

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 26, 2012.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Kennecott Tailings Expansion, SPK-2009-01213-UO.
Name of water being evaluated on this JD form: Adamson Spring

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: UT County: Salt Lake City: Magna

Center coordinates of site (lat/long in degree decimal format): Lat: 40.7189 N, Long: 112.0874 W

Universal Transverse Mercator: _____

Name of nearest waterbody: Great Salt Lake.

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A.

Name of watershed or Hydrologic Unit Code (HUC): 16020204.

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different JD form. List other JDs: SPK-2009-01213 JD1, JD2, JD3, Playa Area/Jones Spring, Clarification Canal and Clarification Canal Wetlands; Toe Ditch and Toe Ditch Wetlands; Historic Toe Ditch Wetlands.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: March 26, 2012.

Field Determination. Date(s): September 6, 2011, November 22, 2010.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: _____.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: _____ linear feet _____ width (ft) and/or _____ acres.

Wetlands: _____ acres.

c. Limits (boundaries) of jurisdiction based on: Pick List and Pick List

Elevation of established OHWM (if known): _____.

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: **According to available information, Adamson Spring and the adjacent wetlands were, at one time, completely covered by the historic alignment of the Mine Tailings Impoundment Clarification Canal. In the late 1980's the Canal**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

was realigned and Adamson Spring was opened to the surface in it's present condition. The present area of the spring was excavated and the spring itself was tapped at 300 feet below the surface to provide water for mining operations. Adamson Spring is an isolated feature with no potential to connect to a Traditional Navigable Water. Currently, water from the spring is being pumped to the Clarification Canal and then to the adjacent Pumpstation 1. It is then pumped into the industrial process water system (See attached Figure 21) via the Clarification Canal. The Clarification Canal and the other parts of the industrial process water system were determined to be non-jurisdictional since under normal circumstances if tailings disposal ceased, the Canal would dry up and not support any hydrology. The Clarification Canal is elevated 30-50 feet above any jurisdictional water source. It is a clay-lined structure that is used to convey water seeping from the tailings impoundment and recycled into the industrial process water system. Adamson Spring is bordered on the South and East by State Highway 201, the Clarification Canal and Tailings Impoundment on the North and and Pumpstation 1 on the West. The wetlands adjacent to the spring are palustrine emergent wetlands dominated almost exclusively by Phragmites australis. It is identified as a freshwater pond on the NWI maps, sepcifically PUBFx (Palustrine, Unconsolidated Bottom, Semipermanently flooded), and excavated. Under normal circumstances there is no potential for water to flow out of Adamson Spring Pond and connect to an RPW (Utah Canal is approximately 0.25-mile to the south on the other side of Highway 201) or the closest TNW, the Great Salt Lake which is approximately 4 miles away (straight-line distance). The Spring lacks any hydrologic, physical, chemical or biological connection to the Great Salt Lake. Further, there is no interstate commerce connection that would be adversely affected as a result of dregredation of Adamson Spring, as such, it would not consititute waters as defined under 328.3 (a)(3).

SECTION III: CWA ANALYSIS

- A. TNWs AND WETLANDS ADJACENT TO TNWs: NOT APPLICABLE
- B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS: NOT APPLICABLE
- C. SIGNIFICANT NEXUS DETERMINATION: NOT APPLICABLE
- D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE: NOT APPLICABLE
- E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):⁴
- which are or could be used by interstate or foreign travelers for recreational or other purposes.
 - from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
 - which are or could be used for industrial purposes by industries in interstate commerce.
 - Interstate isolated waters. Explain: _____.
 - Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: _____ linear feet _____ width (ft).

Other non-wetland waters: _____ acres.

Identify type(s) of waters: _____.

Wetlands: _____ acres.

- F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:
- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
 - Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
 - Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

⁴ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- Non-wetland waters (i.e., rivers, streams): _____ linear feet _____ width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: 0.26 acres. List type of aquatic resource: Spring/pond.
- Wetlands: 0.19 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet _____ width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: _____ acres.

SECTION IV: DATA SOURCES.

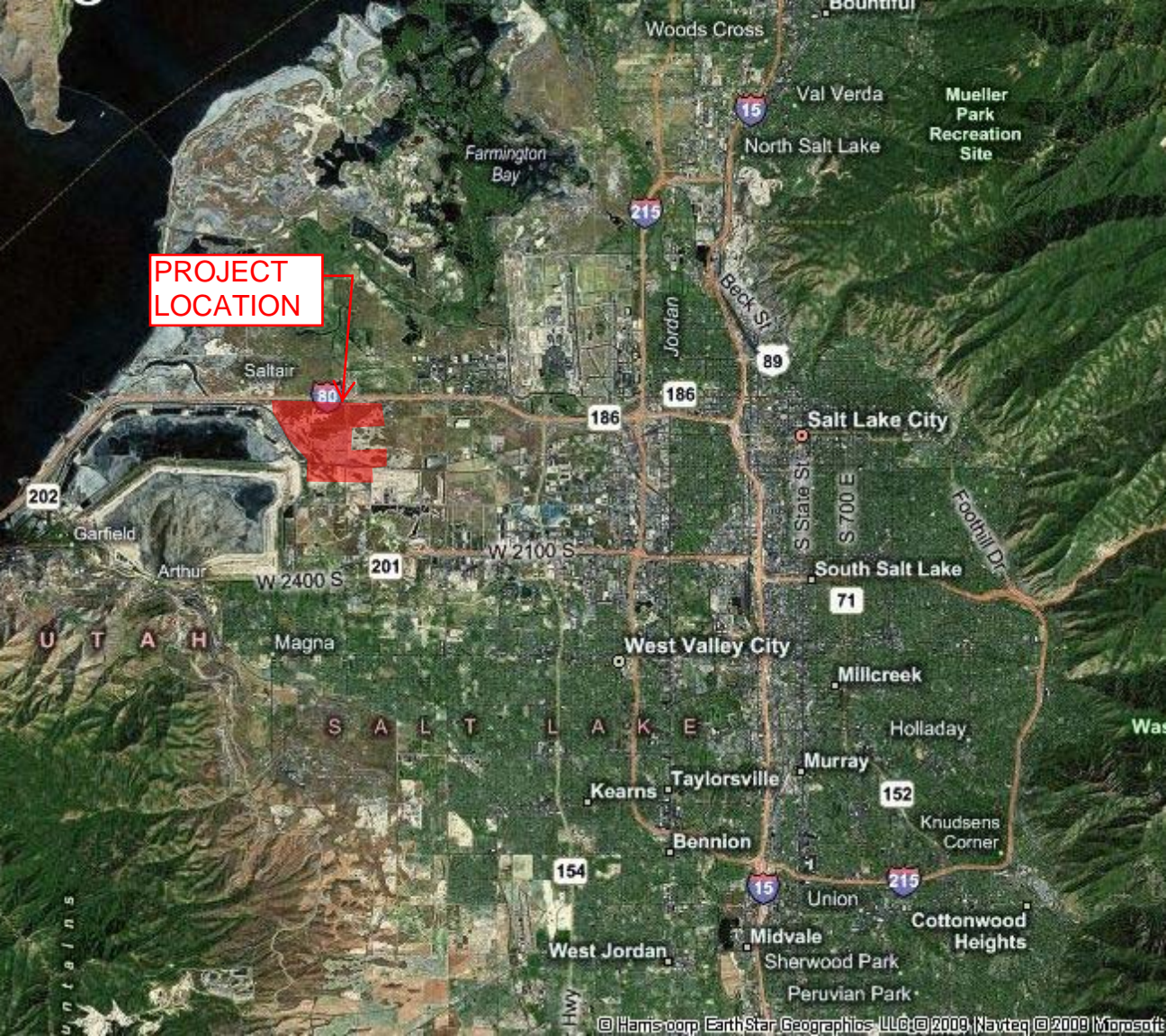
A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

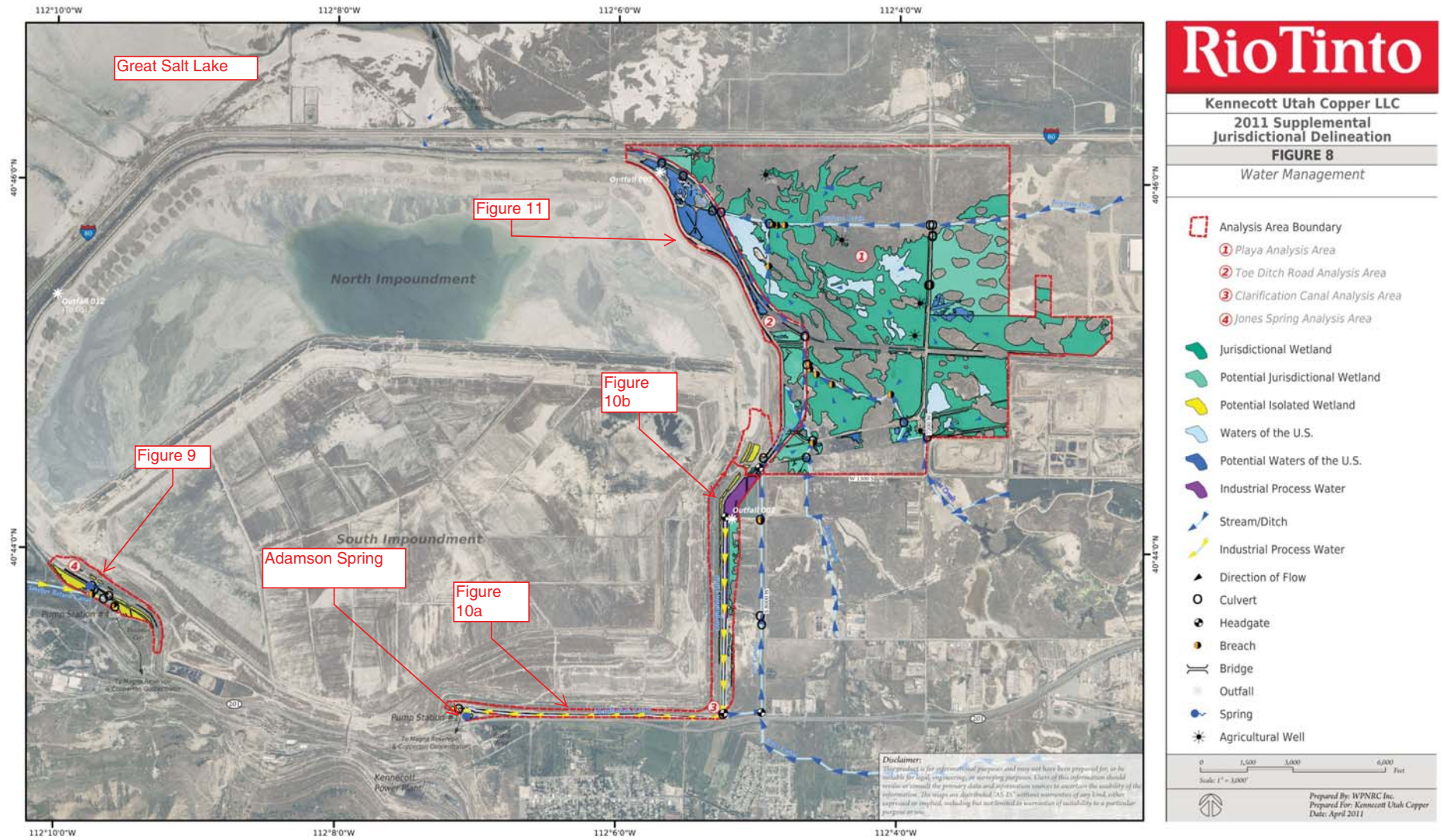
- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland Delineation by WP Natural Resources Consulting, Inc. dated July 2011 and received July 8, 2011; Adamson Spring Figure 21 Received 29, 2012.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: _____.
- Corps navigable waters' study: _____.
- U.S. Geological Survey Hydrologic Atlas: _____.
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: FARNSWORTH PEAK AND MAGNA 7.5-Minute Quadrangles
- USDA Natural Resources Conservation Service Soil Survey. Citation: Included in 2011 Supplemental JD.
- National wetlands inventory map(s). Cite name: Online - FWS Wetland Mapper.
- State/Local wetland inventory map(s): _____
- FEMA/FIRM maps: _____.
- 100-year Floodplain Elevation is: _____ (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Included in 2011 Supplemental JD
or Other (Name & Date): Included in 2011 Supplemental JD.
- Previous determination(s). File no. and date of response letter: _____.
- Applicable/supporting case law: _____.
- Applicable/supporting scientific literature: _____.
- Other information (please specify): _____.

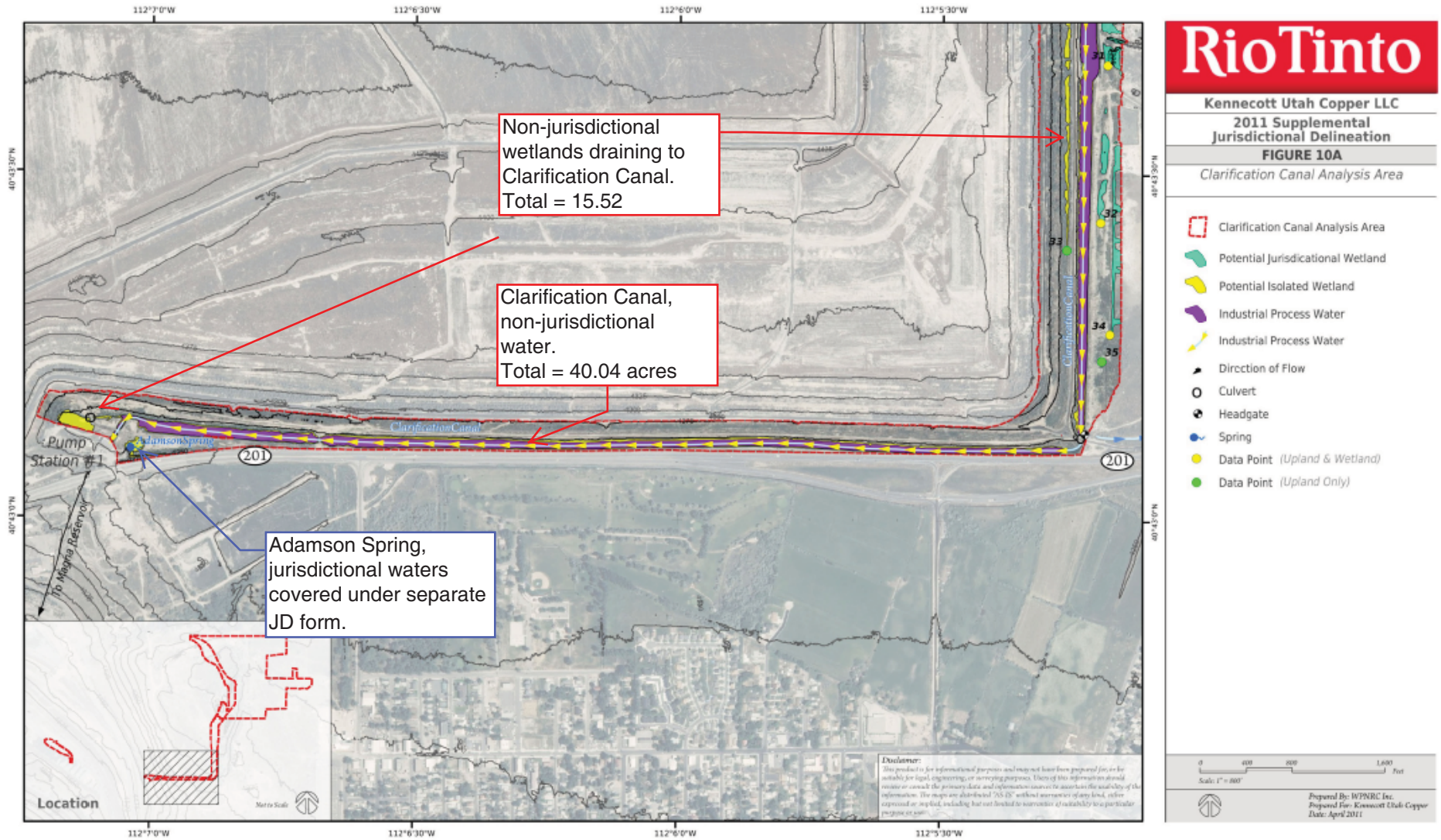
B. ADDITIONAL COMMENTS TO SUPPORT JD:

The following is included on separate datasheet titled "Clarification Canal and Clarification Canal Wetlands; Toe Ditch and Toe Ditch Wetlands; Historic Toe Ditch Wetlands". The Historic Toe Ditch Wetlands near Jones Spring, the Toe Ditch and the Clarification Canal are part of Kennecott Utah Copper's (KUC) industrial process water system which is a system of drains and channels that are pumped uphill to the Copperton Concentrator, approximately 9 miles to the south. The industrial process water system is used to process ore and to transport tailings, the waste product of mineral extraction, to the decant pond located on top of the North Tailing Impoundment. From the decant pond, the water either evaporates, is pumped to the clarification canal, percolates through the tailings impoundment and is captured by the toe drain, or is pumped from the decant pond to Outfall 012 which discharges to the Great Salt Lake, the closest TNW. Although the Historic Toe Ditch Wetlands near Jones Spring, the Clarification Canal and the Toe Ditch, along with the wetland associated with them, potentially drain to the Great Salt Lake the Toe Ditch and Clarification Canal were constructed as part of a permitted discharge (SPK-1994-50301) to construct the North Impoundment in 1996 or were constructed as part of the historic tailings impoundment prior to the Clean Water Act. The wetlands associated with the Toe Ditch and Clarification Canal and historic Toe Ditch receive hydrology solely through rainfall and water from the Toe Ditch or Clarification Canal. They are all at a higher elevation (approx. 30-50' higher) than any surrounding jurisdictional features or any natural water source. If the tailings operation ceased, the normal condition of the Toe Ditch, Clarification Canal, and Historic Toe Ditch wetlands would only receive nominal hydrology from rainfall. Once water levels within the Tailings Impoundment decreased these features would lose hydrology and would revert to being uplands. Therefore, the normal circumstances of these areas are upland and not jurisdictional waters.

**PROJECT
LOCATION**



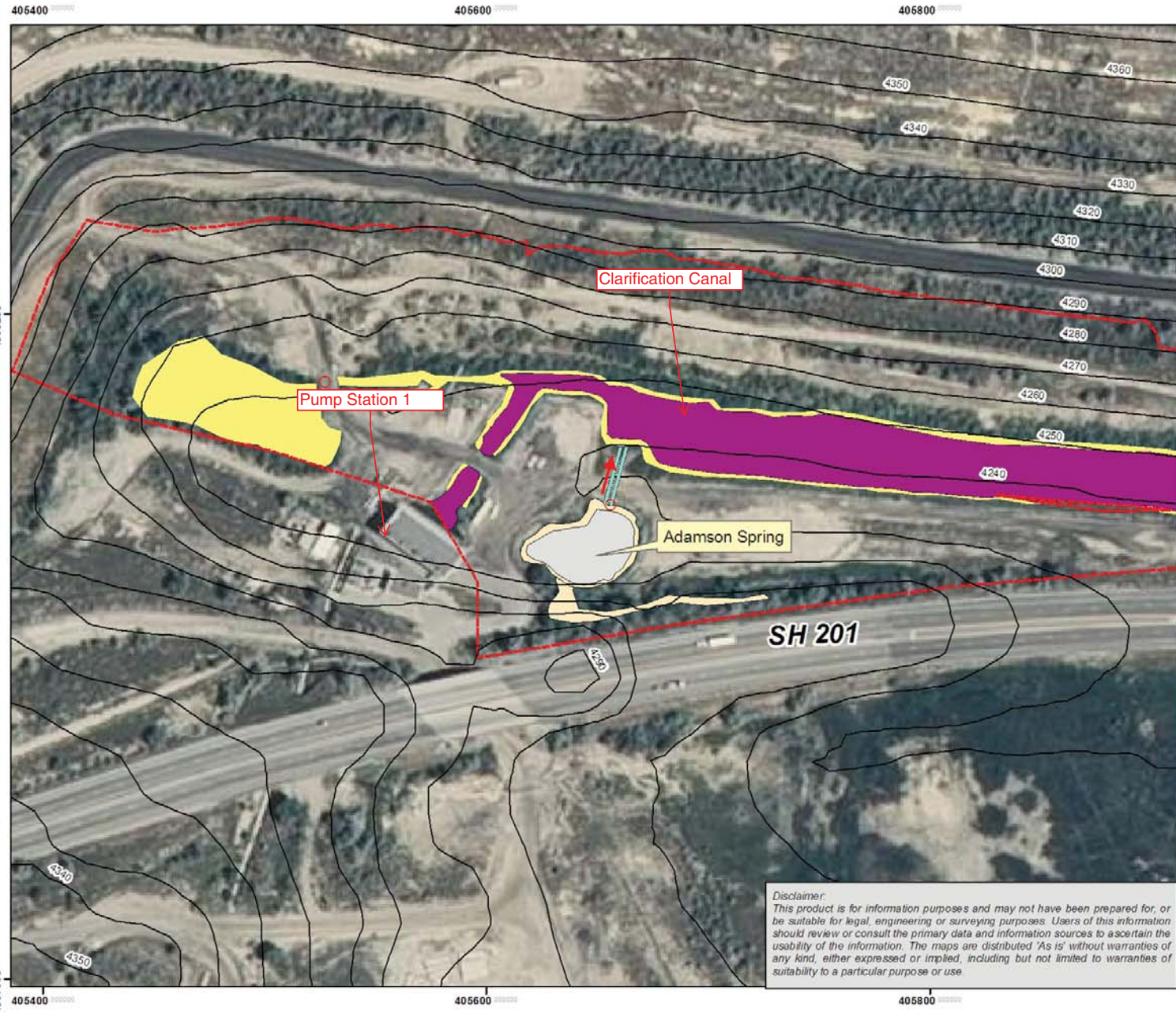
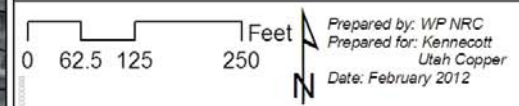




RioTinto

Kennecott Utah Copper LLC

DRAFT - Fig 21
Adamson Spring Area



- Investigation Area
- Culverts
- Underground Pipe/culvert
- Industrial Process Waters
- Non Jurisdictional Wetlands
- Adamson Spring
- Wetlands (Jurisdiction under Review)
- Water Flow Direction

Disclaimer
This product is for information purposes and may not have been prepared for, or be suitable for legal, engineering or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. The maps are distributed 'As is' without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use.



Phragmites surrounding Adamson Spring