SEIGNAL

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF TEXAS 105 27 PM 2: 22 FORT WORTH DIVISION

AMERICAN AIRLINES, INC.,

Plaintiff,

-V.-

No. 4:08-CV-626-A

YAHOO! INC. and OVERTURE SERVICES, INC. d/b/a YAHOO! SEARCH MARKETING,

Defendants.

JOINT REPORT OF MEETING REGARDING ESI ISSUES

Pursuant to the Court's Order dated August 11, 2009, the parties met in Kirkland, Washington at the offices of Daticon EED during the afternoon of August 25 to discuss the production of Yahoo!, Inc.'s ("Yahoo!") electronically stored information ("ESI"). Yahoo! was represented by Daniel Muino (counsel), Laura Covington (Yahoo! in-house counsel), Catherine Cameron (Yahoo! Senior Engineering Manager of Internal Reporting), Jyothi Sunnadkal (Yahoo! Manager of Service Engineering) and David Wilson (President of D6 Consulting, an e-mail discovery consulting firm, by phone). American was represented by Frederick Brown (lead counsel); Lars Berg (counsel), Donald Broadfield (in-house counsel), Howard Hogan (counsel, by phone), John Jessen, Brandon Leatha and David Stromberg (Messrs. Jessen, Leatha and Stromberg are technology consultants with Daticon EED). The Agenda for the meeting (prepared by American) is attached as Exhibit A.

A. Yahoo's Statement

Pursuant to the Court's Order, Yahoo! filed and served an additional declaration on August 21, 2009, further detailing the structure and operation of Yahoo!'s Sage Data Warehouse and explaining the unavoidably lengthy and expensive process of restoring data from back-up tapes for the period January to September 2007. The declaration came from Ms. Sunnadkal, one of the Yahoo! engineers responsible for maintaining the Sage Data Warehouse and overseeing data restoration efforts. The declaration responded directly to 26 questions posed by American.

At the meeting on August 25, Ms. Sunnadkal and Ms. Cameron explained that even if additional hardware was purchased (at a cost of at least \$350,000) and additional technicians were assigned to the restoration effort, the process would still take roughly 1 day for each day of data to be restored, due to (1) the difficulty of identifying and locating the data on hundreds of back-up tapes; (2) the inherent limitations of the restoration hardware; (3) the need to have technicians with institutional knowledge manually conduct the restoration; and (4) the difficulties of expanding the Sage Data Warehouse (one of the world's largest of its kind) and loading the data back into the Warehouse. Accordingly, even if maximum reasonable efforts were undertaken, all remaining data from 2007 (about 8 months worth) could not be restored by the time of the trial scheduled for January 2010.

Yahoo! had previously offered to stipulate to an extrapolation of the data from the 8-month period based on the available 51 months of data from prior to the period and 20 months of data from after (all of which Yahoo! has already produced). Yahoo! remains willing to work with American on such a solution. Yahoo! would also be amenable to a postponement of the scheduled trial to allow for completion of the data restoration (Yahoo! believes that the costs of any such restoration should be wholly or partially borne by American, and would seek the

opportunity to brief that issue). At the meeting, American did not offer any alternative approaches to resolving the data issue.

Yahoo! is submitting this statement without having first seen American's statement, submitted herewith. If American suggests a different approach to resolving this issue, Yahoo! requests an opportunity to respond to American's position. American also posed questions at the meeting about certain other categories of allegedly missing data that were not previously raised in American's Motion to Compel Discovery. If American raises those issues in its statement, Yahoo! respectfully requests an opportunity to brief those issues.

B. American's Statement

1. Restoration of Data Missing from January to September 21, 2007

From its meeting with Yahoo, American has concluded that:

- a) The restoration of the backup tapes for Yahoo's Sage Data Warehouse ("Sage") for the nine months, January to September 21, 2007, can be accomplished in significantly less time than Yahoo has estimated. As explained in the declaration of Mr. Brandon Leatha, a technology expert from Daticon EED, Yahoo should be able to finish the restoration and production of data to American in 75 days. *See* Leatha Declaration, attached as Exhibit B.¹
- **b)** Neither Yahoo nor Yahoo's declarants, Ms. Cameron (August 6, 2009, Dkt No. 65 at App. 3-6) and Ms. Sunnadkal (August 21, 2009, Dkt No. 79), has substantial

¹ The signature page to Mr. Leatha's declaration contains a facsimile of the original signature. American intends to replace the facsimile signature page with the original signature page on August 28 (tomorrow) when the original signature page is expected to be received by American's counsel in Fort Worth.

experience in restoring large data sets from tape to Sage. Their previous experience with restoring data to Sage relates to periodically running test restores of a single day's data for government reporting.

- c) Yahoo has not yet purchased any of the \$350,000 worth of equipment that Ms.
 Cameron said in her August 6 declaration (paragraph 10) was necessary to restore the data within the timeframe Yahoo suggested to the Court.
- A) Yahoo's cost and time estimate in this case for restoring the nine months of data to Sage was designed as a routine business project. When Yahoo came up with its cost and time estimate set forth in the declarations of Ms. Cameron and Ms. Sunnadkal, they were not asked to determine the cost for doing the restoration quickly enough to meet a litigation deadline or order of a court, for example as a 60 or 90 day project.
- e) The portions of Ms. Sunnadkal's declaration regarding restoring data from tapes (paragraphs 4-6, and 7-11), is based on information she heard from Mr. Loi who has not provided a declaration in this case.

American requests that Yahoo be ordered to restore to Sage and produce to American in 75 days from the date of the Court's order the January to September 21, 2007 data that Yahoo has identified as residing solely on backup tapes. Any burden on Yahoo was caused by:

- (1) Yahoo's failure to preserve relevant and requested information in the first place (a) when American first notified Yahoo of its intent to file this lawsuit in December 2006 and Yahoo entered into a standstill agreement to hold the litigation in abeyance; (b) when American formally filed this action in October 2008; (c) when American first told Yahoo it would seek this specific information in November 2008; (d) when American first served its formal discovery requests in February 2009; or (e) when the parties filed a Joint Status Report in which both parties commented on the importance of electronically stored information;
- (2) Yahoo's failure to begin the restoration process immediately (a) when it discovered in late April or early May 2009 that the data was missing, see Sunnadkal declaration ¶ 28; (b) when Yahoo's counsel and 30(b)(6) witness

both represented in May 2009 that Yahoo was working on restoring this information; (c) when American first moved to compel the production of this data in July 2009; or (d) when this Court first ordered Yahoo to produce this data in August 2009;² and

(3) Yahoo's failure to start taking the steps that it now says are necessary to complete the restoration process, including but not limited to purchasing the \$350,000 in additional equipment that they have already identified, see Cameron Decl. (Dkt. No. 65) at ¶ 10, and failing to devote sufficient resources to complete the process by the deadlines set by the Court, see March 13, 2009 Order Setting Schedule (Dkt. No. 38); Leatha Declaration, attached as Exhibit B.

2. Other Missing ESI

From its meeting with Yahoo, American also has concluded that:

- American, including data regarding (a) the number of times that it has published the ads at issue in this lawsuit in response to specific searches ("impressions"), (b) some or all of the text of the infringing advertisements, and (c) other data or reports made available to Yahoo's advertisers in the travel sector through its "ADV_UI" advertiser user interface.
- b) Yahoo does generate and retain for at least some period of time (a) impressions data,
 (b) the text of infringing advertisements, and (c) other data or reports made available
 on its ADV_UI interface to advertisers in the travel sector, in easily accessible form
 for varying periods of time. While the data is retained, Yahoo uses that data for its
 own business purposes and for the benefit of its advertisers. That data, however, is

² See, generally, American's Motion to Compel Discovery (Dkt. No. 43) at pp. 6 n.2, 7 n.3, 8-9; Appendix in Support of American's Motion to Compel Discovery (Dkt. Nos. 44-45) at App. 1-4, 6-9, 25-26, 50, 55-57, 66, 74-76, 131-35.

periodically deleted or moved from readily accessible format to even more backup tapes by Yahoo. Yahoo has not changed its retention and deletion practices for this data as a result of the discovery by American requesting that information in February 2009, the meeting with American in November 2008 outlining discovery needs in the case, the filing of the Complaint in October 2008, or the signing of a series of standstill agreements beginning in December 2006 after American's General Counsel contacted senior legal officers of Yahoo to threaten litigation if Yahoo's trademark infringement did not stop. *See* American's Motion to Compel Discovery and Appendix in Support, cited *supra*.

- c) Yahoo has represented that it no longer maintains in readily accessible form some or all of the (a) impressions data, (b) the text of infringing advertisements, and (c) other data or reports made available on ADV_UI (advertiser user interface) to advertisers in the travel sector.
- d) Yahoo has on backup tapes at least some of the (a) impressions data, (b) the text of infringing advertisements, and (c) other data or reports made available on ADV_UI (advertiser user interface) to advertisers in the travel sector.
- e) Pursuant to the Court's Order of August 4 allowing American to serve written discovery on Yahoo concerning document retention or destruction, American has served a First Set of Special Interrogatories to which Yahoo is scheduled to respond on September 2 and a Second Set of Special Interrogatories and Special Requests for Production for which American has asked for expedited responses by August 28.
- f) Also, pursuant to the provision of the Court's Order of August 4 allowing American to take five additional depositions at Yahoo's costs concerning document retention or

destruction, American has asked Yahoo to make two witnesses, Ms. Sunnadkal and Dr. Huiming Li (mentioned in paragraph 28 of Ms. Sunnadkal's declaration), available for deposition on August 31 and September 2, respectively.

Depending on the completeness of Yahoo's production, which is due on August 28 pursuant to the Court's Order of August 17, 2009, and on the information learned from the special discovery served on Yahoo, American is very likely to seek further relief from the Court. At this time, American respectfully reserves its right to seek such relief depending on its review of Yahoo's forthcoming August 28 production, Yahoo's responses to American's special discovery by September 2, and Yahoo's willingness to expedite its remaining responses and to produce Ms. Sunnadkal and Dr Li on the dates requested by American.

Dated: August 27, 2009

Respectfully submitted,

Dee J. Kelly (State Par No. 11217000)

Dee J. Kelly, Jr. (State Bar No. 11217250)

Lars L. Berg (State Bar No. 00787072)

KELLY HART & HALLMAN LLP

201 Main Street, Suite 2500

Fort Worth, Texas 76102

Phone: (817) 332-2500

Fax: (817) 878-9280

Frederick Brown (pro hac vice)
Jason B. Stavers (pro hac vice)

GIBSON, DUNN & CRUTCHER LLP

555 Mission Street, Suite 3000 San Francisco, California 94105

Phone: (415) 393-8204

Fax: (415) 374-8420

Howard S. Hogan (pro hac vice) GIBSON, DUNN & CRUTCHER LLP 1050 Connecticut Avenue, N.W. Washington, D.C. 20036

Phone: (202) 955-8500 Fax: (202 467-0539

Attorneys for Plaintiff American Airlines, Inc.

David F. Chappell

Texas State Bar No. 04141000

Scott A. Fredricks

Texas State Bar No. 24012657

CANTEY HANGER LLP

Cantey Hanger Plaza

600 West Sixth Street, Suite 300

Fort Worth, Texas 76102

Telephone: (817) 877-2800

Fax: (817) 877-2807

Of Counsel:

Michael A. Jacobs (pro hac vice) Lynn M. Humphreys (pro hac vice) MORRISON & FOERSTER LLP 425 Market Street San Francisco, CA 94105-2482 Telephone: (415) 268-7000

Fax: (415) 268-7522

Attorneys for Yahoo! Inc. and Overture Services,

Inc. d/b/a Yahoo! Search Marketing

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing was delivered on August 27, 2009 to defendant's counsel, as follows, in accordance with the Federal Rules of Civil Procedure:

Via Electronic Mail
Michael A. Jacobs
mjacobs@mofo.com
Daniel P. Muino
dmuino@mofo.com
MORRISON & FOERSTER LLP
425 Market Street
San Francisco, CA 94105

Via Electronic Mail
David F. Chappell
dchappell@canteyhanger.com
Scott A. Fredricks
sfredricks@canteyhanger.com
CANTEY HANGER LLP
600 West Sixth Street, Suite 300
Fort Worth, TX 76102

Dee J. Kelly

Agenda: ESI MEETING WITH Yahoo, August 25, 2009

- Discussion of Yahoo's Declarations re restoring backup tapes to readily accessible data
 - O Yahoo's experience in restoring large data sets from tape to live databases for business or litigation purposes?
 - o Why hasn't Yahoo added dedicated personnel?
 - o Why hasn't Yahoo added more equipment or outsourced the project?
 - o Has Yahoo purchased, rented or secured more equipment for this restoration? Need documents.
 - o How many LTO2 drives and Filers does Yahoo own/use for its on going business v. being used for this restoration?
 - o Why hasn't Yahoo added more Filers or LTO2 drives?
 - o When did Yahoo begin the restoration?
 - o What is the average hourly labor cost of the technicians Yahoo has assigned to the restoration?
 - O Total estimated restoration cost to restore data on schedule and with resources proposed by Yahoo? Documents.
 - o What data sources feed the SAGE Data Warehouse? Need flowchart.
 - O What databases take data from the Sage Data Warehouse? Need flowchart.
 - o How do Edwards 1 and 2, ORACLE Financials. RQCC, Account Monitoring, Grid, Project Apax, MRP, AD UI, SS Offers feed or source the Sage Data Warehouse?
 - O Need Wilco, Backbone Nevault, Filer, Warehouse Replication, Myna and Net APP Filer, Edwards 1 and 2, ORACLE Financials. RQCC, Account Monitoring, Grid, MRP, AD UI, SS Offers and Project Apax manuals.
 - What data does Wilco select for backup and deletion—need details?
 - O What data was deleted from Sage and not backed up?
 - What data remains on Sage that was not deleted from January to September 2007?
 - o How long is data kept on Net APP filers?
 - o Need deletion or backup schedules for all databases.
 - o When did Yahoo stop deleting the Requested Data?
 - o When did Yahoo begin its restoration efforts?
 - o Why wasn't the Court and AA informed immediately about the missing data?
 - o When did Mr. Garg authorize the deletion of data from Sage?
 - o Who was informed of the deletion?
 - o What documents support the deletion?
 - o When was Mr. Garg and those reporting to him provided a document retention notice?
 - o What is the reporting chain form Mr. Garg to the CTO.
 - Who in that chain received a document retention notice? When?
 - Other See questions inserted in declaration.

• Other missing data

o Ad text for approximately 8.6 million of the 19.5 million clicks identified is missing (the "Creative Description"). We are also missing the "Creative



Title" for 1.5 million clicks, the "Creative Short Description" for 12.2 million clicks, and the display URL for 1.5 million clicks.

- O Data for 1.3 million clicks also omit information from the field identifying whether the click was a result of Yahoo's sponsored search or content match programs.
- We have no data on landing URL fields.
- We are missing bid information for 11.4 million of the 19.5 million clicks in Yahoo's Generation V search data.
- O Yahoo has not produced any information about bids on non-clicked keywords and/or advertisements.
- O Data related to the placement of advertisements on a search results page. All Yahoo has provided is the "rank" in which each clicked-on ad appeared on the page, but has not provided any DUDE data or other information that would allow us to calculate where each ad appeared on the pageData missing from Yahoo's Generation IV and V set that had been reported in Yahoo's Generation I or II data.
- O Quality Index Score. Yahoo has not produced any data related to the "quality" of each sponsor result even though they boast of the ability to track and improve advertisers' quality scores.
- o Share of Voice data.
- O Impressions and click through rates. The closest we have is YAH-AA 454823-825, but it is for 2008 and 2009 only, it is not clear if "bidded results" can be equated to "impressions"; and it is by canon search term, not advertiser, so there is no way to gauge either click through rate or impressions for any particular ads.
- o We are missing partner serve URLs for 1.7 million of the 19.5 million clicks in Gen 5
- O Yahoo has produced no html code, screen shots, or other ways to see what each page displayed in response to a search for AA Mark or Confusingly Similar term actually looked like when presented to consumers.
- o Measures of which terms are most "confusingly similar to" the AA Marks.
- o Missing data identified in Dan Jackson's report
- O Data from additional fields recorded by Yahoo and identified in August 20 letter to Yahoo

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF TEXAS FORT WORTH DIVISION

AMERICAN AIRLINES, INC.,

Plaintiff.

-٧.∽

YAHOO! INC. and OVERTURE SERVICES, INC. d/b/a YAHOO! SEARCH MARKETING,

Defendants.

Case No. 4:08-CV-626-A

DECLARATION OF BRANDON LEATHA

- I, Brandon Leatha, declare as follows:
- 1. My name is Brandon Leatha. I am over 18 years of age and am fully competent in all respects to make this Declaration. I have personal knowledge of the facts contained in this Declaration and each of them is true and correct.
- 2. I am a Senior Consultant at Daticon EED ("EED"). I have been employed at EED since August of 2000. EED is a full service electronic discovery provider and has provided services to corporations and law firms on hundreds of discovery matters since it was founded in 1987. I am currently responsible for providing consultative services related to the preservation, collection, restoration, processing, review and production of electronically stored information (ESI) for corporations and law firms. During my tenure at EED, I have managed a team of over 20 database analysts. I have personally provided services for many of the nation's largest



discovery collections, reviews and productions. I have first-hand experience working with large databases and restoring information from backup tapes for purposes of electronic discovery.

- 3. EED has been asked by American Airlines, Inc. ("American") and their outside Counsel to evaluate the current efforts by Yahoo to restore sponsored search data from backup tapes for the period of January 2007 to September 2007 ("target data"). I have reviewed the declarations of Ms. Cameron and Ms. Sunnadkal. I have also reviewed the motions, responses and briefs filed by both American and Yahoo as well as documents produced by Yahoo. On August 25th, I participated in a meet and confer with American and Yahoo. In attendance from Yahoo were Catherine Cameron, Jyothi Sunnadkal, Dan Muino, Laura Covington and David Wilson (via phone).
- 4. Based on the information provided during the August 25th Meet and Confer as well as the declarations of Ms. Cameron and Ms. Sunnadkal provided by Yahoo, I have an understanding of Yahoo's current efforts to restore the target data from backup tape. The current effort includes six Yahoo employees working approximately half time. Yahoo is currently using three LTO-2 tape drives and one 5TB (Terabyte) filer or storage device to restore the January 2007 tapes. At this time, no new equipment has been purchased or leased for the restoration effort. The current process to restore data can be broken into the following five steps:³
 - 1) Identify the tapes containing target data for the desired time period
 - 2) Retrieve and load the tapes into the tape library
 - 3) Restore data from the tapes to the restore filer (storage device)
 - 4) Extract data from the TAR files to a temporary staging filer

³ Based on information provided by Jyothi Sunnadkal during the August 25th, 2009 Meet and Confer.

¹ Declaration of Jyothi Sunnadkal, August 11th, 2009, paragraph 11.

² Based on information provided by Catherine Cameron during the August 25th, 2009 Meet and Confer.

- 5) Insert the data into the active SAGE filer and database system.
- 5. Based on information learned during the meet and confer, steps 3 (Restore) and 5 (Insert) are the most time consuming of the 5 step process. Yahoo reports that the current restoration of the backup tapes is averaging 20 MB/s (megabytes per second) per tape drive and that the backed-up data for each day averages between 1.5 2TB.
- 6. Based on Yahoo's current process, hardware, and staffing, an average restore speed of 20MB/s and 3 tape drives running 24 hours per day, Yahoo should be able to restore approximately 5TB (5,063GB) of data from tape each day. The current restoration efforts are limited by the size and performance of the 5TB restore filer or storage system, the limited number of tape drives used to restore tapes and limited number of employees working half time on the restoration project.
- 7. Yahoo could significantly improve the speed of restoration by dedicating a team to the project full time as well as adding additional storage, filers and tape drives. The addition of a dedicated full time team will allow the tape identification (step 1) and tape loading (step 2) to keep up with the tape restoration such that there will not be a lag or wait time between restoring the tapes sets. The addition of hardware to bring the restoration systems up to nine LTO-2 tape drives (an addition of six tape drives) and three filers with 50TB of storage each (an addition of two filers and 145TB of storage) will allow the tape restoration process to run continually 24 hrs per day. It is reasonable to expect Yahoo to be able to acquire the proposed equipment for \$350,000 \$450,000. Yahoo may have access to specialized discounts, purchasing agreements or options to lease or repurpose this equipment that would reduce the out-of-pocket expense.

- 8. On a continual basis, as the tape sets are restored to the three filers, the dedicated team can perform the extraction (step 4) and insertion (step 5) of data into the SAGE database. Once the extraction and insertion are completed for a given day, the source data can be removed from the restore filer to ensure sufficient space is maintained to restore additional data. Staffing and scheduling the teams appropriately will allow a near continual restoration process.
- 9. Based on information provided by Yahoo, there are approximately 250 days of data remaining to be restored. At an average of 1.75TB of data per day, this results in an estimated 440TB of data remaining to be restored. At Yahoo's average restore speed of 20MB/s per tape drive, utilizing the proposed nine tape drives and three filers, Yahoo should be able to restore between 12 and 15 TB per day. Having a dedicated team to perform steps one (1) through five (5) on a continual basis will allow the remaining data to be restored within 35-45 days. If Yahoo were to purchase or lease the proposed equipment and dedicate a restoration team, it is reasonable to expect that Yahoo could restore, search and produce the remaining requested sponsored search data within 75 days. Additionally, Yahoo could explore the option of hiring an outside specialist in data restoration to expedite the process.
- 10. Based on my review of the produced materials and the meet and confer with Ms. Cameron and Ms. Sunnadkal, it appears that Yahoo has not taken all reasonable steps to maximize the speed of restoration. As of August 25th 2009, Yahoo has not purchased or leased additional equipment, dedicated systems or fully dedicated staff to the restoration process. Additionally, Yahoo is seeking to restore all of its search data for 2007 and is not taking steps to limit the restoration to the specific data requested by American. Further, my estimates above are based on Yahoo's estimate of the LTO-2 restoration speeds of 20 MB/s. While achieving the manufacture's maximum LTO-2 spec speed of 40 MB/s may not be achievable, it is realistic to

⁴ February 1, 2007 to September 22nd plus the days not yet provided for January 2007.

expect that Yahoo should be able to restore data at 25-35 MB/s. Additionally, it has been reported that some of the tapes are LTO-3 which have a manufactures specification speed of 80 MB/s, twice that of LTO-2.

My understanding from information provided by Ms. Cameron and Ms.
 Sunnadkal is that they were not asked to complete the restoration on any particular timeline.

I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed in Washington D.C., on August 27th, 2009.

Brandon Leatha