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Acting Secretary for
Environmental Protection



Department of Toxic Substances Control

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5796 Corporate Avenue
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Edmund G. Brown Jr.
Governor

Sent Via E-mail

February 24, 2011

Ms. Yvonne Meeks
Portfolio Manager – Site Remediation
Pacific Gas and Electric Company
4325 South Higuera Street
San Luis Obispo, CA 93401

APPROVAL OF THE REVISED ADDENDUM TO THE REVISED WORK PLAN FOR EAST RAVINE GROUNDWATER INVESTIGATION, AND FINAL REVISED IMPLEMENTATION PLAN FOR REPAIR OF MONITORING WELLS MW-38S AND MW-38D AND OLD WELL/ PIPE RECONNAISSANCE AT PACIFIC GAS AND ELECTRIC COMPANY (PG&E), TOPOCK COMPRESSOR STATION, NEEDLES, CALIFORNIA (EPA ID NO. CAT080011729)

Dear Ms. Meeks:

The Department of Toxic Substances Control (DTSC) has received and completed our review of the December 31, 2010 *Revised Addendum to the Revised Work Plan for East Ravine Groundwater Investigation (Revised Addendum)* and the February 11, 2011 *Final Revised Implementation Plan for Repair of Monitoring Wells MW-38S and MW-38D and Old Well/ Pipe Reconnaissance (Final Revised MW-38 Rehabilitation Plan)*. DTSC circulated the East Ravine addendum to the Consultative Work Group, Tribal Representatives and the Technical Workgroup subcommittee for review and comment on September 13, 2010. Similarly, DTSC forwarded a draft of the MW-38 Rehabilitation Plan to the same parties on September 28, 2010 for review and comment. After careful evaluation of the comments received on both documents, DTSC formally forwarded all comments to PG&E and requested a revision to the East Ravine addendum on December 3, 2010 and the MW-38 Rehabilitation Plan on December 7, 2010. As a result of DTSC's direction, PG&E revised the documents and issued the final Revised Addendum on December 31, 2010 and a Final Revised MW-38 Rehabilitation Plan on February 11, 2011.

DTSC notes that the need for additional investigations at the East Ravine and Topock Compressor Station were considered and described in the July 2, 2008 Volume 2, Final

RCRA Facility Investigation/ Remedial Investigation Report. Additionally, PG&E concluded in Appendix A of the December 2009 final Groundwater Corrective Measure Study/ Feasibility Study Report (CMS/FS) the need to collect additional data associated with potential source of contamination within the East Ravine and Compressor Station and for the data to be incorporated into the design of the final remedy. DTSC concurs that the additional samples to be collected are necessary for the remedy decision to support the design as concluded in the CMS/FS, and that the additional wells to be installed are consistent with the remediation project considered under the January 31, 2011 certified Environmental Impact Report (EIR).

As for the MW-38 well cluster (MW-38S and MW-38D), DTSC directed PG&E on June 2, 2010 to prepare a plan for the rehabilitation of these monitoring wells that were damaged during a rain event in January 2010. These wells are part of the existing well network to monitor the condition of the groundwater plume. MW-38S is important in that it yields some of the highest contaminant concentrations along Bat Cave Wash and defines the western boundary of the hexavalent chromium plume. DTSC considers the retention of these existing wells to be vital and necessary for the assessment of the current plume condition and future clean up progress during remedy implementation. DTSC considers the maintenance/ replacement of these wells to be consistent with the remediation project considered under the certified EIR.

Furthermore, DTSC considers the location of a possible existence of an old, improperly abandoned, well as reported in the 2007 RFI/RI Volume 1 report to be an activity that is necessary to be in compliance with the California Well Standards. This old well is situated within a contaminated area, proper decommissioning of this well is mandated under the well standards to avoid further contamination of the groundwater resource. According to the Final Revised MW-38 Rehabilitation Plan, PG&E will conduct geophysical surveys within an area south of the MW-38 cluster to locate this well. The geophysical survey area is depicted in Figure 2 of the Final Revised Rehabilitation Plan. This geophysical survey will be conducted simultaneously with the required aboveground and underground utilities survey prior to intrusive repair work at the MW-38 well cluster. Since the use of geophysical survey alone can produce excessive anomalies that may potentially require unnecessary physical disturbance of soil within a sensitive area as concluded in the certified EIR, DTSC has reviewed additional historical photos and testimony of a former employee in an attempt to reduce the potential survey area. PG&E should prioritize the geophysical investigation within the prescribed area as suggested in the enclosed memorandum.

Based on the scope of work identified within the subject final work plans, the review and consideration of the comments received, and our review of the analysis associated with the certified programmatic EIR for the groundwater remedy, DTSC concludes that the activities specified in the two work plans are consistent with the findings of the certified programmatic EIR. DTSC hereby approves the December 31, 2010 Revised Addendum and the February 11, 2011 MW-38 Rehabilitation Plan subject to the condition set forth in the Mitigation Monitoring and Reporting Program adopted as part of the project approval

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and EIR certification which includes applicable measures, but are not limited to, pre-construction nesting surveys if work is done within nesting season, compliance with the preliminary biological assessment requirements, the need for PG&E to carry out all remediation activities, including all supporting operations and maintenance activities, in ways that avoid, minimize, and mitigate significant adverse effects to historically significant cultural and historic resources.

If you have any questions or comments regarding this letter, please contact me at (714) 484-5439.

Sincerely,



Aaron Yue
Senior Hazardous Substances Engineer
Office of Geology

Enclosure

aky: 021101B

cc: PG&E Topock Consultative Workgroup Members – Via e-mail
PG&E Topock Geo/Hydro Technical Workgroup Members – Via e-mail
Tribal Representatives in PG&E Contact List – Via e-mail



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MEMORANDUM

TO: Aaron Yue
Senior Hazardous Substances Engineer
Office of Geology

FROM: Chris Guerre, CHG
Senior Engineering Geologist
Geologic Services Unit
Cypress Office

DATE: February 23, 2011

SUBJECT: FORMER WELL / PIPE IN BAT CAVE WASH
PACIFIC GAS AND ELECTRIC COMPANY
TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA (EPA ID NO. CAT080011729)

Background

According to the *Revised Final RCRA Facility Investigation Report, Volume 1, Site Background and History, PG&E Topock Compressor Station*, dated August 2007 and prepared by CH2MHill, a plant employee welded a cap onto an approximately 12-inch diameter vertical pipe located in Bat Cave Wash. The pipe looked like a regular well casing and only extended a small amount above the ground. Department of Toxic Substances Control (DTSC) staff discussed the occurrence of the old well / pipe in Bat Cave Wash with Pacific Gas and Electric (PG&E) representative Mr. Curt Russell and former PG&E Topock Compressor Station employee Mr. Bill De Lay on January 26, 2011. Mr. De Lay specified where he recalled welding the well shut sometime in the 1980s. The area he identified is pictured in Figure 1 as well as on Figure 6. He indicated that the approximate location of the well was bounded by existing groundwater monitoring well MW-10 (located to the right in Figure 1) and by the person pictured to the far-left in Figure 1 and that the well was located closer towards the middle of the wash.

Findings and Recommendations

Based on Mr. Delay's account of the location of the old well, DTSC staff reviewed historic photographs of the PG&E Topock Compressor Station that were included in PG&E's August 22, 2007 letter/DVD disk titled *Photos of the Topock Compressor Station and vicinity*. A few historic photographs were found of a temporary water supply well that was operational in March 1951 (Figures 2, 4 and 5). Examination of the background in Figure 2 illustrates a distinctive rock outcrop that can be viewed in current photographs of Bat Cave Wash (Figures 1 and 3). This rock outcrop is highlighted in green in the 1951 Figure 2 photograph and the area has also been highlighted in current photos (Figures 1 and 3).

Based on this information, DTSC believes that the old well / pipe described in the 2007 RFI Volume 1 Report and by Mr. De Lay may be the old 1951 temporary water supply well shown in Figures 2, 4 and 5. DTSC recommends that this information be considered by PG&E to assist in locating the old well as planned in PG&E's February 11, 2011 Technical Memorandum entitled *Final Revised Implementation Plan for Repair of Monitoring Wells MW-38S and MW-38D and Old Well/Pipe Reconnaissance*.

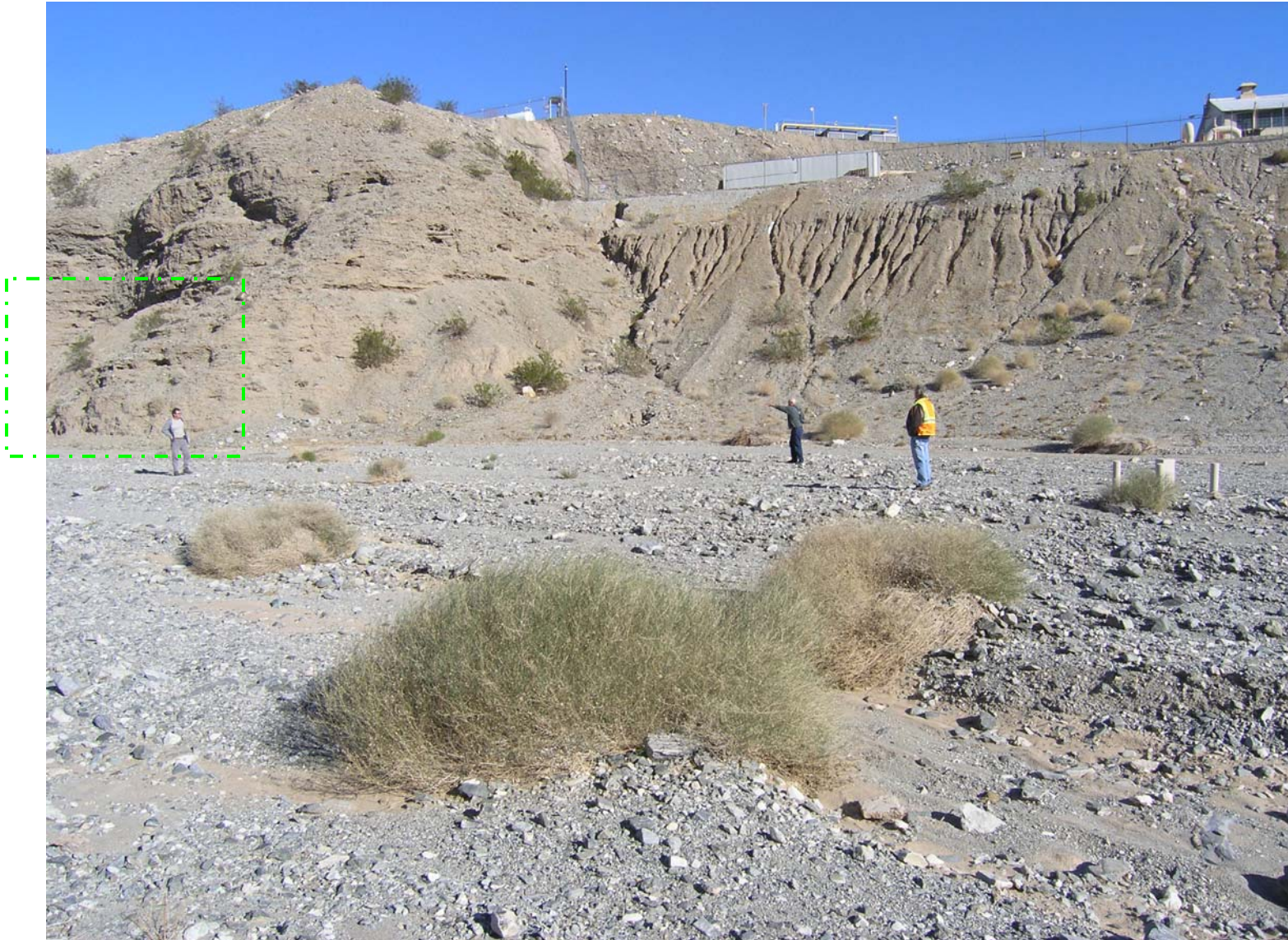


Figure 1. January 26, 2011. Northeast view from Bat Cave Wash showing general area where Mr. De Lay recalled welding a lid onto the top of an old well.

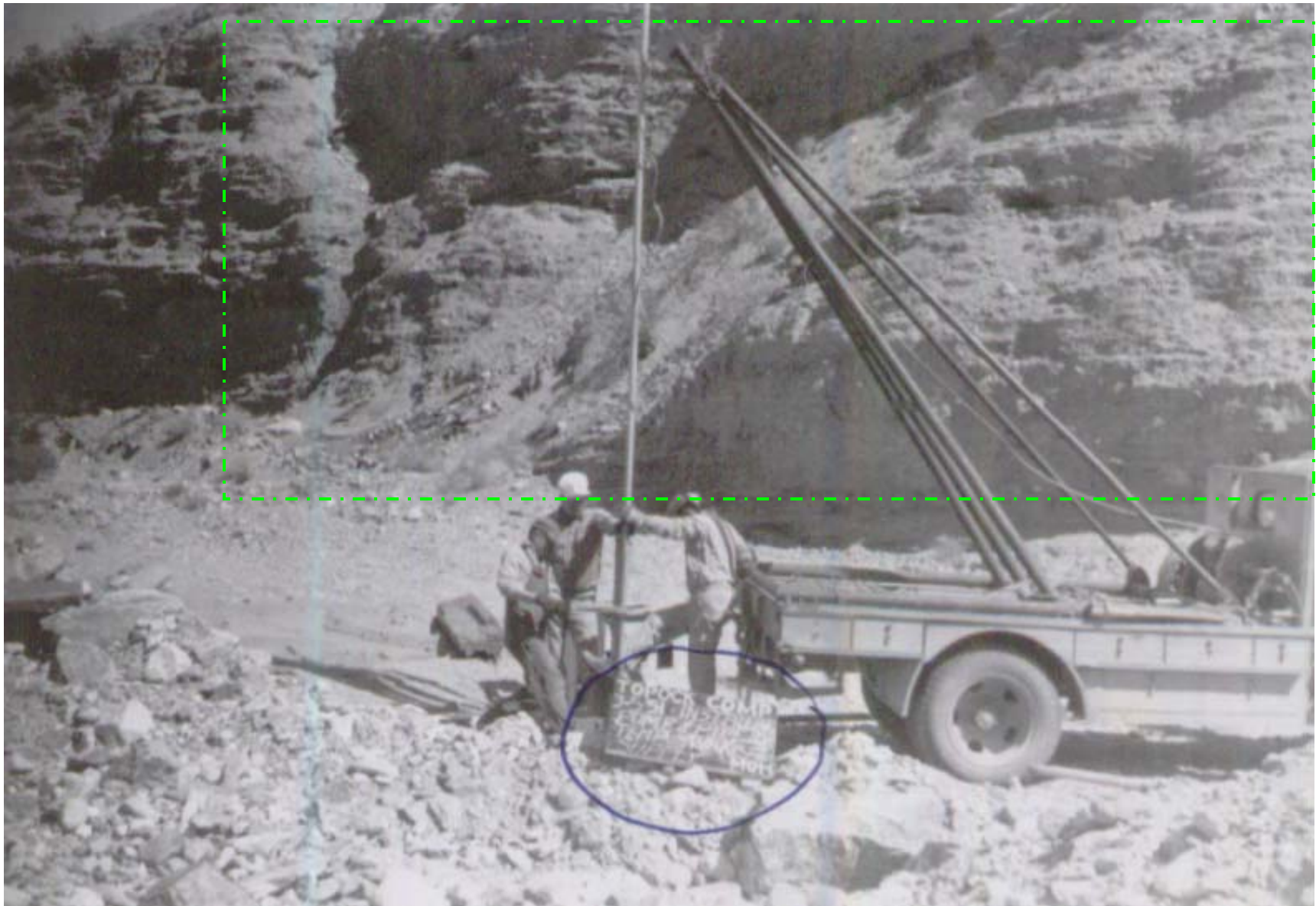


Figure 2. March 5, 1951. Installing Water Pump in Temporary Water Supply Well



Figure 3. August 14, 2010. Northeasterly view of Bat Cave Wash highlighting distinctive rock outcrop to the east.



Figure 4. March 5, 1951 Close up of Pump Installation in Temporary Water Supply Well

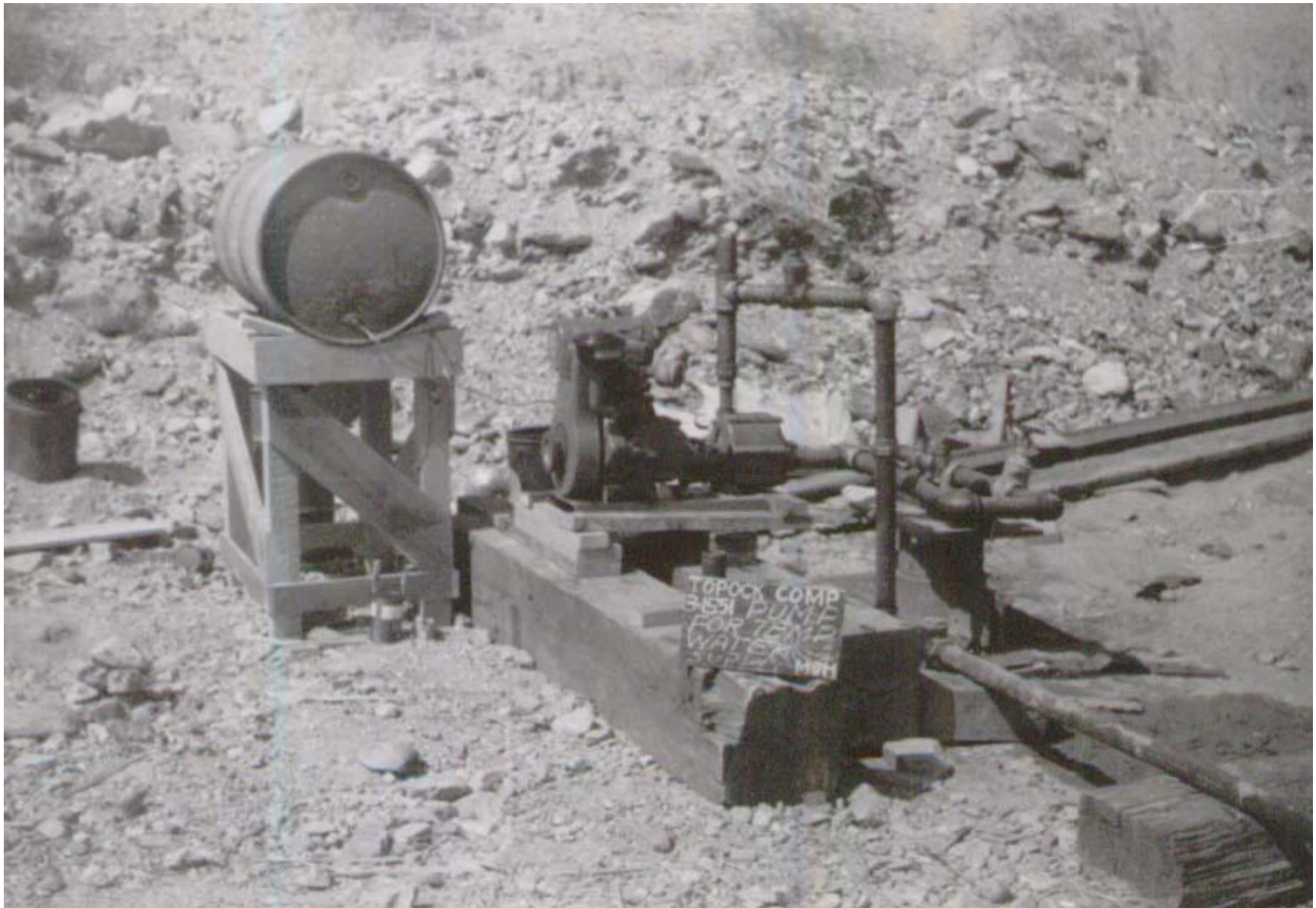


Figure 5. March 15, 1951 Close up of Installed Pump System. Temporary Water Supply Well

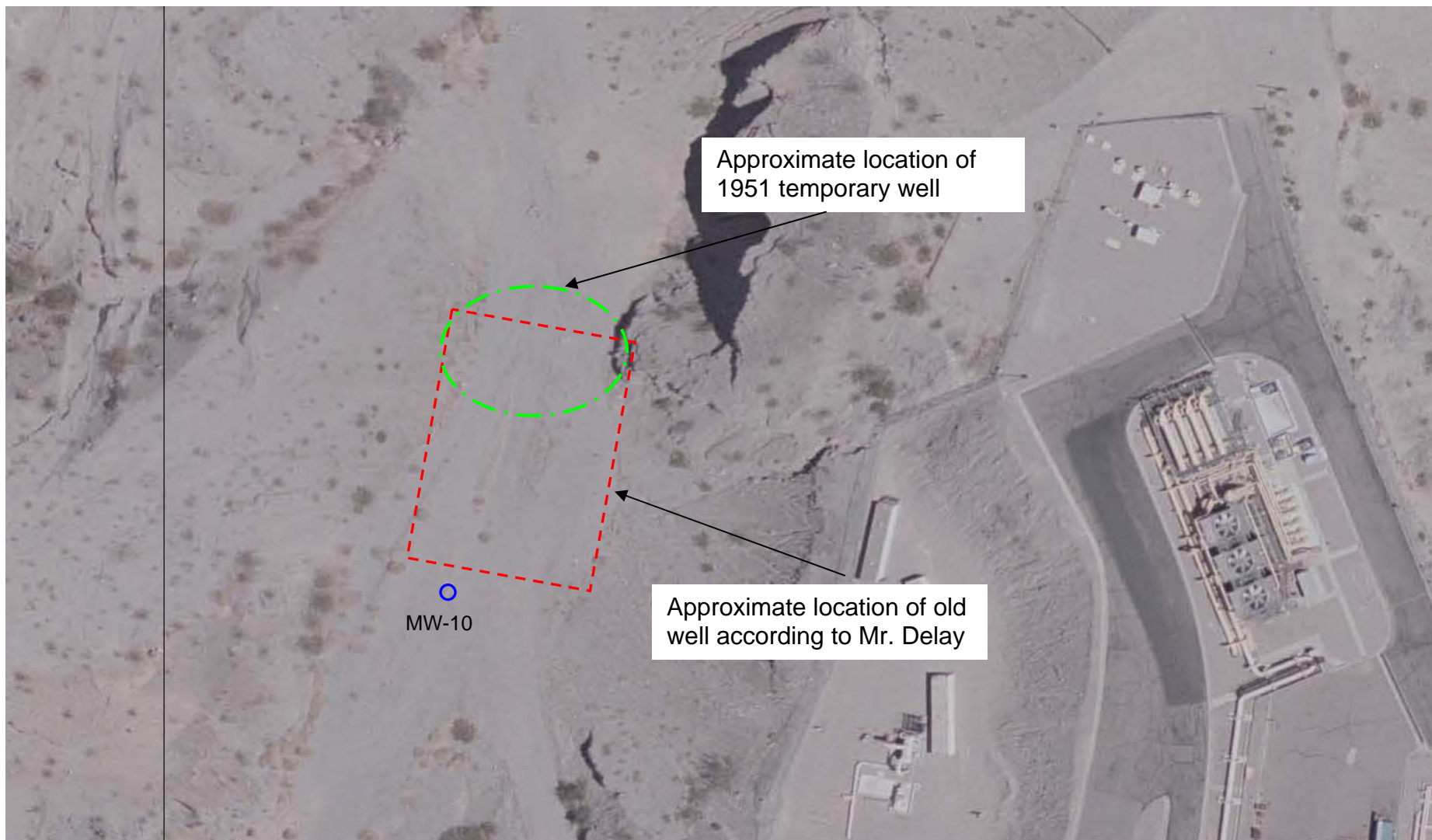


Photo 6: Aerial view of potential location of the old historic well.