

Sheen Monitoring Report #3

Mayflower Pipeline Incident Response

Mayflower, Arkansas

Monitoring Period: Daily from 11/4/2013 through 11/10/2013

Mitigation: Suspected petrogenic sheens were removed using absorbent materials.

Observations in Drainage Ways:

- A-Main
 - One patch of metallic/rainbow sheens, one streamer, five patches, and one cover (no particular structure) of metallic sheens; one patch of brown metallic sheen; and one patch of rainbow sheen observed. Sheens broke apart when disturbed ("brittle")¹.
 - Two streamers and two patches of metallic sheens observed. Sheens did not break when disturbed ("non-brittle")².
- A365W
 - One patch of brittle¹ metallic/rainbow sheens, and seven patches and one cover (no particular structure) of brittle¹ metallic sheens observed.
 - One patch of non-brittle² metallic sheens observed.
- A365E
 - One patch of brittle² metallic sheens observed.
 - One streamer of non-brittle² metallic sheens and one patch of non-brittle² rainbow sheens observed.

Observations in Dawson Cove Inlet Channel:

- Two streamers and one patch of brittle¹ metallic sheen observed.
- Four streamers and two patches of non-brittle² metallic sheens observed.

Notes:

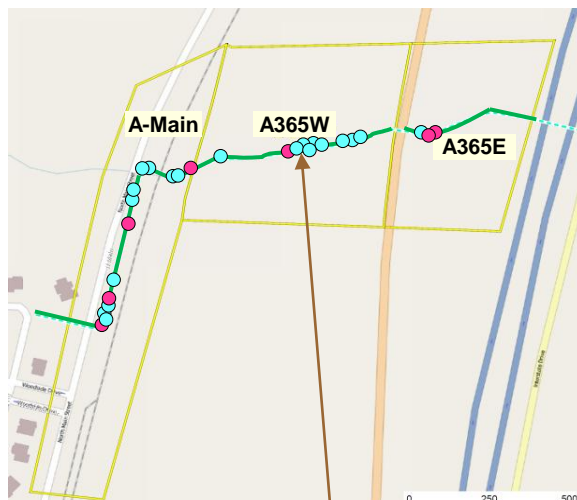
1. Brittle sheens are often of natural biogenic origin.
2. Non-brittle sheens are often related to anthropogenic sources, including petrogenic sources (e.g., petroleum hydrocarbons).
3. Laboratory testing is required to distinguish sheen sources (e.g., crude oil, roadway runoff, natural biologic activity).
4. Sheen color (dark / metallic / rainbow / silver gray) and structure (patches / streamers) terminology reference: NOAA 2007. NOAA Open Water Oil Identification Job Aid.

Legend:

Green Line – No Sheen

Aqua Circle – "Brittle" Sheen Location

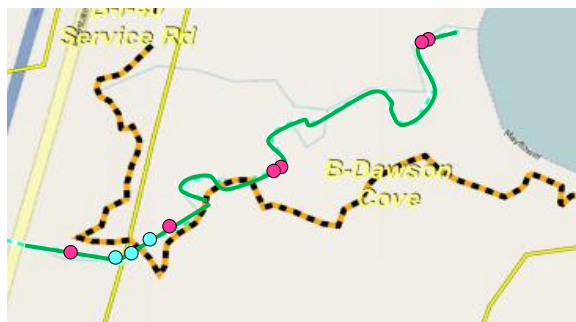
Pink Circle – "Non-Brittle" Sheen Location



Drainage Ways (Summary of Observations from 11/4/2013 to 11/10/2013)



Metallic Sheen Patch Observation on 11/10/2013



Dawson Cove Inlet Channel (Summary of Observations from 11/4/2013 to 11/10/2013)

Sheen Monitoring Report #3 (continued)

Mayflower, Arkansas

Monitoring Period: Daily from 11/4/2013 through 11/10/2013

Observations in Dawson Cove:

- Five patches, one patch/streamer, and two covers (no structure) of brittle¹ metallic sheens; one patch of brittle¹ rainbow sheens; and one patch/streamer of brittle¹ metallic/rainbow sheen observed.
- Eight patches (two with small oil spots [<1-inch wide]), six streamers, and two patches/streamers of non-brittle² metallic sheens; one patches, three streamers, and one patch/streamer of non-brittle² rainbow sheens with small oil spots (<1-inch wide); and two streamers, two patches/streamers, and two patches of non-brittle² metallic/rainbow sheens with small oil spots (<1-inch wide) observed.



Metallic/Rainbow Sheen Patch/Streamer with Small Oil Spots Observation on 11/7/2013

Legend:

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



Dawson Cove (Summary of Observations from 11/4/2013 to 11/10/2013)

Path Forward for 11/11/2013 to 11/17/2013:

- Continue sheen monitoring in all areas.

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) terminology reference: NOAA 2007. NOAA Open Water Oil Identification Job Aid.



Metallic Sheen Streamer Observation on 11/8/2013