

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF LOUISIANA

IN RE: OIL SPILL by the OIL RIG § MDL NO. 2179  
“DEEPWATER HORIZON” in the § SECTION: J  
GULF OF MEXICO, on APRIL 20, §  
2010 § JUDGE BARBIER  
This Document Relates To: ALL CASES § MAG. JUDGE SHUSHAN  
..... §

**DEFENDANT HALLIBURTON ENERGY SERVICES, INC.’S OBJECTIONS  
AND RESPONSES TO CO-DEFENDANT ANADARKO PETROLEUM  
CORPORATION’S INTERROGATORIES AND REQUESTS FOR PRODUCTION**

TO: Ky Kirby, Bingham McCutchen LLP, 2020 K Street NW, Washington, DC  
20006-1806

Pursuant to Rules 26, 33 and 34 of the Federal Rules of Civil Procedure, Halliburton Energy Services, Inc. ("HESI") hereby serves the following Objections and Responses to Defendant Anadarko Petroleum Corporation's ("Anadarko") Interrogatories and Requests for Production:

I.

**OBJECTIONS APPLICABLE TO ALL**

HESI asserts the following objections to each and every one of Anadarko's Interrogatories and Requests for Production, including any definitions or instructions associated therewith ("Anadarko's Discovery Requests"). These objections are incorporated by reference into each specific response or answer set forth by HESI, and are neither waived nor limited by any specific response or answer.

1. HESI objects to the definition of "HESI" as it is overly broad and could be misinterpreted to include entities that are not parties to this litigation. Further, Halliburton Company is not a party to any master complaint or any cross-claims. And although Halliburton Company is a named party in a single Bundle A personal injury case (*Michelle Jones, et al. v. Transocean, Ltd., et al.*, Cause No. 2:10-cv-1196), it has moved to dismiss the claims against it

under Rule 12(b)(2) for lack of personal jurisdiction. Thus, it is improper to serve Halliburton Company with discovery at this time. The party deemed served with these discovery requests is HESI and thus all objections and responses are HESI's only. To the extent the Court later determines that it has jurisdiction over Halliburton Company or that Halliburton Company is otherwise an appropriate party herein, these objections and responses shall be deemed to apply to it as well; until such time, however, these objections and responses are only on behalf of HESI.

2. HESI responds to Anadarko's Interrogatories where applicable, by producing responsive documents, if any, in accordance with Rule 33(d) of the Federal Rules of Civil Procedure. HESI objects, however, to producing in response to any Interrogatory or Request for Production documents, information, or things that are: (1) not in the possession, custody, or control of HESI; (2) already in the possession, custody, or control of Anadarko's counsel or (3) publicly available or otherwise readily available to Anadarko's counsel.

3. HESI objects to Anadarko's Discovery Requests to the extent they request information, seek documents, or attempt to impose any obligations beyond those permitted or authorized by the Federal Rules of Civil Procedure or the Rules and Orders of this Court.

4. HESI objects to Anadarko's Discovery Requests to the extent they request information or seek documents that contain proprietary or trade secret information.

5. HESI objects to Anadarko's Discovery Requests to the extent they seek information subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

6. HESI objects to Anadarko's Discovery Requests to the extent they seek the disclosure of information or documents that would violate the rights of privacy of third parties, or any similar judicially recognized protection or privilege, including, but not limited to, restrictions imposed in connection with the proceedings before the MBI (or any other

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governmental investigation), and the protections of the Health Insurance Portability and Accountability Act ("HIPAA"), or that would result in the disclosure of any confidential information without appropriate restrictions on said disclosure and dissemination that are contained within the protective order entered into by the Court.

7. HESI objects to Anadarko's Discovery Requests, including instruction "(f)," to the extent that they impose obligations beyond or different from those obligations imposed by the Federal Rules of Civil Procedure, Pretrial Order No. 14 [Docket No 655], or Pretrial Order No. 16 [Docket No. 686]. Pursuant to Pretrial Order No. 14, HESI need not identify in its privilege log any of the following: (1) post-April 20, 2010, communications between HESI and its counsel; (2) post-April 20, 2010, communications between or among counsel for HESI; or (3) any communications between or among counsel for Defendants.

8. HESI objects to Anadarko's Discovery Requests, including the "Definitions" and "Instructions" contained therein, to the extent that they call for the generation or creation of documents not already in existence.

9. HESI objects to Anadarko's definition of the term "DEEPWATER HORIZON" to the extent it is defined as including "any vessel, vehicle, aircraft, or other equipment used in connection with the process of drilling, developing, exploring for and/or producing oil and gas resources" because it is overly broad and inconsistent with HESI's general understanding of the vessel the Deepwater Horizon.

10. HESI objects to Anadarko's definition of "INCIDENT" as "without limitation, the loss of control of the MACONDO WELL leading to the explosion that occurred on the DEEPWATER HORIZON on or around April 20, 2010" because "loss of control" is vague and ambiguous; HESI will use the following definition for "INCIDENT": "the explosion that occurred on the Deepwater Horizon on or around April 20, 2010."

11. HESI objects to Anadarko's definition of "CEMENT FAILURE" as "the inability of CEMENT to achieve zonal isolation and prevent the flow of hydrocarbons" because the definition is misleading and incorrectly incorporates a causal element. HESI additionally objects to the definition to the extent that it includes or implies anything other than the cement not isolating the targeted hydrocarbon-bearing zone.

12. HESI objects to the use of the words "any" and "all" in Anadarko's Discovery Requests to the extent that such use is overbroad and seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

13. To the extent HESI states it will produce documents in response to Anadarko's Discovery Requests, HESI will produce such documents on a rolling basis with such reasonable speed as HESI can locate and process them, without sacrificing a meaningful review for responsiveness, privilege, and confidentiality, as this is the only feasible method given the necessary time required to respond to the numerous parallel proceedings and investigations initiated in response to the Incident.

14. To the extent HESI responds that it will search for and produce responsive documents, HESI undertakes to make a good faith effort to conduct a reasonable search of non-privileged, responsive documents and/or to apply a reasonable set of search terms when searching through electronically stored records and data. HESI is not offering or promising to search for and produce every document or piece of information that may exist in the possession, custody, or control of any of its thousands of employees and agents where any such items are not included within the results of a reasonable search as described above. HESI will comply with any and all Orders of the Court regarding the production of ESI and other information.

15. By providing information in response to Anadarko's Interrogatories, HESI does not concede that such information is relevant, material, or admissible in evidence in this or any

other proceeding. HESI reserves all rights to object to the use of such information as evidence in this or any other proceeding.

16. HESI's responses to Anadarko's Discovery Requests are based on information understood by it as of February 14, 2011. HESI reserves its right to amend, modify, or supplement its responses.

17. HESI's objections and responses are based on its understanding and interpretation of Anadarko's Discovery Requests. If HESI understands or interprets any of Anadarko's Discovery Requests differently than Anadarko, HESI reserves the right to supplement any of its objections and responses.

## II.

### **SPECIFIC OBJECTIONS AND RESPONSES TO INTERROGATORIES**

HESI hereby incorporates by reference all the foregoing Objections Applicable to All within each response below.

**INTERROGATORY 1:** Please identify any deepwater well for which you have designed and/or utilized nitrogen foam slurry cement within the past ten (10) years.

**Objection:** HESI objects to this Interrogatory because it is overly broad, vague, ambiguous, and unduly burdensome and seeks information irrelevant to the claims or defenses of any party to the extent that it requests information from the past ten (10) years. FED. R. CIV. P. 26(b)(1). HESI further objects to the term "identify" in this Interrogatory as overly broad, vague, and undefined.

**Response:** Subject to and without waiving the foregoing objections, over the last 10 years, HESI has performed approximately 598 cement jobs incorporating nitrogen as a foamed cement in the Gulf of Mexico. Requiring HESI to provide all information about each of the foregoing jobs is unduly burdensome. HESI will provide relevant information about relevant jobs performed during a relevant time period once it receives a more reasonable and more narrowly tailored request.

**INTERROGATORY 2:** Please identify and describe each instance of cement failure, where nitrogen based foam cement slurry designed by you was used to seal or cap a deepwater well, within the past ten (10) years.

**Objection:** HESI objects to this Interrogatory because it is overly broad, vague, ambiguous, and unduly burdensome and seeks information irrelevant to the claims or

defenses of any party to the extent that it requests information from the past ten (10) years and is not limited by well type or location. FED. R. CIV. P. 26(b)(1). HESI further objects to the unidentified terms "identify and describe" as overly broad and vague. HESI further objects to the definition of "CEMENT FAILURE" as "the inability of CEMENT to achieve zonal isolation and prevent the flow of hydrocarbons" because the definition is misleading and because it incorrectly incorporates a causal element. HESI additionally objects to the definition to the extent that it includes or implies anything other than the cement not isolating the targeted hydrocarbon-bearing zone.

**Response:** Subject to and without waiving the foregoing objections, over the last 10 years, HESI has performed approximately 598 deepwater foam cement jobs in the Gulf of Mexico. Of these jobs, the below 20 jobs experienced a failure to achieve zonal isolation.

Job Date	Water Depth Ft.	Total Depth Ft.	Job Type
5/12/2001	5421	8011	Conductor Casing
5/28/2001	5421	8000	Surface Casing
5/6/2001	5421	8019	Surface Casing
5/10/2001	5421	8010	Surface Casing
5/2/2001	5421	8006	Surface Casing
2/26/2002	3152	4931	Conductor Casing
6/8/2002	5383	6488	Conductor Casing
7/3/2002	2796	4884	Conductor Casing
7/17/2003	3803	7106	Surface Casing
7/27/2003	2177	7055	Conductor Casing
7/31/2003	3813	7100	Surface Casing
4/10/2004	3243	4290	Conductor Casing
10/23/2004	4180		Surface Casing
5/3/2007	5631	10025	Surface Casing
8/1/2007	2900	4091	Conductor Casing
1/16/2008	8945	12350	Surface Casing
2/10/2008	2696	5776	Surface Casing
5/20/2008	6078	7184	Conductor Casing
1/31/2010	2460	4289	Surface Casing

**INTERROGATORY 3:** Please identify all persons employed by you who visited the DEEPWATER HORIZON between January 1, 2010 and April 20, 2010, and describe the purpose of each such visit.

**Objection:** HESI objects to this Interrogatory as overly broad in that it requests all employees who merely visited the Deepwater Horizon and the purpose of each such visit, whether or not that employee has any knowledge of relevant facts. HESI further objects to this Interrogatory as overly broad and unduly burdensome to the extent that

it would require HESI to describe the job duties of each employee every time they reported to work.

**Response:** Subject to and without waiving the foregoing objections, see HESI's Objections and Responses to Plaintiffs' Omnibus Discovery Requests, including HESI's Supplemental Responses to the same.

**INTERROGATORY 4:** Please identify and describe the chemical composition, components, additives, ratios and manufacturers of the cement used on the Macondo Well Cement Job.

**Objection:** HESI objects to this Interrogatory as vague and ambiguous to the extent that it uses the undefined term "chemical composition." Such an undefined term may have a number of meanings and, as such, makes this Interrogatory overly broad such that it will result in production of irrelevant information. FED. R. CIV. P. 26(b)(1). HESI will define "Macondo Well Cement Job" as the design and execution of the cement job at the 9 7/8 x 7 inch production casing that was pumped on April 19, 2010.

**Response:** Subject to and without waiving the foregoing objections, HESI identifies the following documents:

HAL\_0001148 – HAL\_0001150  
HAL\_0001886 – HAL\_0001888  
HAL\_0003201 – HAL\_0003202  
HAL\_0003203 – HAL\_0003204  
HAL\_0003211 – HAL\_0003212  
HAL\_0003555 – HAL\_0003557  
HAL\_0004068 – HAL\_0004069  
HAL\_0004143 – HAL\_0004145  
HAL\_0004190 – HAL\_0004191  
HAL\_0005971 – HAL\_0005972  
HAL\_0006425 – HAL\_0006426  
HAL\_0006468 – HAL\_0006469  
HAL\_0006648 – HAL\_0006649  
HAL\_0007696 – HAL\_0007698  
HAL\_0007900 – HAL\_0007902  
HAL\_0008155 – HAL\_0008157  
HAL\_0008306 – HAL\_0008308  
HAL\_0008595 – HAL\_0008596  
HAL\_0008630 – HAL\_0008633  
HAL\_0009699 – HAL\_0009701  
HAL\_0010641 – HAL\_0010642  
HAL\_0010865 – HAL\_0010867  
HAL\_0011253 – HAL\_0011255  
HAL\_0011388 – HAL\_0011389  
HAL\_0011390 – HAL\_0011391  
HAL\_0011392 – HAL\_0011393  
HAL\_0011394

HAL\_0011395 – HAL\_0011396  
HAL\_0011397 – HAL\_0011398  
HAL\_0011399  
HAL\_0011400  
HAL\_0011401  
HAL\_0011402  
HAL\_0011403  
HAL\_0011404  
HAL\_0023703 – HAL\_0023705  
HAL\_0025111 – HAL\_0025112  
HAL\_0028376 – HAL\_0028377  
HAL\_0028378 – HAL\_0028380  
HAL\_0028386 – HAL\_0028387  
HAL\_0028388 – HAL\_0028389  
HAL\_0028390 – HAL\_0028391  
HAL\_0028405 – HAL\_0028407  
HAL\_0028428 – HAL\_0028429  
HAL\_0028680 – HAL\_0028682  
HAL\_0028683 – HAL\_0028684  
HAL\_0028709 – HAL\_0028712  
HAL\_0044927 – HAL\_0044928  
HAL\_DOJ\_0000021

**INTERROGATORY 5:** Please identify and describe any and all tests and analysis performed by you relating to the Macondo Well cement job. For each test and analysis, please identify the protocols for preparing, conducting, evaluating, and reporting such test or analysis and identify the persons involved in preparing, conducting, interpreting, and reporting the results of the test or analysis.

**Objection:** HESI objects to this Interrogatory to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege. HESI further objects to this Interrogatory because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: April 16, 2009 (when HESI executed its GOM contract with BP) through April 20, 2010. HESI further objects to this Interrogatory because it is vague and ambiguous to the extent that it does not define the term "analysis." HESI further objects to this Interrogatory as an improper form or discovery in that this inquiry is better suited for depositions.

**Response:** Subject to and without waiving the foregoing objections, HESI performed design analyses using its OptiCem modeling software and WellCAT software. HESI input certain well conditions from the daily reports into WellCAT and OptiCem, and OptiCem generated cement models, which were emailed to the BP drilling engineers for review. HESI performed three sets of lab tests related to the production casing on the Macondo Well; two sets related to the cement slurry and one set related to the Tuned™ Spacer. The first set of lab tests on the cement slurry were pilot tests, and were performed in February of 2010. The second set of tests on the cement

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slurry were performed in April of 2010. The lab tests related to the Tuned™ Spacer were conducted in April of 2010. For further response, HESI identifies the following documents:

HAL\_DOJ\_0000021-23  
HAL\_DOJ\_0000028-29  
HAL\_DOJ\_0000031-33  
HAL\_DOJ\_0000035-36  
HAL\_DOJ\_0000042-43  
HAL\_DOJ\_0000045-46  
HAL\_DOJ\_0000049-50  
HAL\_DOJ\_0000247-252  
HAL\_0064086  
HAL\_0079712  
HAL\_0080816  
HAL\_0084887  
HAL\_0107294  
HAL\_0113586  
HAL\_0114487  
HAL\_0011388  
HAL\_0028236  
HAL\_0028683  
HAL\_0028709  
HAL\_0044651  
HAL\_0044840  
HAL\_0044927  
HAL\_0120237  
HAL\_0112786  
HAL\_0112944  
HAL\_0010641  
HAL\_0010865  
HAL\_0010868  
HAL\_0028180  
HAL\_0051613  
HAL\_0051624  
HAL\_DOJ\_0000028-29  
HAL\_DOJ\_0000031-33  
HAL\_0084884  
HAL\_0113590  
HAL\_0114482  
HAL\_0120241  
HAL\_0080818  
HAL\_0080840  
HAL\_0112802  
HAL\_0010620  
HAL\_0044604  
HAL\_0028369  
HAL\_0028679  
HAL\_0028708

HAL\_0008151  
 HAL\_0008161  
 HAL\_0010648  
 HAL\_0010806  
 HAL\_0011088

For further response, HESI responds with the following information:

NAME OF TEST	DATE	PERFORMED BY	DESCRIPTION OF TEST/NOTES
Mixability Rating	04/13/10	Dedric Leblanc and Juston Stelly	Cement Lab Weigh-Up Sheet; Req/Slurry: US-73909/1
Mud Balance Density		Dedric Leblanc and Juston Stelly	
Foam Mix and Stability		Jack Warren and Dustin Richard	
Thickening Time		Dedric Leblanc and Juston Stelly	
UCA Comp. Strength		James Stelly and Matthew Richard	
Crush Compressive Strength		James Stelly	
Non API Rheology		James Stelly and Matthew Richard	
Non API Rheology		James Stelly and Matthew Richard	
FYSA Viscosity Profile and Gel Strength		James Stelly	
Thickening Time	04/15/10	Chester (Chet) Martin and Dedric Leblanc	Cement Lab Weigh-Up Sheet, April 15, 2010 – Req/Slurry: US-73909/2
Repeat Thickening Time	04/16/10	Jack Warren and Matthew Angelle	Cement Lab Weigh-Up Sheet; April 16, 2010; Req/Slurry: US-73909/2
UCA Compressive Strength		Chester (Chet) Martin	
Repeat Foam Mix and Stability	04/17/10	Chester Martin and Benjamin Richard	Cement Lab Weigh-Up Sheet; April 17, 2010; Req/Slurry: US-73909/1

**INTERROGATORY 6:** Please identify and describe the equipment, supplies, material and/or inventory you requested or recommended be transported to the Deepwater Horizon in preparation for the Macondo Well cement job and, who made such a request or recommendation, and, if transported, identify the date the equipment, supplies, material and/or inventory were transported to the Deepwater Horizon.

**Response:** HESI identifies the following documents:

BP-HZN-MBI00018732  
BP-HZN-MBI00013721  
BP-HZN-MBI00014019  
BP-HZN-MBI00018739  
BP-HZN-MBI00013728  
BP-HZN-MBI00018746  
BP-HZN-MBI00013735  
BP-HZN-MBI00018752  
BP-HZN-MBI00013741  
BP-HZN-MBI00018758  
BP-HZN-MBI00013747  
BP-HZN-MBI00018764  
BP-HZN-MBI00013753  
BP-HZN-MBI00013759  
BP-HZN-MBI00018770  
BP-HZN-MBI00013764  
BP-HZN-MBI00018775  
BP-HZN-MBI00014025  
BP-HZN-MBI00013770  
BP-HZN-MBI00018781  
BP-HZN-MBI00018788  
BP-HZN-MBI00013777  
BP-HZN-MBI00018793  
BP-HZN-MBI00013782  
BP-HZN-MBI00013787  
BP-HZN-MBI00018804  
BP-HZN-MBI00013793  
BP-HZN-MBI00013796  
BP-HZN-MBI00018807  
BP-HZN-MBI00018814  
BP-HZN-MBI00013803  
BP-HZN-MBI00018820  
BP-HZN-MBI00013809  
BP-HZN-MBI00018826  
BP-HZN-MBI00013815  
BP-HZN-MBI00018832  
BP-HZN-MBI00013821  
BP-HZN-MBI00013827  
BP-HZN-MBI00018838  
BP-HZN-MBI00013834  
BP-HZN-MBI00018845  
BP-HZN-MBI00018850  
BP-HZN-MBI00013839  
BP-HZN-MBI00013844  
BP-HZN-MBI00018855  
BP-HZN-MBI00018874

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BP-HZN-MBI00018861  
BP-HZN-MBI00013850  
BP-HZN-MBI00013856  
BP-HZN-MBI00018867  
BP-HZN-MBI00013863  
BP-HZN-MBI00013868  
BP-HZN-MBI00013874  
BP-HZN-MBI00018885  
BP-HZN-MBI00013879  
BP-HZN-MBI00018890  
BP-HZN-MBI00018895  
BP-HZN-MBI00013884  
BP-HZN-MBI00013890  
BP-HZN-MBI00018901  
BP-HZN-MBI00018908  
BP-HZN-MBI00013897  
BP-HZN-MBI00013905  
BP-HZN-MBI00014382  
BP-HZN-MBI00019353  
BP-HZN-MBI00013911  
BP-HZN-MBI00019358  
BP-HZN-MBI00013916  
BP-HZN-MBI00014387  
BP-HZN-MBI00019363  
BP-HZN-MBI00014392  
BP-HZN-MBI00013921  
BP-HZN-MBI00019368  
BP-HZN-MBI00014397  
BP-HZN-MBI00013926  
BP-HZN-MBI00014406  
BP-HZN-MBI00013935  
BP-HZN-MBI00019377  
BP-HZN-MBI00014412  
BP-HZN-MBI00019383  
BP-HZN-MBI00013941  
BP-HZN-MBI00014418  
BP-HZN-MBI00013947  
BP-HZN-MBI00019393  
BP-HZN-MBI00014422  
BP-HZN-MBI00013951  
BP-HZN-MBI00019397  
BP-HZN-MBI00014426  
BP-HZN-MBI00013955  
BP-HZN-MBI00019402  
BP-HZN-MBI00014431  
BP-HZN-MBI00013960  
BP-HZN-MBI00019407

BP-HZN-MBI00014436  
BP-HZN-MBI00013970  
BP-HZN-MBI00013557  
BP-HZN-MBI00013965  
BP-HZN-MBI00018568  
BP-HZN-MBI00013562  
BP-HZN-MBI00013975  
BP-HZN-MBI00018573  
BP-HZN-MBI00013567  
BP-HZN-MBI00013980  
BP-HZN-MBI00018578  
BP-HZN-MBI00013573  
BP-HZN-MBI00013986  
BP-HZN-MBI00018584  
BP-HZN-MBI00013578  
BP-HZN-MBI00018596  
BP-HZN-MBI00013585  
BP-HZN-MBI00018589  
HAL\_0121013-HAL\_0121098  
HAL\_0121106-HAL\_0121107

**INTERROGATORY 7:** Please identify any and all pre-and post-Macondo Well cement job analysis and/or evaluation by you of the equipment and systems, including all tools, machines, pumps, hoses, piping, pumpers, cement heads, cementing units, cement skids and/or monitoring units, that you used during the Macondo Well cement job. For each analysis or evaluation, please identify the person who performed the analysis or evaluation.

**Objection:** HESI objects to this Interrogatory to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege. HESI further objects to this Interrogatory to the extent that it requests expert information prior to the deadlines set by the Court. HESI further objects to this Interrogatory because it is vague and ambiguous to the extent that it does not define the terms "analysis" or "evaluation".

**Response:** Subject to and without waiving the foregoing objections, HESI identifies the following documents:

HAL-CG000472  
HAL-CG0000515  
HAL-CG0000528  
HAL\_0080668  
HAL\_0080676  
HAL\_0084576  
HAL\_0028371  
HAL\_0028381  
HAL\_0028408  
HAL\_0028424  
HAL\_0028444

HAL\_0028459  
HAL\_0028469  
HAL\_0028496  
HAL\_0028512  
HAL\_0028532  
HAL\_0028566  
HAL\_0028576  
HAL\_0028603  
HAL\_0028623  
HAL\_0028639  
HAL\_0028647  
HAL\_0028655  
HAL\_0028665  
HAL\_0031387  
HAL\_0119997  
HAL\_0120011  
HAL\_0120021  
HAL\_0120029  
HAL\_0120037  
HAL\_0120053  
HAL\_0120080  
HAL\_0120090  
HAL\_0121106-HAL\_0121124

**INTERROGATORY 8:** Please identify your employee that was responsible for monitoring and confirming the success of the Macondo Well cement job.

**Objection:** HESI objects to this Interrogatory as vague and ambiguous to the extent that it uses the undefined phrase "success of the Macondo Well cement job." FED. R. CIV. P. 26(b)(1). HESI further objects to this Interrogatory because it incorrectly assumes that HESI was "responsible for monitoring and confirming the success of the Macondo Well cement job."

**Response:** Subject to and without waiving the foregoing objections, the following HESI employees executed the cement job on the production casing and monitored such execution: Nathaniel Chaisson and Paul Anderson.

**INTERROGATORY 9:** Please state whether you were aware of the approximately 160 barrel loss from the active mud pit system between 2255 on April 19, 2010 and 0010 on April 20, 2010. If so, please describe when you became aware of the loss and what you did in response to this knowledge.

**Objection:** HESI objects to this Interrogatory because it is overly broad, vague and ambiguous as to the meaning of the phrase "loss from the active mud pit system" and therefore seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1). HESI further objects to the Interrogatory to the extent that it incorrectly assumes that there was an approximate 160 barrel loss from the active mud pit system between 2255 on April 19, 2010 and 0010 on April 20, 2010.

**Response:** Subject to and without waiving the foregoing objections, there was no 160 barrel loss from the active mud pit system between 2255 on April 19 and 0010 on April 20. Rather, during this time, there was a transfer of approximately 150 barrels of fluid from the active pit system to the auxiliary system.

**INTERROGATORY 10:** Please state the reason(s) why you utilized an un-foamed base cement with a de-foamer in it with respect to the Macondo Well cement job, and describe any known benefits from this composition.

**Objection:** HESI objects to this Interrogatory because it is vague and ambiguous as to the meaning of the phrase "un-foamed base cement with a de-foamer in it" and therefore seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

**Response:** Subject to and without waiving the foregoing objections, the cement blend utilized on the Macondo Well production casing was a blend successfully utilized on the well the Deepwater Horizon drilled prior to the Macondo Well. Similar to the Macondo Well, the prior well was a deepwater well with high temperatures. BP had full knowledge of what cement blend was to be used on the Macondo Well and HESI'S use of the base cement was consistent with BP's general process of utilizing cement already loaded onto a rig and paid for by BP.

**INTERROGATORY 11:** Did BP provide you with actual measured BHST for the Macondo Well? If so, what data was provided to you and when was it provided to you?

**Objection:** HESI objects to this Interrogatory as vague and ambiguous to the extent that it uses the undefined term "BHST." Such an undefined term may have a number of meanings and, as such, makes this Interrogatory overbroad such that it will result in production of irrelevant information. FED. R. CIV. P. 26(b)(1). HESI will assume "BHST" means "bottom hole static temperature."

**Response:** Subject to and without waiving the foregoing objections, yes. HESI obtained temperature data subsequent to wireline logging operations.

**INTERROGATORY 12:** If BP provided data regarding actual measured BHST, please state whether that data was ever revised from the time that it was originally delivered to you? If so, describe each revision, including its date.

**Objection:** HESI objects to this Interrogatory because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI further objects to this Interrogatory because it is not limited to the Macondo Well. HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010 and to the Macondo Well. HESI further objects to this Interrogatory as vague and ambiguous to the extent that it uses the undefined term "BHST." Such an undefined term may have a number of meanings and, as such, makes this Interrogatory overbroad such that it will result in production of irrelevant information. FED. R. CIV. P. 26(b)(1). HESI will assume "BHST" means "bottom hole static temperature."

**Response:** Subject to and without waiving the foregoing objections, the data was revised to increase the temperature by approximately two degrees on or about April 12, 2010 or April 13, 2010.

**INTERROGATORY 13:** Did BP have access to your lab tests that incorporated, relied on and/or were related to BHST data? If so, what tests did you give BP access to and on what date.

**Objection:** HESI objects to this Interrogatory because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period or the relevant project. FED. R. CIV. P. 26(b)(1). HESI further objects to this Interrogatory because it is not limited to the Macondo Well. HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010 and to the Macondo Well. HESI further objects to this Interrogatory as vague and ambiguous to the extent that it uses the undefined term "BHST." Such an undefined term may have a number of meanings and, as such, makes this Interrogatory overbroad such that it will result in production of irrelevant information. FED. R. CIV. P. 26(b)(1). HESI will assume "BHST" means "bottom hole static temperature."

**Response:** Subject to and without waiving the foregoing objections, yes. HESI further responds by identifying the following documents:

HAL\_0080668  
HAL\_0080676  
HAL\_0084576  
HAL\_0028371  
HAL\_0028381  
HAL\_0028408  
HAL\_0028424  
HAL\_0028444  
HAL\_0028459  
HAL\_0028469  
HAL\_0028496  
HAL\_0028512  
HAL\_0028532  
HAL\_0028566  
HAL\_0028576  
HAL\_0028603  
HAL\_0028623  
HAL\_0028639  
HAL\_0028647  
HAL\_0028655  
HAL\_0028665  
HAL\_0031387  
HAL\_0119997  
HAL\_0120011  
HAL\_0120021

HAL\_0120029  
HAL\_0120037  
HAL\_0120053  
HAL\_0120080  
HAL\_0120090  
HAL\_0006648  
HAL\_0006650  
HAL\_0006707  
HAL\_0008306  
HAL\_0010641  
HAL\_0028680  
HAL\_0028683  
HAL\_0028709  
HAL\_0118303  
HAL\_0118305  
HAL\_0118308  
HAL\_0025000  
HAL\_0025078  
HAL\_0025111  
HAL\_0028371  
HAL\_0028371  
HAL\_0028424

**INTERROGATORY 14:** Please identify the chain of command regarding your employees, agents and/or contractors working on your behalf on the Macondo Well cement job.

**Objection:** HESI objects to this Interrogatory as vague and ambiguous to the extent that the phrase "chain of command" is undefined and thus the Interrogatory seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

**Response:** Subject to and without waiving the foregoing objections, HESI's cementing engineers and/or cement account representatives review information provided by HESI's customers and make recommendations. The customer reviews the recommendations, and either accepts or rejects them. If the customer has any concerns with the recommendations, the cementing engineer and/or cement account representative investigates the concern and can seek assistance from or consult with a technical sales advisor, the operations department, or the Global Technology department.

**INTERROGATORY 15:** Please describe in detail what BP did to coordinate with you, and with other contractors, with respect to the tasks you were to perform for BP at the Macondo Well, including but not limited to how BP communicated its decisions.

**Objection:** HESI objects to this Interrogatory because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI further objects to this Interrogatory because it is vague and ambiguous as to the meaning of the phrase "what BP did to coordinate with you" and therefore seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Interrogatory as overly broad and unduly burdensome to the extent that it seeks "in detail" a description of "what BP did" over a six month period. HESI further objects to this Interrogatory to the extent that it seeks information about BP's actions with parties other than HESI, and thus not known by HESI.

**Response:** Subject to and without waiving the foregoing objections, BP "coordinated" with HESI's cementing engineer in person, over the telephone, and via email. BP provided HESI with information regarding well conditions and drilling progress, and hosted morning conference calls to discuss the Macondo Well status.

### III.

#### **SPECIFIC OBJECTIONS AND RESPONSES TO REQUESTS FOR PRODUCTION**

HESI hereby incorporates by reference all the foregoing Objections Applicable to All within each response below.

**REQUEST FOR PRODUCTION 1:** Please produce all documents reviewed by you in connection with preparation of your responses to each of the Interrogatories set forth above.

**Objection:** HESI objects to this Request as unduly burdensome to the extent that it requires the identification of documents not responsive to discovery requests and documents irrelevant to the claims or defenses of any party.

HESI also objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI directs Anadarko to the documents referenced by HESI in its responses to Anadarko's Interrogatories. HESI further directs Anadarko to HESI's response to Plaintiffs' interrogatories and omnibus discovery requests.

**REQUEST FOR PRODUCTION 2:** Please produce any documents relating to the Deepwater Horizon or the Macondo Well which were considered by you for transmission to but were not in fact sent to the MMS or another government agency between September 2009 and April 20, 2010.

**Objection:** HESI objects to this Interrogatory because it is overly broad in that it is vague and ambiguous as to the meaning of the phrase "considered by you for transmission to." As such, this Request seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI states that it has no responsive documents.

**REQUEST FOR PRODUCTION 3:** Please produce all documents and communications relating to the design, development, testing, suitability, application and use of foam cement slurry on the Macondo Well.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all documents and communications" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 4:** Please produce records of all telephone calls you received from anyone on board the Deepwater Horizon on April 20, 2010.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all telephone calls you received from anyone on board the DEEPWATER HORIZON," including those unrelated to the claims or defenses at issue in this litigation. FED. R. CIV. P. 26(b)(1).

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 5:** Please produce all documents you prepared following the Macondo Well control event of March 8, 2010 to acknowledge or address the response time recorded during that event.

**Objection:** HESI objects to this Request because it is vague and ambiguous as to the meaning of the phrase "Macondo Well control event of March 8, 2010." As such, this Request seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 6:** Please produce all documents and communications related to the cement and/or cement slurries designed, tested, modeled, and/or investigated for possible use at the Macondo Well.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all documents and communications" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 7:** Please produce all documents and communications related to the placement of cement and/or cement slurries at the Macondo Well.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all documents and communications" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is vague and ambiguous as to the meaning of the phrase "placement of cement and/or cement slurries." As such, this Request seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 8:** Please produce all documents and communications related to cement pumping calculations for the Macondo Well.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all documents and communications" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is vague and ambiguous as to the meaning of the phrase "cement pumping calculations." As such, this Request seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 9:** Please produce inventory documents, material lists, manifest and/or other documents and communications related to the tools, equipment, materials and/or supplies that were transported or were requested by you to be transported to the Deepwater Horizon for your use on the Macondo Well cement job.

**Objection:** HESI objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 10:** Please produce all documents and communications related to your risk assessment and quality assurance evaluation(s) of the Macondo Well cement job.

**Objection:** HESI objects to this Request because it is vague and ambiguous as to the meaning of the phrase "risk assessment and quality assurance evaluation(s)." As such, this Request seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 11:** Please produce all documents and communications related to nitrogen breakout and migration in the annulus cement that was placed across the main hydrocarbon zone of the Macondo Well.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all documents and communications" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is vague and ambiguous as to the meaning of the phrase "nitrogen breakout and migration" and as to the meaning of the phrase "the main hydrocarbon zone." As such, this Request seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request as overly broad because it requires production of "all documents and communications" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

HESI further objects to this Request to the extent that it requests expert information in advance of the expert deadlines established by the Court.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 12:** Please produce all documents and communications related to cement or foamed cement slurry design changes for the Macondo Well cement job.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all documents and communications" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 13:** Please produce all documents and communications related to your response to Interrogatory No. 11.

**Objection:** HESI incorporates its objections and responses to Interrogatory 11. HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Interrogatory to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 14:** Please produce all documents related to pumping time for cement with respect to the Macondo Well, including the nitrogen slurry and the 16.7 PPG slurry.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all documents and communications" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is vague and ambiguous as to the meaning of the phrase "pumping time." As such, this Request seeks information irrelevant to the claims or defenses of any party. FED. R. CIV. P. 26(b)(1).

HESI further objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 15:** Please produce all documents that are or relate to any advice that you gave BP or Transocean regarding the Deepwater Horizon or in connection with the Macondo Well, which BP or Transocean did not follow.

**Objection:** HESI objects to this Request because it is overly broad and seeks information irrelevant to the claims or defenses of any party to the extent that it does not define the relevant time period. FED. R. CIV. P. 26(b)(1). HESI, therefore, limits its response to the following period: February 1, 2010 (the day Deepwater Horizon commenced drilling at the Macondo Well) through April 20, 2010.

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**REQUEST FOR PRODUCTION 16:** Please produce all documents related to all cement tests and simulations for the Macondo Well in February, March, April, and May 2010.

**Objection:** HESI objects to this Request because it seeks information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence to the extent it asks for "all documents" including those unrelated to HESI. FED. R. CIV. P. 26(b)(1).

Finally, HESI objects to this Request to the extent it seeks information that is subject to the attorney-client privilege, work product doctrine, joint-defense privilege, or other applicable legal protection or privilege.

**Response:** Subject to and without waiving the foregoing objections, HESI will produce all responsive, non-privileged documents.

**GODWIN RONQUILLO PC**

By: /s/Donald E. Godwin

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**ATTORNEYS FOR DEFENDANT  
HALLIBURTON ENERGY SERVICES, INC.  
AND HALLIBURTON COMPANY**

**CERTIFICATE OF SERVICE**

I hereby certify that the above and foregoing document, Halliburton Energy Services, Inc.'s Objections and Responses to Defendant Anadarko Petroleum Corporation's Interrogatories and Requests for Productions, has been served on All Counsel by electronically uploading the same to Lexis Nexis File & Serve in accordance with Pretrial Order No. 12, on this 14th day of February, 2011.

/s/Donald E. Godwin

Donald E. Godwin



Feb 14 2011  
10:06PM

**VERIFICATION**

**STATE OF LOUISIANA**

§

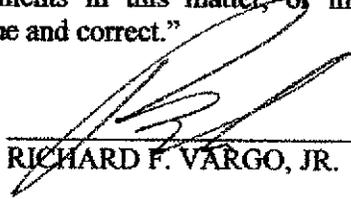
**PARISH OF IBERIA**

§

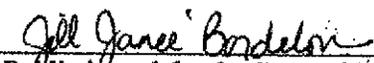
§

BEFORE ME, the undersigned authority, on this day personally appeared Richard F. Vargo, Jr. who being by me duly sworn on his oath deposed and said

“My name is Richard F. Vargo, Jr. I am the Gulf of Mexico Region PSL Cementing Manager for Halliburton Energy Services, Inc. I am over the age of 18 years. I have never been convicted of a crime, and I am fully competent to make this affidavit. I have read the forgoing responses to Anadarko Petroleum Corporation's Interrogatories. The answers are based on my personal knowledge, my review of documents in this matter, or information available to Halliburton Energy Services, Inc. and are true and correct.”

  
\_\_\_\_\_  
RICHARD F. VARGO, JR.

SUBSCRIBED AND SWORN to before me on the 14<sup>th</sup> day of February 2011, to certify which, witness my hand and official seal.

  
\_\_\_\_\_  
Notary Public in and for the State of Louisiana  
Jill Janee Bordelon  
Notary ID# 55307

My commission expires at death