

Form Rev. 10.3.14

1. Program Number: *See*, Reporting Policy at III (C) (1).

12120114-S

2. Project Title: *See*, Reporting Policy at III (C) (2).

3. Long-term Monitoring: Lingering Oil - Extending the Tracking of oil levels and weathering (PAH composition) in PWS through time

4. Principal Investigator(s) Names: *See*, Reporting Policy at III (C) (3).

5. Mark Carls, Mandy Lindeberg

6. Time Period Covered by the Report: *See*, Reporting Policy at III (C) (4).

7. February 1, 2014-January 31, 2015

8. Date of Report: *See*, Reporting Policy at III (C) (5).

February 13, 2015

9. Project Website (if applicable): *See*, Reporting Policy at III (C) (6).

www.gulfwatchalaska.org

10. Summary of Work Performed: *See*, Reporting Policy at III (C) (7).

- The retrospective biomarker analysis has been completed and a manuscript has been drafted and is currently in review at the author level.
- Field sample design has been completed to determine the quantity and weathering state of oil on 10 PWS beaches. Sampling is scheduled for this summer.
- Annual hydrocarbon database updates have been completed

Deliverable/Milestone	Status
Objective 1: field work	Field work is scheduled for this summer
Objective 2: supplemental analyses	No supplemental analyses have been requested by other researchers.
Objective 3: hydrocarbon database	Maintenance of the hydrocarbon database is up to date and available on Ocean Workspace/public. New data include the retrospective biomarker analyses.
Objective 4: Reporting	Reports have been submitted as required.

11. Coordination/Collaboration: *See*, Reporting Policy at III (C) (8).

We continued collaboration with the bioremediation program (Boufadel et al.), PWSRCAC on potential shrimp contamination in Port Valdez, an ADF&G bird study (outside PWS), and an NOS project in the Arctic.

12. Information and Data Transfer: *See, Reporting Policy at III (C) (9).*

Draft report, Carls, Holland, Lindeberg. 2015. Biomarkers as tracers of Exxon Valdez oil.

Approved report: Irvine, G.V., D.H. Mann, M.G. Carls, L. Holland, C. Reddy, R.K. Nelson, and C. Aeppli. 2014. Lingering oil on boulder-armored beaches in the Gulf of Alaska 23 years after the Exxon Valdez oil spill, Exxon Valdez Oil Spill Restoration Project Final Report (Restoration Project 11100112), U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska.

13. Response to EVOSTC Review, Recommendations and Comments: *See, Reporting Policy at III (C) (10).*

No comments for this project

14. Budget: *See, Reporting Policy at III (C) (11).*

No line items exceeded $\pm 10\%$.