

Atlantic Richfield Company

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August 6, 2013

CERTIFIED – RETURN RECEIPT REQUESTED

Ms. Jere Johnson
Remedial Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street, SFD-9-1
San Francisco, CA 94105

Subject: July 2013 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), CERCLA Docket No. 9-2007-0005; Administrative Order on Consent, CERCLA Docket No. 09-2009-0010

Dear Ms. Johnson:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared this July 2013 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

July 2013 Activities

Site Security and O&M Activities

- Continued Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- With the exception of the Pumpback Well System (PWS) Evaporation Pond, all wind dancers were in operation. Following the July 4 rain event, a wind dancer was activated on the berm between the middle and south Lined Evaporation Pond (LEP) cells. Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds with the exception of the VLT Pond, as directed by EPA, with start/stop times adjusted to accommodate daylight hours. Bird Gard towers 'A', 'B' and 'C' around the PWS and LEP were not in operation before the July 4 rain event, but were operated during the remainder of the month.
- Bird identification refresher training occurred on July 31.
- No measurable water in the PWS Evaporation Pond cells was observed by the end of July, including the approximate 1.5 inches that accumulated from the July 4 event, which subsequently evaporated.
- Arimetco FMS pond levels: Phase 1 Pond = 3.68 feet; FMS Evaporation Pond = 9.1 feet; VLT Pond = 1109 feet; Slot 2 Pond = 11.96 feet. Approximately 95,833 gallons of solution were transferred from the VLT pond to the FMS Evaporation Pond, with no additional fluid transfers. See attached monitoring data.
- Approximately 50,494 gallons of solution were pumped from the leak detectors including 12,631 gallons from SD2 near the Slot Pond and approximately 37,326 gallons from VLTD1 at the VLT Pond (see attached monitoring data). A total of approximately 1,197,656 gallons of solution has been pumped from the leak detectors since January 1. See attached monitoring data.



July 2013 Activities - Continued

Site Security and O&M Activities - Continued

- Following the July 4 precipitation event, Site personnel inspected all FMS ditches and ponds, and other topographically low areas for erosion or damage. Erosional damage to roads and a washout of a berm and embankment near the VLT Pond were noted. Road grading and berm repairs were completed by July 9.
- Participated in a Site visit on July 16 with EPA, NDEP and SPS to review the new FMS pond location. Provided comments on a draft design document prepared by NDEP's contractor.
- Continued a review of EPA's VLT Pond Repair Construction, Operation and Maintenance Report.
- Desert Engineering completed modifications on July 9 to the wash pad, which was constructed for past removal actions, to accommodate future Site characterization activities (e.g., monitor well drilling, Process Areas and Evaporation Ponds investigations).
- Fawcett Electric performed electrical system upgrades and modifications over the course of several days in July, including: 1) disconnecting and reconnecting power prior to the VLT road embankment repairs; and 2) the replacement of a damaged cross arm on the power line leading to the VLT pond and removed unnecessary overhead wiring.
- Postponed the plan to perform dust suppression activities on the LEP and UEP, originally scheduled for mid-July, due to the July 4 precipitation event.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained July 23-25.
- A pit lake water elevation of 4230.34 feet amsl was recorded on July 25, 2013 from the pressure transducer, an increase of approximately 0.29 feet since June 25, 2013. The pit lake elevation has risen 1.98 feet since July 25, 2012.
- The owner of DW-83 requested to be removed from the domestic well sampling program. Well TW-6 on Yerington Paiute Tribe (YPT) property (Arrowhead Market) was removed from future sampling as the well was disconnected from all use (the YPT water supply system now provides all water to the market).
- Nine new residences were added to the Bottled Water Program. One new residence (DW-122) is serviced by their own private well, whereas the other eight residences are new homes recently built on YPT property and serviced by Well 4. The owner of DW-147 declined bottled water in July 2013 after accepting it in June 2013.
- Continued the compilation of 2Q 2013 groundwater and domestic well data for inclusion in the quarterly reports.
- Continued modifications to the Revised Groundwater (OU-1) RI Work Plan based on EPA comments, including Data Quality Objectives (DQOs) for the Work Plan.
- Continued the evaluation of hydrologic tracer data and the preparation of the Hydrologic Tracer Data Summary Report (DSR).
- Discussed the scope of the Additional Monitor Well Work Plan with YPT representatives. Received comments on the Work Plan from EPA and YPT on July 29, and initiated responses to these comments.
- Continued groundwater flow modeling activities.
- Continued geochemical modeling of groundwater quality data and interpretation of results.
- Discussed additional testing of aquifer solid samples with Hazen Laboratories.
- Collected standing water samples from various locations on the Site after the July 4 precipitation event. A total of 18 samples were collected, including 3 duplicates.
- Continued activities for the Process Areas (OU-3) Sub-Surface Utility and Dry Well Investigation as follows: 1) Spectrum Geophysics and Desert Engineering continued field investigations July 16-19; 2) updating the DSR for the sub-surface investigations; and 3) planning for upcoming pad demolition and UST investigation activities.
- Continued development of the Field Sampling and Analysis Plan (FSAP) required by the Process Areas (OU-3) RI Work Plan for the step-out soil sampling program.
- Routine database management activities and support of Site investigations and reports.

Planned August/September 2013 Activities

Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- As needed, assist EPA and NDEP with FMS capacity information.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Transmit the 2Q 2013 groundwater monitoring and domestic well monitoring reports.
- Perform the 3Q 2013 groundwater monitoring and domestic well monitoring events.
- Transmit responses to EPA comments on the 2012 Annual Groundwater Monitoring Report.
- Continue to prepare the Preliminary Bedrock Well Investigation DSR.
- Continue to summarize hydrologic tracer data from the May 2012 sampling event in a Technical Memorandum for transmittal to EPA.
- Continue to modify the revised Site-Wide Groundwater (OU-1) RI Work Plan and prepare responses to EPA comments.
- Initiate responses to EPA comments on the Draft Additional Monitor Well Work Plan, modify the Work Plan and initiate field activities.
- Continue geochemical modeling activities in support of an interpretation of hydrologic tracer data and potential support of future fate and transport analysis.
- Continue aquifer solids testing activities.
- Transmit final responses to EPA comments on the Public Information Tech Memo for a portion of the Groundwater Study Area, and the revised Tech Memo.
- Continue to develop a Work Plan for supplemental characterization activities for the Evaporation Ponds and the northern portion of the Calcine Ditch.
- Complete remaining Phase II geophysical and soil investigations associated with sub-surface utilities in the Process Areas, and continue to compile the data. Continue preparation of the DSR when all geophysical and analytical data become available.
- Complete and transmit the draft FSAP for the OU-3 RI Work Plan for EPA review.
- Initiate the collection of groundwater grab samples from WW-10 in accordance with the OU-3 RI Work Plan.
- Review data quality objectives for the Wabuska Drain (OU-7) RI Work Plan when received.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the July 2013 monthly report.

Sincerely,

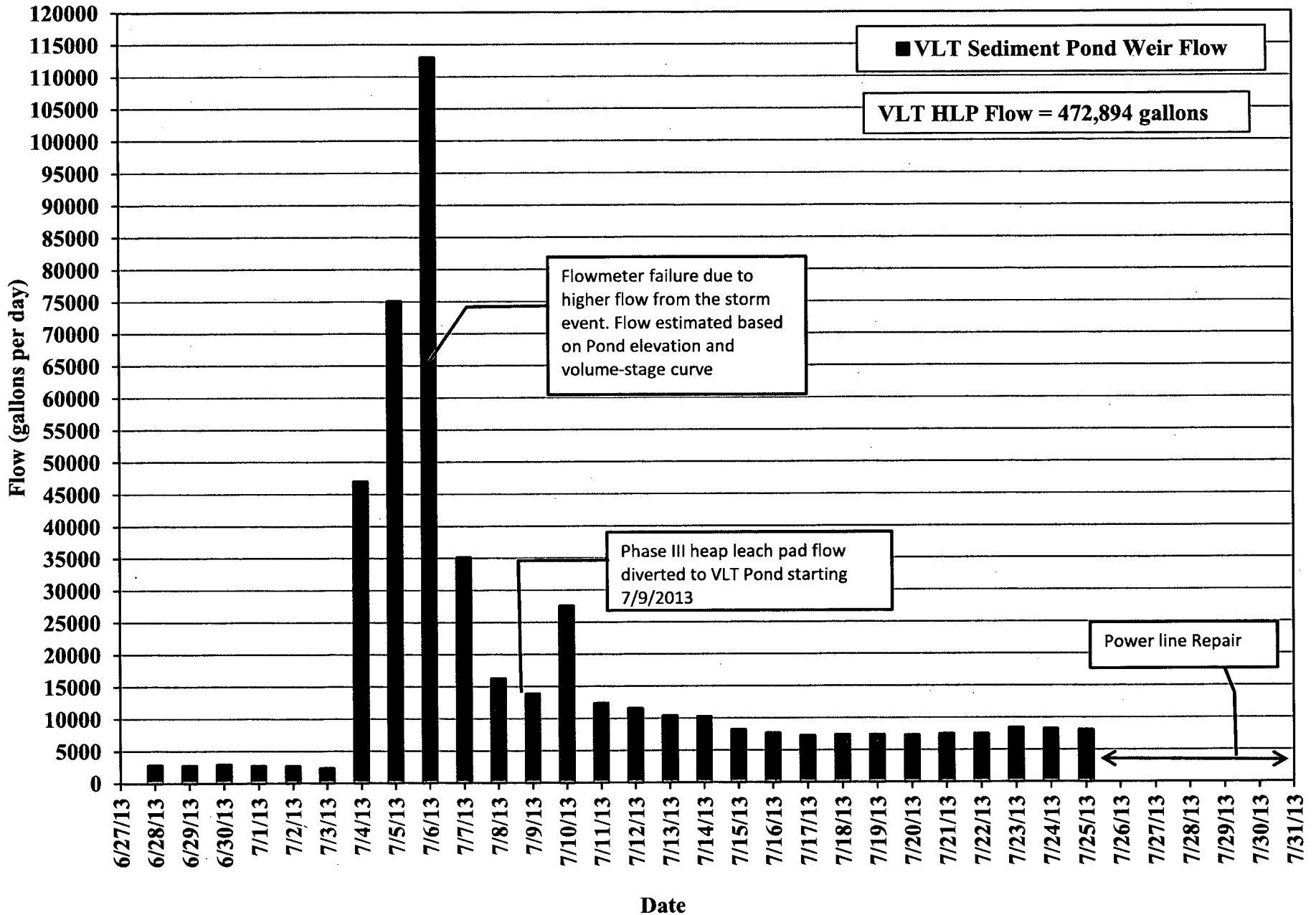


Jack Oman
Project Manager

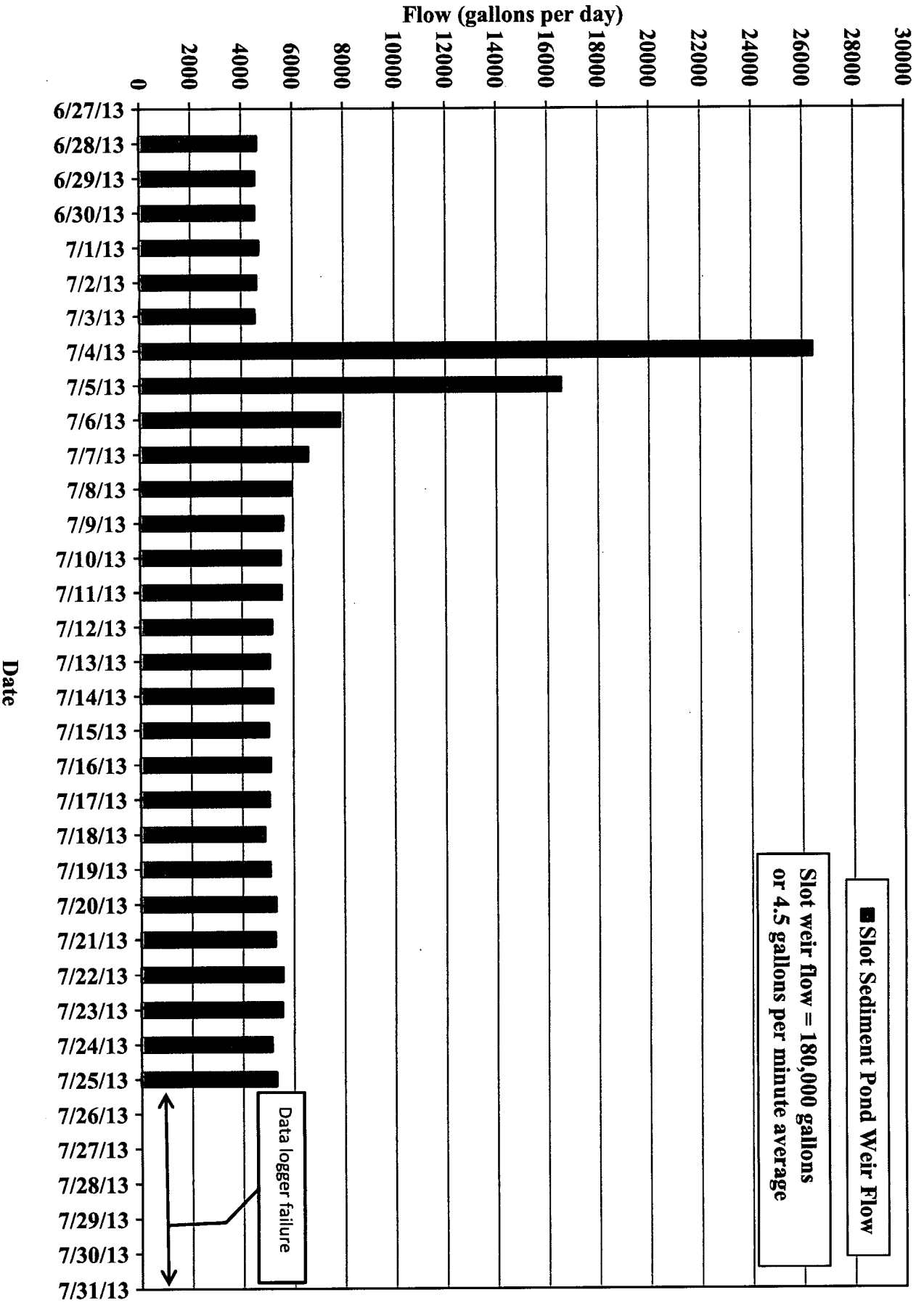
Attachment

cc: Dave Seter, EPA – via electronic mail
Harry Ball, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, NDEP – via electronic mail
Jeryl Gardner, NDEP – via electronic mail
Tom Olsen, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic mail
Phyllis Hunewill – via electronic mail
Virgil Arellano, Lyon County Commissioner – via electronic mail
Rob Loveberg, Lyon County Planning Department – via electronic mail
Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Deborah Dunn, YPT – via electronic mail
Chairwoman Howard, YPT – via electronic mail
Dietrick McGinnis, McGinnis and Associates – via electronic mail
Tom Bowden, Ridolfi, Inc. – via electronic mail
Chairwoman McFalls, WRPT – via electronic mail
Tad Williams, WRPT – via electronic mail
Ron Halsey, Atlantic Richfield Company – via electronic mail
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George Eliopoulos, Singatse Peak Services, LLP – via electronic mail
Taurus Massey, Singatse Peak Services, LLP – via electronic mail
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Ken Greene, CH2M Hill – via electronic mail
Victor Early, Tetra Tech – via electronic mail
Colin Lee, Tetra Tech – via electronic mail
Peggy Pauly, YCAG – via electronic mail
Lyon County Library System Central

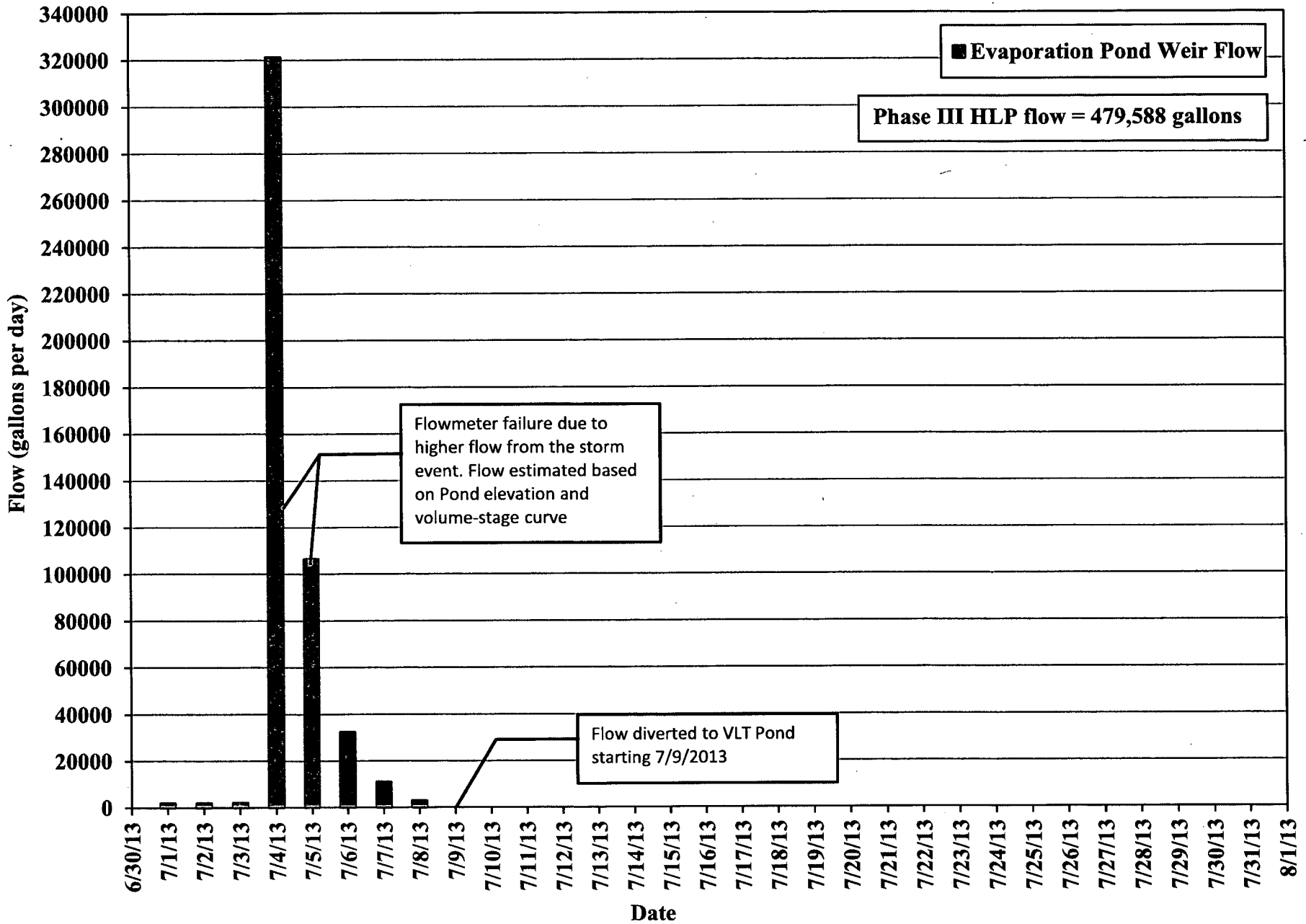
Arimetco VLT Pond Flow (July 2013)



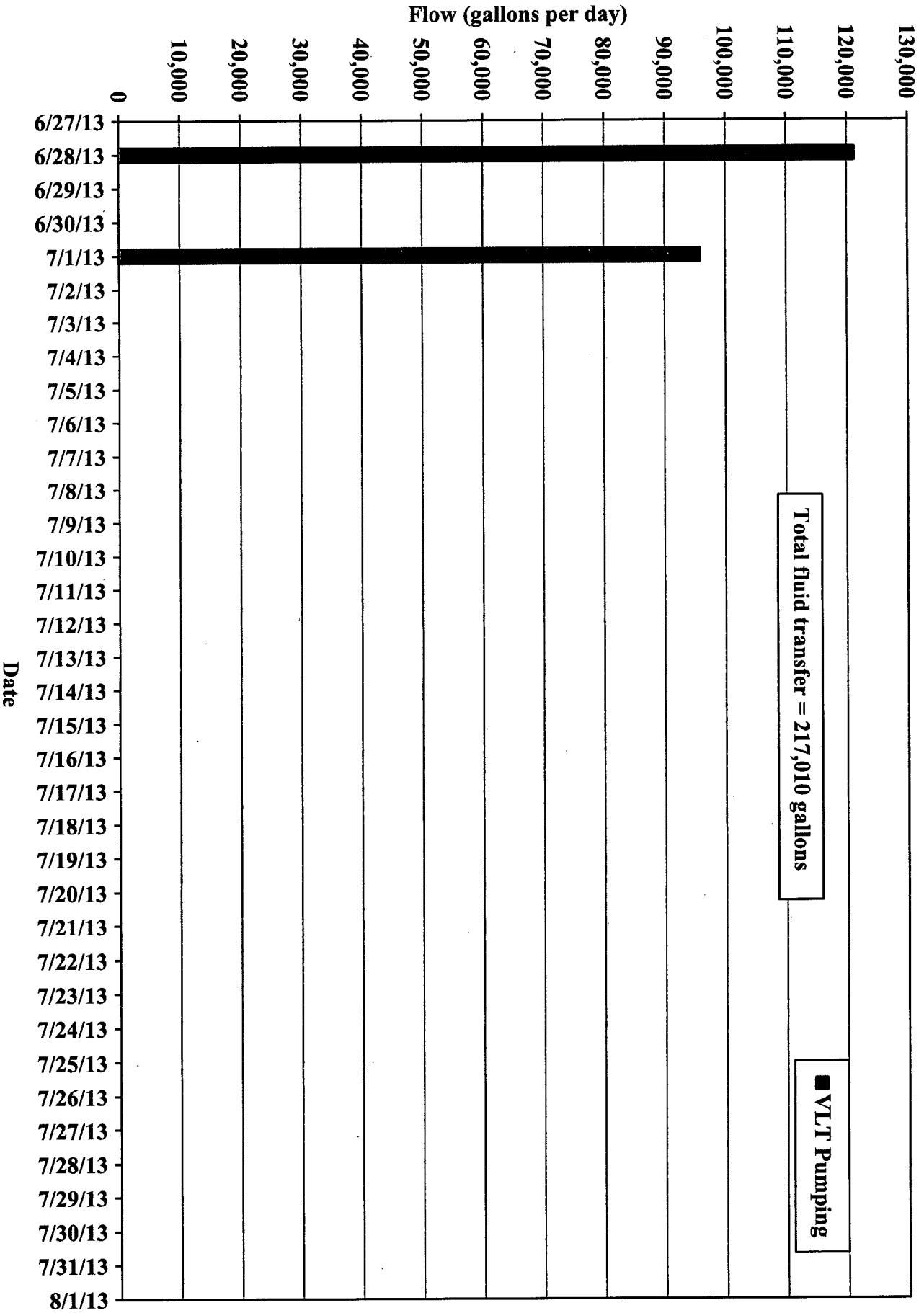
Armetco Slot Pond Weir Flow (July 2013)



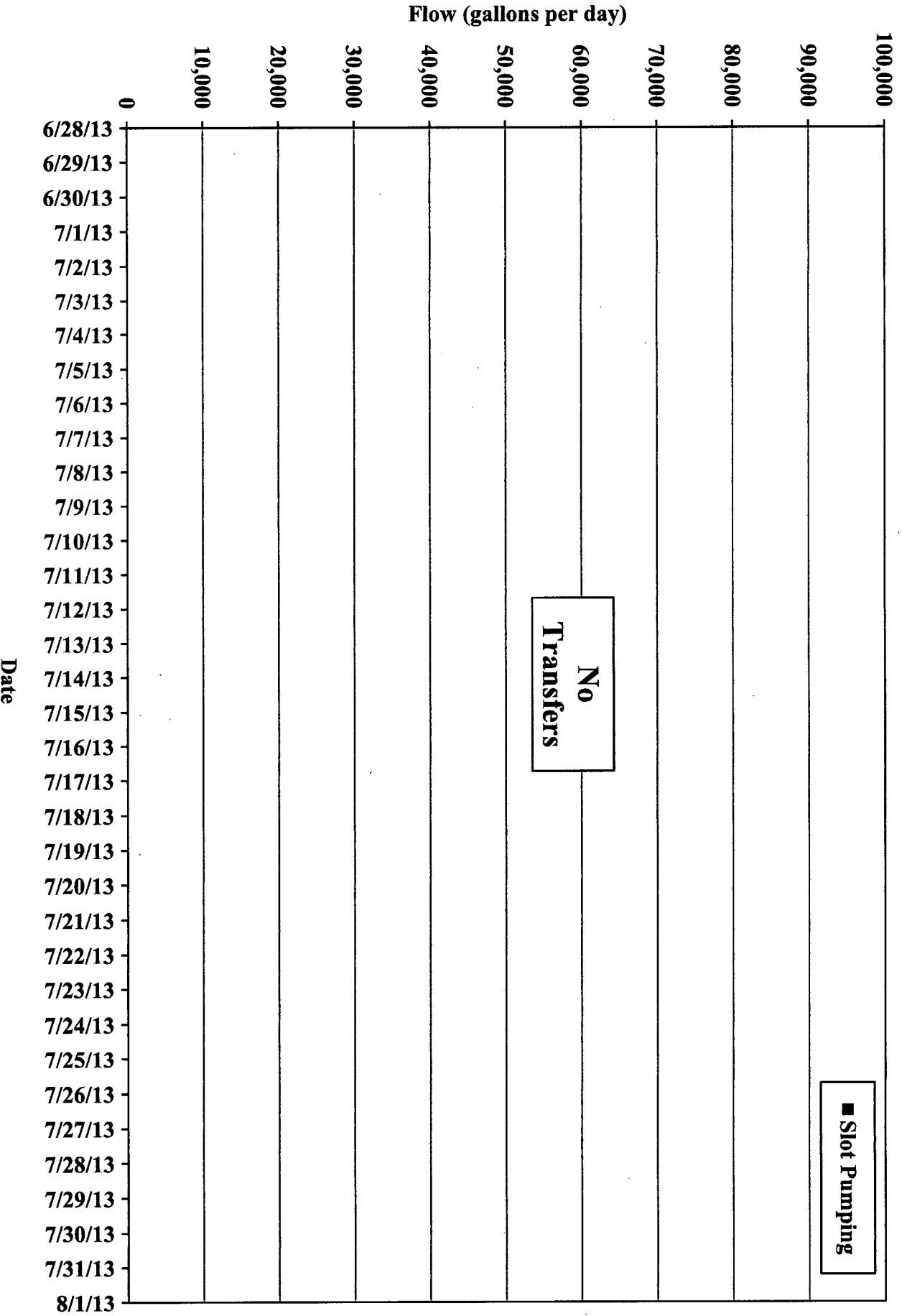
Armetco FMS Evaporation Pond Weir Flow (July 2013)



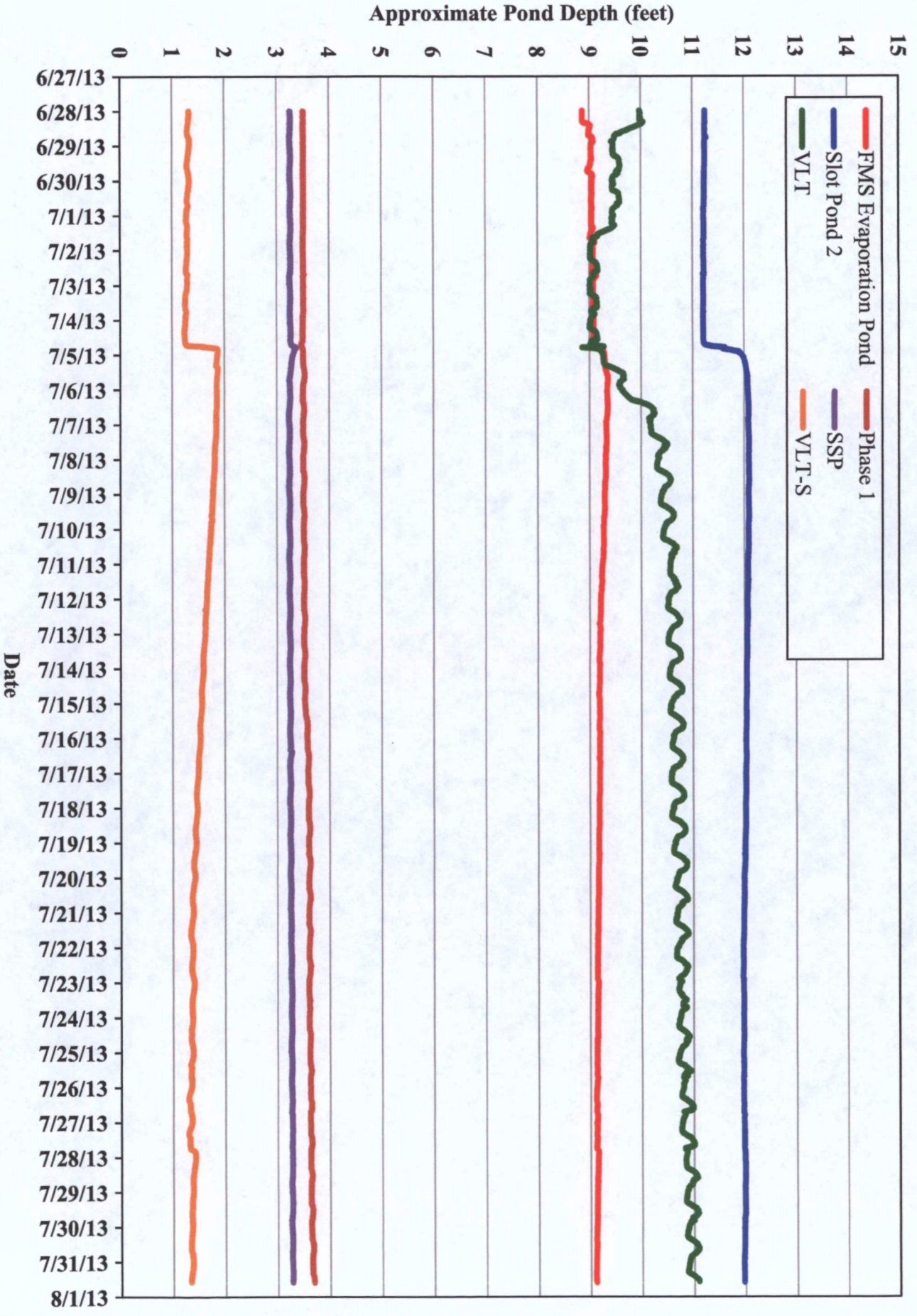
Arimetco VLT Pond Fluid Transfer (July 2013)



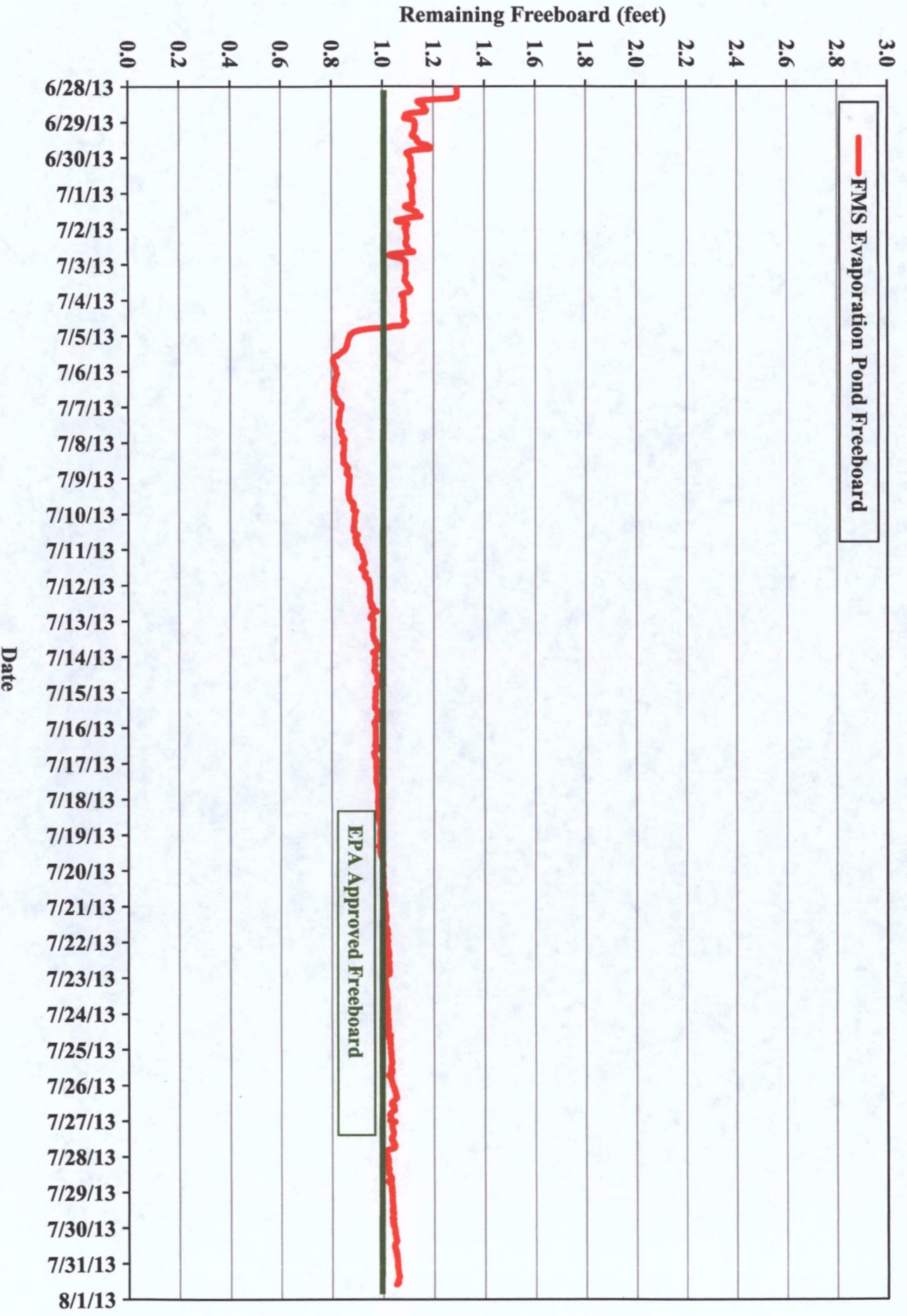
Arimateco Slot Pond Fluid Transfer (July 2013)



Arimeto FMS Ponds Transducer Levels (July 2013)



Arimetco FMS Evaporation Pond Freeboard Status (July 2013)



Arimetco Fluid Management System Monthly Leak Detector Report (Year 2013)

Leak Detector ID	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Monthly Totals
VLTSP	W	W	W	W	W	W	W						1,256
	168	125	185	193	175	176	234						
VLTP1	D	D	D	D	D	D	D						0
	0	0	0	0	0	0	0						
VLTD1	W	W	W	W	W	W	W						1,075,291
	178,011	190,000	172,265	217,000	185,473	95,216	37,326						
VLTD2	W	W	W	W	W	W	W						1,133
	181	129	162	174	159	148	180						
VLTD3	D	D	D	D	D	D	D						0
	0	0	0	0	0	0	0						
I FX	W	W	W	W	W	W	W						318
	35	32	33	116	22	0	80						
II FX	W	W	W	W	W	W	W						138
	60	35	15	10	0	0	18						
III FX	D	W	W	W	W	W	W						110
	0	40	50	0	0	0	20						
SSP1	W	W	W	W	W	W	W						29
	0	29	0	0	0	0	0						
SD1	D	D	D	D	D	D	D						0
	0	0	0	0	0	0	0						
SD2	W	W	W	W	W	W	W						119,376
	25,294	25,866	20,090	13,305	11,672	10,518	12,631						
SD3	D	D	D	D	D	D	D						0
	0	0	0	0	0	0	0						
MD1	D	D	D	D	D	D	W						5
	0	0	0	0	0	0	5						
Total	203,749	216,256	192,800	230,798	197,501	106,058	50,494	0	0	0	0	0	1,197,656

Notes:

- 1) Leak Detector Locations shown on Figure 2-1 of the 2010 Annual O&M Report (June 2, 2011)
- 2) W=Wet; and D = Dry. 3) NOT PUMPED