Atlantic Richfield Company

Anthony R. Brown
Project Manager, Mining

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September 26, 2016

Lynda Deschambault
Remedial Project Manager, Superfund Division
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street, 10th Floor (SFD 7-1)
San Francisco, California 94105

Subject: **August 2016 Report of Cultural Resource Monitoring within the Expanded Area of Potential Effects**
Leviathan Mine Site
Alpine County, California

Dear Ms. Deschambault:

This letter summarizes the cultural resource monitoring activities conducted by Atlantic Richfield Company in August 2016 within the expanded Area of Potential Effects (APE) for the Leviathan Mine Site in Alpine County, California. Cultural resource monitoring associated with 2016 Remedial Investigation/Feasibility Study (RI/FS) ground-disturbing field activities within the expanded APE are being performed in accordance with the Section 106 protocols (protocols) presented in the U.S. Environmental Protection Agency's (U.S. EPA) letter dated April 19, 2016. The protocols state that U.S. EPA "shall provide a monthly letter summary report to the consulting parties." In addition, "the monthly report will be provided to the parties within 30 days after the end of the reporting month, and will include a letter summarizing the month's activities and cultural resources found, and the actions taken to avoid any such resources." We understand that U.S. EPA will use the information provided in this letter to prepare the monthly letter summary report to the consulting parties.

The RI/FS is being conducted in accordance with the requirements of the Statement of Work attached to the *Administrative Order for Remedial Investigation and Feasibility Study, Comprehensive Environmental Response, Compensation, and Liability Act Docket No. 2008-18* issued by the U.S. EPA on June 23, 2008.

Provided below is a summary of RI/FS ground disturbing activities conducted within the expanded APE with a Washoe Tribal Monitor from August 1 through August 31, 2016.

- Two historic roads associated with mine expansion and exploration were observed at LOC – 37 and LOC – 41 in July of 2016. The road at LOC-41 was documented in late July and the road at LOC-37 was documented during the month of August. Site records are included in this August 2016 monthly report.

- In July, several cultural resources were observed outside of the 30 meter buffer for drilling locations LOC-37, LOC-39, and LOC-40. The cultural resources were avoided during drilling activities, and they were documented in August.

- Ground disturbance activities including minor grading and plant grubbing associated with preparing the drill pad at LOC – 37 were monitored. No additional cultural resources were observed.

- Ground disturbance activities including minor grading and plant grubbing associated with preparing the drill pad at LOC – 41 were monitored. No additional cultural resources were observed.

- Drilling activity at LOC-39 was monitored for cultural resources from ground surface to 10 ft. blow ground surface. No cultural resources were observed.

- Habitat-related plant and soil sampling was conducted in the Downstream Study Area located on Bryant Creek and in the Reference Study Area on Mountaineer and Cottonwood Creeks. No cultural resources were observed during the sampling task; however, one prehistoric resource was identified in an area adjacent to sampling activities on Cottonwood Creek. Amec Foster Wheeler will return to document this site as the field schedule permits, and a completed site record with be submitted in a future monthly report.

- Floodplain sampling was conducted in the Reference Study Area, Downstream Study Area, and River Ranch. No cultural resources were observed.

Attached site records (on the relevant SHPO forms) and maps showing the locations of sampling activities and any cultural resources documented in August within the expanded APE. The following site records have not been submitted for SHPO review and, thus, have temporary site number assignments. The final site records with California state and U.S. Forest Service assigned numbers will be incorporated into the Humboldt-Toiyabe National Forest Cultural Resource Narrative Report for the Cultural Resource Narrative Report for the Leviathan Mine Cultural Resources Inventory, Forest Service Report R2013041702306 via Addendum No. 4 to be prepared after the 2016 field season. Addendum No. 4 will include the following:

- Temporary site no. **JDH_1601** is a historic mine-related road segment that terminates at a well head. This site was identified and recorded with a Washoe tribal monitor as a result of a Class III survey of drilling LOC-41 conducted in July, 2016.

- Temporary site no. **JDH_1603** is a historic mine exploration road with associated features and artifacts. This site was identified and recorded with a Washoe tribal monitor as a result of a Class III survey of drilling LOC-37 conducted in July, 2016.

- Temporary site no. **JDH_1604** is a multicomponent site that consists of both a historic debris scatter and prehistoric lithic scatter. This site was identified and recorded with a

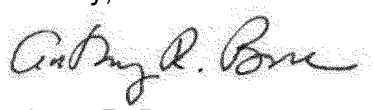
Washoe tribal monitor as a result of a Class III survey of drilling LOC-37 conducted in July, 2016.

- Temporary site no. **JDH_1605** is a multicomponent site that consists of both a historic debris scatter and prehistoric lithic scatter. This site was identified and recorded with a Washoe tribal monitor as a result of a Class III survey of drilling LOC-39 conducted in July, 2016.

- **P-02-000981/CA-ALP-727H (Update)** was recorded by Amec in 2013 and included in the Humboldt-Toiyabe National Forest Cultural Resource Narrative Report for the Cultural Resource Narrative Report for the Leviathan Mine Cultural Resources Inventory, Forest Service Report R2013041702306. This site was reevaluated and documented in August 2016 following the expansion of the project APE for remedial investigations for 2016. P-02-000981/CA-ALP-727H was originally described as a ranching complex and a mining complex. Several additional historic features and artifacts were documented, as well as the addition of a prehistoric component. This site was reevaluated and documented with a Washoe tribal monitor as a result of a Class III survey of drilling LOC-40 conducted in July 2016.

If you have any questions or comments, please feel free to contact me at (714) 228-6770 or anthony.brown@bp.com.

Sincerely,



Anthony R. Brown
Project Manager, Mining

cc: Josh Wirtschafter – U.S. EPA Region 9 – via electronic copy
Lily Tavassoli – U.S. EPA Region 9 – via electronic copy
Greg Reller – Burleson Consulting, Inc. – via electronic copy
Nathan Block, Esq., BP – via electronic copy
Adam Cohen, Esq., Davis Graham & Stubbs, LLP – via electronic copy
Brian Johnson, Atlantic Richfield Company – via electronic copy
Marc R. Lombardi – Amec Foster Wheeler
Jason Cooper - Amec Foster Wheeler

P:\Project\13000s\13091 Leviathan\4000 Regulatory\4150 RIFS Reports\5 Cultural Resources\2016 Monthly Reports\August\160926 August_2016_Sect 106 LtrRpt.docx

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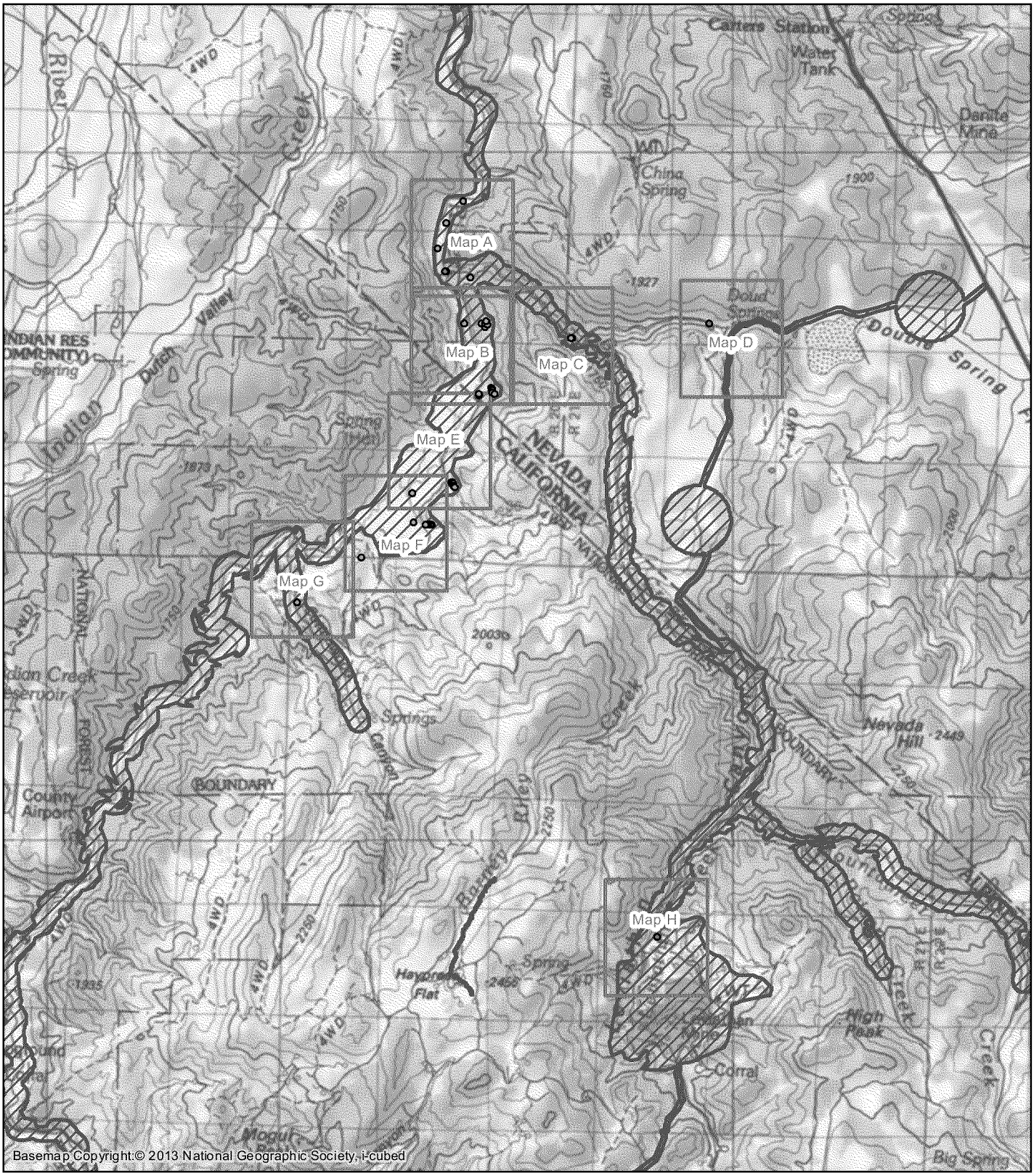


(259,280 4,285,315) UTM Zone 11N NAD83 (274,266 4,285,315)

0 1,000 2,000 4,000
Meters

N

1:80,000

amec foster wheeler

Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Map Extent
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1
August Sampling Locations Map Key

(265,227 4,299,766) Coordinates for Map Corners (266,715 4,299,766)

(265,227 4,298,077) UTM Zone 11N NAD83 (266,715 4,298,077)

0 100 200 400
Meters

N

1:7,940

amec foster wheeler

Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1A
August Sampling Locations

(265,226 4,298,193) Coordinates for Map Corners (266,714 4,298,193)

(265,226 4,296,504) UTM Zone 11N NAD83 (266,714 4,296,504)

0 100 200 400
Meters

N

1:7,940

amec foster wheeler

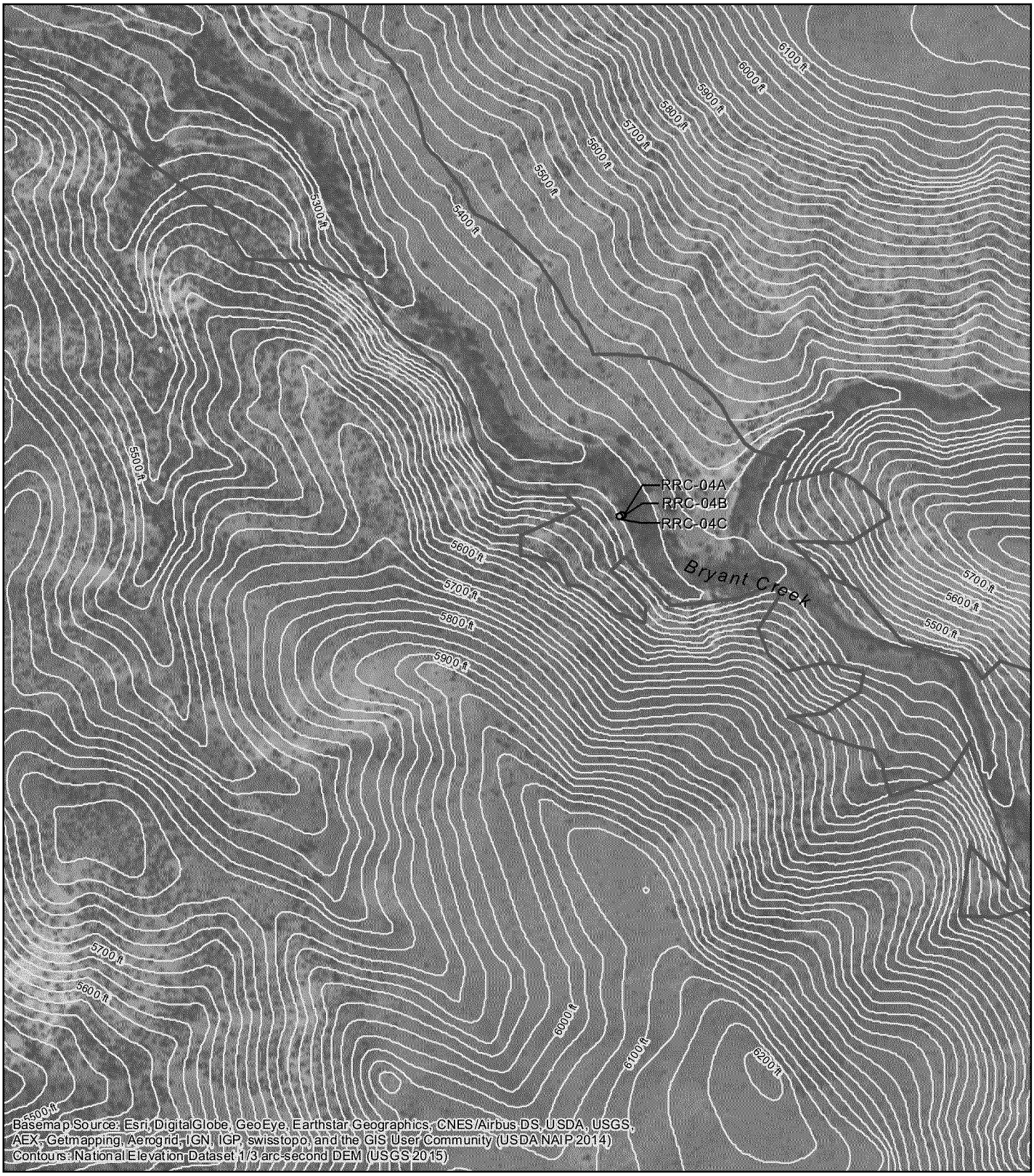
Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1B
August Sampling Locations

(266,684 4,298,190) Coordinates for Map Corners (268,172 4,298,190)



(266,684 4,296,501) UTM Zone 11N NAD83 (268,172 4,296,501)

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Meters

N

1:7,940

Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1C
August Sampling Locations

(269,163 4,298,300) Coordinates for Map Corners (270,650 4,298,300)

(269,163 4,296,611) UTM Zone 11N NAD83 (270,650 4,296,611)

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Meters

1:7,940

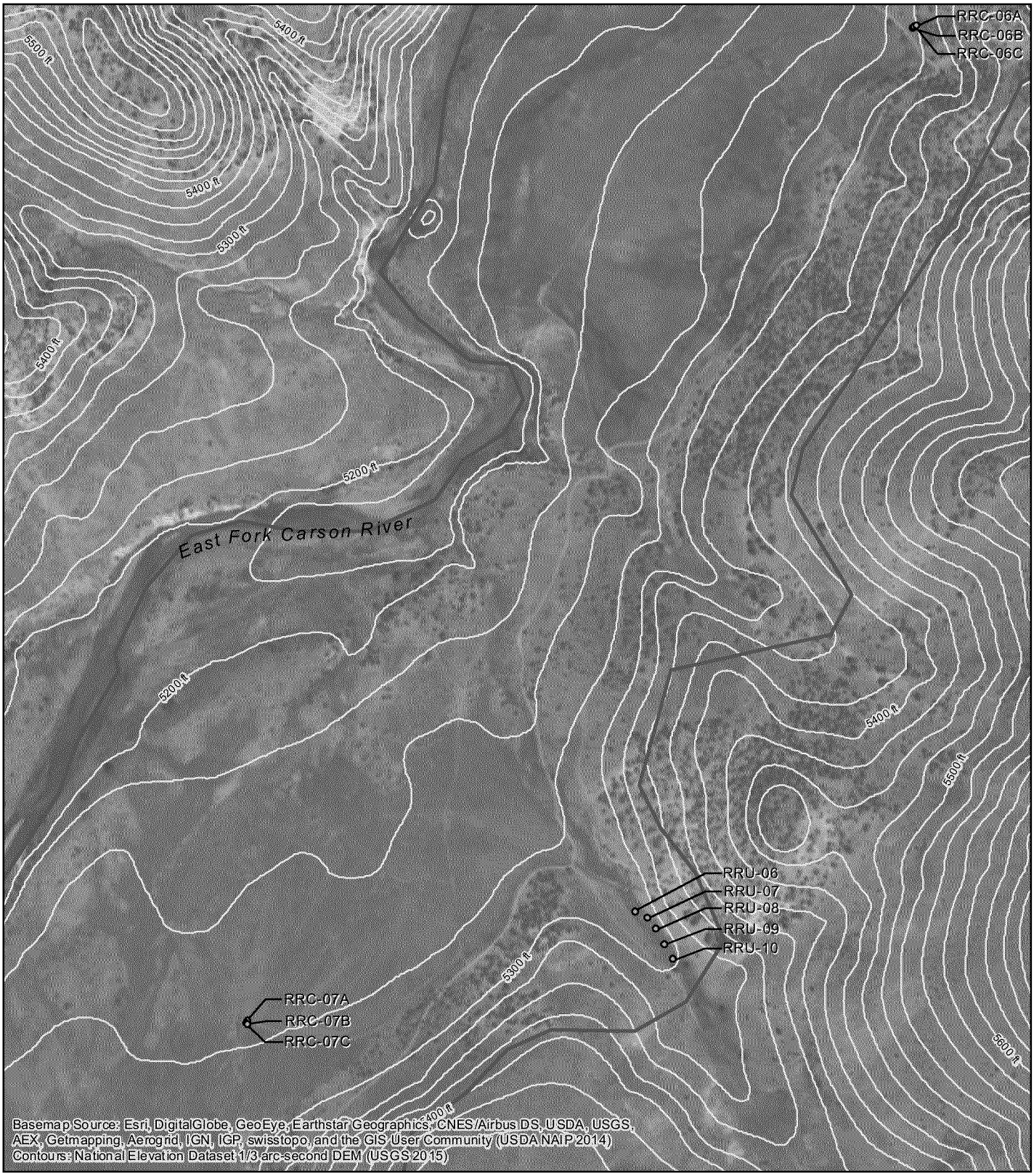
Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1D
August Sampling Locations

(264,905 4,296,666) Coordinates for Map Corners (266,392 4,296,666)



(264,905 4,294,977) UTM Zone 11N NAD83 (266,392 4,294,977)

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Meters

N

1:7,940

Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1E
August Sampling Locations

(264,269 4,295,464) Coordinates for Map Corners (265,756 4,295,464)

(264,269 4,293,775) UTM Zone 11N NAD83 (265,756 4,293,775)

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Meters

N

1:7,940

Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1F
August Sampling Locations

(262,896 4,294,792) Coordinates for Map Corners (264,384 4,294,792)

(262,896 4,293,103) UTM Zone 11N NAD83 (264,384 4,293,103)

0 100 200 400
Meters

1:7,940

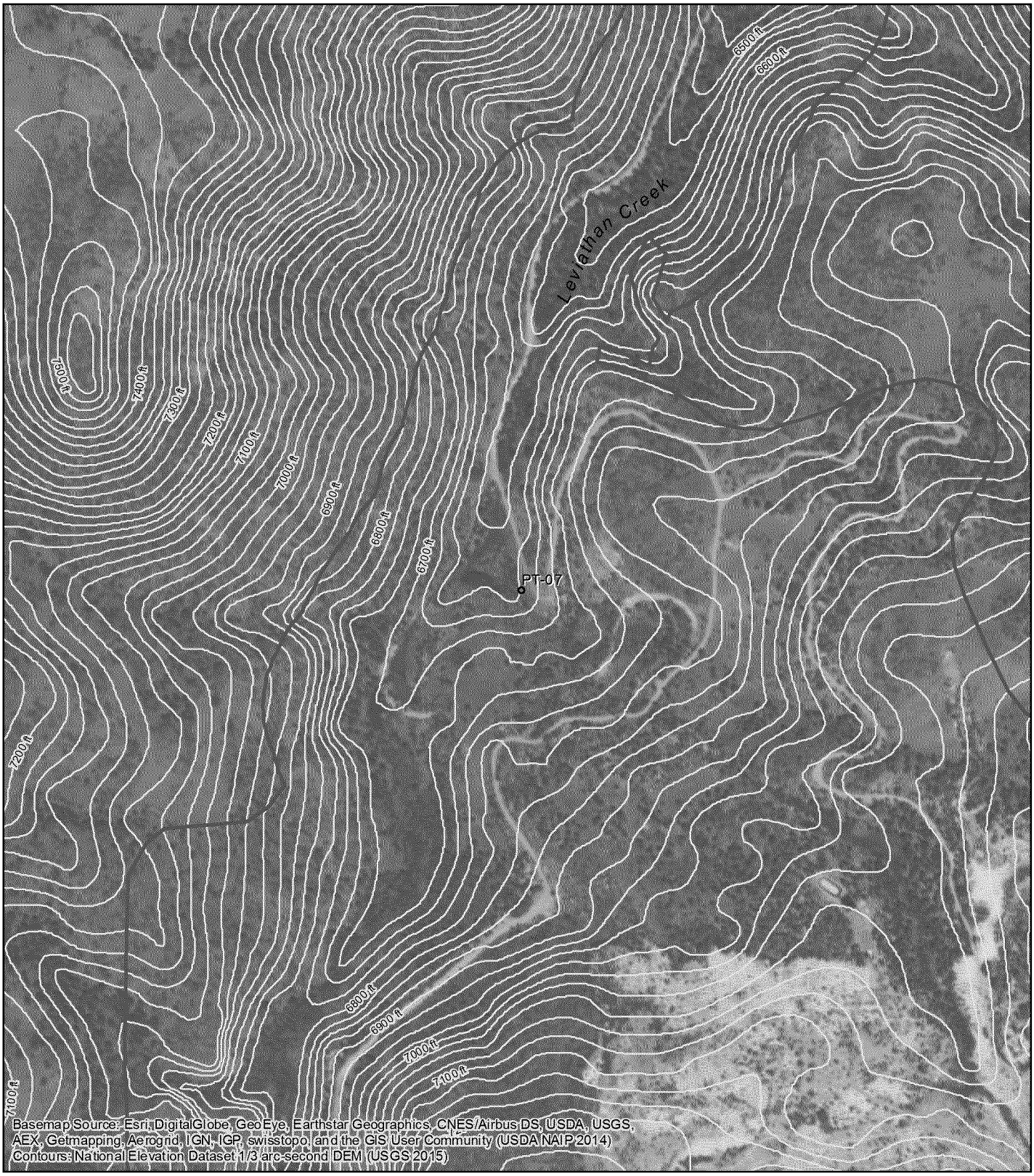
Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1G
August Sampling Locations

(268,065 4,289,570) Coordinates for Map Corners (269,552 4,289,570)



(268,065 4,287,881) UTM Zone 11N NAD83 (269,552 4,287,881)

0 100 200 400
Meters

1:7,940

Project Data

- River Ranch Sampling Location
- Plant Soil Sampling Location
- Updated APE

Amec Foster Wheeler Project # 0013091132
Figure Date: September 23, 2016
Map By: TAM
Approved By: JDH

Figure 1H
August Sampling Locations

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # HRI# Trinomial NRHP Status Code
Other Listings Review Code _____ Reviewer _____ Date _____	

Page 1 **Of** 11 ***Resource Name or #:** JDH_1601

P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County** **Alpine**

And

***b. USGS 7.5' Quad: Heenan Lake**	**Date** 1979	**T**	**10 N**	**;R**	**21 E**	**;**	**NW**	**1/4 of**	**SE**	**1/4 of**	**SW**	**1/4 of**	**15**	Sec;	Mt Diablo **B.M.**

c. Address None City , CA Zip

d. UTM: NAD 83 Zone 11 ; 268,392 mE/ 4,287,789 mN (centroid)

e. Other Locational Data:

***P3a. Description:** This site consists of a two-track road alignment and wellhead located on an east facing slope above Leviathan Creek, and upstream of Delta Seep. The site is situated within a Jeffrey pine forest with an understory of sagebrush, bitterbrush, and various seasonal grasses. The site also contains various riparian grasses bordering the west bank of Leviathan Creek. The site contains one discontinuous two-track road segment (Segment-01) that terminates at a wellhead. The road segment trends west-northwest and is truncated to the east by Leviathan Creek and a portion of the road is bisected by a modern barb wire and T-post mine property fence. The southern boundary is not clearly defined due to channelization of Leviathan Creek and improvements to the Delta Seep access road. The terminus of the road segment to the northwest ends at a wellhead (F-01). Artifacts include a segment of steel pipe, a segment of braided steel cable, a rectangular food can, and a milled lumber fragment.

***P3b. Resource Attributes AH7. Roads; AH5. Wells**

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (isolates, etc.)

P5b. Description of Photo: Site Overview and Segment 01, road facing north/northwest, 7-26-2016, 20160726_140254.jpg

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:** State of California Regional Water Resources Control Board – Lahontan Region

***P8. Recorded by:** J. Huddleston, and L. Huddleston,
Amec Foster Wheeler, 961 Matley Lane #110, Reno, NV 89502

***P9. Date Recorded:** 7-26-2016

***P10. Survey Type:** Intensive Survey

***P11. Report Citation:** Cultural Resource Narrative Report for the Leviathan Mine Cultural Resources Inventory, Forest Report R2013041702306

***Attachments:** ☐None ☒Location Map ☒Sketch Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☒Archaeological Record ☐District Record ☒Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☒Photograph Record ☐Other

*A1. Dimensions: a. Length 585 (ft) x b. Width 45 (ft); orientation of long axis: North-South

Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☒ Other: GPS/GIS data

Method of Determination: ☒ Artifacts ☒ Features ☐ Soil ☐ Vegetation ☒ Topography

☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other:

Reliability of Determination: ☒High ☐ Low Explain: Ground visibility was good.

Limitations: ☐Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☐ Vegetation ☐ Other:

A2. Depth: ☐ None ☒Unknown Method of Determination: Survey

*A3. Human Remains: ☐ Present ☒ Absent ☐ Possible ☐ Unknown:

*A4. Features: The site consists of a road segment and wellhead.
Segment 1 is a two-track road segment that is approximately 600 feet (ft.) long and varies between 8 and 10 ft. in width. The road segment trends west-northwest and is truncated to the east by Leviathan Creek and a portion of the road is bisected by a modern barb wire and T-post mine property fence. The southern boundary is not clearly defined due to channelization of Leviathan Creek and improvements to the Delta Seep access road. The terminus of the road segment to the northwest ends at a wellhead.
Feature F-1 is a wellhead that is constructed with a 16 inch (in) circular steel cap with 12 1-in. rivet holes mounted on a 12 in. (two piece) welded pipe casing. The top of the wellhead has a threaded pipe that is 1" x 1 ¼" with a 1 ½" coupling. A single 2 ½ ft. pipe (37 in. long) is welded horizontally to the southern side of the wellhead.

*A5. Cultural Constituents: Artifacts at the site consist of mining related items and a single food can. **Artifact A-01** is a six foot segment of steel pipe located approximately 30 ft. downslope of the wellhead. Steel pipe segment is 18 inches (in) in diameter with 10" and 4" vertical cuts along its' length. **Artifact A-02** is a segment of 1 in. steel braided cable. **Artifact A-03** is a rectangular key wind top strip can (crushed) (308h). **Artifact A-04** is a fragment of milled lumber located adjacent to A-02.

*A6. Were Specimens Collected? ☒ No ☐ Yes

*A7. Site Condition: ☒ Good ☐ Fair ☐ Poor Disturbances:

*A8. Nearest Water: Leviathan Creek (52 ft)

*A9. Elevation: 609-612 m AMSL, interpreted from map

A10. Environmental Setting: *See Continuation Sheet for detailed description.*

A11. Historical Information:

*A12. Age: ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945
☒ Post 1945 ☐ Undetermined Dates:

A13. Interpretations: This site represents earlier well development for Leviathan Mine. *See Continuation Sheet*

A14. Remarks: A Class III survey was conducted preceding drilling activity. Cultural Resources were identified and documented prior to drilling in support of Leviathan Mine remedial investigations and feasibility studies.

A15. References:

A16. Photographs: See Photograph Record
Original Media/Negatives Kept at: Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

*A17. Form Prepared by: Jesica Huddleston Date: 8/25/2016

Affiliation and Address: Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

L1. Historic and/or Common Name: N/A

L2a. Portion Described: ☒ Entire Resource ☐ Segment ☐ Point Observation Designation:
b. Location of point or segment: Located on the west side of Leviathan Creek above Delta Seep. Trends southwest to northeast.

L3. Description: Historic two-track well access road. *See Continuation Sheet for detailed description.*

L4. Dimensions:
a. Top Width: fluctuates between 8 and 10 ft.
b. Bottom Width: N/A
c. Height or Depth: N/A
d. Length of Segment: 620 ft.

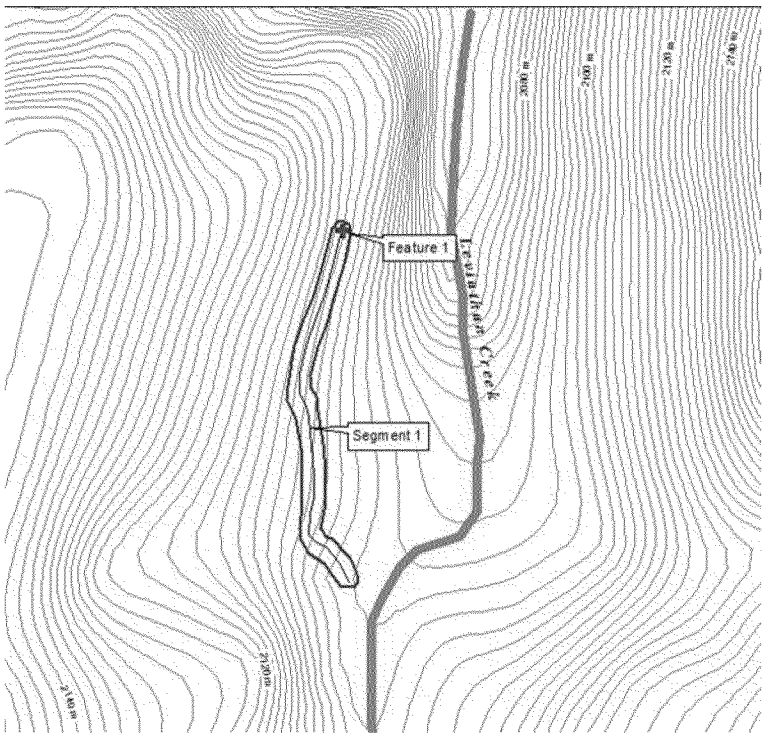
L5. Associated Resources: Leviathan Mine

L4e. Sketch of Cross-Section Facing: West/Northwest

L6. Setting: Jeffrey Pine/Sage woodland located above a waterfall on Leviathan Creek with successive pools.

L7. Integrity Considerations: Overgrown vegetation. Approximately 60 to 80 years of tree growth within road parameters. Segments of the road have been buried due to slope wash and falling rock.

L8a. Photograph, Map, or Drawing



L8b. Description of Photo, Map, or Drawing: Map of JDH-1601 showing location of Segment-01.

L9. Remarks:

L10. Form Prepared by:
J. Huddleston and L. Huddleston
Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

L11. Date: 8/26/2016

Location Where Collected Specimens are Curated: N/A

Artifact #	Type	Condition	Description (form, material, etc.)	Dimensions (cm) L W TH	Locational Data (UTM Zone 11 NAD83) Easting / Northing	Sketch/ Photo	Collected?
A-01	Metal	C	Steel pipe segment with welded vertical cuts	Appx. 6 ft. long, 18 in. in diam.	268,420 / 4,287,872	Yes	No
A-02	Metal	F	Segment of steel braided cable	1 in. diam.	268,408 / 4,287,863	Yes	No
A-03	Metal	F	Rectangular key wind opened food can, crushed	-	268,399 / 4,287,826	No	No
A-04	Wood	F	Milled lumber fragment	-	268,408 / 4,287,863	Yes	No

Type Key: (list abbreviations used)	Condition Key:
	F Fragmentary C Complete Other:

*Recorded by: Jesica Huddleston and Loren Huddleston *Date: 7-26-2016 ☒ Continuation ☐ Update

A10. Environmental Setting:
JDH_1601 is cut into the toe/slope of an east facing slope. The site is situated within a juniper/sage woodland with rosehips, bitterbrush, mountain mahogany, and various seasonal grasses. On-site vegetation also includes various wetland grasses to the east bordering the stream channel of Leviathan Creek. The site is located upstream and to the southeast of Delta Seep and is adjacent to a waterfall with three successive pools on Leviathan Creek.

A13. Interpretations: Continued
JDH-1601 is a mining related two-track road and wellhead location. These historic features and associated debris are recommended **Not Eligible** for inclusion in the National Register of Historic Places under any criteria. The site is associated with the later stages of active mining at the Leviathan Mine Site, but cannot be associated with any prominent event, important figure, or unique methods of construction (Not eligible under Criterion A, B, or C). The site consists of two features associated with implementation of well monitoring efforts and a few scattered artifacts (a pipe segment, length of cable, meat tin, and a milled lumber fragment.) associated with construction of the wellhead. The site has been used as an access road as early as the late 1950s or early 1960s. Based on the artifact assemblage and the low potential for buried deposits the data potential has been sufficiently captured during recordation. As such, it is recommended not eligible under Criterion D.

L3. Linear Feature Description: Continued

Two-track road created by vehicular traffic on east facing slope leading from Leviathan Creek to its terminus at a wellhead. The beginning of the road is indeterminate due to channelization of Leviathan Creek and road improvements to the Delta Seep access road. A segment of the road is bisected by a modern barb wire and T-post fence utilized for mine property security. Artifacts include a segment of braided steel cable (Artifact A-02), a segment of steel pipe (Artifact A-01), a rectangular food can (Artifact A-03), and a single milled lumber fragment (Artifact A-04). Confidential client's records of mining related activities in the area indicate that the road and well-head were installed between 1960 and 1961.

Segment 1 is a road segment that is approximately 600 feet (ft.) long and varies between 8 and 10 ft. in width. The road segment trends west-northwest and is truncated to the east by Leviathan Creek and a portion of the road is bisected by a modern barb wire and T-post mine property fence. The southern boundary is not clearly defined due to channelization of Leviathan Creek and improvements to the Delta Seep access road. The terminus of the road segment to the northwest ends at a wellhead.

Feature F-1 is a wellhead that is constructed with a 16 in circular steel cap with 12 1-in. rivet holes mounted on a 12 in. (two piece) welded pipe casing. The top of the well head has a threaded pipe that is 1" x 1 ¼" with a 1 ½" coupling. A single 2 ½ ft. pipe (37 in. long) is welded horizontally to the southern side of the wellhead.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPH RECORD

Primary # _____
HRI # _____
Trinomial _____

Page 6of 11 Project Name: Leviathan Mine Year 2016
Camera Format: DIGITAL Lens Size: 35mm
Roll #NA Film Type and Speed Digital Negatives Kept at: Amec Foster Wheeler Reno, NV

Mo.	Day	Time	Exp/Frame	Subject / Description	View	Accession #
July	26	2:02 pm	20160726_140254	Site Overview and Segment 01, road	N/NW	
July	26	11:51 am	20160726_115155	Detail of Feature 01, well head	N/A	
July	26	11:58 am	20160726_115804	Detail of Artifact-01, steel pipe	N/A	
July	26	12:05 pm	20160726_120550	Detail of Artifact-02 (steel cable) and Artifact-04 (milled lumber)	N/A	

*Recorded by: Jesica Huddleston and Loren Huddleston
*Date: 7-26-2016

☒ Continuation ☐ Update

Detail of Feature 01, wellhead, 20160726_115155

Detail of Artifact-01, steel pipe, 20160726_115804

*Recorded by: Jesica Huddleston and Loren Huddleston

*Date: 7-26-2016

☒ Continuation ☐ Update

Detail of Artifact-02 (steel cable) and Artifact-04 (milled lumber), 20160726_120550

State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

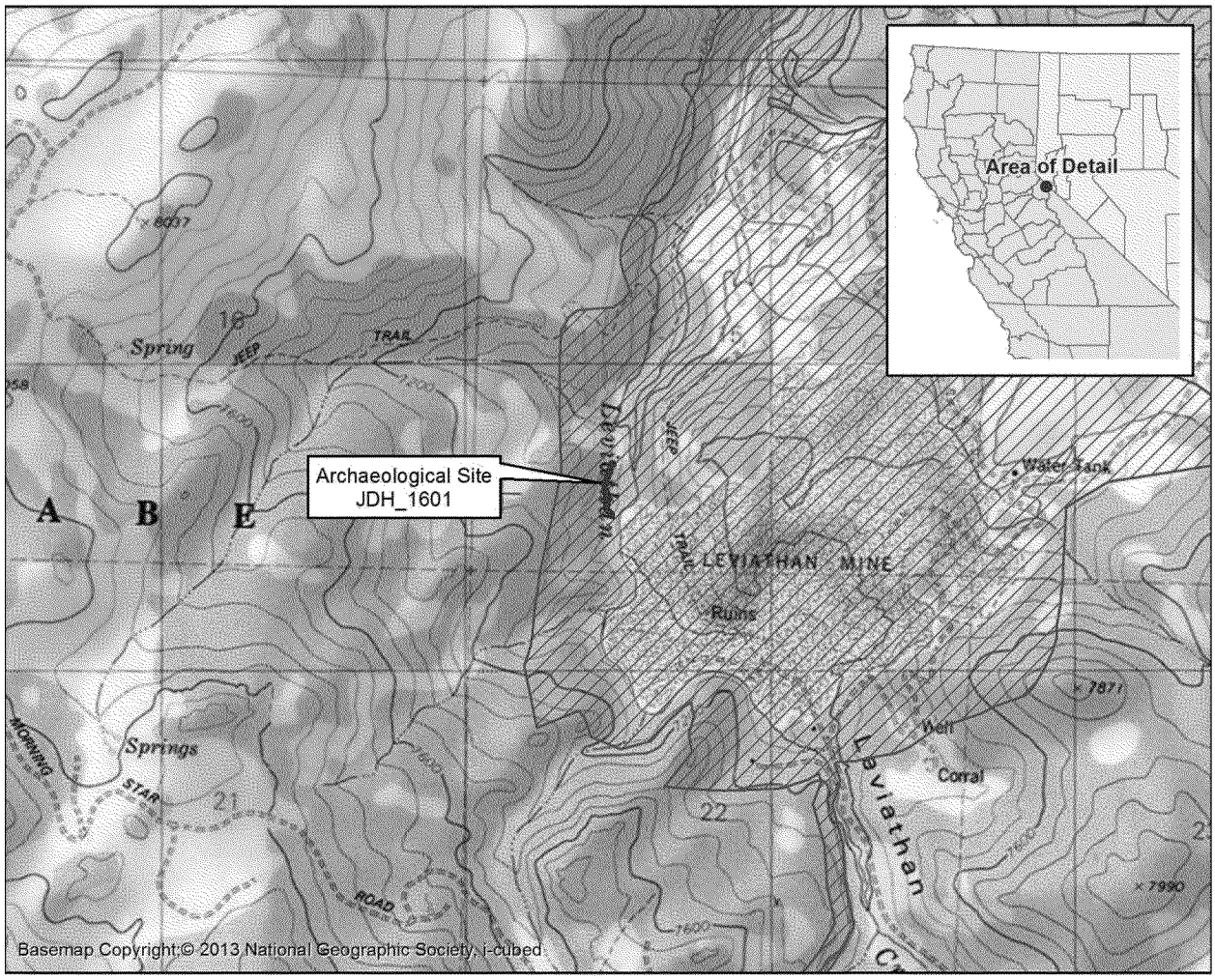
Primary #
HRI#
Trinomial

Page 9 of 10

*Resource Name or # (Assigned by recorder) JDH 1601

*Map Name: Heenan Lake *Scale: 1:24,000 *Date of map: 9/16/2016

(266,419 4,289,373) Coordinates for Map Corners (270,381 4,289,373)



(266,419 4,286,203) UTM Zone 11N NAD83 (270,381 4,286,203)

0 0.25 0.5 0.75 1 Km
0 0.1 0.2 0.3 0.4 0.5 Mi

N

Archaeological Site JDH_1601 Location
Project APE

USGS 7.5' Topographic Map Series
Heenan Lake, California Quadrangle (1979)
Section 15 of Township 10 N, Range 21 E, M.D.M.

1:24,000

Note
All locations and boundaries approximate

Agency Rep. R2013041702306
Amec Foster Wheeler Project No. 0013091150
Drawn By - Date TAM - 9/16/2016
Approved By - Date JDH - 9/16/2016

Figure 1: Site JDH_1601 Vicinity

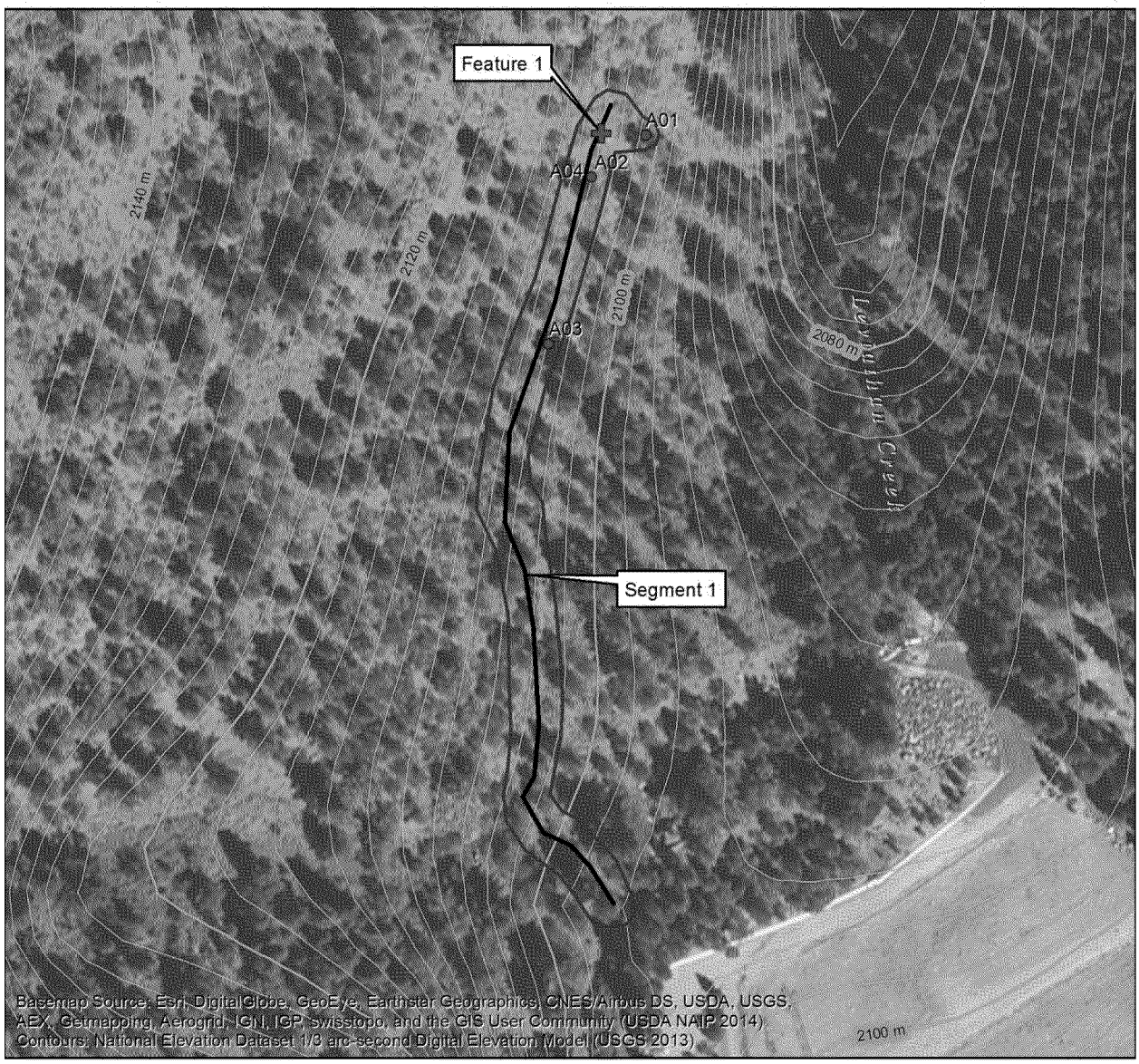
State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary #
HRI#
Trinomial

Page 10 **of** 10 ***Resource Name or #**(Assigned by recorder) JDH 1601

***Drawn by:** Tyler McWilliams ***Date of map:** 9/16/2016

(268,280 4,287,900) Coordinates for Map Corners (268,527 4,287,900)



(268,280 4,287,670) UTM Zone 11N NAD83 (268,527 4,287,670)

0 10 20 30 40 Meters
0 30 60 90 120 150 Feet

N

1:1,500

Archaeological Site Boundary
Historic Road Bed
Feature
Artifact

Agency Rep. R2013041702306
Amec Foster Wheeler Project No. 0013091150
Drawn By - Date TAM - 9/16/2016
Approved By - Date JDH - 9/16/2016

Note
All locations and boundaries approximate

Figure 2: Site JDH_1601 Sketch

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION **PRIMARY RECORD**	Primary # HRI# Trinomial NRHP Status Code
Other Listings Review Code _____ Reviewer _____ Date _____	

 ***Resource Name or #:** JDH_1603

P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County** **Alpine**

And

***b. USGS 7.5' Quad: Heenan Lake**	**Date** 1979	**T**	**10 N**	**;R**	**21 E**	**;**	**SE**	**1/4 of**	**SE**	**1/4 of**	**NE**	**1/4 of**	**15**	Sec;	Mt Diablo **B.M.**
***b. USGS 7.5' Quad: Heenan Lake**	**Date** 1979	**T**	**10 N**	**;R**	**21 E**	**;**	**NE**	**1/4 of**	**NE**	**1/4 of**	**SE**	**1/4 of**	**15**	Sec;	Mt Diablo **B.M.**
***b. USGS 7.5' Quad: Heenan Lake**	**Date** 1979	**T**	**10 N**	**;R**	**21 E**	**;**	**NW**	**1/4 of**	**NW**	**1/4 of**	**SW**	**1/4 of**	**14**	Sec;	Mt Diablo **B.M.**
***b. USGS 7.5' Quad: Heenan Lake**	**Date** 1979	**T**	**10 N**	**;R**	**21 E**	**;**	**SW**	**1/4 of**	**SW**	**1/4 of**	**NW**	**1/4 of**	**14**	Sec;	Mt Diablo **B.M.**

c. Address N/A City , CA Zip

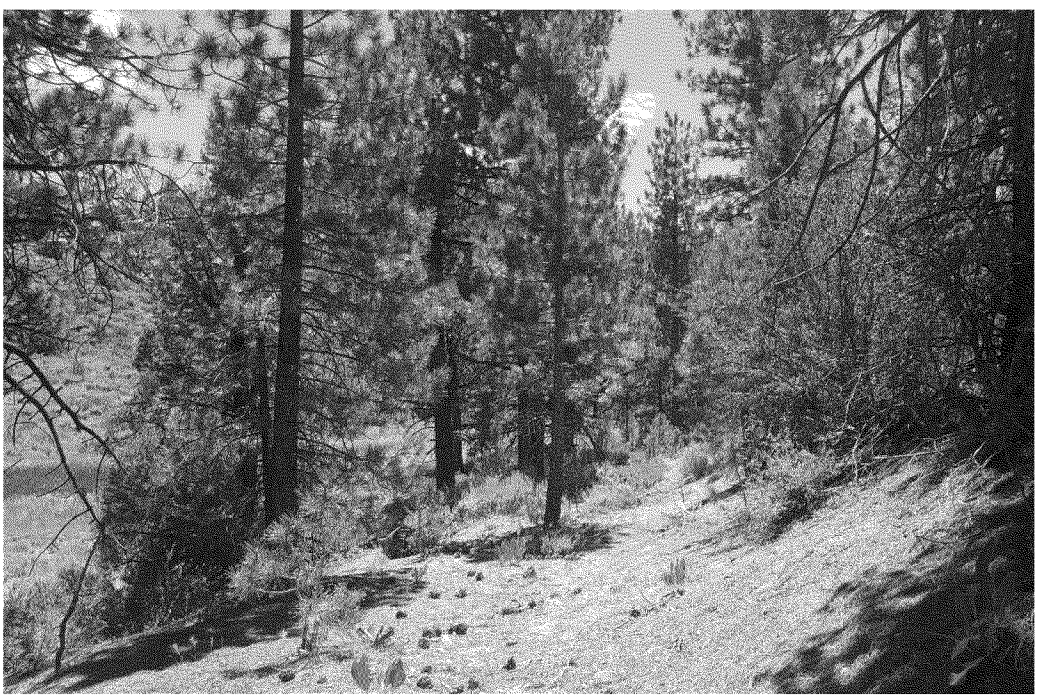
d. UTM: NAD 83 Zone 11 ; 269,624 mE/ 4,288,190 mN (centroid)

e. Other Locational Data: Southern extent of Feature 3 – 269,559 mE/ 4,288,030 mN

***P3a. Description:** Site JDH_1603 is a collection of features and artifacts related to mining/mineral extraction. The site is situated on a prominent ridge and descends into a small alpine meadow located at the north-northeast extent of the greater Leviathan Mine complex. The ridge and meadow are within a Jeffery Pine and Sagebrush woodland with willow, bitterbrush, rice grass, Great Basin rye, with other small shrubs and bunch grasses. *See Continuation Sheet for further site description.*

***P3b. Resource Attributes: AH7. Roads; AH9. Mines**

***P4. Resources Present:** ☐Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (isolates, etc.)



P5b. Description of Photo: Site Overview with Feature F-03/Segment 02, two-track road, facing north/northwest, 7/26/2016, 20160721_130004.jpg

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

***P7. Owner and Address:**

***P8. Recorded by:** J. Huddleston and J. Trudell
Amec Foster Wheeler, 961 Matley Lane #110, Reno, NV 89502

***P9. Date Recorded:** 8/9/2016

***P10. Survey Type:** Intensive Survey

***P11. Report Citation:**

***Attachments:** ☐None ☒Location Map ☒Sketch Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☒Archaeological Record ☐District Record ☒Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☒Artifact Record ☒Photograph Record ☐Other

*A1. Dimensions: a. Length 1,081 (ft) x b. Width 462 (ft); orientation of long axis: North-South

Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☒ Other: GPS

Method of Determination: ☒ Artifacts ☒ Features ☐ Soil ☐ Vegetation ☒ Topography

☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other:

Reliability of Determination: ☒High ☐ Low Explain: Ground visibility was good.

Limitations: ☐Restricted access ☐ Paved/built over ☐ Site limits incompletely defined
☐ Disturbances ☒ Vegetation ☐ Other:

A2. Depth: ☐ None ☒Unknown Method of Determination: Survey

*A3. Human Remains: ☐Present ☒ Absent ☐Possible ☐ Unknown:

*A4. Features: **F-01-** a mechanically excavated trench**, F-02-** a rock cairn **F-03-** a mine exploration road**, F-04** -a mechanically excavated cut bank, **F-05-** and a two-track road *See Continuation Sheet for detail*

*A5. Cultural Constituents: The artifacts present include braided steel cable (**A-01**), clear glass bottles (**A-02-A-05**), a large tin can (**A-06**), a hinge (**A-07**), an oil can (**A-08**), a shovel head (**A-09**), pulley wheels (**A-10**), a jar lid, various tin cans, and various milled lumber fragments**.** The majority of artifacts are contained with two concentration areas (Concentrations **C-01** and **C-02**), with a small number of artifacts distributed within the general site area. Diagnostic artifacts observed on the site consist of glass bottles with maker's marks and hole-in-cap cans. Date ranges for the diagnostic artifacts overlap in the 1930s and 1940s. *All these artifacts are described in detail on the Artifact Record and the two Concentrations are described further on the Continuation Sheet*

*A6. Were Specimens Collected? ☒ No ☐ Yes

*A7. Site Condition: ☐ Good ☒ Fair ☐ Poor Disturbances:

*A8. Nearest Water: Aspen Creek (250 ft)

*A9. Elevation: 2170 - 2190 m AMSL, interpreted from map

A10. Environmental Setting: The site is within a Jeffery Pine and Sagebrush woodland with willow, bitterbrush, ricegrass, Great Basin rye, with other small shrubs and bunch grasses.

A11. Historical Information:

*A12. Age: ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☒ 1914-1945
☒ Post 1945 ☐ Undetermined Describe: The diagnostic artifacts indicate a date range from 1934 to the early 1970s.

A13. Interpretations: Historic mine exploration road with associated features and artifacts. *See Continuation Sheet*

A14. Remarks: A Class III survey was conducted preceding drilling activity. Cultural Resources were identified and documented prior to drilling in support of Leviathan Mine remedial investigations and feasibility studies.

A15. References: *See Continuation Sheet*

A16. Photographs:
Original Media/Negatives Kept at: Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

*A17. Form Prepared by: Jesica Huddleston and Loren Huddleston Date: 9/2/2016

Affiliation and Address: Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

L1. Historic and/or Common Name: N/A

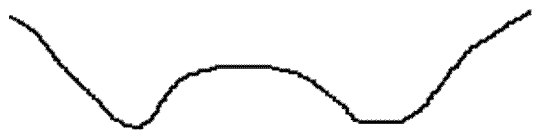
L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation Designation: Feature F-03/Segment 01
b. Location of point or segment: Located on the east side of Leviathan Mine Road/Forest Service Road 10052, above Aspen Seep. Trends southwest to northeast.

L3. Description: **Feature F-03/Segment 01** is a constructed convex berm road utilizing imported fill placed within a seasonal drainage. Segment – 01 begins from Leviathan Mine Road/Forest Service Road 10052 and heads northeast 162 meters (m.) where it approaches a meadow, then turns slightly to the north and continues until it reaches the toe of an east facing slope conjoining with Segment 02. The top width of Segment 01 varies between 4 – 6 m. wide and approx. 2 m. tall with seasonal drainage along both the east and west sides of the road berm. The Confidential client's records of mining activities in the area indicate that the mine exploration road was constructed and two bore holes are shown on a December 1936 topographic & geologic map. They were likely installed sometime before December 1936, but most likely in 1935.

L4. Dimensions:
a. Top Width: 4 to 6 m.
b. Bottom Width: 6 to 8 m.
c. Height or Depth: <1 m.
d. Length of Segment:162 m

L5. Associated Resources: Leviathan Mine.

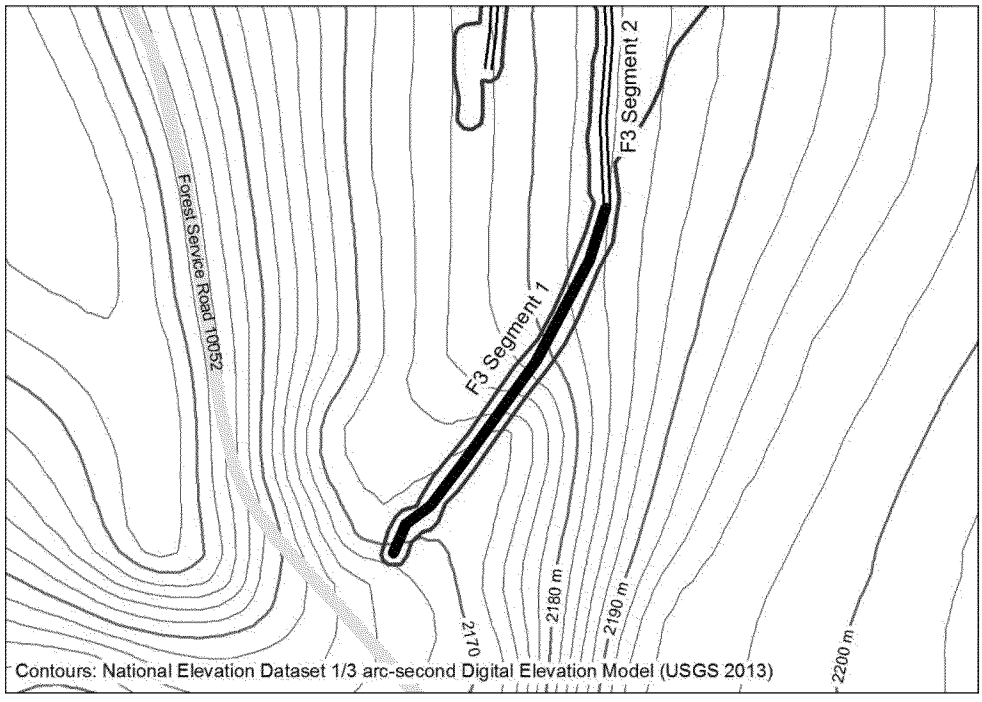
L4e. Sketch of Cross-Section Facing: North/Northeast



L6. Setting: Jeffrey Pine/Sagebrush woodland located below and adjacent to a meadow.

L7. Integrity Considerations: Overgrown vegetation. Approximately 60 to 80 years of tree growth within road parameters.

L8a. Photograph, Map, or Drawing



L8b. Description of Photo, Map, or Drawing: Map of JDH-1603 showing location of Feature F-03/Segment-01.

L9. Remarks:

L10. Form Prepared by:
Jesica Huddleston
Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

L11. Date: 8/31/2016

State of California – The Resources Agency DEPARTMENT OF PARKS AND RECREATION **LINEAR FEATURE RECORD**	Primary # _____ HRI # _____ Trinomial _____

Page of Resource Name or # JDH_1603

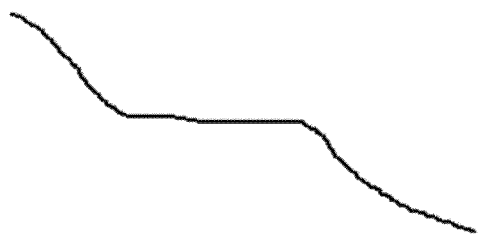
L1. Historic and/or Common Name:
L2a. Portion Described: ☐ Entire Resource ☐ Segment ☐ Point Observation Designation: Feature F-03/Segment 02
b. Location of point or segment: Located on the east side of Leviathan Mine Road/Forest Service Road 10052, above Aspen Seep. Horseshoe-shaped and aligned north-south with the bend on the northern end of the segment.

L3. Description: **Feature F-03/Segment-02** is a road alignment that is located to the north of and runs continuous with F03/Segment-01. Segment-02 is cuts into the toe of an east facing slope following the contour of the landform upslope and to the north, and varies between 6 – 8 m. in width. Once Segment -02 reaches the north end of the slope it follows the natural contour to the west, where it intersects with F-05. After the intersection with F-05 waste rock becomes prevalent on the road, the road narrows to approximately 4 – 5 m. wide, and continues to the terminus of F-03. Confidential client's records of mining related activities indicate that the mine exploration road was constructed and two bore holes are shown on a December 1936 topographic and geologic map. They were likely installed sometime before December 1936, but most likely in 1935. *See item F4. Features on continuation sheet for associated feature descriptions.*

L4. Dimensions:
a. Top Width: N/A
b. Bottom Width: 6 to 8 m.
c. Height or Depth: N/A
d. Length of Segment 200 m

L5. Associated Resources: Leviathan Mine.

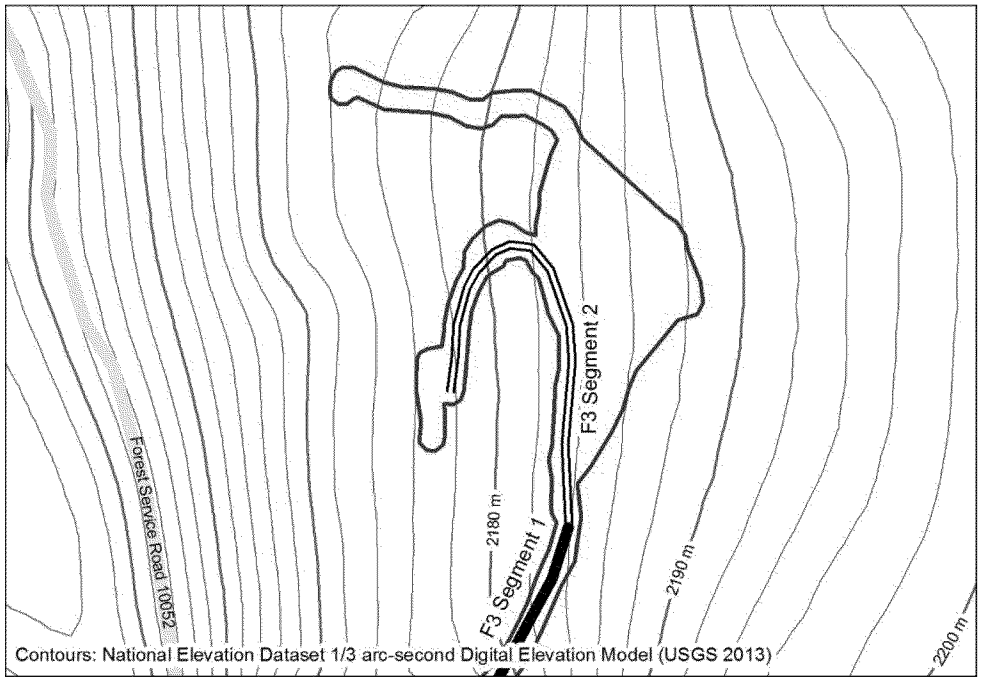
L4e. Sketch of Cross-Section Facing: North/Northeast



L6. Setting: Jeffrey Pine/Sagebrush woodland located below and adjacent to a meadow.

L7. Integrity Considerations: Overgrown vegetation. Approximately 60 to 80 years of tree growth within road parameters.

L8a. Photograph, Map, or Drawing



L8b. Description of Photo, Map, or Drawing: Map of JDH-1603 showing location of Feature F-03/Segment-02.

L9. Remarks:

L10. Form Prepared by:
Jesica Huddleston
Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

L11. Date: 8/31/2016

Location Where Collected Specimens are Curated: N/A

Artifact #(s)	Type	Condition	Description (form, material, etc.)	Dimensions (cm) L W TH	Locational Data (UTM Zone 11 NAD83) Easting / Northing	Sketch/ Photo	Collected?
A-01	Metal	F	Braided steel cable segment of indeterminate length due to buried portions of cable	approximately 1.75 in. diameter,	C1: 269,669 / 4,288,236	Yes	No
A-02, A-03, & A-04	Glass	F	Colorless Bottle base with dimpling. Heel embossed "4/5 QUART", shoulder "FEDERAL LAW FORBIDS SALE R…" Base embossed "DI//10 56-51 [Owens Illinois mark], N=10" Use of the phrase "Federal Law forbids…" occurs between 1934-1968 (Munsey 1970:126; Rock 1990:25; IMACS 1992:472.8)	Base 3 2/16" in.	C1: 269,669 / 4,288,236	Yes	No
A-05	Glass	C	Colorless cylindrical ABM threaded jar with metal screw cap [deteriorated center]. Base embossed "C [CG Maker's Mark) // 3628111" Glass Container Corp. Maker's Mark from 1934- 1968 (Lockhart et. al. 2015)	-	C1: 269,669 / 4,288,236	Yes	No
A-06	Metal	F	Large Can, crushed	-	269,658 / 4,288,221	No	No
A-07	Metal	C	Pin hinge, scalloped ends with three mounting holes on both sides (N=6 holes)	4 x 3 x 1 in.	269,651 / 4,288,196	Yes	No
A-08	Metal	C	Oil can with "SAE//30//WD", punched and X-cut, crushed	-	269,641 / 4,288,174	No	
A-09	Metal	C	Shovel head, rounded with "O//FS//Baldwin//Monongah", three rivet head attachment, with "NN[01]" on the back of the blade	14 ¾ in. in length x 8 in. wide	269,640 / 4,288,154	Yes	No
A-10	Metal/Rubber	C	Pulley wheels with rubber inserts, N=10 (wheels), N=10 (inserts)	1 ft. diam. x 1 in. thick	269,658 / 4,288,208	Yes	No
	Metal	F	Sanitary can fragment, single serve, CE, crushed c1904 – date (Rock 1989: 52, 61-62)	-		No	No
	Metal	F	Hole in cap can, church key opened, crushed 1823-c1940 (Rock 1989: 16-17, 49-50, 58)	-		No	No
	Metal	F	Stamped end can	-		No	No
	Metal	F	Rectangular can with crimped ends, pour spout, with partial cap	-		No	No
	Metal	F	Crushed jar lid	-		No	No
	Metal	F	Crimped end, internally rolled can, rotary opened, crushed	-		No	No

Type Key: (list abbreviations used)	Condition Key:
ABM: Automatic Bottle Machine	F Fragmentary C Complete Other:

*Recorded by: Jesica Huddleston and Jana Trudell *Date: 7/26/2016 ☒ Continuation ☐ Update

*P3a. Description: Continued

There are five features within the site including a mechanically excavated trench and associated spoils (F-01), a collapsed rock cairn (F-02), a mine exploration road (F-03), a mechanically excavated cut bank (F-04), and a two-track road (F-05). These features are in association with cultural constituents including a number of unique and/or diagnostic artifacts and a more general historic debris scatter. *All artifacts are described in detail within *A5and the Artifact Record.* The majority of artifacts are contained with two concentration areas (Concentrations **C-01** and **C-02),** with a small number of artifacts distributed within the general site area.

Feature F-01 is a mechanical trench and associated spoils pile. *See A4. Features below for detailed description.*
Feature F-02 is a collapsed rock cairn with fallen milled lumber post. *See A4. Features below for detailed description.*
Feature F-03 is a historic mine exploration road with two distinct segments. *See A4. Features below for detailed description*
Feature F-03/Segment 1 is a segment of constructed convex berm road within a seasonal drainage. See A4. Features below for detailed description.
Feature F-03/Segment 2 is a segment of two-track road that contours the land form upslope. See A4. Features below for detailed description.
Feature F-04 is a discontinuous mine cut. *See A4. Features below for detailed description.*
Feature F-05 is an ephemeral two-track road connecting to F3. See A4. Features below for detailed description.
Concentration C-01 is an assemblage of historic debris located approximately 15 meters south of **F-01,** the concentration is comprised of four colorless glass bottles and a colorless glass jar (**A-01 through A-05**), colorless bottle glass fragments, a jar lid, and various tin cans and tin can fragments.
Concentration C-02 is a scatter of splintered, fragmented, and deteriorated wooden slats (~30 +/-), one 10' x 1' milled lumber fragment, one 4' x 2' milled lumber post, with one crushed hole-in-cap tin can.

A4. Features: Continued

Feature F-01 is a mechanical trench and associated spoils pile with a north to south orientation. Trench dimensions are 30 meters (m.) in length by 10 m. wide, with a maximum depth of 5 m. Spoils pile associated with F-01 is located on the southeast end of the mechanical trench and measures approximately 10 m. wide east – west by 12 m. north – south with a maximum height of 3 m. A crimped end can fragment was observed on the west edge of F-01.
Feature F-02 is a collapsed rock cairn with a fallen milled lumber post measuring 4 in. by 4 in. by approximately 4 ft. in length. Rock cairn is comprised of 22 large cobbles. F-02 is associated with F-01 and is located at the southeast edge of mechanical trench spoils pile.
Feature F-03 is a historic mine exploration road with two distinct segments that are differentiated by the method of road construction and placement within the topography.

- **Segment 01** is a constructed convex berm road utilizing imported fill placed within a seasonal drainage. Segment – 01 leads from Leviathan Mine Road/Forest Service Road 10052 and heads north 162 meters (m.) where it approaches a meadow, then turns slightly to the northwest and continues following the natural contour upslope conjoining with Segment 02. Segment 01 varies between 4 – 6 m. wide and approx. 2 m. tall with seasonal drainage along both the east and west sides of the road berm.
- **Segment 02** is a segment of two-track road that is located to the north and continuous with Segment 01. Segment 02 is cut into the toe of an east facing slope following the contour of the landform upslope and to the north. Once Segment – 02 reaches the north end of the slope it follows the natural contour to the west, where it intersects with F-05. After the intersection with F-05, waste rock becomes prevalent on the road and continues to the terminus of F-03.

Feature F-04 is a discontinuous mine cut that runs parallel to and is situated below F-03 on the west side of the slope. Appears to be constructed for mine waste dumping, potentially abandoned, as mining in this area appears to have been terminated. F-04 is approx. 32 m in length and varies between 5 and 6 ft. in width.
Feature F-05 is an ephemeral two-track road that leads from F-03 connecting to the west down a steep slope to a large cleared area comprised of waste rock located along Leviathan Mine Road/Forest Service Road 10052, likely the result of previous mining activities. F-05 winds through Pinyon and Jeffrey Pine trees with various ephemeral turn arounds and pull-outs along the route. Road width is indeterminate as the shape fluctuates greatly within turn arounds and pullouts, and visibility is further compromised by heavy layer of pine duff.

A13. Interpretation Continued:
Site JDH_1603 is a collection of features and artifacts related to mining/mineral extraction recommended **Not Eligible** for inclusion in the National Register of Historic Places under any criteria. The site cannot be associated with any prominent event, important figure, and is not unique in construction (Not eligible under Criterion A, B, or C). Though the site can be associated with the Leviathan Mine Site's later phase of mining and with research issues identified for the project, the features and associated artifacts present can provide only limited data for answering pertinent research questions. Based on the limited data potential for the features, the small artifact assemblage, and the low potential for buried deposits the data available have been sufficiently captured during recordation. As such, JDH_1603 is recommended not eligible under Criterion D.

A15. References:

Intermountain Antiquities Computer System (IMACS)
1992 *User's Guide Instructions and Computer Codes for Use with the IMACS Site Form.* Revised. Prepared by the University of Utah, Bureau of Land Management, and U.S. Forest Service.

Lockhart, Bill
2006 The Color Purple: Dating Solarized Amethyst Container Glass. *Historical Archaeology* 40(2): 45-56.

Lockhart, Bill, B. Schriever, C. Serr, and B. Lindsey
2015 (November 5th) Glass Containers Corp. and Its Successors. Retrieved from:
https://sha.org/bottle/pdffiles/GlassContainersCo.pdf

Munsey, Cecil
1970 *The Illustrated Guide to Collecting Bottles.* Hawthorn Books, Publishers, New York.

Rock, James T.
1989 *Tin Canisters: Their Identification.* Ms. on file at the U.S. Forest Service, Klamath National Forest, Yreka, California.
1990 *Basic Bottle Identification.* Ms. on file at the U.S. Forest Service, Klamath National Forest, Yreka, California.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPH RECORD

Primary # _____
HRI # _____
Trinomial _____

Page 8of 17 Project Name: Leviathan Mine Year 2016
Camera Format: DIGITAL Lens Size: 35mm
Roll #NA Film Type and Speed Digital Negatives Kept : Amec Foster Wheeler Reno

Mo.	Day	Time	Exp/Frame	Subject / Description	View	Accession #
7	21	1:11 pm	20160721_131112	Overview with Feature F-03/Segment 02, two-track road	N/NW	
7	21	1:04 pm	20160721_130416	Overview of F-03/Segment-02, Imported Fill Berm Road	N/NE	
8	9	10:13 am	20160809_101329	Overview of Feature F-01, Mechanical Trench Spoils	N	
8	9	10:10 am	20160809_101038	Overview of Feature F-02, Collapsed Cairn	NW	
8	9	12:42 am	20160809_124254	Overview of Feature F-04, Mine Cut	N	
8	9	12:47 pm	20160809_132227	Overview of Feature F-05, Ephemeral Road	E	
8	9	10:55 am	20160809_104826	Overview of Concentration C-01, Historic Debris	E/SE	
8	9	2:14 pm	20160809_110130	Overview of Concentration C-02, Milled Lumber Fragments	S/SW	
8	9	9:46 am	20160809_095636	Overview of Artifact A-1, Braided Steel Cable Segment with F-3/Segment 2	SW	
8	9	10:39 am	20160809_103724	Detail of Artifacts A-02, A-03, and A-04,	Plan	
8	9	10:43 am	20160809_103849	Detail of Artifact A-05, Colorless cylindrical ABM threaded jar	Plan	
8	9	1:32 pm	20160809_133255	Detail of Artifact A-07, Pin Hinge, plan view	Plan	
8	9	1:46 pm	20160809_134705	Detail of Artifact A-09, Shovel Head	Plan	
7	21	1:23 pm	20160721_132313	Detail of Artifact A-10, Pulley Wheels with Rubber Inserts	N/NW	

Overview of F-03/Segment-02, imported fill berm road, facing North/Northeast, 20160721_130416.jpg

Overview of Feature F-01, mechanical trench, view facing East, 20160809_101504.jpg

Overview of Feature F-01, mechanical trench spoils, view facing North, 20160809_101329.jpg

Overview of Feature F-02, collapsed cairn, view facing Northwest, 20160809_101038.jpg

Overview of Feature F-04, mine cut, view facing North, 20160809_124254.jpg

Overview of Feature F-05, ephemeral road, view facing East, 20160809_132227.jpg

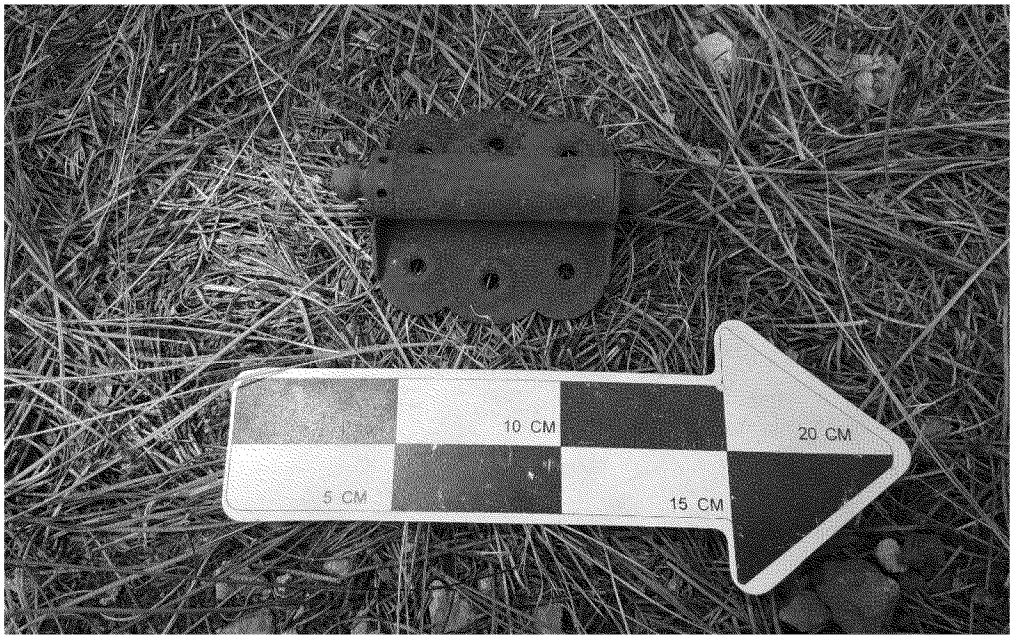
Overview of Concentration C-01, historic debris, view facing East/Southeast, 20160809_104826.jpg

Overview of Concentration C-02, milled lumber fragments, view facing South/Southwest, 20160809_110130.jpg

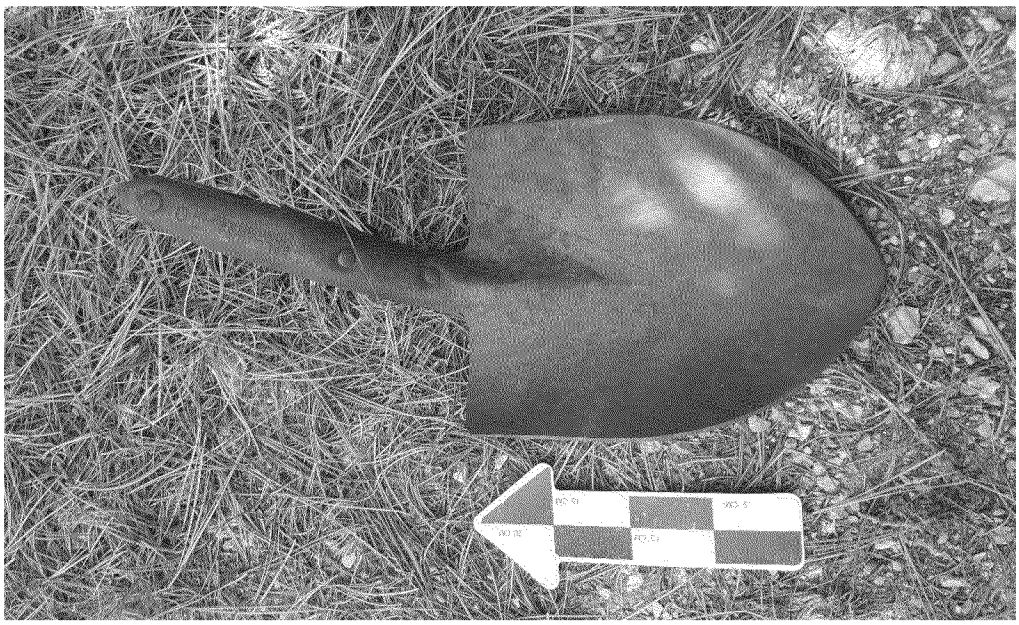
Overview of Artifact A-01, braided steel cable segment with F-03/Segment 2, view facing Southwest, 20160809_095636.jpg

Detail of Artifacts A-02, A-03, and A-04, plan view, 20160809_103724.jpg

Detail of Artifact A-05, colorless cylindrical ABM threaded jar, plan view, 20160809_103849.jpg



Detail of Artifact A-07, pin hinge, plan view, 20160809_133255.jpg



Detail of Artifact A-09, shovel head, plan view, 20160809_134705.jpg

Detail of Artifact A-10, pulley wheels with rubber inserts, view facing North/Northwest, 20160721_132313.jpg

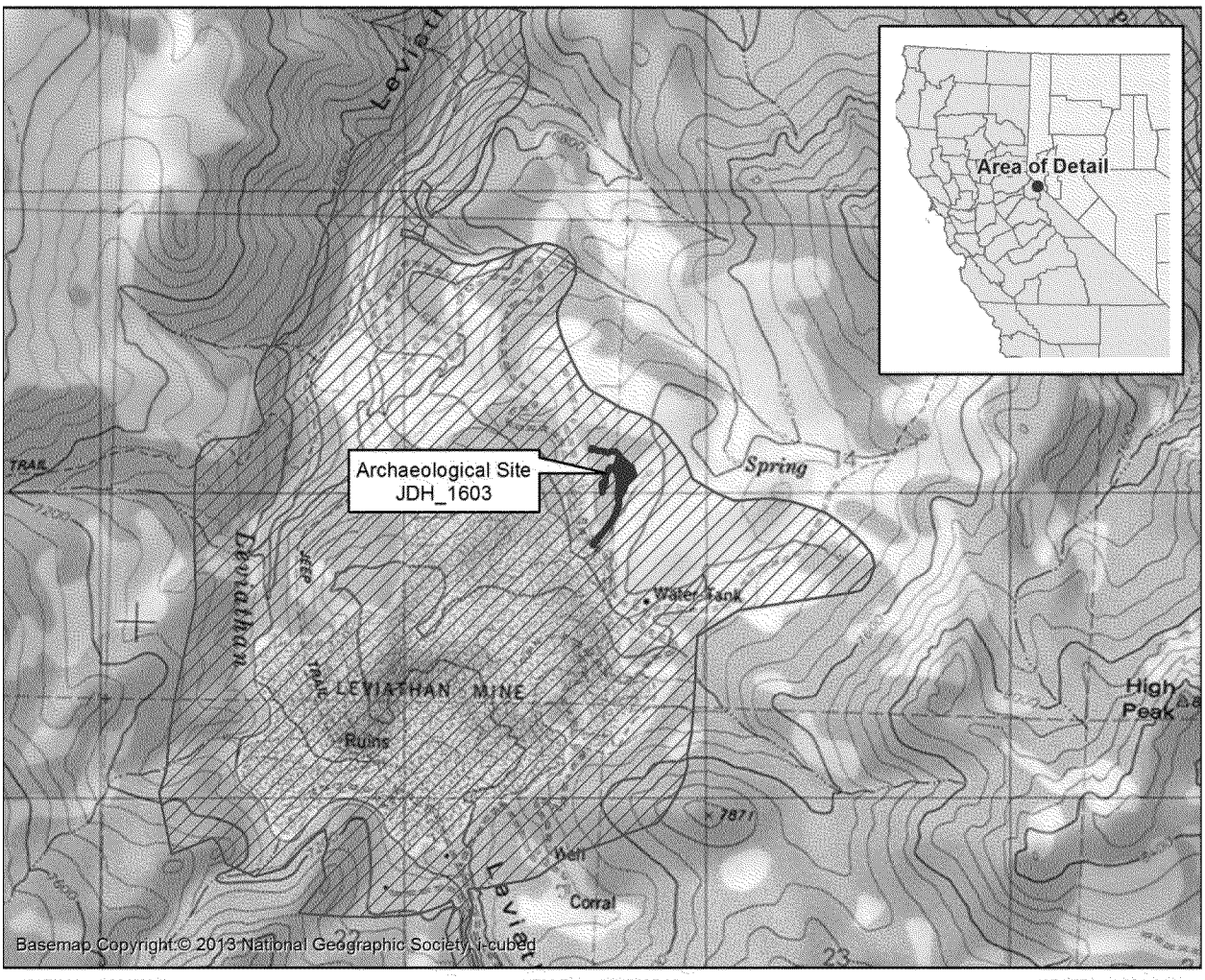
State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

*Resource Name or #(Assigned by recorder) JDH 1603
*Map Name: Heenan Lake *Scale: 1:24,000 *Date of map: 1979

(267,608 4,289,804) Coordinates for Map Corners (271,571 4,289,804)



(267,608 4,286,634) UTM Zone 11N NAD83 (271,571 4,286,634)

0 0.25 0.5 0.75 1 Km
0 0.1 0.2 0.3 0.4 0.5 Mi

N

1:24,000

USGS 7.5' Topographic Map Series
Heenan Lake, California Quadrangle (1979)
Sections 14 and 15 of Township 10 N, Range 21 E, M.D.M.

Archaeological Site JDH_1603 Location
Project APE

Note
All locations and boundaries approximate

Agency Rep. R2013041702306
Amec Foster Wheeler Project No. 0013091150
Drawn By - Date TAM - 9/8/2016
Approved By - Date JDH - 9/8/2016

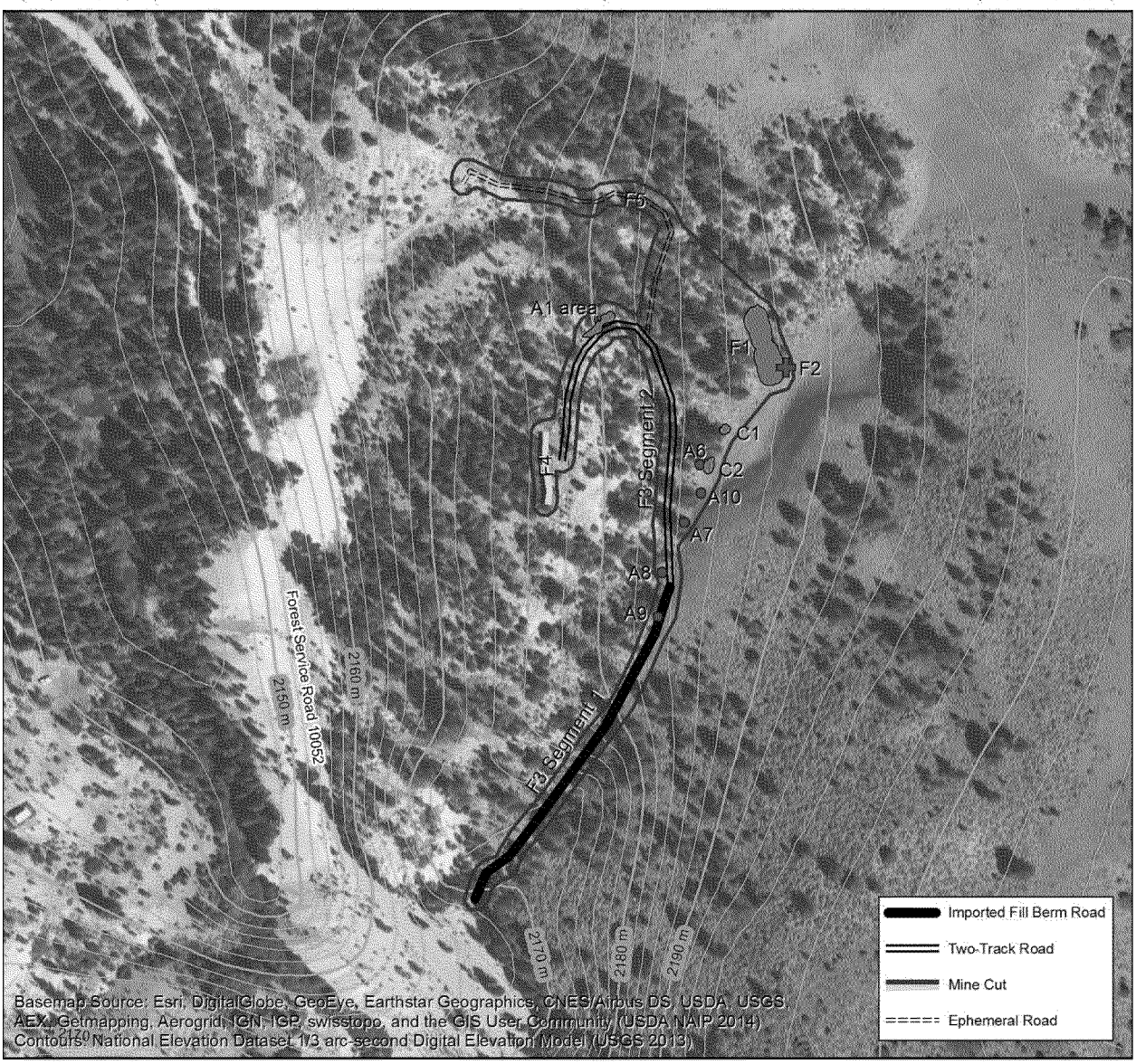
Figure 1: Site JDH_1603 Vicinity

State of California Natural Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI#
SKETCH MAP
Trinomial

Page 17 **of** 17 ***Resource Name or #**(Assigned by recorder) JDH_1603

Drawn by: Tyler McWilliams ***Date of map:** 9/8/2016

(269,352 4,288,420) Coordinates for Map Corners (269,847 4,288,420)



(269,352 4,287,960) UTM Zone 11N NAD83 (269,847 4,287,960)

0 30 60 90 120 Meters
0 60 120 180 240 300 Feet

N

1:3,000

Archaeological Site Boundary
Feature
Artifact

Agency Rep. R2013041702306 | Amec Foster Wheeler Project No. 0013091150
Drawn By - Date TAM - 9/9/2016 | Approved By - Date JDH - 9/9/2016

Note
All locations and boundaries approximate

Figure 2: Site JDH_1603 Sketch

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI# _____
Trinomial _____
NRHP Status Code _____
Other Listings _____
Review Code _____ Reviewer _____ Date _____

 ***Resource Name or #:** JDH_1604

P1. Other Identifier:

***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County** **Alpine**
And

***b. USGS 7.5' Quad:**	**Date**		**T**		**;R**		**;**		**1/4 of**		**1/4 of**		**1/4 of**		Sec;	Mt Diablo **B.M.**

c. Address N/A City , CA Zip

d. UTM: NAD 83 Zone 11 ; 269,788 mE/ 4,288,432 mN (centroid)

e. Other Locational Data:

***P3a. Description:** This multi-component site consists of a prehistoric lithic scatter with an incipient mortar and a historic debris scatter with axe cut stumps. The site is situated along the edge of the tree line and distributed along the slope of a west/northwest trending ridge that surrounds an open meadow. Vegetation on site ranges from sagebrush scrub to a Jeffrey pine and pinyon pine forest. The soil on site is light greyish brown with small pebbles and subangular cobbles. The prehistoric component of the site consists of a coarse grained-volcanic (CGV) flake tool, two obsidian biface fragments, a cryptocrystalline silicate (CCS) scraper, two CGV cores, an andesitic incipient mortar (Feature-F-01), and a broad scatter of obsidian and CCS debitage. The historic component of this site consists of a widely dispersed debris scatter including lug and bail pails, coffee pot, sanitary cans, tobacco tins, vent-hole cans, a large rectangular can, a wash basin, and two axe-cut tree stumps (Features F-02 and F-03). Though there is no evidence of temporal overlap between the prehistoric and historic components, they are associated spatially. The majority of historic artifacts indicate the site was used for timber harvesting and/or pastoral animal husbandry activities. The assemblage of widely dispersed prehistoric artifacts are indicative of both floral and faunal procurement activities.

***P3b. Resource Attributes AH4.: Trash Scatter; AP2.: Lithic Scatter**

***P4. Resources Present:** ☐ Building ☐Structure ☐Object ☒Site ☐District ☐Element of District ☐Other (isolates, etc.)

P5b. Description of Photo: Site overview of JDH_1604, view facing Northeast/North, 20160811_132932.jpg

***P6. Date Constructed/Age and Sources:** ☐Historic ☐Prehistoric ☒Both

***P7. Owner and Address:**

***P8. Recorded by:** J. Huddleston, L. Huddleston, J. Trudell, and M. Rives Amec Foster Wheler, 961 Matley Lane #110, Reno, NV 89502

***P9. Date Recorded:** 8/11/2016
***P10. Survey Type:** Intensive Survey

***P11. Report Citation:**

***Attachments:** ☐None ☒Location Map ☒Sketch Map ☒Continuation Sheet ☐Building, Structure, and Object Record ☒Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☒Photograph Record ☐Other

*A1. Dimensions: a. Length 753 (ft)x b. Width 595 (ft); orientation of long axis: east-west

Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☒ Other: GPS

Method of Determination: ☒ Artifacts ☒ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other:

Reliability of Determination: ☒ High ☐ Low Explain: Ground visibility was good.

Limitations: ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined ☐ Disturbances ☒ Vegetation ☒ Other: Colluvial actions may have contributed to relocation and/or spatial distribution of artifacts

A2. Depth: ☐ None ☐ Unknown Method of Determination:

*A3. Human Remains: ☐ Present ☒ Absent ☐ Possible ☐ Unknown:

*A4. Features: There are three features at the site **(Features F-01 to F-03)**. **Feature F-01** is an incipient mortar created in a natural crack of a partially buried course grained andesitic boulder measuring 60.2 x 50.0 x 8.5 cm. from the ground surface. Single mortar cup is 10.0 x 10.1 cm in diameter. The mortar cup is irregular as the polish/wear indicates that is was utilized in an angular motion with moderately polished facets on the west side interior surface of the cup and very little polishing on the east side interior of the cup. **Features F-02 and F-03** are burned axe-cut stumps. **Feature F-02** measures approximately 16 to 24 inches in diameter, and **Feature F-03** measures approximately 20 to 26 inches in diameter.

*A5. Cultural Constituents: The prehistoric component of the site consists of four formed lithic tools, two CGV cores, and a broad scatter of obsidian and CCS debitage. **Artifact A-01** is a CGV flake tool with microflaking on its margin utilizing an interior core reduction flake measuring 6.3 x 4.2 x 1.1 cm. **Artifact A-02** is a translucent obsidian biface fragment with a perverse fracture at midsection (2.2) x 1.2 x 0.5 cm. **Artifact A-03** is a mottled red/yellow/brown CCS flake tool with lateral flake scars on dorsal side, with microflaking and polish present along one margin 5.0 x 3.2 x 1.8 cm. **Artifact A-04** is a transparent obsidian biface midsection with a hinge fracture on the distal end, and a snap fracture on the proximal end (1.3) x (2.0) x (0.6) cm. **Artifact A-05** is a CGV core with two reduction flake removals 5.0 x 2.6 x 2.1 cm. *See continuation sheet for remaining descriptions.*

*A6. Were Specimens Collected? ☒ No ☐ Yes

*A7. Site Condition: ☒ Good ☐ Fair ☐ Poor Disturbances:

*A8. Nearest Water: unnamed creek (425 ft. to the northeast)

*A9. Elevation: 2184-2200 m AMSL, interpreted from map

A10. Environmental Setting: The site is situated along the tree line and slope of a west/northwest trending ridge surrounding an open meadow. Vegetation on site consists of Jeffrey Pine, low and tall sage, Great Basin wild rye, Woolly Mule's Ear, Pinyon Pine, mountain mahogany, snowberry, gooseberry, balsam, wild rose, Indian rice grass, buck wheat, sand seed, xeric grasses, and bitter brush.

A11. Historical Information:

*A12. Age: ☒ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☒ 1769-1848 ☒ 1848-1880 ☒ 1880-1914 ☒ 1914-1945 ☒ Post 1945 ☐ Undetermined Dates: The prehistoric component of this site lacks temporally diagnostic projectile points and cannot be dated more specifically without additional testing. The historic component of the site dates range from 1815 to present.

A13. Interpretations: *See continuation sheet*

A14. Remarks: The small assemblage of prehistoric artifacts at the site is indicative of both floral and faunal procurement activities, and the site appears to be consistent with a short-term seasonal camp.

A15. References:

Cleeland, Teri (compiler)
1984 *Historic Artifact Dating Guide.* Northern Arizona University Archaeology Laboratory, Flagstaff, Arizona.
Ferraro, Pat, and Bob Ferraro
1966 *A Bottle Collector's Book.* Western Printing & Publishing Company, Sparks, Nevada.
Siminois, Donald
1997 Can Guide. USDI, Bureau of Land Management, Kingman Field Office, Kingman, Arizona.

A16. Photographs:
Original Media/Negatives Kept at: Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

*A17. Form Prepared by: Jesica Huddleston Date: 9-6-2016

Affiliation and Address: Amec Foster Wheeler, 961 Matley Lane #110 Reno, Nevada 89502

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARTIFACT RECORD

Primary # _____
Trinomial _____

 Resource Name or #: JDH_1604

Location Where Collected Specimens are Curated: N/A

Artifact #	Type	Condition	Description (form, material, etc.)	Dimensions (cm) L W TH	Locational Data (UTM Zone 11 NAD83) Easting / Northing	Sketch/ Photo	Collected?
A-01	Flake Tool	C	CGV flake tool, microflaking on margin on interior core reduction flake	6.3 x 4.2 x 1.1 cm.	269,707 / 4,288.420	Yes	No
A-02	Biface	F	Translucent obsidian biface fragment with a perverse fracture at midsection	(2.2) x 1.2 x 0.5 cm.	269,768 / 4,288,452	Yes	No
A-03	Flake Tool	C	Mottled red/yellow/brown CCS flake tool, lateral flake scars on dorsal side on a flake blank on the ventral side, microflaking and polish on margin	5.0 x 3.2 x 1.8 cm.	269,776 / 4,288,487	No	No
A-04	Biface	F	Translucent obsidian biface midsection, hinge fracture on the distal end, snap fracture on the proximal end	(1.3) x (2.0) x (0.6) cm.	269,813 / 4,288,442	Yes	No
A-05	Core	C	CGV core with two reduction flake removals	5.0 x 2.6 x 2.1 cm.	269,844 / 4,288,365	No	No
A-06	Core	C	CGV unidirectional core with 15 % cortex	6 x 4.4 x 3.7 cm.	269,837 / 4,288,414	No	No
A-07	Metal	C	Steel w ash basin with, rolled lip, soldered lap seam, riveted handles , disintegrating	20 in. diam. top, 16 in. diam. Base, 6 in. in height	269,765 / 4,288,330	Yes	No
	Glass	F	Amber bottle glass vessel shoulder and body fragments N=3	-		No	No
	Glass	F	Olive bottle glass vessel fragments N=2	-		No	No
	Metal	F	Braided cable segment	Approx. 25 ft.		No	No
	Metal	F	Lug and bail pail, internally rolled, stamped ends, bailing wire handles, crushed, N=2	502 height		No	No
	Metal	F	Coffee pot with riveted spout, internally rolled, crimped ends, fragmentary, crushed	-		No	No
	Metal	C	Hole in Top condensed milk can with stamped ends, concentric circles, internally rolled, stamped ends, knife opened, N=3	208 x 206		No	No
	Metal	C	Large lug and bail pail with riveted handles, lap seam, crimped ends	14 in. height		No	No
	Metal	C	Sanitary can, single serve, knife opened	210 x 300		No	No
	Metal	C	UPTT, internally rolled, crimped ends, wire pin hinge, slightly crushed N=2	404 height		No	No
	Metal	C	Tall rectangular can with soldered lap seam, crimped ends, slightly crushed	404 tall x 304 wide		No	No

Type Key: (list abbreviations used)	Condition Key:
UPTT: Upright Pocket Tobacco Tin CCS- Cryptocrystalline Silicate CGV – Coarse-grained volcanic	F Fragmentary C Complete Other:

A5. Cultural Constituents Continued:
Artifact A-06 is a CGV unidirectional core with 15% cortex (6 x 4.4 x 3.7 cm.). The assemblage of widely dispersed prehistoric artifacts are indicative of both floral and faunal procurement activities.

The historic component of the site consists of a wide scatter of debris including a steel wash basin, coffee pot, 3 lug and bail pails, 2 upright pocket tobacco tins, a segment of steel braided cable, a tall rectangular can, sanitary can, hole in top can, and amber and olive bottle glass fragments. **Artifact A-07** is a steel wash basin with a rolled lip, soldered lap seam, and riveted handles. **Artifact A-07** measures 20 inches in diameter at the top, 16 inches in diameter at the base, and 6 inches in height. The majority of the historic artifacts are located on the northeast portion of the site, with the exception of Artifact A-07, which is located across an open meadow at the southernmost portion of the site and may have been used for sheep herding activities. The functional attributes present on artifacts (i.e., olive bottle glass and can ends and seams) indicate that the date range for historical use of the site ranges from 1815 to present. The presence of a segment of braided steel cable and axe-cut stumps may be indicative of historic mining activities at the same location. It is unclear but suggestive that the historic component may represent more than one temporal use of the site.

A13. Interpretations Continued:
The prehistoric component of the site is indicative of both floral and faunal procurement activities, and likely represents a seasonal short-term camp. This site is likely a resource procurement site and recommended **Eligible** for inclusion in the National Register of Historic Places under Criterion D. The site contains both milling equipment and hunting implements, including an incipient bedrock mortar and two obsidian bifaces. The presence obsidian and coarse-grained volcanic tools and debitage that can be subjected to obsidian hydration and XRF sourcing analysis allows the site to potentially address research questions concerning Chronology and Cultural Change, as well as provide insight into Lithic Technology and Procurement strategies employed during the Late Archaic. The tool assemblage present at the site indicates that a range of procurement and processing activities took place at the site, while the presence of a bedrock mortar implies that the site may have been occupied repeatedly. Both aspects have the potential to provide information on Subsistence and Settlement strategies.

The historic component of the site is recommended N**ot Eligible** for inclusion in the National Register of Historic Places under any criteria. The site cannot be associated with any prominent event, important figure, and is not unique in construction (Not eligible under Criterion A, B, or C). The site consists of a few widely dispersed artifacts with a wide temporal range, and two axe-cut stumps. The majority of historic artifacts indicate the site was used for timber harvesting and/or pastoral animal husbandry activities, and may present some evidence of later mining activities in the area. Based on the artifact assemblage and the low potential for buried deposits the data potential has been sufficiently captured during recordation. As such, it is recommended not eligible under Criterion D.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PHOTOGRAPH RECORD

Primary # _____
HRI # _____
Trinomial _____

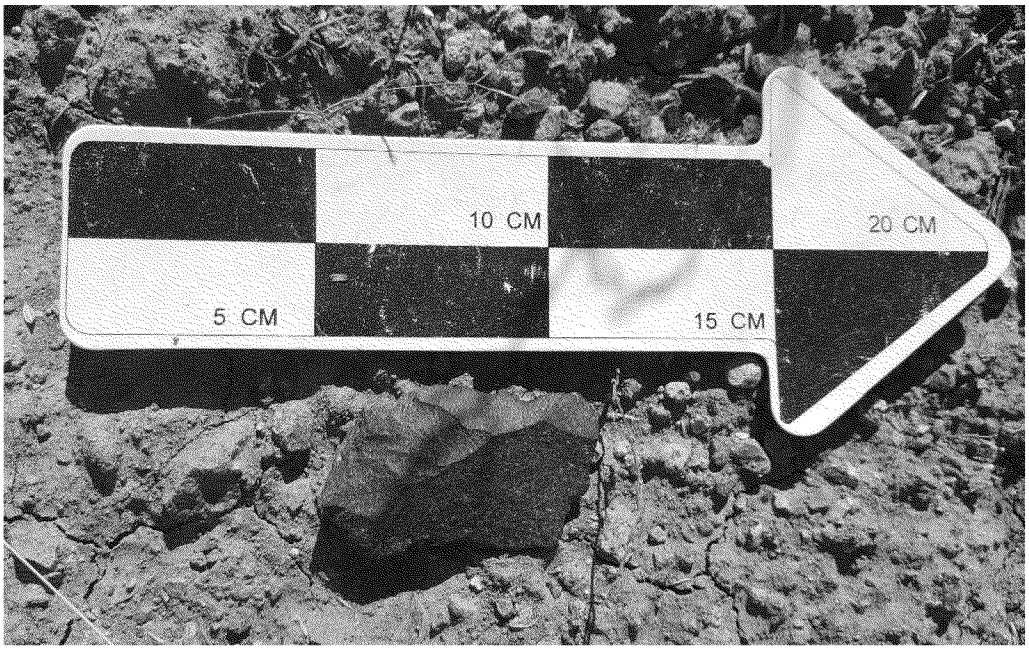
Page 5of 11 Project Name: Leviathan Mine Year 2016
Camera Format: DIGITAL Lens Size: 35mm
Roll #NA Film Type and Speed Digital Negatives Kept at: Amec Foster Wheeler, Reno, NV

Mo.	Day	Time	Exp/Frame	Subject / Description	View	Accession #
8	11		20160811_132932	Site overview of JDH_1604	NE/N	
8	11		20160811_124056	Overview of Feature F-01, Incipient Mortar	E/SE	
8	11		20160811_122739	Overview of Feature F-02, Axe-cut Tree Stump	SW	
8	11			Overview of Feature F-03, Axe-cut Tree Stump	S/SW	
8	11		20160811_094430	Detail of Artifact A-01, CGV flake tool, Side A	Plan	
8	11		20160811_101650	Detail of Artifact A-02, Obsidian biface fragment, Side A	Plan	
8	11		20160811_103457	Detail of Artifact A-04, Obsidian biface fragment	Plan	

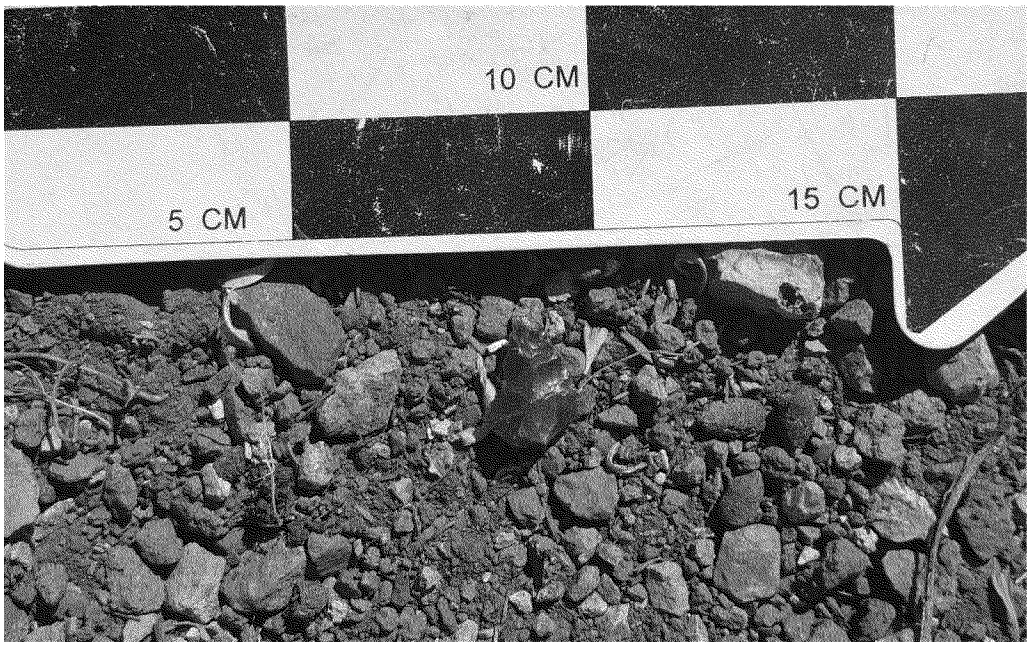
Overview of Feature F-01, incipient mortar, view facing East/Southeast, 20160811_124056.jpg

Overview of Feature F-02, axe-cut tree stump, view facing Southwest, 20160811_122739.jpg

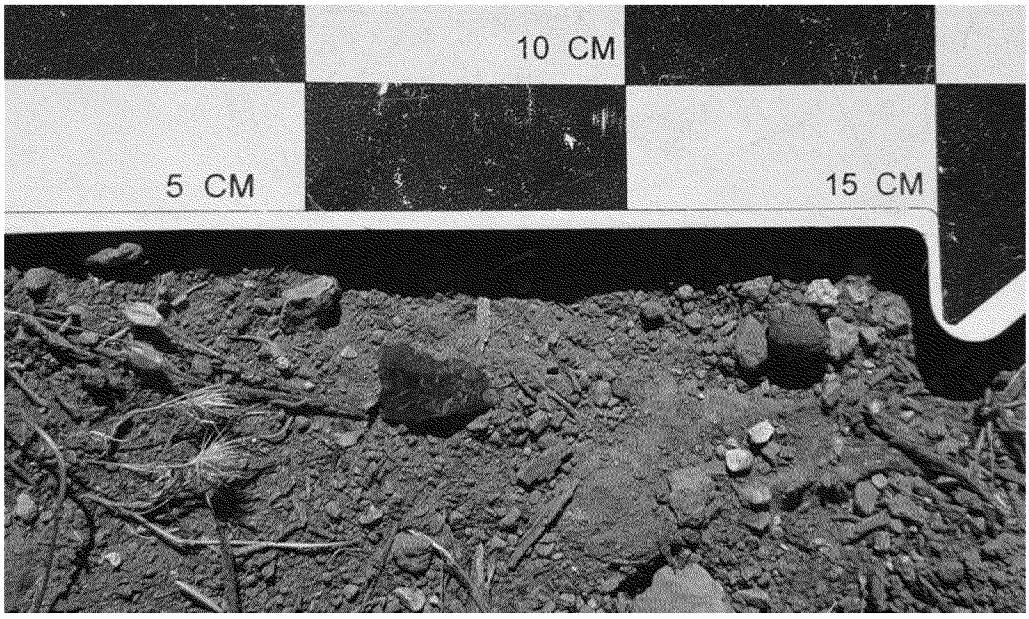
Overview of Feature F-03, axe-cut tree stump, view facing South/Southwest, 20160811_121949.jpg



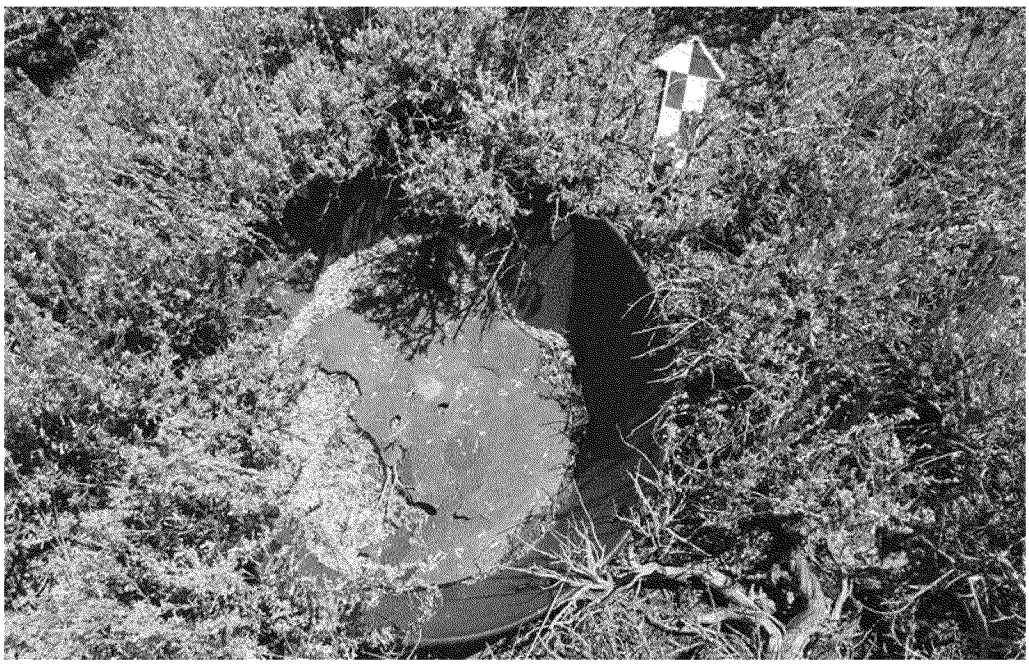
Detail of Artifact A-01, CGV flake tool, Side A, plan view, 20160811_094430.jpg



Detail of Artifact A-02, obsidian biface fragment, Side A, plan view, 20160811_101650.jpg



Detail of Artifact A-04, obsidian biface fragment, plan view, 20160811_103457.jpg



Detail of Artifact A-07, wash basin, plan view, 20160811_132820.jpg

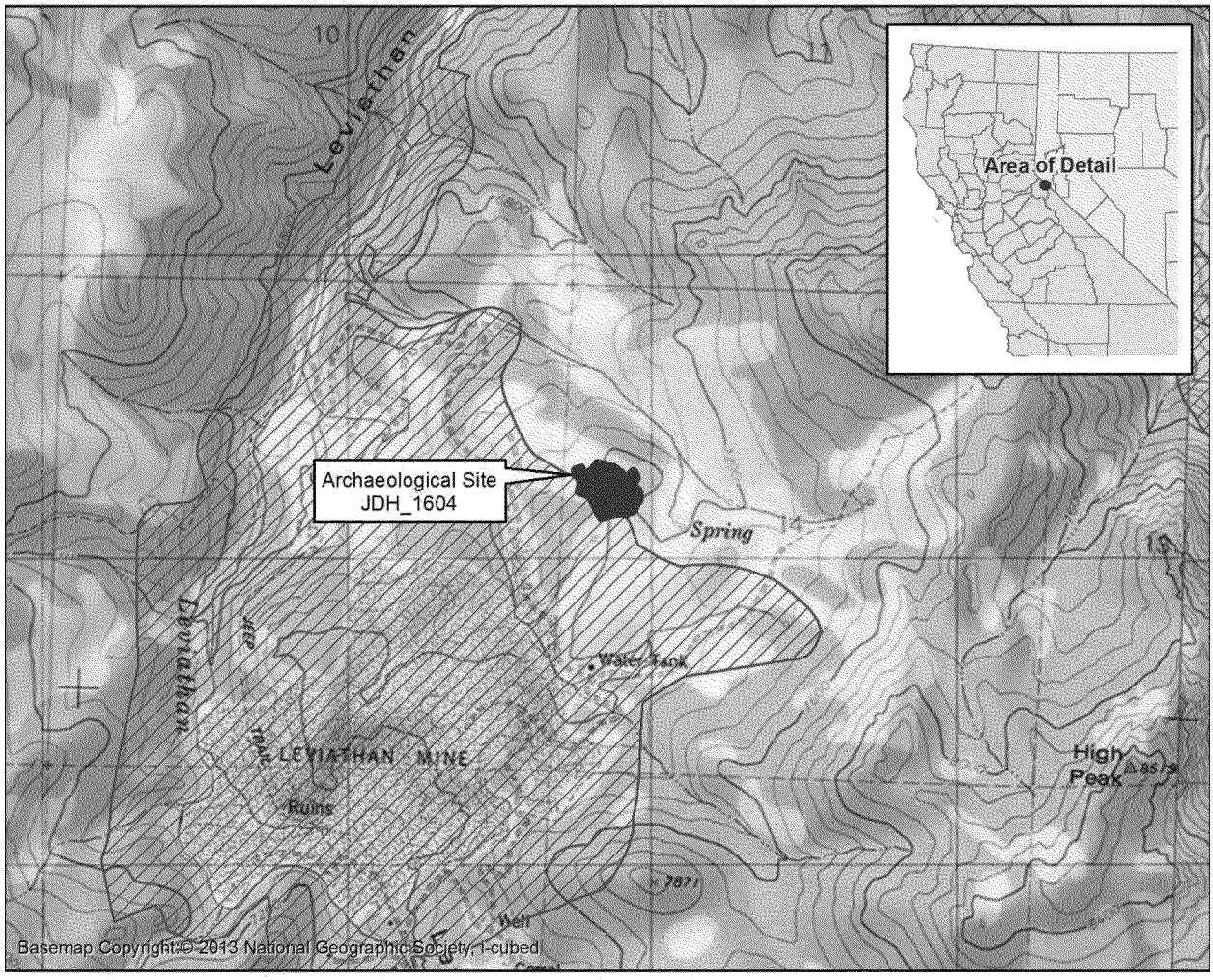
State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

*Resource Name or #(Assigned by recorder) JDH_1604
*Map Name: Heenan Lake *Scale: 1:24,000 *Date of map: 1979

(267,807 4,290,017) Coordinates for Map Corners (271,770 4,290,017)



(267,807 4,286,847) UTM Zone 11N NAD83 (271,770 4,286,847)

0 0.25 0.5 0.75 1 Km
0 0.1 0.2 0.3 0.4 0.5 Mi

N

1:24,000

USGS 7.5' Topographic Map Series
Heenan Lake, California Quadrangle (1979)
Section 14 of Township 10 N, Range 21 E, M.D.M.

Archaeological Site JDH_1604 Location
Project APE

Note
All locations and boundaries approximate

Agency Rep. R2013041702306	Amec Foster Wheeler Project No. 0013091150
Drawn By - Date TAM - 9/20/2016	Approved By - Date JDH - 9/20/2016

Figure 1: Site JDH_1604 Vicinity

State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary #
HRI#
Trinomial

Page 11 **of** 11 ***Resource Name or #**(Assigned by recorder) JDH_1604

(269,611 4,288,579) Coordinates for Map Corners (269,941 4,288,579)

(269,611 4,288,273) UTM Zone 11N NAD83 (269,941 4,288,273)

0 20 40 60 80 Meters
0 40 80 120 160 200 Feet
N
1:2,000

Note
All locations and boundaries approximate

Historic Artifact Area
Prehistoric Artifact Area
Archaeological Site Boundary
Feature
Artifact

Agency Rep. R2013041702306	Amec Foster Wheeler Project No. 0013091150
Drawn By - Date TAM - 9/20/2016	Approved By - Date JDH - 9/20/2016

Figure 2: Site JDH_1604 Sketch