

Sheen Monitoring Report #41

Period: 07/28/2014 through 08/03/2014

Monitoring Days: 08/01/2014*

*Weekly sheen monitoring started on 03/11/2014.

<u>Summary of Rainfall:</u> 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
07/28/2014	0.00 inches	No
07/29/2014	0.00 inches	No
07/30/2014	0.06 inches	No
07/31/2014	0.12 inches	No
08/01/2014	0.00 inches	No**
08/02/2014	0.00 inches	No
08/03/2014	0.00 inches	No

^{**}Weekly sheen monitoring and removal event was conducted on 08/01/2014.

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

Observations in Cove Inlet Channel:

No sheen observed.

Observations in Cove:

- One patch/streamer and one patch of rainbow/silver gray sheen; and three patches/streamers of silver gray sheen observed. Sheens did not break when disturbed ("nonbrittle")1.
- One patch of silver gray sheen observed. Sheen broke apart when disturbed ("brittle")².
- One patch/streamer of non-brittle¹ and brittle² rainbow/silver gray sheen observed (shown as non-brittle¹ on the figure).

Path Forward for 08/04/2014 through 08/10/2014:

Conduct sheen monitoring in Cove.

Notes:

- Non-brittle sheens are often related to anthropogenic sources, including petrogenic sources (e.g., petroleum hydrocarbons).
- 2. Brittle sheens are often of natural biogenic origin.
- 3. 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

Leaend:

Green Line – No Sheen
Aqua Circle – Brittle Sheen Location
Pink Circle – Non-Brittle Sheen Location
OW-1 – Shoreline Observation Location



Cove (Summary of Observations from 07/28/2014 through 08/03/2014)



Rainbow/Silver Gray Sheen Patch Observation on 08/01/2014