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Attorneys for Plaintiffs

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF OREGON

OREGON NATURAL DESERT ASS'N et al.,

Plaintiffs,

v.

UNITED STATES FOREST SERV. et al.,

Defendants,

and

ROBERTSON RANCH et al.,

Intervenor-Defendants,

and

OREGON CATTLEMEN'S ASS'N,

Intervenor-Defendants.

Case No. 03-CV-213-KI

SECOND DECLARATION OF JONATHAN J. RHODES

I, JONATHAN J. RHODES, state and declare as follows:

1. My name is Jonathan J. Rhodes. I am the same Jonathan J. Rhodes who submitted a first declaration in this case. My qualifications are described in that declaration.

2. In my previous declaration I listed and described the material that I had reviewed at that time. Since then, I have also reviewed the "Trip Report: Malheur National Forest Michael Borman, William Krueger, and Tamzen Stringham, April 19 and 20, 2004," dated May 3, 2004, (hereafter: Borman et al.), the declaration of Dr. R.L. Beschta, dated February 29, 2004, and the declaration of Dr. J.B. Kauffman, dated July 10, 2003.

Scope of Review

3. I submit this declaration to explain why I disagree with the observations of Borman et al. regarding the effect of grazing on riparian vegetation, water flows, sediment flux, soils, channel form, and water quality in the Malheur and North Fork Malheur wild and scenic river corridor watersheds. This declaration clarifies how aspects Borman et al. are misleading and in conflict with the best available scientific information on grazing and its effects on aquatic resources within the wild and scenic corridor watersheds.

4. My review of the additional material does not, in any way, alter my conclusions in my previous declaration about the negative effects of the grazing in these wild and scenic river corridor watersheds and how it is retarding attainment of INFISH RMOs. I stand by all of the findings and conclusions in my previous declaration regarding the effects of grazing on riparian areas and stream conditions in these watersheds.

The declarations of Drs. Kauffman and Beschta and I are grounded in the scientific method.

5. Although Borman et al. asserts that the declarations of Drs. Beschta, Kaufman and I "were observational and not based on the scientific method," this assertion is erroneous for

at least three reasons. First, the scientific method not only allows for observation, but, in fact, observations are a fundamental part of doing science. Second, one aspect of the scientific method is to interpret observations within the context of documented findings from applicable scientific research. The declarations of Drs. Kauffman, Beschta and I do just this. They interpret careful and detailed observations within the context of applicable results of scientific research, carefully cited. This is one of the specific reasons for scientific inquiry: to allow a generalized understanding of how systems work. Ironically, Borman et al. provide no new data or measurements, but instead opt to selectively dispute some specific issues we raised, based on their observations. Borman et al. is almost completely devoid of any discussions of salient scientific studies to support their general contentions.

6. Third, Drs. Kauffman and Beschta, and I cite a significant amount of applicable data garnered via the scientific method in our declarations, including data from studies within subject allotments, other studies in applicable settings, measurements of bank and vegetation conditions made on streams using the USFS's own monitoring protocols, and data on stream conditions and the status of INFISH RMOs from the Malheur National Forest's own monitoring and Watershed Analysis (1999). The research included our own original, peer- reviewed studies in the Blue Mountain Province of Oregon, including studies within the MNF and watersheds of the Wild and Scenic Corridors (e.g., Kauffman et al., 2002). Borman et al. simply ignores this, while arbitrarily dismissing some of it as inapplicable or potentially incorrect, without providing any convincing justification for this dismissal or any independent measurements of their own.

7. The following are but a few examples of data in my declaration that were ignored in Borman et al.:

> a) extremely high width/depth ratios in the Malheur River and N. Fork Malheur River from the MNF's own monitoring and Watershed Analysis (1999);

b) stubble height measurements taken at the end of the 2003 grazing season in several of the riparian areas at issue in this case, which documented that stubble height standards were not met;

c) measurements of high levels of bare ground in grazed riparian areas at the end of the 2003 grazing season;

d) bank stability measurements on a grazed reach of Summit Creek at the end of the 2003 grazing season, using USFS methods, demonstrating that INFISH RMO for bank stability was not met in this reach;

e) pool frequency data from the MNF Watershed Analysis (1999), demonstrating that streams do not meet the INFISH RMO for pool frequency, and are well outside of natural ranges for these stream types;

f) data indicating that the RMO for water temperature is not met within the Wild and Scenic Corridors;

g) data from research on grazed and ungrazed reaches on Summit Creek (Magilligan and McDowell, 1997; Kauffman et al., 2002) documenting that ungrazed reaches were closer to meeting INFISH RMOs for pool frequency and width/depth than adjacent grazed reaches; Kauffman et al. (2002) quantitatively documented these ungrazed reaches had more cover from shrubs and deciduous trees and less bare ground than adjacent grazed reaches, which indicates that grazing is continuing to retard attainment of RMOs and the recovery of fish habitat and riparian vegetation.

8. Borman et al. fail to provide any convincing evidence or studies that support their rejection of the scientific information in my declaration or those of Kauffman and Beschta. For instance, Borman et al. asserts that their observations indicate that my measurements of bank stability, made in accordance with the USFS protocols for bank stability measurement, were erroneous. However, they made no measurements that refute or contradict my data, nor do they even describe what was observed.

Borman et al. fails to address the key issue that current grazing is retarding the attainment of INFISH RMOs.

9. Notably, Borman et al. are completely silent on the issue of whether current grazing is retarding the attainment of INFISH RMOs for pool frequency, water temperature,

bank stability, overhanging banks, and width/depth ratio. The combined studies, data, and field evidence described in the declarations of Kauffman, Beschta, and I consistently indicate that current grazing in the wild and scenic corridors' watersheds is retarding the attainment of INFISH RMOs. These data are from studies within these watersheds (Magilligan and McDowell, 1997; Kauffman et al. 2002). It is also consistent with findings from research in areas with similar settings and grazing treatments applicable to the setting and current grazing use in the wild and scenic corridors' watersheds (Magilligan and McDowell, 1997; Kauffman et al. 2002; Rhodes and Greene, in process). This, in turn, is consistent with a wider body of published research on the effects of grazing treatments on overhanging banks, bank stability, pools, erosion, sedimentation, bare ground, width/depth, and riparian vegetation, as noted in the previous declarations of Kauffman, Beschta, and I. See, e.g., First Declaration of Jonathan J. Rhodes at ¶¶ 58, 66, 80.

10. This information plainly indicates that current levels of livestock grazing prevent or retard the attainment of INFISH RMOs relative to the rate of attainment without the impacts of grazing. This is consistent with assessments by the USFS's own researchers. Platts et al (1991) concluded that rest from grazing was the most effective way to protect fish habitat from damage by grazing. Similarly, Sedell et al. (1997) concluded that fencing of streams and exclusion of livestock was likely to have far more positive benefits for fish habitat than any type of livestock management.

11. Borman et al. claims that propositions that have not been documented in published research cannot be supported. The effect of a variety of grazing treatments on stream conditions has been repeatedly researched and documented in the published literature. This research consistently indicates that grazing retards the recovery of overhanging banks, bank

stability, pools, erosion, sedimentation, bare ground, width/depth, and riparian vegetation relative to the rate of recovery in the absence of grazing impacts. Therefore, using the criteria advocated by Borman et al. there is no scientific support for the notion that grazing does not retard the rate of recovery and progress towards better conditions for these stream attributes.

12. It is noteworthy that Borman et al. does not contend that grazing is not retarding recovery. It is also significant that their report does not offer any observations or muster a single piece of relevant research that could support this contention.

Borman et al. obfuscate the applicability and utility of the Summit Creek exclosure.

13. Borman et al. repeatedly speculate that browsing and vegetative conditions in several of the stream reaches grazed by livestock *might* be due to wildlife use. However, this ignores the situation in the Summit Creek exclosure. The exclosure fence is no barrier to wildlife. Thus, it provides a critical example of response of vegetation and stream conditions to wildlife browse, in the absence livestock impacts. The fact that vegetation and stream conditions in the exclosure are doing so well and so much better than in grazed reaches indicates that potential browsing effects from wildlife are has a relatively minimal effect on vegetation recovery. This indicates that removal of livestock is the primary cause of the major difference between grazed and ungrazed reaches with respect to vegetation biomass, species, and growth forms and resultant effects on stream conditions, as documented Magilligan and McDowell (1997) and Kauffman et al. (2002) in Summit Creek. The deciduous woody species (e.g., willows and alder), so important for bank stability, stream shade, and for wildlife habitat are doing immensely better in this exclosure where the only difference in effects on vegetation relative to adjacent reaches grazed by livestock is the lack of livestock grazing. This wholly undermines the contentions of Borman et al. that livestock grazing is not the primary cause of the

degraded condition of deciduous woody vegetation in reaches grazed by livestock.

14. The MNF's own Watershed Analysis (1999) also clearly affirms the importance of the Summit Creek exclosure as verification of the impacts of livestock grazing riparian vegetation and stream conditions:

> "The exclosure along Summit Creek in the Summit Prairie allotment is the only grassland riparian area in the watershed that has not been grazed by livestock for over a decade. As such, the exclosure is extremely valuable as an example of grassland riparian habitat potential without the influence of livestock grazing. Inside the exclosure, the stream was deeper and narrower, and banks were undercut and lined with lush sedge and grass vegetation. The grass and sedge vegetation was observed to provide excellent bank stability, cover, and shade. Several large willow shrubs were growing well...Immediately outside the exclosure, the stream was wider and shallower, with caving and eroding banks...The only willow bush was heavily browsed."

15. Borman et al. assert, on the basis of no evidence, that the Summit Creek exclosure may not be applicable to other stream reaches. This is certainly not the case for adjacent reaches. Dr. P. McDowell, Professor in the Department of Geography at the University of Oregon and an expert on channel processes and form, selected these reaches for study, due to their comparability with adjacent reaches, in two separate scientific studies, based on the measurement of a variety of stream attributes and physical setting (Magilligan and McDowell, 1997; Kaufman et al., 2002). In contrast, Borman et al. is devoid of measurements of any stream or setting attributes.

16. One of the central purposes of the Rosgen (1996) stream classification system, upon which Borman et al. purport to rely, is to allow comparison among similar channel types for channel attributes that scale with streamflow and stream size, such as width/depth ratio. Notably, based on the criteria in Rosgen (1996) and the stream data in Magilligan and McDowell (1997), Summit Creek within and below the exclosure is the generally the same stream type as the Malheur River mainstem within the Wild and Scenic Corridor. It is also the same stream

type as in many reaches in the North Fork Malheur River. Therefore, these reaches are broadly comparable.

17. Rosgen (pp. 7-11 to 7-12, 1996) notes that reference reaches that are free of impacts, such as grazing exclosures, are critical to determining the impacts of land use (e.g. grazing) on stream conditions. In one of the conceptual examples provided in Rosgen (1996) the reference reach is well upstream of a study reach, indicating that the latter would have considerably higher streamflow than the former. This is analogous to the context of the Summit Creek exclosure and its relationship to the Malheur River.

Borman et al. rely on the subjective Proper Functioning Condition assessment method, which is inadequate to characterize the impacts of grazing on riparian areas and streams.

18. The Proper Functioning Condition method (hereafter: PFC) lacks scientific rigor and is highly subjective, rendering it prone to error and abuse. Borman et al. clearly relies heavily on the PFC for its assessment of riparian and stream conditions. The National Research Council[1] (2002, p. 336 in Riparian Areas: Functions and Strategies for Management, National Academy Press, Washington, D.C.) noted that because the PFC approach "…is qualitative, PFC is vulnerable to subjective application, which places a great burden on the consistency and skill of the local assessment teams." Aquatic experts from the USFS and USBLM concluded that PFC is poorly defined (Sedell et al.[2], p. 448, 1997). The PFC method involves no measurement of any stream or riparian attribute, which is somewhat ironic, given that Borman et al. complains about the lack of scientific method in the my declaration and those of Drs. Beschta and

[1] National Research Council (2002) was authored by a blue ribbon panel of scientists with expertise in riparian areas and their restoration: M.M. Brinson, L.J. MacDonnell, D.J. Austen, R.L. Beschta, T.A. Dillaha, D.L. Donahue, S.V. Gregory, J.W. Harvey, M.C. Molles, Jr., E.I. Rogers, and J.A. Stanford. The panel was selected by the National Academy of Sciences.
[2] The aquatic scientists from the USFS and USBLM that authored this publication are: J. Sedell, D. Lee, B. Reiman, R. Thurow, and J. Williams.

Kauffman.

19. This assessment that PFC is qualitative is not confined to external evaluations of it. The National Riparian Service Team (1999), (hereafter: NRST), which developed and provides training in PFC, states that "PFC is: A qualitative assessment based on quantitative science."

20. Further, the NRST (1999) notes that PFC is not "... A replacement for inventory or monitoring protocols designed to yield information on the 'biology' of the plants and animals dependent on the riparian-wetland area." NRST (1999) also states that riparian areas that are "properly functioning" do not represent the desired future condition of these areas. NRST (1999) also states that "PFC wasn't: Designed to be a long term monitoring tool but it may be an appropriate part of a well designed monitoring program" and "PFC isn't: Designed to provide monitoring answers about attainment of desired conditions."

21. Independent evaluations (Stevens et al., 2002) of the PFC method, which included field testing on several streams and riparian areas, have documented several deficiencies and flaws in the method. These defects include the failure to consider and incorporate water quality, fish and wildlife habitat, anthropogenic perturbations, and the inability of the method to provide a means to quantitatively assess trends or reliably compare conditions among locations, such as reference and study reaches (Stevens et al., 2002). For these and other reasons, one chapter of the Society for Conservation Biology formally expressed concern about the PFC method to the NRST and requested that it rectify some of the identified defects (Letter from the Colorado Plateau of the Society for Conservation Biology to the NRST, dated Nov. 2002).

Stream shade from topography and conifers is inadequate to moderate water temperatures.

22. The lack of riparian shade due to the effects livestock grazing is an important

issue with regard to stream temperatures and bull trout. While hillslopes and conifers on them provide some shade on streams, they only do so early in the morning and late in the afternoon. Borman et al. 2004 ignores that during the period of the day when most stream heating occurs (i.e., from 9 am to 3 pm), the grazed stream reaches throughout the watersheds for the river corridors are seriously deficient in shade from riparian plant communities. The exceptionally high width/depth ratios of these streams, as noted in my declaration and that of Dr. Beschta, contribute to the existing water temperature problems. Such wide and shallow streams are more prone to increased heating, as documented in the scientific literature.

Elevated streambank erosion occurs in grazed reaches throughout the watersheds of the Wild and Scenic Rivers.

23. Except for well-vegetated reaches in exclosures, accelerated streambank erosion from grazing impacts (bank trampling and loss of streambank vegetation) is widespread throughout the corridor allotments. As long as elevated streambank erosion continues in grazed areas, it will thwart or significantly retard the recovery of streambanks, width/depth ratios, pools, and connectivity with stream floodplains. While the occurrence of a few sedges on point bars, as pointed out by Borman et al., may seem encouraging, they are continually getting clipped off by livestock and, thus, are functionally incapable of anchoring and building banks to the same degree as ungrazed sedges, or riparian trees and shrubs which are being stunted by the effects of livestock grazing.

24. The repeated assertion in Borman et al. that erosion and deposition are in balance in stream reaches within the allotments is without merit. These streams show diagnostic signs of elevated erosion, including a dearth of stable overhanging banks at meander bends, oversteepened raw banks, significantly aggrading stream deposits, extremely depressed pool frequencies, and grossly elevated width/depth ratios. None of these diagnostic attributes of

elevated erosion occur pervasively in the Summit Creek exclosure, nor in other older exclosures in similar settings on the MNF and in adjacent subbasins.

25. As noted by Rosgen (1996), although streambank erosion is natural, it is accelerated by the loss of riparian vegetation. Rosgen (1996) notes that typical channel adjustments to grazing damage includes accelerated bank erosion, increased width/depth ratios, and damaged fish habitat. All of these conditions clearly exist in streams throughout the allotments in the wild and scenic corridors' watersheds. These conditions are not just documented by our observations and measurements, but also independently corroborated by the MNF's Watershed Analysis (1999).

26. Despite the avowed reliance on Rosgen's (1996) stream classification, Borman et al. fail to disclose the high level of vulnerability of the streams within the watersheds of the wild and scenic river corridors to damage by grazing. Borman et al. speculate that the Malheur River is a "C type" steam and the North Fork Malheur is comprised of "C3 or C4" and "D4" type streams, based on the Rosgen classification method. According to Rosgen (1996) all of these stream types have "very high sensitivity" to disturbance by grazing, including increases in sediment delivery, "very high" streambank erosion potential and are significantly influenced by changes in vegetation. Rosgen (1996) states: "...deeper rooted, woody species...are critical to the bank stability of C3, C4...stream types. For these stream types grazing should be limited to the early season." The "early season" equates to grazing in the spring; currently, riparian areas within the allotments along the Malheur and North Fork Malheur wild and scenic rivers are grazed anywhere from June 1st through the end of October. The declarations of Dr. Kauffman, Dr. Beschta, and I clearly document that current livestock grazing is preventing the recovery of the woody species so important to the stability of these channel types.

Width/Depth ratios do not meet INFISH RMOs and have been elevated by grazing.

27. It is clear that width/depth ratios in these river corridors do not meet INFISH RMOs. Borman et al. ignores that the adverse effects of grazing on width/depth ratios is one of the most well-documented effects of grazing, as detailed in my first declaration. Borman et al. also ignores that the MNF's own Watershed Analysis (1999) independently concluded that grazing has significantly increased the width/depth ratios existing in streams. While Borman et al. argues that the RMO for width/depth ratio of 10 may not be attainable, this is contrary to the assessment in the Watershed Analysis (1999), as noted in my previous declaration. Borman et al. also disregards that current width/depth ratios are in extreme departure from the RMO target. For instance, the current width/depth ratio on the Malheur River is about 39 (Watershed Analysis, 1999), or just slightly less than four times the INFISH RMO. Magilligan and McDowell (1997) and Kauffman et al. (2002) demonstrated that width/depth ratios in ungrazed stream reaches were far lower than in grazed stream reaches in the watersheds of the Wild and Scenic corridors. These studies demonstrate that grazing is thwarting the attainment of reduced width/depth ratios. With regard to citing Rosgen (1996) for what appropriate width/depth ratios should be, Rosgen (1996) merely cites measured width/depth in channel types; it does not indicate that higher ranges of measured width/depth ratios are natural or desirable.

There is adequate evidence of adverse impacts on soils, erosion, and sedimentation and resulting negative effects on channel form, including width/depth ratios and pools.

28. There is no question that grazing significantly compacts soils, as I noted in my previous declaration. For instance, Cowley (2002) calculated that a 1,000 pound cow exerts more than 83 pounds per square inch of pressure on soils and streambanks, which is more than five times that of a D-9 Caterpillar tractor. No credible scientist with a knowledge of soils would dispute that a D-9 Caterpillar tractor compacts soils. It is generally accepted in the field of

hydrology that soil compaction decreases infiltration rates, increases runoff, and contributes to increased erosion. Kauffman et al (in press) documented dramatic differences in soil compaction between grazed and ungrazed areas on the MNF in an adjacent subbasin.

29. It is also well documented that other impacts of grazing increases erosion. As detailed in the previous declarations, there is abundant evidence in these watersheds that grazing has elevated erosion and sedimentation. Based on available information and evidence in the corridor watersheds, it is spurious for Borman et al. to suggest that unless compaction, erosion, and sedimentation has been measured it may be meaningless conjecture Convergent evidence and the body of knowledge on grazing effects clearly indicate that grazing has elevated erosion and sedimentation. Notably, this is assessment is corroborated by the MNF's Watershed Analysis (1999), although it is completely ignored by Borman et al., as is the body of knowledge on the effects of grazing on erosion and sedimentation. To be sure, measurement would allow quantification of the degree of alteration of erosion and sedimentation within the subject area, but it is certainly not the prime determinant of whether it exists.

30. Similarly, research has repeatedly demonstrated that elevated sedimentation contributes to the loss of pools, as the state-of-art review by Buffington et al. (2002) clearly indicates. Again, measurement would aid in quantifying how much this is occurring, but is not a necessary requisite for assessing whether it is occurring. Rather, the conjecture by Borman et al. that this may be meaningless is in considerable conflict with a large body of literature that Borman et al. completely ignores.

A widely held scientific view is that rest from grazing is needed to allow riparian and stream recovery.

31. Numerous scientific assessments of the effect of grazing on riparian and stream recovery have concluded that at least several years of grazing rest is warranted to allow recovery

of degraded riparian and stream systems. This includes the USFS's own experts on aquatic impacts and grazing effects on aquatic resources (Clary and Webster, 1989; Platts et al., 1991; Sedell et al., 1997). Notably, Platts' (1991) evaluation of the compatibility of grazing with protection of fish habitat was based on a review of different types of grazing management strategies.

32. Evaluations of fish habitat conditions affected by grazing, at scales ranging from the reach to the regional, have repeatedly recommended the temporary or permanent elimination of riparian grazing in degraded riparian areas in order to initiate and/or accelerate the recovery of riparian vegetation, channel conditions, and fish habitat conditions, especially in degraded areas (Clary and Webster, 1989; Beschta et al., 1991; Anderson et al., 1993; Henjum et al., 1994). Skovlin (1984, as cited in Clary and Webster, 1989) recommended at least five years of rest for degraded areas prior to re-introducing grazing under proper management. The USFS and USBLM's publication on grazing management in riparian areas (Leonard et al., 1997[3]), states:

> Livestock grazing in riparian areas, however, may not always be entirely compatible with other resource uses or values. Where soils in riparian areas are unstable, the vegetation complex is fragile, threatened and endangered plants and/or animals are affected, aquatic or recreation values are high, municipal watersheds are involved, etc., special livestock management prescriptions must be applied. In some cases, excluding livestock grazing may be the most logical and responsible course of action (at least for a time sufficient to achieve a level of recovery and stability that can support grazing in the context of the management objectives).

Notably, the riparian areas and streams in the watersheds of the Malheur and North Fork Malheur wild and scenic corridors meet at least one or more these criteria.

33. Although Borman et al. takes issue with Dr. Kauffman's reasoned assessment that rest from grazing is needed to allow riparian and stream recovery in these degraded systems,

[3] One of the authors is Borman of Borman et al.

available scientific assessments demonstrate that this is a widely shared view among scientists who have researched the matter. While it has been suggested that there are grazing strategies that are compatible with the recovery of degraded riparian systems, there appear to be limited data to corroborate this claim and data do not appear to exist that indicate that any riparian grazing strategy can result in the same rate of recovery of riparian vegetation and channel conditions as can be achieved with elimination of riparian grazing (Rhodes et al., 1994).

Borman et al. have no basis for asserting that the cited grazing studies are not applicable.

34. Borman et al. arbitrarily asserts that many of the studies cited in the declarations of Kauffman and myself are not germane because settings and grazing treatments were not explained. It is notable that Borman et al. provides no information whatsoever to support the contention that these studies are not applicable. The declarations of Dr. Kauffman and I did indeed discuss settings and grazing treatments for many of the studies cited. The studies of Magilligan and McDowell (1997), Kauffman et al. (2002), Brookshire et al., (2002), Rhodes and Greene (in process), and Kauffman et al (in press) were conducted in Interior Oregon in areas with geology, vegetation, and climate similar to the watersheds of the wild and scenic corridors' watersheds. These studies involved grazing treatments similar to those existing in these allotments. Moreover, many of the studies cited in the declarations of Dr. Kauffman and I involved grazing treatments that had similar or lower levels of impacts on riparian and aquatic systems than the current grazing management employed in the Wild and Scenic corridors' watersheds (e.g., Kauffman et al, 1983; Clary, 1999; Brookshire and Kauffman, 2002; Kauffman et al (in press)). If one wishes to assert that these and the other cited studies are not applicable, some compelling rationale needs to be provided, based on specific aspects of the studies. Borman et al. did not do this, but instead applied sweeping generalizations in an effort to

discount the results of applicable scientific research with which they apparently disagree.

There is no compelling rationale for asserting that current degradation is primarily due to historic impacts.

35. There is no dispute that various aspects of the aquatic and riparian systems have been degraded. However, Borman et al. repeatedly ascribe most of it to historic grazing. While it is probable that historic grazing had a significant role in the degradation, Borman et al. provide no strong evidence that current grazing effects have a limited, minimal role in contributing to and maintaining these conditions. As previously stated, conditions in ungrazed reaches within the area consistently indicate otherwise: these measured conditions indicate that current grazing is thwarting or significantly retarding the recovery of overhanging banks, bank stability, channel width, width/depth ratios, pool volume and quality, vegetative cover, stream shade from woody riparian vegetation, and water temperature.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

DATED this 17th day of May 2004.

s/ Jonathan J. Rhodes

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Jonathan J. Rhodes

Literature Cited in Addition to Literature Cited in First Declaration of Jonathan J. Rhodes

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