Attachment E
Plugging and Abandonment Plan (40 CFR §§ 144.31, 144.51 & 146.34)
Underground Injection Control
Application for Modification of
Class III UIC Permit R9UIC-AZ3-FY11-1

Florence Copper Project
Florence Copper Inc.

July 2019

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List of Exhibits

Exhibit No.	Title
E-1	Form 7520-19, Schematic Diagrams of Wells and Core Holes Within the AOR, and ISCR Resource Block Tables

Underground Injection Control
Application for Modification of Class III UIC Permit R9UIC-AZ3-FY11-1
Florence Copper Project

Attachment E: Plugging and Abandonment Plan (40 CFR §§ 144.31. 144.51 & 146.34)

E.1 INTRODUCTION

This Attachment describes the plugging and abandonment procedures and individual well and core hole details.

This Attachment has been prepared in support of an application (Application) by Florence Copper Inc. (Florence Copper) to the United States Environmental Protection Agency (USEPA) for modification of Underground Injection Control Class III (Area) Permit R9UIC-AZ3-FY11-1 (UIC Permit) for the planned In-Situ Copper Recovery (ISCR) facility at the Florence Copper Project (FCP) in Pinal County, Arizona. With this Application, Florence Copper seeks authorization to construct and operate a commercial-scale ISCR facility at the FCP site. Florence Copper proposes to incorporate the pilot-scale Production Test Facility (PTF), which is currently operating under the UIC Permit, into the planned commercial-scale ISCR facility at the FCP site.

This plugging and abandonment plan is based on Appendix C of UIC Permit R9UIC-AZ3-FY11-1, with revision and updates as necessary to reflect the proposed operations and operational experience at the PTF.

E.2 PLUGGING AND ABANDONMENT

E.2.1 Applicability

This plugging and abandonment plan is applicable to proposed Class III wells, existing Class III wells, and non-Class III wells and core holes within the FCP ISCR area and the associated Area of Review (AOR) located at the FCP site. This plan applies to all wells and core holes within the AOR because the corrective action for each of the wells and core holes within the AOR is to plug and abandon them using Class III well standards. The AOR is defined in Attachment A of this Application as a 500-foot circumscribing area around the planned commercial-scale ISCR well field.

This plan also applies to existing Class III wells outside of the PTF AOR that were constructed by BHP Copper, Inc. (BHP) in accordance with UIC Permit No. AZ396000001. The BHP Class III wells may be plugged and abandoned following completion of PTF operations if Florence Copper chooses not to proceed with commercial-scale operations on the property. If Florence Copper chooses to proceed with commercial-scale operations on the FCP property, they may incorporate the existing BHP Class III wells into future phases of FCP operations.

This plugging and abandonment plan has been designed to ensure that all existing and future wells and core holes located within the AOR will be plugged and abandoned (1) in a manner that will prevent or stop the migration of injected solutions into Underground Sources of Drinking Water (USDW) through a

penetrating core hole or well, and (2) in accordance with applicable permits and regulations administered by the USEPA, the Arizona Department of Environmental Quality (ADEQ), and Arizona Department of Water Resources (ADWR).

Plugging and abandonment of existing non-Class III wells and core holes within the AOR will occur prior to commencement of injection within 500 feet of the well or core hole. Plugging and abandonment of Class III wells will occur during closure, or when an individual Class III well is retired or closed. Retirement of a Class III well may occur if the well fails to pass mechanical integrity testing or if the well becomes damaged beyond repair.

All abandonment notifications, approvals, procedures, documentation, and reporting required under this plan apply to all Class III wells constructed within the commercial-scale AOR, which includes the PTF wells and BHP test wells.

E.2.2 Objectives

The objectives of the plugging and abandonment plan are to ensure that wells and core holes will be plugged and sealed in a manner that will prevent the migration of injected fluids into or between USDWs, and to ensure compliance with the applicable requirements of the ADWR (Arizona Administrative Code [A.A.C.] R12-15-816 [Abandonment], and ADWR Well Abandonment Handbook) and the USEPA (40 Code of Federal Regulations [CFR] 146.10 [Plugging and Abandoning Class I-V Wells]).

E.2.3 Hydrogeologic Setting

The saturated geologic formations underlying the FCP site have been divided into three distinct water-bearing hydrostratigraphic units referred to as the Upper Basin Fill Unit (UBFU), Lower Basin Fill Unit (LBFU), and the Bedrock Oxide Unit. The UBFU and LBFU are separated by a thin, regionally extensive aquitard referred to as the Middle Fine-Grained Unit (MFGU). The injection and recovery wells will be completed in the Bedrock Oxide Unit, the uppermost zone of the bedrock complex underlying the FCP site. The injection zone extends from a point 40 feet below the top of the Bedrock Oxide Unit to the oxide/sulfide contact at the base of the Bedrock Oxide Unit. The uppermost 40 feet of the Bedrock Oxide Unit is excluded from injection and is referred to as the exclusion zone.

E.2.3 Overview of ISCR Operations

The ISCR area will be prepared for injection and recovery operations through a three-step process that includes: (a) the abandonment of core holes and existing wells (except Class III wells) within the active well field area and within 500 feet of the planned active ISCR well field area; (b) installation of injection, recovery, and observation wells as required; and (c) installation of ancillary facilities such as power and conveyance infrastructure.

The planned ISCR process involves injecting raffinate (approximately 99.5 percent water mixed with 0.5 percent sulfuric acid) through injection wells into the oxide zone of the bedrock beneath the site for the purposes of dissolving copper minerals from the ore body. The estimated injection zone is between approximately 500 feet below ground surface (bgs) to 1,185 feet bgs. The resulting copper-bearing

solution will be pumped by recovery wells to the surface where copper will be removed from the solution in a solvent extraction electro winning (SX/EW) plant. The barren solution from the SX/EW plant will be re-acidified and re-injected back into the oxide zone.

Once copper concentration in the solution declines to a predetermined level, well closure will begin. Closure will consist of circulation of fresh water through the wells until groundwater has been restored to a quality that meets criteria specified in the Aquifer Protection Permit (APP) and the UIC Permit. Depending on copper content, solutions produced during closure operations will be withdrawn through the recovery wells and conveyed to the SX/EW plant for processing, or neutralized and pumped to one of the water impoundments.

Injection will be discontinued and the ISCR wells undergoing closure will be provisionally considered closed once constituent concentrations in groundwater pumped from the injection zone meet the closure criteria specified in the APP and the UIC Permit. Not more than two years following the provisional closure of an ISCR well, the well will be abandoned in accordance with procedures outlined in this plan and requirements set forth in UIC Permit R9UIC-AZ3-FY11-1 and APP No. P-101704.

At the conclusion of PTF operations, proposed Class III wells within the AOR will remain open for use in monitoring groundwater conditions until ADEQ and USEPA give approval to plug and abandon the wells. FCP ISCR Class III wells will not be plugged and abandoned until written authorization to do so has been received from both ADEQ and USEPA.

Post-closure monitoring at the POC wells and supplemental monitoring wells will continue following completion of formation rinsing for the period of time specified in the APP and the UIC Permit. The POC wells will remain open for the period of time necessary to complete closure and post-closure monitoring specified in the APP and the UIC Permit.

E.2.4 Licenses, Notifications, and Approvals

E.2.4.1 Licensed Drillers

Abandonment procedures are described in this document and will only be performed by well drillers licensed by the ADWR pursuant to Arizona Revised Statutes § 45-595(B), or under the direction of such licensed well drillers.

E.2.4.2 Abandonment Notification and Authorization

Florence Copper will convey notice of intent to abandon a well or core hole to ADWR using Form 55-38 (*Notice of Intent to Abandon a Well)* approximately 30 days prior to the planned commencement of abandonment activities for a well or core hole. Form 55-38 will include information describing the location, type, and construction of the well or core hole, and the proposed plugging or abandonment method.

In addition, Florence Copper will convey notice of proposed abandonment of Class III and Non-Class III wells and all core holes to USEPA on a revised copy of Form 7520-19 (*Plugging and Abandonment Plan)*

approximately 60 days prior to the planned abandonment. The form will include descriptions of the proposed abandonment materials and methods of emplacement. Copies of Forms 55-38 and 7520-19 will be submitted to ADEQ concurrently with submittal to ADWR and USEPA.

Once ADWR has approved the abandonment method and materials identified on ADWR Form 55-38, ADWR will issue authorization to the driller to commence with the proposed abandonment. Authorization from ADWR will be in the form of a "well abandonment card" issued to the licensed driller. No well or core hole will be abandoned on the FCP site unless the driller has received a well abandonment card, issued by the Director of the ADWR, authorizing the abandonment of the specific well or core hole.

E.3 WELL AND CORE HOLE ABANDONMENT PROCEDURES

The standard abandonment procedure will be to completely fill the well or core hole with an appropriate sealing material, with some variation depending on the type, condition, and total depth of the well or core hole. Within the AOR, the sealing material will be Type V cement, or approved equivalent as defined in the UIC Permit. The condition and depth of each well or core hole varies significantly. Abandonment will be considered complete when all applicable sealing steps set forth below have been completed or have been determined to be unnecessary.

E.3.1 Well or Core Hole Preparation

The following tasks will be performed to prepare each well or core hole for effective sealing.

a. Locate and Inspect Well or Core Hole: The well or core hole will be located using available survey coordinates. The condition and location of the well or core hole will be recorded. If the well or core hole is not visible from the surface, the area will be excavated to locate the collar of the core hole or expose the surface casing of the well.

b. Move in Workover Rig: A workover rig capable of performing the required abandonment operations at the required depths will be moved in and set up over the well or core hole.

c. Equipment Removal: All pumps, tubing, wiring, and ancillary equipment within the well will be removed prior to abandonment of the well. No equipment exists within the core holes.

d. Perforations: If records demonstrate that a well annulus is inadequately sealed and its casing is not removed, the casing will be perforated to allow installation of cement grout in the annulus. If necessary and the casing extends that distance, perforations will extend from at least 20 feet below the bedrock-LBFU contact to at least 20 feet above the contact; from at least 20 feet below the base of the MFGU to at least 20 feet above the top of the MFGU; and from 25 feet bgs to 5 feet bgs.

e. Cleaning: Wells and core holes will be cleaned out, if necessary, to a depth of at least 100 feet below the bedrock-LBFU contact to enable proper placement of cement seals. This will be accomplished by installing a work string of tubing and circulating fluids, or drilling, or performing other remedial work as required to clean the well or core hole to the required depth.

f. Equalization of Wellbore Fluids: After cleaning the well or core hole, wellbore fluids (bentonite mud) may be circulated and treated as necessary to achieve equilibrium and stabilize the hole.

E.3.2 Equipment and Materials

The following material and equipment will be used in sealing wells and core holes according to the procedure described below if required to make proper seals.

a. Cement Grout: All cement grout will consist of Type V cement, or equivalent approved in accordance with the UIC Permit.

b. Mechanical Plugs: A mechanical bridge plug will be set at the base of the interval to be cemented off if it is not at the bottom of the well or core hole. Alternately, the well or core hole may be filled with suitable formation stabilizer (i.e., mixture of sand and pea gravel) to support the cement seal during placement. This will prevent migration cement below the interval to be cemented and sealed.

c. Cement Plugs: Cement plugs will consist of Type V cement grout or equivalent approved in accordance with the UIC Permit.

d. Cement Retainer: If cement grout is to be installed in the annulus behind perforated casing, a cement retainer will be set above the top perforation prior to pumping cement grout into the perforated interval that has been isolated by the cement retainer.

e. Work String: A work string of small diameter pipe or tubing (tremie pipe) will be used for the placement of cement grout and plugs.

E.3.3 General Procedure for Sealing Wells and Core Holes

The following procedure will be used to seal each well or core hole:

a. If the surface casing is loose at ground surface, an attempt will be made to remove it. If removal of the casing is not feasible, it will be left in the hole and perforated as needed to allow an annular seal to be placed to a depth of 25 feet bgs. In areas of agricultural use, the surface casing will be cut at least 5 feet bgs and removed.

b. A tremie pipe will be used to place Type V cement in the open well or core hole from the bottom of the hole to the top of the hole. Cement retainers, as described above, will be used to force cement grout into the annulus behind perforated intervals, as necessary.

c. If the hole has been obstructed, as much cement as possible will be placed from 100 feet below the LBFU-bedrock contact to the top of the hole.

d. The volume of Type V cement will be recorded and will not be less than the estimated volume of material required to fill each interval.

E.3.4 Procedures for Special Circumstances

The following procedures will be completed for special circumstances, as indicated.

a. Seal of Perched Aquifer: If cascading water is encountered during preparation for abandonment, the well casing in the target area will be cleaned or perforated, isolated with

cement plugs, and Type V cement will be used to seal the annulus around the perched layer. Cement seals will be emplaced in four steps as follows:

1. In the area of the observed cascading water, existing casing perforations in the well will be cleaned to the point that they are open and will readily allow neat cement to pass, or new perforations will be cut that will allow neat cement to pass.
2. The well casing will be filled with Type V cement to a point at least 20 feet below the cascading zone and will be allowed to cure for a minimum of 12 hours.
3. A packer will be emplaced above the cascading zone.
4. Type V neat cement will be injected under pressure into the cascading zone until a volume of cement has been pumped that is equal to or greater than the combined volume of the well bore and the annular space within the isolated zone.

b. Injection Wells: Injection wells plugged and abandoned in accordance with the procedures specified above will be deemed to have been plugged and abandoned in accordance with the provisions of 40 CFR 146.10. Therefore, Florence Copper will comply with the procedures specified above to ensure that any deviation from the above procedures will not violate the provisions of 40 CFR 146.10.

E.3.5 Documentation and Reporting

Following completion of plugging and abandonment, reports will be prepared and filed with the respective agencies, as described below.

E.3.5.1 Reporting Responsibilities

The licensed driller or supervised designee will maintain a log of all abandonment activities. The log will be of sufficient detail that the driller will be able to complete all ADWR requirements and all abandonment reports required by USEPA. The driller will sign all ADWR abandonment forms. The authorized Florence Copper representative will sign all narrative abandonment reports submitted to ADWR and all abandonment reports to USEPA.

E.3.5.2 Reports to ADWR

The licensed driller will complete and sign a *Well Abandonment Completion Report* (ADWR Form 55-58) and submit it to ADWR within 30 days following abandonment of any well (including Class III wells) or core hole. Form 55-58 will update the information provided on ADWR Form 55-38 (*Notice of Intent to Abandon a Well)* including updated information on the treatment, materials, and methods used for abandoning the well or core hole. Florence Copper will complete and sign a *Well Owner's Notification of Abandonment* (ADWR Form 55-36) and submit it to ADWR within 30 days following abandonment.

E.3.5.3 Reports to USEPA

Within 60 days after plugging and abandoning a well or core hole or at the time of the next quarterly report due to the USEPA (whichever is less), Florence Copper will submit a report to the Regional Administrator of USEPA. If the quarterly report is due less than 15 days before plugging and

abandonment is completed, then the report will be submitted within 60 days. The report will be certified as accurate by the licensed driller who performed the plugging and abandonment procedures. The report will consist of either:

- A statement that the well or core hole was plugged and abandoned in accordance with the plan previously submitted to the Regional Administrator; or
- An updated version of the plan on Form 7520-19, specifying differences if the actual plugging or abandonment differed from the plan previously submitted.

The report will also include a summary of non-Class III wells and core holes abandoned and will include copies of all forms (Forms 55-38, 55-58, and 55-36) submitted to ADWR.

Completed copies of Form 7520-19 and schematic diagrams of wells and core holes within the AOR are provided as Exhibit E-1 to this Attachment.

E.3.5.4 Reports to ADEQ

Florence Copper will include in its quarterly APP monitoring report to ADEQ a summary noting the identification number of each well or core hole for which abandonment was completed during the reporting period, the date that the abandonment was completed, and the location of the well or core hole.

Florence Copper will also submit to ADEQ a copy of the plugging and abandonment report developed for submittal to USEPA.

E.3.5.5 Maintenance of Records

Copies of all completed and required abandonment report forms, plans, and narratives required by ADWR or USEPA will be maintained at the FCP site for inspection until closure is completed. After commencement of post-closure, the records will be stored by Florence Copper, subject to review by USEPA and ADEQ, until post-closure is completed.

E.4 PLUGGING AND ABANDONMENT FORMS

The planned ISCR well field area has been divided into resource blocks to aid in well field planning. Each resource block measures 500 feet by 500 feet and covers area of approximately 5.7 aces. Because resource characterization extended beyond the edge of the ISCR well field, the resource blocks also continue beyond the edge of the well field. The ISCR well field area boundary shown on Figures A-1 and A-2 (Attachment A of this Application) reflects the cutoff selected for copper recovery based on ore body characteristics. A total of 50 resource blocks fall either fully or partly inside the ISCR well field area. The proposed ISCR wells located within the ISCR well field are listed by resource block on Tables E-1 through E-50, provided in Exhibit E-1.

Each of the planned ISCR wells will be constructed based on site-specific geologic information developed during drilling and logging of the individual bore hole that the well will be constructed in. Specific

information developed includes lithologic logging, caliper, gamma-ray, temperature, directional survey, and electrical logs. This information will be used to adjust the location of well seals, injection intervals, and eventually plugs based on this geologic information. By contrast, the well diagrams and plugging and abandonment forms (USEPA Form 7520-19) included in Exhibit E-1 reflect preliminary well designs based on core hole data, with interpolation in areas between core holes. The core hole information was also used to develop the resource blocks shown on Attachment A, Figures A-1 and A-2 of this Application. Based on the information presently available, the planned ISCR wells to be constructed in each resource block will be of a similar depth and will feature a similar seal interval and injection zone interval. Consequently, one plugging and abandonment form was prepared for each resource block. Each plugging and abandonment form includes one well diagram for injection and recovery wells, and another for perimeter and observation wells for blocks that include both types of wells. Coordinates for each well location are provided in tabular format (Tables E-1 through E-50) with each plugging and abandonment form (Exhibit E-1). Tables E-1 through E-50 include well information for a total of 1,757 injection and recovery wells, 87 perimeter wells, and 44 observation wells.

E.5 PLUGGING AND ABANDONMENT COST EESTIMATE

A cost estimate for plugging and abandonment is included with the estimated closure and post-closure costs provided in Attachment F of this Application.

EXHIBIT E-1

Form 7520-19, Schematic Diagrams of Wells and Core Holes Within the AOR, and ISCR Resource Block Tables

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 19 Wells - See Attached Table E-1

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of NW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.053291

Longitude -111.435439

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 19. There are 11 Class III multi-use injection/ recovery wells, 1 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

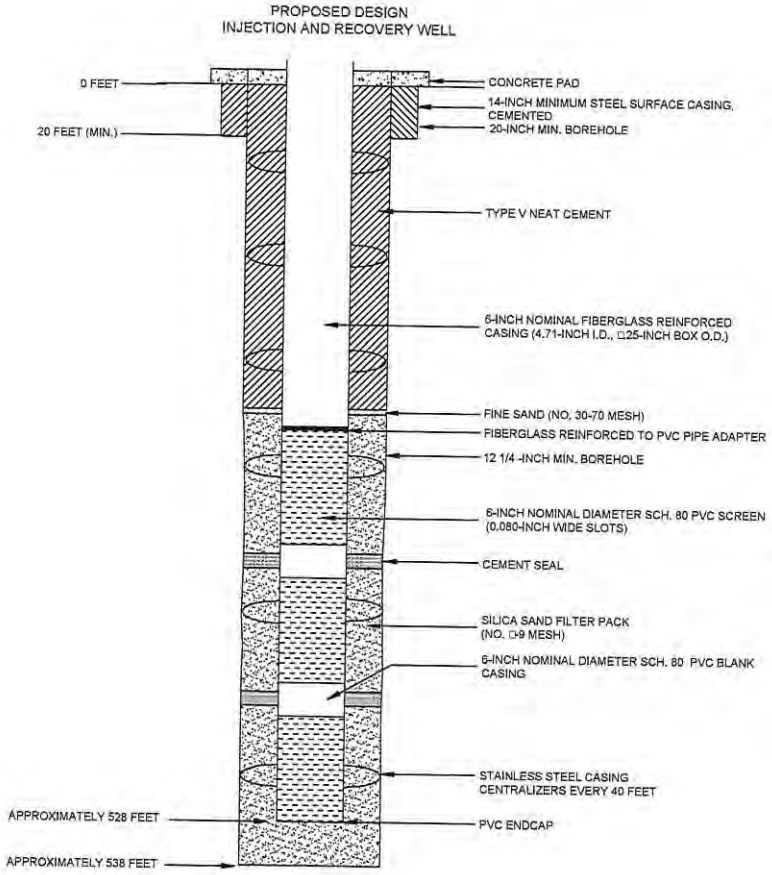
The work performed includes plugging and abandonment of the Class III wells in resource block 19. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-1a and E-1b.

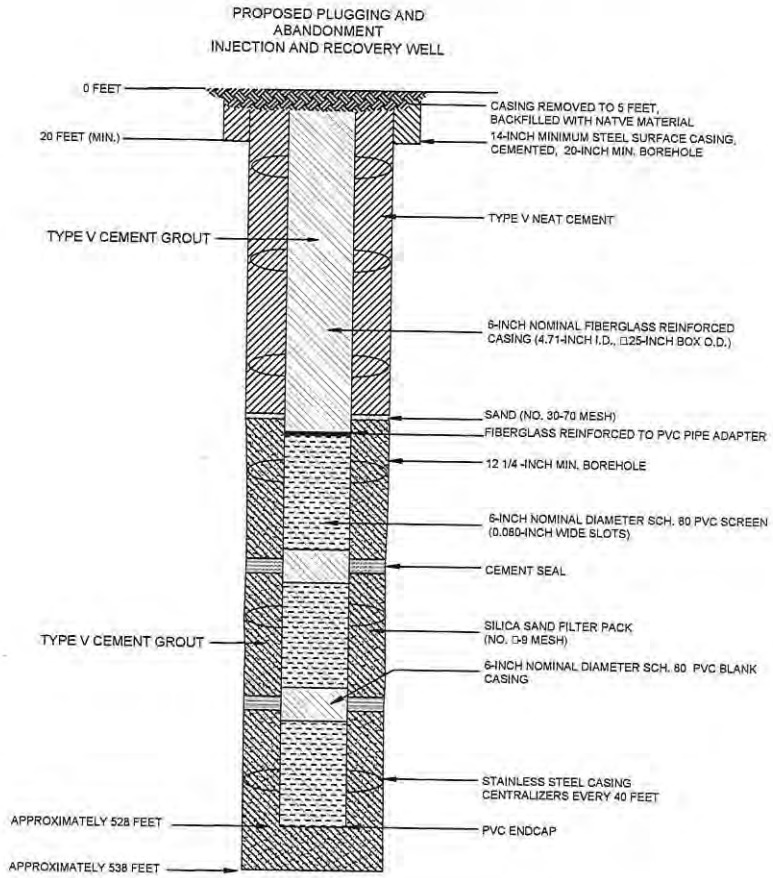
Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

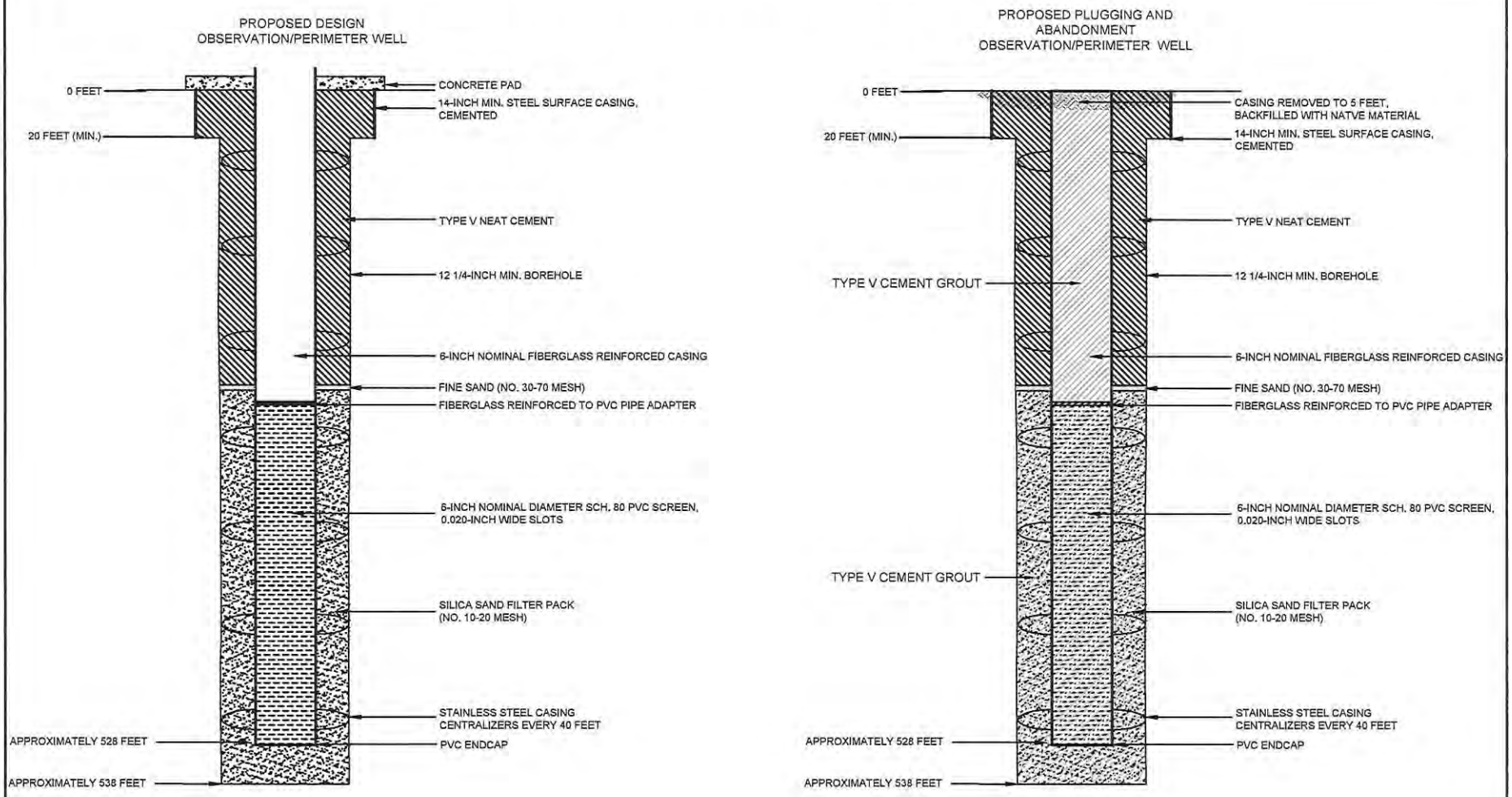
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 19
TYPICAL INJECTION AND RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-1a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 19
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-1b

TABLE E-1
WELLS WITHIN RESOURCE BLOCK 19
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
566	847412	747121	19	336	376	528
567	847483	747192	19	336	376	528
583	847341	747050	19	336	376	528
873	847341	747121	19	336	376	528
874	847341	747192	19	336	376	528
875	847270	747121	19	336	376	528
921	847389	747205	19	336	376	528
922	847289	747205	19	336	376	528
923	847339	747255	19	336	376	528
569	847483	747121	19	336	376	528
587	847412	747050	19	336	376	528
O01	847408	747389	19	336	376	528
P01	847337	747319	19	336	376	528
P02	847479	747319	19	336	376	528
P03	847695	747333	19	336	376	528

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 20 Wells - See Attached Table E-2

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.052763

Longitude -111.433440

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 20. There are 6 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 20. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-2a and E-2b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
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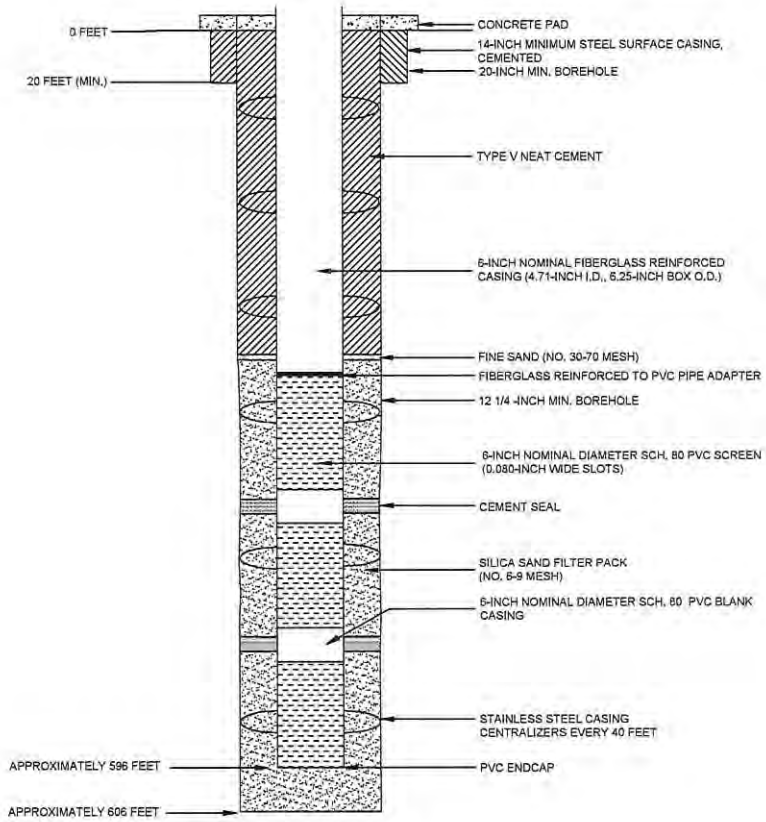
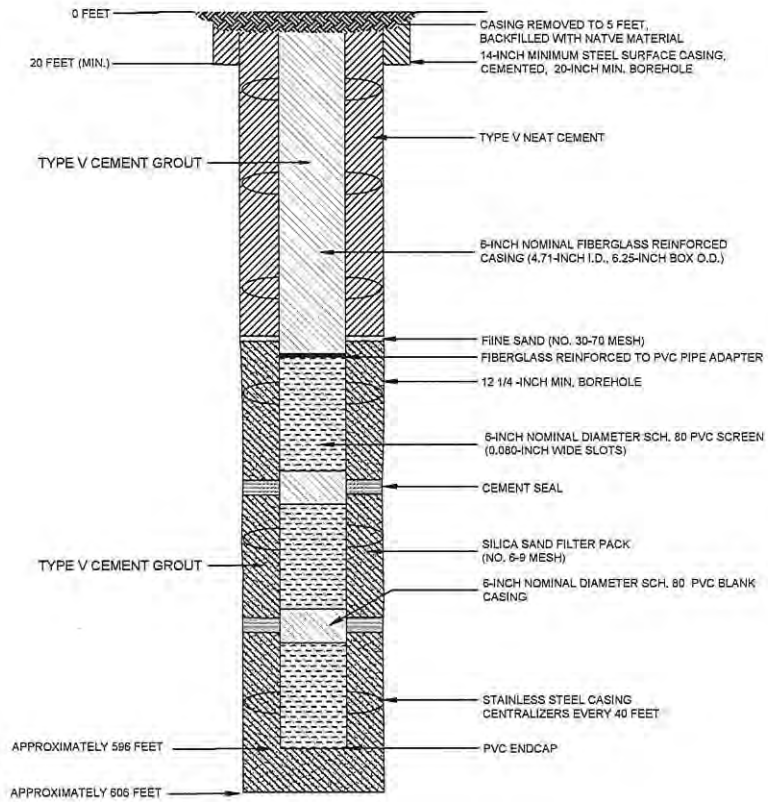
PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

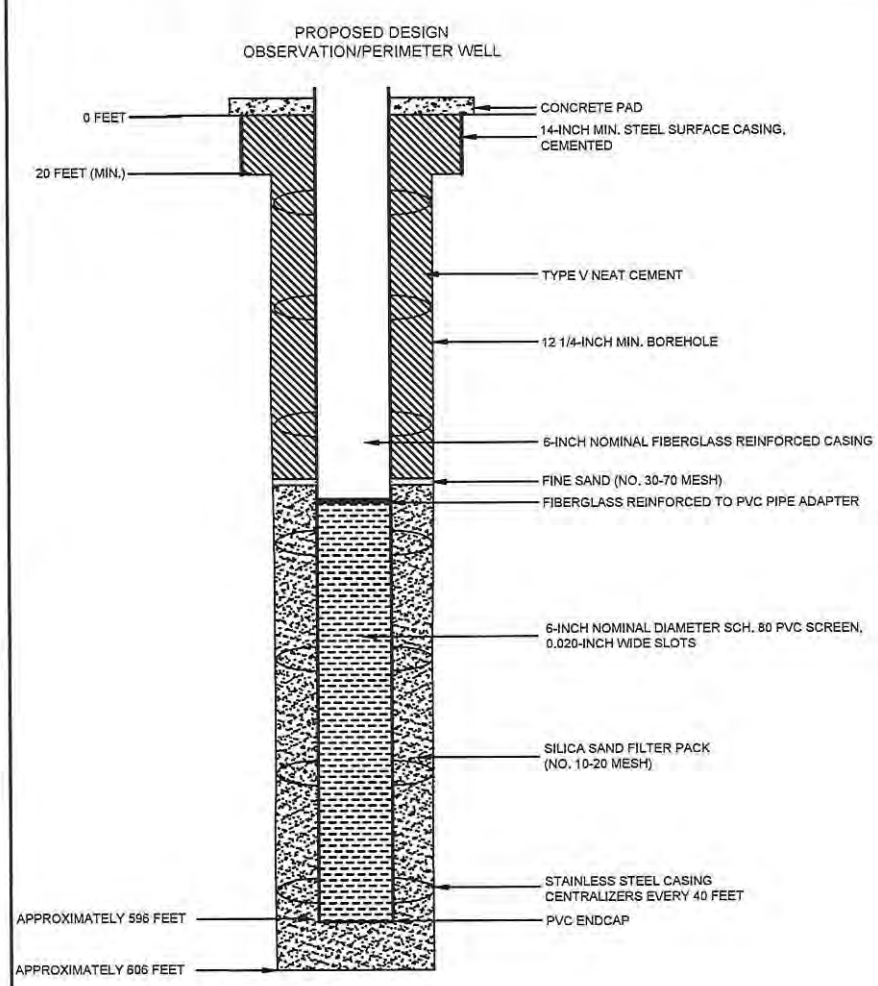
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

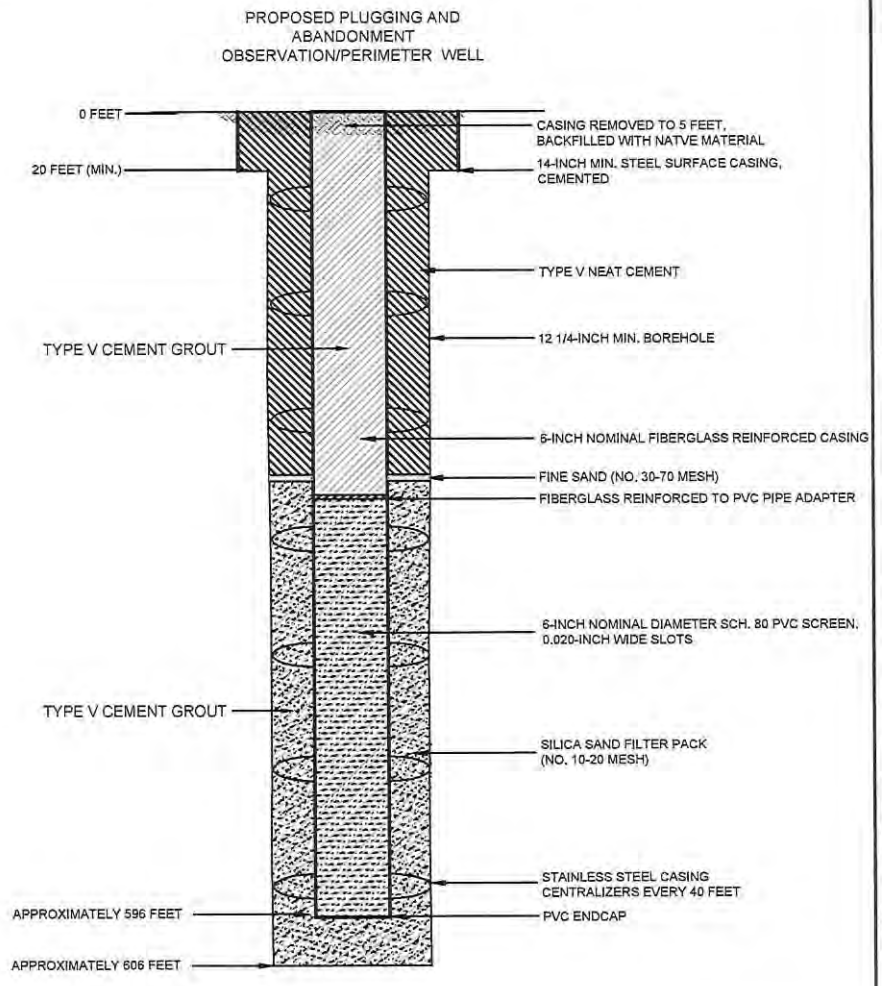
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 20
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-2a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 20
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-2b

TABLE E-2
WELLS WITHIN RESOURCE BLOCK 20
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
632	848119	747050	20	351	391	596
602	847978	747121	20	351	391	596
605	848190	747121	20	351	391	596
606	848048	747121	20	351	391	596
607	848119	747121	20	351	391	596
633	848048	747050	20	351	391	596
O02	847765	747333	20	351	391	596
O03	847978	747263	20	351	391	596
P05	847907	747192	20	351	391	596
P06	848048	747192	20	351	391	596
P07	848190	747192	20	351	391	596

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 21 Wells - See Attached Table E-3

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.052742

Longitude -111.431160

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 21. There are 6 Class III multi-use injection/ recovery wells, 1 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

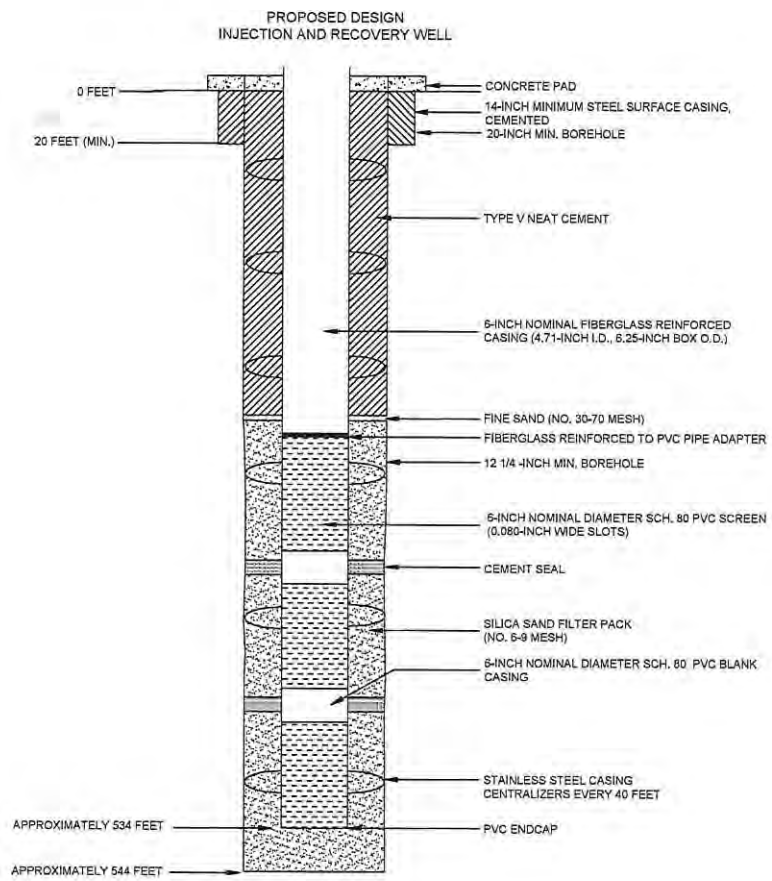
The work performed includes plugging and abandonment of the Class III wells in resource block 21. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-3a and E-3b.

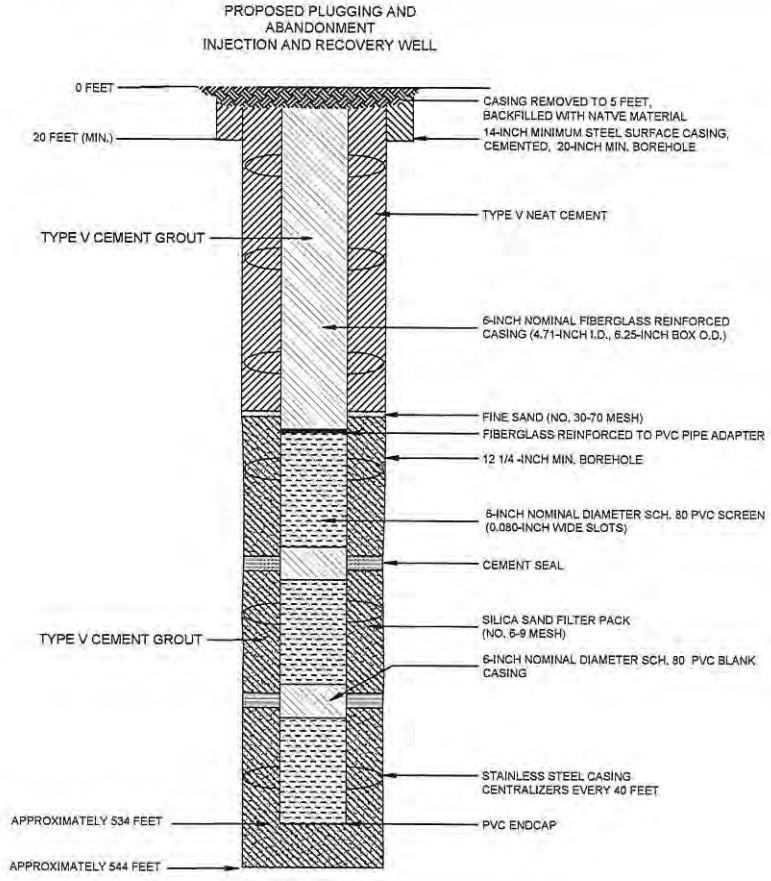
Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

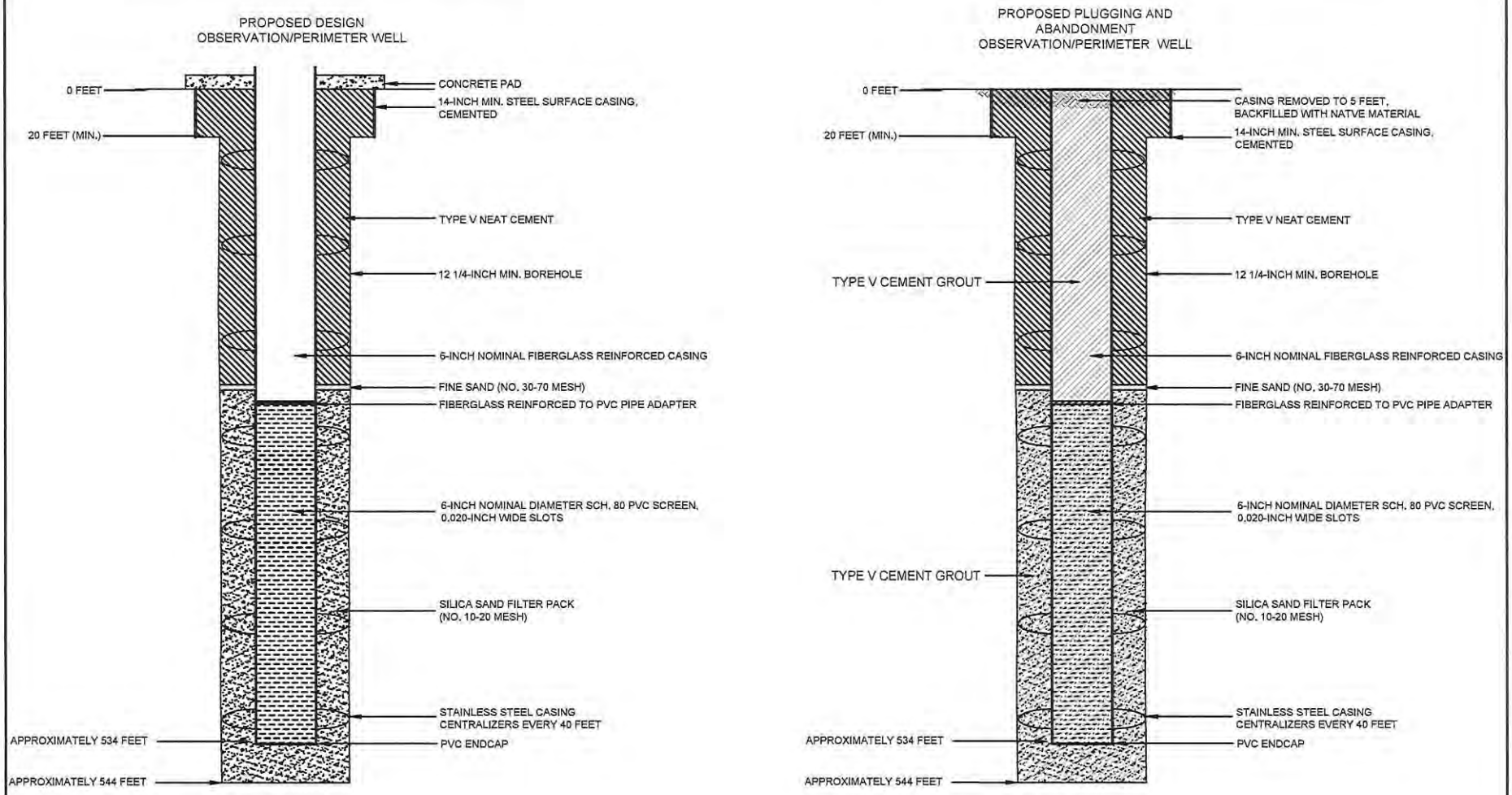
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 21
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-3a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 21
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-3b

TABLE E-3
WELLS WITHIN RESOURCE BLOCK 21
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
11	848826	747050	21	344	384	534
6	848755	747051	21	344	384	534
8	848897	747121	21	344	384	534
10	848826	747121	21	344	384	534
132	848754	747121	21	344	384	534
133	848684	747121	21	344	384	534
O05	848755	747263	21	344	384	534
P09	848685	747192	21	344	384	534
P10	848826	747192	21	344	384	534
P11	848967	747192	21	344	384	534

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 22 Wells - See Attached Table E-4

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.052757

Longitude -111.428766

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 22. There are 4 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 22. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-4a and E-4b.

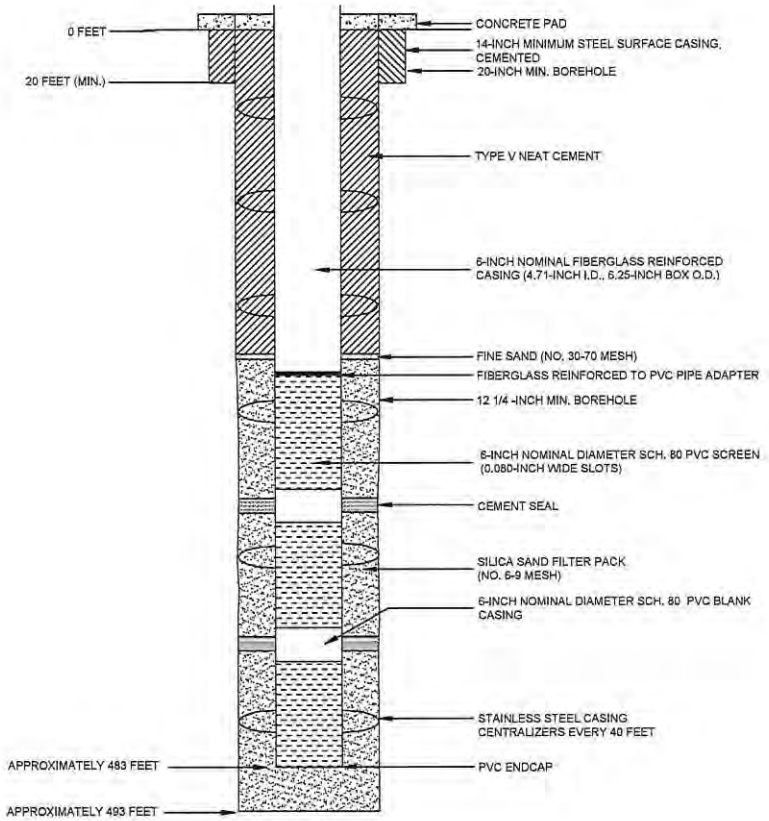
Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

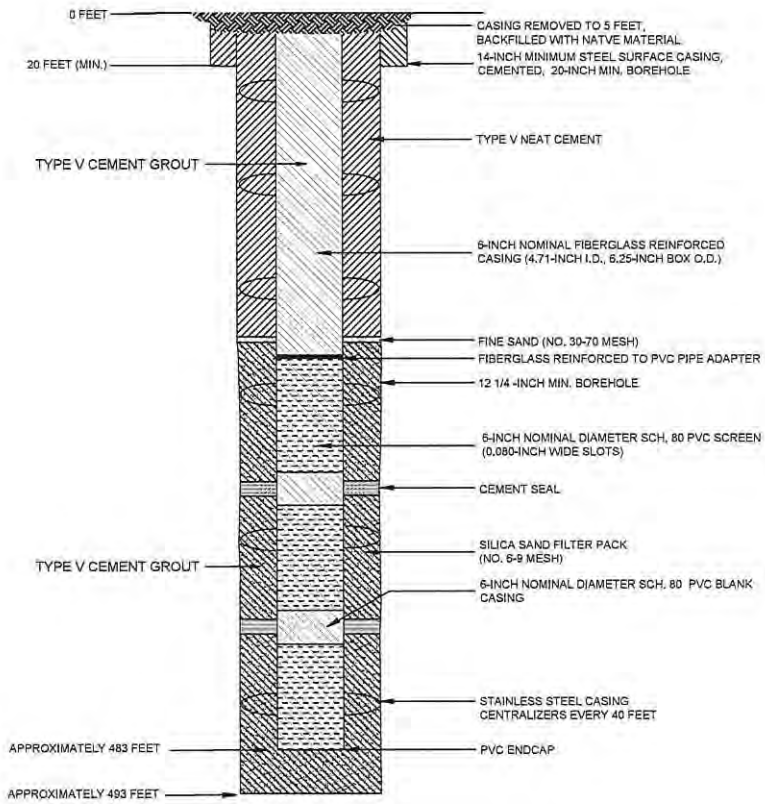
Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

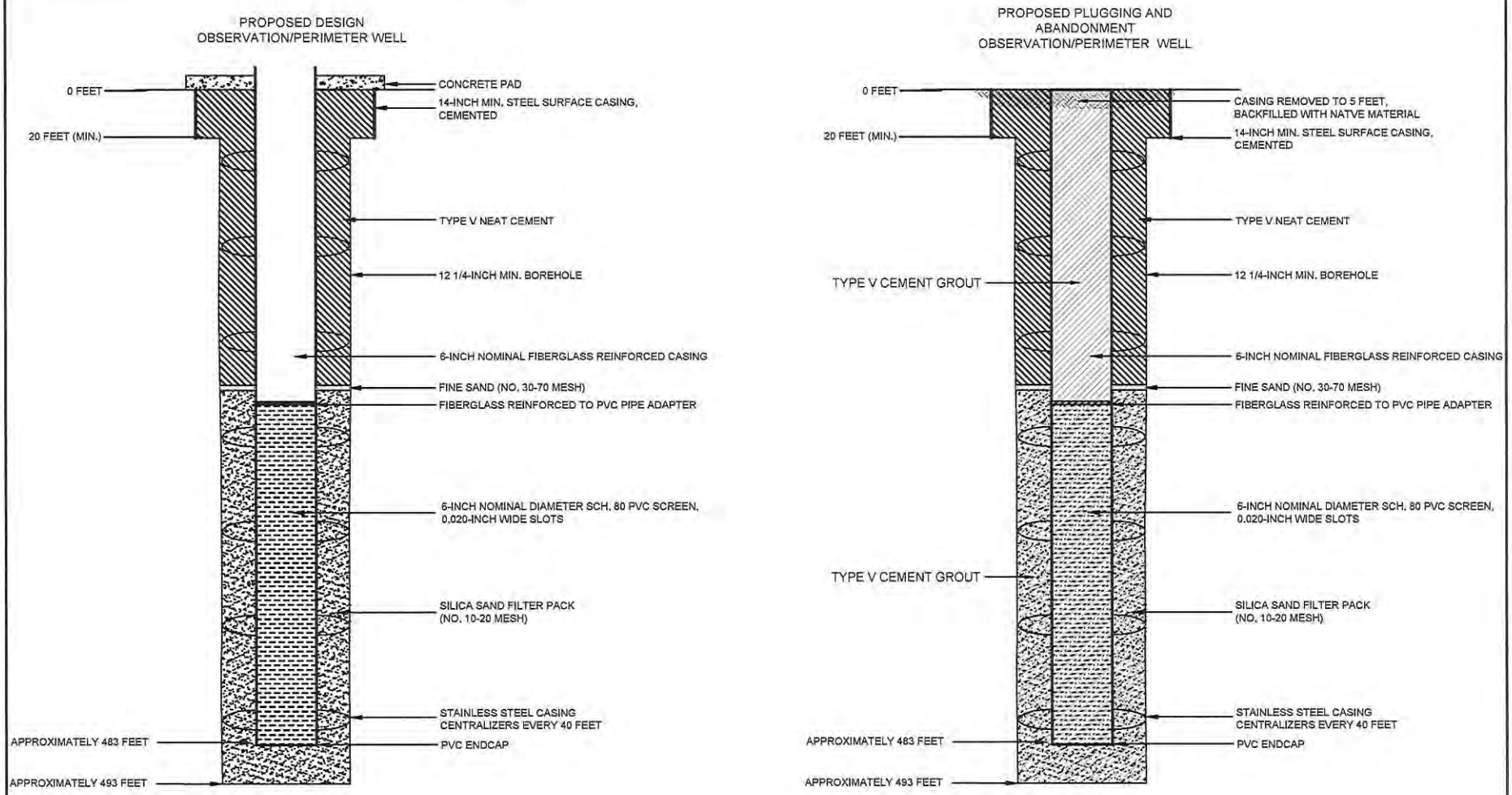
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 22
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-4

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 22
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-4b

TABLE E-4
WELLS WITHIN RESOURCE BLOCK 22
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
301	849533	747050	22	341	381	483
302	849604	747121	22	341	381	483
313	849533	747121	22	341	381	483
314	849462	747050	22	341	381	483
O07	849322	747263	22	341	381	483
O08	849605	747263	22	341	381	483
P14	849393	747192	22	341	381	483
P15	849534	747192	22	341	381	483
P16	849675	747192	22	341	381	483

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 27 Wells - See Attached Table E-5

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.052352

Longitude -111.436308

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 27. There are 16 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 5 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

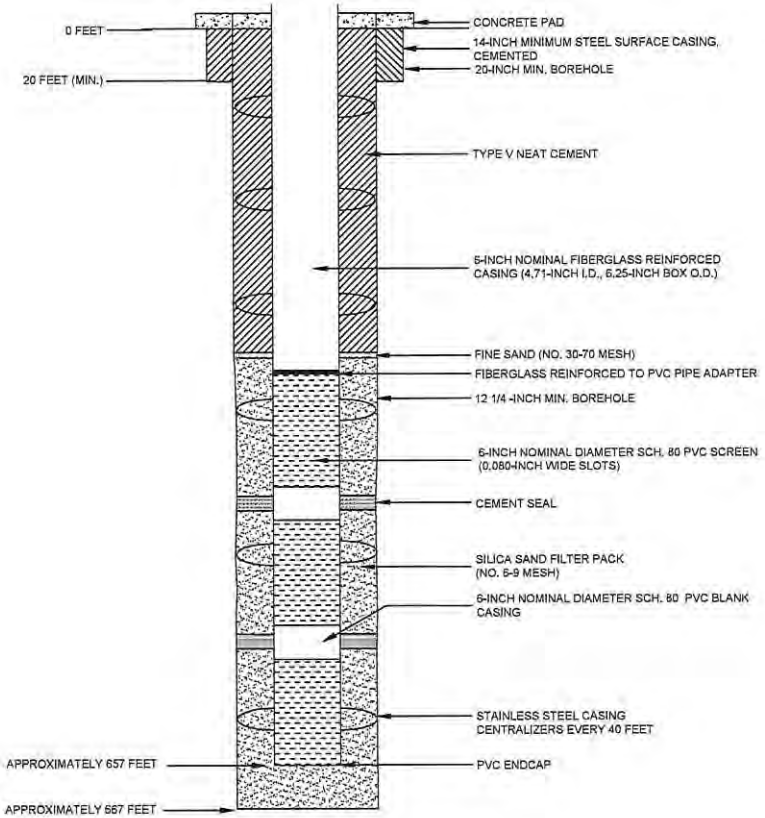
The work performed includes plugging and abandonment of the Class III wells in resource block 27. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-5a and E-5b.

Certification

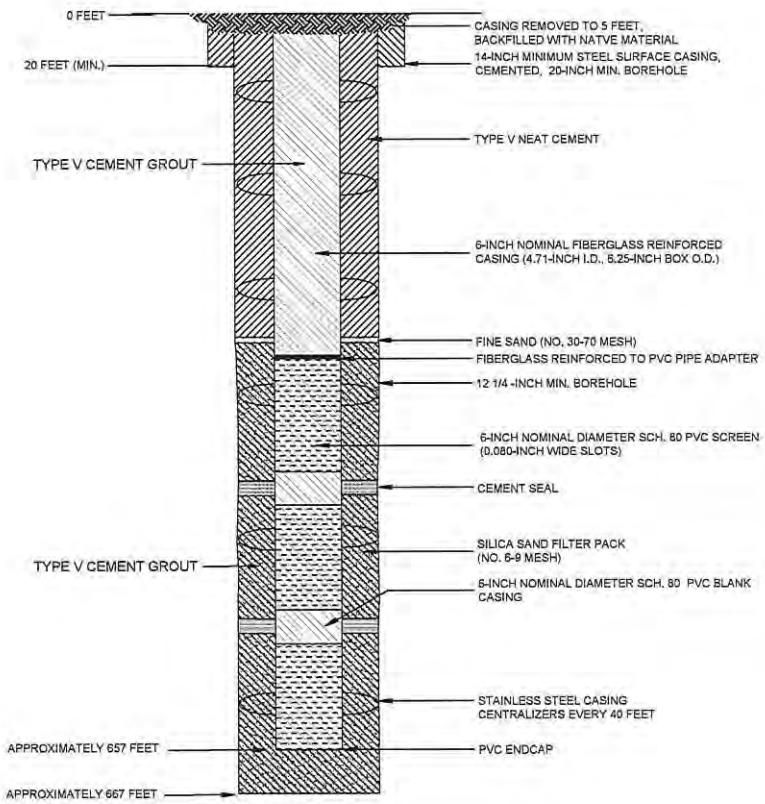
I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Don Johnson - VP, GM		9/3/19

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 27
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-5a

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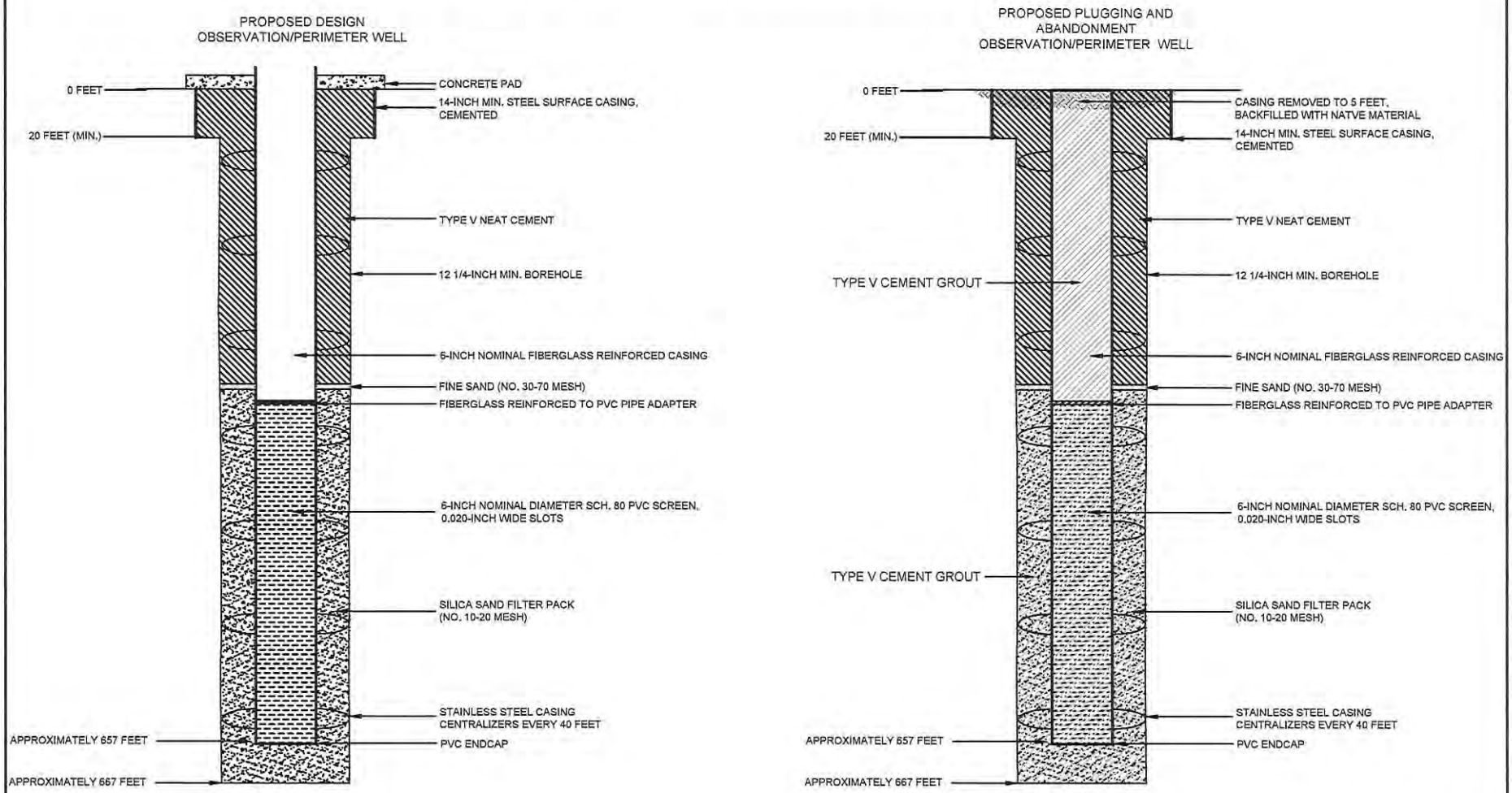
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 27
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-5b

TABLE E-5
WELLS WITHIN RESOURCE BLOCK 27
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
719	847129	746768	27	350	390	657
723	847129	746838	27	350	390	657
881	847129	746909	27	350	390	657
883	847129	746980	27	350	390	657
718	847058	746697	27	350	390	657
720	847200	746838	27	350	390	657
722	847200	746909	27	350	390	657
882	847200	746980	27	350	390	657
584	847270	746980	27	350	390	657
721	847270	746909	27	350	390	657
580	847341	746980	27	350	390	657
916	847200	747050	27	350	390	657
920	847270	747050	27	350	390	657
924	847129	747050	27	350	390	657
925	847200	747121	27	350	390	657
926	847129	747121	27	350	390	657
O43	846988	746909	27	350	390	657
O44	847059	747192	27	350	390	657
P83	846988	746697	27	350	390	657
P84	847058	746838	27	350	390	657
P85	847058	746980	27	350	390	657
P86	847059	747121	27	350	390	657
P87	847129	747192	27	350	390	657

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 28 Wells - See Attached Table E-6

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.052554

Longitude -111.434624

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 28. There are 49 Class III multi-use injection/ recovery wells and 1 dedicated Class III observation well planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

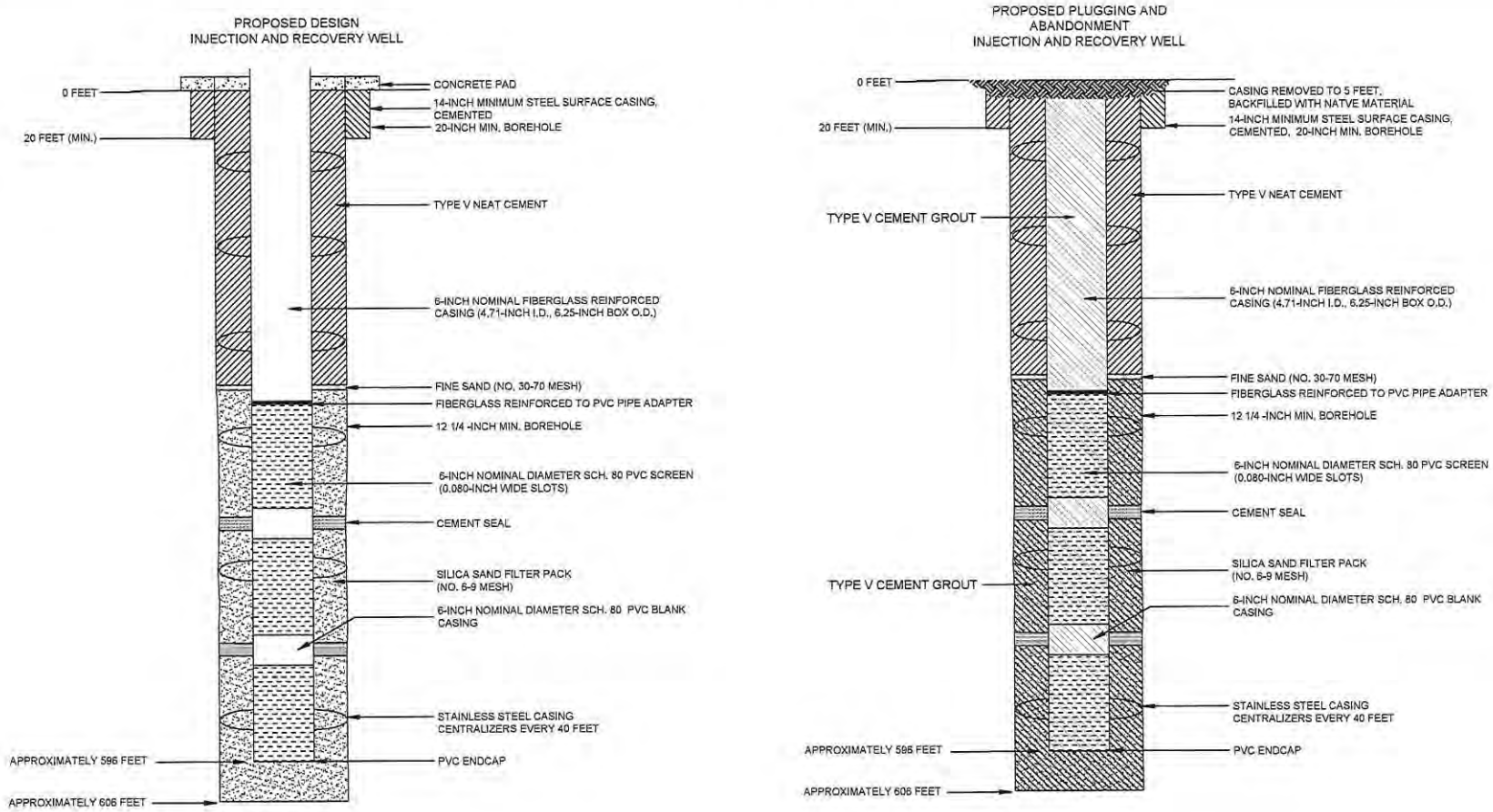
The work performed includes plugging and abandonment of the Class III wells in resource block 28. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-6a and E-6b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - GM, VP		9/3/19

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

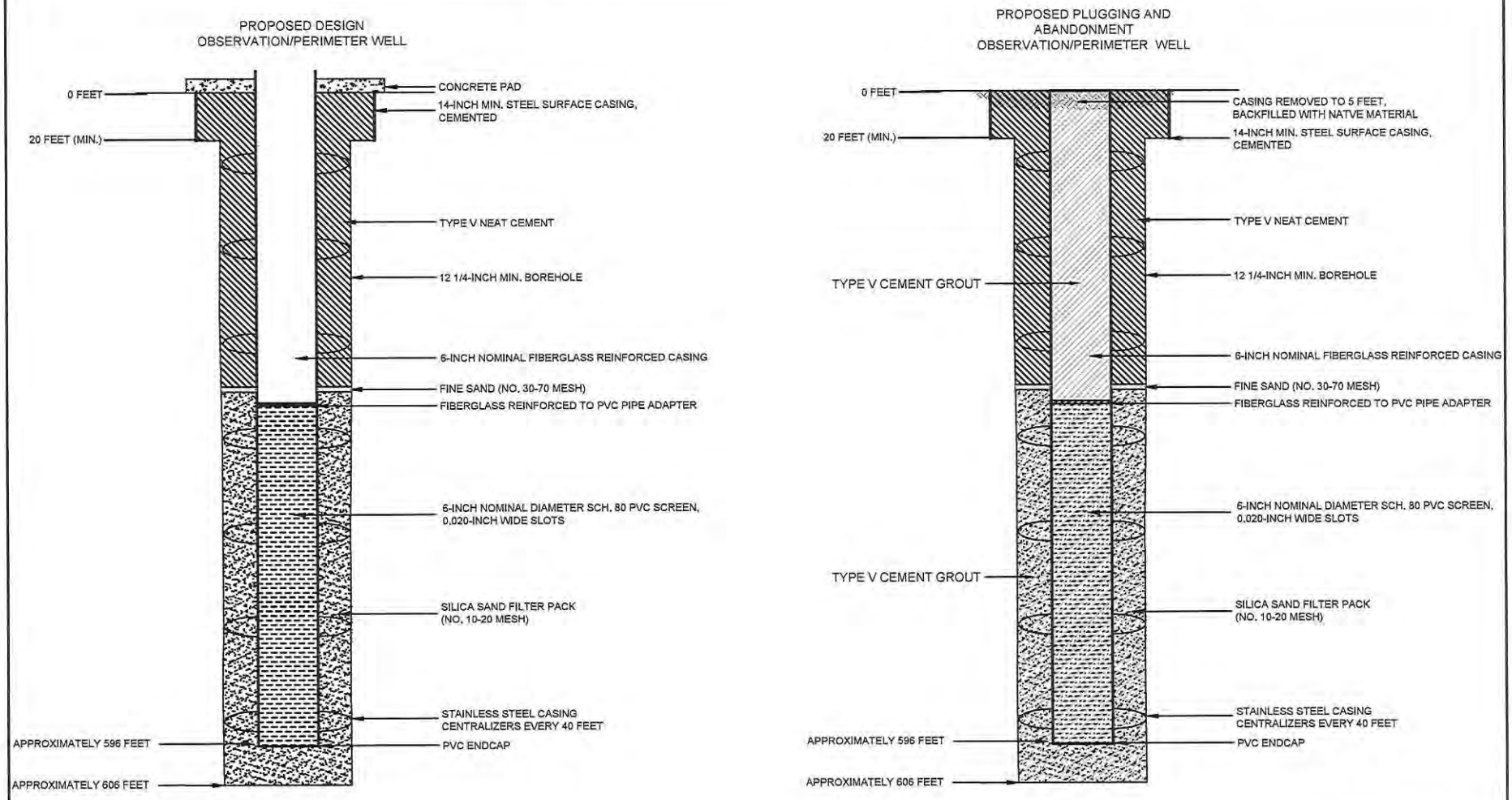
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 28
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-6a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 28
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-6b

TABLE E-6
WELLS WITHIN RESOURCE BLOCK 28
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
517	847695	746697	28	351	391	596
570	847624	747121	28	351	391	596
568	847553	747121	28	351	391	596
571	847624	747192	28	351	391	596
575	847553	746838	28	351	391	596
578	847483	746909	28	351	391	596
581	847412	746980	28	351	391	596
585	847553	747050	28	351	391	596
586	847483	747050	28	351	391	596
588	847553	746980	28	351	391	596
705	847622	747255	28	351	391	596
703	847672	747205	28	351	391	596
704	847572	747205	28	351	391	596
634	848048	746980	28	351	391	596
631	847978	746909	28	351	391	596
630	847907	746980	28	351	391	596
629	847978	746980	28	351	391	596
628	847836	747050	28	351	391	596
627	847907	747050	28	351	391	596
626	847978	747050	28	351	391	596
625	847695	747050	28	351	391	596
624	847695	746980	28	351	391	596
623	847765	747050	28	351	391	596
622	847695	746838	28	351	391	596
621	847765	746909	28	351	391	596
619	847765	746980	28	351	391	596
620	847836	746980	28	351	391	596
618	847695	746909	28	351	391	596
617	847765	746768	28	351	391	596
589	847483	746980	28	351	391	596
590	847553	746909	28	351	391	596
591	847624	746768	28	351	391	596
593	847625	746837	28	351	391	596
594	847624	746909	28	351	391	596
595	847624	747050	28	351	391	596
596	847624	746980	28	351	391	596
597	847836	747121	28	351	391	596
599	847765	747121	28	351	391	596
600	847765	747192	28	351	391	596

TABLE E-6
WELLS WITHIN RESOURCE BLOCK 28
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
601	847695	747121	28	351	391	596
603	847907	747121	28	351	391	596
610	847836	746768	28	351	391	596
609	847765	746697	28	351	391	596
611	847907	746838	28	351	391	596
612	847695	746768	28	351	391	596
613	847765	746838	28	351	391	596
614	847836	746909	28	351	391	596
615	847907	746909	28	351	391	596
616	847836	746838	28	351	391	596
P04	847765	747263	28	351	391	596

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 29 Wells - See Attached Table E-7

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.052289

Longitude -111.432285

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 29. There are 35 Class III multi-use injection/ recovery wells, 1 dedicated Class III observation, and 1 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 29. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-7a and E-7b.

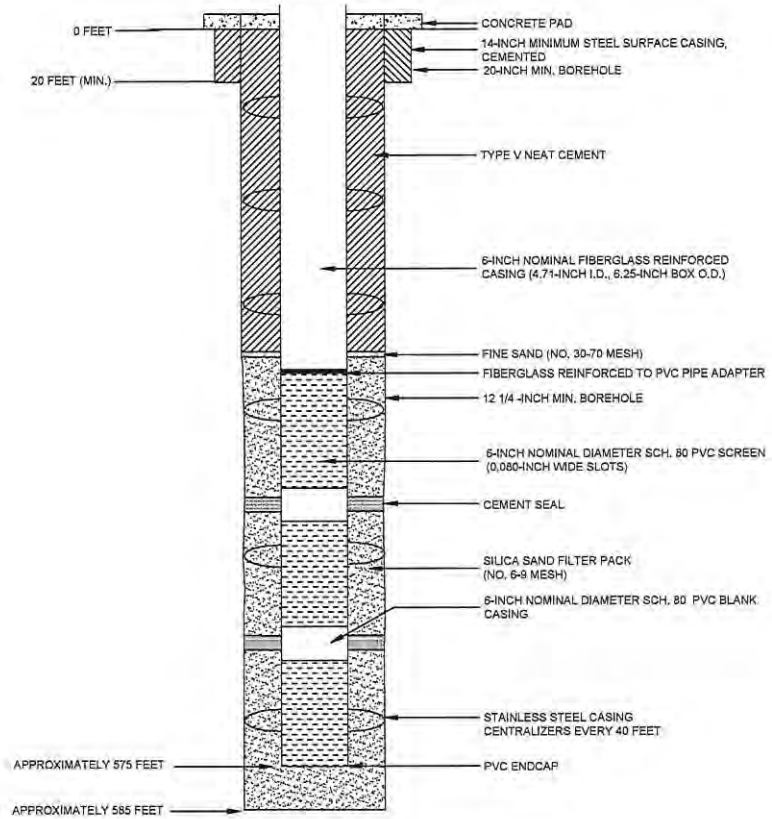
Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

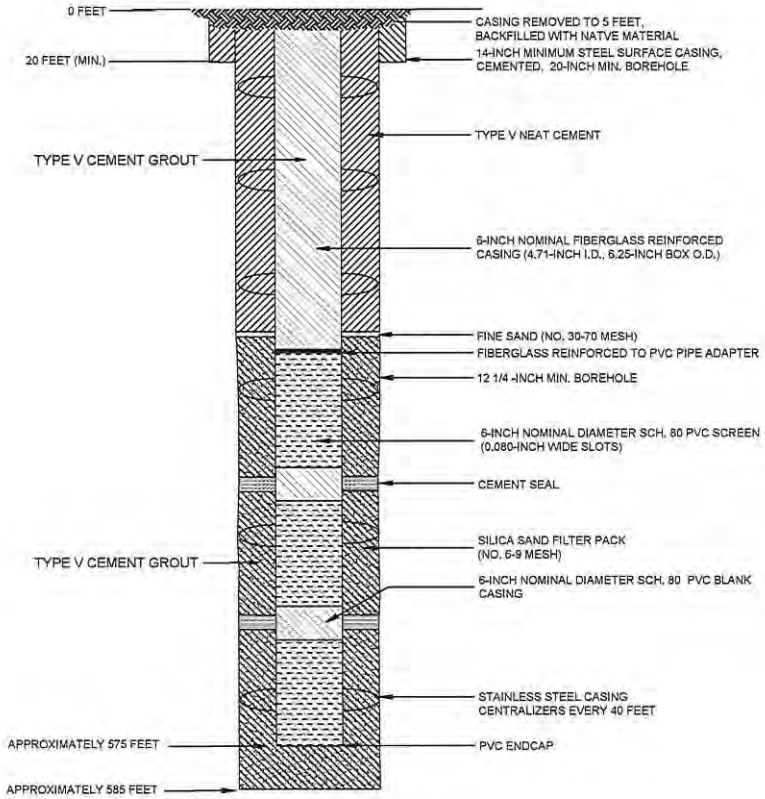
Name and Official Title *(Please type or print)*	Signature	Date Signed
Don Johnson - VP, GM		9/3/19

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

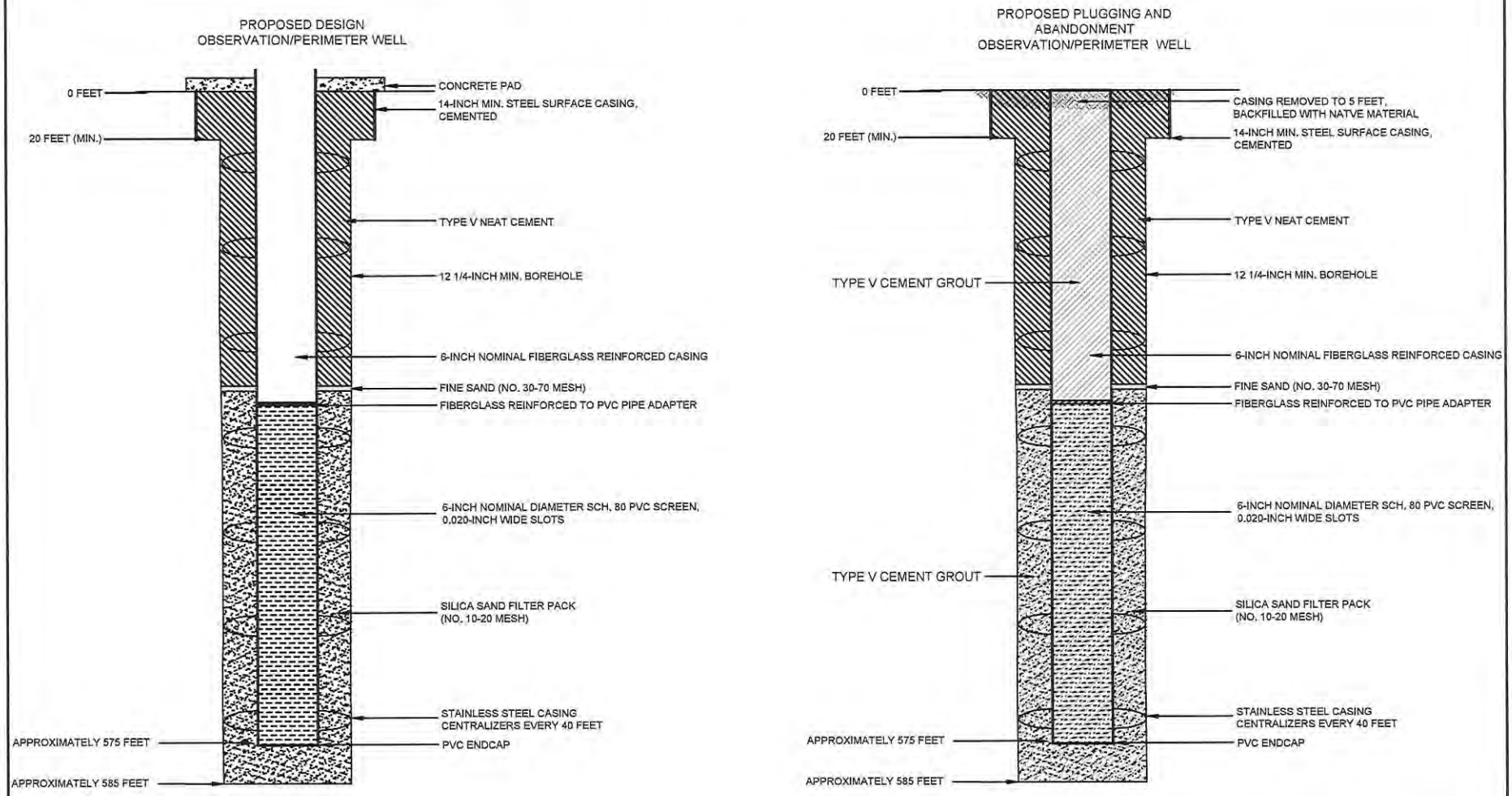
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 29
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-7a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 29
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-7b

TABLE E-7
WELLS WITHIN RESOURCE BLOCK 29
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1	848614	746838	29	348	388	575
2	848614	746909	29	348	388	575
3	848557	746838	29	348	388	575
4	848685	746980	29	348	388	575
5	848685	746909	29	348	388	575
7	848755	746980	29	348	388	575
131	848684	747050	29	348	388	575
635	848260	747121	29	348	388	575
643	848543	746768	29	348	388	575
646	848543	746909	29	348	388	575
651	848331	746838	29	348	388	575
652	848402	746909	29	348	388	575
653	848472	746980	29	348	388	575
654	848543	746980	29	348	388	575
656	848369	746838	29	348	388	575
655	848508	746934	29	348	388	575
657	848331	746768	29	348	388	575
662	848331	746909	29	348	388	575
660	848472	747050	29	348	388	575
661	848402	746980	29	348	388	575
663	848260	746838	29	348	388	575
668	848260	746909	29	348	388	575
669	848331	746980	29	348	388	575
670	848331	747050	29	348	388	575
671	848260	746980	29	348	388	575
672	848190	746909	29	348	388	575
684	848260	747050	29	348	388	575
685	848190	747050	29	348	388	575
686	848190	746980	29	348	388	575
687	848119	746980	29	348	388	575
688	848614	747050	29	348	388	575
689	848614	746980	29	348	388	575
709	848521	747064	29	348	388	575
710	848421	747064	29	348	388	575
711	848471	747114	29	348	388	575
O04	848331	747263	29	348	388	575
P08	848473	747192	29	348	388	575

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 30 Wells - See Attached Table E-8

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.052368

Longitude -111.429986

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 30 There are 44 Class III multi-use injection/ recovery wells, 1 dedicated Class III observation, and 2 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 30. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-8a and E-8b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

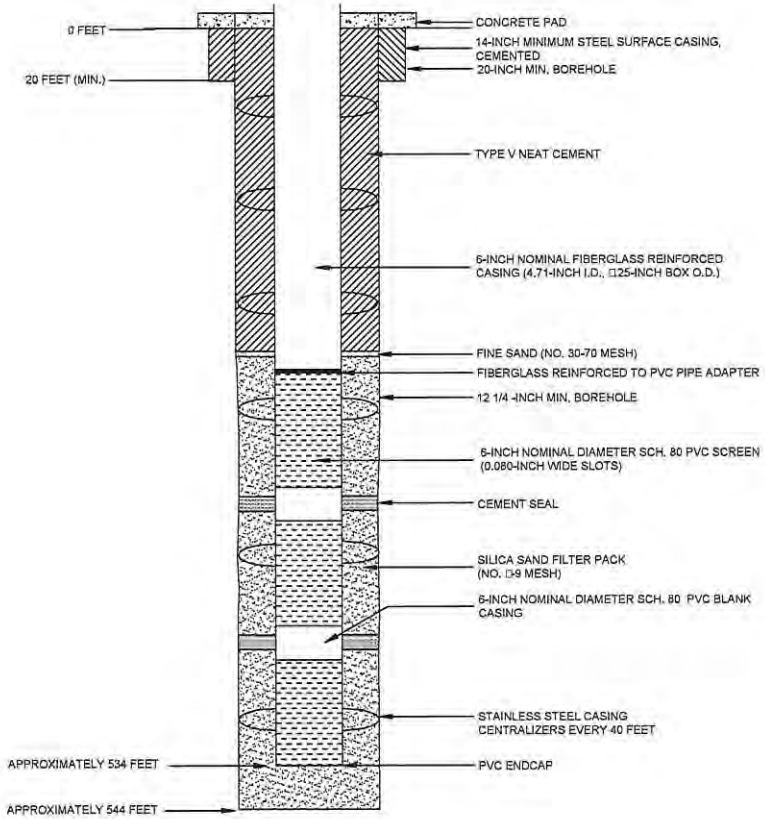
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

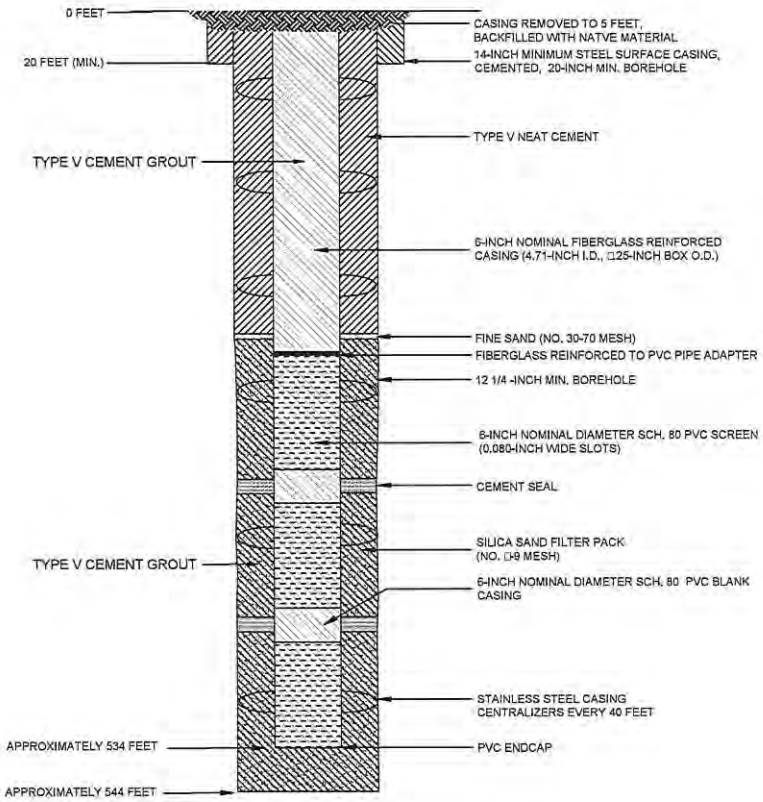
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

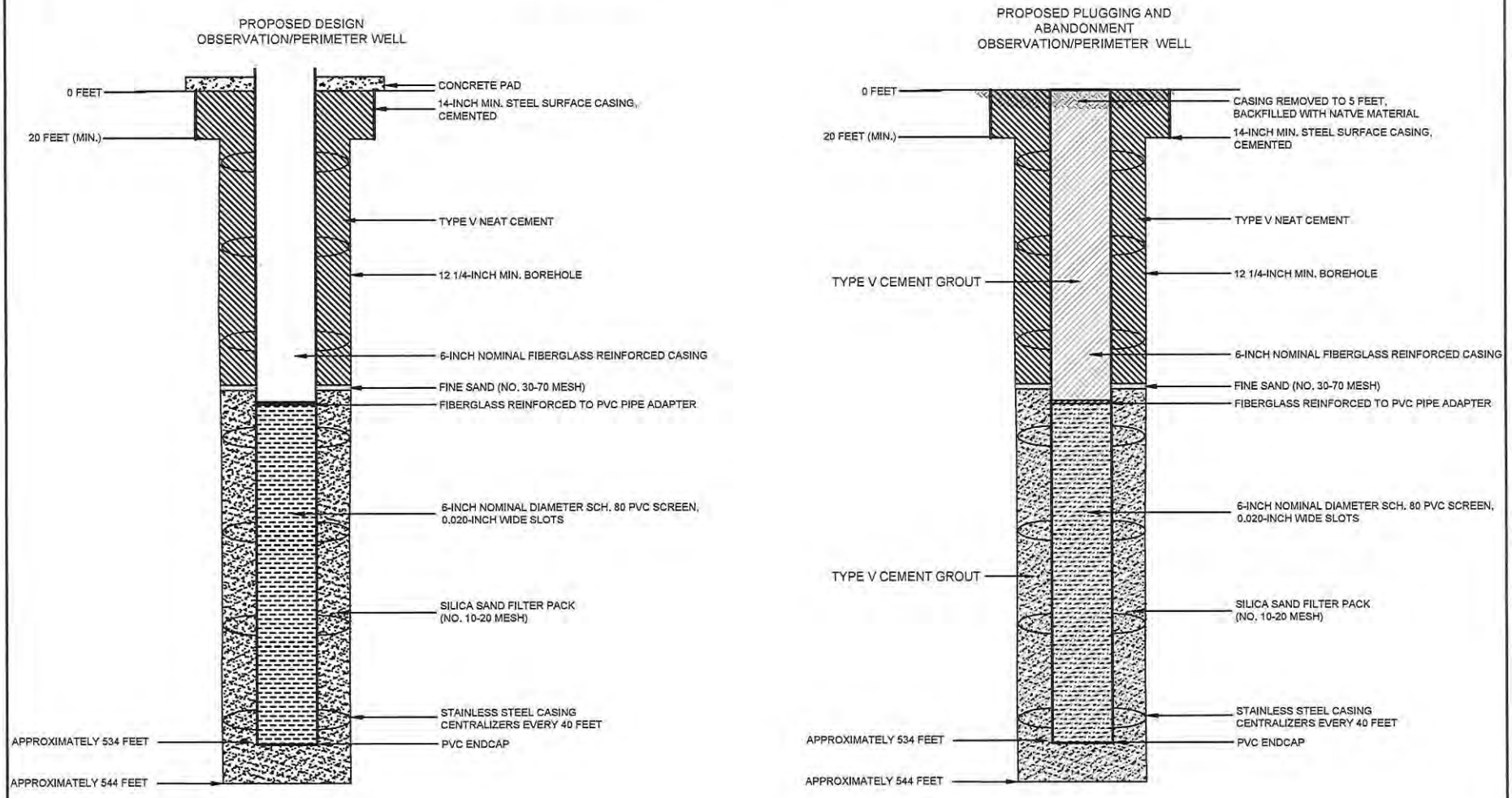
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 30
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-8a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 30
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-8b

TABLE E-8
WELLS WITHIN RESOURCE BLOCK 30
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
28	848967	747121	30	344	384	534
30	849109	747121	30	344	384	534
31	849038	747121	30	344	384	534
36	849321	747121	30	344	384	534
37	849180	747121	30	344	384	534
38	849250	747121	30	344	384	534
41	849109	746768	30	344	384	534
48	849038	746838	30	344	384	534
49	849109	746838	30	344	384	534
50	849038	746768	30	344	384	534
56	848967	746909	30	344	384	534
62	848897	746980	30	344	384	534
63	848967	746980	30	344	384	534
64	848897	746909	30	344	384	534
66	848897	747050	30	344	384	534
67	848826	746980	30	344	384	534
68	849109	747050	30	344	384	534
70	848967	747050	30	344	384	534
69	849038	747050	30	344	384	534
57	849038	746909	30	344	384	534
58	848967	746838	30	344	384	534
71	849109	746980	30	344	384	534
72	849038	746980	30	344	384	534
73	849109	746909	30	344	384	534
75	849180	746837	30	344	384	534
76	849250	746909	30	344	384	534
77	849180	746909	30	344	384	534
78	849392	747050	30	344	384	534
79	849321	747050	30	344	384	534
80	849250	747050	30	344	384	534
82	849321	746980	30	344	384	534
81	849180	747050	30	344	384	534
83	849250	746980	30	344	384	534
84	849180	746980	30	344	384	534
295	849250	746768	30	344	384	534
296	849321	746838	30	344	384	534
297	849392	746909	30	344	384	534
298	849462	746980	30	344	384	534
300	849180	746697	30	344	384	534

TABLE E-8
WELLS WITHIN RESOURCE BLOCK 30
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
315	849392	746980	30	344	384	534
317	849250	746838	30	344	384	534
316	849321	746909	30	344	384	534
318	849180	746768	30	344	384	534
319	849109	746697	30	344	384	534
O06	849038	747263	30	344	384	534
P12	849109	747192	30	344	384	534
P13	849251	747192	30	344	384	534

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 31 Wells - See Attached Table E-9

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.052432

Longitude -111.428116

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 31 There are 20 Class III multi-use injection/ recovery wells, 3 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 31. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-9a and E-9b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

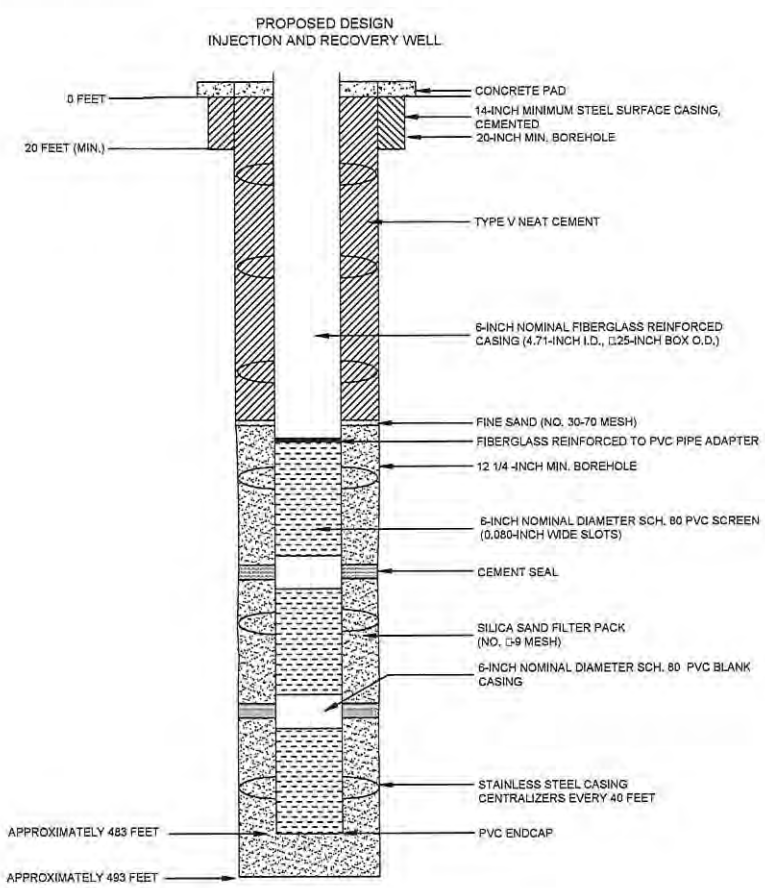
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

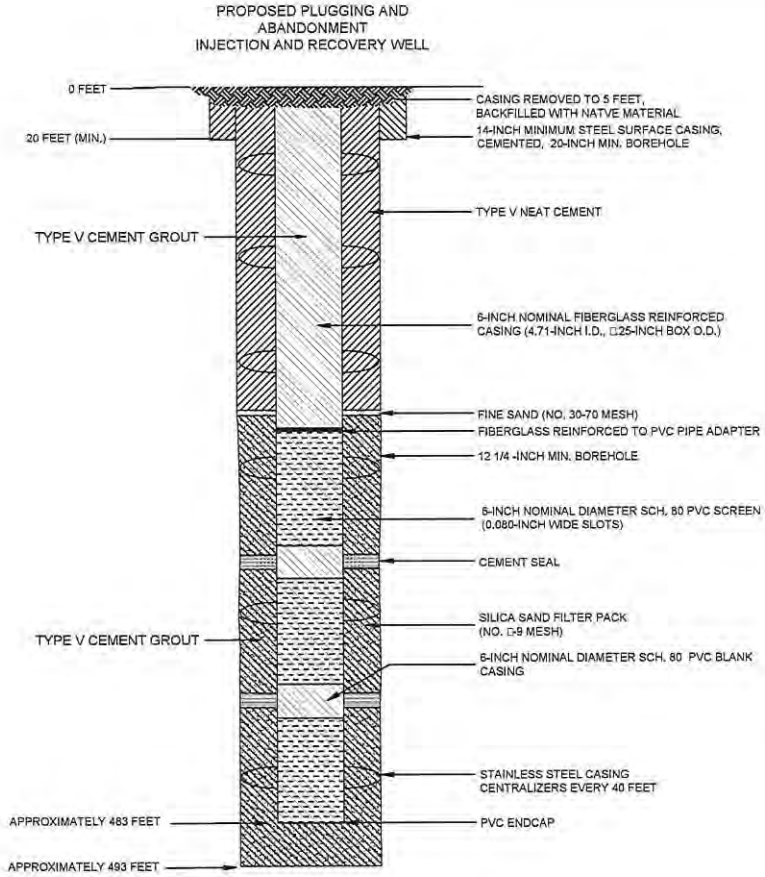
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

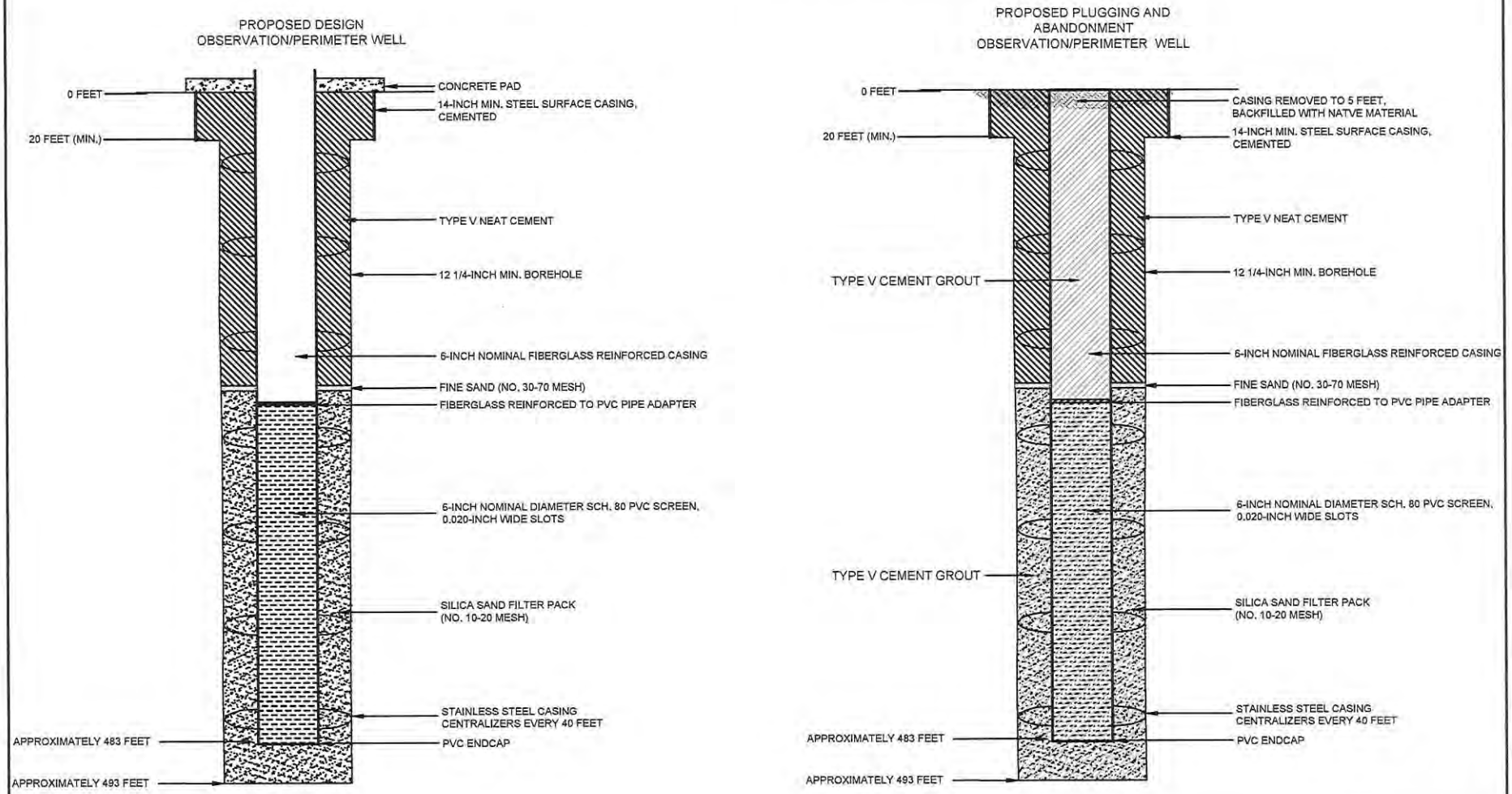
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 31
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-9

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 31
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-9b

TABLE E-9
WELLS WITHIN RESOURCE BLOCK 31
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
137	849674	747121	31	341	381	483
139	849816	747121	31	341	381	483
140	849745	747121	31	341	381	483
144	849816	746697	31	341	381	483
152	849745	746838	31	341	381	483
154	849745	746768	31	341	381	483
162	849674	746909	31	341	381	483
163	849745	746909	31	341	381	483
164	849674	746838	31	341	381	483
173	849604	746980	31	341	381	483
174	849674	746980	31	341	381	483
175	849604	746909	31	341	381	483
180	849604	747050	31	341	381	483
181	849533	746980	31	341	381	483
191	849745	747050	31	341	381	483
192	849674	747050	31	341	381	483
193	849816	746980	31	341	381	483
194	849745	746980	31	341	381	483
303	849887	746697	31	341	381	483
327	849887	747121	31	341	381	483
O09	849888	747263	31	341	381	483
O10	849957	747050	31	341	381	483
O11	849957	746838	31	341	381	483
P17	849817	747192	31	341	381	483
P18	849958	747192	31	341	381	483
P19	849887	746980	31	341	381	483
P20	849887	746768	31	341	381	483

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 32 Wells - See Attached Table E-10

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.051705

Longitude -111.425358

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 32 There are 1 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 32. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-10a and E-10b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

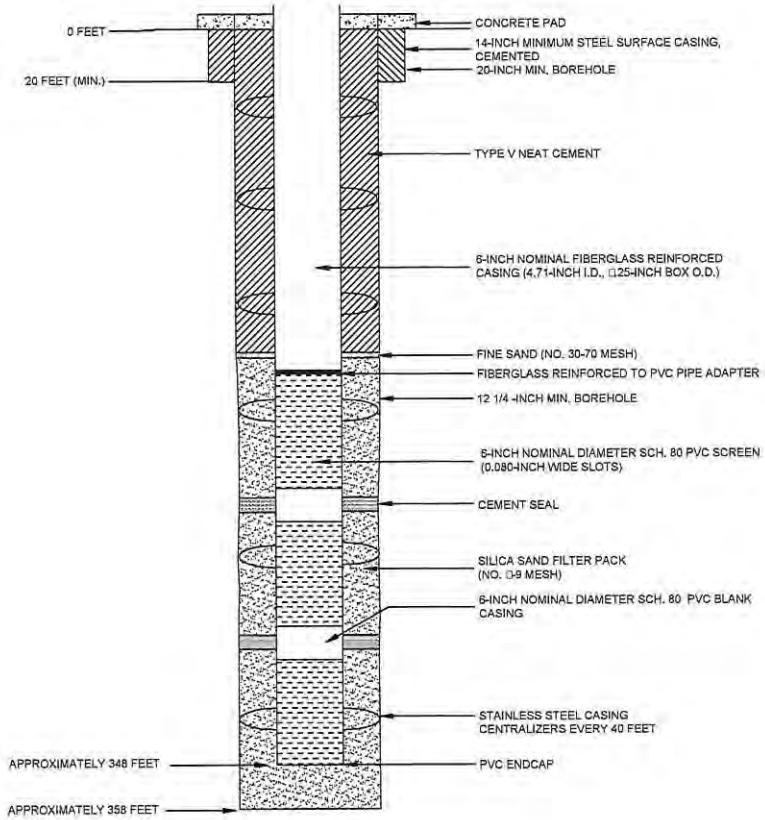
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

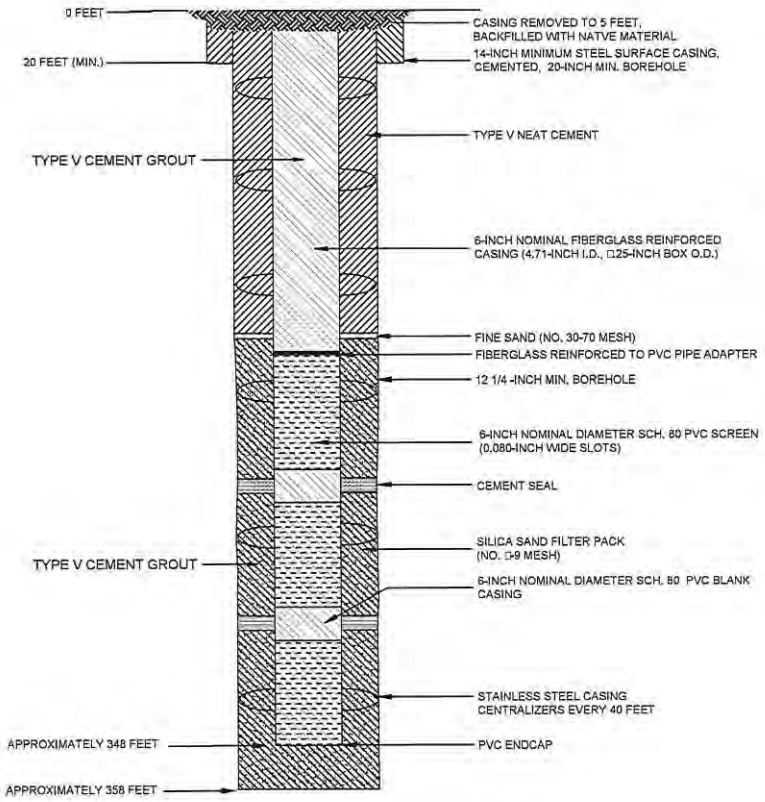
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

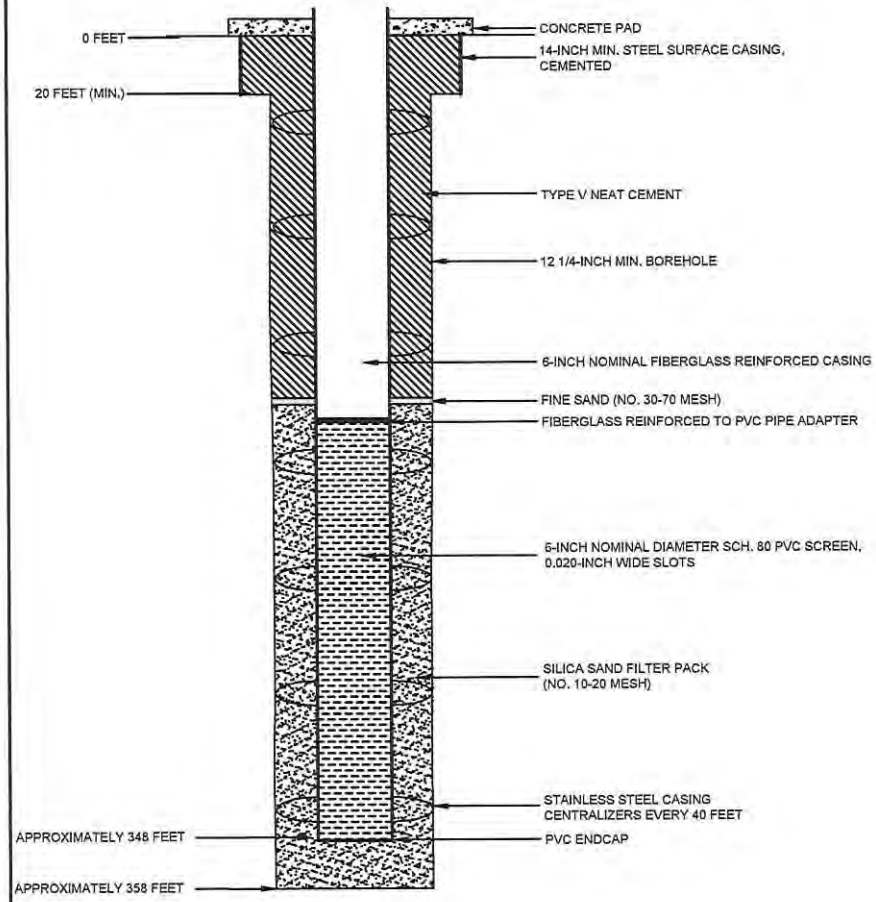
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 32
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

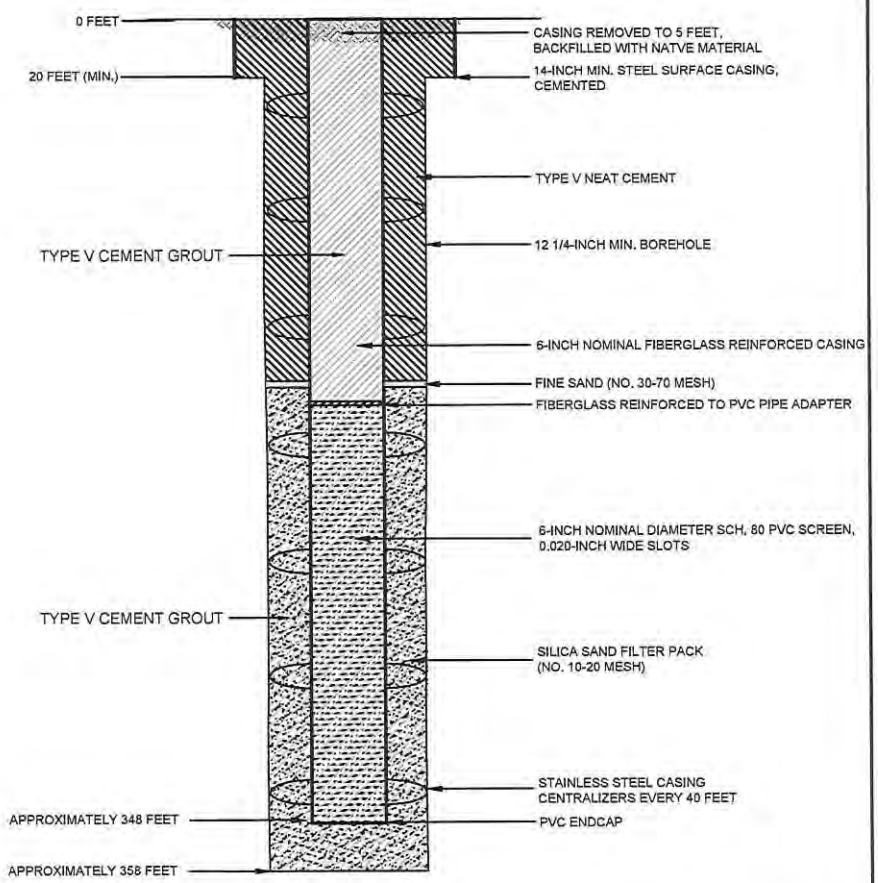
FIGURE E-10a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 32
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-10b

TABLE E-10
WELLS WITHIN RESOURCE BLOCK 32
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
326	850523	746697	32	348	388	491
O13	850523	746838	32	348	388	491
O14	850664	746626	32	348	388	491
P24	850452	746768	32	348	388	491
P25	850594	746768	32	348	388	491
P26	850594	746697	32	348	388	491

Notes:

ft bgs = feet below ground surface

Based on depths in block 40

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 36 Wells - See Attached Table E-11

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.051514

Longitude -111.435765

See Attached Table for Individual Well Coordinates.

Surface Location

NW 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

ft. from (N/S) Line of quarter section

ft. from (E/W) Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 36. There are 50 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 36. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-11.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

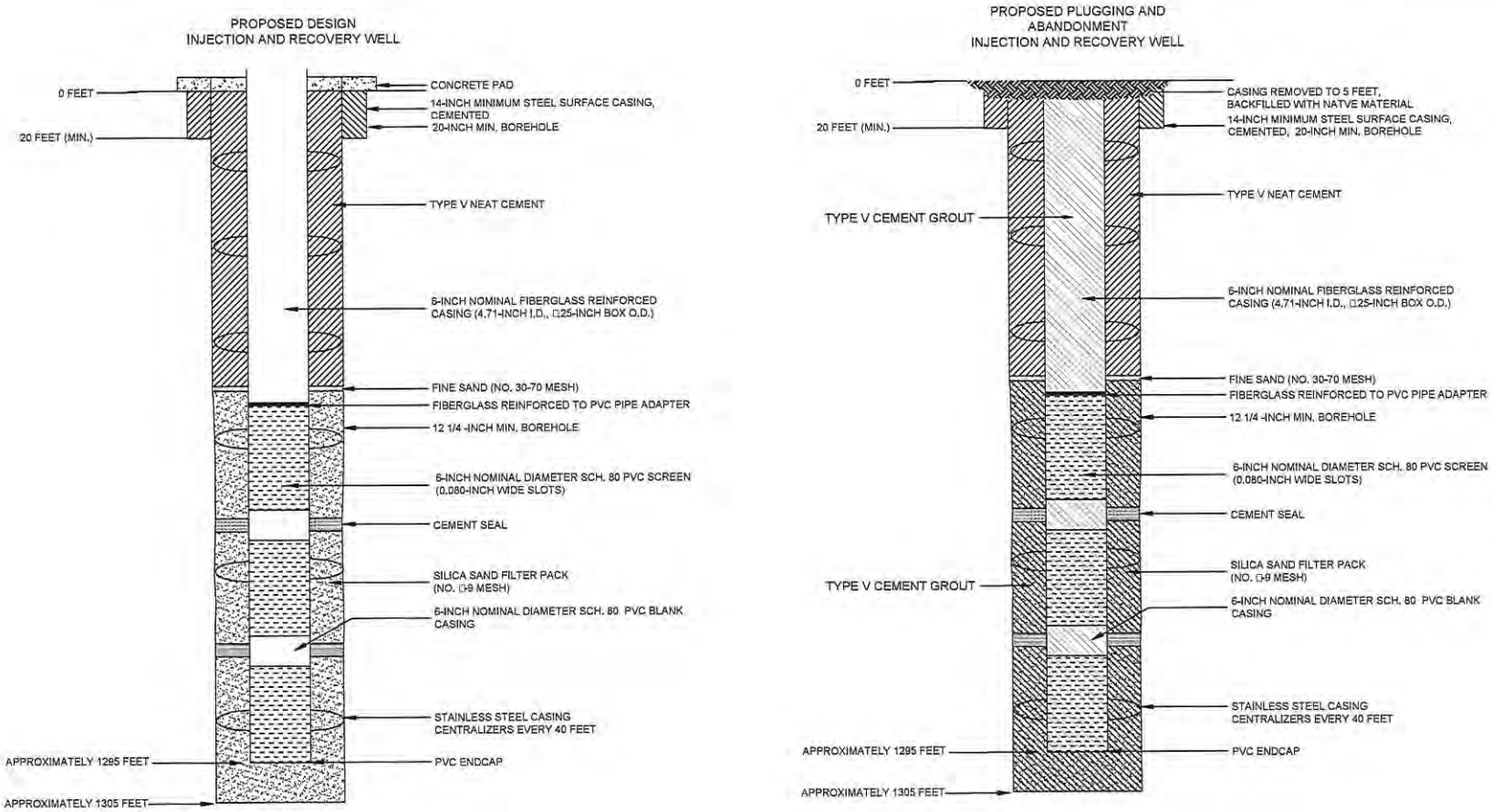
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 36
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-11

TABLE E-11
WELLS WITHIN RESOURCE BLOCK 36
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
514	847624	746556	36	496	536	1295
515	847624	746626	36	496	536	1295
516	847695	746626	36	496	536	1295
518	847553	746555	36	496	536	1295
520	847412	746343	36	496	536	1295
521	847412	746414	36	496	536	1295
522	847341	746343	36	496	536	1295
523	847553	746485	36	496	536	1295
524	847483	746485	36	496	536	1295
525	847483	746414	36	496	536	1295
572	847553	746697	36	496	536	1295
573	847553	746768	36	496	536	1295
574	847483	746838	36	496	536	1295
576	847483	746768	36	496	536	1295
577	847412	746909	36	496	536	1295
579	847412	746838	36	496	536	1295
582	847341	746909	36	496	536	1295
592	847624	746697	36	496	536	1295
715	847483	746697	36	496	536	1295
716	847412	746768	36	496	536	1295
717	847341	746838	36	496	536	1295
726	847412	746555	36	496	536	1295
727	847483	746626	36	496	536	1295
728	847412	746626	36	496	536	1295
729	847341	746555	36	496	536	1295
730	847200	746555	36	496	536	1295
731	847270	746626	36	496	536	1295
732	847341	746697	36	496	536	1295
733	847412	746697	36	496	536	1295
734	847341	746626	36	496	536	1295
735	847270	746555	36	496	536	1295
736	847129	746626	36	496	536	1295
737	847200	746697	36	496	536	1295
738	847270	746768	36	496	536	1295
774	847553	746626	36	496	536	1295
773	847412	746485	36	496	536	1295
765	847200	746485	36	496	536	1295
764	847270	746485	36	496	536	1295
756	847270	746414	36	496	536	1295

TABLE E-11
WELLS WITHIN RESOURCE BLOCK 36
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
755	847341	746485	36	496	536	1295
754	847341	746414	36	496	536	1295
749	847483	746555	36	496	536	1295
746	847058	746626	36	496	536	1295
745	847129	746697	36	496	536	1295
744	847200	746768	36	496	536	1295
743	847270	746838	36	496	536	1295
742	847129	746555	36	496	536	1295
741	847200	746626	36	496	536	1295
740	847270	746697	36	496	536	1295
739	847341	746768	36	496	536	1295

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 37 Wells - See Attached Table E-12

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.051518

Longitude -111.433408

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 37. There are 49 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 37. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-12.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

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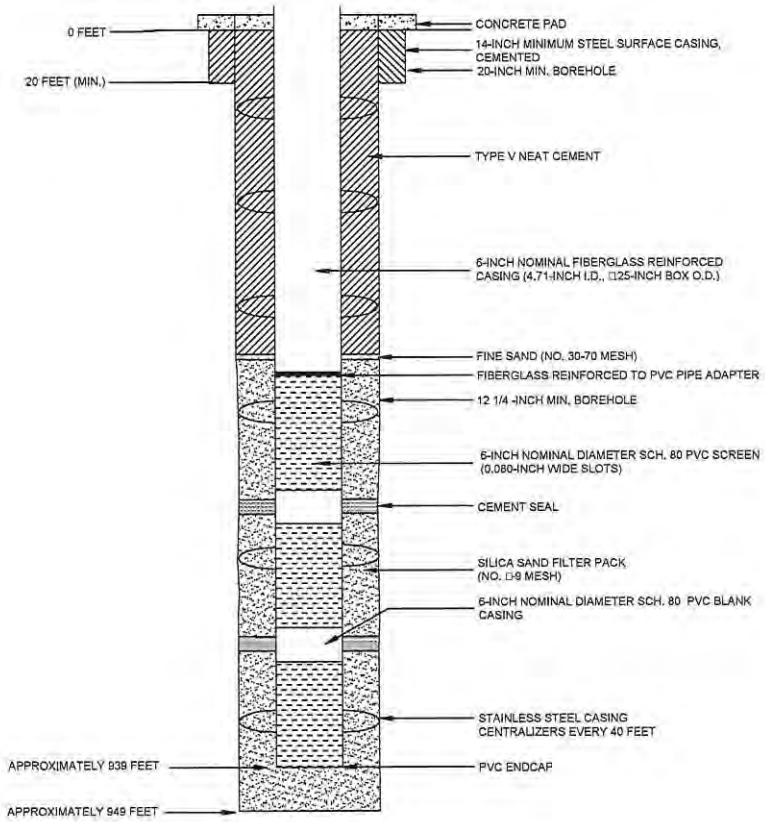
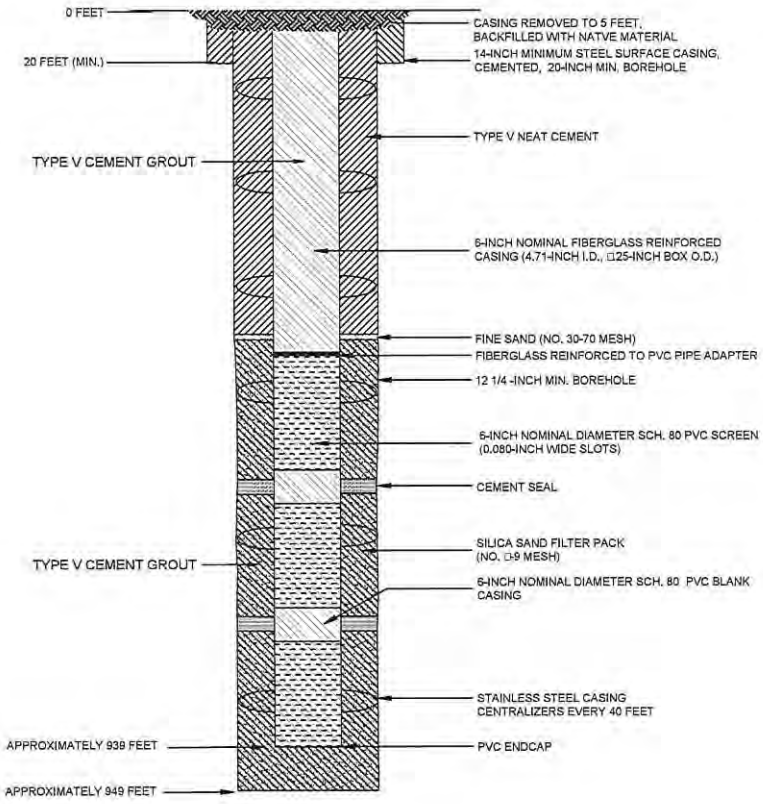
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 37
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-12

TABLE E-12
WELLS WITHIN RESOURCE BLOCK 37
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
333	848260	746556	37	496	536	939
334	848260	746485	37	496	536	939
335	848190	746485	37	496	536	939
336	848190	746414	37	496	536	939
337	848119	746343	37	496	536	939
338	848048	746343	37	496	536	939
339	848119	746414	37	496	536	939
538	847836	746555	37	496	536	939
540	847765	746626	37	496	536	939
561	847907	746485	37	496	536	939
563	847977	746414	37	496	536	939
636	847977	746697	37	496	536	939
637	847978	746768	37	496	536	939
638	847907	746697	37	496	536	939
639	847978	746838	37	496	536	939
640	847907	746768	37	496	536	939
641	847977	746626	37	496	536	939
642	848315	746556	37	496	536	939
644	848260	746626	37	496	536	939
645	848331	746697	37	496	536	939
648	848331	746626	37	496	536	939
649	848190	746697	37	496	536	939
650	848260	746768	37	496	536	939
658	848260	746697	37	496	536	939
659	848190	746626	37	496	536	939
664	848190	746768	37	496	536	939
665	848119	746697	37	496	536	939
666	848119	746768	37	496	536	939
667	848190	746838	37	496	536	939
673	848119	746838	37	496	536	939
674	848048	746768	37	496	536	939
675	848190	746556	37	496	536	939
676	848048	746556	37	496	536	939
677	848119	746556	37	496	536	939
678	848119	746626	37	496	536	939
679	848048	746626	37	496	536	939
680	848048	746697	37	496	536	939
681	848049	746837	37	496	536	939
682	848119	746909	37	496	536	939

TABLE E-12
WELLS WITHIN RESOURCE BLOCK 37
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
683	848048	746909	37	496	536	939
690	848119	746485	37	496	536	939
691	847907	746626	37	496	536	939
692	847836	746626	37	496	536	939
693	847836	746697	37	496	536	939
694	847977	746555	37	496	536	939
695	847907	746555	37	496	536	939
696	847977	746485	37	496	536	939
697	848048	746485	37	496	536	939
698	848048	746414	37	496	536	939

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 38 Wells - See Attached Table E-13

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.051569

Longitude -111.431269

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 38. There are 53 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 38. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-13.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

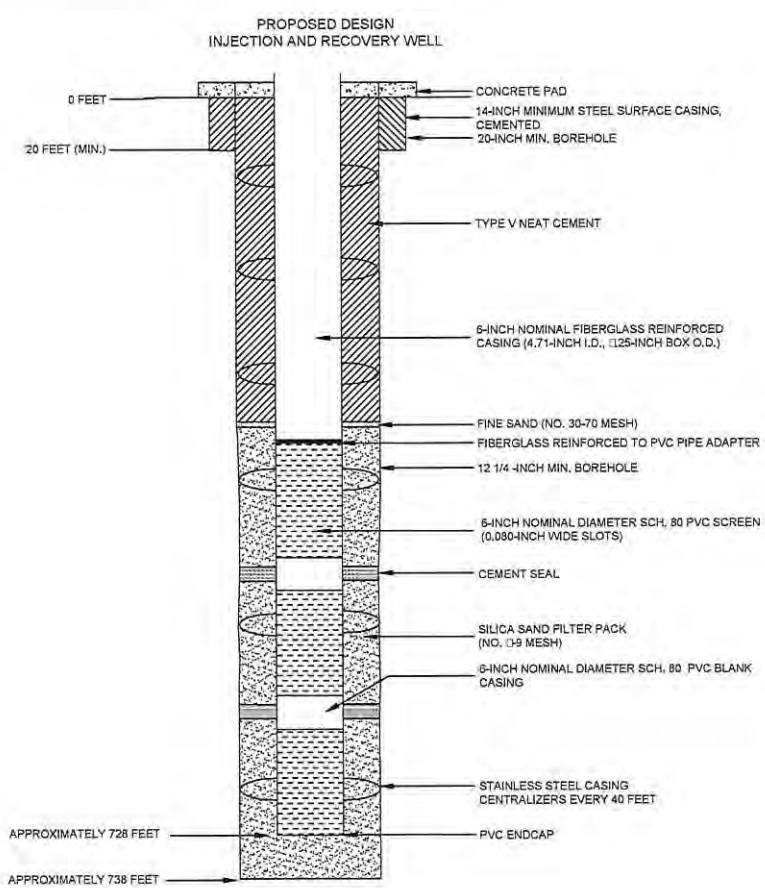
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

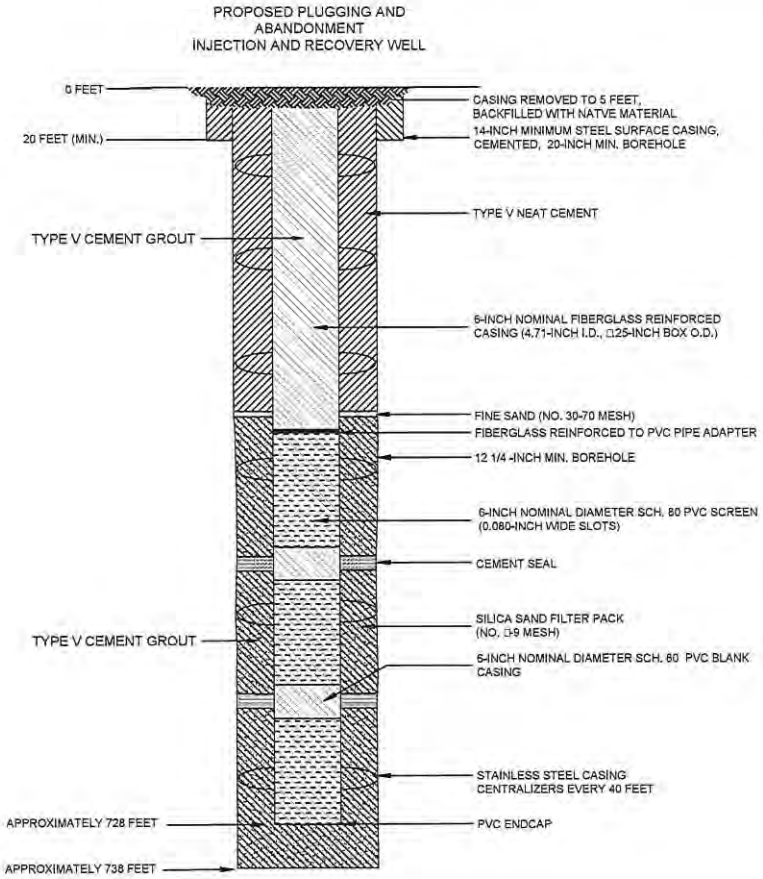
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 38
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-13

TABLE E-13
WELLS WITHIN RESOURCE BLOCK 38
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
12	848614	746626	38	368	408	728
13	848685	746697	38	368	408	728
14	848685	746768	38	368	408	728
15	848614	746697	38	368	408	728
16	848685	746838	38	368	408	728
17	848614	746768	38	368	408	728
18	848543	746697	38	368	408	728
19	848685	746556	38	368	408	728
20	848685	746626	38	368	408	728
21	848755	746768	38	368	408	728
22	848755	746556	38	368	408	728
23	848755	746626	38	368	408	728
24	848755	746697	38	368	408	728
25	848756	746838	38	368	408	728
26	848755	746909	38	368	408	728
27	848755	746485	38	368	408	728
32	849462	747121	38	368	408	728
34	849392	747121	38	368	408	728
40	848967	746555	38	368	408	728
42	849038	746697	38	368	408	728
43	848967	746626	38	368	408	728
44	848897	746555	38	368	408	728
45	848826	746626	38	368	408	728
46	848897	746697	38	368	408	728
47	848967	746768	38	368	408	728
51	848967	746697	38	368	408	728
52	848897	746626	38	368	408	728
53	848826	746555	38	368	408	728
54	848826	746768	38	368	408	728
55	848897	746838	38	368	408	728
59	848897	746768	38	368	408	728
60	848826	746697	38	368	408	728
61	848826	746909	38	368	408	728
65	848826	746838	38	368	408	728
74	849038	746555	38	368	408	728
85	848826	746343	38	368	408	728
86	848897	746414	38	368	408	728
87	848897	746485	38	368	408	728
88	848826	746414	38	368	408	728

TABLE E-13
WELLS WITHIN RESOURCE BLOCK 38
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
89	848826	746485	38	368	408	728
90	848967	746485	38	368	408	728
91	848755	746343	38	368	408	728
299	849109	746626	38	368	408	728
312	849038	746626	38	368	408	728
340	848614	746556	38	368	408	728
341	848685	746485	38	368	408	728
342	848755	746414	38	368	408	728
343	848543	746556	38	368	408	728
385	848614	746485	38	368	408	728
387	848685	746414	38	368	408	728
700	848543	746626	38	368	408	728
701	848495	746556	38	368	408	728
702	848504	746626	38	368	408	728

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 39 Wells - See Attached Table E-14

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.051457

Longitude -111.428830

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 39. There are 51 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 39. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-14.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, Gm		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

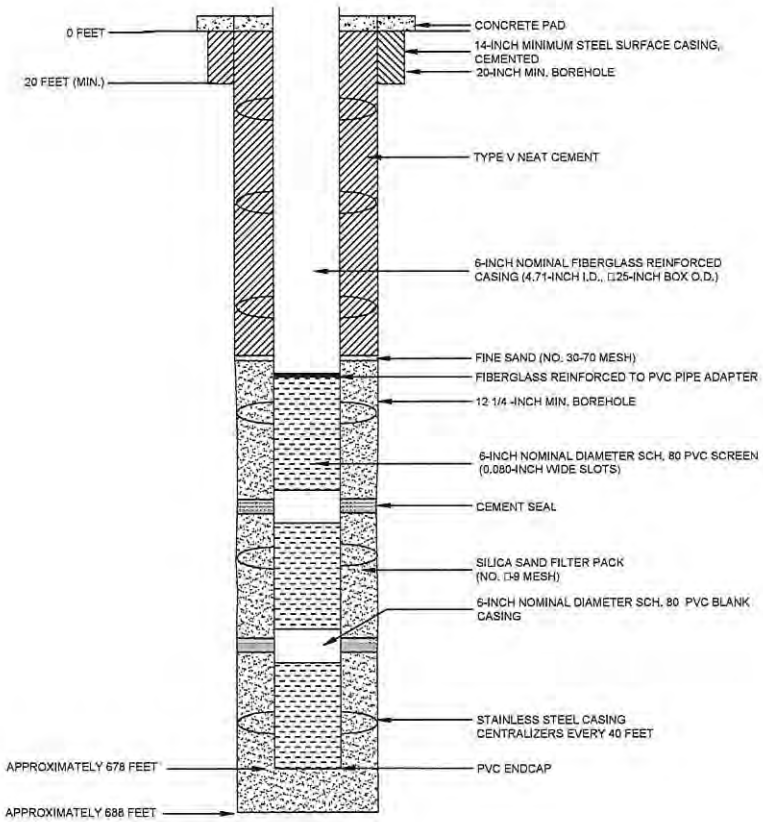
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

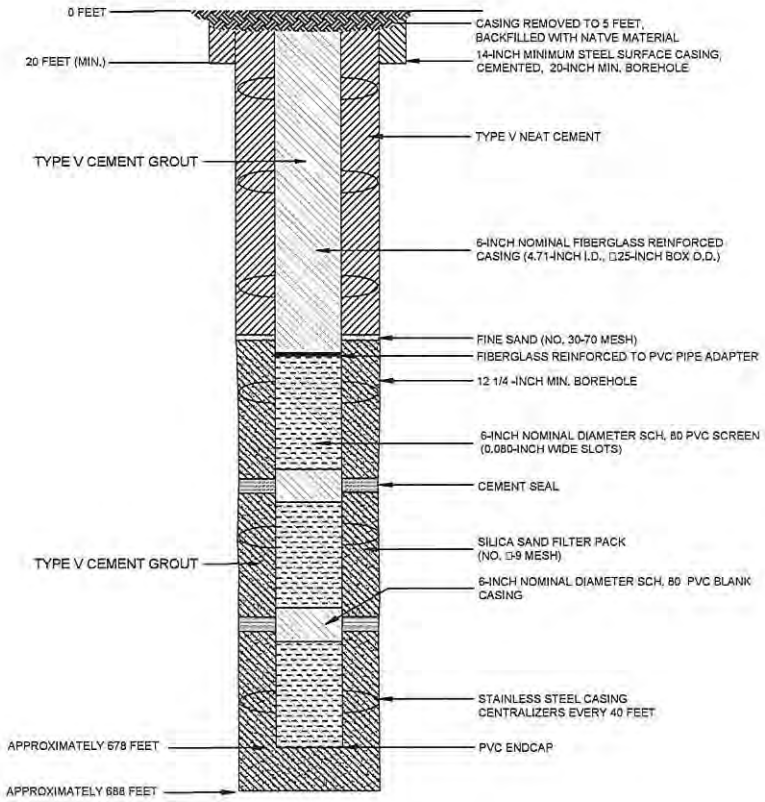
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 39
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-14

TABLE E-14
WELLS WITHIN RESOURCE BLOCK 39
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
142	849674	746556	39	350	390	678
143	849745	746626	39	350	390	678
145	849745	746697	39	350	390	678
146	849674	746626	39	350	390	678
147	849604	746556	39	350	390	678
148	849462	746556	39	350	390	678
149	849533	746626	39	350	390	678
150	849604	746697	39	350	390	678
151	849674	746768	39	350	390	678
155	849674	746697	39	350	390	678
156	849604	746626	39	350	390	678
157	849533	746556	39	350	390	678
158	849392	746626	39	350	390	678
159	849462	746697	39	350	390	678
160	849533	746768	39	350	390	678
161	849604	746838	39	350	390	678
165	849604	746768	39	350	390	678
166	849533	746697	39	350	390	678
167	849462	746626	39	350	390	678
168	849392	746556	39	350	390	678
169	849321	746697	39	350	390	678
170	849392	746768	39	350	390	678
171	849462	746838	39	350	390	678
172	849533	746909	39	350	390	678
176	849533	746838	39	350	390	678
177	849462	746768	39	350	390	678
178	849392	746697	39	350	390	678
179	849321	746626	39	350	390	678
182	849462	746909	39	350	390	678
183	849392	746838	39	350	390	678
184	849321	746768	39	350	390	678
185	849250	746697	39	350	390	678
186	849334	746556	39	350	390	678
188	849250	746556	39	350	390	678
189	849250	746626	39	350	390	678
190	849179	746626	39	350	390	678
195	849745	746556	39	350	390	678
196	849816	746626	39	350	390	678
199	849533	746343	39	350	390	678

TABLE E-14
WELLS WITHIN RESOURCE BLOCK 39
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
200	849604	746405	39	350	390	678
201	849604	746485	39	350	390	678
202	849533	746405	39	350	390	678
203	849462	746343	39	350	390	678
207	849462	746405	39	350	390	678
208	849533	746485	39	350	390	678
209	849462	746485	39	350	390	678
210	849392	746414	39	350	390	678
212	849392	746485	39	350	390	678
213	849321	746485	39	350	390	678
216	849321	746446	39	350	390	678
218	849674	746485	39	350	390	678

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 40 Wells - See Attached Table E-15

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.051341

Longitude -111.426663

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 40 There are 38 Class III multi-use injection/ recovery wells, 1 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 40. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-15a and E-15b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
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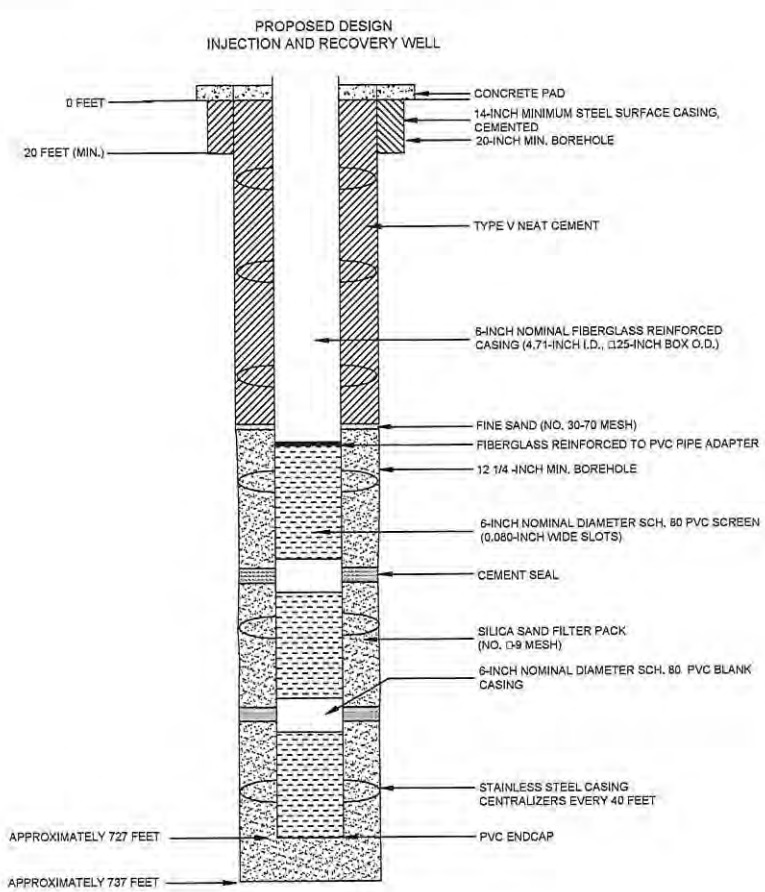
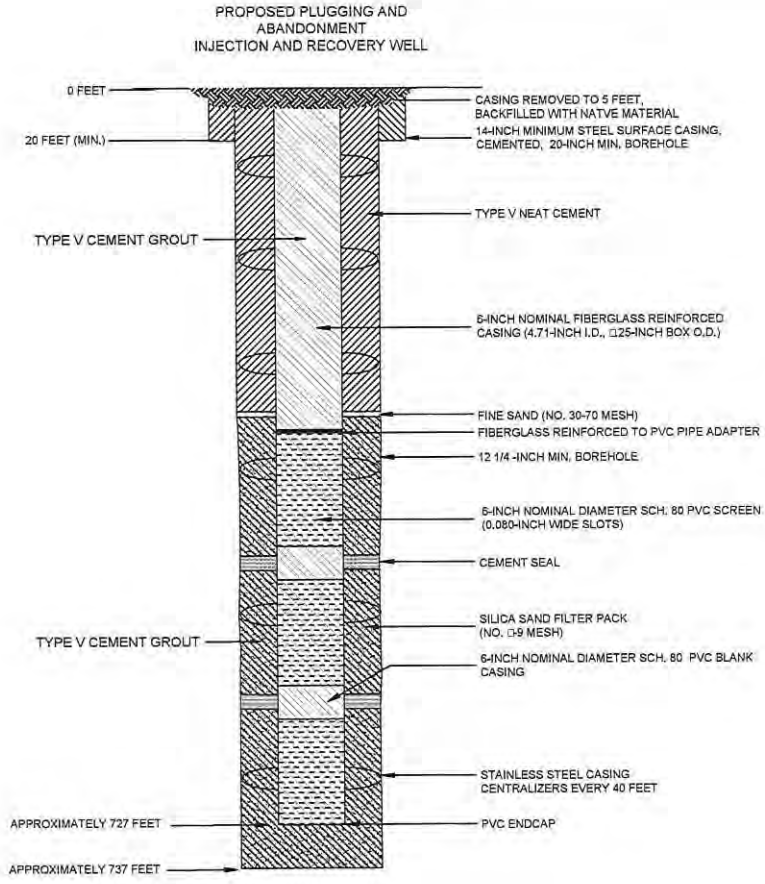




NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

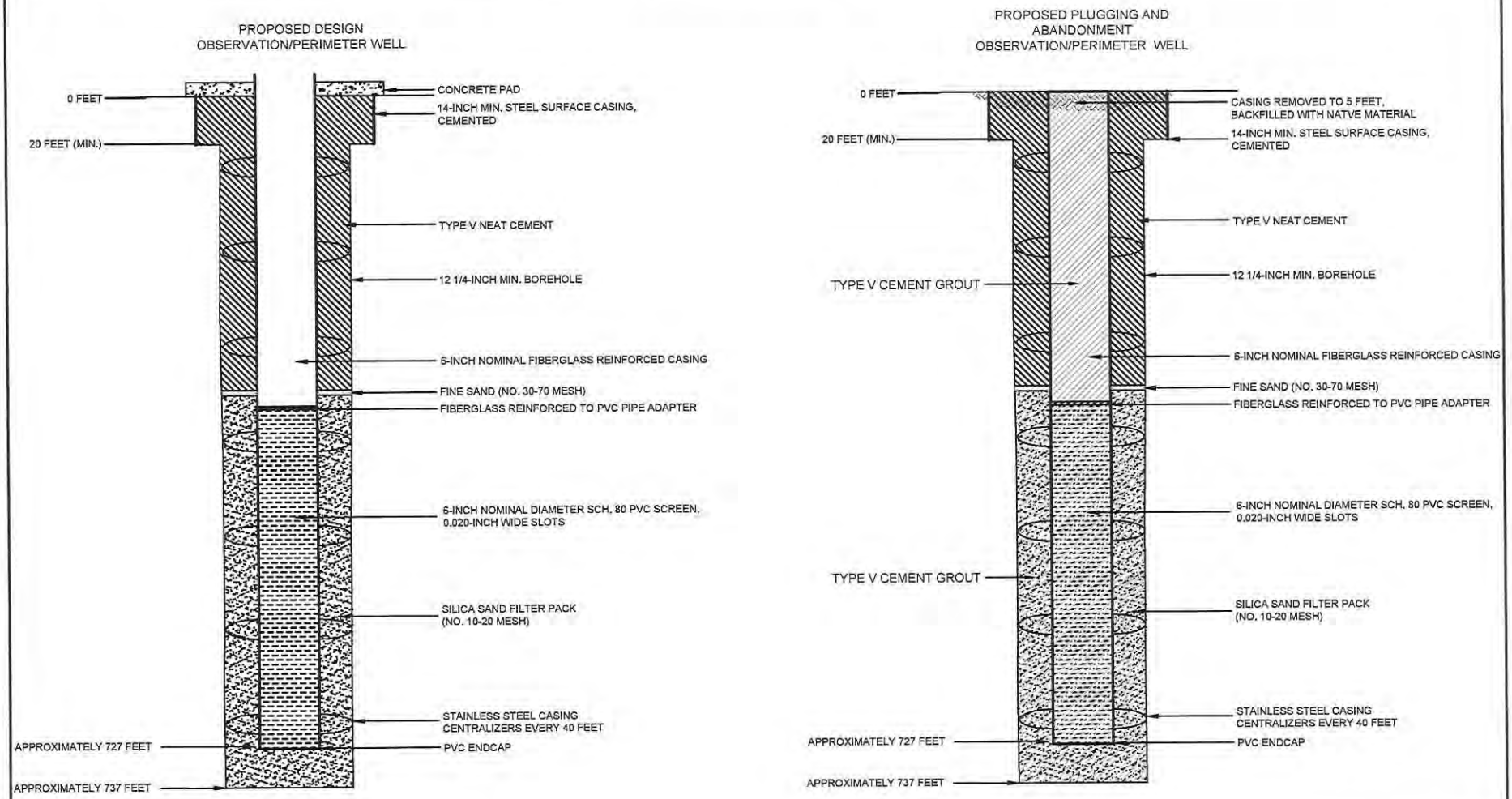
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 40
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-15a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 40
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-15b

TABLE E-15
WELLS WITHIN RESOURCE BLOCK 40
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
221	849887	746626	40	350	390	727
245	850099	746556	40	350	390	727
246	850169	746626	40	350	390	727
325	850452	746697	40	350	390	727
324	850523	746626	40	350	390	727
247	850240	746697	40	350	390	727
248	850099	746626	40	350	390	727
249	850028	746556	40	350	390	727
250	849957	746626	40	350	390	727
251	850099	746697	40	350	390	727
252	850028	746626	40	350	390	727
253	849957	746556	40	350	390	727
254	849957	746697	40	350	390	727
255	850240	746556	40	350	390	727
256	850169	746556	40	350	390	727
257	850240	746626	40	350	390	727
259	850452	746626	40	350	390	727
260	850382	746697	40	350	390	727
261	850452	746556	40	350	390	727
262	850311	746556	40	350	390	727
263	850381	746556	40	350	390	727
264	850382	746626	40	350	390	727
265	850311	746626	40	350	390	727
268	850169	746343	40	350	390	727
272	850099	746414	40	350	390	727
275	850028	746485	40	350	390	727
278	850240	746485	40	350	390	727
279	850169	746485	40	350	390	727
280	850099	746485	40	350	390	727
281	850240	746414	40	350	390	727
282	850169	746414	40	350	390	727
283	850240	746343	40	350	390	727
290	850381	746485	40	350	390	727
291	850311	746485	40	350	390	727
294	850311	746414	40	350	390	727

TABLE E-15
WELLS WITHIN RESOURCE BLOCK 40
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
304	850028	746697	40	350	390	727
305	850169	746697	40	350	390	727
306	850311	746697	40	350	390	727
O12	850240	746838	40	350	390	727
P21	850028	746768	40	350	390	727
P22	850169	746768	40	350	390	727
P23	850311	746768	40	350	390	727

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 44 Wells - See Attached Table E-16

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.050516

Longitude -111.436522

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 44. There are 31 Class III multi-use injection/ recovery wells, 3 dedicated Class III observation, and 5 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 44. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-16a and E-16b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson – VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
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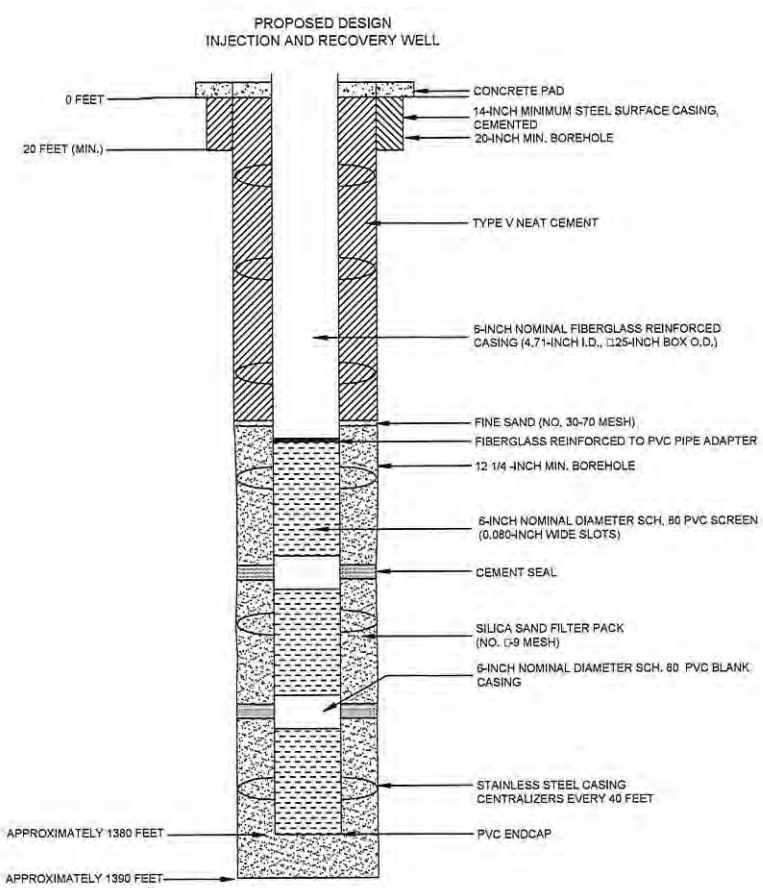
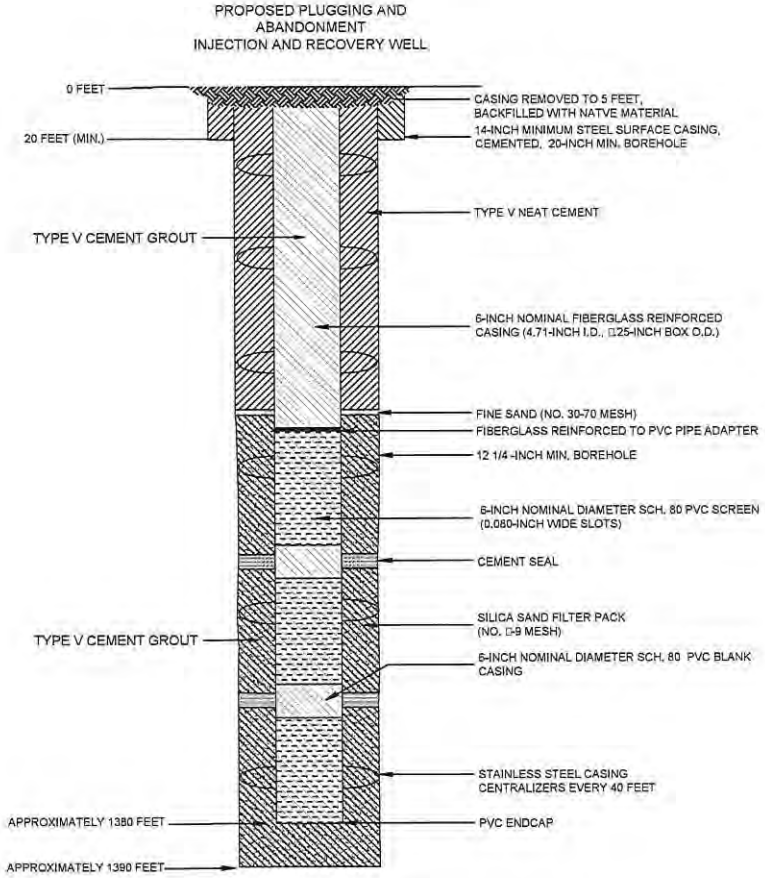




NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

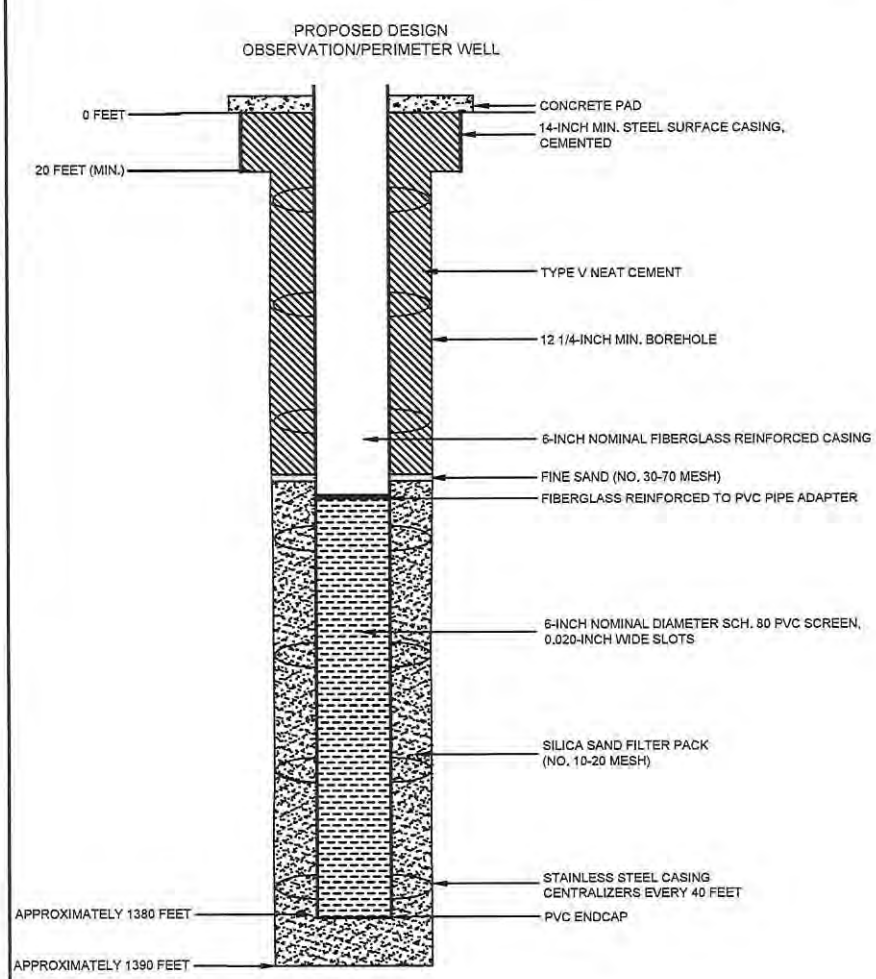
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

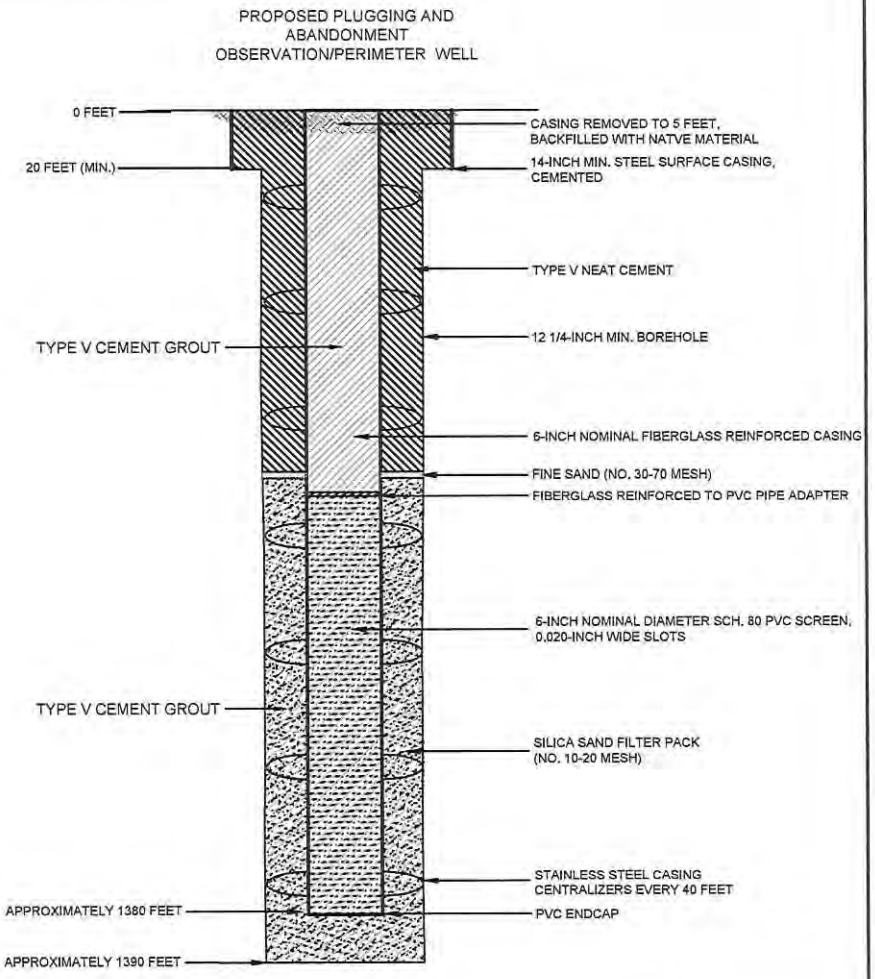
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 44
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-16a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 44
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-16b

TABLE E-16
WELLS WITHIN RESOURCE BLOCK 44
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
472	847129	746060	44	705	745	1380
473	847200	746131	44	705	745	1380
474	847270	746202	44	705	745	1380
475	847270	746273	44	705	745	1380
476	847200	746202	44	705	745	1380
477	847129	746131	44	705	745	1380
479	847058	745990	44	705	745	1380
480	846988	745990	44	705	745	1380
478	847058	746060	44	705	745	1380
519	847341	746273	44	705	745	1380
747	847058	746555	44	705	745	1380
750	847058	746131	44	705	745	1380
751	847129	746202	44	705	745	1380
752	847200	746273	44	705	745	1380
753	847270	746343	44	705	745	1380
757	847200	746343	44	705	745	1380
758	847129	746273	44	705	745	1380
759	847058	746202	44	705	745	1380
760	846988	746131	44	705	745	1380
761	847058	746273	44	705	745	1380
762	847129	746343	44	705	745	1380
763	847200	746414	44	705	745	1380
766	847129	746414	44	705	745	1380
767	847058	746343	44	705	745	1380
768	846988	746273	44	705	745	1380
769	847129	746485	44	705	745	1380
770	847058	746485	44	705	745	1380
771	847058	746414	44	705	745	1380
895	846988	746202	44	705	745	1380
898	846988	746060	44	705	745	1380
902	846988	746343	44	705	745	1380
O40	846846	746060	44	705	745	1380
O41	846846	746343	44	705	745	1380
O42	846917	746626	44	705	745	1380
P78	846917	745990	44	705	745	1380
P79	846917	746131	44	705	745	1380
P80	846917	746273	44	705	745	1380
P81	846988	746414	44	705	745	1380
P82	846988	746555	44	705	745	1380

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 45 Wells - See Attached Table E-17

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.050597

Longitude -111.434617

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 45. There are 50 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 45. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-17.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

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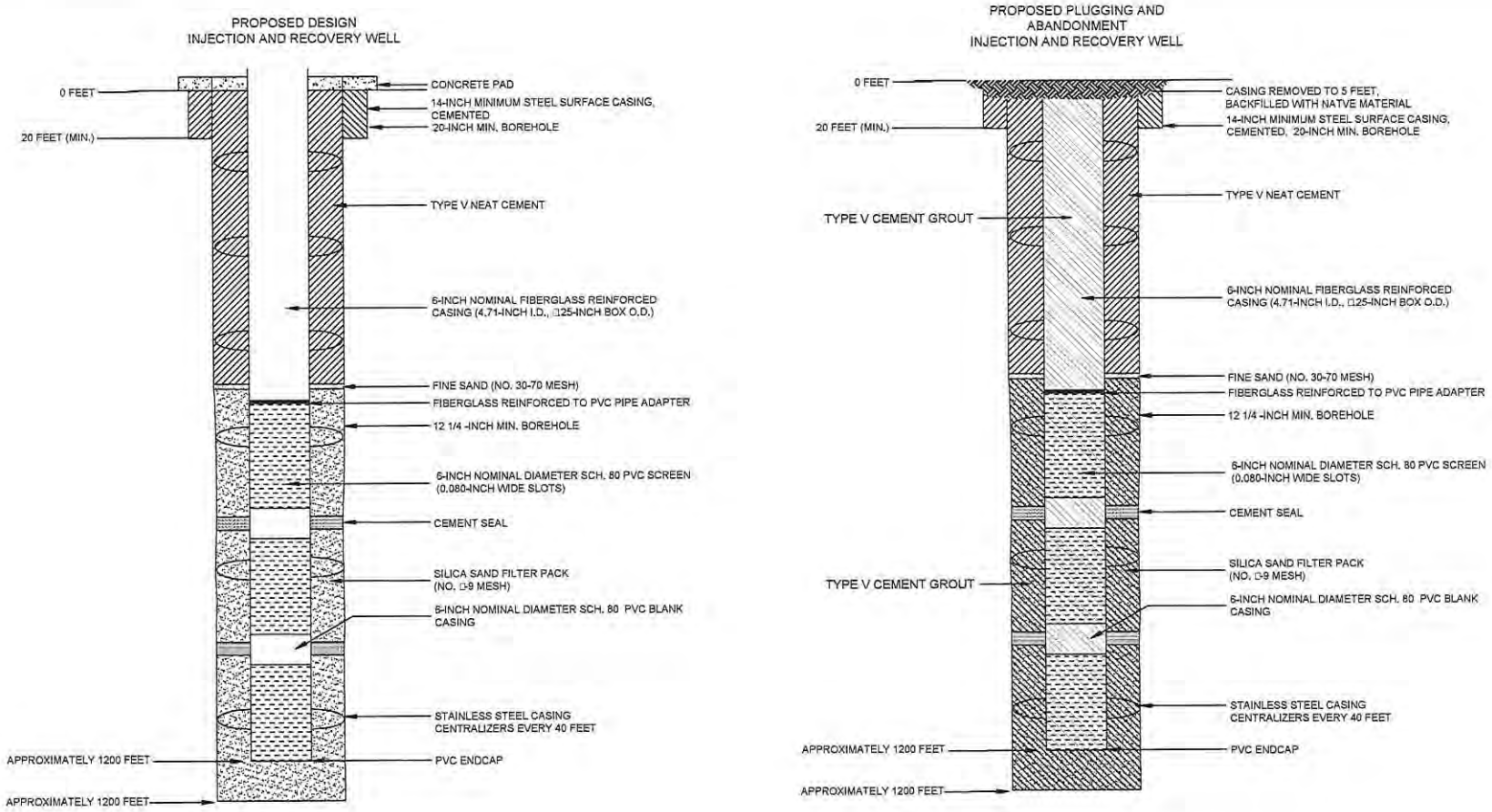


NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 45
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-17

TABLE E-17
WELLS WITHIN RESOURCE BLOCK 45
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
420	847624	746061	45	465	505	1200
421	847977	746202	45	465	505	1200
422	847907	746131	45	465	505	1200
423	847836	746061	45	465	505	1200
424	847765	745990	45	465	505	1200
425	847977	746273	45	465	505	1200
426	847907	746202	45	465	505	1200
427	847836	746131	45	465	505	1200
428	847765	746061	45	465	505	1200
429	847695	745990	45	465	505	1200
467	848048	746273	45	465	505	1200
481	847553	746131	45	465	505	1200
484	847483	746202	45	465	505	1200
485	847412	746273	45	465	505	1200
526	847553	746202	45	465	505	1200
527	847483	746273	45	465	505	1200
528	847553	746273	45	465	505	1200
529	847483	746343	45	465	505	1200
530	847553	746414	45	465	505	1200
531	847553	746343	45	465	505	1200
532	847624	746202	45	465	505	1200
533	847624	746131	45	465	505	1200
534	847625	746272	45	465	505	1200
535	847624	746343	45	465	505	1200
536	847624	746485	45	465	505	1200
537	847624	746414	45	465	505	1200
539	847765	746555	45	465	505	1200
541	847695	746555	45	465	505	1200
542	847695	746061	45	465	505	1200
543	847765	746131	45	465	505	1200
544	847836	746202	45	465	505	1200
545	847907	746273	45	465	505	1200
546	847695	746202	45	465	505	1200
547	847765	746273	45	465	505	1200
548	847836	746343	45	465	505	1200
549	847907	746343	45	465	505	1200
550	847836	746273	45	465	505	1200
551	847765	746202	45	465	505	1200
552	847695	746131	45	465	505	1200

TABLE E-17
WELLS WITHIN RESOURCE BLOCK 45
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
553	847695	746343	45	465	505	1200
554	847765	746414	45	465	505	1200
555	847836	746414	45	465	505	1200
556	847765	746343	45	465	505	1200
557	847695	746273	45	465	505	1200
558	847765	746485	45	465	505	1200
559	847695	746414	45	465	505	1200
560	847695	746485	45	465	505	1200
562	847836	746485	45	465	505	1200
564	847907	746414	45	465	505	1200
565	847977	746343	45	465	505	1200

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 46 Wells - See Attached Table E-18

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.050571

Longitude -111.432280

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 46. There are 49 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 46. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-18.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

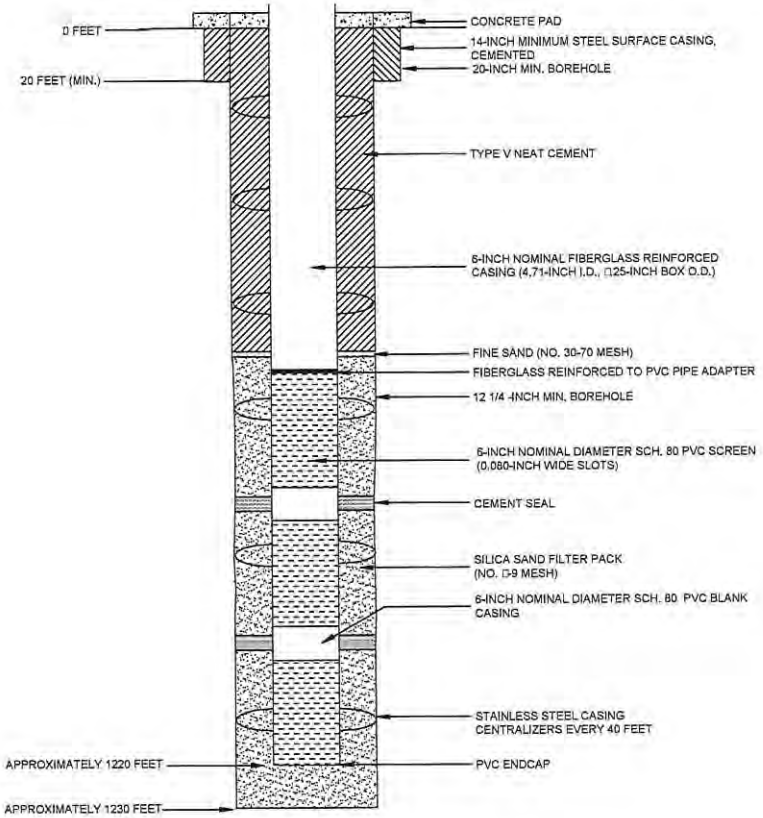
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

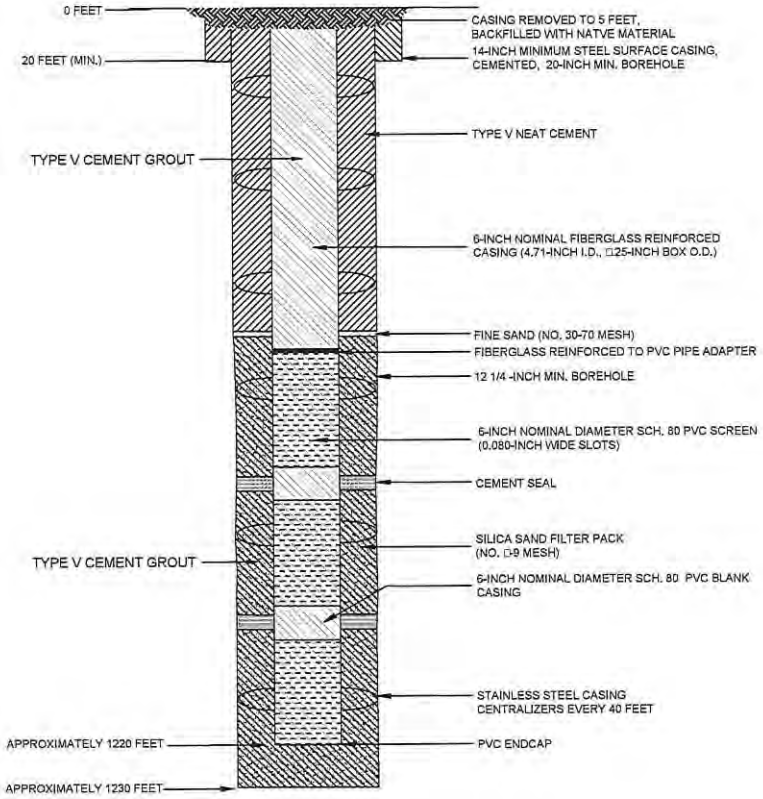
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 46
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-18

TABLE E-18
WELLS WITHIN RESOURCE BLOCK 46
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
344	848402	746528	46	412	452	1220
345	848685	746202	46	412	452	1220
346	848614	746131	46	412	452	1220
347	848543	746061	46	412	452	1220
348	848472	746131	46	412	452	1220
349	848543	746202	46	412	452	1220
350	848614	746273	46	412	452	1220
351	848685	746273	46	412	452	1220
352	848614	746202	46	412	452	1220
353	848543	746131	46	412	452	1220
354	848331	746131	46	412	452	1220
355	848402	746202	46	412	452	1220
356	848472	746273	46	412	452	1220
357	848543	746343	46	412	452	1220
358	848614	746343	46	412	452	1220
359	848543	746273	46	412	452	1220
360	848472	746202	46	412	452	1220
361	848402	746131	46	412	452	1220
362	848331	746061	46	412	452	1220
363	848260	746202	46	412	452	1220
364	848331	746273	46	412	452	1220
365	848402	746343	46	412	452	1220
366	848472	746414	46	412	452	1220
367	848543	746414	46	412	452	1220
368	848472	746343	46	412	452	1220
369	848402	746273	46	412	452	1220
370	848331	746202	46	412	452	1220
371	848260	746131	46	412	452	1220
372	848472	746485	46	412	452	1220
373	848402	746414	46	412	452	1220
374	848331	746343	46	412	452	1220
375	848260	746273	46	412	452	1220
376	848190	746202	46	412	452	1220
377	848190	746273	46	412	452	1220
378	848260	746343	46	412	452	1220
379	848331	746414	46	412	452	1220
380	848402	746485	46	412	452	1220
381	848331	746485	46	412	452	1220
382	848260	746414	46	412	452	1220

TABLE E-18
WELLS WITHIN RESOURCE BLOCK 46
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
383	848190	746343	46	412	452	1220
384	848119	746273	46	412	452	1220
386	848543	746485	46	412	452	1220
388	848614	746414	46	412	452	1220
389	848685	746343	46	412	452	1220
390	848756	746272	46	412	452	1220
414	848402	746061	46	412	452	1220
415	848471	746061	46	412	452	1220
416	848402	745990	46	412	452	1220
417	848472	745990	46	412	452	1220

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 47 Wells - See Attached Table E-19

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.050530

Longitude -111.429954

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 47. There are 49 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 47. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-19.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

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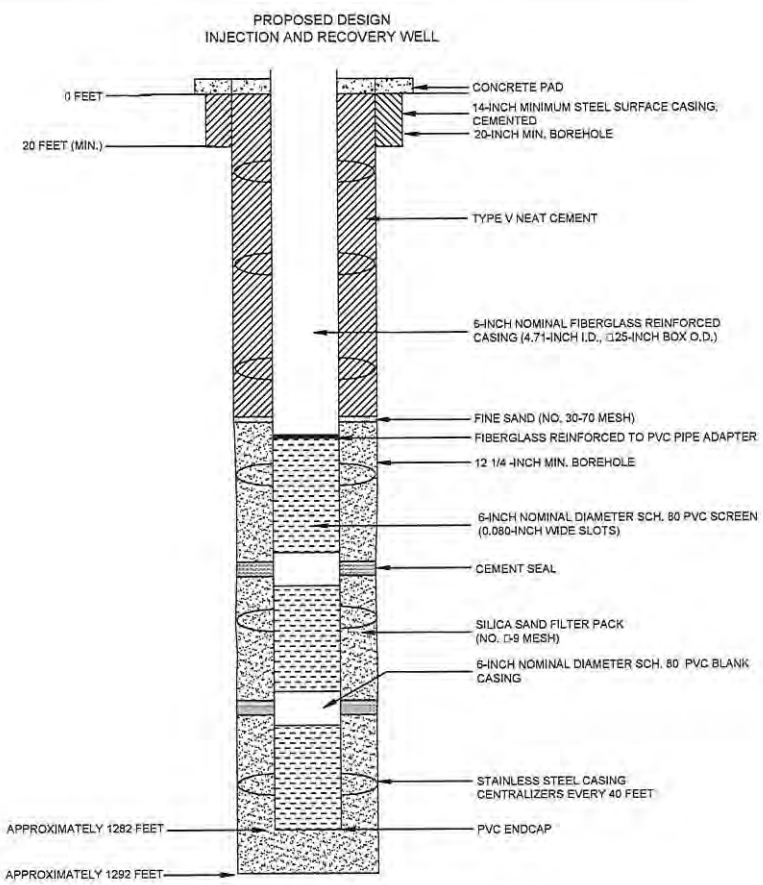
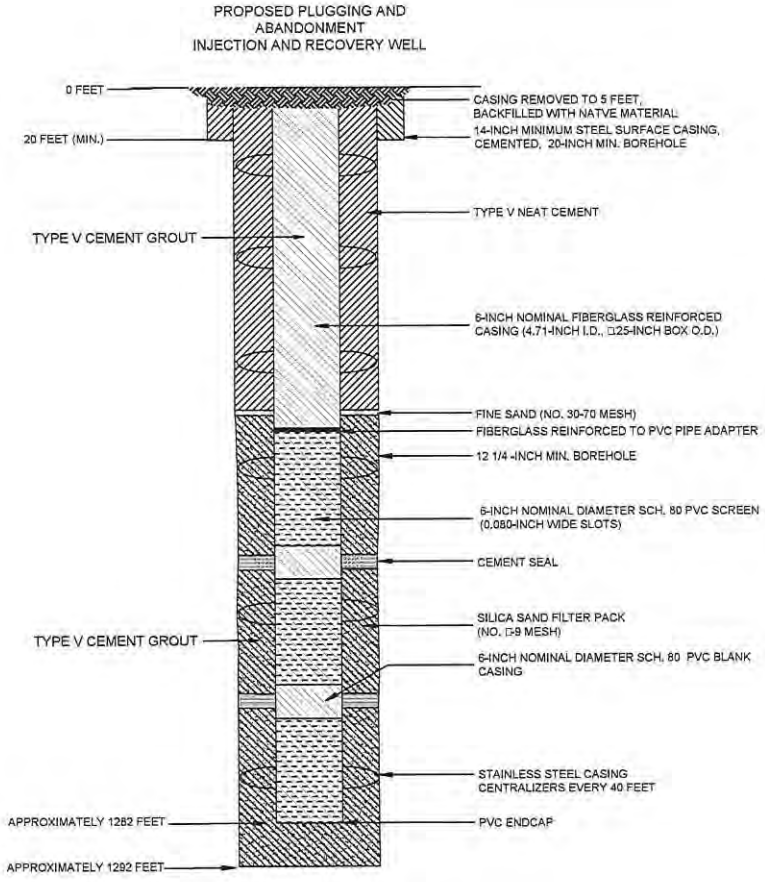
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 47
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-19

TABLE E-19
WELLS WITHIN RESOURCE BLOCK 47
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
92	849038	746061	47	413	453	1282
93	849109	746131	47	413	453	1282
94	849109	746202	47	413	453	1282
95	849038	746131	47	413	453	1282
96	848967	746202	47	413	453	1282
97	849038	746273	47	413	453	1282
98	849109	746273	47	413	453	1282
99	849038	746194	47	413	453	1282
100	848967	746131	47	413	453	1282
101	848897	746273	47	413	453	1282
102	848967	746343	47	413	453	1282
103	849038	746343	47	413	453	1282
104	848967	746273	47	413	453	1282
105	848897	746202	47	413	453	1282
106	848967	746414	47	413	453	1282
107	848897	746343	47	413	453	1282
108	848816	746273	47	413	453	1282
109	849109	746485	47	413	453	1282
110	849038	746485	47	413	453	1282
111	849109	746414	47	413	453	1282
112	849038	746414	47	413	453	1282
113	849109	746343	47	413	453	1282
114	849109	746007	47	413	453	1282
115	849109	746061	47	413	453	1282
116	849321	746131	47	413	453	1282
117	849250	746131	47	413	453	1282
118	849250	746202	47	413	453	1282
119	849321	746273	47	413	453	1282
120	849250	746273	47	413	453	1282
121	849179	746202	47	413	453	1282
122	849179	746031	47	413	453	1282
123	849250	746061	47	413	453	1282
124	849179	746061	47	413	453	1282
125	849179	746131	47	413	453	1282
126	849180	746272	47	413	453	1282
127	849250	746343	47	413	453	1282
128	849179	746343	47	413	453	1282
129	849179	746414	47	413	453	1282
141	849109	746555	47	413	453	1282

TABLE E-19
WELLS WITHIN RESOURCE BLOCK 47
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
187	849179	746556	47	413	453	1282
197	849382	746202	47	413	453	1282
198	849462	746273	47	413	453	1282
204	849392	746273	47	413	453	1282
205	849321	746202	47	413	453	1282
206	849392	746343	47	413	453	1282
211	849321	746343	47	413	453	1282
214	849250	746485	47	413	453	1282
215	849179	746485	47	413	453	1282
217	849250	746414	47	413	453	1282

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 48 Wells - See Attached Table E-20

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.050486

Longitude -111.427659

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 48. There are 45 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 48. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-20.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Don Johnson - VP, Gen		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

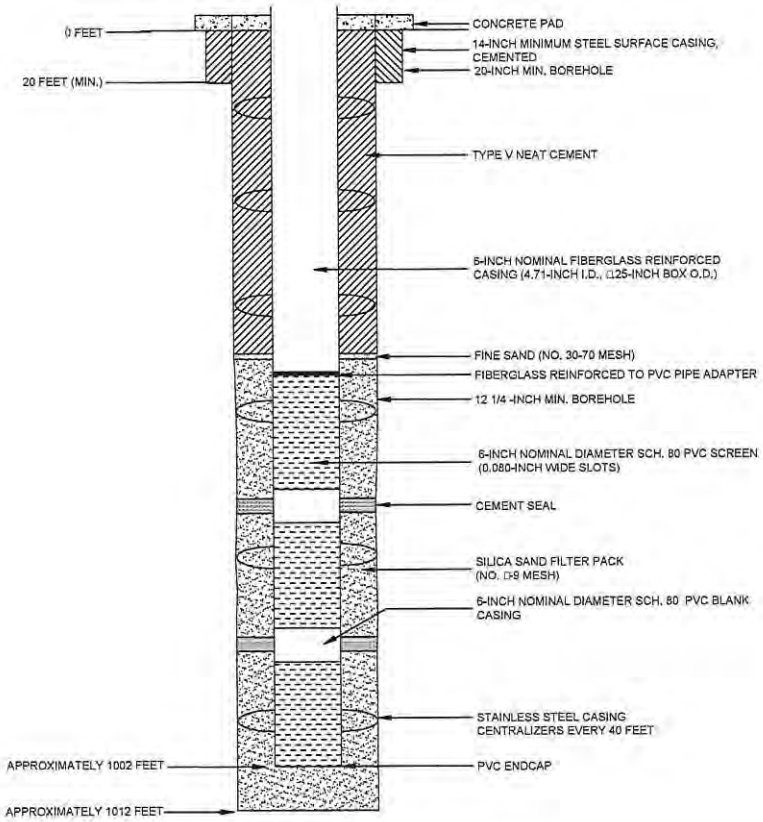
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

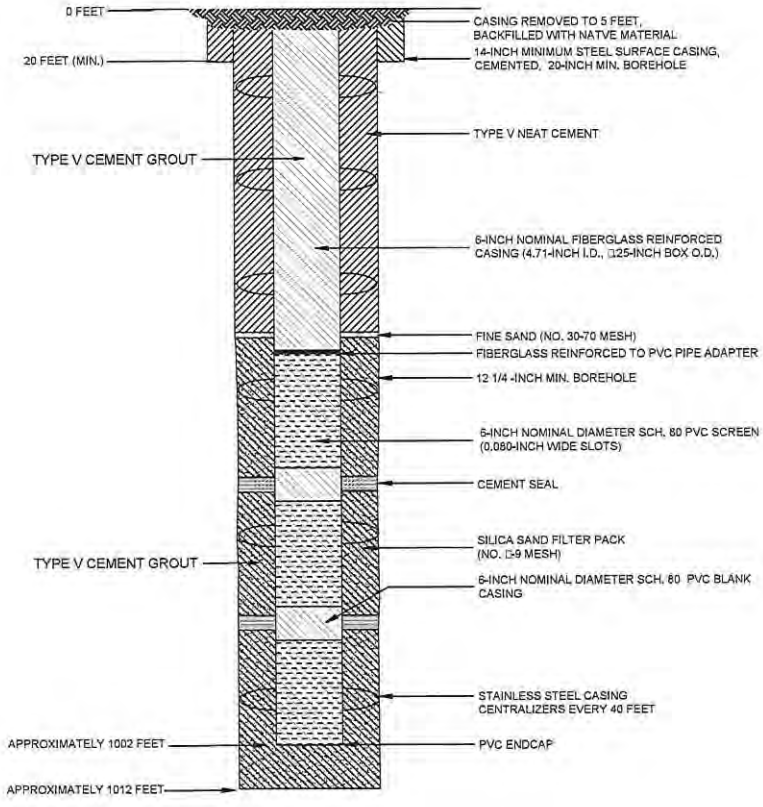
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 48
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-20

TABLE E-20
WELLS WITHIN RESOURCE BLOCK 48
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
219	849816	746556	48	492	532	1002
220	849887	746556	48	492	532	1002
222	849745	746273	48	492	532	1002
223	849816	746273	48	492	532	1002
224	849745	746226	48	492	532	1002
226	849604	746273	48	492	532	1002
227	849674	746343	48	492	532	1002
228	849745	746343	48	492	532	1002
229	849674	746273	48	492	532	1002
230	849604	746202	48	492	532	1002
232	849674	746414	48	492	532	1002
233	849604	746343	48	492	532	1002
234	849533	746273	48	492	532	1002
237	849816	746485	48	492	532	1002
238	849745	746485	48	492	532	1002
239	849816	746414	48	492	532	1002
240	849745	746414	48	492	532	1002
241	849816	746343	48	492	532	1002
242	849887	746343	48	492	532	1002
243	849887	746485	48	492	532	1002
244	849887	746414	48	492	532	1002
267	850099	746343	48	492	532	1002
269	850099	746273	48	492	532	1002
270	849957	746343	48	492	532	1002
271	850028	746414	48	492	532	1002
273	850028	746343	48	492	532	1002
274	849957	746273	48	492	532	1002
276	849957	746414	48	492	532	1002
277	849957	746485	48	492	532	1002
775	849816	745990	48	492	532	1002
776	849887	745990	48	492	532	1002
777	849887	746061	48	492	532	1002
780	849957	746061	48	492	532	1002
781	850028	746131	48	492	532	1002
783	850028	746171	48	492	532	1002
784	849957	746131	48	492	532	1002
933	849745	746061	48	492	532	1002
934	849816	746131	48	492	532	1002
935	849816	746162	48	492	532	1002

TABLE E-20
WELLS WITHIN RESOURCE BLOCK 48
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
936	849745	746131	48	492	532	1002
941	849674	746107	48	492	532	1002
950	849816	746061	48	492	532	1002
951	849887	746181	48	492	532	1002
952	849887	746131	48	492	532	1002
966	849957	746171	48	492	532	1002

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 49 Wells - See Attached Table E-21

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.050537

Longitude -111.425633

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 49. There are 19 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 5 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 49. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-21a and E-21b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

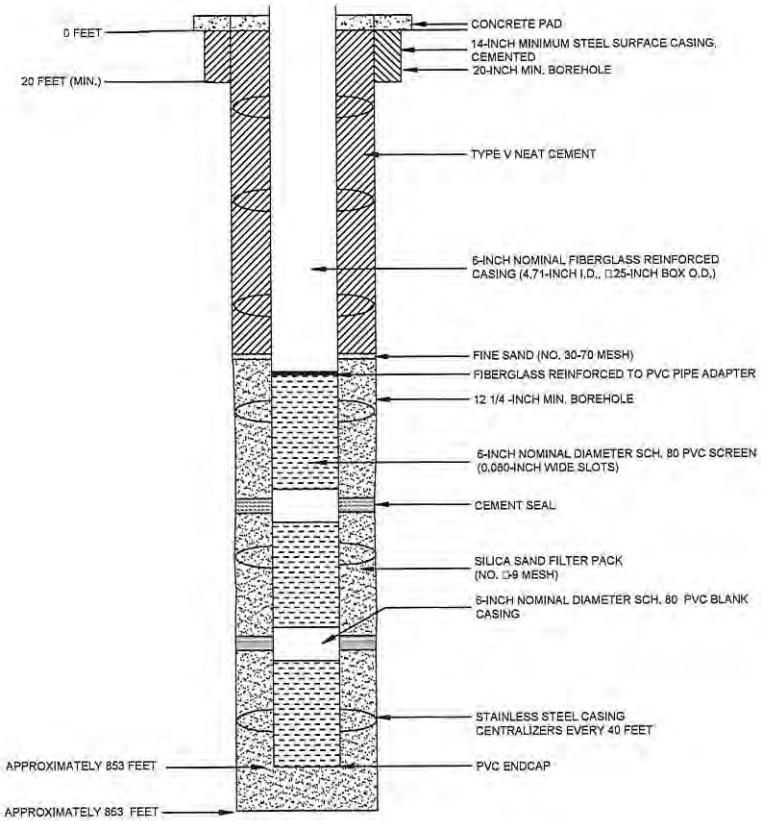
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

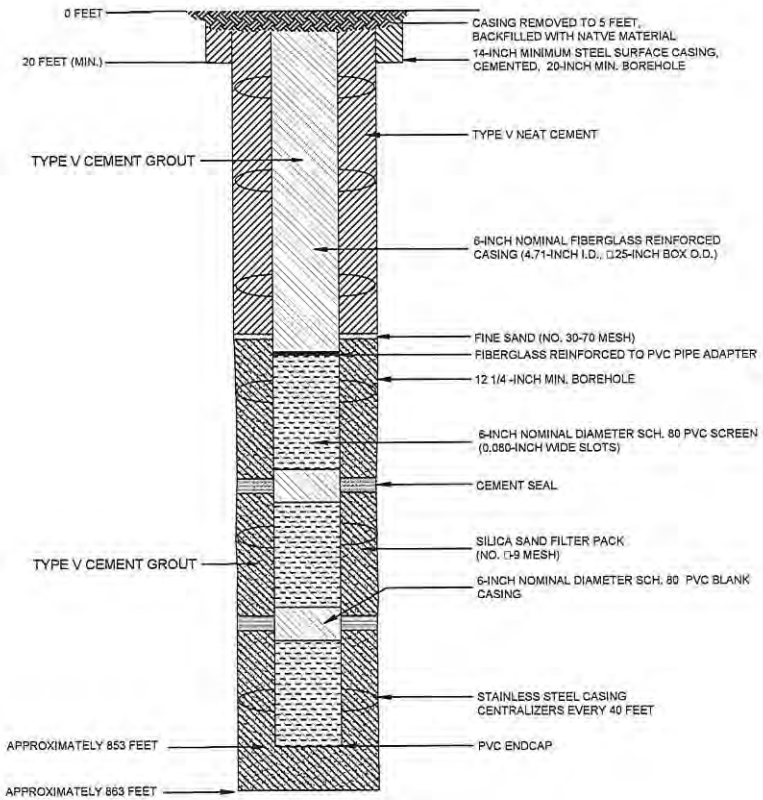
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

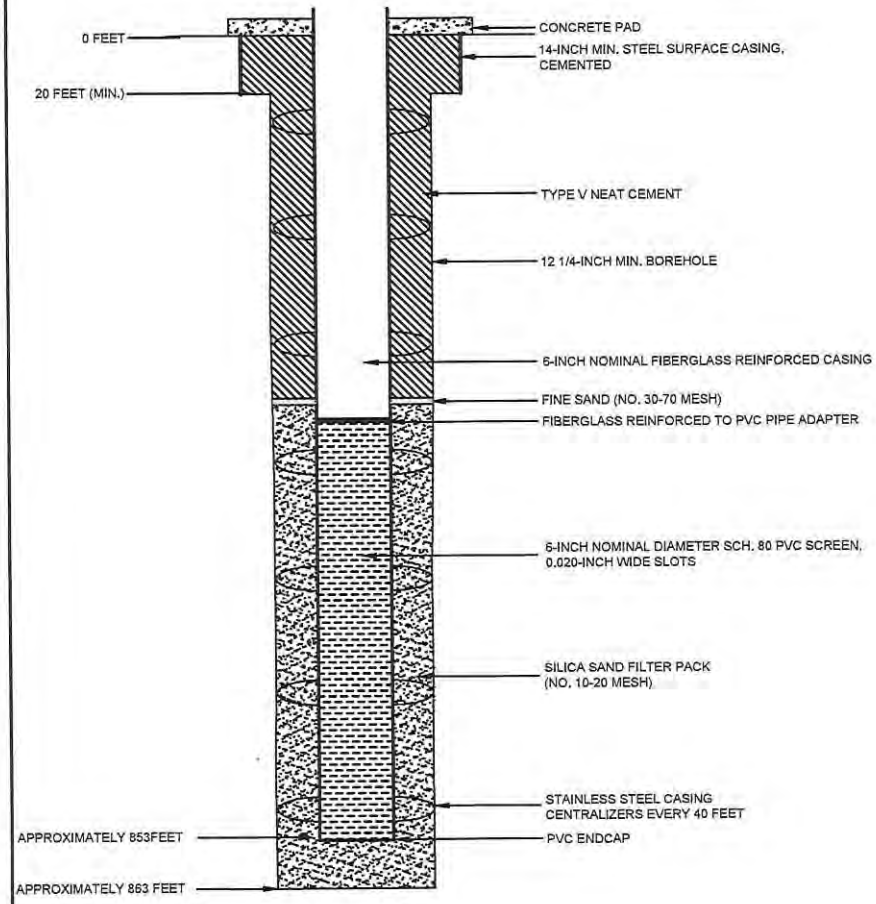
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 49
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

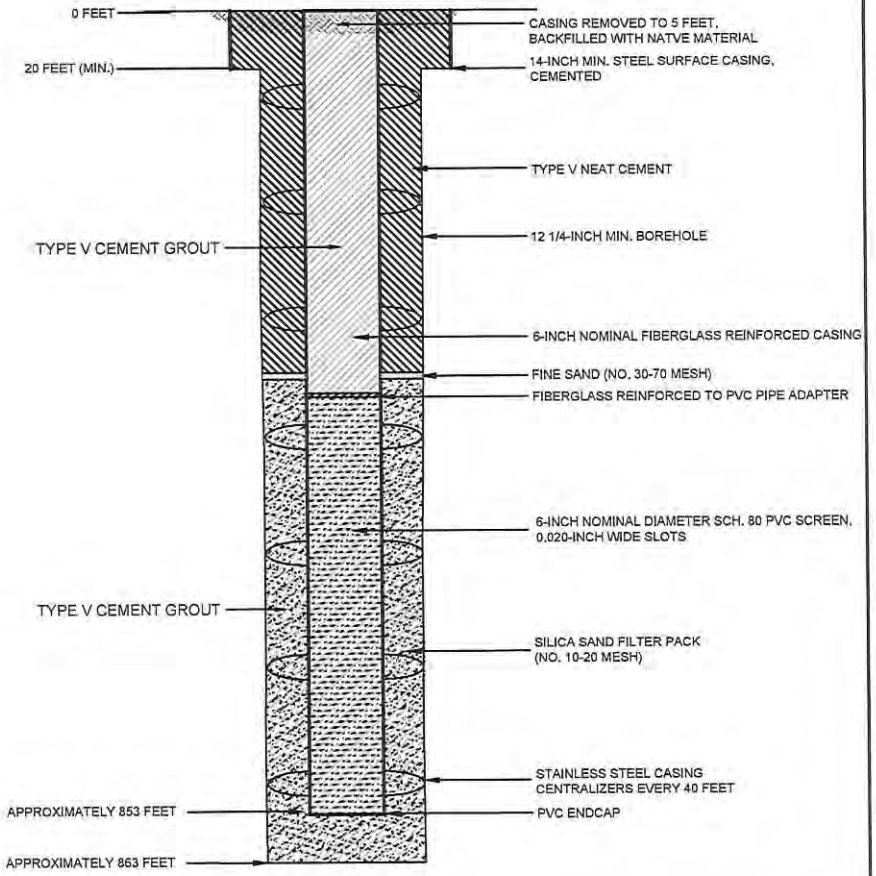
FIGURE E-21a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 49
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-21b

TABLE E-21
WELLS WITHIN RESOURCE BLOCK 49
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
258	850523	746556	49	440	480	853
266	850240	746273	49	440	480	853
284	850523	746414	49	440	480	853
285	850452	746343	49	440	480	853
286	850381	746273	49	440	480	853
287	850381	746343	49	440	480	853
288	850311	746343	49	440	480	853
289	850452	746485	49	440	480	853
292	850452	746414	49	440	480	853
293	850381	746414	49	440	480	853
321	850452	746273	49	440	480	853
322	850523	746343	49	440	480	853
323	850523	746273	49	440	480	853
801	850523	746061	49	440	480	853
805	850523	745990	49	440	480	853
806	850452	746098	49	440	480	853
807	850523	746106	49	440	480	853
808	850452	746061	49	440	480	853
809	850381	746131	49	440	480	853
O15	850664	746344	49	440	480	853
O16	850664	745990	49	440	480	853
P27	850594	746556	49	440	480	853
P28	850594	746414	49	440	480	853
P29	850594	746273	49	440	480	853
P30	850594	746106	49	440	480	853
P31	850594	745919	49	440	480	853

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 52 Wells - See Attached Table E-22

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.049763

Longitude -111.435705

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 52. There is 1 Class III multi-use injection/ recovery well, planned for construction in this block. The injection and recovery well will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 52. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-22.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

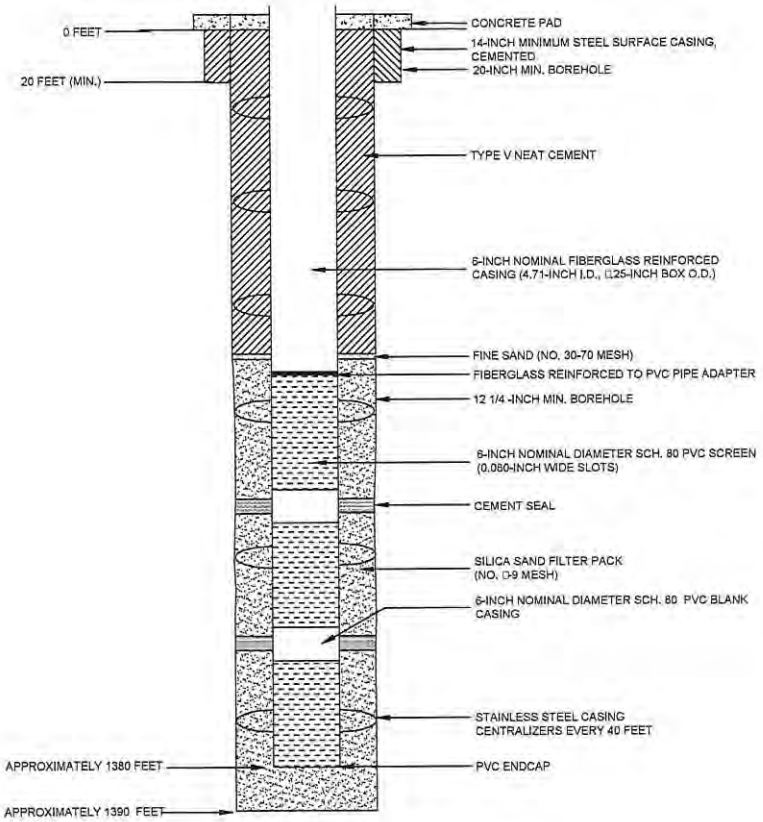
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

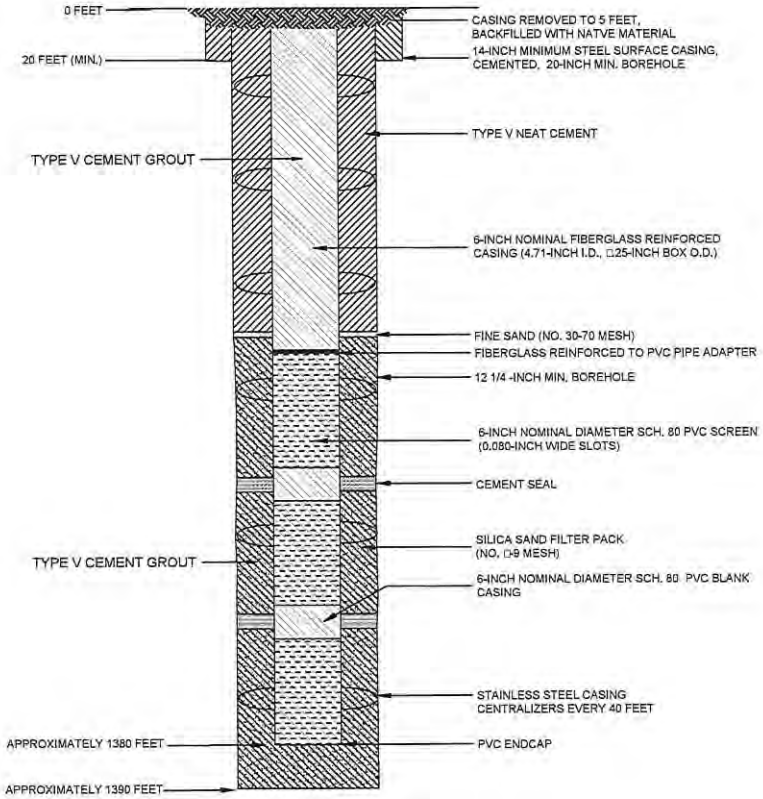
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 52
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-22

TABLE E-22
WELLS WITHIN RESOURCE BLOCK 52
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
907	846988	745919	52	705	745	1380

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 53 Wells - See Attached Table E-23

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.049763

Longitude -111.435705

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 53. There are 49 Class III multi-use injection/ recovery and one Class III perimeter well planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 53. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-23.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

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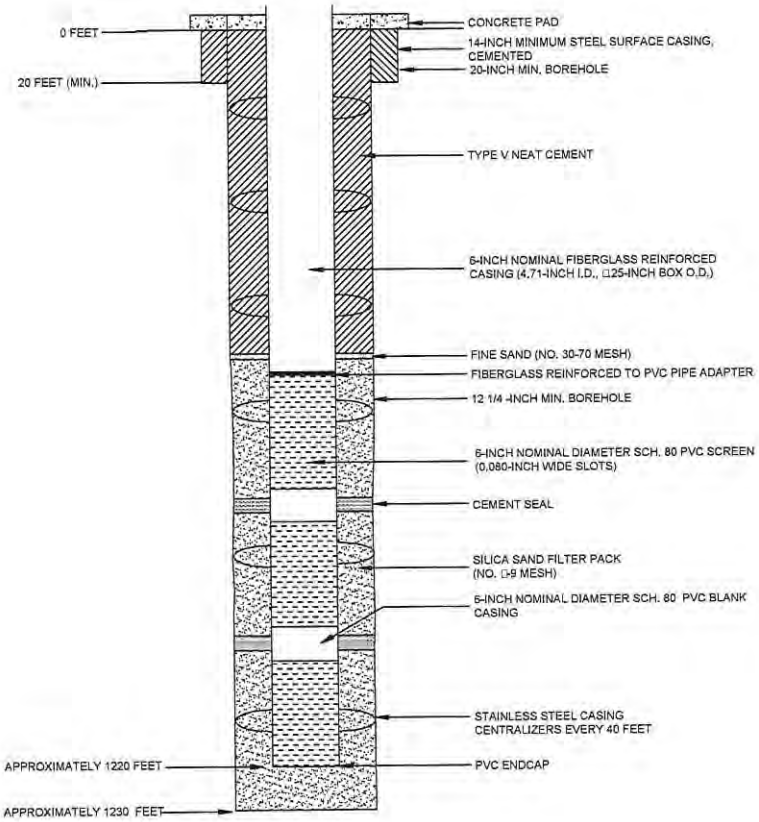
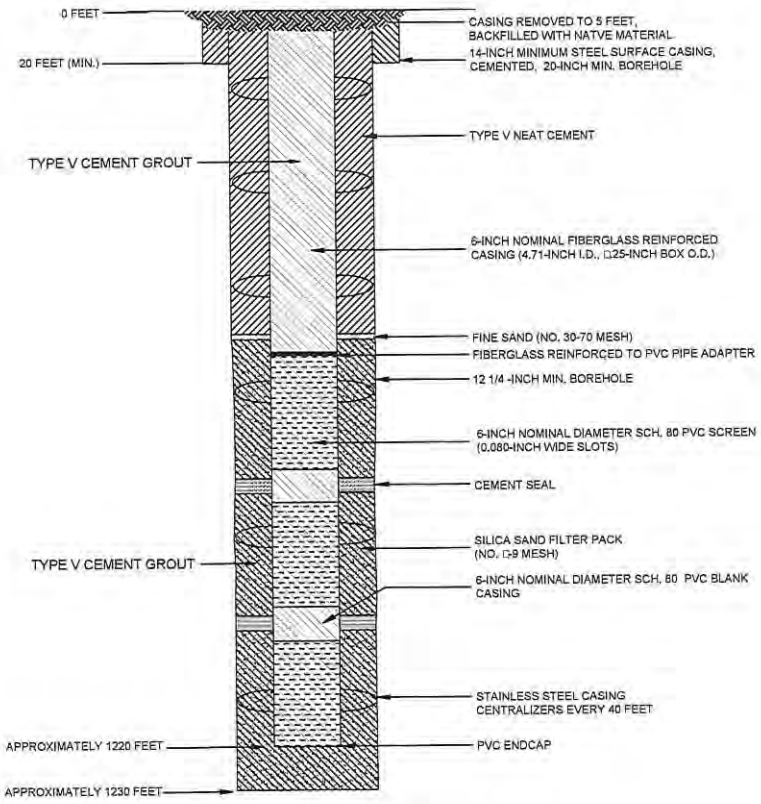
PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 53
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-23

TABLE E-23
WELLS WITHIN RESOURCE BLOCK 53
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
419	847624	745990	53	485	525	1220
430	847695	745919	53	485	525	1220
431	847553	745990	53	485	525	1220
432	847624	745919	53	485	525	1220
482	847483	746131	53	485	525	1220
483	847412	746202	53	485	525	1220
486	847553	746061	53	485	525	1220
487	847412	745990	53	485	525	1220
488	847482	746061	53	485	525	1220
489	847412	746061	53	485	525	1220
490	847341	745990	53	485	525	1220
491	847200	745990	53	485	525	1220
492	847270	746060	53	485	525	1220
493	847341	746131	53	485	525	1220
494	847412	746131	53	485	525	1220
495	847341	746060	53	485	525	1220
496	847270	745990	53	485	525	1220
497	847341	746202	53	485	525	1220
498	847270	746131	53	485	525	1220
499	847200	746060	53	485	525	1220
500	847129	745990	53	485	525	1220
501	847482	745990	53	485	525	1220
502	847412	745848	53	485	525	1220
503	847341	745919	53	485	525	1220
504	847270	745848	53	485	525	1220
505	847270	745919	53	485	525	1220
506	847200	745919	53	485	525	1220
508	847129	745919	53	485	525	1220
509	847058	745919	53	485	525	1220
510	847553	745919	53	485	525	1220
511	847482	745919	53	485	525	1220
512	847412	745919	53	485	525	1220
2095	847481	745776	53	485	525	1220
2096	847552	745847	53	485	525	1220
2097	847552	745776	53	485	525	1220
2098	847623	745847	53	485	525	1220
2204	847411	745635	53	485	525	1220
2205	847481	745705	53	485	525	1220
2206	847411	745705	53	485	525	1220

TABLE E-23
WELLS WITHIN RESOURCE BLOCK 53
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2267	847340	745705	53	485	525	1220
2268	847366	745660	53	485	525	1220
2269	847340	745776	53	485	525	1220
2270	847269	745721	53	485	525	1220
2271	847199	745776	53	485	525	1220
2354	847412	745776	53	485	525	1220
2355	847269	745776	53	485	525	1220
2356	847340	745847	53	485	525	1220
2358	847199	745847	53	485	525	1220
2361	847481	745847	53	485	525	1220

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 54 Wells - See Attached Table E-24

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.049920

Longitude -111.433474

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 54. There are 50 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 54. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-24.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

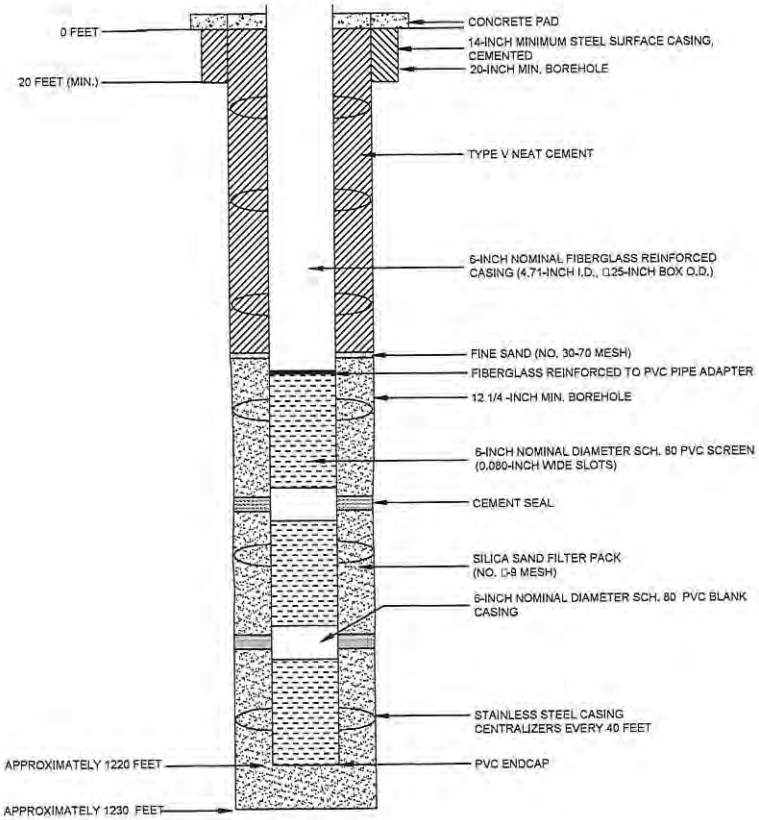
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

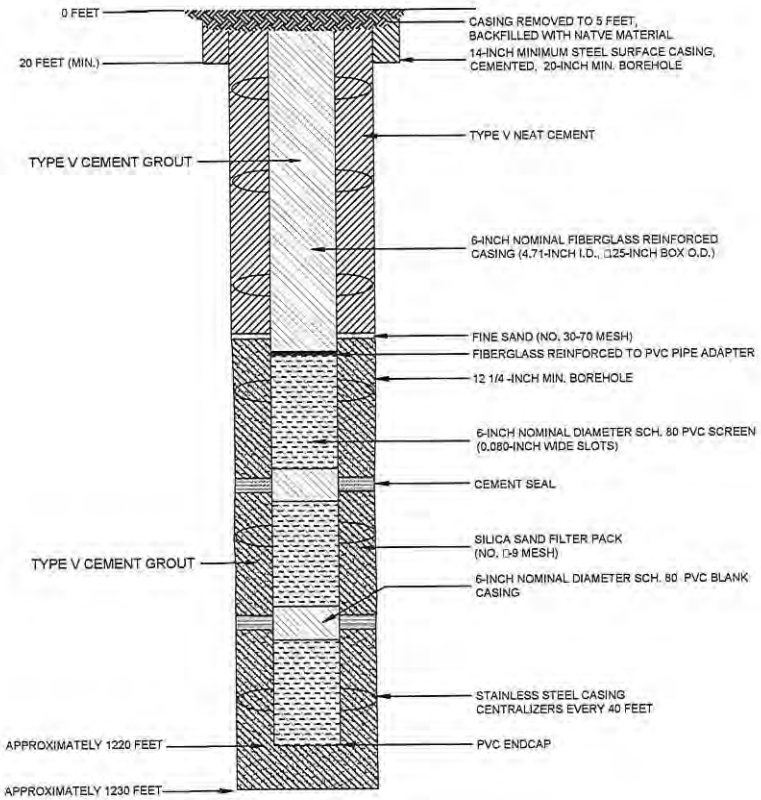
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 54
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-24

TABLE E-24
WELLS WITHIN RESOURCE BLOCK 54
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
433	847836	745990	54	412	452	1220
434	847907	746061	54	412	452	1220
435	847977	746131	54	412	452	1220
436	847977	745990	54	412	452	1220
437	847907	745990	54	412	452	1220
438	847977	746061	54	412	452	1220
439	848260	746061	54	412	452	1220
440	848260	745990	54	412	452	1220
441	848190	746131	54	412	452	1220
442	848190	746061	54	412	452	1220
443	848119	746131	54	412	452	1220
444	848190	745990	54	412	452	1220
445	848048	745990	54	412	452	1220
446	848119	745990	54	412	452	1220
447	848119	746061	54	412	452	1220
448	848048	746061	54	412	452	1220
449	848048	746131	54	412	452	1220
450	847836	745848	54	412	452	1220
451	847765	745919	54	412	452	1220
453	847977	745919	54	412	452	1220
454	847907	745919	54	412	452	1220
455	847836	745919	54	412	452	1220
456	847977	745848	54	412	452	1220
457	848260	745848	54	412	452	1220
458	848260	745919	54	412	452	1220
459	848190	745919	54	412	452	1220
460	848119	745919	54	412	452	1220
461	848048	745919	54	412	452	1220
462	848119	745848	54	412	452	1220
466	848119	746202	54	412	452	1220
468	848048	746202	54	412	452	1220
469	848402	745919	54	412	452	1220
470	848331	745990	54	412	452	1220
471	848331	745919	54	412	452	1220
2109	847976	745705	54	412	452	1220
2116	847906	745776	54	412	452	1220
2124	847906	745847	54	412	452	1220
2125	847976	745776	54	412	452	1220
2126	848118	745635	54	412	452	1220

TABLE E-24
WELLS WITHIN RESOURCE BLOCK 54
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2127	848188	745706	54	412	452	1220
2128	848259	745776	54	412	452	1220
2129	848330	745847	54	412	452	1220
2130	848188	745776	54	412	452	1220
2131	848118	745706	54	412	452	1220
2132	848047	745635	54	412	452	1220
2134	848048	745705	54	412	452	1220
2135	848118	745776	54	412	452	1220
2136	848047	745776	54	412	452	1220
2137	848188	745847	54	412	452	1220
2138	848047	745847	54	412	452	1220

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 55 Wells - See Attached Table E-25

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.049911

Longitude -111.431264

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 55. There are 44 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 55. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-25.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

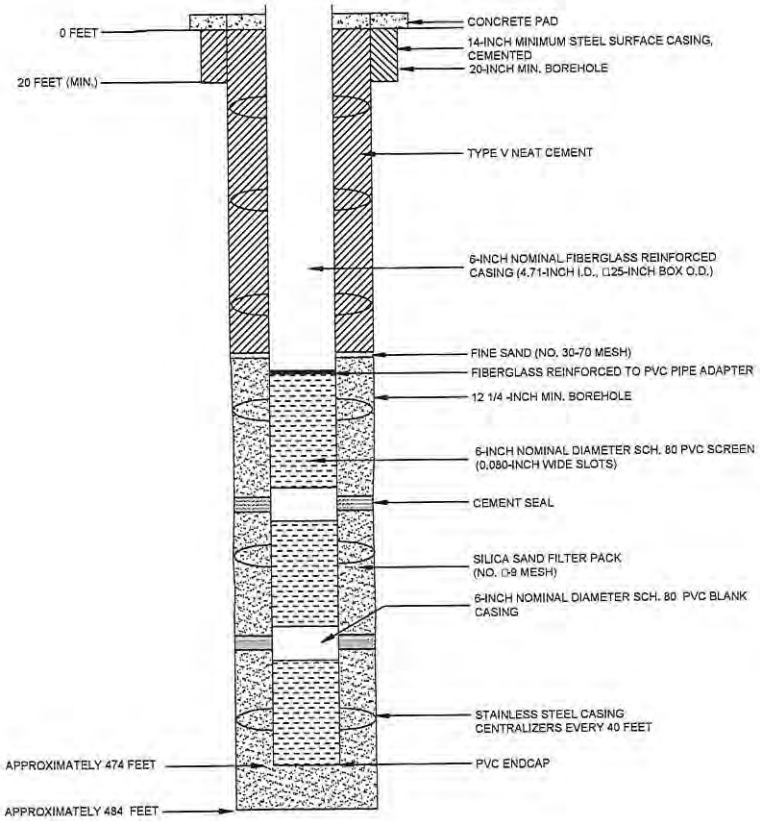
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

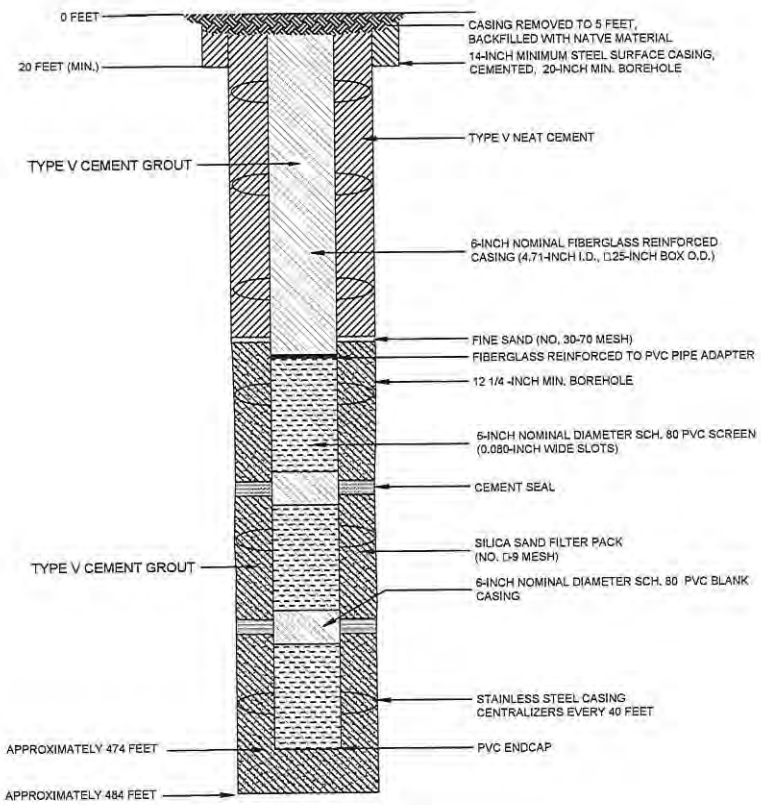
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 55
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-25

TABLE E-25
WELLS WITHIN RESOURCE BLOCK 55
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
392	848543	745990	55	336	376	474
393	848614	746061	55	336	376	474
394	848685	746131	55	336	376	474
395	848684	745990	55	336	376	474
396	848614	745990	55	336	376	474
397	848685	746061	55	336	376	474
398	848755	746202	55	336	376	474
399	848755	745990	55	336	376	474
400	848755	746061	55	336	376	474
401	848755	746131	55	336	376	474
402	848614	745919	55	336	376	474
403	848755	745955	55	336	376	474
404	848967	745990	55	336	376	474
405	848967	746061	55	336	376	474
406	848897	745990	55	336	376	474
407	848826	746061	55	336	376	474
408	848897	746131	55	336	376	474
409	848897	746061	55	336	376	474
410	848826	745990	55	336	376	474
411	848826	746202	55	336	376	474
412	848826	746131	55	336	376	474
413	848897	745955	55	336	376	474
418	848472	745919	55	336	376	474
463	848543	745848	55	336	376	474
465	848543	745919	55	336	376	474
931	849038	745891	55	336	376	474
1640	848755	745636	55	336	376	474
1653	848826	745636	55	336	376	474
1654	848897	745707	55	336	376	474
1655	848967	745778	55	336	376	474
1656	848967	745848	55	336	376	474
1657	848897	745778	55	336	376	474
1658	848826	745707	55	336	376	474
1659	849038	745848	55	336	376	474
2173	848595	745847	55	336	376	474
2186	848683	745706	55	336	376	474
2191	848697	745847	55	336	376	474
2192	848683	745776	55	336	376	474
2193	848755	745705	55	336	376	474

TABLE E-25
WELLS WITHIN RESOURCE BLOCK 55
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2194	848754	745776	55	336	376	474
2195	848754	745847	55	336	376	474
2200	848825	745776	55	336	376	474
2201	848896	745847	55	336	376	474
2202	848825	745847	55	336	376	474

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 56 Wells - See Attached Table E-26

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.049632

Longitude -111.428882

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 56. There are 48 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 56. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-26.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

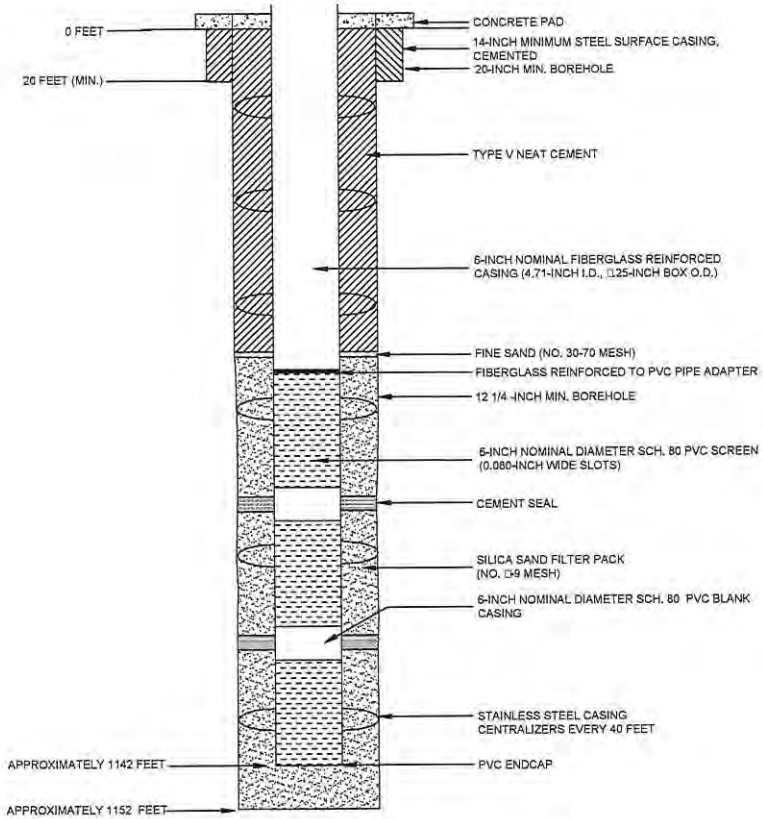
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

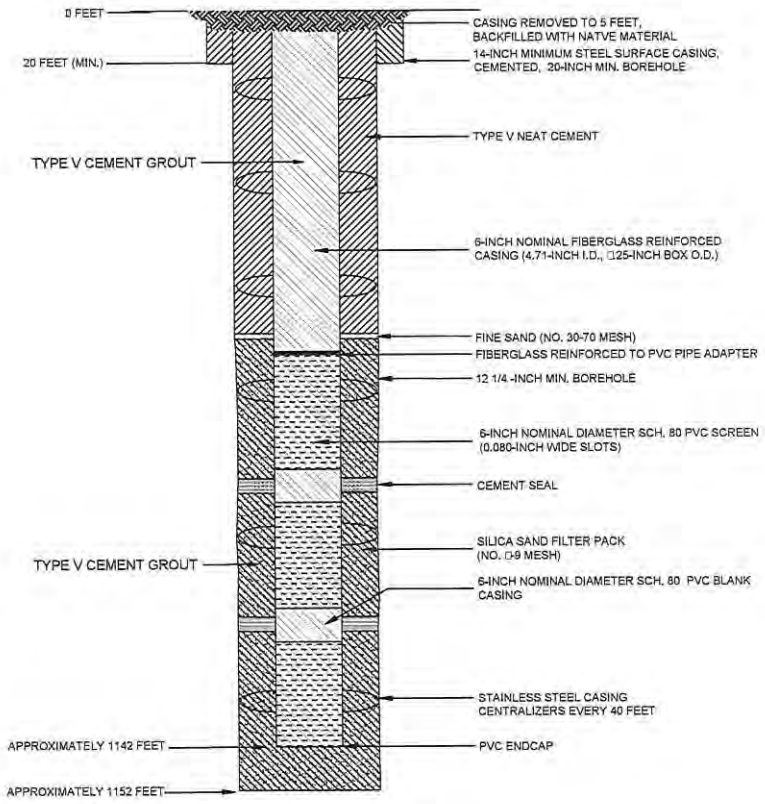
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 56
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-26

TABLE E-26
WELLS WITHIN RESOURCE BLOCK 56
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
130	849321	746077	56	455	495	1142
225	849533	746202	56	455	495	1142
231	849533	746145	56	455	495	1142
235	849462	746202	56	455	495	1142
236	849392	746131	56	455	495	1142
778	849816	745919	56	455	495	1142
779	849745	745919	56	455	495	1142
932	849674	745990	56	455	495	1142
937	849674	746061	56	455	495	1142
938	849604	745990	56	455	495	1142
939	849462	745990	56	455	495	1142
940	849533	746061	56	455	495	1142
942	849604	746061	56	455	495	1142
943	849533	745990	56	455	495	1142
944	849392	746013	56	455	495	1142
945	849462	746034	56	455	495	1142
946	849392	745990	56	455	495	1142
947	849321	745990	56	455	495	1142
948	849250	745962	56	455	495	1142
949	849745	745990	56	455	495	1142
954	849674	745848	56	455	495	1142
955	849604	745919	56	455	495	1142
956	849533	745848	56	455	495	1142
957	849533	745919	56	455	495	1142
958	849462	745919	56	455	495	1142
959	849392	745848	56	455	495	1142
960	849392	745919	56	455	495	1142
961	849321	745919	56	455	495	1142
962	849250	745919	56	455	495	1142
963	849179	745919	56	455	495	1142
964	849250	745848	56	455	495	1142
965	849674	745919	56	455	495	1142
1480	849462	745636	56	455	495	1142
1562	849533	745636	56	455	495	1142
1563	849604	745707	56	455	495	1142
1564	849674	745778	56	455	495	1142
1566	849462	745707	56	455	495	1142
1567	849533	745778	56	455	495	1142
1568	849604	745848	56	455	495	1142

TABLE E-26
WELLS WITHIN RESOURCE BLOCK 56
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1569	849604	745778	56	455	495	1142
1570	849533	745707	56	455	495	1142
1573	849462	745778	56	455	495	1142
1574	849392	745707	56	455	495	1142
1577	849392	745778	56	455	495	1142
1578	849462	745848	56	455	495	1142
1579	849321	745778	56	455	495	1142
1583	849321	745848	56	455	495	1142
1585	849745	745848	56	455	495	1142

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 57 Wells - See Attached Table E-27

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.049658

Longitude -111.426531

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 57. There are 44 Class III multi-use injection/ recovery wells, 1 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 57. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-27a and E-27b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

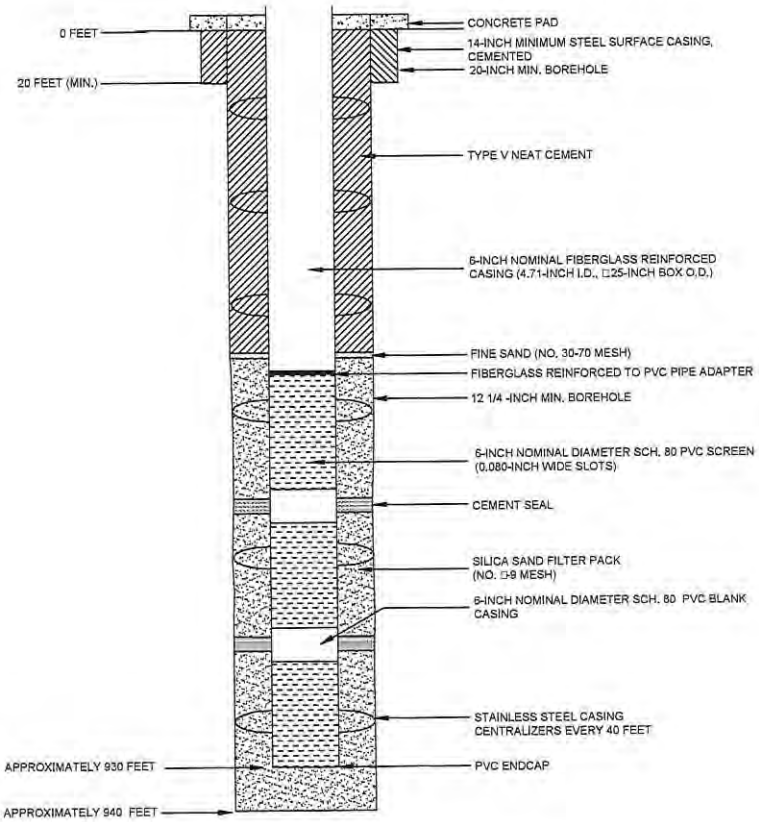
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

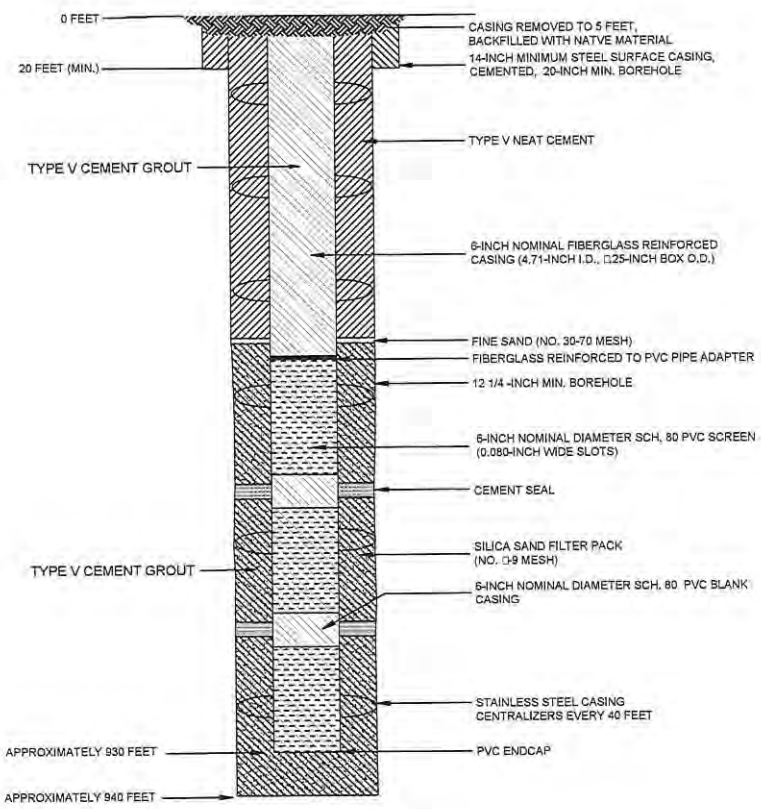
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

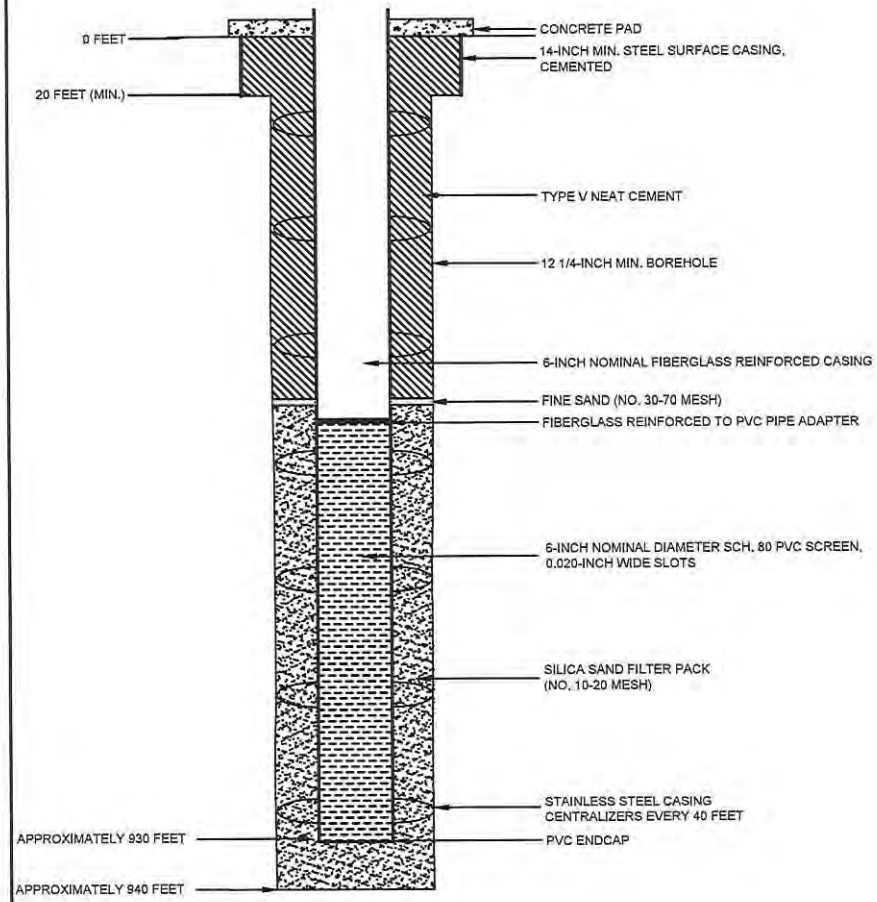
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 57
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

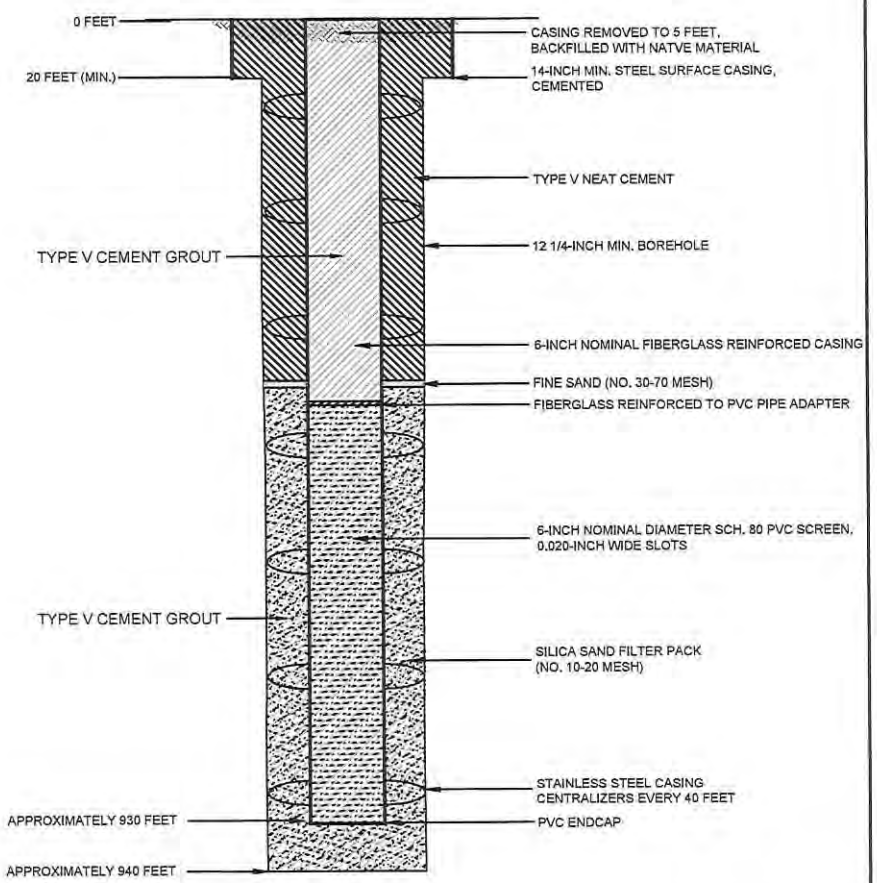
FIGURE E-27a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 57
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-27b

TABLE E-27
WELLS WITHIN RESOURCE BLOCK 57
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
786	849886	745919	57	466	506	930
787	850099	745990	57	466	506	930
788	850169	746061	57	466	506	930
789	850240	746131	57	466	506	930
790	850169	746131	57	466	506	930
791	850099	746061	57	466	506	930
792	850028	745990	57	466	506	930
793	850099	746131	57	466	506	930
794	850028	746061	57	466	506	930
795	849957	745990	57	466	506	930
796	850240	745990	57	466	506	930
797	850169	745990	57	466	506	930
798	850240	746061	57	466	506	930
810	850452	745990	57	466	506	930
811	850311	745990	57	466	506	930
1628	850240	745778	57	466	506	930
1627	850169	745849	57	466	506	930
782	850099	746164	57	466	506	930
812	850381	745990	57	466	506	930
813	850381	746061	57	466	506	930
814	850311	746061	57	466	506	930
815	850311	746131	57	466	506	930
816	850099	745849	57	466	506	930
817	850028	745919	57	466	506	930
818	849957	745848	57	466	506	930
819	849957	745919	57	466	506	930
820	850240	745919	57	466	506	930
821	850169	745919	57	466	506	930
822	850099	745919	57	466	506	930
823	850240	745849	57	466	506	930
824	850523	745919	57	466	506	930
825	850452	745919	57	466	506	930
826	850381	745919	57	466	506	930
829	850170	746163	57	466	506	930
827	850311	745919	57	466	506	930
967	850240	745636	57	466	506	930
969	850240	745707	57	466	506	930
970	850169	745636	57	466	506	930
1615	850169	745707	57	466	506	930

TABLE E-27
WELLS WITHIN RESOURCE BLOCK 57
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1618	850099	745778	57	466	506	930
1619	850169	745778	57	466	506	930
1620	850099	745707	57	466	506	930
1624	850028	745849	57	466	506	930
1625	850028	745778	57	466	506	930
O17	850381	745778	57	466	506	930
P32	850452	745849	57	466	506	930
P33	850311	745848	57	466	506	930
P34	850311	745707	57	466	506	930

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 61 Wells - See Attached Table E-28

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

ft. from (N/S) Line of quarter section

ft. from (E/W) Line of quarter section.

Latitude 33.048659

Longitude -111.436081

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 61. There are 10 Class III multi-use injection/ recovery wells, 3 dedicated Class III observation, and 4 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 61. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-28a and E-28b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, Gm		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

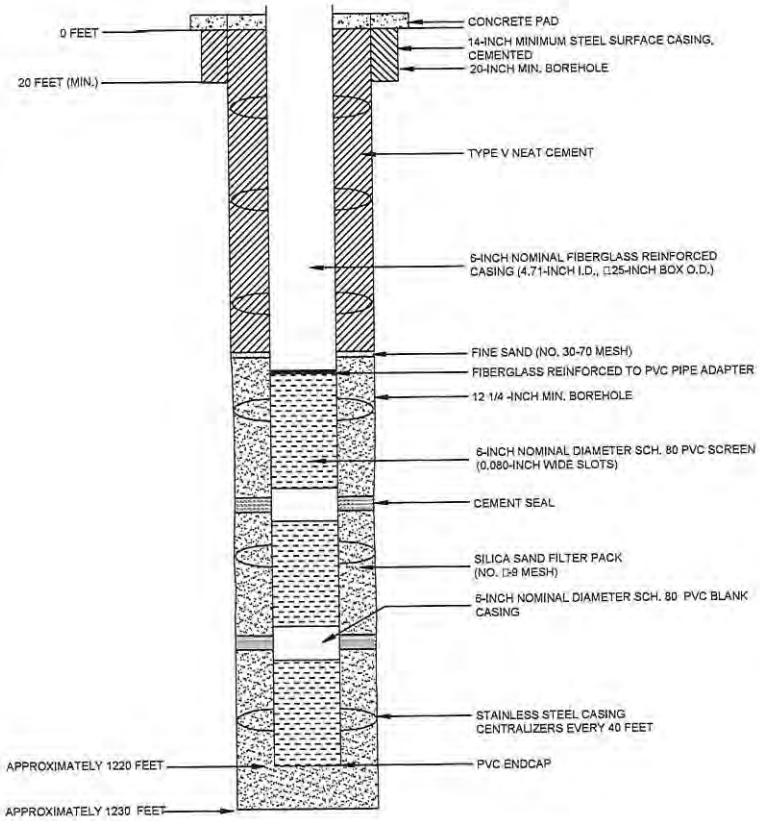
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

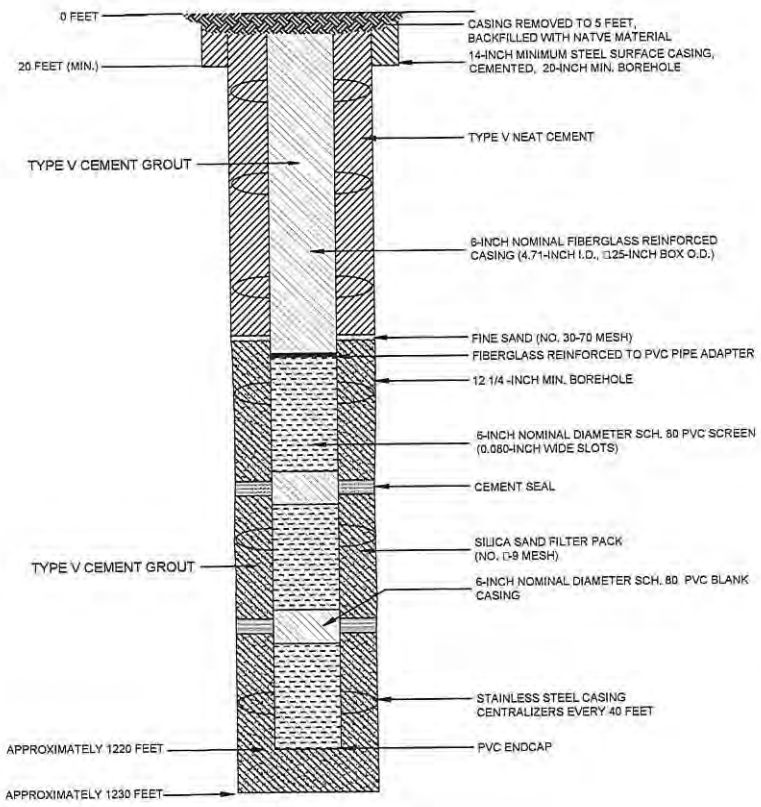
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

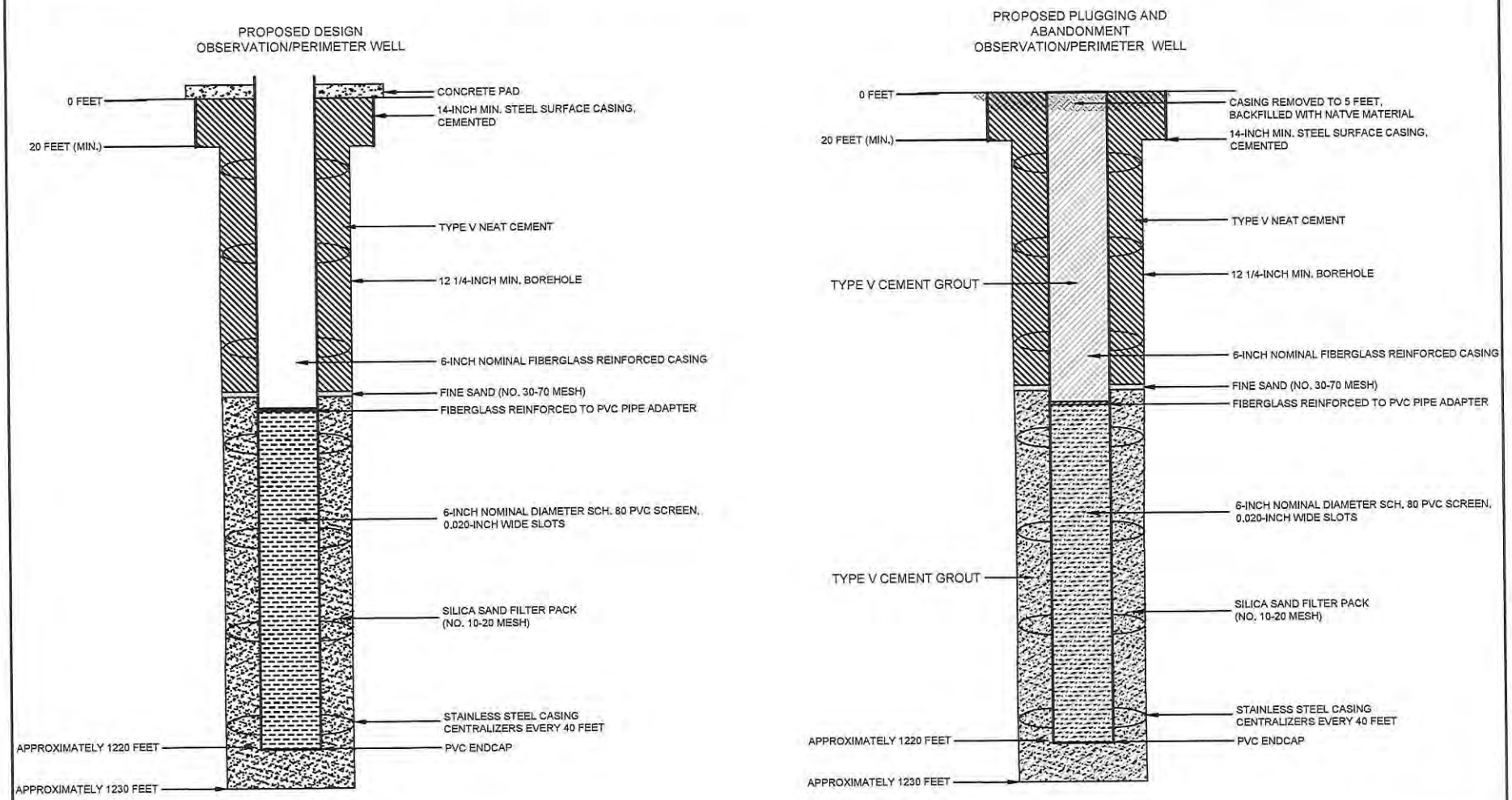
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 61
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-28a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 61
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-28b

TABLE E-28
WELLS WITHIN RESOURCE BLOCK 61
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2220	847199	745423	61	485	525	1220
2221	847269	745493	61	485	525	1220
2222	847340	745564	61	485	525	1220
2224	847269	745564	61	485	525	1220
2225	847199	745493	61	485	525	1220
2276	847199	745564	61	485	525	1220
2277	847270	745620	61	485	525	1220
2280	847174	745676	61	485	525	1220
2281	847199	745635	61	485	525	1220
O37	847057	745352	61	485	525	1220
O38	847057	745635	61	485	525	1220
O39	847057	745776	61	485	525	1220
P73	847128	745423	61	485	525	1220
P74	847128	745564	61	485	525	1220
P75	847104	745676	61	485	525	1220
P77	846988	745848	61	485	525	1220

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 62 Wells - See Attached Table E-29

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.048592

Longitude -111.434611

See Attached Table for Individual Well Coordinates.

Surface Location

SE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 62. There are 51 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 62. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-29.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

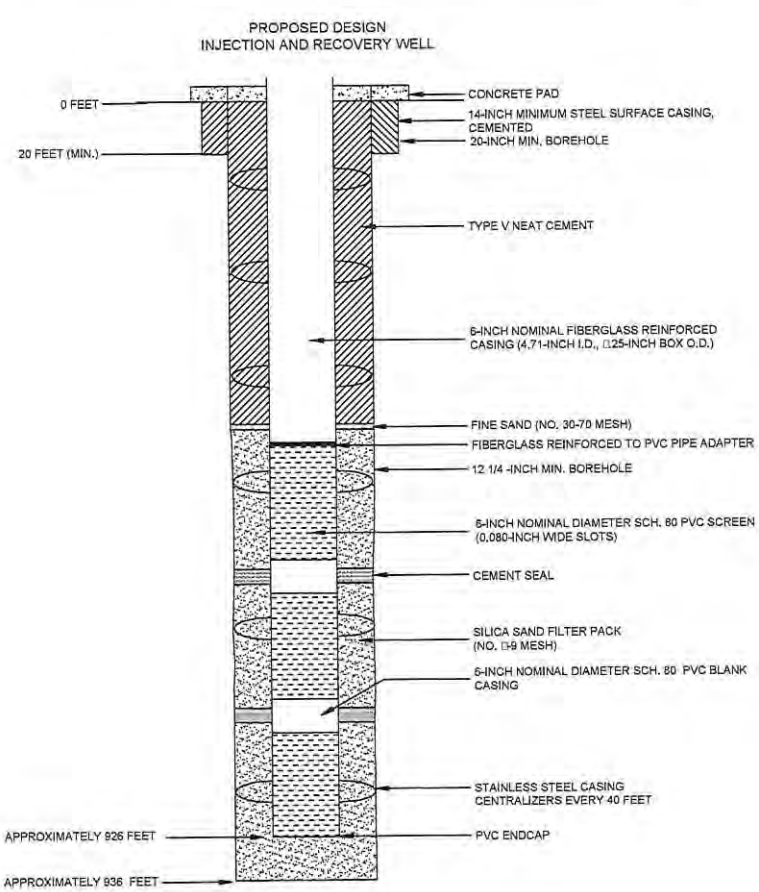
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

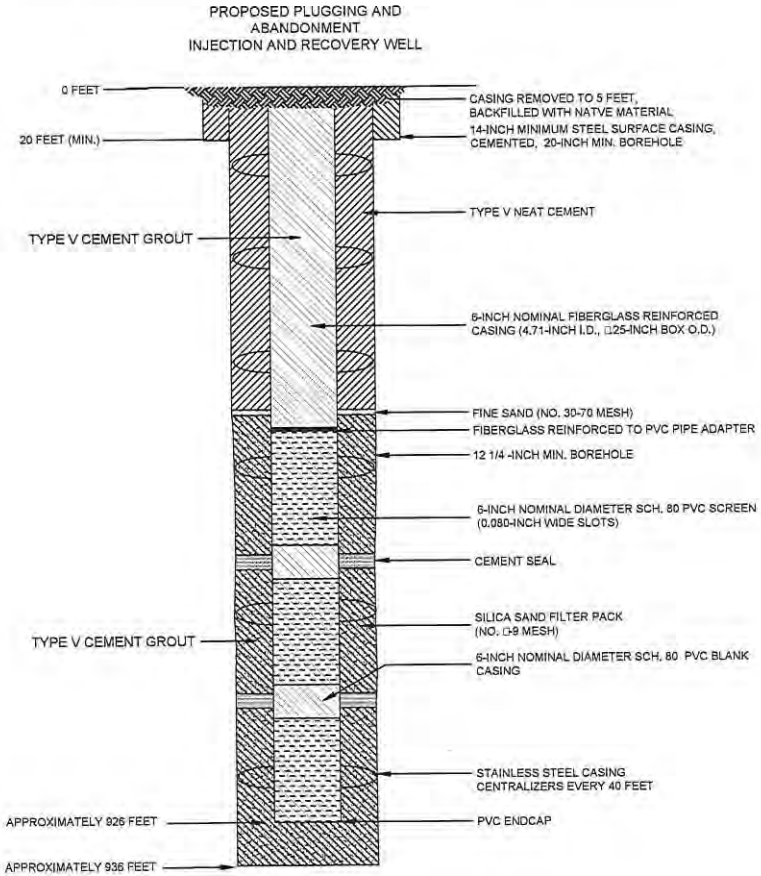
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 62
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-29

TABLE E-29
WELLS WITHIN RESOURCE BLOCK 62
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2030	847695	745283	62	358	398	926
2099	847552	745705	62	358	398	926
2100	847623	745635	62	358	398	926
2101	847624	745705	62	358	398	926
2102	847623	745776	62	358	398	926
2103	847976	745635	62	358	398	926
2104	847906	745564	62	358	398	926
2105	847835	745493	62	358	398	926
2106	847764	745564	62	358	398	926
2107	847835	745635	62	358	398	926
2108	847906	745705	62	358	398	926
2110	847906	745635	62	358	398	926
2111	847835	745564	62	358	398	926
2112	847764	745493	62	358	398	926
2113	847694	745635	62	358	398	926
2114	847764	745705	62	358	398	926
2115	847835	745776	62	358	398	926
2117	847835	745705	62	358	398	926
2118	847764	745635	62	358	398	926
2119	847694	745564	62	358	398	926
2120	847694	745776	62	358	398	926
2121	847764	745847	62	358	398	926
2122	847764	745776	62	358	398	926
2123	847694	745705	62	358	398	926
2133	848047	745564	62	358	398	926
2139	847835	745423	62	358	398	926
2140	847906	745493	62	358	398	926
2141	847976	745564	62	358	398	926
2143	847906	745423	62	358	398	926
2144	847976	745493	62	358	398	926
2207	847552	745564	62	358	398	926
2208	847552	745635	62	358	398	926
2209	847481	745581	62	358	398	926
2210	847481	745635	62	358	398	926
2211	847577	745523	62	358	398	926
2212	847623	745493	62	358	398	926
2213	847623	745564	62	358	398	926
2214	847764	745423	62	358	398	926
2215	847694	745493	62	358	398	926

TABLE E-29
WELLS WITHIN RESOURCE BLOCK 62
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2216	847693	745445	62	358	398	926
2217	847835	745352	62	358	398	926
2218	847473	745482	62	358	398	926
2223	847411	745527	62	358	398	926
2266	847764	745390	62	358	398	926
2237	847508	745455	62	358	398	926
2236	847693	745332	62	358	398	926
2235	847764	745281	62	358	398	926
452	847695	745848	62	358	398	926
2227	847552	745423	62	358	398	926
2229	847600	745396	62	358	398	926
2233	847623	745352	62	358	398	926

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 63 Wells - See Attached Table E-30

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude: 33.048583

Longitude: -111.432288

See Attached Table for Individual Well Coordinates.

Surface Location

SE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence: January 2027 ☐ Report After Work Date Work Ended:	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 63. There are 51 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 63. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-30.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

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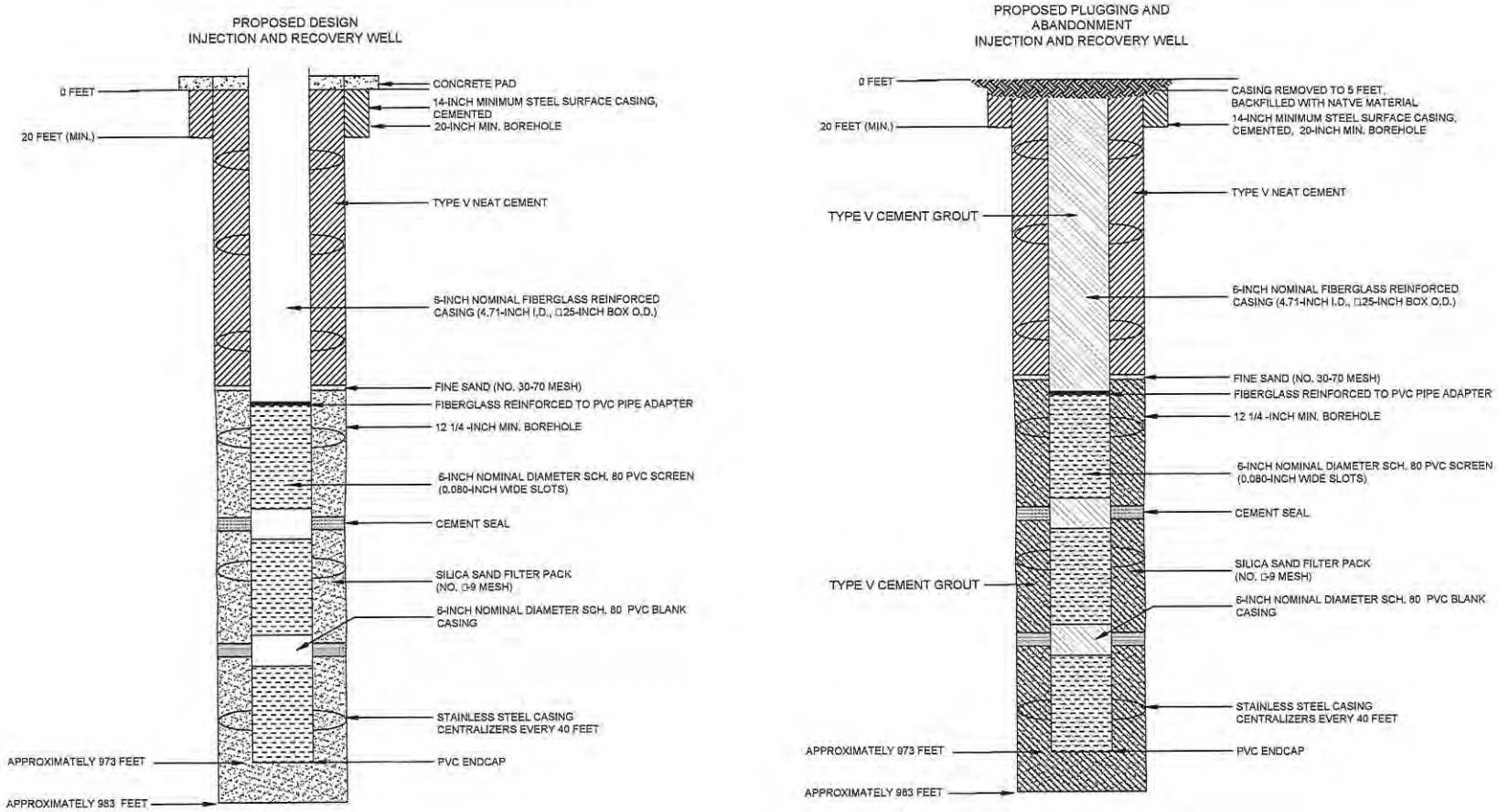
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 63
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-30

TABLE E-30
WELLS WITHIN RESOURCE BLOCK 63
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
464	848401.6491	745848.4602	63	353	393	973
1635	848543.0287	745424.2398	63	353	393	973
1636	848613.7394	745494.9505	63	353	393	973
1637	848684.4501	745565.6612	63	353	393	973
1638	848613.7394	745424.2505	63	353	393	973
1639	848684.4501	745494.9612	63	353	393	973
1641	848755.1714	745565.6826	63	353	393	973
1646	848472.3074	745282.8185	63	353	393	973
1647	848472.3074	745353.5185	63	353	393	973
1648	848401.5967	745282.8078	63	353	393	973
1652	848543.018	745353.5292	63	353	393	973
2037	848260.2064	745388.8383	63	353	393	973
2044	848330.8957	745353.5068	63	353	393	973
2145	848259.1608	745493.4174	63	353	393	973
2146	848329.8714	745564.1281	63	353	393	973
2147	848400.5821	745634.8388	63	353	393	973
2148	848471.2928	745705.5494	63	353	393	973
2149	848542.0035	745776.2601	63	353	393	973
2150	848520.449	745705.5494	63	353	393	973
2151	848471.2821	745634.8388	63	353	393	973
2152	848400.5714	745564.1281	63	353	393	973
2153	848329.8608	745520.0354	63	353	393	973
2154	848188.4608	745564.1174	63	353	393	973
2155	848259.1714	745634.8281	63	353	393	973
2156	848329.8821	745705.5388	63	353	393	973
2157	848400.5928	745776.2494	63	353	393	973
2158	848471.3035	745846.9601	63	353	393	973
2159	848471.2928	745776.2494	63	353	393	973
2160	848400.5821	745705.5388	63	353	393	973
2161	848329.8714	745634.8281	63	353	393	973
2162	848259.1608	745564.1174	63	353	393	973
2163	848188.4501	745493.4067	63	353	393	973
2164	848329.8821	745776.2388	63	353	393	973
2165	848259.1714	745705.5281	63	353	393	973
2166	848188.4608	745634.8174	63	353	393	973
2167	848117.7501	745564.1067	63	353	393	973
2168	848188.4501	745444.3655	63	353	393	973
2177	848683.4035	745634.8601	63	353	393	973
2178	848612.6928	745564.1494	63	353	393	973

TABLE E-30
WELLS WITHIN RESOURCE BLOCK 63
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2179	848541.9821	745493.4388	63	353	393	973
2180	848471.2714	745422.7281	63	353	393	973
2181	848329.8608	745422.7174	63	353	393	973
2182	848400.5714	745466.6131	63	353	393	973
2183	848503.1242	745531.5875	63	353	393	973
2184	848568.9288	745610.9406	63	353	393	973
2185	848622.826	745705.5601	63	353	393	973
2187	848612.6928	745634.8494	63	353	393	973
2188	848541.9821	745564.1388	63	353	393	973
2189	848471.2714	745493.4281	63	353	393	973
2190	848400.5608	745422.7174	63	353	393	973
2198	848400.5501	745352.0067	63	353	393	973

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 64 Wells - See Attached Table E-31

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.048598

Longitude -111.430035

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 64. There are 51 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 64. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-31.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

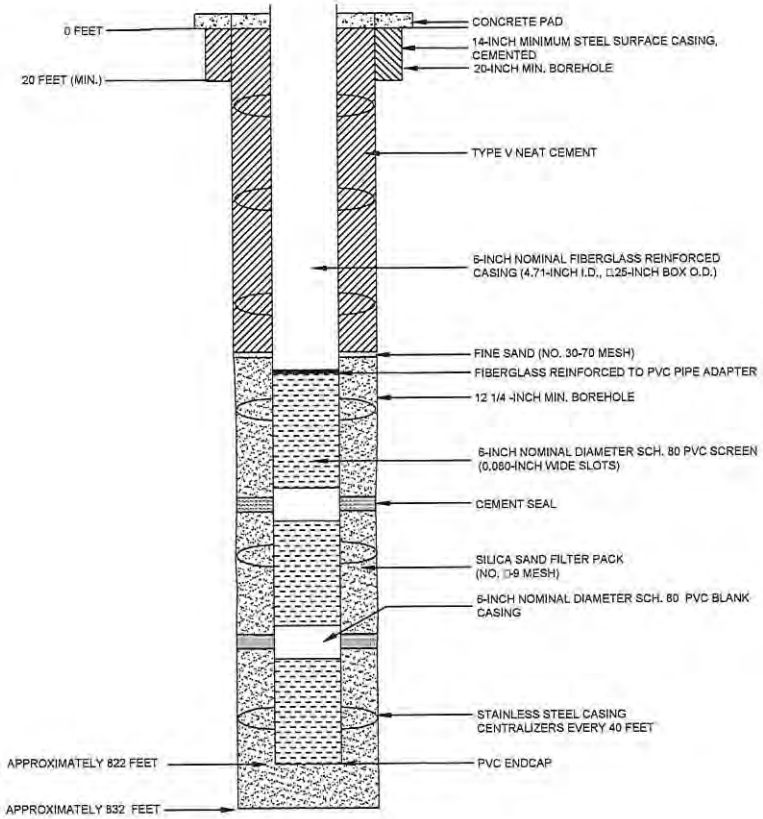
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

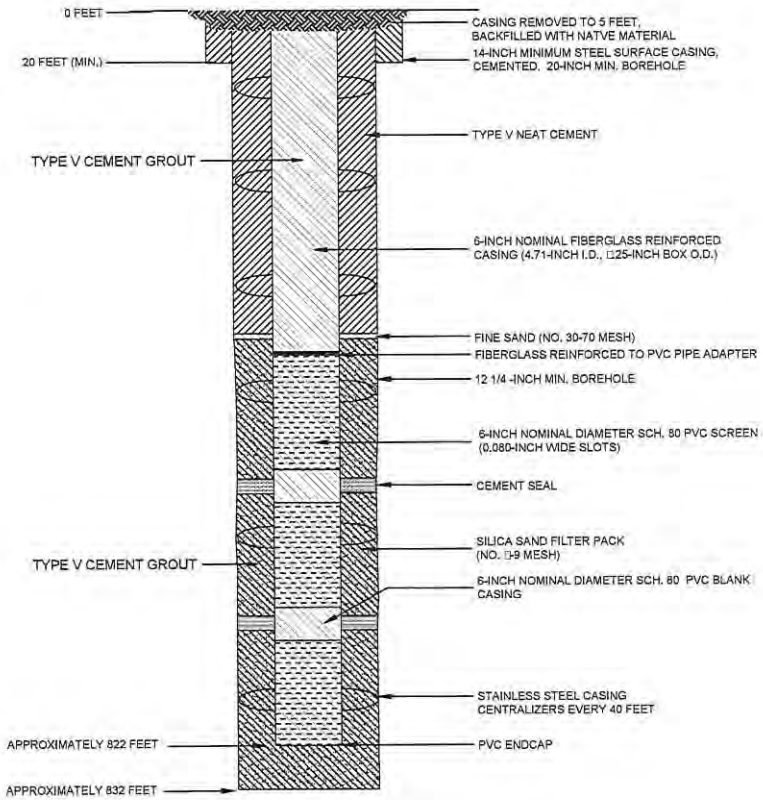
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 64
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-31

TABLE E-31
WELLS WITHIN RESOURCE BLOCK 64
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
930	849109	745913	64	346	386	822
953	849109	745848	64	346	386	822
1478	849392	745495	64	346	386	822
1479	849462	745566	64	346	386	822
1481	849392	745566	64	346	386	822
1482	849321	745495	64	346	386	822
1483	849321	745424	64	346	386	822
1484	849250	745424	64	346	386	822
1485	849250	745353	64	346	386	822
1490	849109	745283	64	346	386	822
1492	849179	745353	64	346	386	822
1493	849179	745283	64	346	386	822
1565	849392	745636	64	346	386	822
1575	849321	745636	64	346	386	822
1576	849321	745707	64	346	386	822
1580	849250	745707	64	346	386	822
1581	849250	745778	64	346	386	822
1582	849179	745778	64	346	386	822
1584	849179	745848	64	346	386	822
1661	849109	745566	64	346	386	822
1662	849109	745636	64	346	386	822
1663	849038	745566	64	346	386	822
1664	848967	745636	64	346	386	822
1665	849038	745707	64	346	386	822
1666	849109	745707	64	346	386	822
1667	849038	745636	64	346	386	822
1668	849038	745778	64	346	386	822
1669	848967	745707	64	346	386	822
1670	849109	745778	64	346	386	822
1671	849109	745495	64	346	386	822
1672	849321	745566	64	346	386	822
1673	849250	745566	64	346	386	822
1674	849250	745636	64	346	386	822
1675	849179	745636	64	346	386	822
1676	849179	745424	64	346	386	822
1677	849250	745495	64	346	386	822
1678	849179	745495	64	346	386	822
1679	849179	745566	64	346	386	822
1680	849180	745706	64	346	386	822

TABLE E-31
WELLS WITHIN RESOURCE BLOCK 64
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1737	848967	745424	64	346	386	822
1738	849038	745495	64	346	386	822
1739	848967	745495	64	346	386	822
1742	848897	745566	64	346	386	822
1743	848967	745566	64	346	386	822
1744	848897	745495	64	346	386	822
1746	848897	745636	64	346	386	822
1747	848826	745566	64	346	386	822
1748	849109	745424	64	346	386	822
1749	849038	745424	64	346	386	822
1761	849109	745353	64	346	386	822
1762	849038	745353	64	346	386	822

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 65 Wells - See Attached Table E-32

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.048565

Longitude -111.427684

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 65. There are 50 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 65. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-32.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson – VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

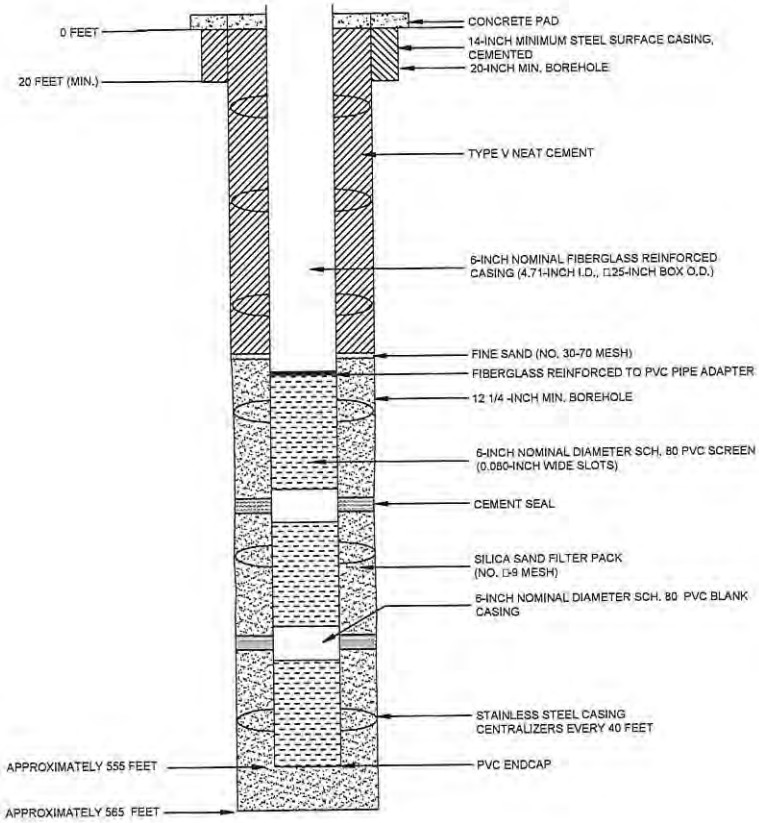
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

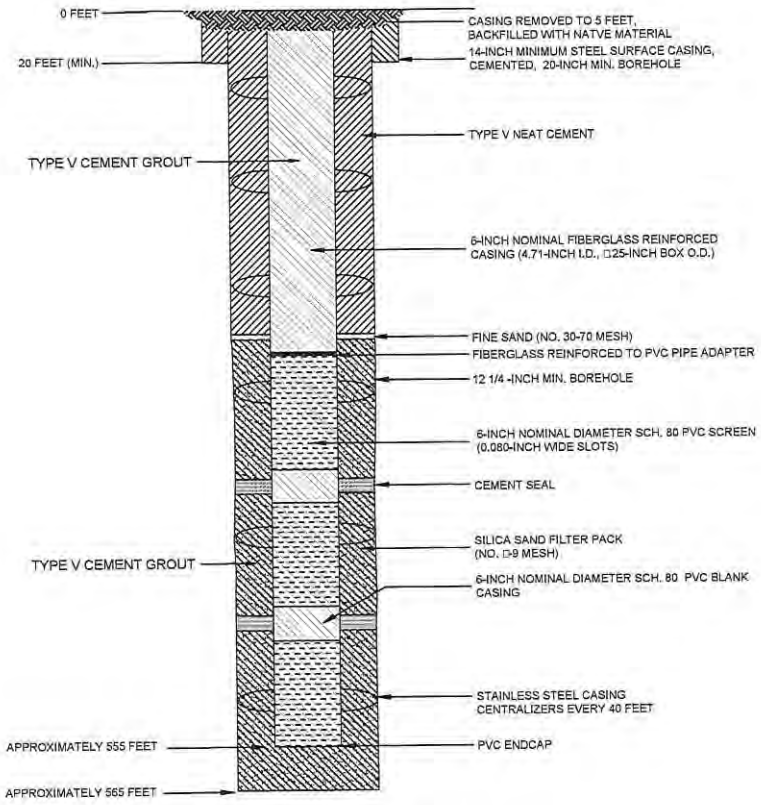
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 65
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-32

TABLE E-32
WELLS WITHIN RESOURCE BLOCK 65
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
785	849816	745848	65	345	385	555
968	850169	745566	65	345	385	555
971	850099	745566	65	345	385	555
1083	849816	745283	65	345	385	555
1084	849886	745354	65	345	385	555
1085	849886	745283	65	345	385	555
1086	850099	745495	65	345	385	555
1087	850028	745424	65	345	385	555
1088	850028	745495	65	345	385	555
1089	849957	745424	65	345	385	555
1090	849957	745354	65	345	385	555
1494	849674	745424	65	345	385	555
1495	849604	745495	65	345	385	555
1496	849533	745566	65	345	385	555
1497	849816	745424	65	345	385	555
1498	849816	745354	65	345	385	555
1499	849745	745354	65	345	385	555
1586	849745	745495	65	345	385	555
1587	849816	745566	65	345	385	555
1588	849816	745636	65	345	385	555
1589	849745	745566	65	345	385	555
1590	849674	745495	65	345	385	555
1591	849604	745566	65	345	385	555
1592	849674	745636	65	345	385	555
1593	849745	745707	65	345	385	555
1594	849816	745707	65	345	385	555
1595	849745	745636	65	345	385	555
1596	849674	745566	65	345	385	555
1598	849745	745778	65	345	385	555
1599	849674	745707	65	345	385	555
1600	849604	745636	65	345	385	555
1602	849816	745778	65	345	385	555
1603	849745	745424	65	345	385	555
1604	849816	745495	65	345	385	555
1605	849886	745636	65	345	385	555
1606	849886	745424	65	345	385	555
1607	849886	745495	65	345	385	555
1608	849886	745566	65	345	385	555
1609	849887	745706	65	345	385	555

TABLE E-32
WELLS WITHIN RESOURCE BLOCK 65
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1610	849886	745778	65	345	385	555
1611	849886	745849	65	345	385	555
1612	849957	745495	65	345	385	555
1613	850028	745566	65	345	385	555
1614	850099	745636	65	345	385	555
1616	849957	745636	65	345	385	555
1617	850028	745707	65	345	385	555
1621	850028	745636	65	345	385	555
1622	849957	745566	65	345	385	555
1623	849957	745778	65	345	385	555
1626	849957	745707	65	345	385	555

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 66 Wells - See Attached Table E-33

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SE 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.048620

Longitude -111.426409

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 66. There are 1 Class III multi-use injection/ recovery wells, 1 dedicated Class III observation, and 1 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 66. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-33a and E-33b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, Gen		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

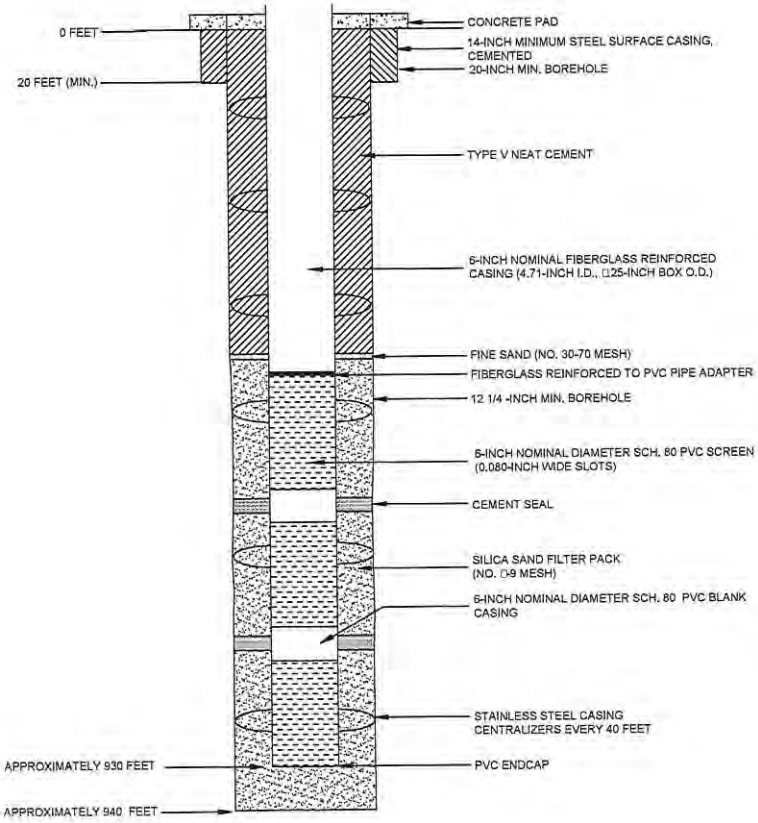
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

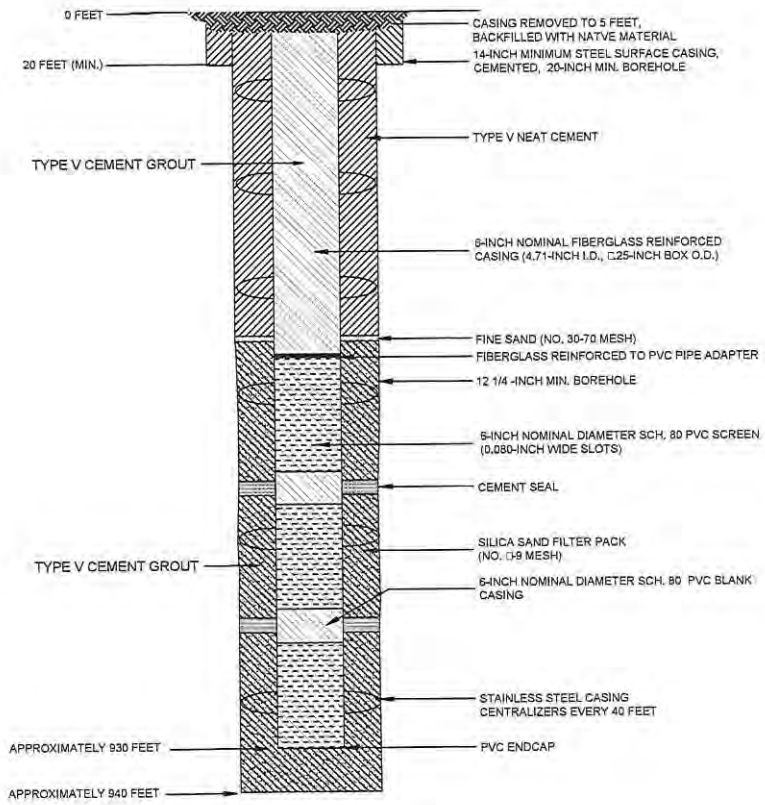
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 66
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-33a

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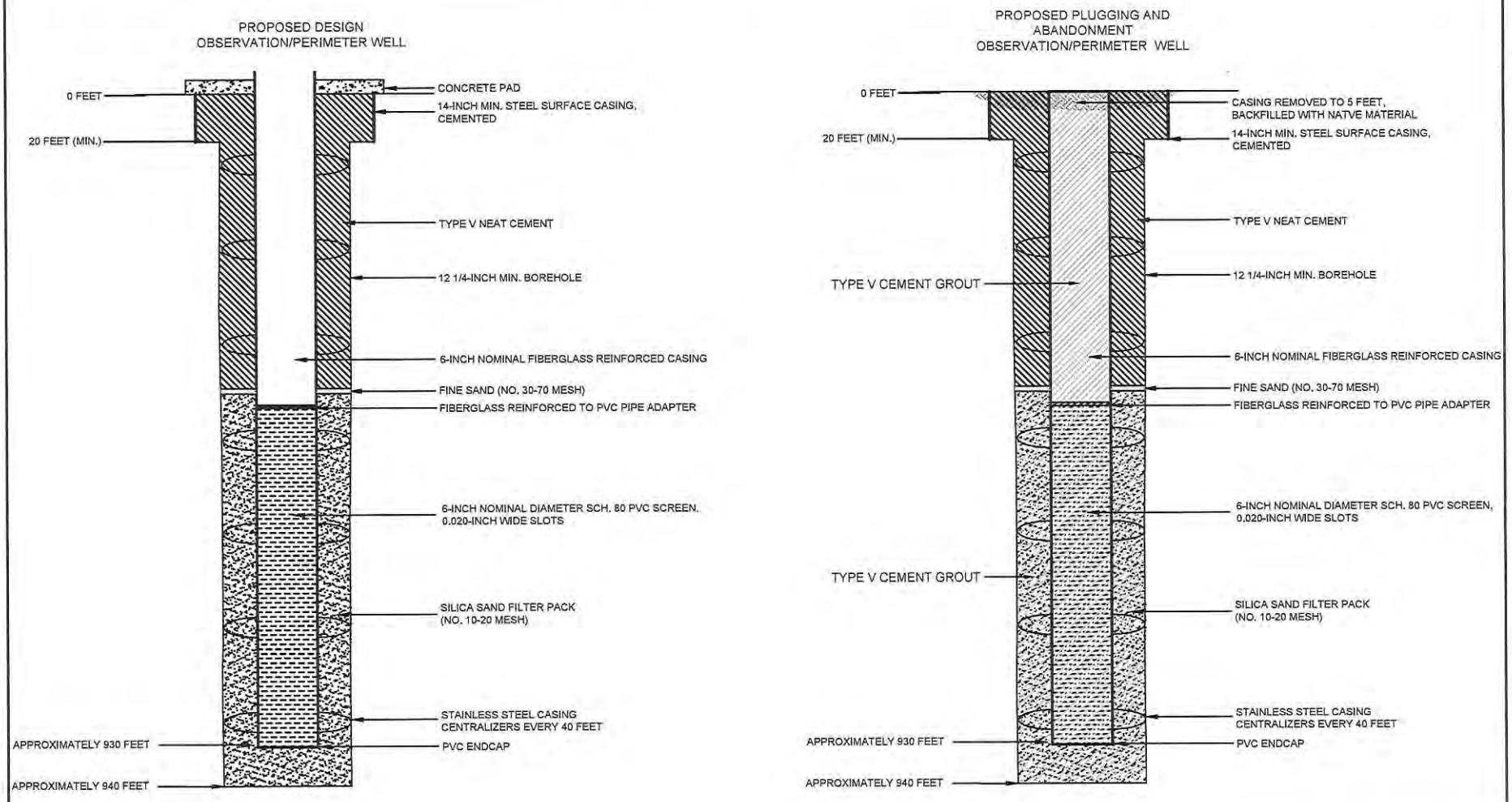
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 66
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-33b

TABLE E-33
WELLS WITHIN RESOURCE BLOCK 66
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
977	850240	745566	66	466	506	930
O18	850381	745636	66	466	506	930
P35	850311	745566	66	466	506	930

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 70 Wells - See Attached Table E-34

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.047637

Longitude -111.435747

See Attached Table for Individual Well Coordinates.

Surface Location

SW 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 70. There are 18 Class III multi-use injection/ recovery wells, and 2 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 70. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-34a and E-34b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

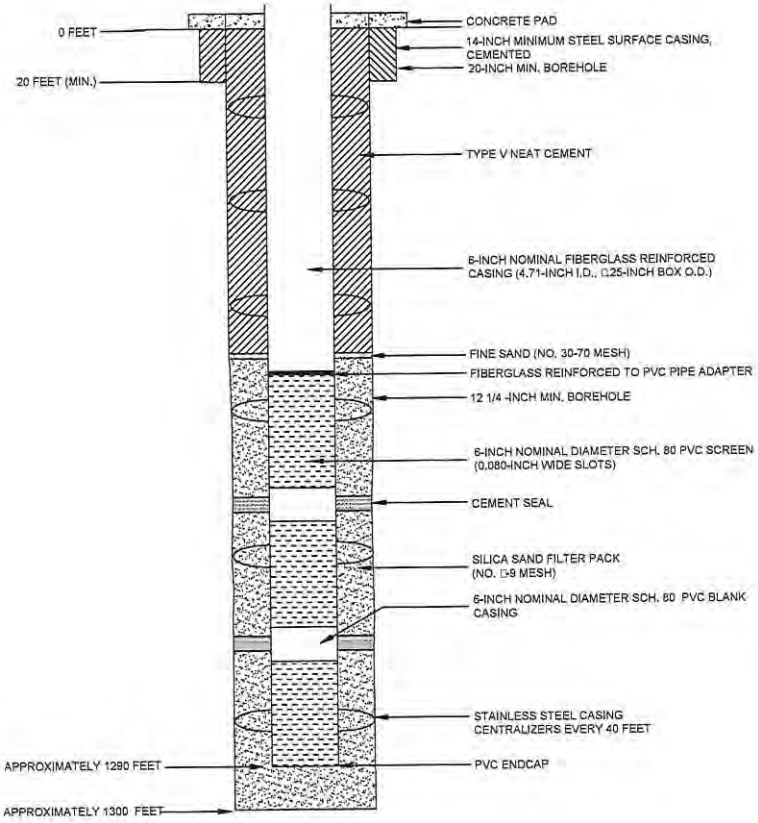
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

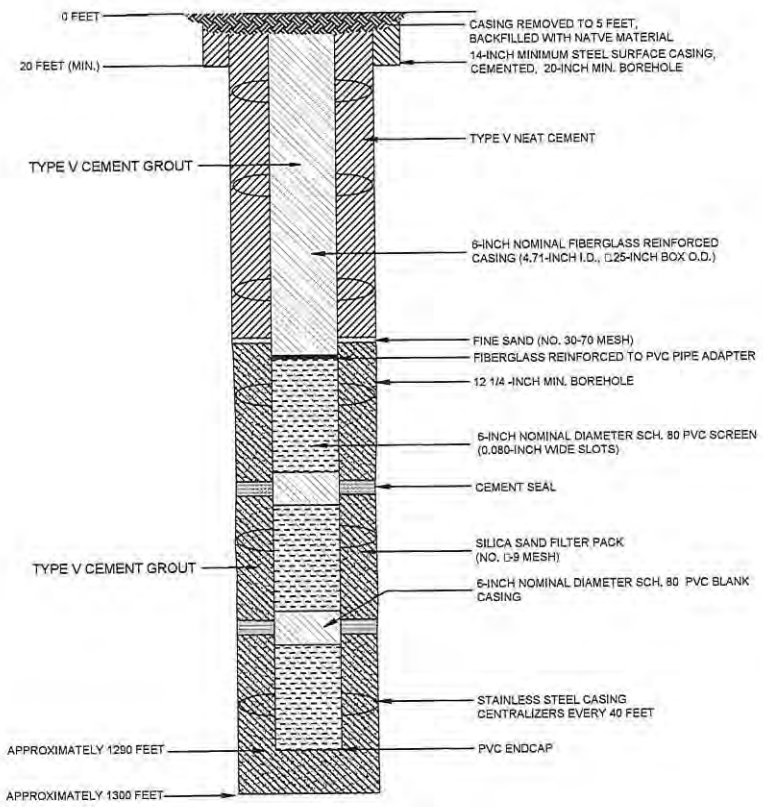
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

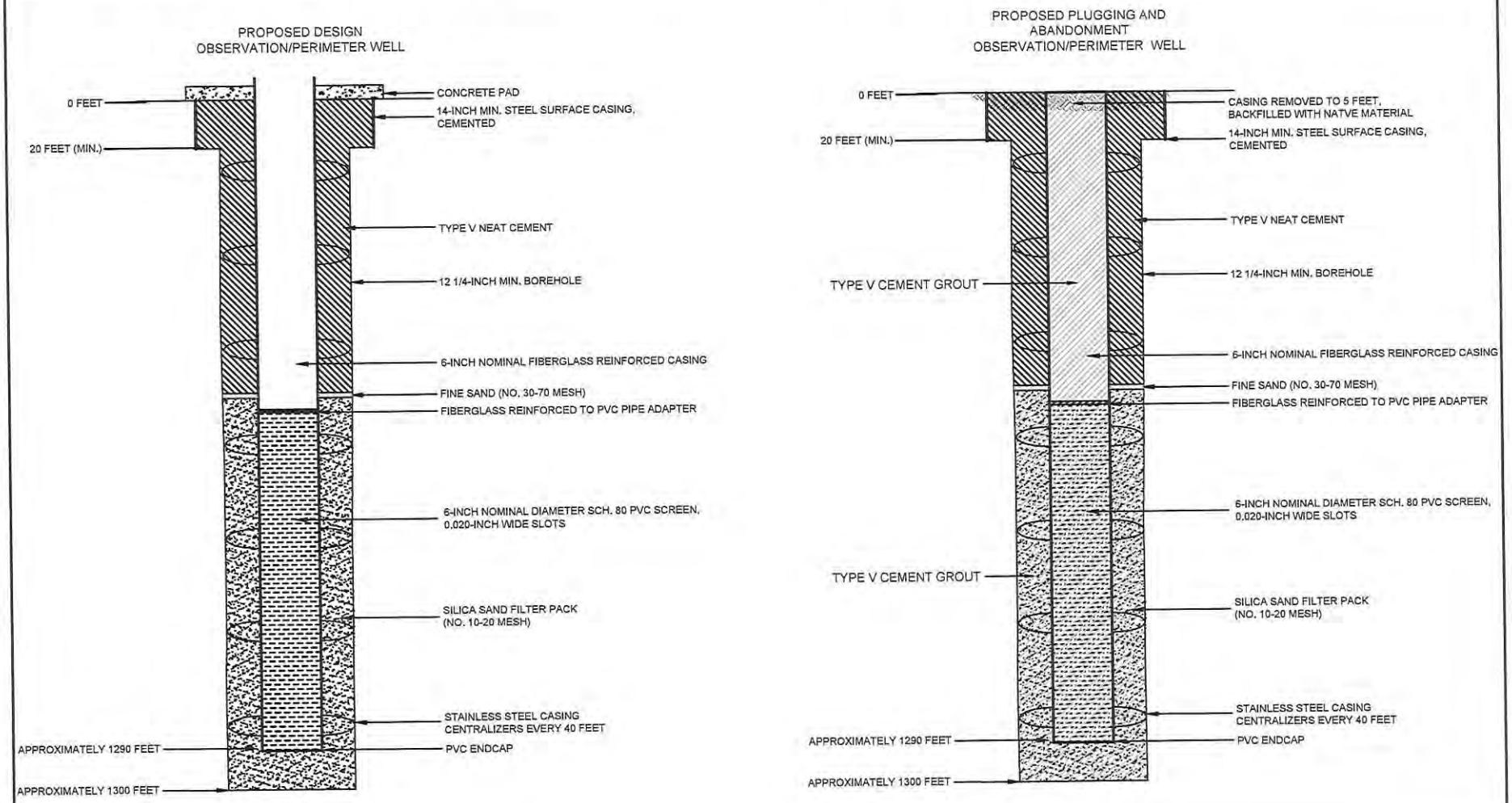
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 70
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-34a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 70
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-34b

TABLE E-34
WELLS WITHIN RESOURCE BLOCK 70
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1883	847412	744929	70	377	417	1290
1885	847412	745000	70	377	417	1290
1886	847341	744929	70	377	417	1290
2029	847695	745212	70	377	417	1290
2031	847553	745071	70	377	417	1290
2032	847482	745000	70	377	417	1290
2033	847553	745141	70	377	417	1290
2034	847482	745071	70	377	417	1290
2035	847625	745140	70	377	417	1290
2036	847624	745212	70	377	417	1290
2219	847411	745493	70	377	417	1290
2228	847481	745423	70	377	417	1290
2232	847552	745352	70	377	417	1290
2234	847623	745281	70	377	417	1290
2238	847411	745423	70	377	417	1290
2239	847340	745423	70	377	417	1290
2240	847340	745493	70	377	417	1290
2241	847269	745423	70	377	417	1290
2242	847411	745069	70	377	417	1290
2243	847481	745140	70	377	417	1290
2244	847340	745140	70	377	417	1290
2245	847411	745211	70	377	417	1290
2246	847481	745211	70	377	417	1290
2247	847411	745140	70	377	417	1290
2248	847340	745069	70	377	417	1290
2249	847269	745210	70	377	417	1290
2250	847340	745281	70	377	417	1290
2251	847411	745281	70	377	417	1290
2252	847340	745210	70	377	417	1290
2253	847269	745140	70	377	417	1290
2254	847340	745352	70	377	417	1290
2255	847269	745281	70	377	417	1290
2256	847199	745210	70	377	417	1290
2257	847199	745281	70	377	417	1290
2258	847269	745352	70	377	417	1290
2259	847199	745352	70	377	417	1290
2261	847481	745352	70	377	417	1290
2262	847411	745352	70	377	417	1290
2263	847552	745281	70	377	417	1290

TABLE E-34
WELLS WITHIN RESOURCE BLOCK 70
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2264	847481	745281	70	377	417	1290
2265	847552	745211	70	377	417	1290
2311	847340	744998	70	377	417	1290
2314	847269	745069	70	377	417	1290
2315	847269	744998	70	377	417	1290
P71	847199	745140	70	377	417	1290
P72	847128	745281	70	377	417	1290

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 71 Wells - See Attached Table E-35

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.047609

Longitude -111.433454

See Attached Table for Individual Well Coordinates.

Surface Location

SE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 71. There are 48 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 71. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-35.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

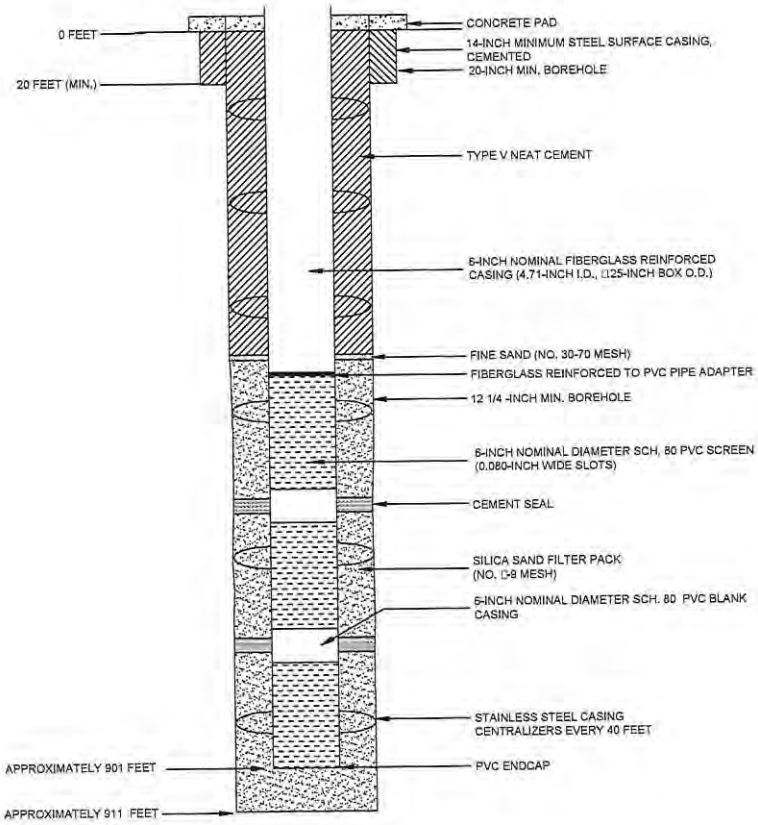
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

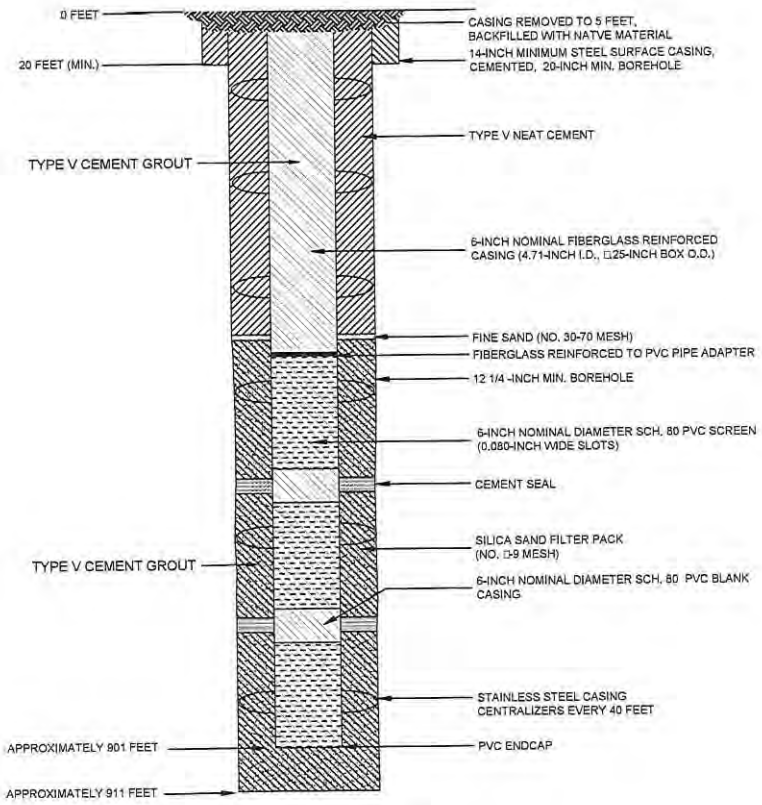
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 71
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-35

TABLE E-35
WELLS WITHIN RESOURCE BLOCK 71
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1642	848189	745000	71	433	473	901
1643	848260	745071	71	433	473	901
1644	848331	745141	71	433	473	901
1645	848402	745212	71	433	473	901
1649	848331	745212	71	433	473	901
1650	848260	745141	71	433	473	901
1651	848189	745071	71	433	473	901
1660	848119	745000	71	433	473	901
1769	848119	744929	71	433	473	901
1770	848048	744929	71	433	473	901
2038	847977	745283	71	433	473	901
2039	847977	745212	71	433	473	901
2040	848119	745071	71	433	473	901
2041	848189	745141	71	433	473	901
2042	848260	745212	71	433	473	901
2043	848331	745283	71	433	473	901
2045	848260	745283	71	433	473	901
2046	848189	745212	71	433	473	901
2047	848119	745141	71	433	473	901
2048	848049	745140	71	433	473	901
2049	848119	745212	71	433	473	901
2050	848048	745212	71	433	473	901
2051	848260	745354	71	433	473	901
2052	848189	745348	71	433	473	901
2053	848189	745283	71	433	473	901
2054	848119	745283	71	433	473	901
2063	847977	745000	71	433	473	901
2064	847977	745071	71	433	473	901
2071	847907	745141	71	433	473	901
2072	847977	745141	71	433	473	901
2073	847907	745071	71	433	473	901
2079	847836	745212	71	433	473	901
2080	847907	745212	71	433	473	901
2081	847836	745141	71	433	473	901
2084	847836	745264	71	433	473	901
2085	847765	745212	71	433	473	901
2089	848048	745071	71	433	473	901
2090	848048	745000	71	433	473	901
2142	847976	745423	71	433	473	901

TABLE E-35
WELLS WITHIN RESOURCE BLOCK 71
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2169	848047	745423	71	433	473	901
2170	848118	745423	71	433	473	901
2171	848118	745493	71	433	473	901
2172	848047	745493	71	433	473	901
2174	847976	745368	71	433	473	901
2175	847906	745352	71	433	473	901
2176	848047	745381	71	433	473	901
2196	847906	745265	71	433	473	901
2199	848047	745281	71	433	473	901

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 72 Wells - See Attached Table E-36

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.047660

Longitude -111.431131

See Attached Table for Individual Well Coordinates.

Surface Location

SE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 72. There are 49 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 72. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-36.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

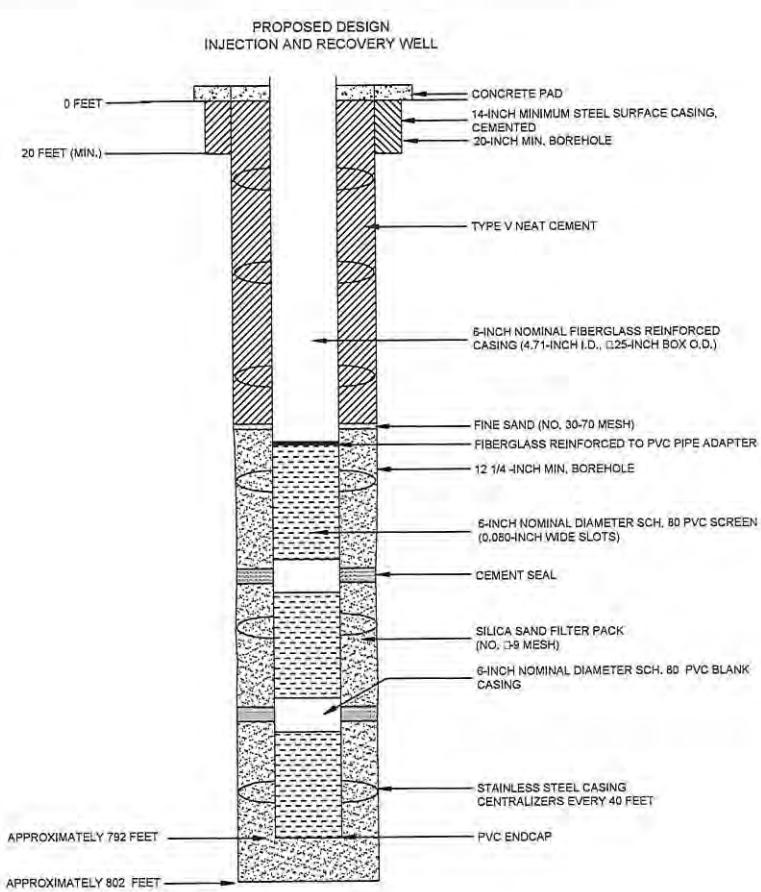
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

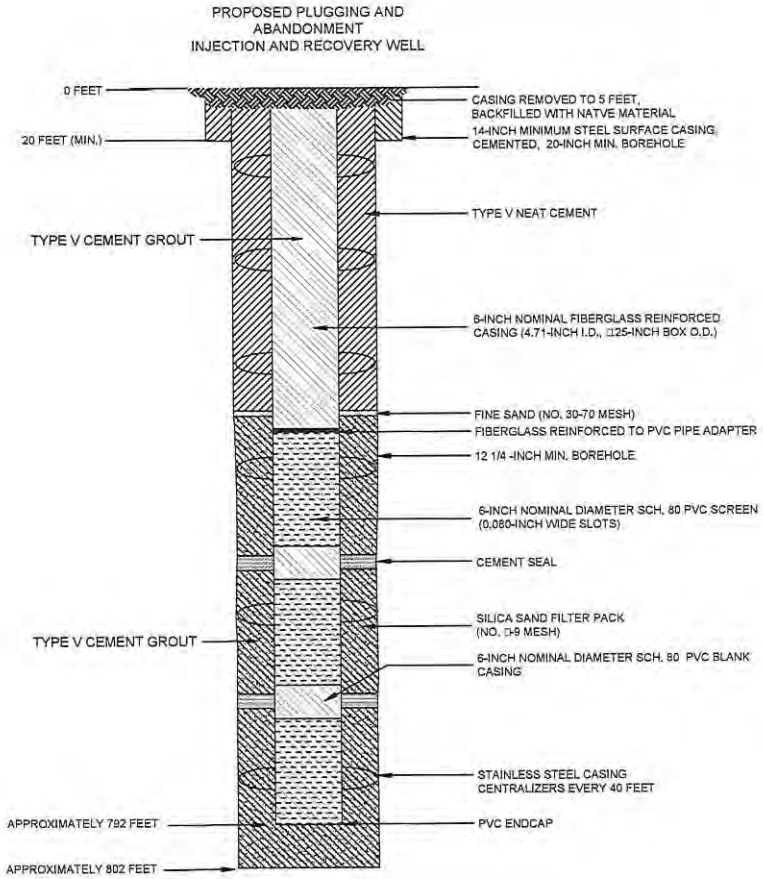
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 72
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-36

TABLE E-36
WELLS WITHIN RESOURCE BLOCK 72
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1256	848755	744929	72	381	421	792
1273	848826	744929	72	381	421	792
1274	848897	745000	72	381	421	792
1275	848897	745071	72	381	421	792
1276	848826	745000	72	381	421	792
1486	848967	745071	72	381	421	792
1487	849038	745141	72	381	421	792
1488	849038	745212	72	381	421	792
1489	848967	745141	72	381	421	792
1491	849109	745212	72	381	421	792
1681	848684	745424	72	381	421	792
1682	848755	745424	72	381	421	792
1683	848755	745495	72	381	421	792
1686	848684	745000	72	381	421	792
1687	848684	745071	72	381	421	792
1695	848614	745141	72	381	421	792
1696	848684	745141	72	381	421	792
1697	848614	745071	72	381	421	792
1705	848543	745212	72	381	421	792
1707	848543	745141	72	381	421	792
1712	848543	745283	72	381	421	792
1713	848472	745212	72	381	421	792
1718	848684	745354	72	381	421	792
1719	848614	745354	72	381	421	792
1720	848684	745283	72	381	421	792
1721	848614	745283	72	381	421	792
1722	848684	745212	72	381	421	792
1725	848755	745071	72	381	421	792
1726	848755	745000	72	381	421	792
1727	848756	745141	72	381	421	792
1728	848755	745212	72	381	421	792
1729	848755	745354	72	381	421	792
1730	848755	745283	72	381	421	792
1740	848897	745424	72	381	421	792
1741	848826	745495	72	381	421	792
1745	848826	745424	72	381	421	792
1750	848826	745071	72	381	421	792
1751	848897	745141	72	381	421	792
1752	848967	745212	72	381	421	792

TABLE E-36
WELLS WITHIN RESOURCE BLOCK 72
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1753	848826	745212	72	381	421	792
1754	848897	745283	72	381	421	792
1755	848967	745283	72	381	421	792
1756	848897	745212	72	381	421	792
1757	848826	745141	72	381	421	792
1758	848897	745353	72	381	421	792
1759	848826	745283	72	381	421	792
1760	848826	745353	72	381	421	792
1763	848967	745353	72	381	421	792
1764	849038	745283	72	381	421	792

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 73 Wells - See Attached Table E-37

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude: 33.047604

Longitude: -111.428879

See Attached Table for Individual Well Coordinates.

Surface Location

SW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence: January 2027 ☐ Report After Work Date Work Ended:	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 73. There are 50 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 73. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-37.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

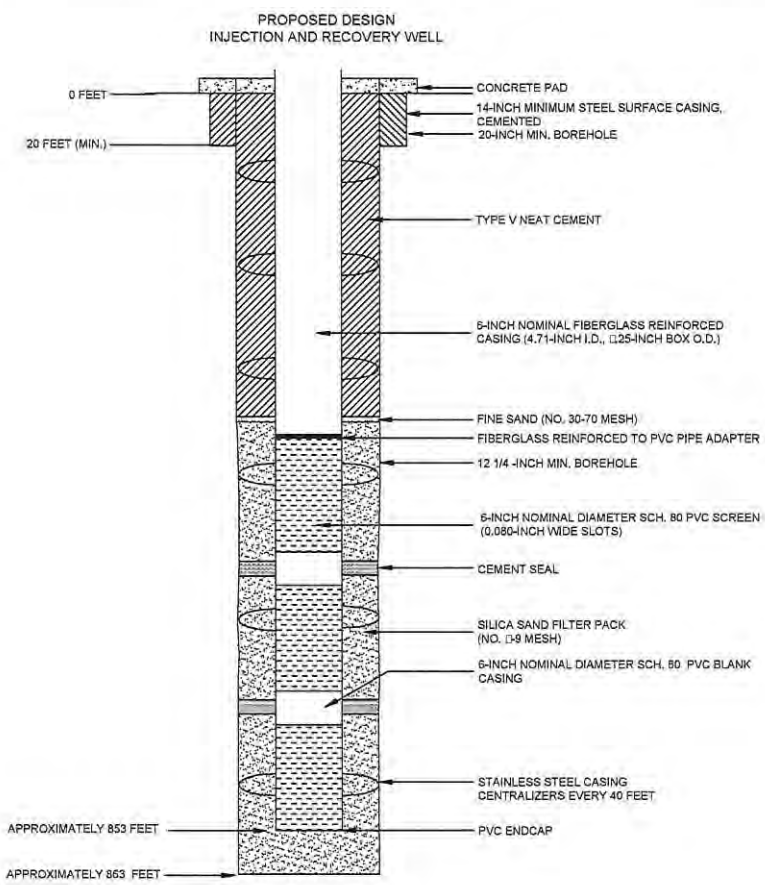
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

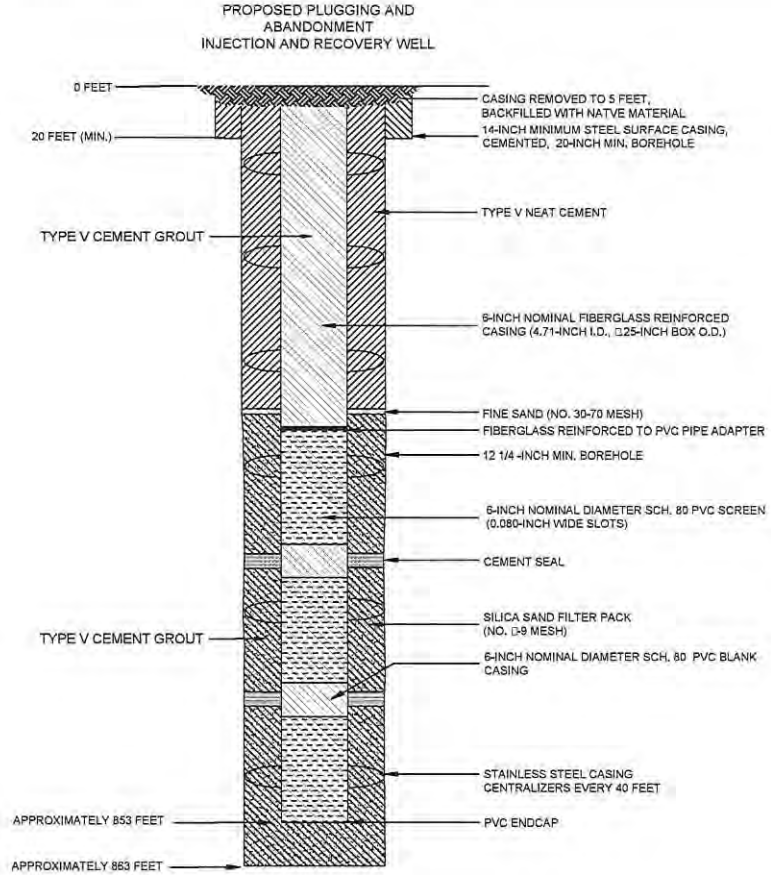
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 73
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-37

TABLE E-37
WELLS WITHIN RESOURCE BLOCK 73
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1091	849816	745212	73	366	406	853
1100	849533	744929	73	366	406	853
1101	849604	745000	73	366	406	853
1102	849674	745071	73	366	406	853
1103	849745	745141	73	366	406	853
1109	849745	745212	73	366	406	853
1110	849674	745141	73	366	406	853
1111	849604	745071	73	366	406	853
1112	849533	745000	73	366	406	853
1113	849462	744929	73	366	406	853
1500	849604	745424	73	366	406	853
1501	849533	745495	73	366	406	853
1502	849674	745353	73	366	406	853
1503	849745	745283	73	366	406	853
1504	849462	745424	73	366	406	853
1505	849533	745424	73	366	406	853
1506	849462	745495	73	366	406	853
1507	849392	745424	73	366	406	853
1515	849462	745000	73	366	406	853
1516	849533	745071	73	366	406	853
1517	849604	745141	73	366	406	853
1518	849674	745212	73	366	406	853
1520	849391	745071	73	366	406	853
1521	849462	745141	73	366	406	853
1522	849533	745212	73	366	406	853
1523	849604	745283	73	366	406	853
1524	849674	745283	73	366	406	853
1525	849604	745212	73	366	406	853
1526	849533	745141	73	366	406	853
1527	849462	745071	73	366	406	853
1528	849391	745000	73	366	406	853
1530	849604	745354	73	366	406	853
1531	849533	745283	73	366	406	853
1532	849462	745212	73	366	406	853
1533	849391	745141	73	366	406	853
1534	849321	745071	73	366	406	853
1537	849321	745141	73	366	406	853
1538	849391	745212	73	366	406	853
1539	849462	745283	73	366	406	853

TABLE E-37
WELLS WITHIN RESOURCE BLOCK 73
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1540	849533	745354	73	366	406	853
1541	849462	745354	73	366	406	853
1542	849391	745283	73	366	406	853
1543	849321	745212	73	366	406	853
1544	849250	745141	73	366	406	853
1553	849250	745212	73	366	406	853
1554	849179	745212	73	366	406	853
1555	849391	745354	73	366	406	853
1556	849321	745353	73	366	406	853
1557	849321	745283	73	366	406	853
1558	849250	745283	73	366	406	853

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 74 Wells - See Attached Table E-38

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.047906

Longitude -111.427022

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 74. There are 18 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 4 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 74. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-38a and E-38b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

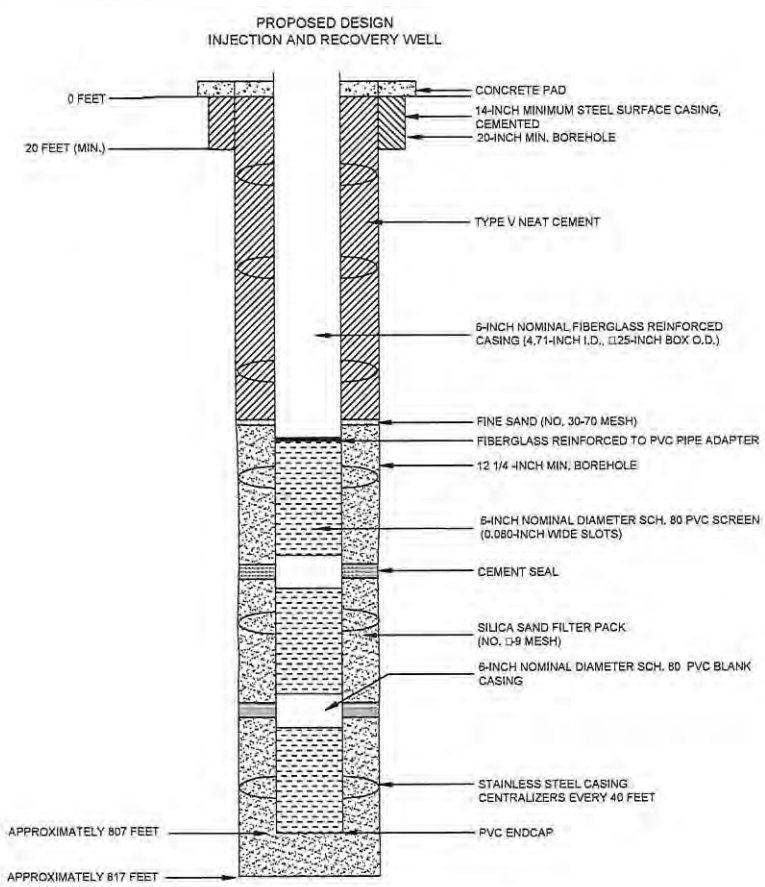
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

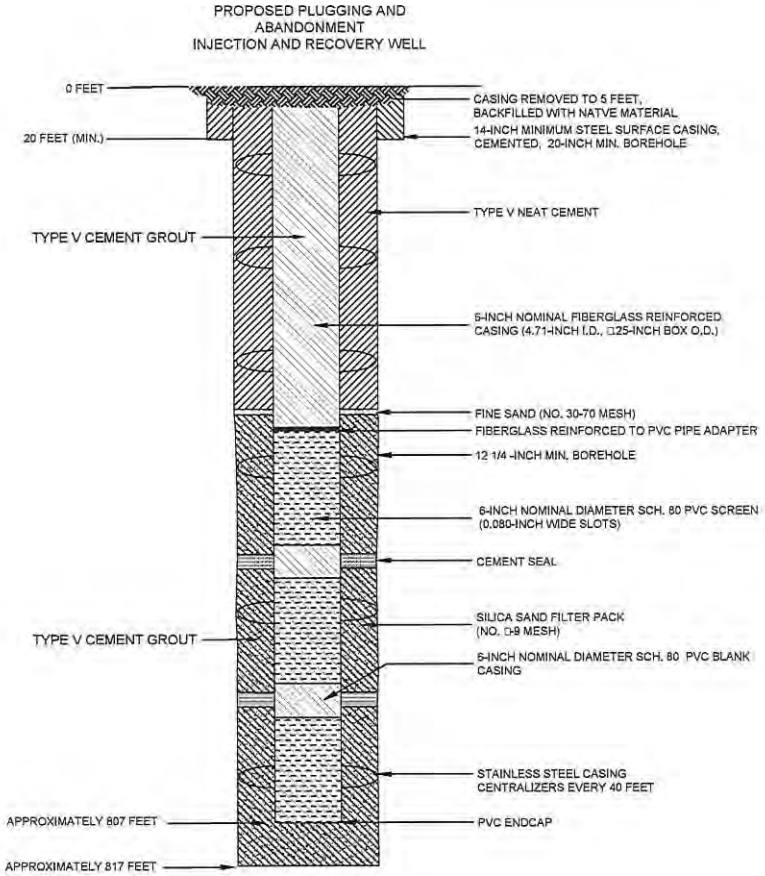
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

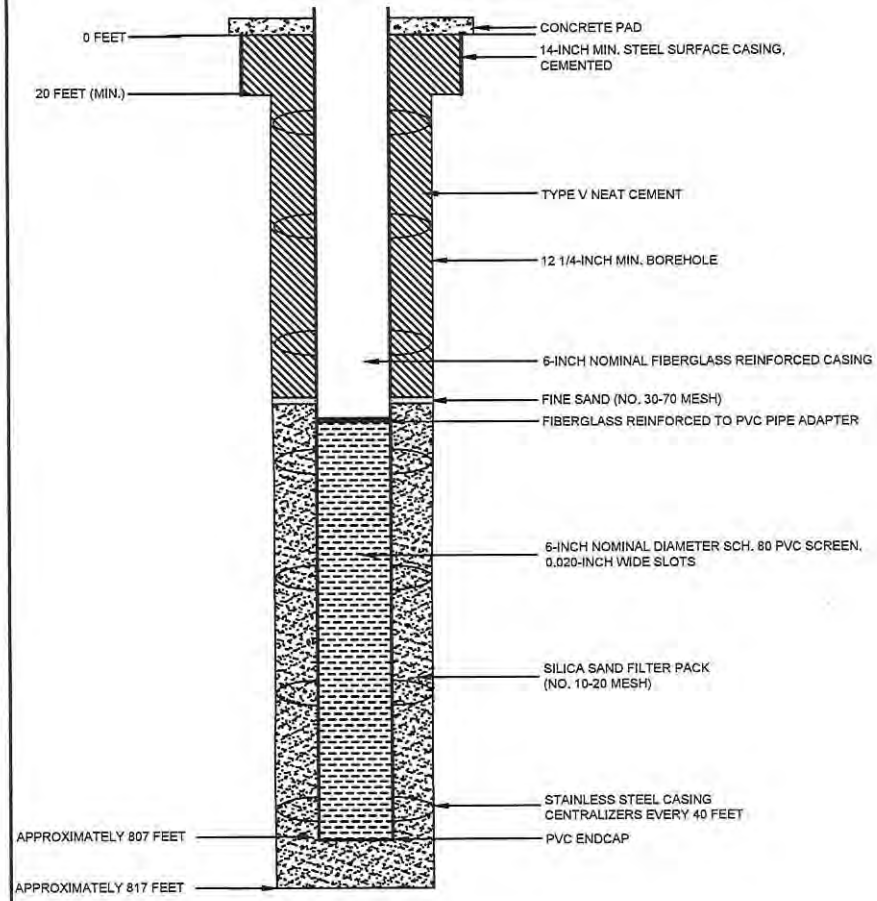
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 74
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

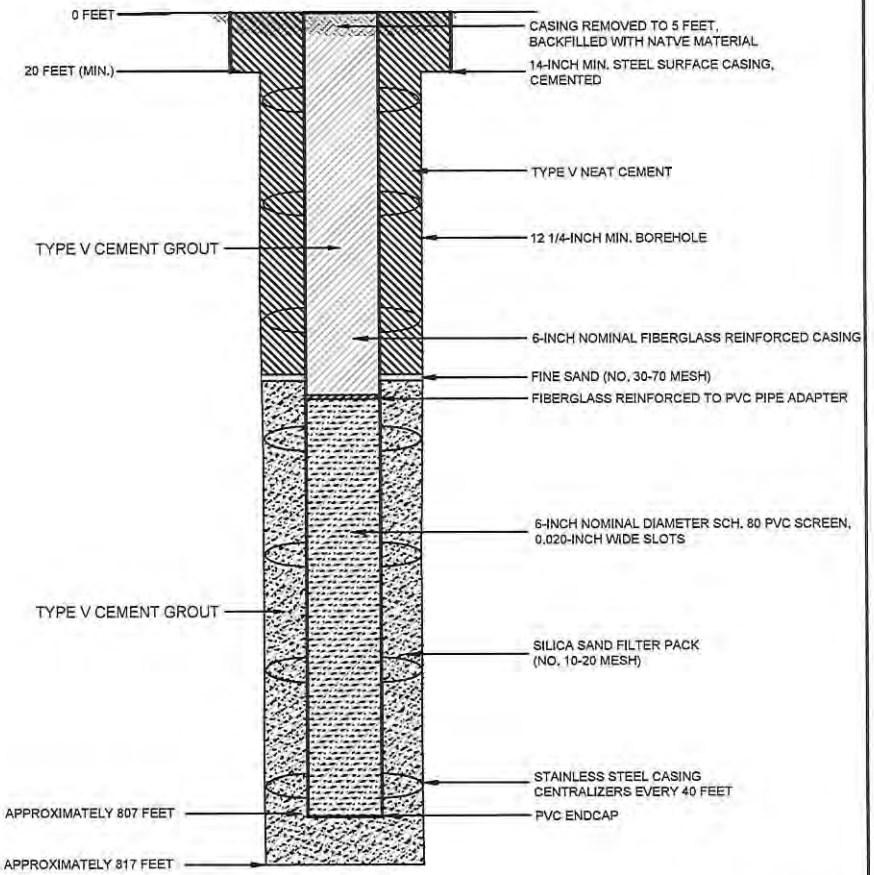
FIGURE E-38a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 74
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-38b

TABLE E-38
WELLS WITHIN RESOURCE BLOCK 74
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
976	850169	745495	74	356	396	807
978	850240	745424	74	356	396	807
979	850240	745495	74	356	396	807
1122	849886	745212	74	356	396	807
1185	850099	745424	74	356	396	807
1186	850169	745424	74	356	396	807
1193	850028	745141	74	356	396	807
1199	849957	745212	74	356	396	807
1200	850028	745283	74	356	396	807
1201	850099	745283	74	356	396	807
1202	850028	745212	74	356	396	807
1203	849957	745141	74	356	396	807
1204	850028	745354	74	356	396	807
1205	849957	745283	74	356	396	807
1206	850240	745354	74	356	396	807
1207	850169	745354	74	356	396	807
1208	850099	745354	74	356	396	807
1210	850169	745283	74	356	396	807
O19	850311	745354	74	356	396	807
O20	850169	745141	74	356	396	807
P36	850311	745424	74	356	396	807
P37	850240	745283	74	356	396	807
P38	850169	745212	74	356	396	807
P39	850099	745141	74	356	396	807

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 78 Wells - See Attached Table E-39

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.046722

Longitude -111.436024

See Attached Table for Individual Well Coordinates.

Surface Location

SW 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

ft. from (N/S) Line of quarter section

ft. from (E/W) Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 78. There are 4 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 78. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-39a and E-39b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

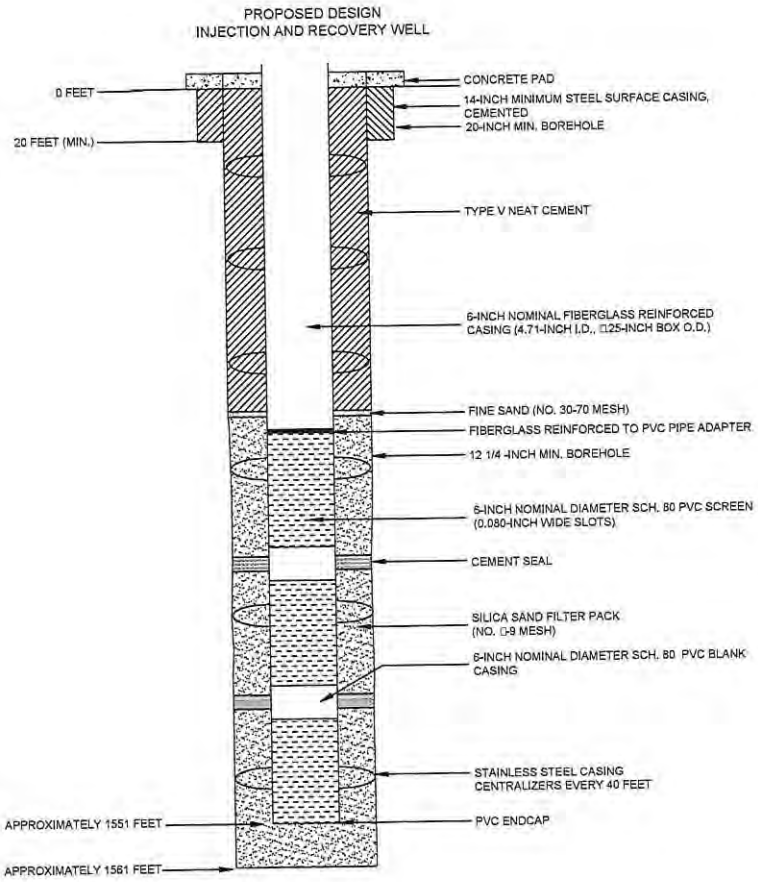
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

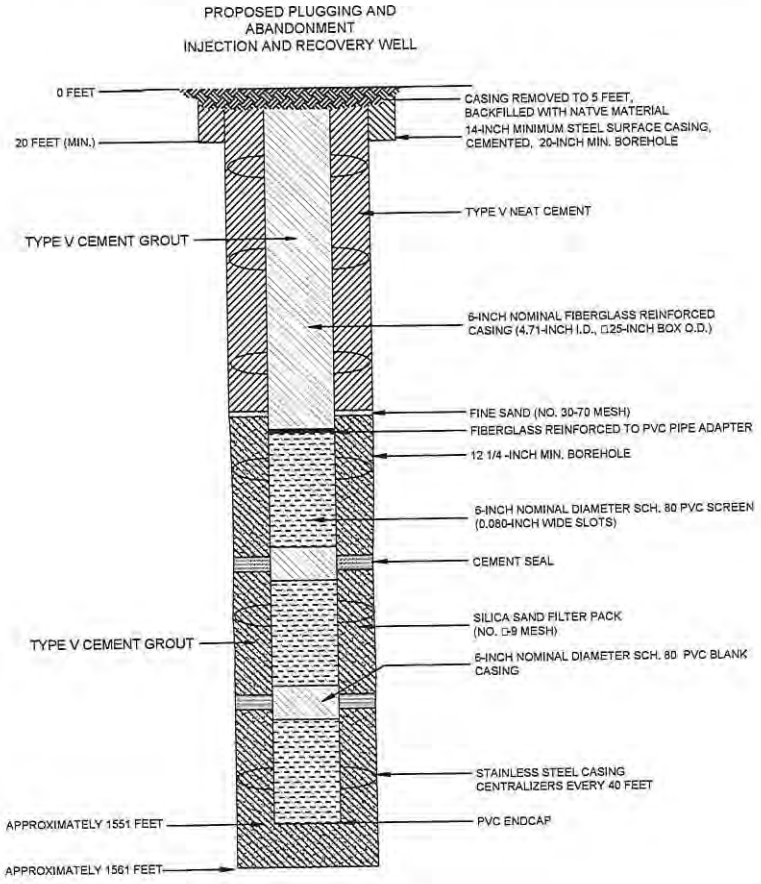
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

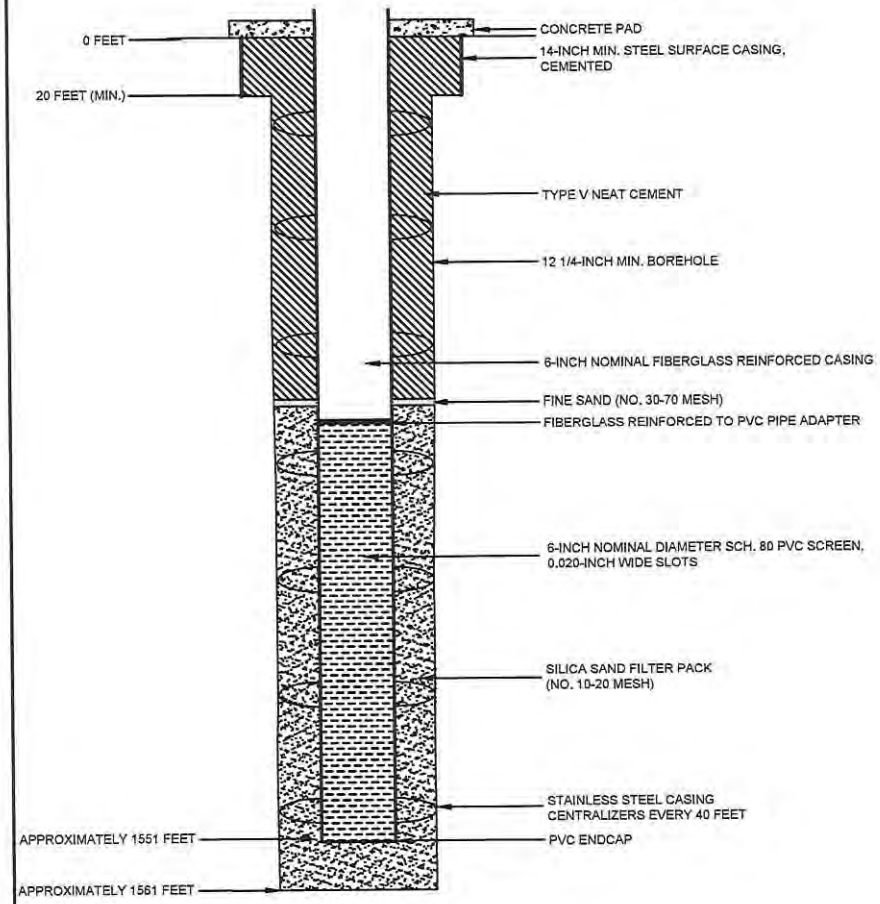
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 78
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

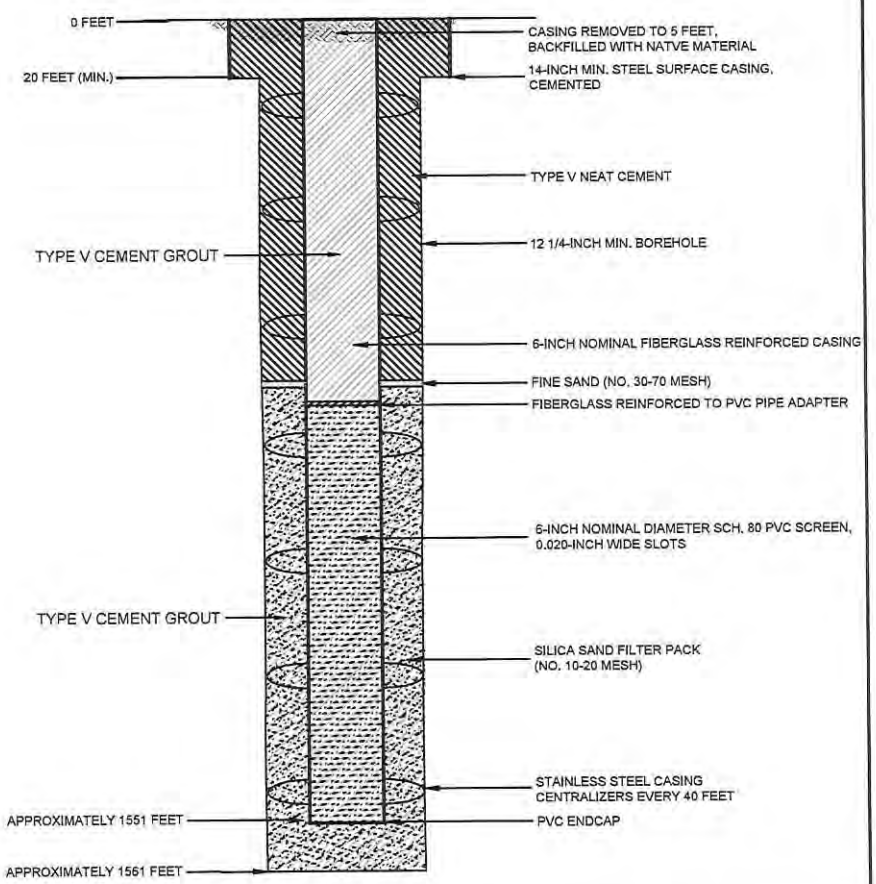
FIGURE E-39a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 78
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-39b

TABLE E-39
WELLS WITHIN RESOURCE BLOCK 78
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1884	847341	744858	78	1260	1300	1551
1887	847270	744858	78	1260	1300	1551
1893	847270	744788	78	1260	1300	1551
2310	847269	744928	78	1260	1300	1551
O35	847129	744788	78	1260	1300	1551
O36	847128	745069	78	1260	1300	1551
P68	847200	744717	78	1260	1300	1551
P69	847200	744858	78	1260	1300	1551
P70	847199	744998	78	1260	1300	1551

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 79 Wells - See Attached Table E-40

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.046624

Longitude -111.434579

See Attached Table for Individual Well Coordinates.

Surface Location

SE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 79. There are 50 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 79. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-40.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, Gm		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

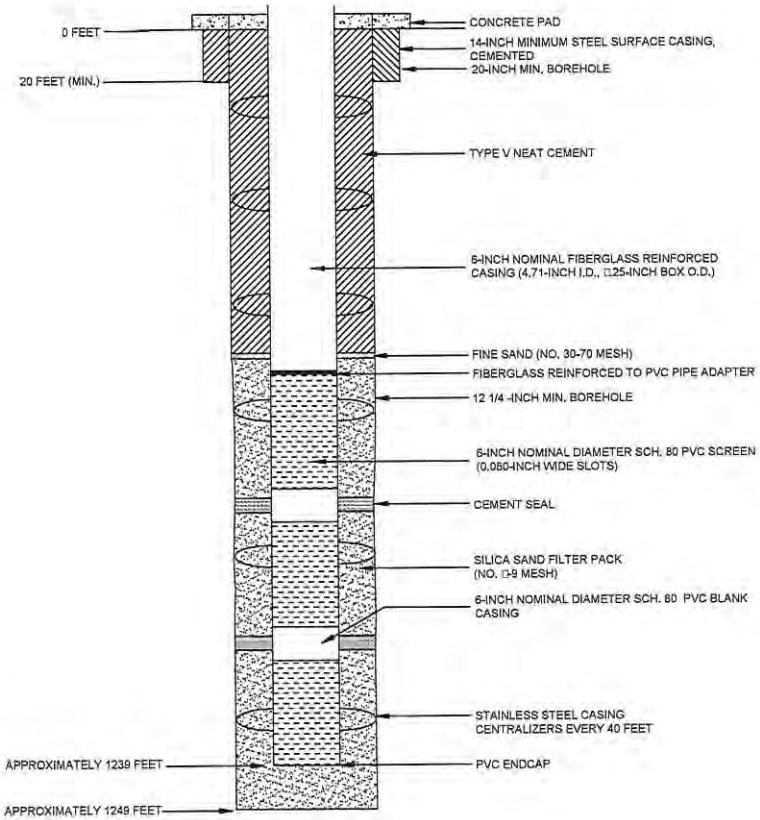
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

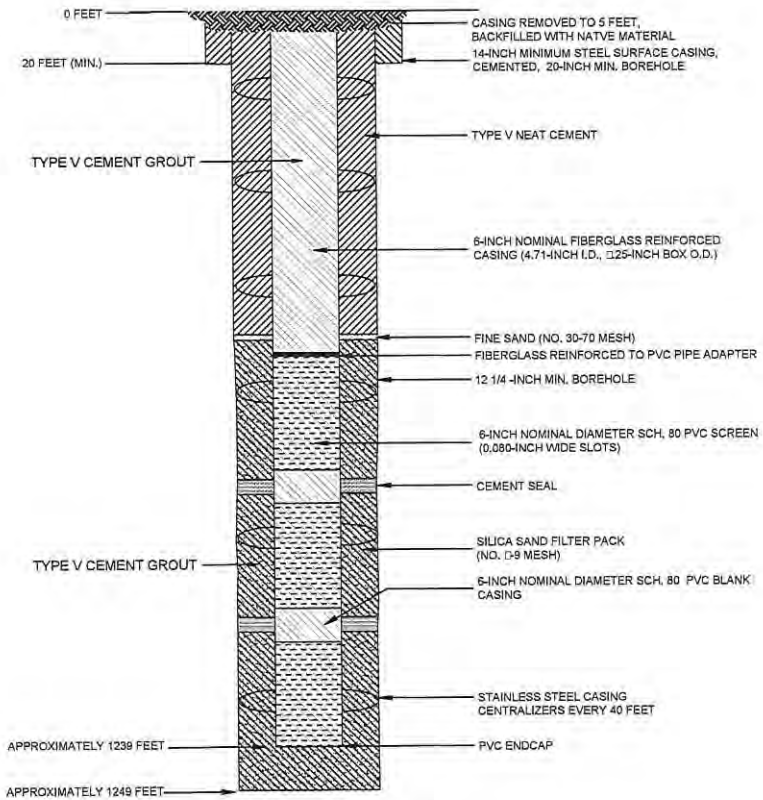
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 79
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-40

TABLE E-40
WELLS WITHIN RESOURCE BLOCK 79
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1767	847977	744859	79	560	600	1239
1768	848048	744859	79	560	600	1239
1772	847765	744576	79	560	600	1239
1773	847836	744647	79	560	600	1239
1774	847836	744717	79	560	600	1239
1775	847765	744647	79	560	600	1239
1776	847694	744576	79	560	600	1239
1777	847977	744788	79	560	600	1239
1778	847906	744788	79	560	600	1239
1779	847906	744717	79	560	600	1239
1900	847412	744858	79	560	600	1239
1901	847482	744929	79	560	600	1239
1902	847553	744859	79	560	600	1239
1903	847482	744859	79	560	600	1239
1912	847553	744788	79	560	600	1239
1913	847482	744788	79	560	600	1239
1915	847553	744717	79	560	600	1239
1919	847624	744646	79	560	600	1239
1920	847624	744788	79	560	600	1239
1921	847624	744717	79	560	600	1239
1922	847694	744646	79	560	600	1239
1923	847694	744717	79	560	600	1239
2055	847553	745000	79	560	600	1239
2056	847553	744929	79	560	600	1239
2057	847624	745071	79	560	600	1239
2058	847624	744859	79	560	600	1239
2059	847624	744929	79	560	600	1239
2060	847624	745000	79	560	600	1239
2061	847836	744859	79	560	600	1239
2062	847907	744929	79	560	600	1239
2065	847907	745000	79	560	600	1239
2066	847836	744929	79	560	600	1239
2067	847765	744859	79	560	600	1239
2068	847695	744929	79	560	600	1239
2069	847765	745000	79	560	600	1239
2070	847836	745071	79	560	600	1239
2074	847836	745000	79	560	600	1239
2075	847765	744929	79	560	600	1239
2076	847694	744859	79	560	600	1239

TABLE E-40
WELLS WITHIN RESOURCE BLOCK 79
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
2077	847695	745071	79	560	600	1239
2078	847765	745141	79	560	600	1239
2082	847765	745071	79	560	600	1239
2083	847695	745000	79	560	600	1239
2086	847695	745141	79	560	600	1239
2087	847907	744859	79	560	600	1239
2088	847977	744929	79	560	600	1239
2091	847765	744717	79	560	600	1239
2092	847765	744788	79	560	600	1239
2093	847694	744788	79	560	600	1239
2094	847836	744788	79	560	600	1239

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 80 Wells - See Attached Table E-41

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.046674

Longitude -111.432298

See Attached Table for Individual Well Coordinates.

Surface Location

SE 1/4 of SW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 80. There are 50 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 80. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-41.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson – VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

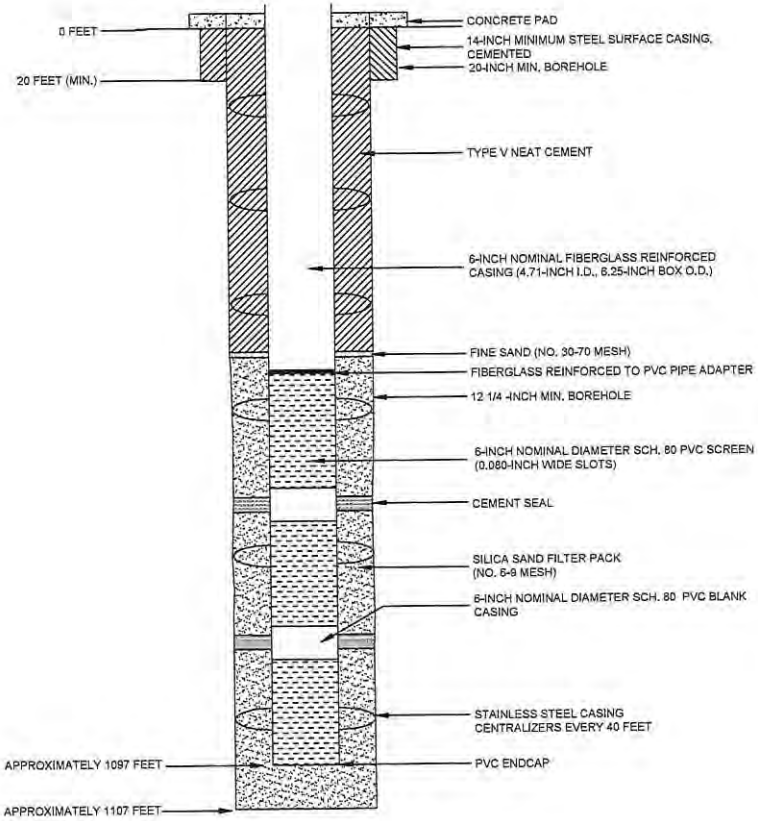
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

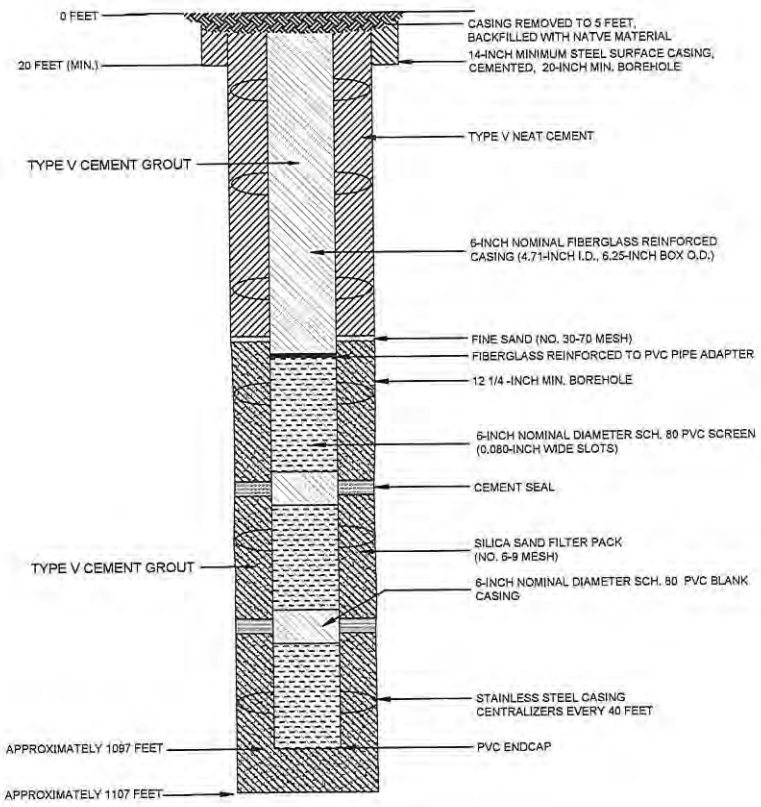
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 80
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-41

TABLE E-41
WELLS WITHIN RESOURCE BLOCK 80
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1254	848684	744859	80	380	420	1097
1255	848755	744859	80	632	672	1097
1260	848472	744576	80	632	672	1097
1261	848543	744646	80	632	672	1097
1262	848543	744717	80	632	672	1097
1263	848472	744646	80	632	672	1097
1264	848402	744576	80	632	672	1097
1270	848684	744788	80	632	672	1097
1271	848614	744788	80	632	672	1097
1272	848614	744717	80	632	672	1097
1684	848543	744859	80	632	672	1097
1685	848614	744929	80	632	672	1097
1688	848614	745000	80	632	672	1097
1689	848543	744929	80	632	672	1097
1690	848472	744859	80	632	672	1097
1691	848331	744859	80	632	672	1097
1692	848402	744929	80	632	672	1097
1693	848472	745000	80	632	672	1097
1694	848543	745071	80	632	672	1097
1698	848543	745000	80	632	672	1097
1699	848472	744929	80	632	672	1097
1700	848402	744859	80	632	672	1097
1701	848260	744929	80	632	672	1097
1702	848331	745000	80	632	672	1097
1703	848402	745071	80	632	672	1097
1704	848472	745141	80	632	672	1097
1708	848472	745071	80	632	672	1097
1709	848402	745000	80	632	672	1097
1710	848331	744929	80	632	672	1097
1711	848260	744859	80	632	672	1097
1714	848402	745141	80	632	672	1097
1715	848331	745071	80	632	672	1097
1716	848260	745000	80	632	672	1097
1717	848189	744929	80	632	672	1097
1723	848614	744859	80	632	672	1097
1724	848684	744929	80	632	672	1097
1731	848472	744717	80	632	672	1097
1732	848472	744788	80	632	672	1097
1733	848402	744717	80	632	672	1097

TABLE E-41
WELLS WITHIN RESOURCE BLOCK 80
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1734	848402	744788	80	632	672	1097
1735	848331	744788	80	632	672	1097
1736	848543	744788	80	632	672	1097
1787	848189	744859	80	632	672	1097
1788	848119	744859	80	632	672	1097
1804	848401	744647	80	632	672	1097
1805	848331	744647	80	632	672	1097
1812	848331	744717	80	632	672	1097
1813	848260	744717	80	632	672	1097
1824	848260	744788	80	632	672	1097
1825	848189	744788	80	632	672	1097

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 81 Wells - See Attached Table E-42

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.046665

Longitude -111.429989

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 81. There are 51 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 81. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-42.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

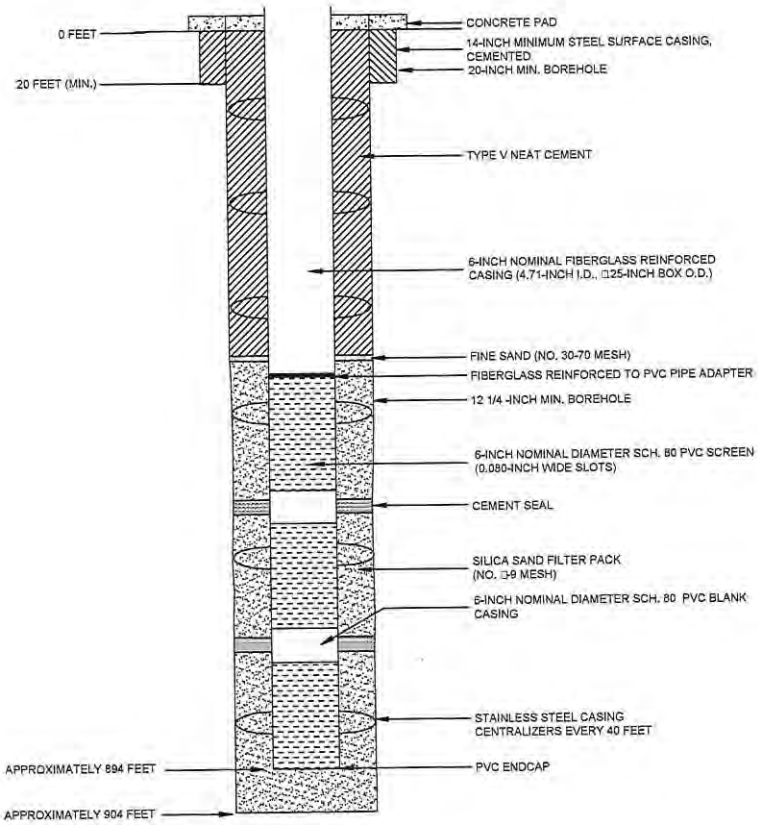
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

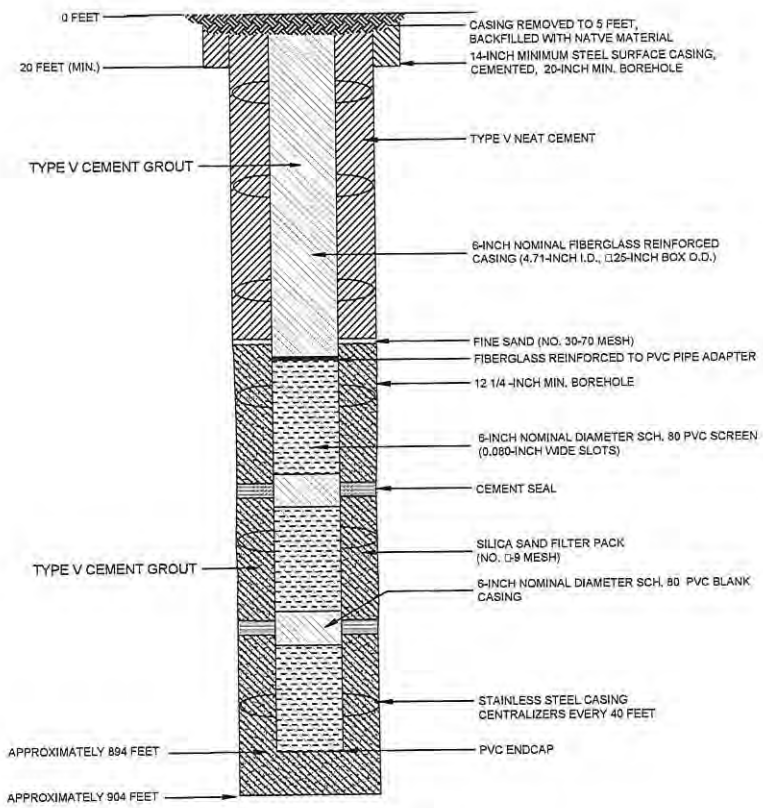
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 81
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-42

TABLE E-42
WELLS WITHIN RESOURCE BLOCK 81
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1099	849462	744859	81	402	442	894
1114	849391	744859	81	402	442	894
1123	849109	744576	81	402	442	894
1170	849180	744575	81	402	442	894
1171	849250	744646	81	402	442	894
1172	849179	744646	81	402	442	894
1173	849391	744788	81	402	442	894
1174	849321	744788	81	402	442	894
1175	849321	744717	81	402	442	894
1176	849250	744717	81	402	442	894
1363	848967	744859	81	402	442	894
1364	849038	744929	81	402	442	894
1365	848967	744929	81	402	442	894
1366	848897	744859	81	402	442	894
1367	848967	745000	81	402	442	894
1368	848897	744929	81	402	442	894
1369	848826	744859	81	402	442	894
1370	849109	744859	81	402	442	894
1371	849038	744859	81	402	442	894
1389	849038	744646	81	402	442	894
1395	848967	744717	81	402	442	894
1398	848896	744788	81	402	442	894
1401	849109	744788	81	402	442	894
1402	849038	744788	81	402	442	894
1403	848967	744788	81	402	442	894
1404	849109	744717	81	402	442	894
1405	849038	744717	81	402	442	894
1406	849109	744646	81	402	442	894
1416	849179	744788	81	402	442	894
1417	849179	744717	81	402	442	894
1508	849109	745000	81	402	442	894
1509	849109	745071	81	402	442	894
1510	849038	745000	81	402	442	894
1511	849109	745141	81	402	442	894
1512	849038	745071	81	402	442	894
1513	849109	744929	81	402	442	894
1514	849391	744929	81	402	442	894
1519	849321	745000	81	402	442	894
1529	849321	744929	81	402	442	894

TABLE E-42
WELLS WITHIN RESOURCE BLOCK 81
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1535	849250	745000	81	402	442	894
1536	849250	745071	81	402	442	894
1545	849179	745071	81	402	442	894
1546	849321	744859	81	402	442	894
1547	849179	744859	81	402	442	894
1548	849250	744859	81	402	442	894
1549	849250	744929	81	402	442	894
1550	849179	744929	81	402	442	894
1551	849179	745000	81	402	442	894
1552	849180	745140	81	402	442	894
1559	849250	744788	81	402	442	894
1706	848614	745212	81	402	442	894

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 82 Wells - See Attached Table E-43

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

[ ] ft. from (N/S) [ ] Line of quarter section

[ ] ft. from (E/W) [ ] Line of quarter section.

Latitude 33.046682

Longitude -111.427992

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
[ ] Class I [ ] Class II [✓] Class III [ ] Class V	[✓] Notice Prior to Work Date Expected to Commence January 2027 [ ] Report After Work Date Work Ended	[ ] Well Rework [✓] Plugging and Abandonment [ ] Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 82. There are 31 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 3 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 82. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-43a and E-43b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Don Johnson - VP, Gm		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

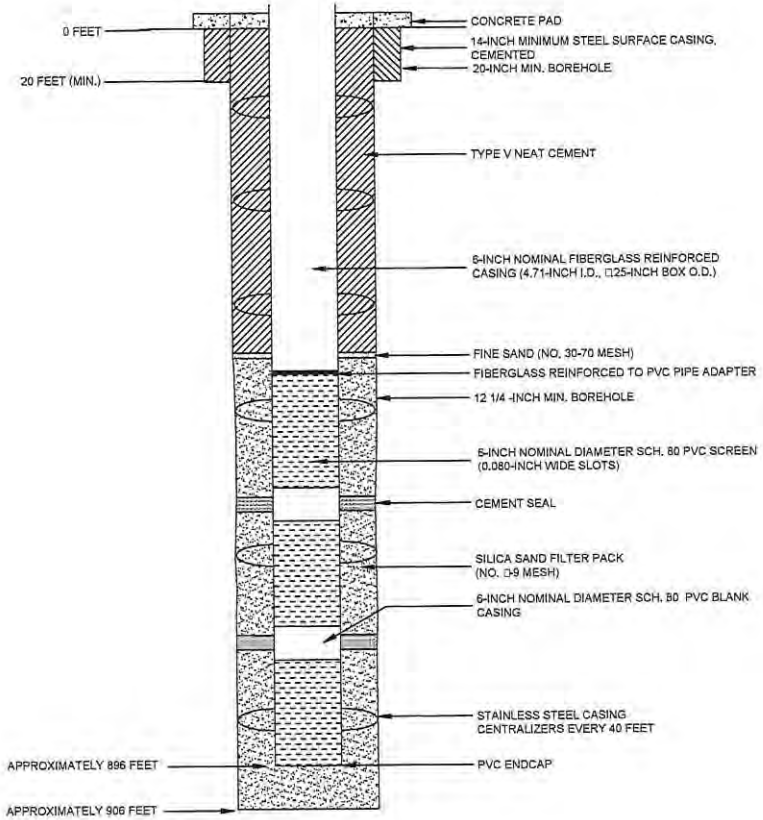
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

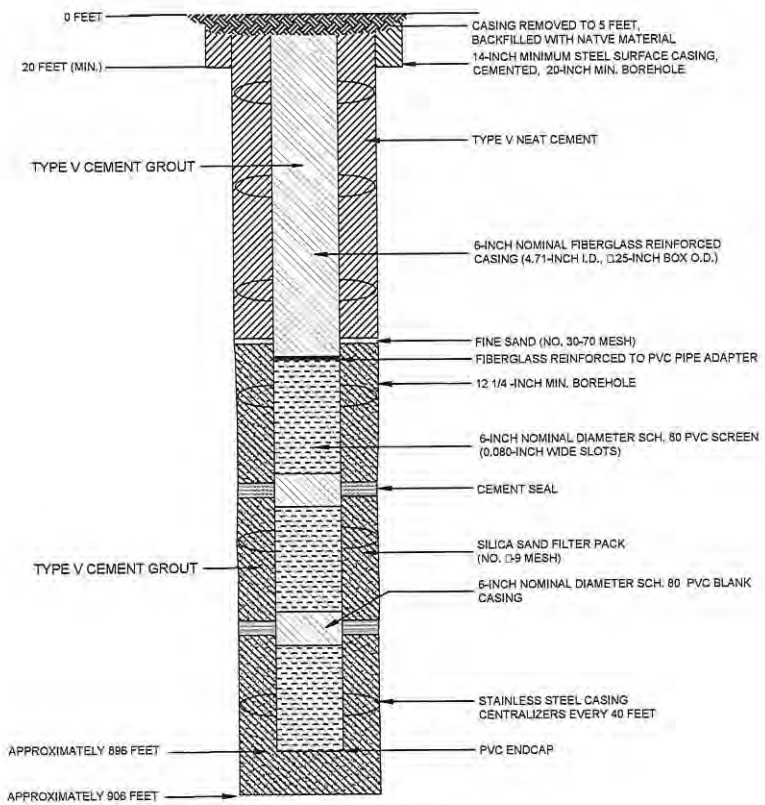
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

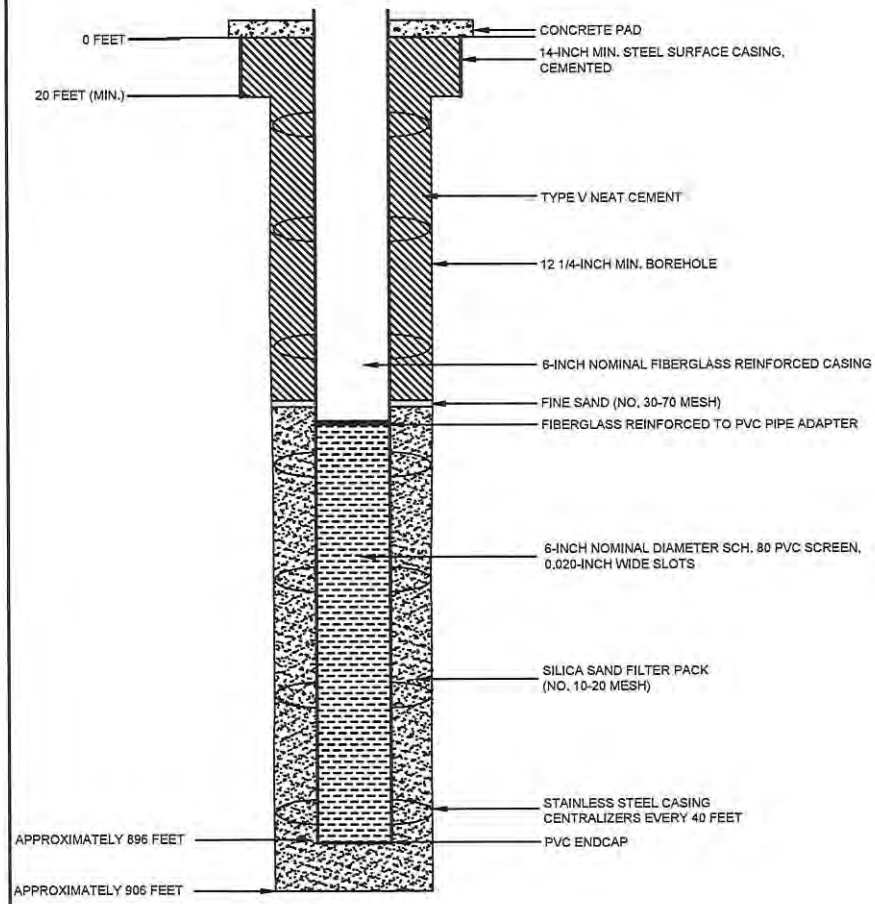
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 82
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

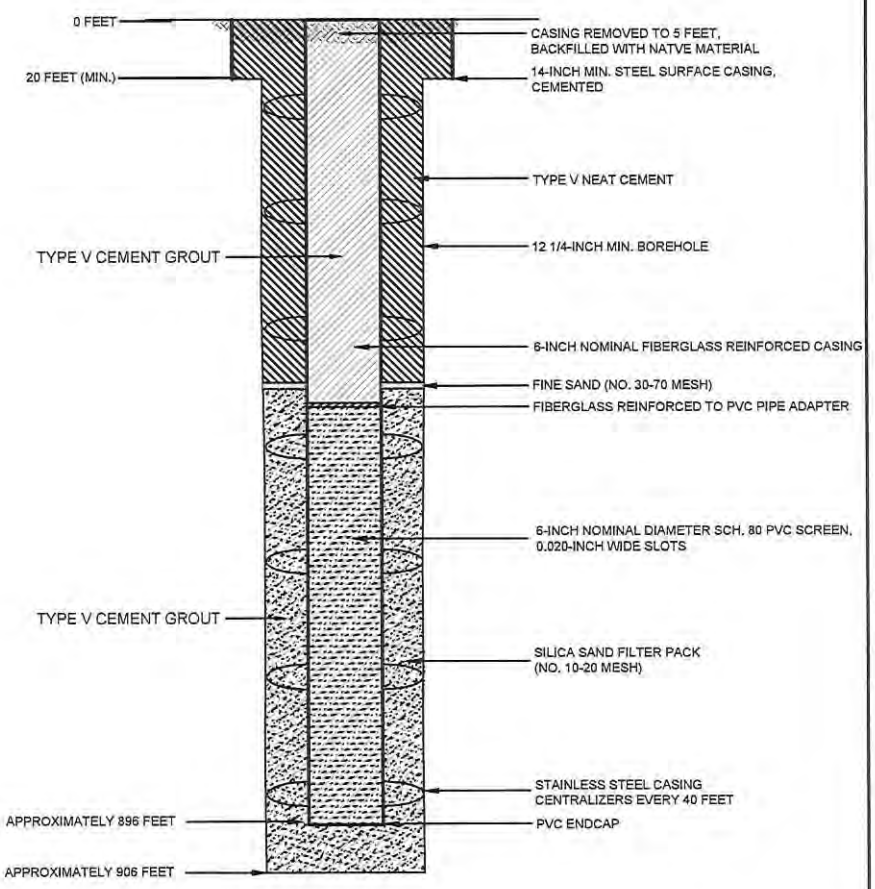
FIGURE E-43a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 82
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-43b

TABLE E-43
WELLS WITHIN RESOURCE BLOCK 82
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1092	849674	744859	82	393	433	896
1093	849745	744929	82	393	433	896
1094	849816	745000	82	393	433	896
1095	849816	745071	82	393	433	896
1096	849745	745000	82	393	433	896
1097	849674	744929	82	393	433	896
1098	849604	744859	82	393	433	896
1104	849816	745141	82	393	433	896
1105	849745	745071	82	393	433	896
1106	849674	745000	82	393	433	896
1107	849604	744929	82	393	433	896
1108	849533	744859	82	393	433	896
1115	849816	744859	82	393	433	896
1116	849745	744859	82	393	433	896
1117	849816	744929	82	393	433	896
1118	849886	745071	82	393	433	896
1119	849886	744929	82	393	433	896
1120	849886	745000	82	393	433	896
1121	849887	745141	82	393	433	896
1137	849745	744646	82	393	433	896
1148	849674	744717	82	393	433	896
1154	849604	744788	82	393	433	896
1177	849816	744788	82	393	433	896
1178	849745	744788	82	393	433	896
1179	849674	744788	82	393	433	896
1180	849816	744717	82	393	433	896
1181	849745	744717	82	393	433	896
1192	849957	745071	82	393	433	896
1198	849957	745000	82	393	433	896
1226	849816	744576	82	393	433	896
1230	849816	744646	82	393	433	896
O22	849957	744788	82	393	433	896
O21	850028	744929	82	393	433	896
P43	849886	744717	82	393	433	896
P42	849886	744859	82	393	433	896
P41	849957	744929	82	393	433	896
P40	850028	745000	82	393	433	896

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 87 Wells - See Attached Table E-44

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of NW 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.045744

Longitude -111.435476

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 87. There are 34 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 4 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 87. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-44a and E-44b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

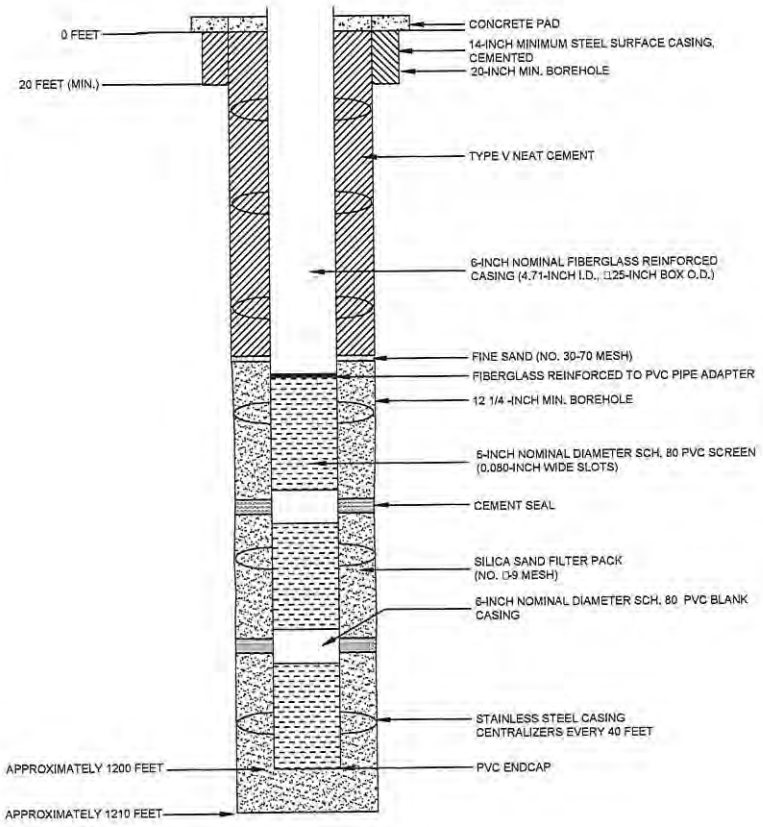
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

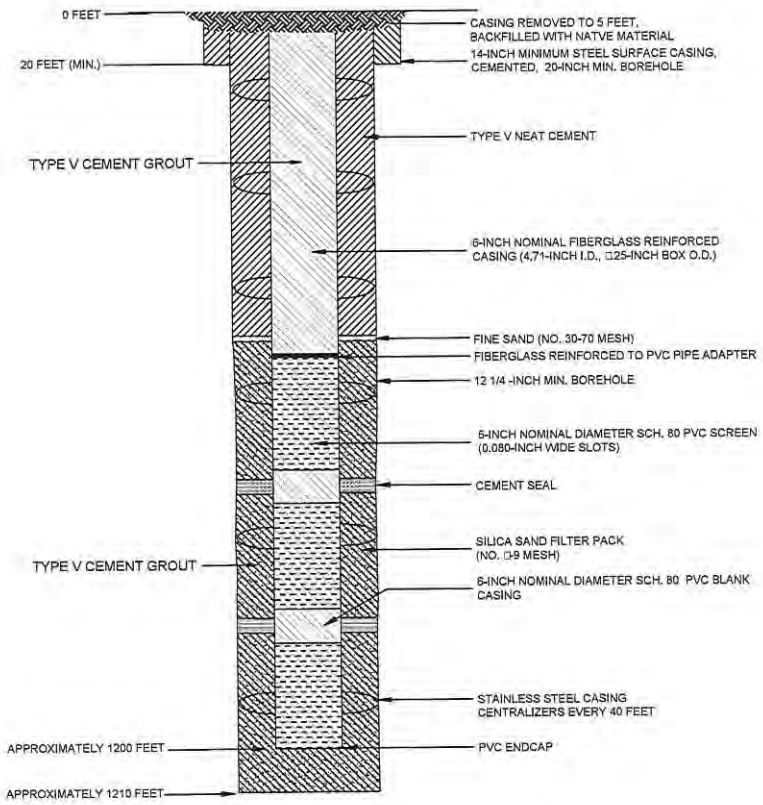
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

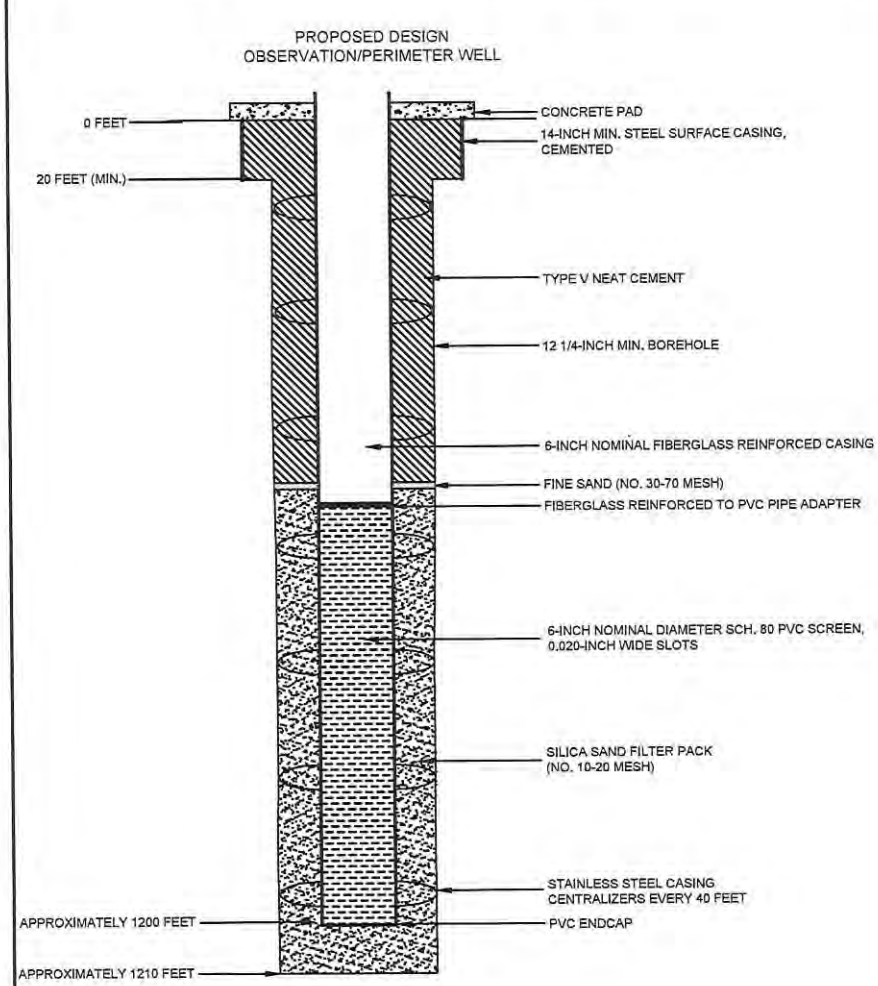
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

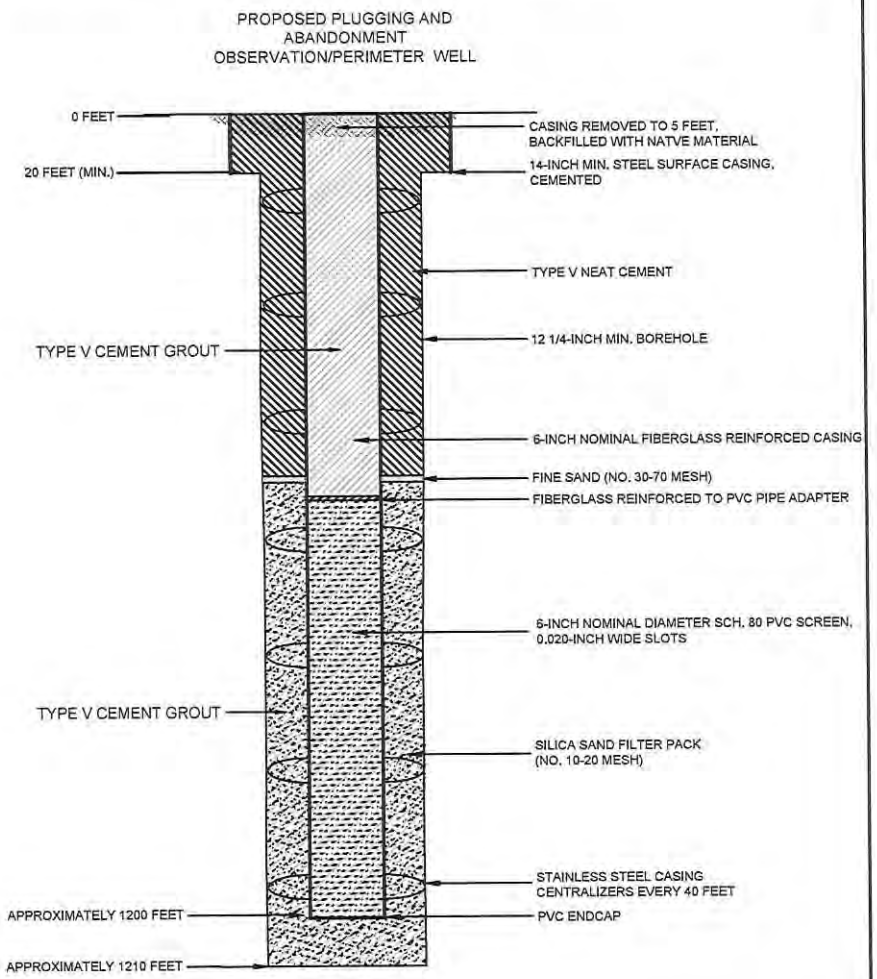
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 87
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-44a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 87
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-44b

TABLE E-44
WELLS WITHIN RESOURCE BLOCK 87
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1765	847624	744505	87	740	780	1200
1766	847624	744434	87	740	780	1200
1771	847694	744505	87	740	780	1200
1780	847411	744293	87	740	780	1200
1781	847482	744364	87	740	780	1200
1782	847553	744434	87	740	780	1200
1783	847482	744293	87	740	780	1200
1784	847553	744364	87	740	780	1200
1786	847411	744222	87	740	780	1200
1904	847553	744505	87	740	780	1200
1905	847482	744576	87	740	780	1200
1906	847553	744576	87	740	780	1200
1907	847412	744646	87	740	780	1200
1908	847482	744646	87	740	780	1200
1909	847341	744717	87	740	780	1200
1910	847412	744717	87	740	780	1200
1911	847341	744788	87	740	780	1200
1914	847412	744788	87	740	780	1200
1916	847482	744717	87	740	780	1200
1917	847553	744646	87	740	780	1200
1918	847625	744575	87	740	780	1200
1925	847482	744434	87	740	780	1200
1926	847412	744364	87	740	780	1200
1930	847341	744434	87	740	780	1200
1931	847412	744505	87	740	780	1200
1932	847482	744505	87	740	780	1200
1933	847412	744434	87	740	780	1200
1934	847341	744364	87	740	780	1200
1939	847341	744576	87	740	780	1200
1940	847412	744576	87	740	780	1200
1941	847341	744505	87	740	780	1200
1948	847270	744646	87	740	780	1200
1949	847341	744646	87	740	780	1200
1954	847270	744717	87	740	780	1200
O33	847270	744222	87	740	780	1200
O34	847200	744505	87	740	780	1200
P64	847341	744152	87	740	780	1200
P65	847341	744293	87	740	780	1200
P66	847270	744434	87	740	780	1200
P67	847270	744576	87	740	780	1200

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 88 Wells - See Attached Table E-45

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of NW 1/4 of Section 33 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.045677

Longitude -111.433451

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 88. There are 49 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 88. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-45.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

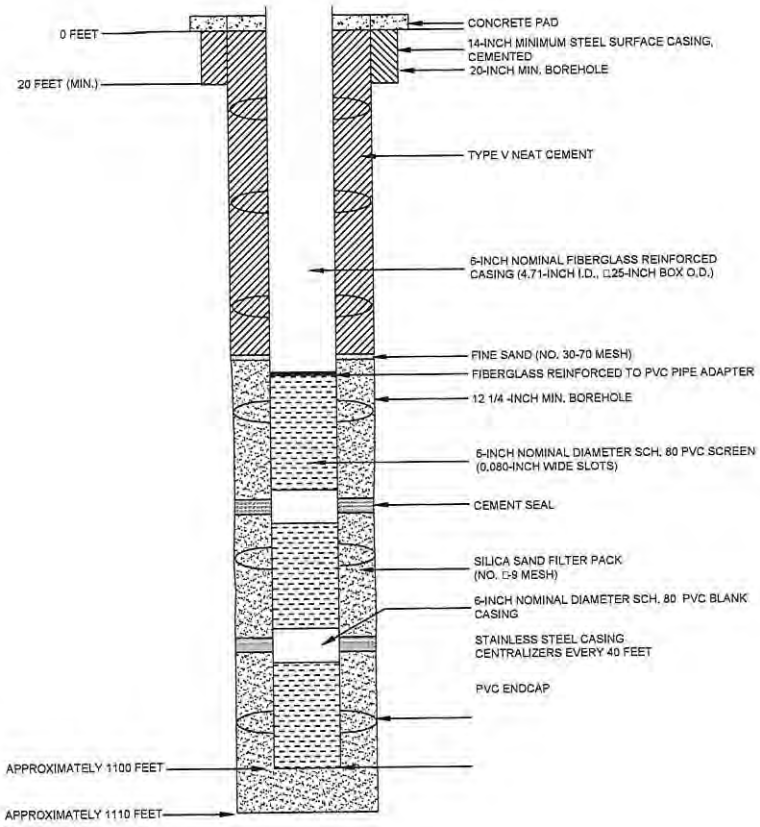
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

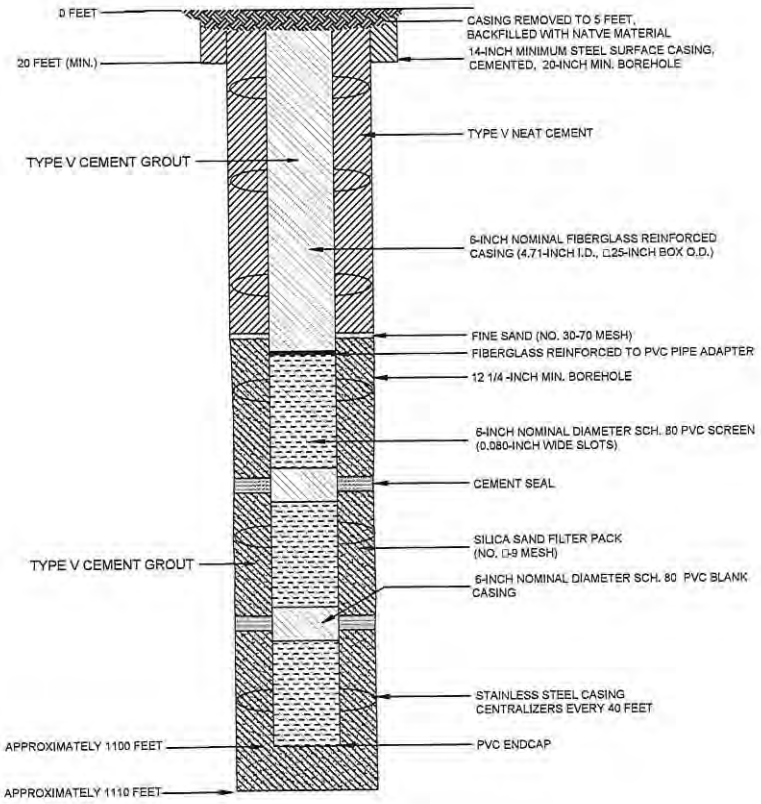
CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 88
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-45

TABLE E-45
WELLS WITHIN RESOURCE BLOCK 88
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1257	848260	744364	88	560	600	1100
1258	848331	744434	88	560	600	1100
1259	848402	744505	88	560	600	1100
1265	848331	744505	88	560	600	1100
1266	848260	744434	88	560	600	1100
1267	848189	744364	88	560	600	1100
1268	848189	744293	88	560	600	1100
1269	848119	744293	88	560	600	1100
1289	848048	744222	88	560	600	1100
1789	847977	744434	88	560	600	1100
1790	847977	744505	88	560	600	1100
1791	847906	744434	88	560	600	1100
1866	847977	744293	88	560	600	1100
1864	847765	744505	88	560	600	1100
1861	847836	744434	88	560	600	1100
1856	847906	744364	88	560	600	1100
1830	848048	744717	88	560	600	1100
1829	848119	744717	88	560	600	1100
1828	848189	744717	88	560	600	1100
1827	848048	744788	88	560	600	1100
1826	848119	744788	88	560	600	1100
1823	848048	744647	88	560	600	1100
1792	847836	744505	88	560	600	1100
1793	847906	744576	88	560	600	1100
1794	847977	744576	88	560	600	1100
1795	847906	744505	88	560	600	1100
1796	847906	744647	88	560	600	1100
1797	847836	744576	88	560	600	1100
1798	847977	744717	88	560	600	1100
1799	847977	744647	88	560	600	1100
1800	847977	744364	88	560	600	1100
1801	848189	744435	88	560	600	1100
1822	848119	744647	88	560	600	1100
1821	848049	744575	88	560	600	1100
1820	848048	744434	88	560	600	1100
1819	848048	744364	88	560	600	1100
1818	848119	744364	88	560	600	1100
1817	848048	744293	88	560	600	1100
1816	848048	744505	88	560	600	1100

TABLE E-45
WELLS WITHIN RESOURCE BLOCK 88
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1815	848119	744576	88	560	600	1100
1814	848189	744647	88	560	600	1100
1811	848260	744647	88	560	600	1100
1810	848189	744576	88	560	600	1100
1809	848119	744505	88	560	600	1100
1808	848119	744434	88	560	600	1100
1807	848189	744505	88	560	600	1100
1806	848260	744576	88	560	600	1100
1803	848331	744576	88	560	600	1100
1802	848260	744505	88	560	600	1100

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-I		Block 89 Wells - See Attached Table E-46

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Latitude 33.045680

Longitude -111.431128

See Attached Table for Individual Well Coordinates.

Surface Location

NE 1/4 of NW 1/4 of Section 33 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 89. There are 50 Class III multi-use injection/ recovery wells, planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out.

The work performed includes plugging and abandonment of the Class III wells in resource block 89. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figure E-46.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson – VP, Gen		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

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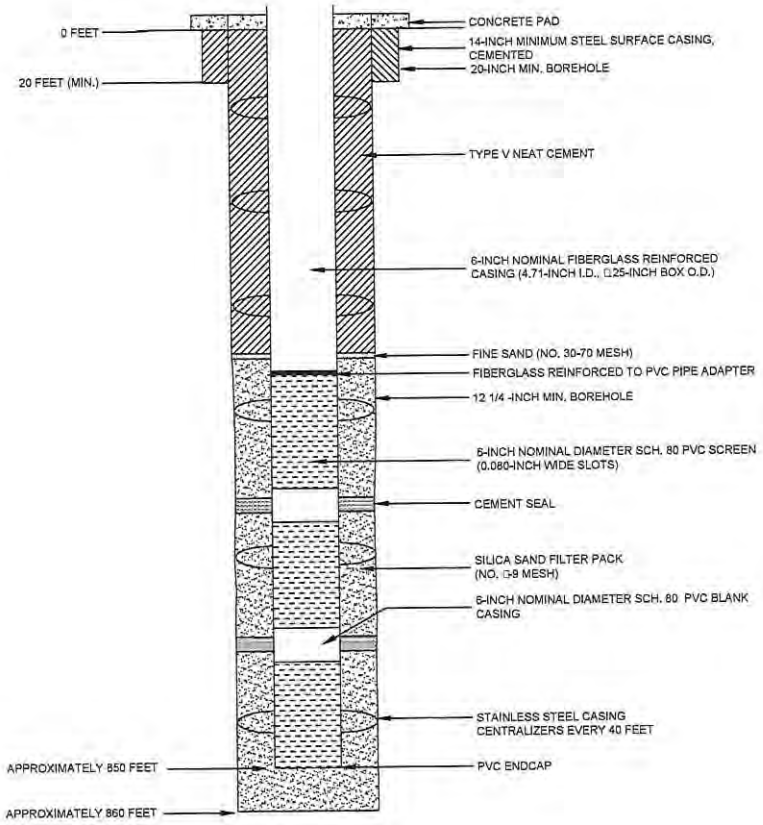
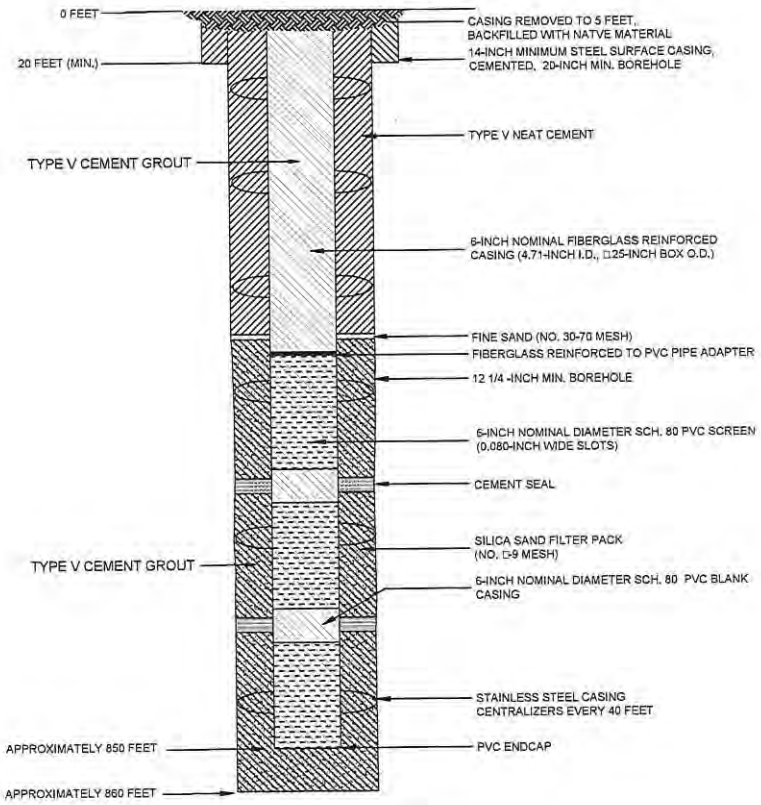
PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 89
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-46

TABLE E-46
WELLS WITHIN RESOURCE BLOCK 89
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1296	848614	744364	89	390	430	850
1297	848684	744434	89	390	430	850
1298	848684	744505	89	390	430	850
1299	848614	744434	89	390	430	850
1305	848543	744505	89	390	430	850
1306	848614	744576	89	390	430	850
1307	848684	744576	89	390	430	850
1308	848614	744505	89	390	430	850
1309	848543	744434	89	390	430	850
1313	848543	744576	89	390	430	850
1312	848614	744646	89	390	430	850
1318	848684	744717	89	390	430	850
1314	848472	744505	89	390	430	850
1320	848684	744293	89	390	430	850
1319	848684	744646	89	390	430	850
1322	848684	744364	89	390	430	850
1323	848755	744505	89	390	430	850
1324	848755	744293	89	390	430	850
1325	848755	744364	89	390	430	850
1326	848755	744434	89	390	430	850
1327	848756	744575	89	390	430	850
1328	848755	744646	89	390	430	850
1329	848755	744788	89	390	430	850
1330	848755	744717	89	390	430	850
1362	848755	744222	89	390	430	850
1375	849109	744505	89	390	430	850
1376	849038	744434	89	390	430	850
1377	848967	744364	89	390	430	850
1378	848896	744293	89	390	430	850
1379	848826	744364	89	390	430	850
1380	848896	744434	89	390	430	850
1381	848967	744505	89	390	430	850
1382	849038	744576	89	390	430	850
1383	849038	744505	89	390	430	850
1384	848967	744434	89	390	430	850
1385	848896	744364	89	390	430	850
1386	848826	744293	89	390	430	850
1387	848826	744505	89	390	430	850
1388	848896	744576	89	390	430	850

TABLE E-46
WELLS WITHIN RESOURCE BLOCK 89
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1390	848967	744576	89	390	430	850
1391	848896	744505	89	390	430	850
1392	848826	744434	89	390	430	850
1393	848826	744646	89	390	430	850
1394	848896	744717	89	390	430	850
1396	848896	744646	89	390	430	850
1397	848826	744576	89	390	430	850
1399	848826	744717	89	390	430	850
1400	848826	744788	89	390	430	850
1421	848826	744222	89	390	430	850
1462	848967	744646	89	390	430	850

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 90 Wells - See Attached Table E-47

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SW 1/4 of SE 1/4 of Section 28 Township 4S Range 9E

____ ft. from (N/S) ____ Line of quarter section

____ ft. from (E/W) ____ Line of quarter section.

Latitude 33.046065

Longitude -111.428845

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 90. There are 29 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 5 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 90. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-47a and E-47b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson – VP, Gen		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

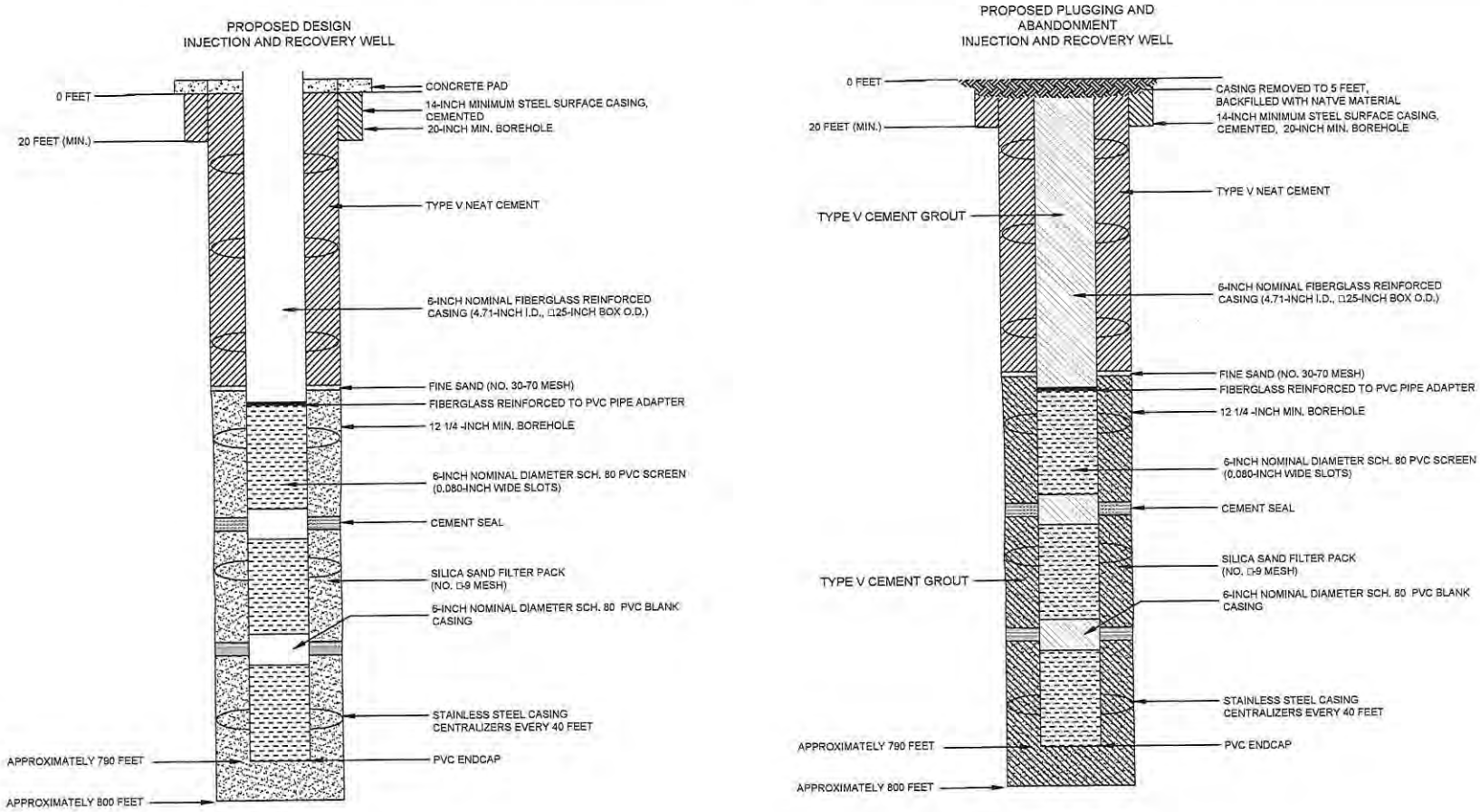
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

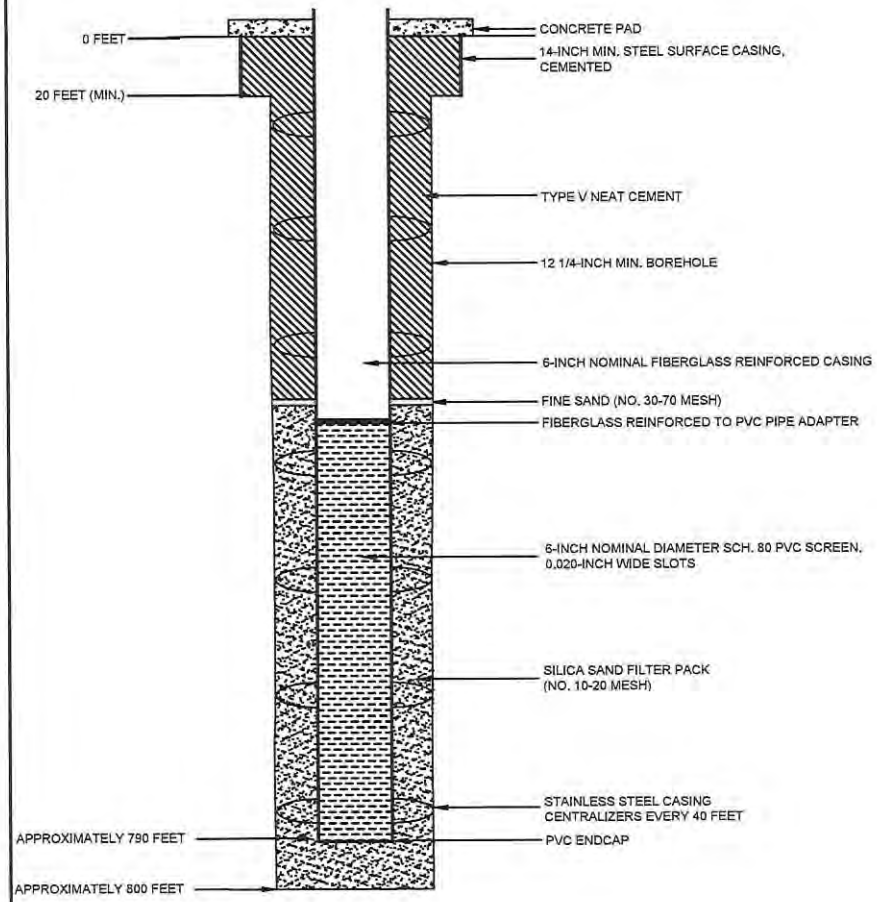
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 90
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

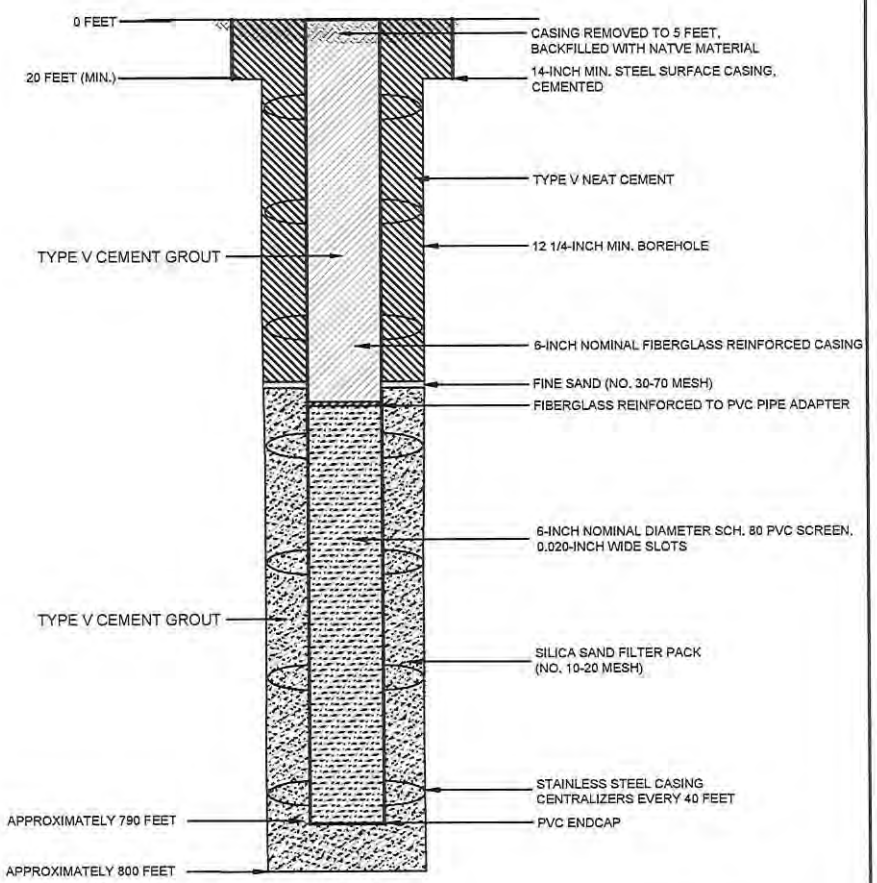
FIGURE E-47a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 90
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-47b

TABLE E-47
WELLS WITHIN RESOURCE BLOCK 90
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1127	849674	744505	90	385	425	790
1128	849745	744505	90	385	425	790
1134	849533	744505	90	385	425	790
1135	849604	744576	90	385	425	790
1136	849674	744646	90	385	425	790
1138	849674	744576	90	385	425	790
1139	849604	744505	90	385	425	790
1144	849391	744505	90	385	425	790
1145	849462	744576	90	385	425	790
1146	849533	744646	90	385	425	790
1147	849604	744717	90	385	425	790
1149	849604	744646	90	385	425	790
1150	849533	744576	90	385	425	790
1151	849462	744505	90	385	425	790
1155	849533	744717	90	385	425	790
1156	849462	744646	90	385	425	790
1157	849391	744576	90	385	425	790
1158	849321	744505	90	385	425	790
1160	849250	744505	90	385	425	790
1161	849321	744576	90	385	425	790
1162	849391	744646	90	385	425	790
1163	849462	744717	90	385	425	790
1164	849533	744788	90	385	425	790
1165	849462	744788	90	385	425	790
1166	849391	744717	90	385	425	790
1167	849321	744646	90	385	425	790
1168	849250	744576	90	385	425	790
1169	849179	744505	90	385	425	790
1225	849745	744576	90	385	425	790
O23	849816	744364	90	385	425	790
O24	849533	744364	90	385	425	790
P44	849886	744434	90	385	425	790
P45	849745	744434	90	385	425	790
P46	849604	744434	90	385	425	790
P47	849462	744434	90	385	425	790
P48	849321	744434	90	385	425	790

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 96 Wells - See Attached Table E-48

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of NW 1/4 of Section 28 Township 4S Range 9E

ft. from (N/S) Line of quarter section

ft. from (E/W) Line of quarter section.

Latitude 33.045109

Longitude -111.434644

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 96. There are 30 Class III multi-use injection/ recovery wells, 3 dedicated Class III observation, and 5 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 96. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-48a and E-48b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

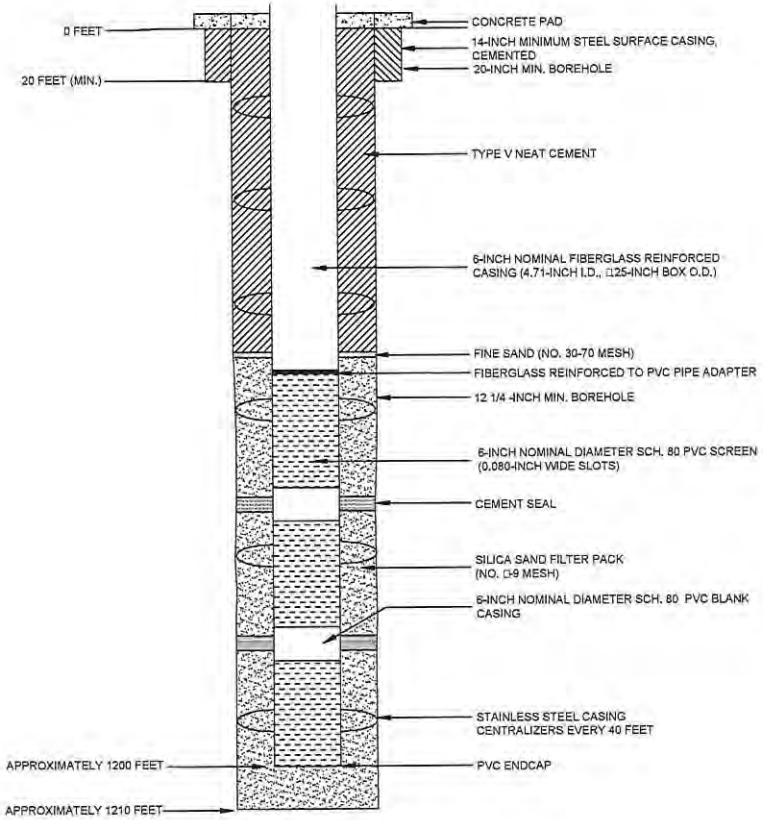
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

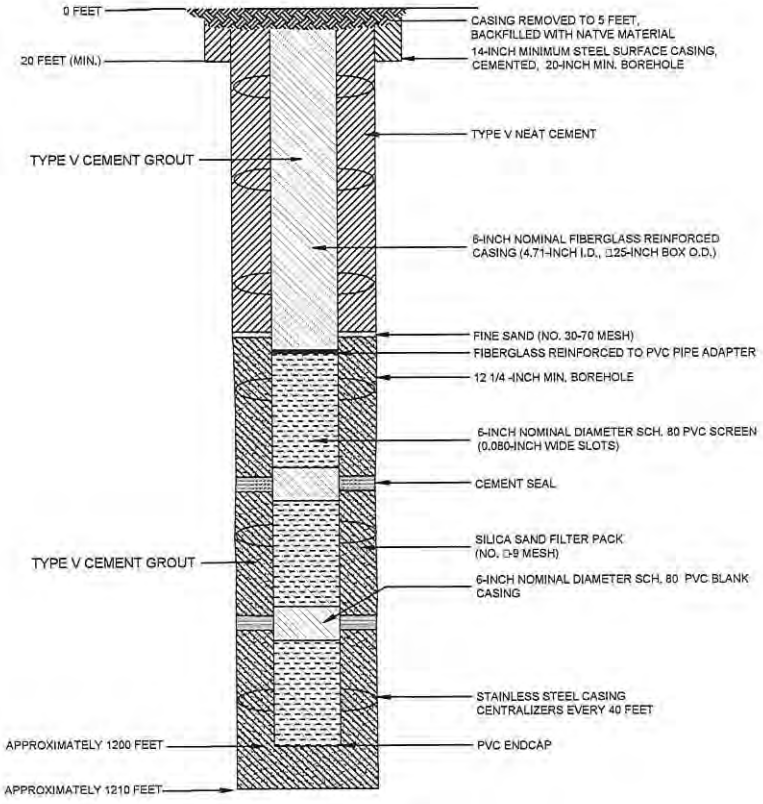
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

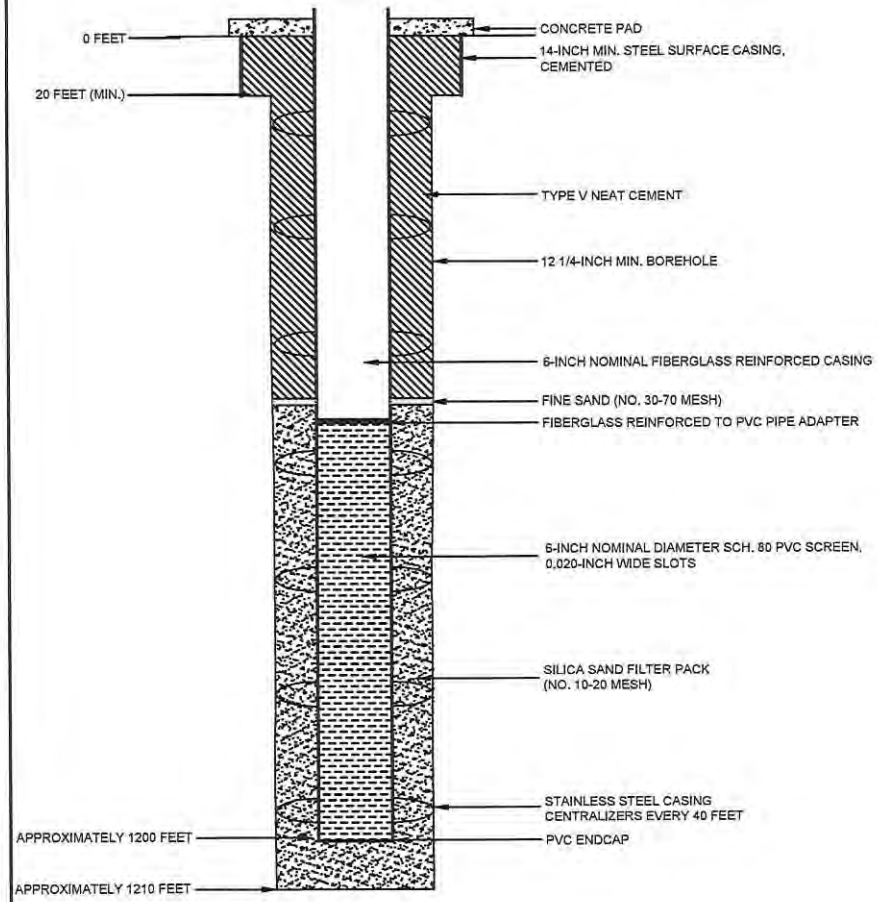
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 96
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

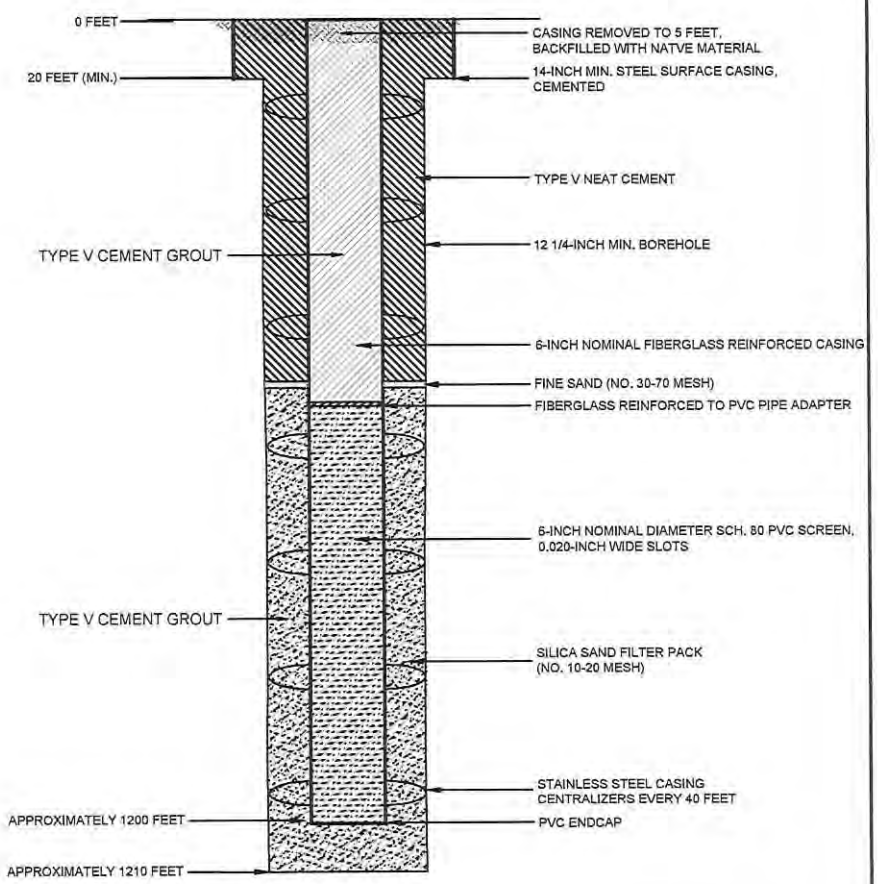
FIGURE E-48a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 96
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-48b

TABLE E-48
WELLS WITHIN RESOURCE BLOCK 96
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1287	847977	744151	96	740	780	1200
1290	848048	744151	96	740	780	1200
1831	847553	744293	96	740	780	1200
1832	847624	744293	96	740	780	1200
1833	847624	744364	96	740	780	1200
1842	847411	744152	96	740	780	1200
1844	847553	744222	96	740	780	1200
1845	847482	744222	96	740	780	1200
1846	847553	744152	96	740	780	1200
1847	847482	744152	96	740	780	1200
1853	847624	744222	96	740	780	1200
1854	847624	744152	96	740	780	1200
1855	847836	744293	96	740	780	1200
1857	847836	744364	96	740	780	1200
1858	847765	744293	96	740	780	1200
1859	847694	744364	96	740	780	1200
1860	847765	744434	96	740	780	1200
1862	847765	744364	96	740	780	1200
1863	847694	744293	96	740	780	1200
1865	847694	744434	96	740	780	1200
1867	847906	744293	96	740	780	1200
1872	847765	744152	96	740	780	1200
1873	847836	744152	96	740	780	1200
1876	847765	744222	96	740	780	1200
1877	847694	744152	96	740	780	1200
1878	847694	744222	96	740	780	1200
1879	847977	744222	96	740	780	1200
1880	847906	744222	96	740	780	1200
1881	847836	744222	96	740	780	1200
1882	847906	744152	96	740	780	1200
O30	848119	744010	96	740	780	1200
O31	847836	744010	96	740	780	1200
O32	847553	744010	96	740	780	1200
P59	848048	744081	96	740	780	1200
P60	847906	744081	96	740	780	1200
P61	847765	744081	96	740	780	1200
P62	847624	744081	96	740	780	1200
P63	847482	744081	96	740	780	1200

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 97 Wells - See Attached Table E-49

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NE 1/4 of NW 1/4 of Section 28 Township 4S Range 9E

_____ ft. from (N/S) _____ Line of quarter section

_____ ft. from (E/W) _____ Line of quarter section.

Latitude 33.045064

Longitude -111.432321

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
☐ Class I ☐ Class II ☑ Class III ☐ Class V	☑ Notice Prior to Work Date Expected to Commence January 2027 ☐ Report After Work Date Work Ended	☐ Well Rework ☑ Plugging and Abandonment ☐ Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 97. There are 30 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 5 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 97. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-49a and E-49b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

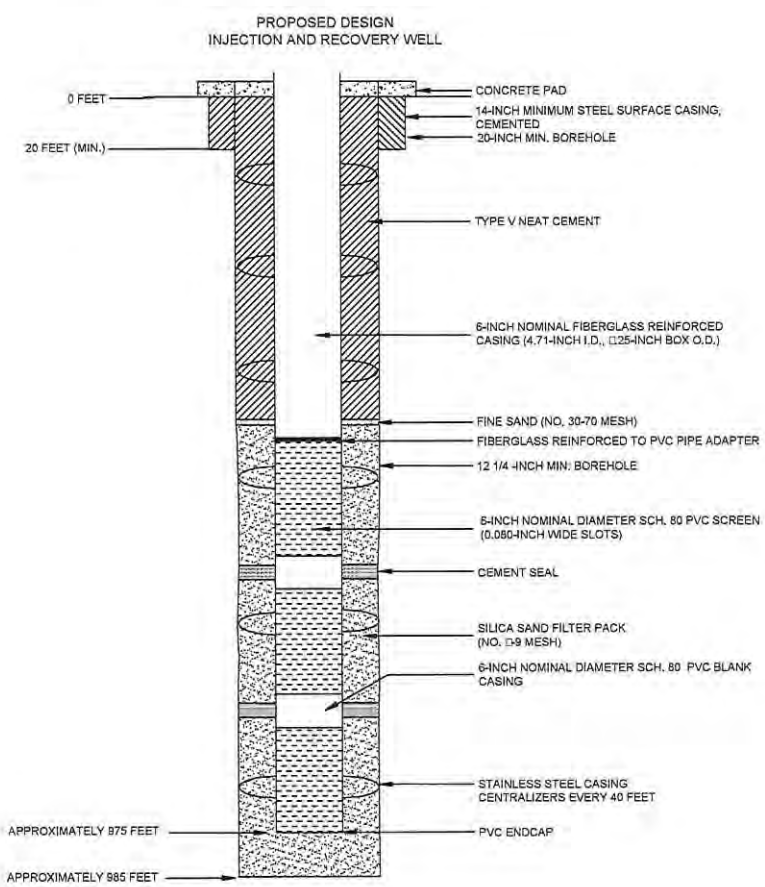
For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

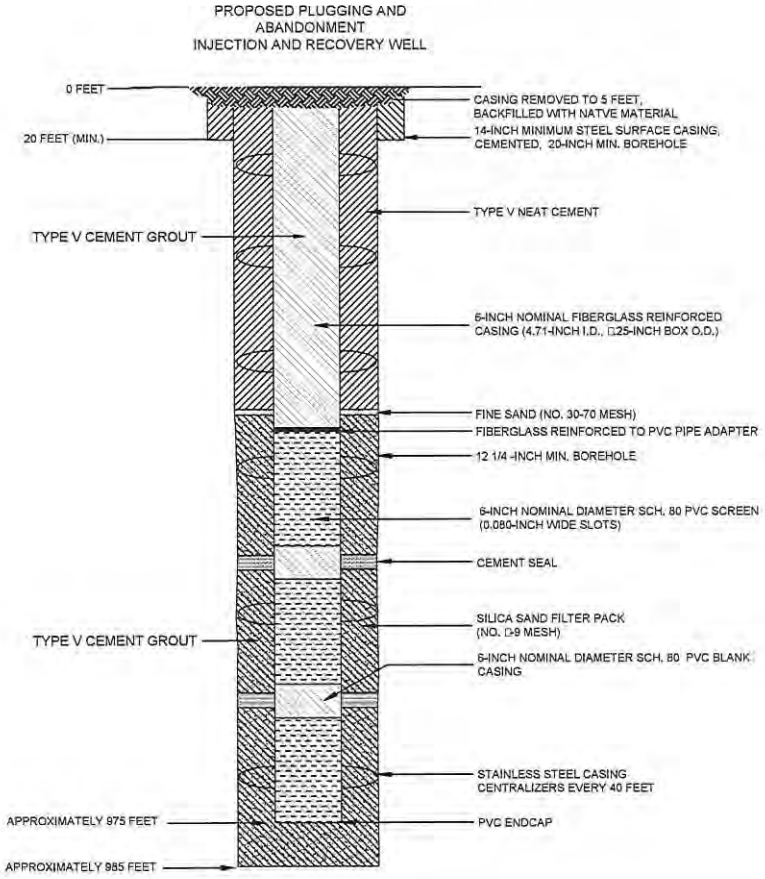
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG





NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

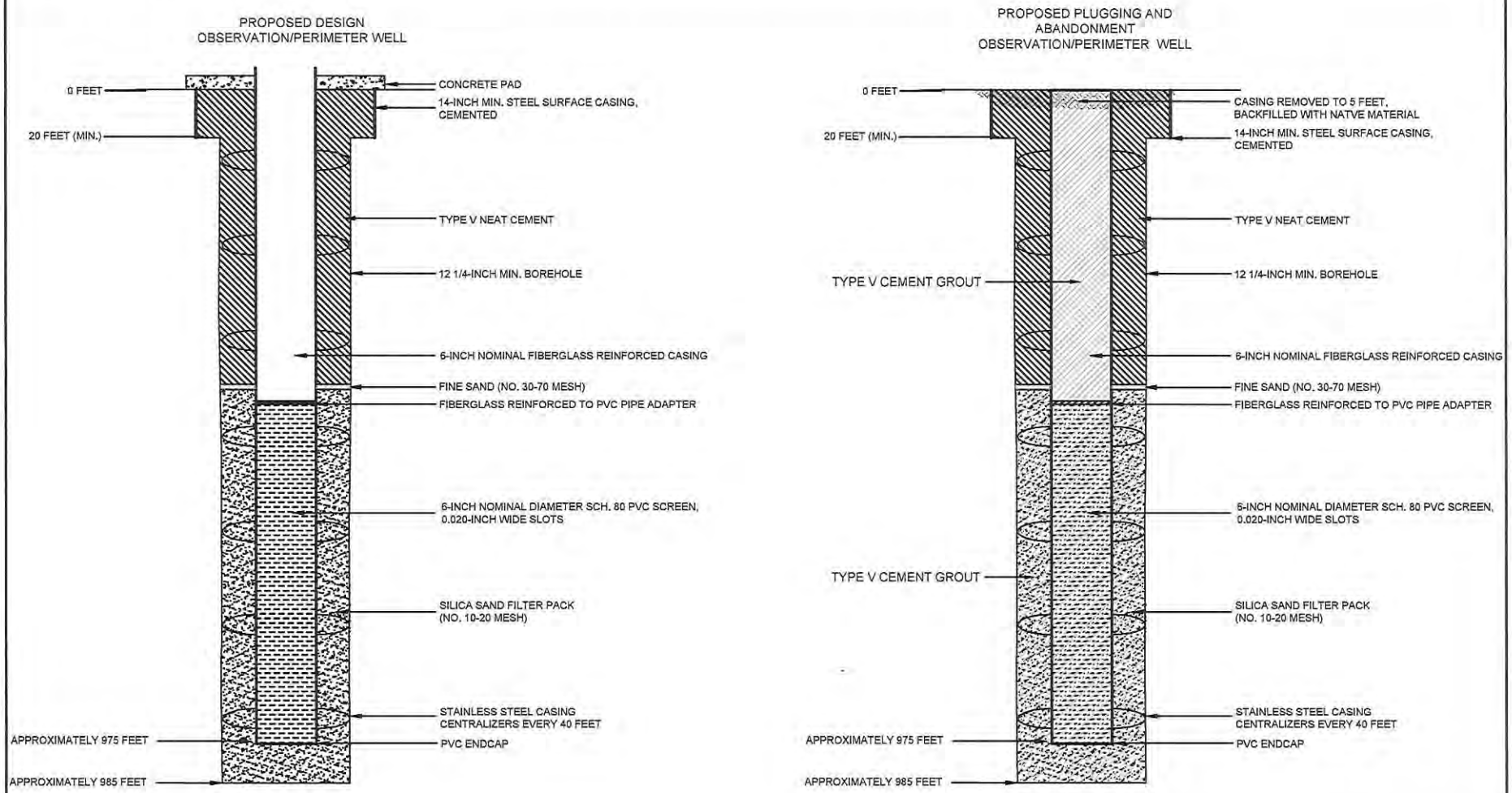
FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 97
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

FIGURE E-49a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 97
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-49b

TABLE E-49
WELLS WITHIN RESOURCE BLOCK 97
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1295	848543	744293	97	475	485	975
1300	848543	744364	97	475	485	975
1301	848472	744293	97	475	485	975
1302	848331	744293	97	475	485	975
1303	848402	744364	97	475	485	975
1304	848472	744434	97	475	485	975
1310	848472	744364	97	475	485	975
1311	848402	744293	97	475	485	975
1315	848402	744434	97	475	485	975
1316	848331	744364	97	475	485	975
1317	848260	744293	97	475	485	975
1321	848614	744293	97	475	485	975
1342	848543	744152	97	475	485	975
1343	848472	744222	97	475	485	975
1344	848401	744152	97	475	485	975
1345	848401	744222	97	475	485	975
1346	848331	744222	97	475	485	975
1347	848260	744151	97	475	485	975
1354	848260	744222	97	475	485	975
1355	848189	744222	97	475	485	975
1356	848189	744151	97	475	485	975
1357	848119	744151	97	475	485	975
1358	848684	744222	97	475	485	975
1359	848614	744222	97	475	485	975
1360	848543	744222	97	475	485	975
1361	848684	744152	97	475	485	975
1432	848331	744151	97	475	485	975
1433	848614	744152	97	475	485	975
1434	848472	744152	97	475	485	975
1435	848755	744151	97	475	485	975
O28	848684	744010	97	475	485	975
O29	848401	744010	97	475	485	975
P54	848755	744081	97	475	485	975
P55	848614	744081	97	475	485	975
P56	848472	744081	97	475	485	975
P57	848331	744081	97	475	485	975
P58	848189	744081	97	475	485	975

Notes:

ft bgs = feet below ground surface

OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

EPA

WELL REWORK RECORD, PLUGGING AND ABANDONMENT PLAN, OR PLUGGING AND ABANDONMENT AFFIDAVIT

Name and Address, Phone Number and/or Email of Permittee

Florence Copper Project
1575 W Hunt Hwy,
Florence, AZ 85132

Permit or EPA ID Number	API Number	Full Well Name
R9UIC-AZ3-FY11-1		Block 98 Wells - See Attached Table E-50

State	County
Arizona	Pinal

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

NW 1/4 of NE 1/4 of Section 28 Township 4S Range 9E

[ ] ft. from (N/S) [ ] Line of quarter section

[ ] ft. from (E/W) [ ] Line of quarter section.

Latitude 33.045068

Longitude -111.430281

See Attached Table for Individual Well Coordinates.

Well Class	Timing of Action (pick one)	Type of Action (pick one)
[ ] Class I [ ] Class II [✓] Class III [ ] Class V	[✓] Notice Prior to Work Date Expected to Commence January 2027 [ ] Report After Work Date Work Ended	[ ] Well Rework [✓] Plugging and Abandonment [ ] Conversion to a Non-Injection Well

Provide a narrative description of the work planned to be performed, or that was performed. Use additional pages as necessary. See instructions.

This plugging and abandonment applies to wells Class III wells to be constructed in block 98. There are 15 Class III multi-use injection/ recovery wells, 2 dedicated Class III observation, and 5 Class III perimeter wells planned for construction in this block. The injection and recovery wells will be of uniform design, and will be used for injection and recovery on an alternate basis. Some of the injection and recovery wells will be used as perimeter and observation wells prior to well field build-out. The dedicated perimeter observation well will have a design and depth similar to the injection and recovery wells, but will not have a segmented well screen.

The work performed includes plugging and abandonment of the Class III wells in resource block 98. Plugging and abandonment will be accomplished following procedures defined in Attachment E of the application to modify UIC R9UIC-AZ3-FY11-1. Plugging and abandonment details are shown on the attached Figures E-50a and E-50b.

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dan Johnson - VP, GM		9/3/19

INSTRUCTIONS FOR FORM 7520-19

This form replaces forms 7520-12 and 7520-14. Use this form only when work is planned or has occurred that affects the well's construction or operation as an injection well, including work on the casing, tubing or packer (or for shallow Class V wells, the subsurface fluid emplacement network). Use one form per injection well. While reports or other information developed by contractors or service companies may be attached, this form must be signed by a responsible entity as described at 40 CFR 144.32. Note: operators closing Class V wells should use Form 7520-17.

NAME, ADDRESS, PHONE AND/OR EMAIL OF PERMITTEE: Enter the name and street address, city/town, state, and ZIP code of the permittee. Also provide an email address (if available) and/or a phone number.

PERMIT OR EPA ID NUMBER: Enter the well identification number or permit number assigned to the well by the EPA or the permitting authority.

API NUMBER: Enter the number assigned by the local jurisdiction (usually a State Oil and Gas Agency) using the American Petroleum Institute standard numbering system.

FULL WELL NAME: Enter the full name of the well or project.

Enter the **STATE** and **COUNTY** where the well is located. For States that do not have counties, use the name of that State's equivalent jurisdiction at a more local level.

WELL LOCATION: Fill in the complete township, range, and section to the nearest quarter-quarter section. A township is north or south of the baseline, and a range is east or west of the principal meridian (e.g., T12N, R34W). Also include the distance, in feet, from the nearest north or south line and nearest east or west line of the quarter-section. Also, enter the **latitude** and **longitude** of the well in decimal degrees, to five or six places if possible; be sure to include a negative sign for the longitude of a well in the Western Hemisphere and a negative sign for the latitude of a well in the Southern Hemisphere.

Enter the **WELL CLASS,** i.e., the class of injection well as defined in 40 CFR 144.6.

TIMING OF THE ACTION: Check ***Notice prior to work*** if the activity has not yet occurred (i.e., is planned). Check ***Report after work*** if the activity described has already occurred. As appropriate, include the date the activity is expected to start or the date the activity was completed. (Note this may not be available, e.g., for a plugging plan submitted with a permit application.)

TYPE OF ACTION: Check the appropriate box to describe the kind of activity being reported. Check ***Well Rework*** for work that was/will be performed on the well after it has already been in operation as an injection well. Check ***Plugging and Abandonment*** to report on plans for or descriptions of final closure/plugging after use as an injection well. Check ***Conversion to a Non-Injection Well*** if the well is to be converted to something other than an injection well.

Provide a **NARRATIVE DESCRIPTION** of the work planned to be performed, or that was performed. The narrative should include a description of the main procedures planned or that occurred during the work activity. A service company report, daily report, or similar document may be attached if it includes all the requested information and is clear and legible.

For well reworks, include the following information: The reason for the well rework; depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; method(s) to demonstrate that the well has mechanical integrity (as applicable); and any deviations from the approved rework plan (as applicable).

For a well plugging plan, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; and wait-on-cement times, if any. Also provide one or more cost estimates from an independent firm in the business of plugging and abandoning wells to plug the well as described in the plan.

For well plugging affidavit, include the following information: Reason for the well plugging; number of plugs placed, and their depths; materials used as plugs (e.g., cast iron bridge plug, cement, cement retainer); method to set plugs; wait-on-cement times, if any; and any deviations from the approved plugging plan (if applicable).

For conversion to a non-injection well, include the following information: Depths of activity; type of activity; changes to injection well configuration, well casing, or cement behind casing; any plug added to the well and its depth; any newly drilled interval and its depth; depths of new perforations; and method(s) to demonstrate that the well has mechanical integrity (as applicable).

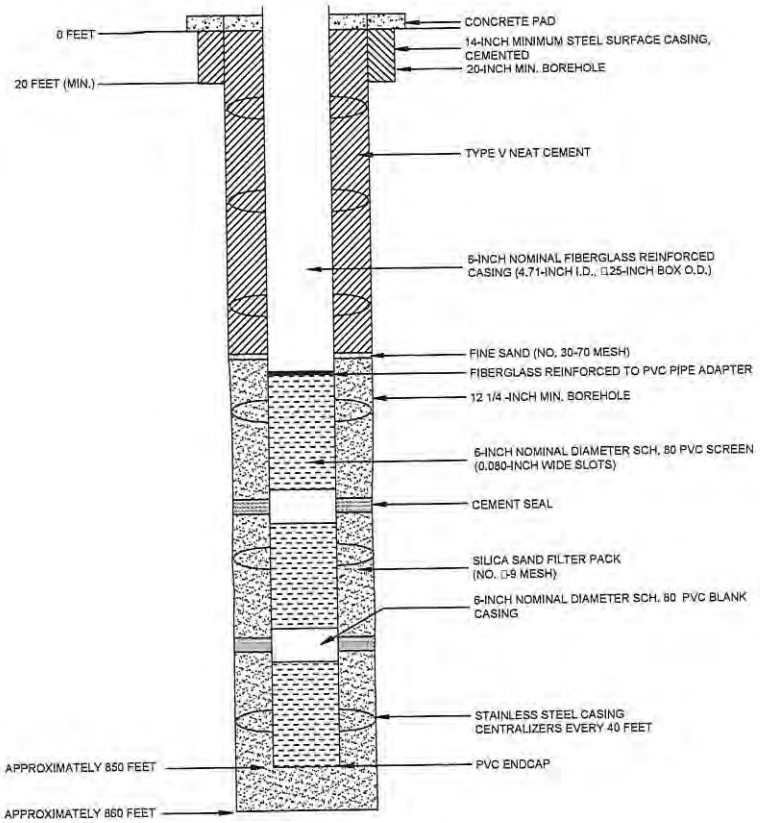
For all of the above activities, include a well sketch depicting the work, results of well tests/logging performed, service company tickets, and any other available information demonstrating how the work was/is to be performed. Also, specify whether depths are below ground surface, relative to Kelly bushing, etc.

CERTIFICATION: This form must be signed and dated by either: a responsible corporate officer for a corporation, by a general partner for a partnership, by the proprietor of a sole proprietorship, or by a principal executive or ranking elected official for a public agency.

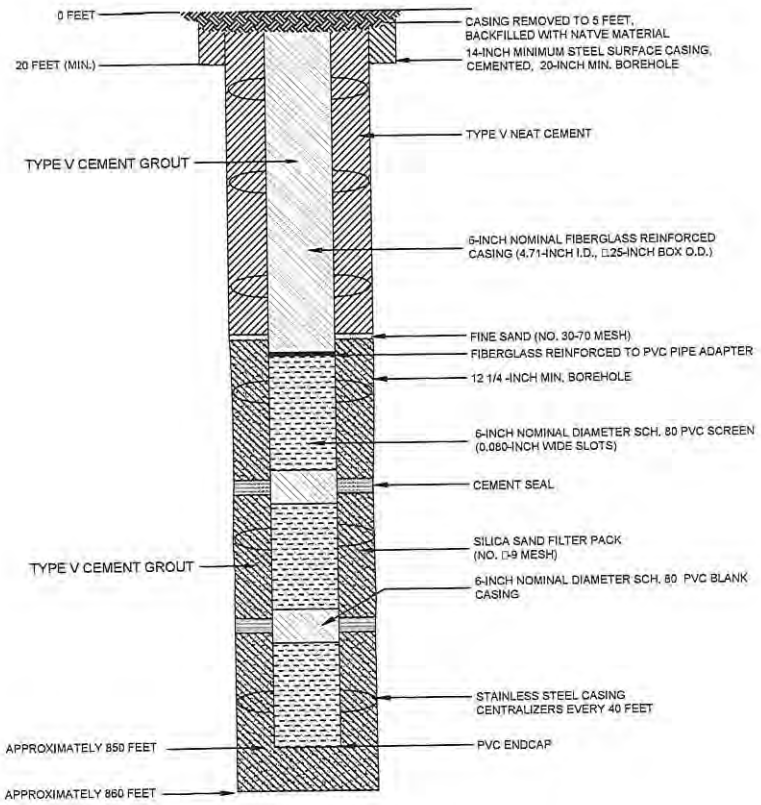
PAPERWORK REDUCTION ACT NOTICE: The public reporting and recordkeeping burden for this collection of information is estimated to average between 6.0 and 7.9 hours per response, depending on the injection well class. Burden means the total time, effort, or financial resource expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to the collection of information; search data sources; complete and review the collection of information; and, transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Saved by: MNICHOLLS Printed: 7/27/2019 5:44 PM Sheet: HA-FIG-A-L
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-INJECTION_RECOVERY WELL_3SCREENS.DWG

PROPOSED DESIGN
INJECTION AND RECOVERY WELL



PROPOSED PLUGGING AND
ABANDONMENT
INJECTION AND RECOVERY WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

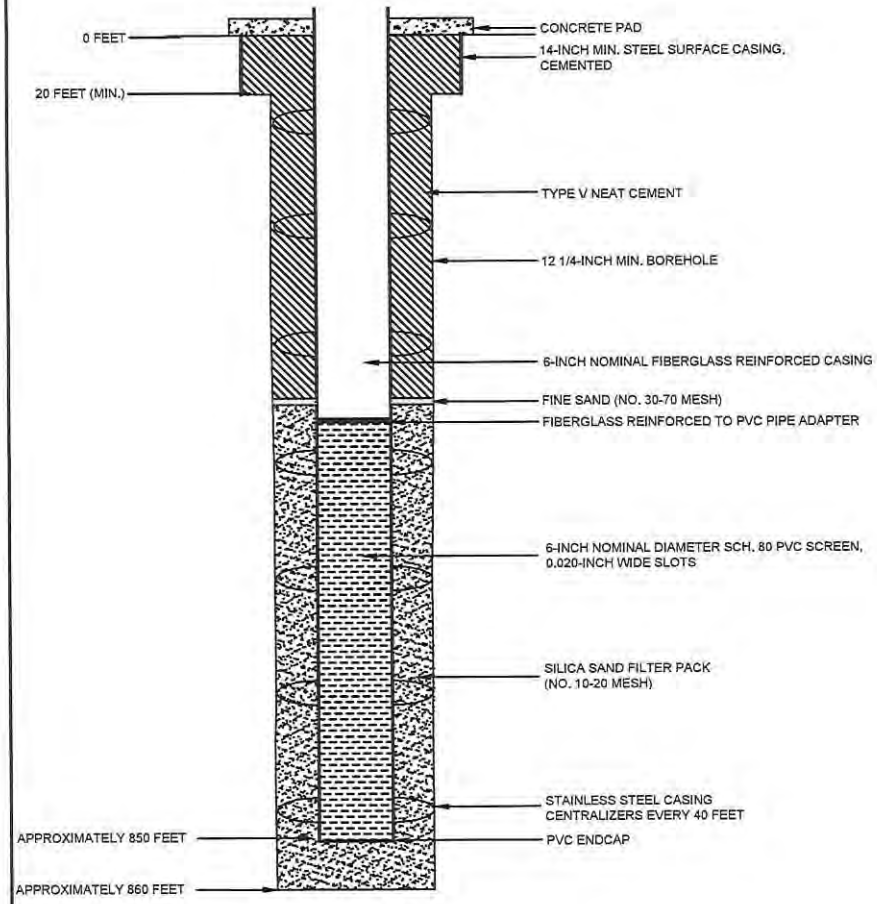
ABANDONMENT SCHEMATIC
RESOURCE BLOCK 98
TYPICAL INJECTION AND
RECOVERY WELL

SCALE: AS SHOWN
JULY 2019

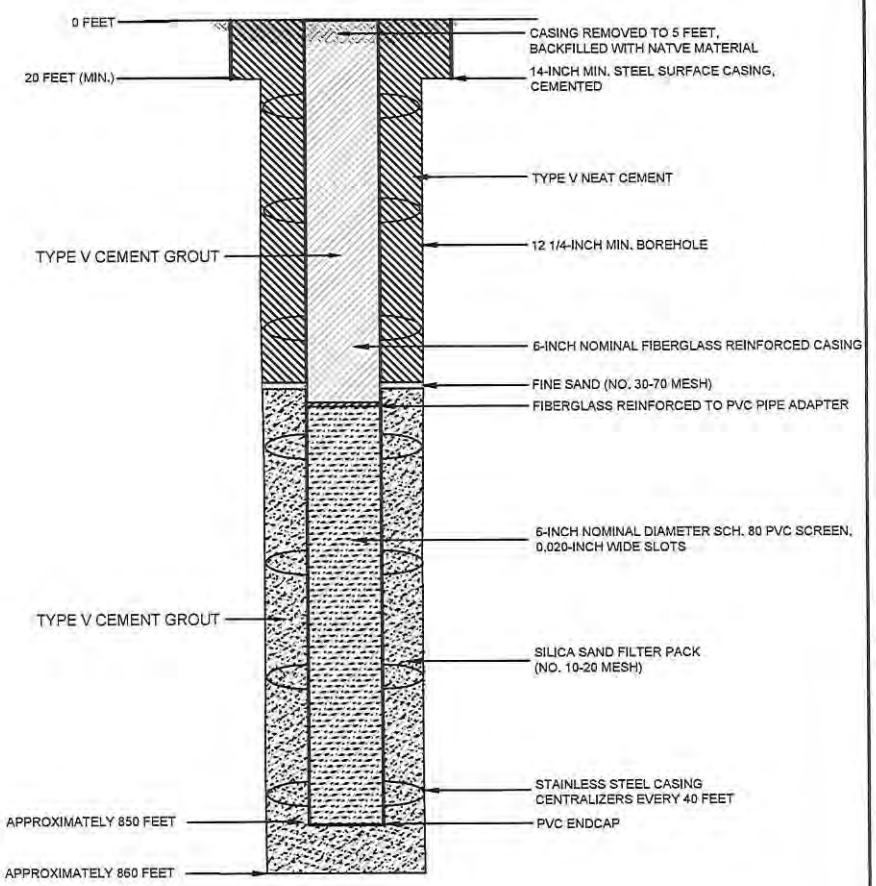
FIGURE E-50a

Saved by: MNICHOLLS Printed: 7/25/2019 7:20 PM Sheet: HA-FIG-A-L(2)
\\HALEYALDRICH.COM\SHARE\PHX_COMMON\PROJECTS\FLORENCE COPPER\132473 FLORENCE GROUNDWATER PERMITTING\CAD\132473_000-OBSERVATION_WELL_CONSTRUCTION DIAGRAM.DWG

PROPOSED DESIGN
OBSERVATION/PERIMETER WELL



PROPOSED PLUGGING AND
ABANDONMENT
OBSERVATION/PERIMETER WELL



NOTES

1. WELL DESIGN DETAILS ARE BASED ON CORE HOLE AND WELL LOG RECORDS.

HALEY ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA

ABANDONMENT SCHEMATIC
RESOURCE BLOCK 98
OBSERVATION/PERIMETER WELL

JULY 2019
SCALE: AS SHOWN

FIGURE E-50b

TABLE E-50
WELLS WITHIN RESOURCE BLOCK 98
FLORENCE COPPER PROJECT
FLORENCE, ARIZONA

Well Number	Easting	Northing	Resource Block	Depth to Top of Bedrock (ft bgs)	Depth to Top of Injection Zone (ft bgs)	Depth to Bottom of Injection Zone (ft bgs)
1418	848967	744151	98	390	430	850
1425	849109	744151	98	390	430	850
1436	849038	744151	98	390	430	850
1437	848896	744151	98	390	430	850
1372	848967	744293	98	390	430	850
1373	849038	744364	98	390	430	850
1374	849109	744434	98	390	430	850
1407	849109	744293	98	390	430	850
1408	849038	744293	98	390	430	850
1409	849109	744364	98	390	430	850
1419	848896	744222	98	390	430	850
1420	848826	744151	98	390	430	850
1422	849109	744222	98	390	430	850
1423	849038	744222	98	390	430	850
1424	848967	744222	98	390	430	850
O25	849250	744364	98	390	430	850
O26	849250	744222	98	390	430	850
O27	848967	744010	98	390	430	850
P49	849179	744434	98	390	430	850
P50	849179	744293	98	390	430	850
P51	849179	744151	98	390	430	850
P52	849038	744081	98	390	430	850
P53	848896	744081	98	390	430	850

Notes:

ft bgs = feet below ground surface