



UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA

In re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010	:	MDL No. 2179
	:	
	:	SECTION: J
	:	
This Document Relates To: All Actions	:	JUDGE BARBIER
	:	MAGISTRATE JUDGE
.....	:	SHUSHAN

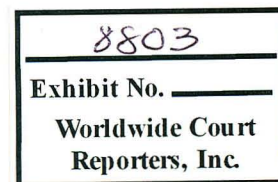
AGREED 30(b)(6) DEPOSITION NOTICE OF THE UNITED STATES

By agreement of Plaintiffs' Liaison Counsel, Defense Liaison Counsel, Coordinating Counsel for the States, and Coordinating Counsel for the U.S., the U.S. shall, pursuant to Rule 30(b)(6) of the Federal Rules of Civil Procedure and Pre-Trial Order No. 17 (as supplemented and amended by Pre-Trial Order 27), designate and produce one or more officers, managers, agents, employees, or other representatives of the U.S. to discuss the Areas of Inquiry identified below. The times and locations of the depositions will be scheduled in conjunction with the designees' fact depositions in their individual capacities, or otherwise as may be scheduled with Judge Shushan and the parties.

DEFINITIONS

As used in the list of topics contained in this notice, the following terms are defined as set forth below:

1. "Source Control Efforts" has the same meaning as "Source Control" in the Definitions contained in the United States' Initial Response to BP Exploration and Production Company's First Set of Discovery Requests served on May 19, 2011.
2. "Unified Command" means all personnel and functions of the "Unified Area Command" and the "Incident Command Post" at Houston, Texas, as the terms "Unified Area Command" and "Incident Command Post" are used in the report to the National Response Team entitled, "On Scene Coordinator Report -- *Deepwater Horizon* Oil Spill" and dated September 2011 (the "OSC Report").
3. "National Incident Commander" has the same meaning as when used in the OSC Report.



4. “MC 252 Well” means the exploratory well drilled in Block 252 of the Mississippi Canyon.

5. “Junk Shot” means the operation by which bridging material was injected into the Deepwater Horizon blow-out preventer either from the surface or through a subsea manifold as part of the Top Kill operations.

6. “Top Hat” means the mechanical device used to collect hydrocarbons from the top of the Lower Marine Riser Package up to the *Discover Enterprise* after the riser was cut off in June 2010.

7. “Top Kill” means the operations comprised of the Momentum Kill and Junk Shot attempted in May 2010 as a means to kill the MC 252 Well.

8. “Momentum Kill” means the operation by which drilling fluid was pumped into the Deepwater Horizon blow-out preventer at a high rate of speed in an attempt to overcome the flow of hydrocarbons as part of the Top Kill operations.

9. “Static Kill” means the operation by which drilling fluid was pumped into the *Deepwater Horizon* blow-out preventer after the well had been closed in.

10. “Erosion” means the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, for example, the flow of fluids and/or other materials, including but not limited to hydrocarbons.

AREAS OF INQUIRY

A. Source Control

1. Your review and approval of BP’s 2009 Regional Oil Spill Response Plan -- Gulf of Mexico.

2. Your knowledge on or before April 20, 2010, of any requirements that Oil Spill Response Plans, Exploration Plans, or any other regulatory submittal include provisions regarding how to respond to subsea oil well blow-outs (including deepwater oil well blow-outs) on the Outer Continental Shelf, by containing, capturing, controlling, capping or stopping the flow of oil and gas from the well.

3. Other than blow-out preventers, your knowledge of the state of the art within the industry as to any device, system, assembly, procedure or technology for response to subsea oil well blow-outs (including deepwater oil well blow-outs) by containing, capturing, controlling, capping or stopping the flow of oil and gas from the well.

4. The training of United States personnel, including but not limited to personnel of the United States Coast Guard prior to April 20, 2010, to respond to, or to participate in a response to, an offshore oil well blow-out relating to Source Control Efforts.

5. Your knowledge of the Source Control elements of BP's offshore oil spill response programs, or emergency management training programs, for responses to offshore oil well blowouts, between January 1, 2005 and April 20, 2010, including any audits or approvals of such training programs.

6. Your knowledge of the role of and categories and types of actions taken by the Unified Command, as created and implemented pursuant to the National Incident Management System, in Source Control Efforts

7. Your knowledge of the role of and categories and types of actions taken by the office of the National Incident Commander in Source Control Efforts, including, but not limited to, the acquisition and distribution of information or data related to the Source Control efforts.

8. Your knowledge of the role and actions of any United States personnel or United States contractors in Source Control Efforts that were not undertaken under the scope and authority of the Unified Command or the National Incident Commander, e.g., as reflected on such entity's formal organizational chart.

9. Your knowledge of BP's efforts to engage or include United States personnel or United States contractors in Source Control Efforts.

10. Your knowledge of any omissions by BP to engage or include United State personnel or United States contractors in Source Control Efforts.

11. Your knowledge of BP's efforts to provide information to United States personnel or United States contractors in connection with Source Control Efforts.

12. Your knowledge of any failure by BP to provide information to United States personnel or United States contractors in connection with Source Control Efforts.

13. To the extent not otherwise addressed by these topics, your knowledge of and involvement in the decision regarding whether or not to undertake a specific Source Control Effort for which a proposal, evaluation or analysis had been developed

14. Your knowledge of and involvement in the sequencing of Source Control Efforts, including the considerations or factors that accounted for the sequence of Source Control Efforts.

15. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the efforts used to activate the *Deepwater Horizon* blow-out preventer on or after April 20, 2010, through the use of remotely operated vehicles ("ROVs").

16. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a pollution dome or cofferdam as a means to capture oil and gas from the MC252 Well.

17. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a riser insertion tube tool as a means to capture oil and gas from the MC252 Well.

18. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a second blowout preventer as a means to control or cease the flow of oil and gas from the MC252 Well.

19. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a capping stack as a means to control or cease the flow of oil and gas from the MC252 Well.

20. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Junk Shot(s) as a means to stop the flow of oil and gas from the MC252 Well.

21. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Momentum Kill(s) as a means to stop the flow of oil and gas from the MC252 Well.

22. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Top Kill as a means to stop the flow of oil and gas from the MC252 Well.

23. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a Top Hat as a means to capture oil and gas from the MC252 Well.

24. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of the choke or kill line of the *Deepwater Horizon* blow-out preventer as a means to capture oil and gas from the MC252 Well.

25. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of free standing risers and floating production, storage and offloading vessels as a means to capture oil and gas from the MC252 Well.

26. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a Static Kill as a means to kill the MC252 Well.

27. Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of relief wells as a means to stop the flow of oil and gas from the MC252 Well.

28. Your understanding of the path (or paths) through which hydrocarbons flowed from the MC252 reservoir through and out of the MC252 Well between April 20, 2010, and July 15, 2010, including any information supporting that understanding.

29. Your knowledge of and involvement with the selection, testing, monitoring, approval, and use of subsea or surface dispersants at or in the area immediately above the MC252 Well as those matters affected or relate to Source Control Efforts and any effort to quantify the flow of hydrocarbons from the MC 252 Well.

30. Your knowledge of and involvement in the development and implementation of simultaneous operations procedures or plans for vessels working in the immediate vicinity of the MC 252 Well.

31. Your knowledge of any suggestion or proposal to utilize the Macondo wellbore or either relief well for future production from MC 252.

32. Your knowledge of any delay in the drilling of either relief well due to the taking of samples in the wellbore.

33. Your knowledge of the financial support, labor, equipment, facilities and other resources devoted by BP to Source Control Efforts.

B. Quantification

Unified Command/Unified Area Command/Houston Incident Command

34. Your efforts (including all communications, modeling, calculations and analysis of any kind) leading to the flow rate estimate of 1,000 bopd announced by Admiral Landry on April 24, 2010.

35. Your efforts (including all communications, modeling, calculations and analysis of any kind) leading to the flow rate estimate of 5,000 bopd announced by Admiral Landry on April 28, 2010.

36. Your efforts (including all communications, modeling, calculations and analysis of any kind) relating to all attempts to quantify the release of hydrocarbons from the Macondo MC252 well after April 20, 2010, whether or not those efforts resulted in a finalized or public estimate.

37. All communications, data, modeling, calculations and analysis relating to the effect of restrictions on flow from the MC252 well, including flow path within the well, cement, riser geometry, the BOP, or any other restriction, including the effect of removing or mitigating any restriction (*e.g.*, by erosion) or the development or existence of leak points.

38. All communications, data, modeling, calculations and analysis of the MC252 reservoir, including its geological formation, integrity, pressure, and composition (including the composition of oil, natural gas and any other constituents or components of the reservoir) and the effect of reservoir depletion on the flow of hydrocarbons from the MC252 well.

39. All communications, data, modeling, calculations and analysis relating to “skin” within the MC252 reservoir.

40. All communications, data, modeling, calculations and analysis relating to the collection of hydrocarbons from the MC 252 well using the Riser Insertion Tool, including any effect such information had on any estimate of flow rates.

41. All communications, data, modeling, calculations and analysis relating to the effect of the flow of hydrocarbons from the MC252 well on any attempt or technique considered to stop the flow of hydrocarbons from the well.

42. All communications, data, modeling, calculations and analysis identifying or relating to factors affecting the ability to estimate the flow of hydrocarbons from the MC252 well or the accuracy of any such estimate.

Flow Rate Technical Group (FRTG):

43. The organization and operation of the Flow Rate Technical Group (“FRTG”) and all of its sub-teams, and the selection of their members and staff.

44. Any communications constituting directions, guidance, analysis, commentary or influence) relating to the work of the FRTG or to flow, between the FRTG or any of its members and any person in the Federal Interagency Solutions Group (FISG), Executive Office of the President (EoP), Department of Energy (DoE), Department of the Interior (DoI), Environmental Protection Agency (EPA), Department of Homeland Security (DHS) or Department of Commerce (DoC), or anyone acting on their behalf.

45. The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the FRTG, any of its members, any of its sub-teams, or any of their members, during the course of any work performed by the FRTG or any sub-team to quantify or estimate the flow of hydrocarbons from the MC252 well, including velocimetry, nodal analysis, reservoir analysis, hydraulics, acoustics, surface expression, mass balance, multiphase flow, and gas/oil ratio (“GOR”).

46. All communications within or among the FRTG and its sub-teams regarding the difficulty, quality, accuracy or uncertainties associated with its work to quantify or estimate the flow of hydrocarbons from the MC252 well.

47. All communications involving the FRTG or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

48. Your efforts (including all communications, modeling, calculations and analysis of any kind) leading to the May 27, 2010 flow rate estimate of 12,000 to 19,000 bopd.

49. Your efforts (including all communications, modeling, calculations and analysis of any kind) relating to all attempts to quantify the release of hydrocarbons from the MC252 well after April 20, 2010, whether or not those efforts resulted in a finalized or public estimate.

50. Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical

action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.

51. The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.

Department of Energy “Science Team”:

52. The organization and operation of the Department of Energy Science Team, including the selection of its members and staff.

53. The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the Science Team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.

54. All communications involving the Science Team or any of its members regarding the difficulty, quality, accuracy or uncertainty associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

55. All communications involving the Science Team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

56. Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.

57. The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.

58. Your knowledge, consideration or analysis of the National Commission Chief Counsel’s conclusion (2011 Report at 45) that “the interior of the BOP (through which hydrocarbons definitely flowed) showed serious erosion, as did the interior of the casing hanger.”

59. Your knowledge, consideration or analysis of the National Commission Chief Counsel’s conclusion (2011 Report at 212) that “initial photos from the recovered BOP show erosion in the side of the blowout preventer around the ram, which was a possible flow path for hydrocarbons.”

Los Alamos National Lab (LANL):

60. The organization and operation of the LANL team, including the selection of its members and staff.

61. The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the LANL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.

62. All communications involving the LANL team or any of its members regarding the difficulty, quality, accuracy or uncertainty associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

63. All communications between the LANL team or any of its members and any other person regarding the flow rate work being undertaken by any other national laboratory or agency of the Federal Government.

64. All communications involving the LANL team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

65. Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.

66. The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.

Lawrence Livermore National Lab (LLNL):

67. The organization and operation of the LLNL team, including the selection of its members and staff.

68. The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the LLNL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.

69. All communications involving the LLNL team or any of its members regarding the difficulty, quality, accuracy or uncertainty associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

70. All communications between the LLNL team or any of its members and any other person regarding the flow rate work being undertaken by any other national laboratory or agency of the Federal Government.

71. All communications involving the LLNL team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

72. Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.

73. The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.

Lawrence Berkeley National Lab (LBNL):

74. The organization and operation of the LBNL team, including the selection of its members and staff.

75. The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the LBNL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.

76. All communications involving the LBNL team or any of its members regarding the difficulty, quality, accuracy or uncertainties associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

77. All communications between the LBNL team or any of its members and any other person regarding the flow rate work being undertaken by any other national laboratory or agency of the Federal Government.

78. All communications involving the LBNL team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

79. Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.

80. The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.

Sandia National Lab (SNL):

81. The organization and operation of the SNL team, including the selection of its members and staff.

82. The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the SNL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.

83. All communications involving the SNL team or any of its members regarding the difficulty, quality, accuracy or uncertainty associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

84. All communications between the SNL team or any of its members and any other person regarding the flow rate work being undertaken by any other national laboratory or agency of the Federal Government.

85. All communications involving the SNL team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

86. Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.

87. The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.

88. Preparation of the report “DOE-NNSA Flow Analysis Studies Associated with the Oil Release following the Deepwater Horizon Accident, SAND2010-XXXX, Arthur C. Ratzel III, Team Lead, Sandia National Laboratories, December 2010.

Federal Interagency Solutions Group (FISG):

89. Preparation of the reports “McNutt, M, R. Camilli, G. Guthrie, P. Hsieh, V. Labson, B. Lehr, D. Maclay, A. Ratzel, and M. Sogge. 2011; Assessment of Flow Rate Estimates for the Deepwater Horizon / Macondo Well Oil Spill, Flow Rate Technical Group report to the National Incident Command, Interagency Solutions Group, March 10, 2011” and “Oil Budget Calculator, Deepwater Horizon, Technical Documentation, November 2010, A Report by the Federal Interagency Solutions Group, Oil Budget Calculator Science and Engineering Team.”

90. All communication between the FISG or any of its members and any other person regarding the flow rate work being undertaken by any national laboratory or agency of the Federal Government.

91. The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the FISG or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.

92. All communications involving the FISG or any of its members regarding the difficulty, quality, accuracy or uncertainties associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

93. All communications involving the FISG or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

94. Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.

95. The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.

Environmental Protection Agency (EPA):

96. Any communications constituting directions, guidance, analysis, commentary or influence between the EPA and any person in the FRTG, FISG, Executive Office of the President, Department of Energy, Department of the Interior, Department of Homeland Security or Department of Commerce, or anyone acting on their behalf, regarding Source Control Efforts or the quantification or estimation of hydrocarbons escaping from the MC252 well.

97. The EPA's role and participation in the process of considering or determining the amount or type of dispersants to be applied in connection with the release of hydrocarbons from the MC252 Well, and the methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the EPA in connection with that role.

98. All communications involving the EPA regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

National Institute of Standards and Technology (NIST):

99. Any communications constituting directions, guidance, analysis, commentary or influence) between the NIST and any person in the FRTG, FISG, Executive Office of the President, Environmental Protection Agency, Department of Energy, Department of the Interior, Department of Homeland Security or Department of Commerce, or anyone acting on their behalf, regarding the quantification or estimation of hydrocarbons escaping from the MC252 well.

100. The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the NIST in performing or reviewing any work to quantify or estimate the flow of hydrocarbons from the MC252 well, including velocimetry, nodal analysis, reservoir analysis, hydraulics, acoustics, surface expression, mass balance, multiphase flow, and gas/oil ratio ("GOR").

101. All communications within or among the NIST regarding the difficulty, quality, accuracy or uncertainties associated with efforts to quantify or estimate the flow of hydrocarbons from the MC252 well.

102. All communications involving the NIST regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.

103. Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.

104. The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.

Dated: March 30, 2012

Respectfully submitted,

By: /s/ J. Andrew Langan, P.C.

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Attorneys for the BP Parties

CERTIFICATE OF SERVICE

I hereby certify that the above and foregoing has been served on All Counsel by electronically uploading the same to Lexis Nexis File & Serve in accordance with Pretrial Order No. 12, which will send a notice in accordance with the procedures established in MDL 2179, on this 30th day of March, 2012.

/s/ J. Andrew Langan, P.C.

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
1	Your review and approval of BP's 2009 Regional Oil Spill Response Plan -- Gulf of Mexico			Herbst
2	Your knowledge on or before April 20, 2010, of any requirements that Oil Spill Response Plans, Exploration Plans, or any other regulatory submittal include provisions regarding how to respond to subsea oil well blow-outs (including deepwater oil well blow-outs) on the Outer Continental Shelf, by containing, capturing, controlling, capping or stopping the flow of oil and gas from the well			Herbst
3	Other than blow-out preventers, your knowledge of the state of the art within the industry as to any device, system, assembly, procedure or technology for response to subsea oil well blow-outs (including deepwater oil well blow-outs) by containing, capturing, controlling, capping or stopping the flow of oil and gas from the well.			Herbst
4	Training of US personnel, including but not limited to personnel of the USCG prior to 4/20/10, to respond to, or to participate in a response to, an offshore oil well blow-out relating to Source Control Efforts.		Herbst will address training for DOI. Landry will address training for CG	Herbst
4	Training of US personnel, including but not limited to personnel of the USCG prior to 4/20/10, to respond to, or to participate in a response to, an offshore oil well blow-out relating to Source Control Efforts.		Herbst will address training for DOI. Landry will address training for CG	Landry

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
5	Knowledge of the Source Control elements of BP's offshore oil spill response programs, or emergency management training programs, for responses to offshore oil well blowouts, between January 1, 2005 and April 20, 2010, including any audits or approvals of such training programs.			Herbst
6	Knowledge of the role and actions of the Unified Command, as created and implemented pursuant to the National Incident Management System, in Source			Allen
7	Your knowledge of the role and actions of the office of the National Incident Commander in Source Control Efforts.			Allen
8	Knowledge of the role and actions of any United States personnel or United States contractors in Source Control Efforts that were not undertaken under the scope and authority of the Unified Command or the National Incident Commander, e.g., as reflected on such entity's formal organizational chart			Hunter
9	Your knowledge of BP's efforts to engage or include United States personnel or United States contractors in Source Control Efforts.		Cook will address BP's efforts to engage US personnel & contractors in source control efforts except with respect to the National Labs and DOE which will be addressed by Hunter	Cook

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
9	Your knowledge of BP's efforts to engage or include United States personnel or United States contractors in Source Control Efforts.		Cook will address BP's efforts to engage US personnel & contractors in source control efforts except with respect to the National Labs and DOE which will be addressed by Hunter	Hunter
10	Your knowledge of any omissions by BP to engage or include United State personnel or United States contractors in Source Control Efforts.		Cook will address omissions by BP to engage US personnel & contractors in source control efforts except with respect to the Federal labs and DOE which will be addressed by Hunter	Cook
10	Your knowledge of any omissions by BP to engage or include United State personnel or United States contractors in Source Control Efforts.		Cook will address omissions by BP to engage US personnel & contractors in source control efforts except with respect to the Federal labs and DOE which will be addressed by Hunter	Hunter

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
11	Your knowledge of BP's efforts to provide information to United States personnel or United States contractors in connection with Source Control Efforts.		Cook will address BP's efforts to provide info to US personnel & contractors in connection with source control efforts except with respect to the National Labs and DOE which will be addressed by Hunter.	Cook
11	Your knowledge of BP's efforts to provide information to United States personnel or United States contractors in connection with Source Control Efforts.		Cook will address BP's efforts to provide info to US personnel & contractors in connection with source control efforts except with respect to the National Labs and DOE which will be addressed by Hunter.	Hunter
12	Your knowledge of any failure by BP to provide information to United States personnel or United States contractors in connection with Source Control Efforts.		Cook will address BP's failures to provide info to US personnel & contractors in connection with source control efforts except with respect to the National Labs and DOE which will be addressed by Hunter.	Cook

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
12	Your knowledge of any failure by BP to provide information to United States personnel or United States contractors in connection with Source Control Efforts.		Cook will address BP's failures to provide info to US personnel & contractors in connection with source control efforts except with respect to the National Labs and DOE which will be addressed by Hunter.	Hunter
13	Your knowledge of and involvement in the decision whether or not to undertake a specific Source Control Effort, to the extent not otherwise addressed by these topics.		Cook will address the U.S.'s knowledge/involvement in decisions as to whether or not to undertake a specific source control effort not addressed by the other topics except for knowledge/involvement of the National Labs and DOE which will be addressed by Hunter.	Cook

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
13	Your knowledge of and involvement in the decision whether or not to undertake a specific Source Control Effort, to the extent not otherwise addressed by these topics.		Cook will address the U.S.'s knowledge/involvement in decisions as to whether or not to undertake a specific source control effort not addressed by the other topics except for knowledge/involvement of the National Labs and DOE which will be addressed by Hunter.	Hunter
14	Your knowledge of and involvement in the sequencing of Source Control Efforts, including the considerations or factors that accounted for the sequence of Source Control Efforts.		Cook will address the U.S.'s knowledge/involvement in sequencing of source control efforts except for knowledge/involvement of the National Labs which will be addressed by Hunter.	Cook
14	Your knowledge of and involvement in the sequencing of Source Control Efforts, including the considerations or factors that accounted for the sequence of Source Control Efforts.		Cook will address the U.S.'s knowledge/involvement in sequencing of source control efforts except for knowledge/involvement of the National Labs which will be addressed by Hunter.	Hunter

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
15	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the efforts used to activate the Deepwater Horizon blow-out preventer on or after April 20, 2010, through the use of remotely operated vehicles ("ROVs").			Herbst
16	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a pollution dome or cofferdam as a means to capture oil and gas from the MC252 Well.			Herbst
17	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a riser insertion tube tool as a means to capture oil and gas from the MC252 Well.			Herbst
18	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a second blowout preventer as a means to control or cease the flow of oil and gas from the MC252 Well.		Cook will address knowledge of design etc and approval of use of a second BOP to control flow for the U.S. except with respect to the National Labs and DOE which will be addressed by Hunter	Cook

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
18	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a second blowout preventer as a means to control or cease the flow of oil and gas from the MC252 Well.		Cook will address knowledge of design etc and approval of use of a second BOP to control flow for the U.S. except with respect to the National Labs and DOE which will be addressed by Hunter	Hunter
19	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a capping stack as a means to control or cease the flow of oil and gas from the MC252 Well.		Cook will address knowledge of design etc and approval of use of a capping stack to control flow on behalf of the U.S. except with respect to the National Labs and DOE which will be addressed by Hunter	Cook
19	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a capping stack as a means to control or cease the flow of oil and gas from the MC252 Well.		Cook will address knowledge of design etc and approval of use of a capping stack to control flow on behalf of the U.S. except with respect to the National Labs and DOE which will be addressed by Hunter	Hunter

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
20	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Junk Shot(s) as a means to stop the flow of oil and gas from the MC252 Well.		Herbst will address knowledge of design etc and approval of use of junk shot to control flow on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Herbst
20	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Junk Shot(s) as a means to stop the flow of oil and gas from the MC252 Well.		Herbst will address knowledge of design etc and approval of use of junk shot to control flow on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Hunter
21	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Momentum Kill(s) as a means to stop the flow of oil and gas from the MC252 Well.		Herbst will address knowledge of design etc and approval of use of momentum kill to control flow on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Herbst

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
21	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Momentum Kill(s) as a means to stop the flow of oil and gas from the MC252 Well.		Herbst will address knowledge of design etc and approval of use of momentum kill to control flow on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Hunter
22	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Top Kill as a means to stop the flow of oil and gas from the MC252 Well.		Herbst will address knowledge of design etc and approval of use of top kill to control flow on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Herbst
22	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of Top Kill as a means to stop the flow of oil and gas from the MC252 Well.		Herbst will address knowledge of design etc and approval of use of top kill to control flow on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Hunter

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
23 Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a Top Hat as a means to capture oil and gas from the MC252 Well		Cook will address knowledge of design etc. and approval of use of a Top Hat as a means to capture oil and gas except with respect to the Federal Labs and DOE which will be addressed by Hunter	Cook
23 Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a Top Hat as a means to capture oil and gas from the MC252 Well		Cook will address knowledge of design etc. and approval of use of a Top Hat as a means to capture oil and gas except with respect to the Federal Labs and DOE which will be addressed by Hunter	Hunter
24 Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of the choke or kill line of the Deepwater Horizon blow-out preventer as a means to capture oil and gas from the MC252 Well		Cook will address knowledge of design etc and approval of use of a choke or kill like of the DWH BOP to capture flow on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Cook

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
24	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of the choke or kill line of the Deepwater Horizon blow-out preventer as a means to capture oil and gas from the MC252 Well	Cook will address knowledge of design etc and approval of use of a choke or kill like of the DWH BOP to capture flow on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Hunter
25	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of free standing risers and floating production, storage and offloading vessels as a means to capture oil and gas from the MC252 Well.		Cook
26	Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a Static Kill as a means to kill the MC252 Well.	Cook will address knowledge of design etc and approval of static kill as a means to kill the well on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Cook

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
26 Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of a Static Kill as a means to kill the MC252 Well.		Cook will address knowledge of design etc and approval of static kill as a means to kill the well on behalf of the U.S. except with respect to the Federal Labs and DOE which will be addressed by Hunter	Hunter
27 Your knowledge of and involvement in the identification, design, planning, fabrication, testing, selection, and/or approval of the use of relief wells as a means to stop the flow of oil and gas from the MC252 Well.			Allen
28 Your understanding of the path (or paths) through which hydrocarbons flowed from the MC252 reservoir through and out of the MC252 Well between April 20, 2010, and July 15, 2010, including any information supporting that understanding.			Hunter
29 Your knowledge of and involvement with the selection, testing, monitoring, approval, and use of subsea or surface dispersants at or in the area immediately above the MC252 Well as those matters affected or relate to Source Control Efforts and any effort to quantify the flow of hydrocarbons from the MC 252 Well.			Landry
30 Your knowledge of and involvement in the development and implementation of simultaneous operations procedures or plans for vessels working in the immediate vicinity of the MC 252 Well.			Cook

Topic # Topic		Entity to whom topic is directed	Topic Subpart	Witness
31	Your knowledge of any suggestion or proposal to utilize the Macondo wellbore or either relief well for future production from MC 252.			Cook
32	Your knowledge of any delay in the drilling or either relief well due to the taking of samples in the wellbore.			Cook
33	Your knowledge of the financial support, labor, equipment, facilities and other resources devoted by BP to Source Control Efforts.			Cook
34	Your efforts (including all communications, modeling, calculations and analysis of any kind) leading to the flow rate estimate of 1,000 bopd announced by Admiral Landry on April 24, 2010.	Unified Command	announcement itself	Landry
34	Your efforts (including all communications, modeling, calculations and analysis of any kind) leading to the flow rate estimate of 1,000 bopd announced by Admiral Landry on April 24, 2010.	Unified Command	science	Henry
35	Your efforts (including all communications, modeling, calculations and analysis of any kind) leading to the flow rate estimate of 5,000 bopd announced by Admiral Landry on April 28, 2010.	Unified Command	announcement itself	Landry
35	Your efforts (including all communications, modeling, calculations and analysis of any kind) leading to the flow rate estimate of 5,000 bopd announced by Admiral Landry on April 28, 2010.	Unified Command	science	Henry

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
36	Your efforts (including all communications, modeling, calculations and analysis of any kind) relating to all attempts to quantify the release of hydrocarbons from the Macondo MC252 well after April 20, 2010, whether or not those efforts resulted in a finalized or public estimate.	Unified Command pre-FRTG	Landry
36	Your efforts (including all communications, modeling, calculations and analysis of any kind) relating to all attempts to quantify the release of hydrocarbons from the Macondo MC252 well after April 20, 2010, whether or not those efforts resulted in a finalized or public estimate.	Unified Command post-FRTG	McNutt
37	All communications, data, modeling, calculations and analysis relating to the effect of restrictions on flow from the MC252 well, including flow path within the well, cement, riser geometry, the BOP, or any other restriction, including the effect of removing or mitigating any restriction (e.g., by Unified Command erosion) or the development or existence of leak points.	Unified Command	Hunter
38	All communications, data, modeling, calculations and analysis of the MC252 reservoir, including its geological formation, integrity, pressure, and composition (including the composition of oil, natural gas and any other constituents or components of the reservoir) and the effect of reservoir depletion on the flow of hydrocarbons from the MC252 well.	Unified Command residual	Hsieh

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
	All communications, data, modeling, calculations and analysis of the MC252 reservoir, including its geological formation, integrity, pressure, and composition (including the composition of oil, natural gas and any other constituents or components of the reservoir) and the effect of reservoir depletion on the flow of hydrocarbons from the MC252 well.		
38	Unified Command	Analysis by Sandia Flow Team	Ratzel
39	Unified Command	residual	Hunter
39	Unified Command	Hsieh work	Hsieh
40	Unified Command		
	All communications, data, modeling, calculations and analysis relating to the collection of hydrocarbons from the MC 252 well using the Riser Insertion Tool, including any effect such information had on any estimate of flow rates.		Hunter
41	Unified Command		Hunter
	All communications, data, modeling, calculations and analysis relating to the effect of the flow of hydrocarbons from the MC252 well on any attempt or technique considered to stop the flow of hydrocarbons from the well.		
42	Unified Command	NNSA work	Hunter
	All communications, data, modeling, calculations and analysis identifying or relating to factors affecting the ability to estimate the flow of hydrocarbons from the MC252 well or the accuracy of any such estimate.		
42	Unified Command	FRTG work	McNutt

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
43	The organization and operation of the Flow Rate Technical Group ("FRTG") and all of its sub-teams, and the selection of their members and staff.		Sogge
44	Any communications constituting directions, guidance, analysis, review, commentary or influence relating to the work of the FRTG or to flow, between the FRTG or any of its members and any person in the Federal Interagency Solutions Group (FISG), Executive Office of the President (EoP), Department of Energy (DoE), Department of the Interior (DoI), Environmental Protection Agency (EPA), Department of Homeland Security (DHS) or Department of Commerce (DoC), or anyone acting on their behalf.		Sogge
45	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the FRTG, any of its members, any of its sub-teams, or any of their members, during the course of any work performed by the FRTG or any sub-team to quantify or estimate the flow of hydrocarbons from the MC252 well, including velocimetry, nodal analysis, reservoir analysis, hydraulics, acoustics, surface expression, mass balance, multiphase flow, and gas/oil ratio ("GOR").	residual	McNutt

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
45	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the FRTG, any of its members, any of its sub-teams, or any of their members, during the course of any work performed by the FRTG or any sub-team to quantify or estimate the flow of hydrocarbons from the MC252 well, including velocimetry, nodal analysis, reservoir analysis, hydraulics, acoustics, surface expression, mass balance, multiphase flow, and gas/oil ratio ("GOR").	FRTG	Nodal	Guthrie
45	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the FRTG, any of its members, any of its sub-teams, or any of their members, during the course of any work performed by the FRTG or any sub-team to quantify or estimate the flow of hydrocarbons from the MC252 well, including velocimetry, nodal analysis, reservoir analysis, hydraulics, acoustics, surface expression, mass balance, multiphase flow, and gas/oil ratio ("GOR").	FRTG	Reservoir	Maclay

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the FRTG, any of its members, any of its sub-teams, or any of their members, during the course of any work performed by the FRTG or any sub-team to quantify or estimate the flow of hydrocarbons from the MC252 well, including velocimetry, nodal analysis, reservoir analysis, hydraulics, acoustics, surface expression, mass balance, multiphase flow, and gas/oil ratio ("GOR").	FRTG	uncertainty analysis	Possollo
45	All communications within or among the FRTG and its sub-teams regarding the difficulty, quality, accuracy or uncertainties associated with its work to quantify or estimate the flow of hydrocarbons from the MC252 well.	FRTG	residual	McNutt
46	All communications within or among the FRTG and its sub-teams regarding the difficulty, quality, accuracy or uncertainties associated with its work to quantify or estimate the flow of hydrocarbons from the MC252 well.	FRTG	Nodal	Guthrie
46	All communications within or among the FRTG and its sub-teams regarding the difficulty, quality, accuracy or uncertainties associated with its work to quantify or estimate the flow of hydrocarbons from the MC252 well.	FRTG	Reservoir	Maclay

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
46	All communications within or among the FRTG and its sub-teams regarding the difficulty, quality, accuracy or uncertainties associated with its work to quantify or estimate the flow of hydrocarbons from the MC252 well.	FRTG	uncertainty analysis	Possollo
47	All communications involving the FRTG or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	FRTG		Sogge
48	Your efforts (including all communications, modeling, calculations and analysis of any kind) leading to the May 27, 2010 flow rate estimate of 12,000 to 19,000 bopd.	FRTG		McNutt
49	Your efforts (including all communications, modeling, calculations and analysis of any kind) relating to all attempts to quantify the release of hydrocarbons from the MC252 well after April 20, 2010, whether or not those efforts resulted in a finalized or public estimate.	FRTG		McNutt

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
50	Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.	FRTG	residual	Sogge
50	Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.	FRTG	Nodal	Guthrie

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
	Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.	FRTG	Reservoir	Maclay
50	The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.	FRTG	residual	Sogge
51	The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.	FRTG	Nodal	Guthrie
51	The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.	FRTG	Reservoir	Maclay
52	The organization and operation of the Department of Energy Science Team, including the selection of its members and staff.	DOE Science Team		Hunter
53	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the Science Team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.	DOE Science Team		Hunter

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
54	All communications involving the Science Team or any of its members regarding the difficulty, quality, accuracy or uncertainty associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	DOE Science Team		Hunter
55	All communications involving the Science Team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	DOE Science Team		Hunter
56	Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.	DOE Science Team		Hunter
57	The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.	DOE Science Team		Hunter
58	Your knowledge, consideration or analysis of the National Commission Chief Counsel's conclusion (2011 Report at 45) that "the interior of the BOP (through which hydrocarbons definitely flowed) showed serious erosion, as did the interior of the casing hanger."	DOE Science Team		Hunter

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
59	Your knowledge, consideration or analysis of the National Commission Chief Counsel's conclusion (2011 Report at 212) that "initial photos from the recovered BOP show erosion in the side of the blowout preventer around the ram, which was a possible flow path for hydrocarbons."	DOE Science Team	Hunter
60	The organization and operation of the LANL team, including the selection of its members and staff.	LANL	Ratzel
61	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the LANL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.	LANL	Ratzel
62	All communications involving the LANL team or any of its members regarding the difficulty, quality, accuracy or uncertainty associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	LANL	Ratzel
63	All communications between the LANL team or any of its members and any other person regarding the flow rate work being undertaken by any other national laboratory or agency of the Federal Government.	LANL	Ratzel
64	All communications involving the LANL team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	LANL	Ratzel

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
65	<p>Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.</p> <p>LANL</p>		Ratzel
66	<p>The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.</p> <p>LANL</p>		Ratzel
67	<p>The organization and operation of the LLNL team, including the selection of its members and staff.</p> <p>LLNL</p>		Ratzel
68	<p>The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the LLNL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.</p> <p>LLNL</p>		Ratzel
69	<p>All communications involving the LLNL team or any of its members regarding the difficulty, quality, accuracy or uncertainty associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.</p> <p>LLNL</p>		Ratzel

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
70	All communications between the LLNL team or any of its members and any other person regarding the flow rate work being undertaken by any other national laboratory or agency of the Federal Government.	LLNL		Ratzel
71	All communications involving the LLNL team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	LLNL		Ratzel
72	Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.	LLNL		Ratzel
73	The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.	LLNL		Ratzel
74	The organization and operation of the LBNL team, including the selection of its members and staff.	LBNL		Guthrie
75	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the LBNL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well.	LBNL		Guthrie

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
76	All communications involving the LBNL team or any of its members regarding the difficulty, quality, accuracy or uncertainties associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	LBNL		Guthrie
77	All communications between the LBNL team or any of its members and any other person regarding the flow rate work being undertaken by any other national laboratory or agency of the Federal Government.	LBNL		Guthrie
78	All communications involving the LBNL team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	LBNL		Guthrie
79	Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.	LBNL		Guthrie
80	The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.	LBNL		Guthrie
81	The organization and operation of the SNL team, including the selection of its members and staff.	SNL		Ratzel

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
82	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the SNL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well. SNL	residual	Ratzel
82	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the SNL team or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well. SNL	Griffiths paper	Griffiths
83	All communications involving the SNL team or any of its members regarding the difficulty, quality, accuracy or uncertainty associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well. SNL		Ratzel
84	All communications between the SNL team or any of its members and any other person regarding the flow rate work being undertaken by any other national laboratory or agency of the Federal Government. SNL		Ratzel
85	All communications involving the SNL team or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well. SNL		Ratzel

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
86	<p>Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010.</p>	SNL		Ratzel
87	The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.	SNL		Ratzel
88	Preparation of the report "DOE-NNSA Flow Analysis Studies Associated with the Oil Release following the Deepwater Horizon Accident."	SNL		Ratzel
89	Preparation of the reports "McNutt, M, R. Camilli, G. Guthrie, P. Hsieh, V. Labson, B. Lehr, D. Maclay, A. Ratzel, and M. Sogge. 2011; Assessment of Flow Rate Estimates for the Deepwater Horizon / Macondo Well Oil Spill, Flow Rate Technical Group report to the National Incident Command, Interagency Solutions Group, March 10, 2011" and "Oil Budget Calculator, Deepwater Horizon, Technical Documentation, November 2010, A Report by the Federal Interagency Solutions Group, Oil Budget Calculator Science and Engineering Team."	FISG	FRTG report, McNutt report	McNutt

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
	Preparation of the reports "McNutt, M, R. Camilli, G. Guthrie, P. Hsieh, V. Labson, B. Lehr, D. Maclay, A. Ratzel, and M. Sogge. 2011; Assessment of Flow Rate Estimates for the Deepwater Horizon / Macondo Well Oil Spill, Flow Rate Technical Group report to the National Incident Command, Interagency Solutions Group, March 10, 2011" and "Oil Budget Calculator, Deepwater Horizon, Technical Documentation, November 2010, A Report by the Federal Interagency Solutions Group, Oil Budget Calculator Science and Engineering Team."		
89	FISG	oil budget	Miller
	Preparation of the reports "McNutt, M, R. Camilli, G. Guthrie, P. Hsieh, V. Labson, B. Lehr, D. Maclay, A. Ratzel, and M. Sogge. 2011; Assessment of Flow Rate Estimates for the Deepwater Horizon / Macondo Well Oil Spill, Flow Rate Technical Group report to the National Incident Command, Interagency Solutions Group, March 10, 2011" and "Oil Budget Calculator, Deepwater Horizon, Technical Documentation, November 2010, A Report by the Federal Interagency Solutions Group, Oil Budget Calculator Science and Engineering Team."		
89	FISG	uncertainty analysis	Possollo
	All communication between the FISG or any of its members and any other person regarding the flow rate work being undertaken by any national laboratory or agency of the Federal Government.		
90	FISG		Sogge

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
91	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the FISG or any of its members to quantify or estimate the flow of hydrocarbons from the MC252 well. FISG		Sogge
92	All communications involving the FISG or any of its members regarding the difficulty, quality, accuracy or uncertainties associated with any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well. FISG		Sogge
93	All communications involving the FISG or any of its members regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well. FISG		Sogge
94	Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010. FISG		Sogge
95	he effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010. FISG		Sogge

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
96	The EPA's role and participation in the process of considering or determining the amount or type of dispersants to be applied in connection with the release of hydrocarbons from the MC252 Well, and the methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the EPA in connection with that role.	EPA		Landry
97	Any communications constituting directions, guidance, analysis, review, commentary or influence between the EPA and any person in the FRTG, FISG, Executive Office of the President, Department of Energy, Department of the Interior, Department of Homeland Security or Department of Commerce, or anyone acting on their behalf, regarding Source Control Efforts or the quantification or estimation of hydrocarbons escaping from the MC252 well.	EPA		Sogge
98	All communications involving the EPA regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well.	EPA		Sogge
99	All communications constituting directions, guidance, analysis, commentary or influence between the NIST and any person in the FRTG, FISG, Executive Office of the President, Environmental Protection Agency, Department of Energy, Department of the Interior, Department of Homeland Security or Department of Commerce, or anyone acting on their behalf, regarding the quantification or estimation of hydrocarbons escaping from the MC252 well.	NIST		Possollo

Topic # Topic	Entity to whom topic is directed	Topic Subpart	Witness
100	The methods, calculations, analyses, estimates, factors, data and assumptions considered or employed by the NIST in performing or reviewing any work to quantify or estimate the flow of hydrocarbons from the MC252 well, including velocimetry, nodal analysis, reservoir analysis, hydraulics, acoustics, surface expression, mass balance, multiphase flow, and gas/oil ratio ("GOR"). NIST		Possollo
101	All communications within or among the NIST regarding the difficulty, quality, accuracy or uncertainties associated with efforts to quantify or estimate the flow of hydrocarbons from the MC252 well. NIST		Possollo
102	All communications involving the NIST regarding the purpose or timing of any attempt to quantify or estimate the flow of hydrocarbons from the MC252 well. NIST		Possollo
103	Your knowledge of any documents, analysis or discussion relating to erosion (the gradual degradation, deterioration, or destruction of surface material caused by the mechanical action of, e.g., the flow of fluids and/or other materials, including but not limited to hydrocarbons) occurring within the MC252 well and any of its constituent elements, including erosion of the bottomhole, annular cement, casing hanger interior, blind shear ram, riser, any drill pipe remaining in the riser, or any other section or portion of the flow path of hydrocarbons from the MC252 well, on and after April 20, 2010. NIST		Possollo

Topic #	Topic	Entity to whom topic is directed	Topic Subpart	Witness
104	The effect of erosion on the flow rate of hydrocarbons from the MC252 well on and after April 20, 2010.	NIST		Possollo