle – “Brittle” Sheen Location
- Pink Circle – “Non-Brittle” Sheen Location
- OW-1 – Shoreline Observation Location



Dawson Cove (Summary of Observations from 11/25/2013 to 12/01/2013)



Metallic/Rainbow Sheen Patch with Small Oil Spots (0.25-inch Wide) Observation on 12/01/2013

Notes:

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