

**JA-13 Table 1. MET CS 4 Rank Reliability of Different Types of Evidence
Used to Verify Trail Location¹**

Relevant Evidence:² All the Relevant Written, Cartographic, Physical, and Artifact Evidence		Relative Reliability Ranking Of Evidence: 1 - 8 (1 is the highest)¹								Documented (Doc.) Evidence³	
Supporting Evidence^{4A&4B}	Conflicting Evidence^{5A&5B}	1	2	3	4	5	6	7	8	Support_{6A}	Conflict_{6B}
1A. 1846 & 1847 Diaries ⁷		X								Doc.	
1B. 1846 Pringle Diary: Bad Rds		X								Doc.	
1C. 1847 Hulin Diary: Bad Rds - rough, hilly, and sidling		X								Doc.	
2. 1855 GLO Survey & 1856 Map ⁸						X				Doc.	
3A. Mapping Action Plan ⁹ (Ox Bow)									X	Doc.	
3B. Appendix H. Ox Bow									X	Doc.	
3C. Maps (Support Ox Bow)						X		X		Doc.	
3C1. 1856 GLO Map (Ox Bow)						X				Doc.	
3C2. 1894 GLO Map (Ox Bow)						X				Doc.	
3C3. 1895 Official County Map (Ox Bow)									X	Doc.	
3C4. 1904 Mining Map (Ox Bow)									X	Doc.	
3C5. 1904 Map of Oregon (Ox Bow)									X	Doc.	
3C6. 1904 Riddle Quadrangle (Parts of North Ox Bow)									X	Doc.	

3C7. 1900 - 1901 Penny House (Along North Ox Bow)									X		Doc.	
3C8. 1995 Atlas (Ox Bow)									X		Doc.	
3C9. 1995 First There Was Twogood (Ox Bow)										X	Doc.	
3C10. The South Road										X	Doc.	
3C11. Cut-Off Road (Ox Bow)										X	Doc.	
3D. Appendix J. 1874 Survey								X			Doc.	
3.E. Sec. VI.D.1.a) Ridges (Sidling)										X	Doc.	
3.E. Maps: Topo Ridges (Sidling)							X				Doc.	
3.D. Sec. VI.D.1.b) Soils (Rd Stability)										X	Doc.	
3.D. Maps: Soils (Rd Stability)							X				Doc.	
4A. Hugo High Road ¹⁰ (2008)							X			X	Doc.	
4B. Sec. II.C. GLO 1855 Prairies Survey & 1856 Mapping							X				Doc.	
4C. Sec. II.D. Hugo Land Patents: 1800s							X				Doc.	
4D. Sec. III.C. Topography & Water, Winter Wet Areas										X	Doc.	
4E. Sec III.D. Roads & Traces										X	Doc.	
Maps (not listed)										X	Doc.	
5. Analysis of 1855 General Surveyor Office Of Oregon's Field Notes ¹¹										X	Doc.	

6.A Indian Trail Over Grave Creek Hills: 1855 ¹² (2012)											X	Doc.	
6B. Chpt. II											X	Doc.	
6C. Chpt. III.											X	Doc.	
6D. Chpt. IV.											X	Doc.	
6E. Sec. VI.D.												Doc.	
Appendix E. GLO Surveyors Lake & Hyde											X	Doc.	
Appendix G. Reports, Diaries, Journals, & Reminiscences											X	Doc.	
Maps (not listed)											X	Doc.	
7A. Bad Roads (Rough, Hilly and Sidling) at Applegate Trail Ox Bow ¹³											X	Doc.	
7B. Map HM-1. Original 1855 Oregon Surveyor GLO Map of Township											X	Doc.	
7C. Map HM-2. 1855 JR Of Applegate Trail: Section 27, T.34 S., R.6 W, W.M.											X	Doc.	
7D. Map HM-3. Hugo's Applegate Trail & Indian Trail GLO Surveyed Sites											X	Doc.	
7E. Map HM-4. 1895 Official Josephine County, Oregon Map											X	Doc.	
7F. Map HM-5. IV-7A to IV-8A to JA-14: 1902											X	Doc.	
7G. Map HM-6. Penny's High Road House											X	Doc.	
7H. Map USGS 1. IT-4 Bummer Creek Prairie: IV-7A to IV-8A to JA-12C: 1902											X	Doc.	

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7I. Map USGS 2. Ridges & Passes: Oxbow Of the Applegate Trail Sexton Pass											X	Doc.	
7J. Map USGS 3. Topographic Features & Roads: Garbers Pass Through North Oxbow											X	Doc.	
7K. Map USGS 4. Jacksonville Road Of Applegate Trail											X	Doc.	
7L. Map 1-AA. 1855 GLO Survey Notes For Section 27, T.34S., R.6W., W.M.											X	Doc.	
7M. Map 2-AA. Oxbow of Applegate Trail Maps											X	Doc.	
7N. Map 3-AA. 1895 Official Josephine County, Oregon Map											X	Doc.	
7O. Map 4-AA. Old Smith Hill Pass Of Applegate Trail: 1901 - 1902											X	Doc.	
8. 1895 Official Map of Josephine County ¹⁴ (2014)											X	Doc.	
9A. Educational Brochures ¹⁵											X	Doc.	
9B. Penny Ridge JA-13A											X	Doc.	
9C. Old Heller Road of Applegate Trail: Penny Ridge JA-13B											X	Doc.	
9D. Applegate Trail: Boldway Property JA-13C											X	Doc.	
9E. Applegate Trail: White Property JA-13D											X	Doc.	
9F. White's Place & Applegate Trail JA-13E											X	Doc.	

	10.A Indian Trail Over Grave Creek Hills: 1855 ¹⁶										X		Doc.
	10B. 2013. <i>OCTA Authentication Process for Penny Ridge JA-13 Applegate Trail Site.</i> Email.										X		Doc.
	10C. 2013. <i>Analysis of Point JA-13 Penny Ridge As A Possible Site on the 1846 Applegate Trail.</i> Paper.										X		Doc.
	10D. 2013. <i>Investigation of Applegate Trail Oxbow.</i> Paper										X		Doc.
	10E. 2014. <i>The Oxbow More than Likely as it Is Shown on Plat and Probably There Is No Oxbow In The Road.</i> Emails.										X		Doc.
	10F. 2014. <i>Questionable Oxbow.</i>										X		Doc.
	10G. 2014 Paper: 1846 Applegate Trail "Oxbow"										X		Doc.
	10H. 2014 Vote by GLO Field Review SubCommittee, HETC										X		Doc.

Footnotes: JA-13 Table 1 is part of the document entitled, *Scientific & MET Manual Methods*.

Walker, Mike, Co-Project Leader, HETC; Education Chair, HNAHS. Draft July 4, 2012; Updated May 3, 2015. *Scientific & MET Manual Methods*. Hugo, OR.

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1. MET CS 4. Rank Reliability of Different Types of Evidence Used to Verify Trail Location (Trail Mapping Committee, Office of National Trails Preservation & Oregon-California Trails Association. July 2002, 4th edition. *Mapping Emigrant Trails MET Manual*. Independence, MO; MET, pps. 5 - 8). JA-13 Table 1 is not analysis. It is a summary of the researchers's interpretive opinions which are based on a separate researcher's analysis.
 2. MET CS 1. Examine All the Relevant Written, Cartographic, Physical, and Artifact Evidence (MET, p. 5). Only one of the two "Relevant Evidence" columns (i.e., supporting an conflicting evidence) is to be filled out with identifier of the specific evidence. The labels of "supporting" and "conflicting" are the nomenclature of the prediction (Section III.B.4.). When a researcher arrives at the point of identifying a prediction the mutually supporting evidence for the prediction is the "supporting" evidence, and any opposing evidence is identified as "conflicting" evidence.

An analogy of supporting and conflicting evidence and why they are equal follows. For the analogy the hypothesis is a local government's decision. Before a local government, a participant is dissatisfied with a local government's decision and has a right to have that decision reviewed; a process generally called an appeal. The person appealing is the appellant, who is appealing the local government, the respondent (the party who must respond to the appeal). In law, intervention is a procedure to allow a nonparty, called intervenor to join ongoing litigation, either as a matter of right or at the discretion of the court, without the permission of the original litigants. The basic rationale for intervention is that a judgment in a particular case may affect the rights of nonparties, who ideally should have the right to be heard. Those supporting the appellant are intervenor appellant; those supporting the respondent are intervenor respondent.

3. MET CS 1. Document All the Relevant Written, Cartographic, Physical, and Artifact Evidence (MET, p. 5). If it is not documented, it does not have a rating (i.e., it does not exist for review). Both of the "Documented Evidence" columns (i.e., supporting an conflicting evidence) need to be filled out.
4. Specific type of supporting evidence.
 - 4A. Supporting evidence without conflicting evidence needs documentation. The following observation applies to 4A, 4B, 5A, and 5B. According to the MET, compliance requires supporting and any conflicting evidence documentation in both the "Documented Evidence" columns. In this case, the researchers promoting supporting and conflicting evidence are not in compliance with the requirement of analyzing the merit of the opposing researchers' evidence.
 - 4B. Supporting evidence with conflicting evidence also needs to document the confidence of the conflicting evidence (Footnote 6B). In this case, only one of the two "Documented Evidence" columns is documented, indicating a compliance failure with the MET.
 - 5A. Conflicting evidence needs documentation.
 - 5B. Conflicting evidence also needs to document confidence in the supporting evidence (i.e., Footnote 6A).
 - 6A. Supporting evidence is documented.
 - 6B. Conflicting evidence is documented.

Supporting Evidence Footnotes

7. **1846 & 1847 diaries** quoted in Hugo Mapping Action Plan

8. **1855 GLO Survey & 1856 Map**

9. **Mapping Action Plan** (*Hugo Neighborhood*. May 14, 2005. *Mapping Action Plan For Applegate Trail Program*. Hugo, OR).

10. **Hugo's High Road** (Hugo's High Road Committee, Hugo Neighborhood Association & Historical Society. 2008. *Hugo's High Road: 1881 - 1883, A Work In Progress*. Hugo, OR). Applicable Outline -

I. High Road Hypothesis

II. High Road Historical Setting

C. General Land Office 1855 Prairies Survey & 1856 Mapping

1. GLO Survey: 1855

2. Two Prairies In Sections 21 & 28: 1856

D. Hugo Pioneer Land Patents: 1800s

III. Hugo's High Road: ca., 1881 - 1883

C. Topography & Water

1. Topography

2. Winter Wet Areas (Maple Creek, Heller, Ritchie, & Peterson Wetlands)

D. Roads & Traces (White-Boldway Trace, Penny Logging Road, Heller/Hugo Hills Cutoff, & Ahern Road)

Maps

Map HM-3. Prairies: 1856

Map HM-4. Hugo Pioneer Land Patents

Map HM-5. Hugo Pioneer Land Patents: 1800s

Map HM-6. Gravel Pit Station Neighbors: 1895

Map HM-7. Hugo's Riddle Quadrangle Map: ca., 1901 - 1902

Map HM-8. Mining Map Of Hugo Region: 1904

Map CM-8. Wet Winter Soils & Hugo High Road

Map AM-1. Hugo High Road: ca., 1881 - 1883

Map AM-2. High Road Topo/Water East

Map AM-3. High Road Topo/Water West

Map AM-4. North Ox Bow Road & Applegate Trail

Map AM-5. Penny Ridge Road

Map AM-6 Heller/Hugo Hills Cutoff

11. **Analysis of 1855 General Surveyor Office Of Oregon's Field Notes** (Thompson, Larry; Walker, Mike. November 30, 2008. *Analysis of 1855 General Surveyor Office Of Oregon's Field Notes, By Surveyor Hyde, For Surveyed Point JA-13/Penny Ridge*, Hugo, OR).

12. **Indian Trail Over Grave Creek Hills: 1855** (Hugo Native American Team, Hugo Neighborhood Association & Historical Society. August 12, 2012. *Maps For Use In Identifying & Mapping Indian Trails, Indian Trail Over Grave Creek Hills: 1855*. Hugo, OR; 2012/Updated 2014).

FA. Indian Trail Over Grave Creek Hills: 1855 (Chapters I - V)
FB. Indian Trail Over Grave Creek Hills: 1855 (Chapters VI - IX)
Appendices
Footnotes
Maps

Hugo Native American Program
Hugo Neighborhood Association & Historical Society
http://www.hugoneighborhood.org/Hugo_Native_American_Program.htm

Applicable Outline -

II. 1856 GLO PLAT OXBOW OF APPLGATE TRAIL CONCEPT
A. Applegate Trail In Hugo Region: 1846 - 1883
B. Oxbow Of Applegate Trail Means Multiple Trails
C. Early Land Grants Along Applegate Trail
D. Working Trail Evolution Hypotheses
III. 1856 GLO T.34S., R.6W., W.M. PLAT
A. Reliability Of GLO Notes & Plats
1. GLO Surveyors
2. GLO Rough & Copies Field Notes & Draftsman Transcribed Field Notes
3. GLO Section Line Surveys
C. 1894 GLO Plat for T.34S., R.6W., W.M.
IV. RELEVANT MAPS
C. Map Order Of Usability
VI. INDIAN TRAIL OVER GRAVE CREEK HILLS INTERPRETATIONS
D. Evolution Of The Oxbow Of Indian Trail

Appendices

Appendix E. GLO Surveyors Lake & Hyde
Appendix G. Reports, Diaries, Journals, & Reminiscences

Maps

Map A1. Oxbow Applegate Trail Sections Per 1856 GLO Plat
Map A3. North Oxbow Above Maple Creek Wetlands
Map A4. Hugo's Ridges & Passes: 1901 - 1902

- Map A5. Hugo's Ridges, Passes, & Creeks: 1954
- Map A6. Topographic Features & Roads North Of Garbers Pass: 1998
- Map A7. Alternate Jacksonville Road Routes Of Applegate Trail: 1855
- Map A8.No Oxbow In Indian Trail Over Grave Creek Hills: Interpretation

13. **Bad Roads (Rough, Hilly and Sidling) at Oxbow of Applegate Trail And/or Grave Creek Hills** Never published, no conclusion (Drake, Malcolm, Gradient Consultant; Walker Mike, Co-Project Leader, HETC, HNAHS. Draft June 6, 2012. *Bad Roads (Rough, Hilly and Sidling) at Oxbow of Applegate Trail And/or Grave Creek Hills*. For The HETC, HNAHS. Hugo, OR). Maps supporting the document "Bad Roads (Rough, Hilly and Sidling) at Oxbow of Applegate Trail And/or Grave Creek Hills" were developed to various degrees of completeness.

- Map HM-1. Historical Map 1. Original 1855 Oregon Surveyor General Land Office (GLO) Map of Township: T.34 S., R.6 W, W.M.
- Map HM-2. Historical Map 2. 1855 Jacksonville Road (JR) Of Applegate Trail: Section 27, T.34 S., R.6 W, W.M.
- Map HM-3. Historical Map 3. Hugo's Applegate Trail And Indian Trail GLO Surveyed Sites
- Map HM-4. Historical Map 4. 1895 Official Josephine County, Oregon Map
- Map HM-5. Historical Map 5. IV-7A to IV-8A to JA-14: 1902
- Map HM-6. Historical Map 6. *Penny's High Road House. 1932.*
- Map USGS 1. IT-4 Bummer Creek Prairie: IV-7A to IV-8A to JA-12C: 1902
- Map USGS 2. Ridges & Passes: Oxbow Of the Applegate Trail Sexton Pass: 1954
- Map USGS 3. Topographic Features & Roads: Garbers Pass Through North Oxbow: 1998
- Map USGS 4. Jacksonville Road (JR) Of Applegate Trail: 1855
- Map 1-AA. 1855 GLO Survey Notes For Section 27, T.34S., R.6W., W.M.
- Map 2-AA. Oxbow of Applegate Trail Maps
- Map 3-AA. 1895 Official Josephine County, Oregon Map
- Map 4-AA. Old Smith Hill Pass Of Applegate Trail: 1901 - 1902

14. **1895 Official Map of Josephine County** (Hugo Neighborhood Association & Historical Society. 2014. *1895 Official Map of Josephine County, Oregon As A Genealogical Resource*. Hugo, OR).

15. **Educational Brochures**

- 17A - Penny Ridge JA-13A
- 17B - Old Heller Road of Applegate Trail: Penny Ridge JA-13B
- 17C - Applegate Trail: Boldway Property JA-13C
- 17DA - Applegate Trail: White Property JA-13D
- 17DB - White's Place & Applegate Trail JA-13E

Points of Interest for Applegate Trail Brochure Series
 Applegate Trail Inventory
 Hugo Neighborhood Association & Historical Society
<http://www.hugoneighborhood.org/inventorybrochures.htm>

Conflicting Evidence Footnotes

16. Indian Trail Over Grave Creek Hills: 1855 (2012/Updated 2014).

Chapter IX. Future Investigations

Indian Trail Over Grave Creek Hills: 1855

Applegate Trail Inventory

Hugo Neighborhood Association & Historical Society

<http://www.hugoneighborhood.org/applegat.htm>

1. Malcolm Drake. December 7, 2013. *OCTA Authentication Process for Penny Ridge JA-13 Applegate Trail Site*. Email.

2. Bob Black. December 12, 2013. *Analysis of Point JA-13 Penny Ridge As A Possible Site on the 1846 Applegate Trail*. Paper.

3. Malcolm Drake and Kelly Rarey. December 21, 2013. *Investigation of Applegate Trail Oxbow*. Paper

4. Terry Nickerson. December 9, 2013 & January 7, 2014. *The Oxbow More than Likely as it Is Shown on Plat and Probably There Is No Oxbow In The Road*. Medford, OR. Emails.

5. Roger Roberts. January 20, 2014. *Questionable Oxbow*.

6. Roberts' February 14, 2014 Paper: 1846 Applegate Trail "Oxbow"

7. February 24, 2014 Vote by GLO Field Review SubCommittee, HETC (Section IX. A.5.d)

February 24, 2014 Meeting Minutes of the GLO Field Review SubCommittee, Hugo Emigrant Trails Committee – Tap Rock - Evergreen Rm

Attendance: Jim and Rene Ford, Joe and Leta Neiderheiser, Bob Black, Mike Walker, and Kelly Rarey.

Roger Robert's information – Kelly

1. Roger Robert – (Oregon Professional Land Surveyor) Roger's extensive information seems to be all inclusive supporting no Oxbow. (See emails to Kelly dated February 14, 2014 and Maps January 10, 2014.)

2. Two motions were made to vote on the Oxbow question:

Bob Black's motion with Kelly Rarey as second. "There is a surveying error in the field notes describing the topography along the section line. The topography is reversed from Penny Ridge to Maple Creek." Seven votes "Yes" – Unanimous.

Bob Black's motion with Joe Neiderheiser as second. "The Jacksonville Road is misrepresented as being on the Penny Ridge. The Jacksonville Road is on Maple Creek, resulting in no Oxbow." Six votes "Yes"; One vote "No".