

Sheen Monitoring Report #33

Period: 06/02/2014 through 06/08/2014

Monitoring Days: 06/02/2014*

*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
06/02/2014	0.23 inches	No**
06/03/2014	0.00 inches	No
06/04/2014	0.00 inches	No
06/05/2014	0.00 inches	No
06/06/2014	0.16 inches	No
06/07/2014	0.61 inches	Yes***
06/08/2014	1.20 inches	Yes***

^{**}The post-rainfall monitoring and removal event for the qualifying storm on 06/01/2014 was conducted on 06/02/2014 along with the weekly monitoring.

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

Observations in Cove Inlet Channel:

- One cover (no particular structure) and one cover/patch of silver gray sheen, and one cover of rainbow/silver gray observed. Sheens broke apart when disturbed ("brittle")¹.
- One streamer of rainbow/silver gray sheen observed. Sheen did not break when disturbed ("non-brittle")².

Observations in Cove:

- One patch of brittle¹ silver gray sheen observed.
- Three patches/streamers and two streamers of non-brittle² silver gray sheen observed.
- One patch/streamer/cover (no particular structure) of brittle¹ and non-brittle² rainbow/silver gray sheen observed (shown as non-brittle on the figure).

Path Forward for 06/09/2014 to 06/15/2014:

Conduct sheen monitoring in Cove.

Notes:

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

Legend:

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 06/02/2014 through 06/08/2014)



Rainbow/Silver Gray Sheen Patch/Streamer/Cover Observation on 06/02/2014

^{***}The post-rainfall monitoring and removal event for the qualifying storm will be addressed in next sheen monitoring report.