

US EPA ARCHIVE DOCUMENT

APPENDIX C – Plugging and Abandonment Plan

**FLORENCE COPPER, INC.
UIC PERMIT APPLICATION
FLORENCE COPPER PROJECT – PRODUCTION TEST FACILITY**

ATTACHMENT Q – PLUGGING AND ABANDONMENT PLAN

Table of Contents

Table of Contents	1
List of Exhibits	1
Q.1 Introduction	2
Q.1.1 Applicability	2
Q.1.2 Objectives	3
Q.1.3 Hydrogeologic Setting	3
Q.1.4 Overview of PTF Operation	3
Q.2 Licenses, Notifications and Approvals	4
Q.2.1 Licensed Drillers	4
Q.2.2 Abandonment Notification and Authorization	4
Q.3 Well and Core Hole Abandonment Procedures	4
Q.3.1 Well or Core Hole Preparation	4
Q.3.2 Equipment and Materials	5
Q.3.3 General Procedure for Sealing Wells and Core Holes	5
Q.3.4 Procedures for Special Circumstances	5
Q.4 Documentation and Reporting	6
Q.4.1 Reporting Responsibilities	6
Q.4.2 Reports to ADWR	6
Q.4.3 Reports to USEPA	6
Q.4.4 Reports to ADEQ	7
Q.4.5 Maintenance of Records	7

List of Exhibits

Exhibit Q-1	Copy of Aquifer Protection Permit No. 106360 Issued by ADEQ, dated July 3, 2013
Exhibit Q-2	Closure and Post-Closure Plan
Exhibit Q-3	EPA Forms 7520-14, Plugging and Abandonment Plans for Existing Wells and Core Holes
Exhibit Q-4	EPA Forms 7520-14, Plugging and Abandonment Plans for Class III Wells

Q.1 Introduction

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 issuance of an Underground Injection Control Class III (Area) Permit (UIC Permit) for the planned Production Test Facility (PTF), to be located at the Florence Copper Project (FCP) in Pinal County, Arizona. Florence Copper is submitting this Application so that it may proceed with the development of the PTF to demonstrate the feasibility of a future full scale in-situ copper recovery (ISCR) facility. As required for Attachment Q under USEPA Form 7520-6, this Attachment describes the plan for plugging and abandonment of the proposed Class III wells, and the proposed corrective action for existing and planned Class III wells on the FCP site. This Attachment also describes the corrective action Florence Copper will undertake to plug and abandon non-Class III wells and core holes as identified in Attachment C of this Application.

This plugging and abandonment plan is consistent with the Closure and Post-Closure Plan included in Florence Copper's related Aquifer Protection Permit (APP) No. 106360 issued by the Arizona Department of Environmental Quality (ADEQ) for PTF operations at the FCP. For the reviewers' convenience, a copy of Temporary APP No. 106360 is provided as Exhibit Q-1 to this Attachment. The current closure and post-closure requirements are described in Sections 2.9 and 2.10 of Temporary APP No. 106360.

The closure and post-closure language included in Temporary APP No. 106360 conforms with and governs all proposed closure and post-closure plans previously submitted to ADEQ in conjunction with the application for Temporary APP No. 106360. A closure and post-closure plan is included as Exhibit Q-2 to this Attachment.

Q.1.1 Applicability

This plugging and abandonment plan is applicable to both proposed Class III wells, and all other Class III and non-Class III wells and core holes, within the PTF area and the associated Area of Review (AOR) located at the FCP site, 1575 West Hunt Highway, Florence, Arizona 85132. This plan applies to all the wells and core holes because the proposed corrective action for all wells and core holes within the AOR is to plug and abandon them using the same standards as will be applied to abandonment of Class III wells. The AOR is defined in Attachment A of this Application as a 500-foot zone around the permitted PTF area.

This plan also applies to existing Class III wells outside of the PTF AOR that were constructed by 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 operation 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 plan has been designed to ensure that all existing and future wells and core holes located within the AOR (a 500-foot area circumscribing the proposed PTF well field) will be plugged and abandoned (1) in a manner that will prevent or stop the flow of injected solutions into or out of a underground source 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 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 at the PTF. Plugging and abandonment of Class III wells will occur during closure, or whenever an individual Class III well is retired because of irreparable non-compliance with mechanical integrity test requirements.

All abandonment notifications, approvals, procedures, documentation, and reporting required under this plan, and Exhibit Q-2 of this plan, apply to all Class III wells constructed within the PTF AOR and Class III wells constructed by BHP within the AOR established by UIC Permit No. AZ396000001.

Q.1.2 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], Arizona Revised Statutes [A.R.S.] § 45-402 *et seq.*, and ADWR Well Abandonment Handbook) and the USEPA (40 Code of Federal Regulations [CFR] 146.10 [Plugging and Abandoning Class I-V Wells]).

Q.1.3 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 Zone. 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 Zone, the uppermost zone of the bedrock complex underlying the FCP site.

Q.1.4 Overview of PTF Operation

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

PTF operations will consist of the injection of a dilute sulfuric-acid solution (lixiviant) into a pre-defined interval of the oxide zone to dissolve copper and to recover the resulting copper-bearing solution. If necessary, the recovered solution may be re-acidified and re-injected to enrich the copper concentration in solution until the copper concentration is sufficient to support solvent extraction/electrowinning (SX/EW) operations. When the copper concentration meets a desired grade, the recovered solution (pregnant leach solution [PLS]) will be conveyed via an above-ground pipeline to the SX/EW plant for processing.

Once copper concentrations in recovered solutions decline to a level indicating depletion of the ore, closure will begin by replacing the volume of lixiviant injected into the oxide zone with fresh groundwater. Closure will continue with the injection of fresh groundwater. 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 re-injected into the unit from which it was produced, or conveyed via a neutralization circuit to the proposed water impoundment.

Flushing of the oxide zone will be discontinued and the PTF will be provisionally considered to be closed once constituent concentrations in the groundwater in the flushed zone meet the closure criteria specified in the UIC Permit and the related APP. Not more than two years following the provisional closure of the PTF, all wells within the PTF will be abandoned in accordance with the procedures outlined in this plan.

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. Section 2.9.2 of APP No. 106360 requires that the PTF wells remain open to facilitate sampling at one month, sixth months, and one year following the conclusion of formation rinsing, and further requires that written authorization be obtained from both ADEQ and USEPA prior to plugging and abandonment of the PTF wells. ADEQ and USEPA may choose to require additional monitoring after the one year samples have been collected. In any event, PTF 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 for a period of at least five years following the completion of formation rinsing. The supplemental monitoring wells will remain open for at least five years following the cessation of rinsing, and until receipt of written authorization from both ADEQ and USEPA.

Q.2 Licenses, Notifications and Approvals

Q.2.1 Licensed Drillers

Abandonment procedures are described in Section Q.3 and will only be performed by well drillers licensed by the ADWR pursuant to A.R.S. § 45-595(B), or under the direction of such licensed well drillers.

Q.2.2 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 Form 7520-14 (*Plugging and Abandonment Plan*) approximately 60 days prior to the planned abandonment. The form will include descriptions of the proposed abandonment materials and methods to be employed during abandonment. Copies of Forms 55-38 and 7520-14 will be submitted to ADEQ as they are submitted respectively 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.

Q.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. The condition and depth of each well or core hole will vary. Abandonment will be considered complete when all applicable sealing steps set forth in Section Q.3.3 below have been completed or have been found unnecessary.

Q.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. Core holes do not have such equipment.
- 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 below ground surface (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 workstring 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.

Q.3.2 Equipment and Materials

The following material and equipment will be used in sealing wells and core holes according to the procedure described in Section Q.3.3 if required to make proper seals.

- a. Cement Grout: All cement grout will consist of Type V cement, or approved equivalent.
- 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. This will prevent migration of the cement plug below the interval to be cemented and sealed.
- c. Cement Plugs: Cement plugs will consist of Type V cement grout or approved equivalent.
- 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. Workstring: A workstring of small diameter pipe or tubing will be used for the placement of cement grout and plugs.

Q.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, cement will be placed as much as possible from at least 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.

Q.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.

Q.4 Documentation and Reporting

Following completion of plugging and abandonment, reports will be recorded and filed, as described below.

Q.4.1 Reporting Responsibilities

The licensed driller or supervised designate 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 to USEPA. The driller will sign all ADWR abandonment forms. The authorized Florence Copper representative will sign all narrative abandonment reports submitted to the ADWR and all abandonment reports to USEPA.

Q.4.2 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.

Q.4.3 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 shall 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 7520-14, 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 7520-14, and schematic diagrams of wells and core holes within the AOR, are provided as Exhibit Q-3 to this Attachment.

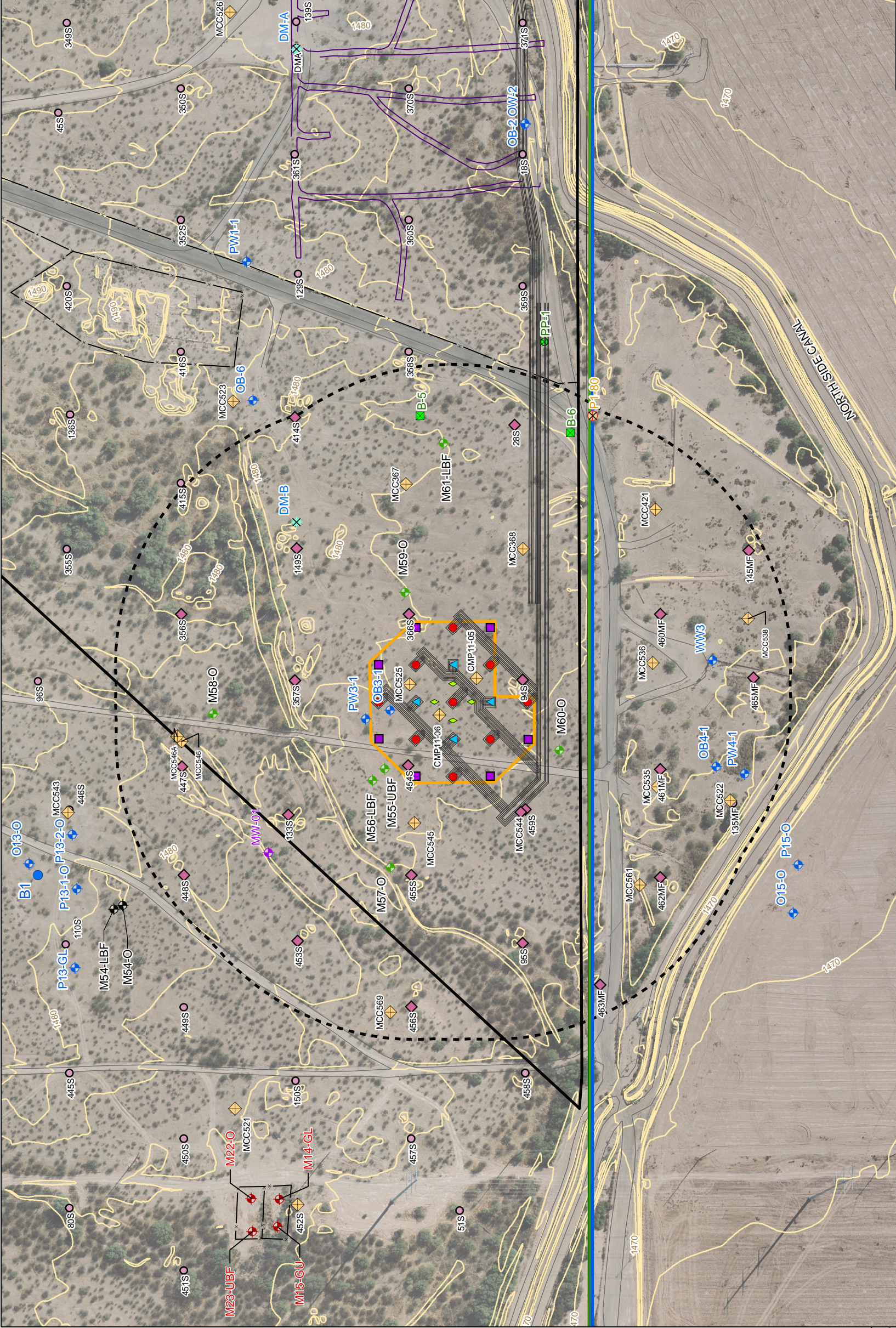
Q.4.4 Reports to ADEQ

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 in accordance with Section Q.4.3.

Q.4.5 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.



LEGEND

MW-01 OPERATIONAL MONITORING WELL
(APPROXIMATE LOCATION BASED ON
REQUIREMENTS OF APP 106360)

EXISTING PTF POC WELL

APPROVED POC WELL -
NOT DRILLED YET

SUPPLEMENTAL MONITORING WELL

NON-POC WELL

NON-POC WELL, ABANDONED

ABANDONED VADOSE ZONE
CHARACTERIZATION PIEZOMETER

EXPLORATION CORE HOLE

CORE HOLE-ABANDONED

EXPLORATION CORE HOLE
TO BE ABANDONED

VADOSE ZONE CHARACTERIZATION
BORING

PROPOSED TEST WELLS

INJECTION

OBSERVATION

RECOVERY

MULTI-LEVEL SAMPLING
WELL

ABANDONED GEOTECHNICAL BORING

KNIGHT PIESOLD, OCTOBER 2011

TERRACON, 1995-1996

CONOCO UNDERGROUND
MINE WORKINGS

PROPOSED COMPONENTS OF
PRODUCTION TEST FACILITY (PTF)

PTF WELL FIELD

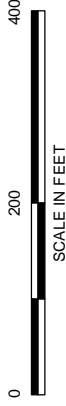
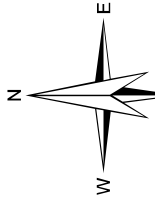
STATE MINERAL LEASE BOUNDARY

LEGAL PROPERTY BOUNDARY

AREA OF REVIEW

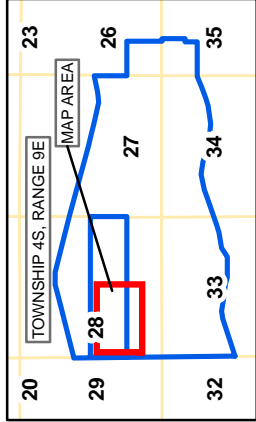
PMA BOUNDARY

TOPOGRAPHIC CONTOUR



HALEY & ALDRICH

FLORENCE COPPER, INC.
FLORENCE, ARIZONA



**FIGURE TEMP APP RTC(E) 18-1
WELLS AND CORE HOLES
WITHIN 500 FEET OF PTF**

SCALE: AS SHOWN
JULY 2014



Table C-1 . Wells and Core Holes within 500 Feet of the PTF Well Field

General Information										Construction Details										Well Abandonment Details					Geologic Log Available	Driller's Log Available	Approximate Volume (Gallons)	Upper Depth (Feet)	Bottom Depth (Feet)	Abandonment Material	Comments
Location Name	ADWR Number	Type	Status	Eastings	Northings	Surface Elevation (Feet)	Total Depth (Feet)	Diameter of Surface Borehole (Inches)	Diameter of Surface Casing (Inches)	Depth of Surface Casing (Feet)	Diameter of Intermediate Borehole (Inches)	Diameter of Intermediate Borehole Casing (Inches)	Depth of Intermediate Borehole (Feet)	Depth of Intermediate Borehole Casing (Feet)	Diameter of Inner Pipe (Inches)	Cement Seal (Feet)	Diameter of Core Hole														
COREHOLES																															
133S	NA	Exploration Core Hole	Existing	847479.9895	746444.8163	1475.50	2217	6.25	5.5	45	5	3	560	560	-	0-560		NX (2.97")				Yes	Yes								
135MF	NA	Exploration Core Hole	Existing	847502.6923	745598.3783	1472.20	2095.5	6.25	5.5	65	5	3	376	376	-	0-376		NR				Yes	Yes								
145MF	NA	Exploration Core Hole	Existing	847981.8852	745570.0709	1473.00	2170	6.25	5	60	5	3	400	400	-	0-400		NX (2.97")				Yes	Yes								
149S	NA	Exploration Core Hole	Existing	847985.9324	746428.5092	1477.30	2142.5	6.25	5	40	5	3	601	601	-	0-601		NX (2.97")				Yes	Yes								
28S	NA	Exploration Core Hole	Existing	848220.5673	746014.3235	1475.20	2227	NR	NR	NR	5.74*	NR	NR	NR	-	NR		NX (2.97")				No	Yes								
356S	NA	Exploration Core Hole	Existing	847860.4898	746648.2579	1478.00	2094	6.5	5.6	45	5	NR	473	NR	-	NR		NX (2.97")				Yes	Yes								
357S	NA	Exploration Core Hole	Existing	847735.4921	746431.7566	1476.85	2280	6.5	5.6	45	5	NR	455	NR	-	NR		NX (2.97")				Yes	Yes								
366S	NA	Exploration Core Hole	Existing	847860.4974	746215.2575	1476.40	425	6.5	5.6	45	5	NR	425	NR	-	NR		NR				Yes	Yes								
414S	NA	Exploration Core Hole	Existing	848235.4974	746431.7618	1477.50	2267	6.5	5.6	50	5	3	380	380	-	0-380		NX (2.97")				Yes	Yes								
415S	NA	Exploration Core Hole	Existing	858110.49	746648.24	1479.46	2042	6.5	NA	40	5	3	280	280	-	0-280		NX (2.97")				Yes	Yes								
447S	NA	Exploration Core Hole	Existing	847572.0492	746646.8176	1476.90	593	6.5	5.6	40	5	NR	593	NR	4*	NR		-				Yes	Yes								
448S	NA	Exploration Core Hole	Existing	847365.1096	746642.8776	1477.08	750	6.75	NR	40	5	3	750	750	4*	0-750		-				Yes	Yes								
453S	NA	Exploration Core Hole	Existing	847240.1122	746426.8763	1475.47	870	6.75	NR	40	5	3	870	870	4*	0-870		-				Yes	Yes								
454S	NA	Exploration Core Hole	Existing	847574.0571	746216.8169	1475.20	403	6.5	5.6	40	5	NR	403	NR	4*	NR		-				Yes	Yes								
455S	NA	Exploration Core Hole	Existing	847365.1175	746210.3773	1473.55	553	7.875	5.6	40	5	3	553	NR	4*	NR		-				Yes	Yes								
456S	NA	Exploration Core Hole	Existing	847115.1148	746210.3747	1473.21	825	6.75	NR	40	5	3	825	825	-	0-825		-				Yes	Yes								
459S	NA	Exploration Core Hole	Existing	847490.1224	745993.8786	1474.03	483	6.5	NR	40	5	NR	483	NR	-	NR		-				Yes	Yes								
460MF	NA	Exploration Core Hole	Existing	847860.5059	745737.9446	1472.44	474	7.875	6	50	5	3	474	474	-	NR		-				Yes	Yes								
461MF	NA	Exploration Core Hole	Existing	847566.1903	745737.9416	1472.07	385	7.875	6	55	5	3	385	385	-	NR		-				Yes	Yes								
462MF	NA	Exploration Core Hole	Existing	847360.4383	745737.9393	1471.52	494	7.875	6	65	5	3*	494	501*	-	NR		-				Yes	Yes				Records indicate depth of 494, field tagged depth of 501				
463MF	NA	Exploration Core Hole	Existing	847157.0591	745851.8123	1471.55	720	7.875	6	50	5	3	720	720	-	NR		-				Yes	Yes								
465MF	NA	Exploration Core Hole	Existing	847740.1329	745560.8806	1471.86	350**	NR	NR	NR	NR	NR	NR	NR	-	NR		-				No	No								
94S	NA	Exploration Core Hole	Existing	847736.125	745999.5686	1475.00	2038	NR	-	-	5.5*	NR	560	NR	4*	NR		NR				Yes	Yes								
95S	NA	Exploration Core Hole	Existing	847236.1198	745999.1883	1472.70	1842	NR	-	-	NR	NR	590	NR	-	NR		NX (2.97")				Yes	Yes								
MCC544	55-548200	Exploration Core Hole	Existing	847485.3097	746002.8159	1473.70	1320.5	NR	NR	NR	4*	4*	380	380	-	NR		HX (3.88")				No	Yes								
CMP11-05	55-220509	Exploration Core Hole	Abandoned	847737.9655	746085.3165	1474.30	1200	8	7	20	6.75	5.5	427	427	-	NA		PQ(4.38")	Type V Cement	467/1200	0	117.5	Yes	Yes			Rod stuck, blasted and pulled as much as possible prior to grouting				
CMP11-06	55-220509	Exploration Core Hole	Abandoned	847667.2736	746156.0257	1475.00	1145	8	7	20	6.75	5.5	429	429	-	NA		PQ(4.38")	Type V Cement	335	0	565	Yes	Yes							
MCC367	55-539336	Exploration Core Hole	Abandoned	848108.0623	746220.8225	1475.73	941	6.5	5.6	45	5	NR	355	355	-	NR		NX (2.97")	Type V Cement	941	0	NR	Yes	Yes							
MCC368	55-539336	Exploration Core Hole	Abandoned	847985.5026	745985.7585	1475.20	1044	6.5	5.6	55	5	NR	390	390	-	NR		NX (2.97")	Type V Cement	1044	0	800	Yes	Yes							
MCC421	55-539336	Exploration Core Hole	Abandoned	848060.5079	745746.5092	1469.55	1039	6.5	5.6	60	5	3	360	353	-	0-353		NX (2.97")	Type V Cement	1039	0	750	Yes	Yes							
MCC522	55-538308	Exploration Core Hole	Abandoned	847507.0673	745604.8156	1466.00	1380	NR	NR	NR	3.5*	-	NR	Pulled	-	NR		NX (2.97")	Type V Cement	1380	0	750	No	Yes							
MCC525	55-538308	Exploration Core Hole	Abandoned	847728.0587	746213.8186	1476.00	1212	NR	NR	NR	NR	-	430	Pulled	-	NR		NX (2.97")	Type V Cement	1210	0	750	No	Yes							
MCC535	55-548247	Exploration Core Hole	Abandoned	847533.19	745743.1913	1471.80	1279	NR	NR	NR	3.5*	NR	360	220-360	-	NR		NX (2.97")	Type V Cement	1279	0	650	No	Yes							
MCC536	55-548247	Exploration Core Hole	Abandoned	847768.8796	745752.1312	1472.20	1162	NR	NR	NR	3.5*	-	380	Pulled	-	NR		NX (2.97")	Type V Cement	1162	0	650	No	Yes							
MCC538	55-548247	Exploration Core Hole	Abandoned	847852.3215	745570.3192	1472.10	1169	NR	NR	NR	3.5*	-	359	Pulled	-	NR		NX (2.97")	Type V Cement	1169	0	650	No	Yes							
MCC545	55-548200	Exploration Core Hole	Abandoned	847464.4934	746204.4409	1474.00	1370	NR	NR	NR	4.5*	-	363	Pulled	-	NR		NX (2.97")	Type V Cement	1370	0	700	No	Yes							
MCC546	55-548200	Exploration Core Hole	Abandoned	847618.2999	746645.6306	1477.00	1152	NR	NR	NR	3.5*	-	397	Pulled	-	NR		NX (2.97")	Type V Cement	620	0	450	No	Yes			Obstruction at 620' during abandonment.				
MCC546A	55-548200	Exploration Core Hole	Abandoned	847627.8622	746653.8179	1477.10	1437	NR	NR	NR	3.5*	-	990	Pulled	-	NR		NX (2.97")	Type V Cement	1437	0	1100	No	Yes							
MCC561	55-548247	Exploration Core Hole	Abandoned	847347.25	745776.6893	1471.10	1480	NR	NR	NR	3.5*	NR	450	50-450	-	NR		NX (2.97")	Type V Cement	1480	0	800	No	No							
MCC569	55-548247	Exploration Core Hole	Abandoned	847704.6765	746250.6247	1473.10	1665	NR	NR	NR	3.5*	-	800	Pulled	-	NR		NX (2.97")	Type V Cement	1665	0	1050	No	No							
B-5	NA	Geophysical Boring	Abandoned	848238.0643	746193.8241	1478.00	31.5	6.625	-	-	-	-	-	-	-	-		-	Native Material		31.5	0	NR	No	Yes						
B-6	NA	Geophysical Boring	Abandoned	848206.2792	745908.8835	1476.00	23.5	6.625	-	-	-	-	-	-	-	-		-	Native Material		23.5	0	NR	No	Yes						

Table C-1 . Wells and Core Holes within 500 Feet of the PTF Well Field

General Information						Construction Details										Well Abandonment Details					Comments			
Location Name	ADWR Number	Type	Status	Easting	Northing	Surface Elevation (Feet)	Total Depth (Feet)	Diameter of Surface Borehole (Inches)	Diameter of Surface Casing (Inches)	Depth of Surface Casing (Feet)	Diameter of Well Borehole (Inches)	Depth of Borehole (Feet)	Depth of Well (Feet)	Screened Interval (Feet)	Cement Seal (Feet)	Bentonite Grout Seal (Feet)	Sand Filter Pack (Feet)	Abandonment Material	Bottom Depth (Feet)	Upper Depth (Feet)				Approximate Volume (Gallons)
WELLS																								
OB3-1	55-542056	Monitoring Well	Existing	847679.2174	746250.8381	1475.78	800	NR	12	20	NR	800	800	500-780	0-20	20-500	500-800					No	No	
OB4-1	55-542055	Monitoring Well	Existing	847572.0773	745631.1264	1471.78	800	NR	12	20	NR	800	800	440-780	0-20	20-440	440-800					No	No	
PW3-1	55-542056	Test Well	Existing	847662.6065	746297.518	1475.50	800	NR	12	20	NR	800	800	500-780	0-20	20-500	500-800					No	No	
PW4-1	55-542055	Test Well	Existing	847558.7182	745577.6161	1471.80	800	NR	12	20	NR	800	800	440-780	0-20	20-440	440-800					No	No	
WW3	55-627608	Irrigation Well	Existing	847774.1494	745638.1085	1470.00	938	NR	24	81	18, 14	938	496, 933	240-933	NR	-	NR					Yes	No	
DM-B	55-806521	Non-POC Well	Abandoned	848035.958	746428.5319	1477.30	700	NR	NR	NR	5	700	617	NR	NR	-	NR	Unknown	Unknown	Unknown	Unknown	No	No	

* = Values Observed in the Field

** = Value from SRK Geologic Model

NR = Not Recorded

NA = Not Available

Exhibit Q-3

**EPA Forms 7520-14, Plugging and Abandonment Plans
for Existing Wells and Core Holes**



United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

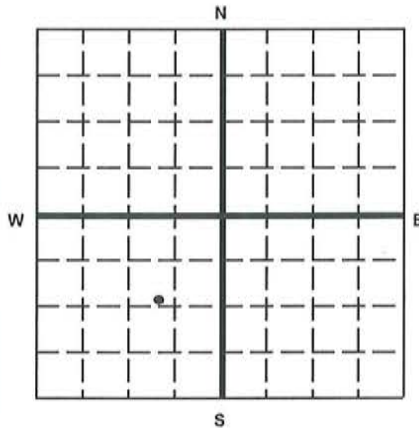
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1200 ft. from (N/S) N Line of quarter section
and 950 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 28S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
N/A	N/A	NA	NA	N/A

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	5.74					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	NA					
Sacks of Cement To Be Used (each plug)	59.2	90.4					
Slurry Volume To Be Pumped (cu. ft.)	75.9	115.9					
Calculated Top of Plug (ft.)	650-EST	5					
Measured Top of Plug (if tagged ft.)	650-EST	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2227	650-estimated		
650-estimated	5		

Estimated Cost to Plug Wells

\$13,715

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)

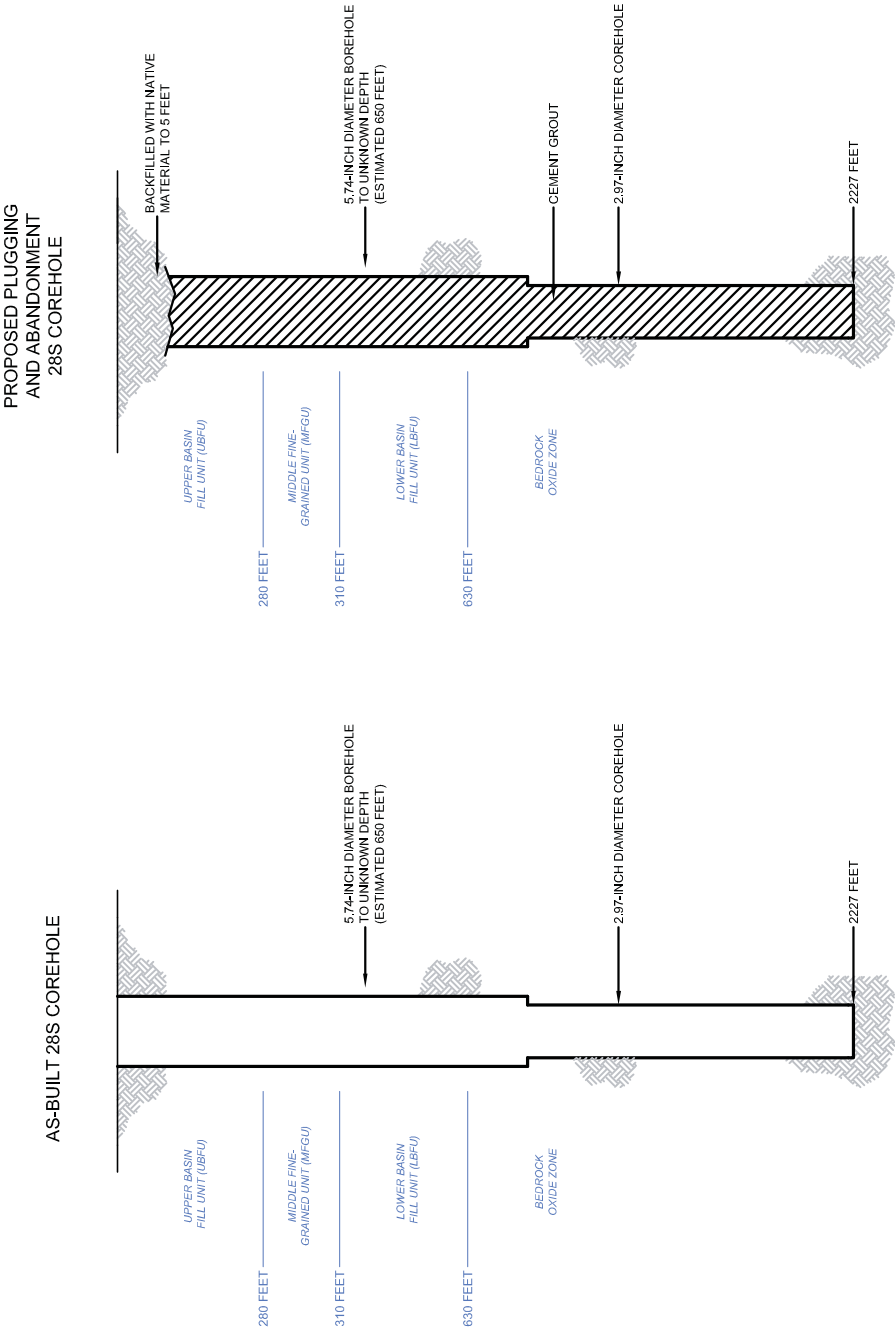
Name and Official Title (Please type or print)

Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

09/07/2012





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

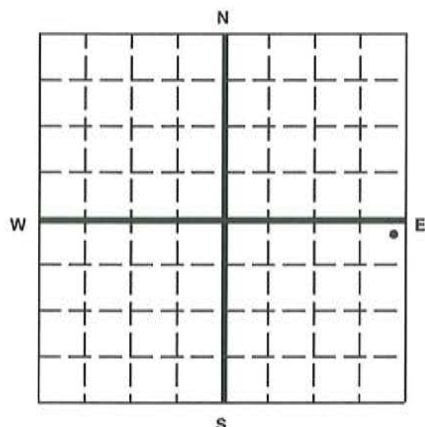
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 170 ft. from (N/S) N Line of quarter section
and 130 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 53S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
NA	NA	NA	NA	NA

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97 est	5					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	NA					
Sacks of Cement To Be Used (each plug)	40.6	35.6					
Slurry Volume To Be Pumped (cu. ft.)	52.01	45.68					
Calculated Top of Plug (ft.)	340	5					
Measured Top of Plug (if tagged ft.)	340	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
1421	340		
340	5		

Estimated Cost to Plug Wells

\$13,715

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)

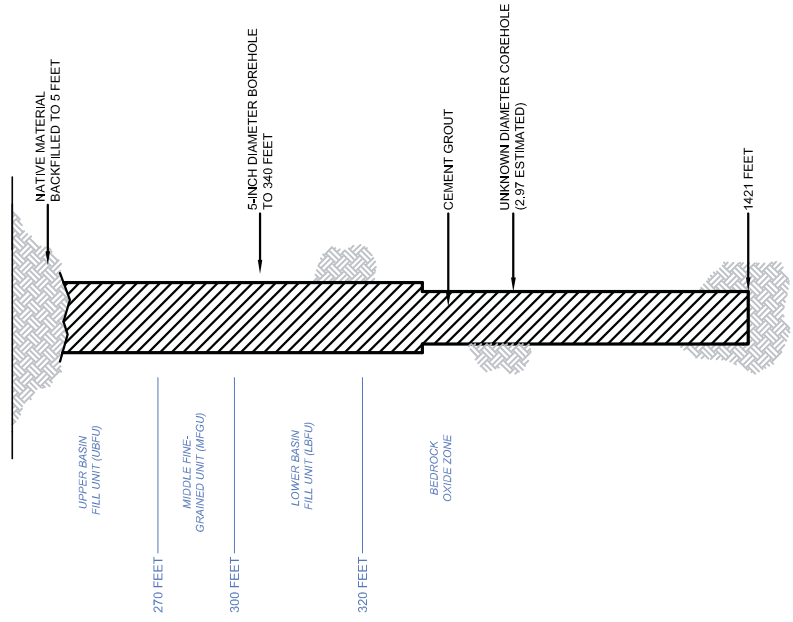
Dan Johnson, VP Environment and Technical Services

Signature

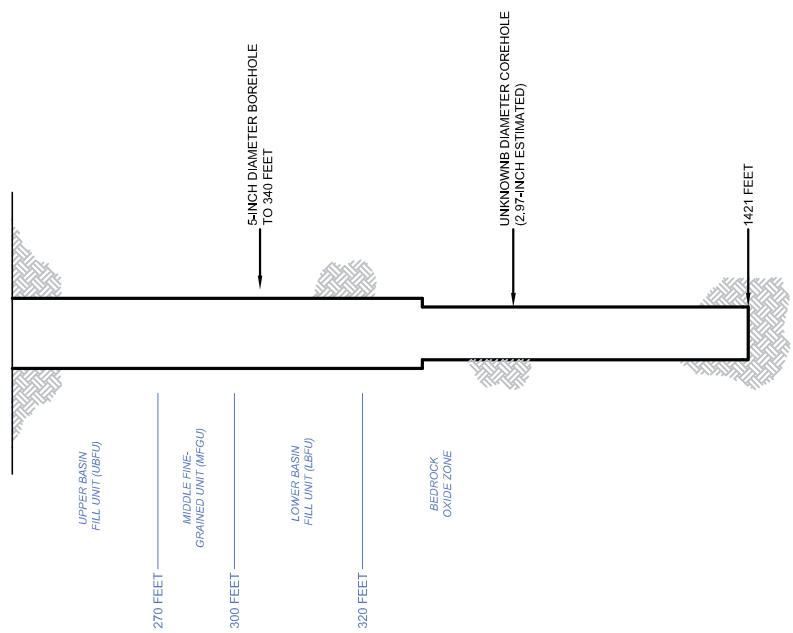
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
53S COREHOLE



AS-BUILT 53S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

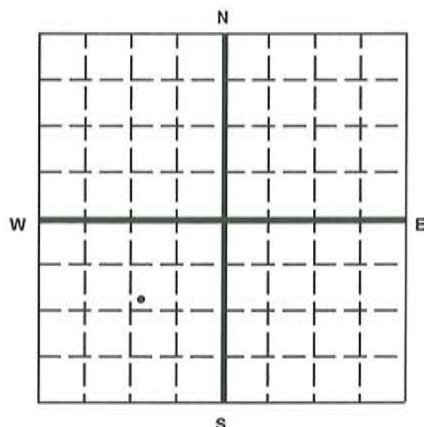
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1200 ft. from (N/S) N Line of quarter section
and 1220 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 94S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
4	10.79-EST.	0	555 est	5 est

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97est	3 est					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	560 est					
Sacks of Cement To Be Used (each plug)	55.5	21.2					
Slurry Volume To Be Pumped (cu. ft.)	71.11	27.24					
Calculated Top of Plug (ft.)	560 est	5					
Measured Top of Plug (if tagged ft.)	560 est	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2038	560 est		
560 est	5		

Estimated Cost to Plug Wells

\$13,715

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)

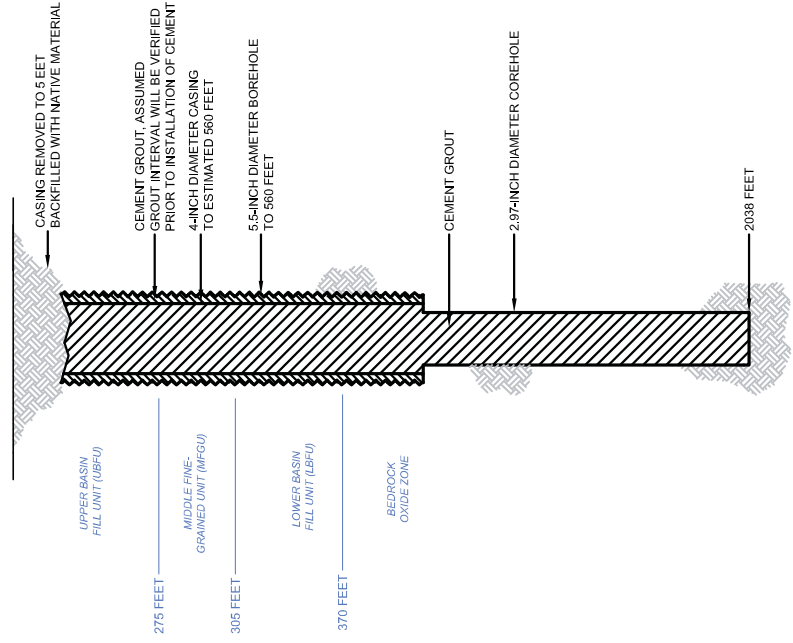
Dan Johnson, VP Environment and Technical Services

Signature

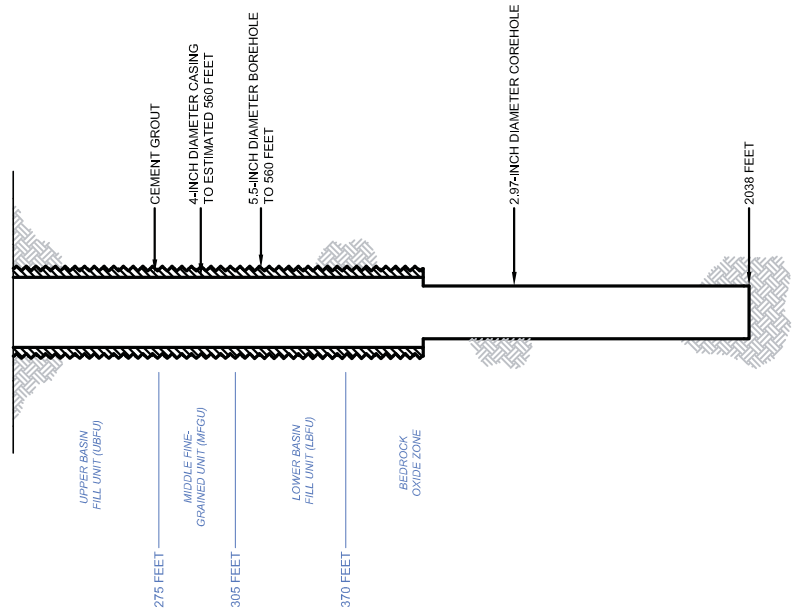
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
94S COREHOLE



AS-BUILT 94S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

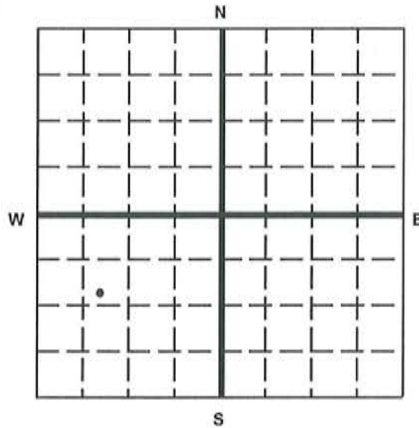
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1180 ft. from (N/S) N Line of quarter section
and 920 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 95S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
NA	NA	NA	NA	NA

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	5 est					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	590					
Sacks of Cement To Be Used (each plug)	47	62.2					
Slurry Volume To Be Pumped (cu. ft.)	60.23	79.8					
Calculated Top of Plug (ft.)	590 est	5					
Measured Top of Plug (if tagged ft.)	590 est	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
1842	590		
590	5		

Estimated Cost to Plug Wells

\$13,715

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)

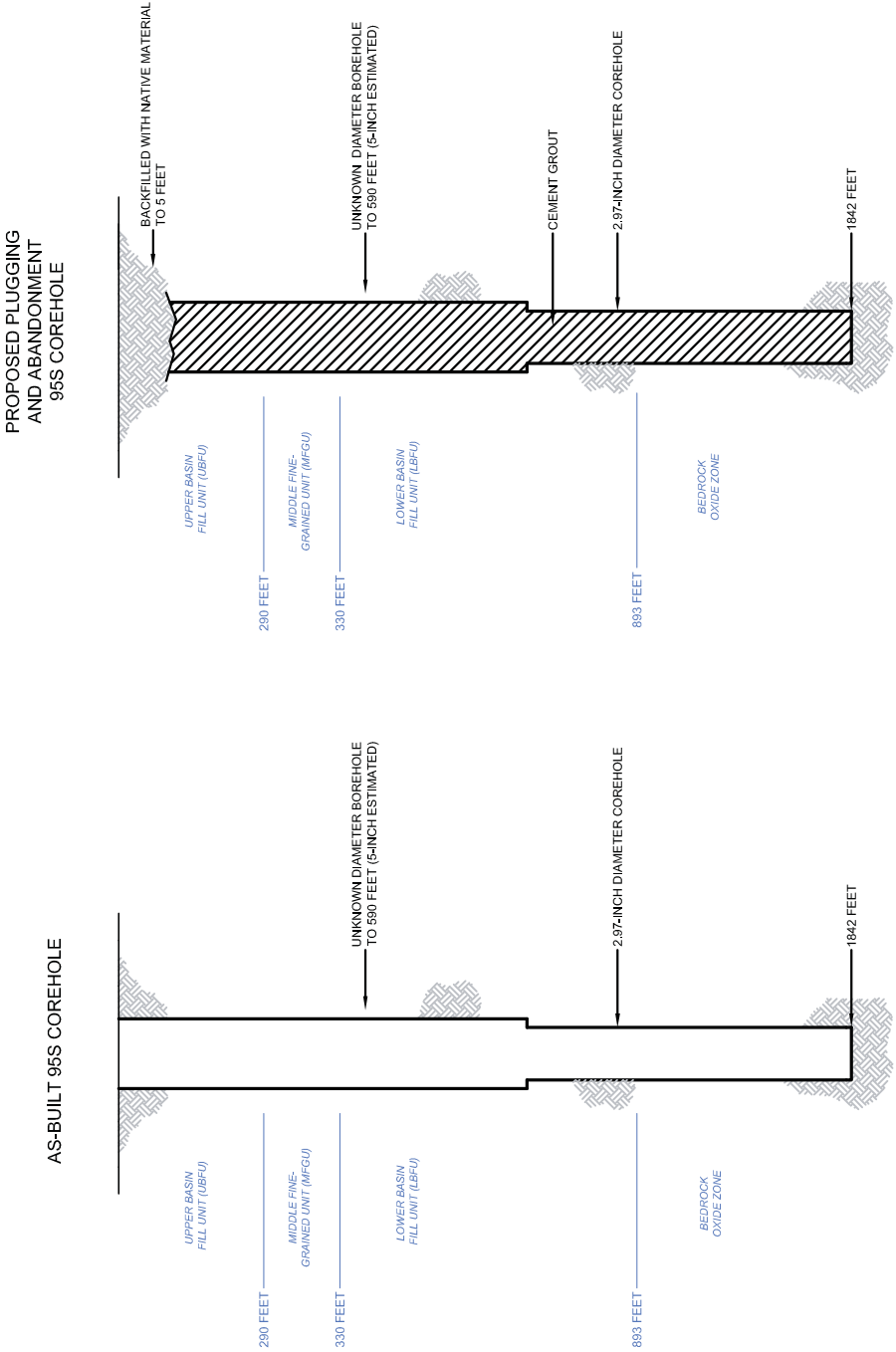
Name and Official Title (Please type or print)

Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

09/07/2012





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

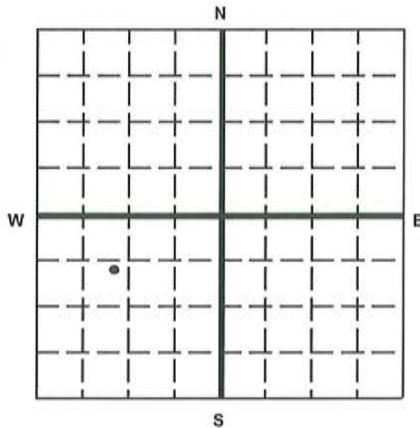
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 730 ft. from (N/S) N Line of quarter section
and 1175 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 133S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-est.	0	555	5
5.5	13.70-est.	0	40	6.25

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	560					
Sacks of Cement To Be Used (each plug)	62.2	21.2					
Slurry Volume To Be Pumped (cu. ft.)	79.72	27.24					
Calculated Top of Plug (ft.)	560	5					
Measured Top of Plug (if tagged ft.)	560	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2217	560		
560	5		

Estimated Cost to Plug Wells

\$13,715

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)

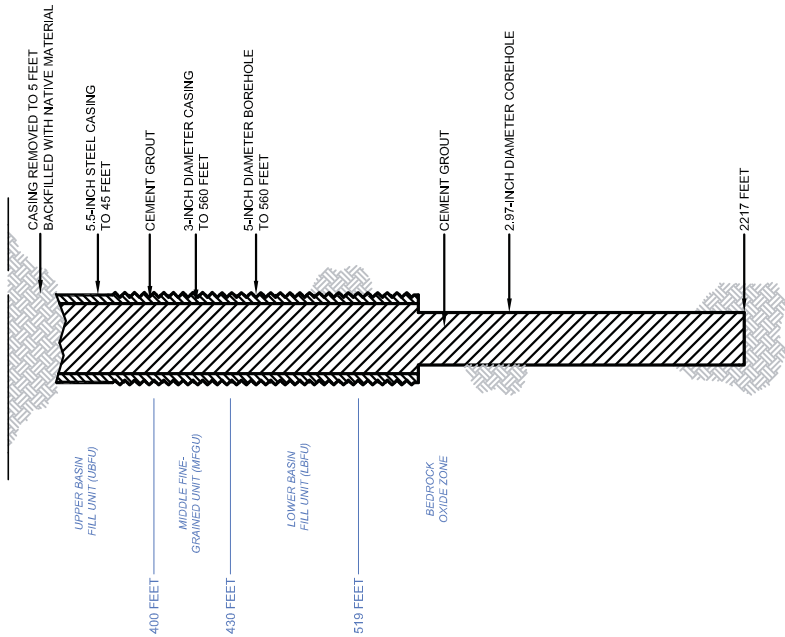
Dan Johnson, VP Environment and Technical Services

Signature

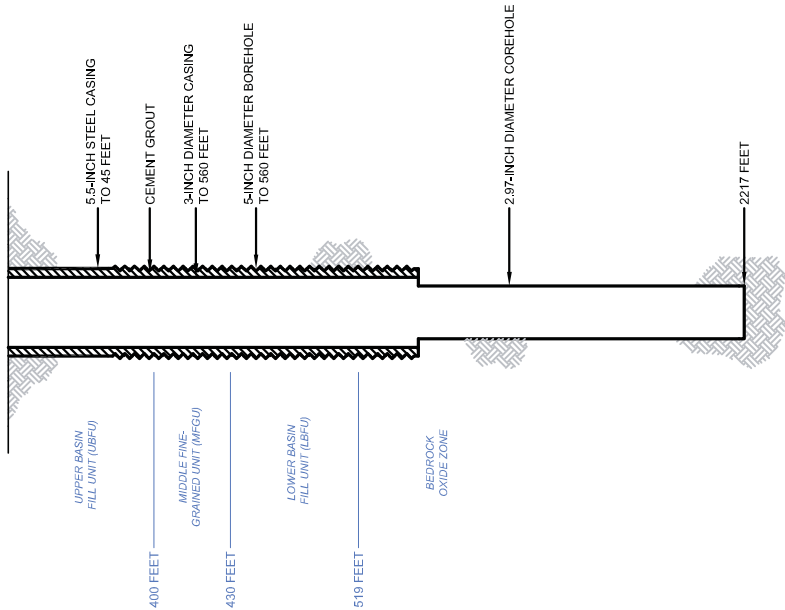
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
133S COREHOLE



AS-BUILT 133S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

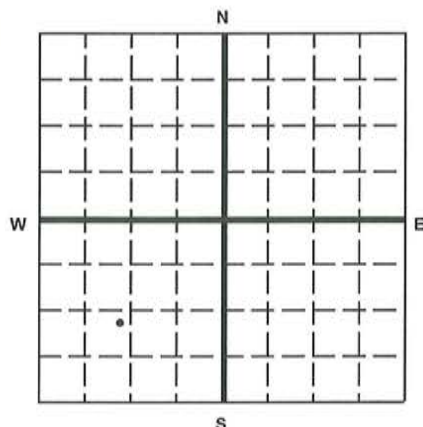
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1040 ft. from (N/S) S Line of quarter section
and 1190 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 135MF

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-est.	0	371	5
5.5	13.70-est.	0	60	6.25

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97-est	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	376					
Sacks of Cement To Be Used (each plug)	64.5	14.2					
Slurry Volume To Be Pumped (cu. ft.)	82.72	18.21					
Calculated Top of Plug (ft.)	376	5					
Measured Top of Plug (if tagged ft.)	376	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2095.5	376		
376	5		

Estimated Cost to Plug Wells

\$13,715

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)

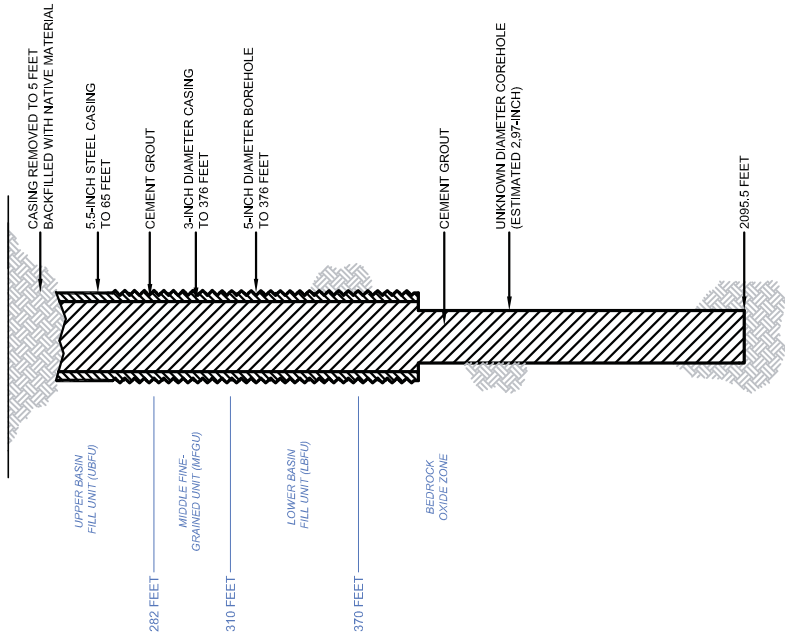
Dan Johnson, VP Environment and Technical Services

Signature

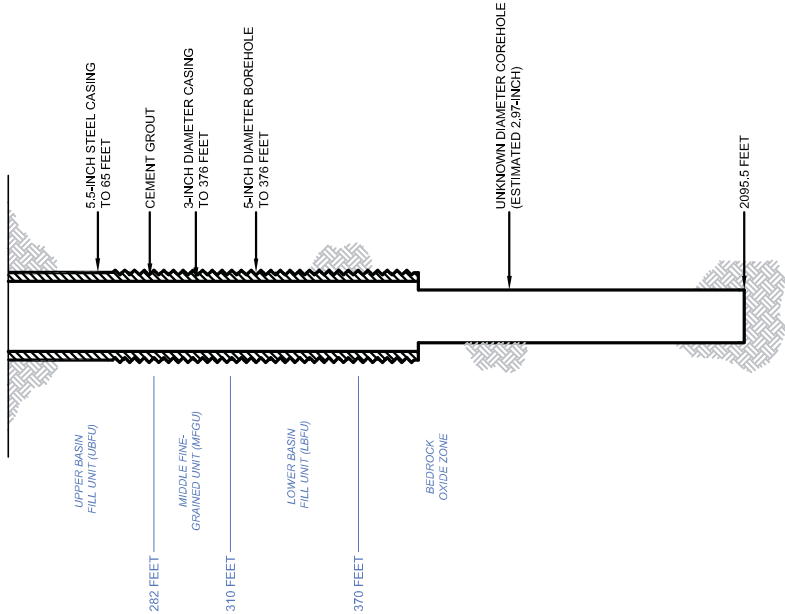
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
135MF COREHOLE



AS-BUILT 135MF COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

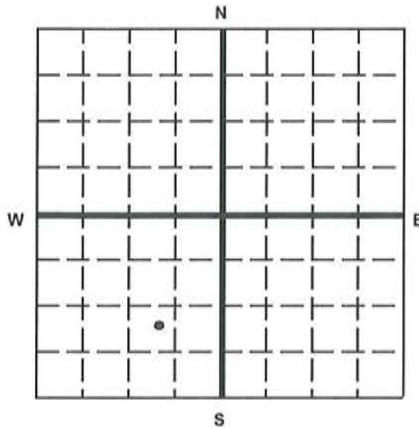
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1020 ft. from (N/S) S Line of quarter section
and 970 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 145MF

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-est.	0	395	5
5	13.70-est.	0	55	6.25

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	400					
Sacks of Cement To Be Used (each plug)	66.4	15.1					
Slurry Volume To Be Pumped (cu. ft.)	85.15	19.39					
Calculated Top of Plug (ft.)	400	5					
Measured Top of Plug (if tagged ft.)	400	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2170	400		
400	5		

Estimated Cost to Plug Wells

\$13,715

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)

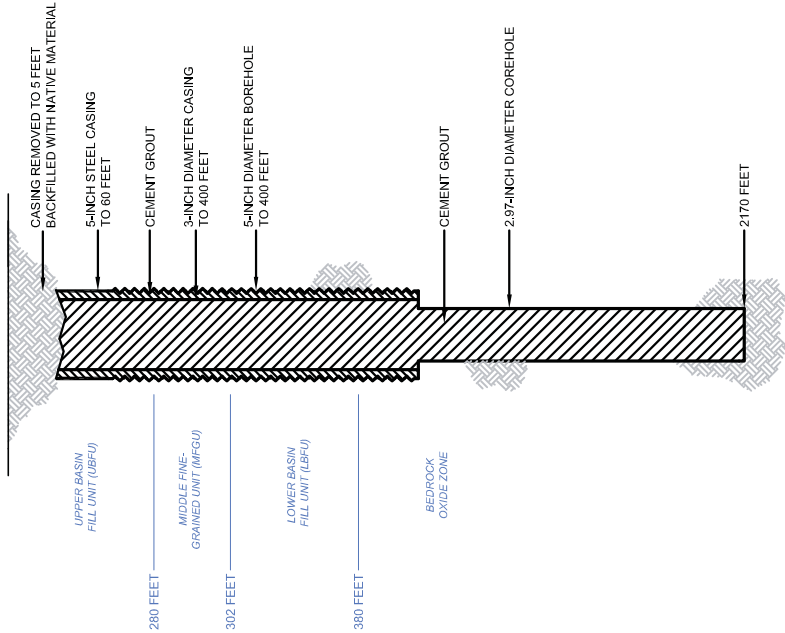
Dan Johnson, VP Environment and Technical Services

Signature

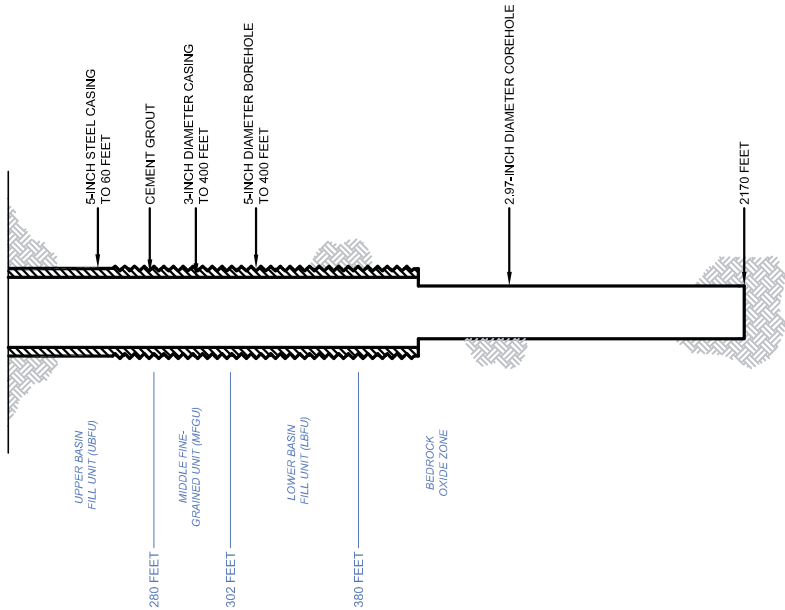
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
145MF COREHOLE



AS-BUILT 145MF COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

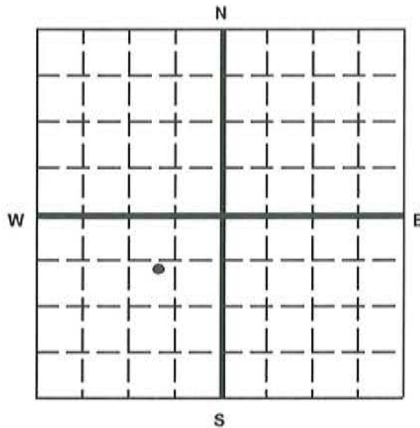
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 770 ft. from (N/S) N Line of quarter section
and 950 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 149S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-est.	0	596	5
5	13.70-est.	0	35	6.25

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	601					
Sacks of Cement To Be Used (each plug)	57.8	22.8					
Slurry Volume To Be Pumped (cu. ft.)	74.16	29.26					
Calculated Top of Plug (ft.)	601	5					
Measured Top of Plug (if tagged ft.)	601	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2142.5	601		
601	5		

Estimated Cost to Plug Wells

\$13,715

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)

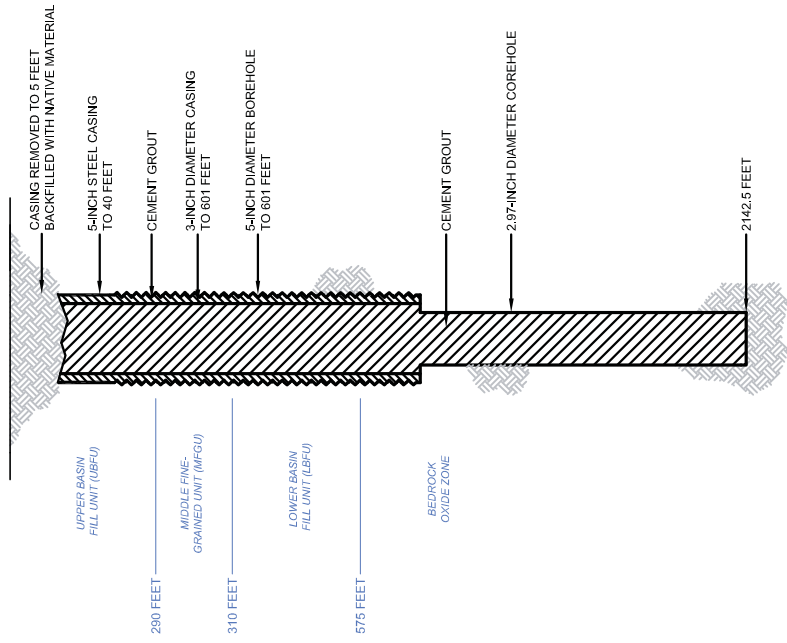
Dan Johnson, VP Environment and Technical Services

Signature

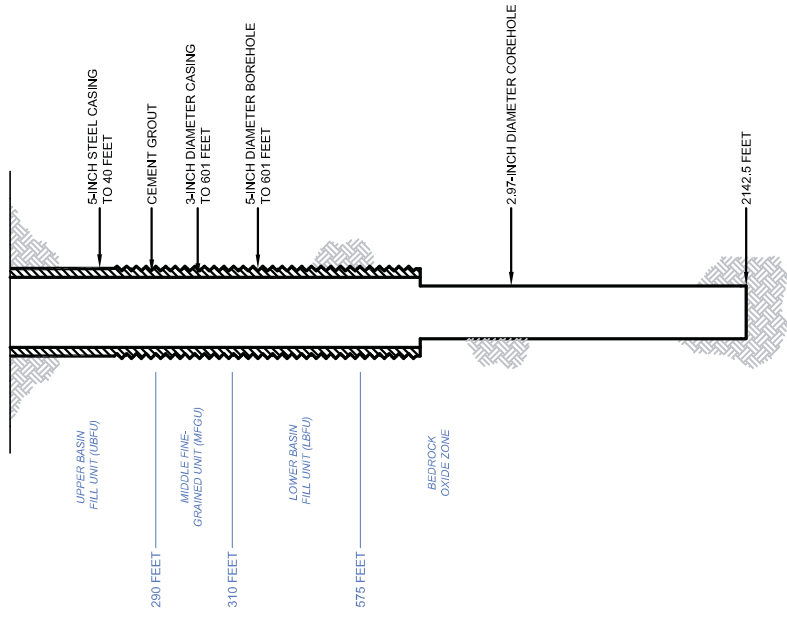
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
149S COREHOLE



AS-BUILT 149S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

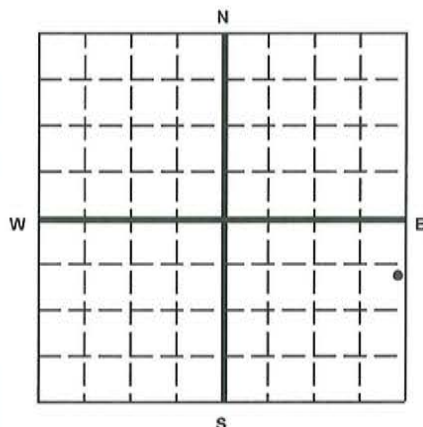
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 760 ft. from (N/S) N Line of quarter section

and 80 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 162S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	348	5
5	13.70-EST.	0	45	6.25 est

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	300					
Sacks of Cement To Be Used (each plug)	25.9	11.3					
Slurry Volume To Be Pumped (cu. ft.)	33.2	14.5					
Calculated Top of Plug (ft.)	300	5					
Measured Top of Plug (if tagged ft.)	300	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
990	300		
300	5		

Estimated Cost to Plug Wells

\$13,715

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)

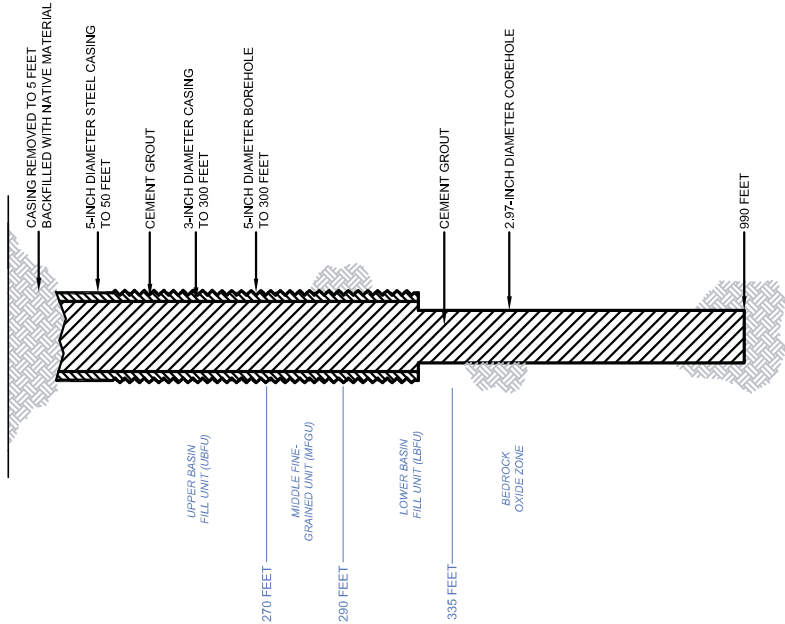
Dan Johnson, VP Environment and Technical Services

Signature

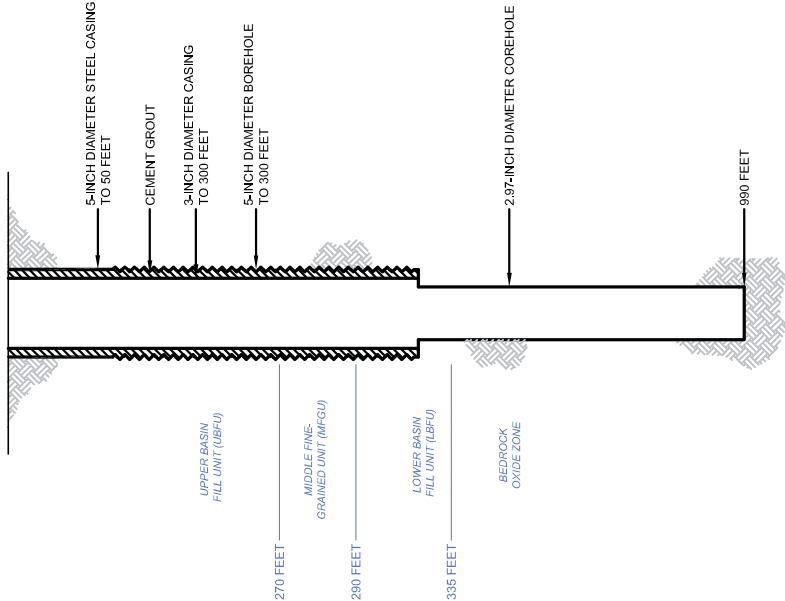
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
162S COREHOLE



AS-BUILT 162S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

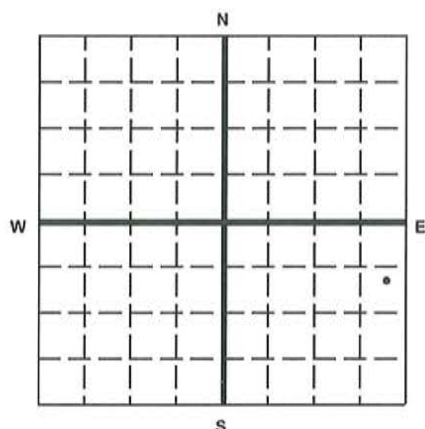
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 770 ft. from (N/S) N Line of quarter section
and 330 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 325S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	327.5 est	5
5.6	13.70-EST.	0	35	6.5-EST

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97 est	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	332.5					
Sacks of Cement To Be Used (each plug)	28.5	12.5					
Slurry Volume To Be Pumped (cu. ft.)	36.6	16.1					
Calculated Top of Plug (ft.)	332.5	5					
Measured Top of Plug (if tagged ft.)	332.5	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
1093	332.5		
332.5	5		

Estimated Cost to Plug Wells

\$13,715

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)

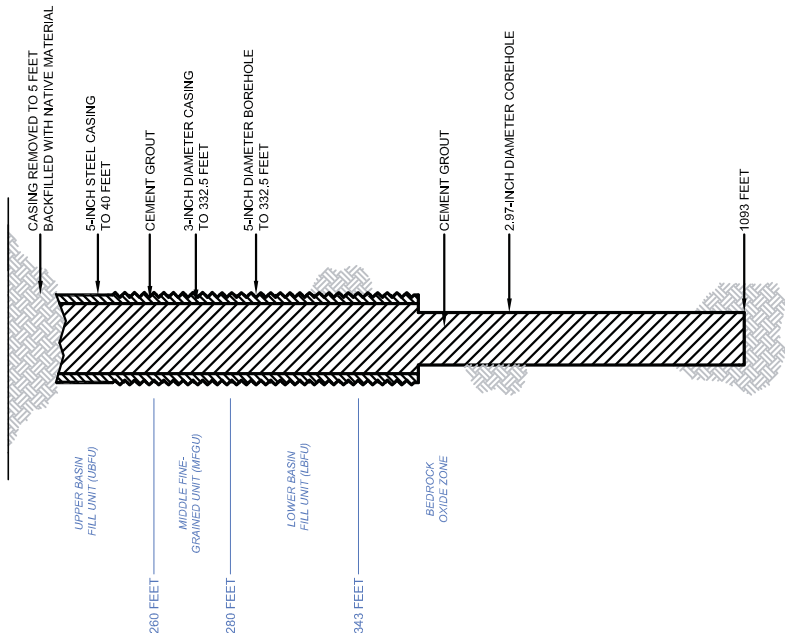
Dan Johnson, VP Environment and Technical Services

Signature

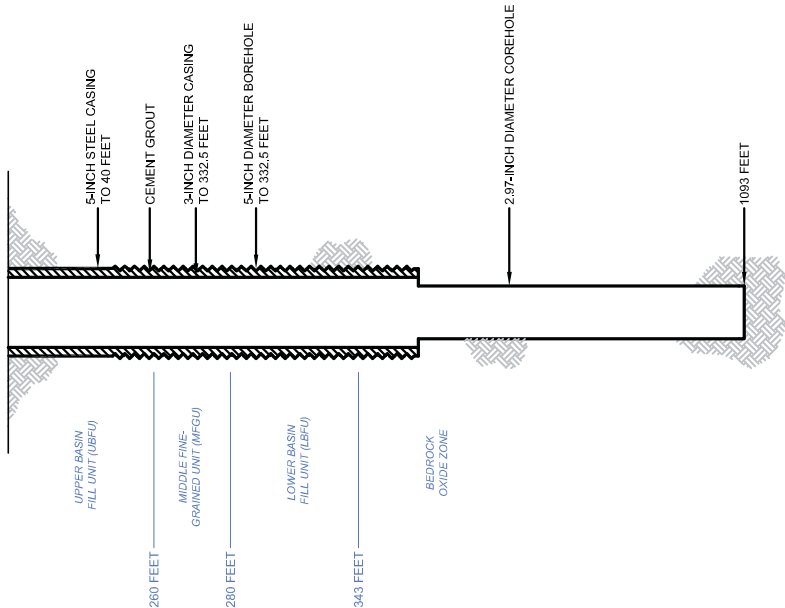
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
325S COREHOLE



AS-BUILT 325S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

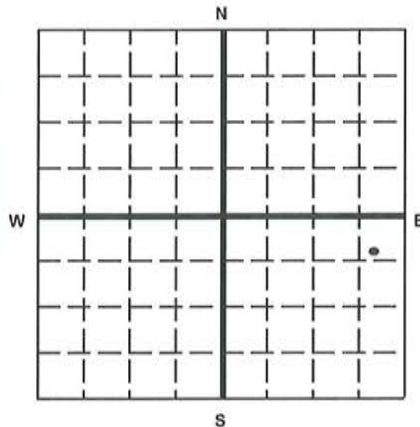
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State
Arizona

County
Pinal

Permit Number
AZ396000001

Surface Location Description

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

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

Surface

Location 560 ft. from (N/S) N Line of quarter section
and 450 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 337S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	295	5
5	13.70-EST.	0	40	6.5-EST.

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97 est	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	300					
Sacks of Cement To Be Used (each plug)	40.1	11.3					
Slurry Volume To Be Pumped (cu. ft.)	51.38	14.48					
Calculated Top of Plug (ft.)	300	5					
Measured Top of Plug (if tagged ft.)	300	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
1368	300		
300	5		

Estimated Cost to Plug Wells

\$13,715

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)

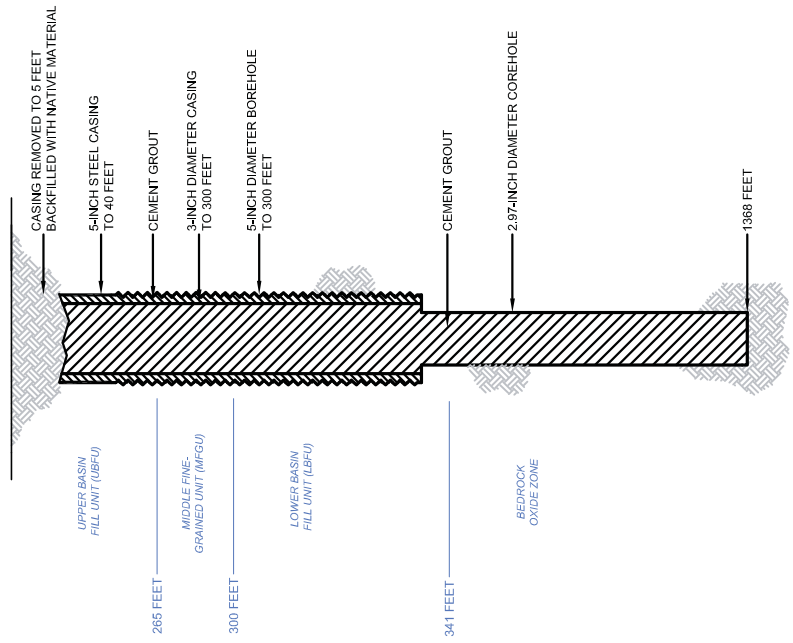
Dan Johnson, VP Environment and Technical Services

Signature

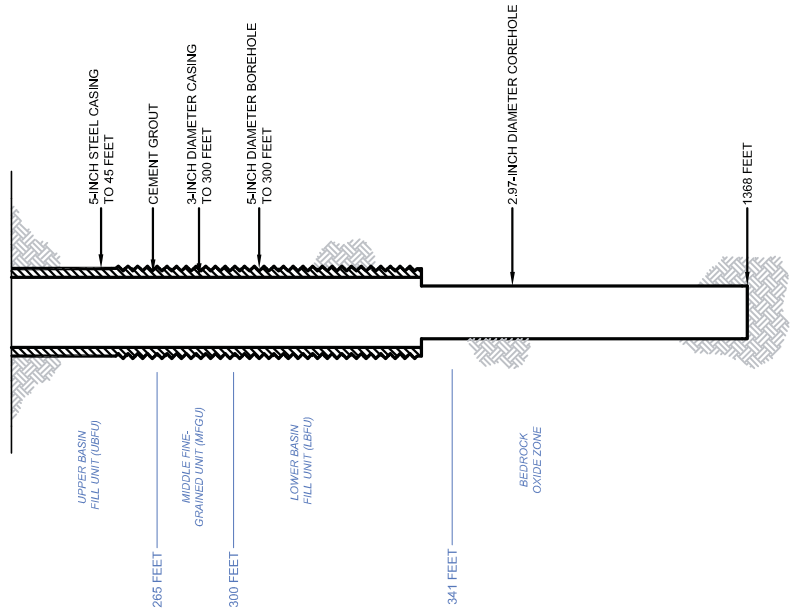
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
337S COREHOLE



AS-BUILT 337S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

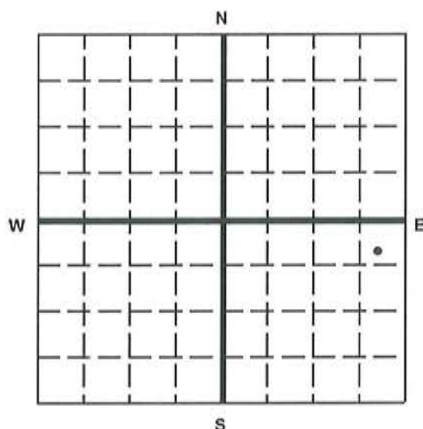
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 350 ft. from (N/S) N Line of quarter section

and 335 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 338S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	325	5
5.6	13.70-EST.	0	35	6.5est

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	330						
Sacks of Cement To Be Used (each plug)	12.4						
Slurry Volume To Be Pumped (cu. ft.)	15.95						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
330	5		

Estimated Cost to Plug Wells

\$13,715

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)

Dan Johnson, VP Environment and Technical Services

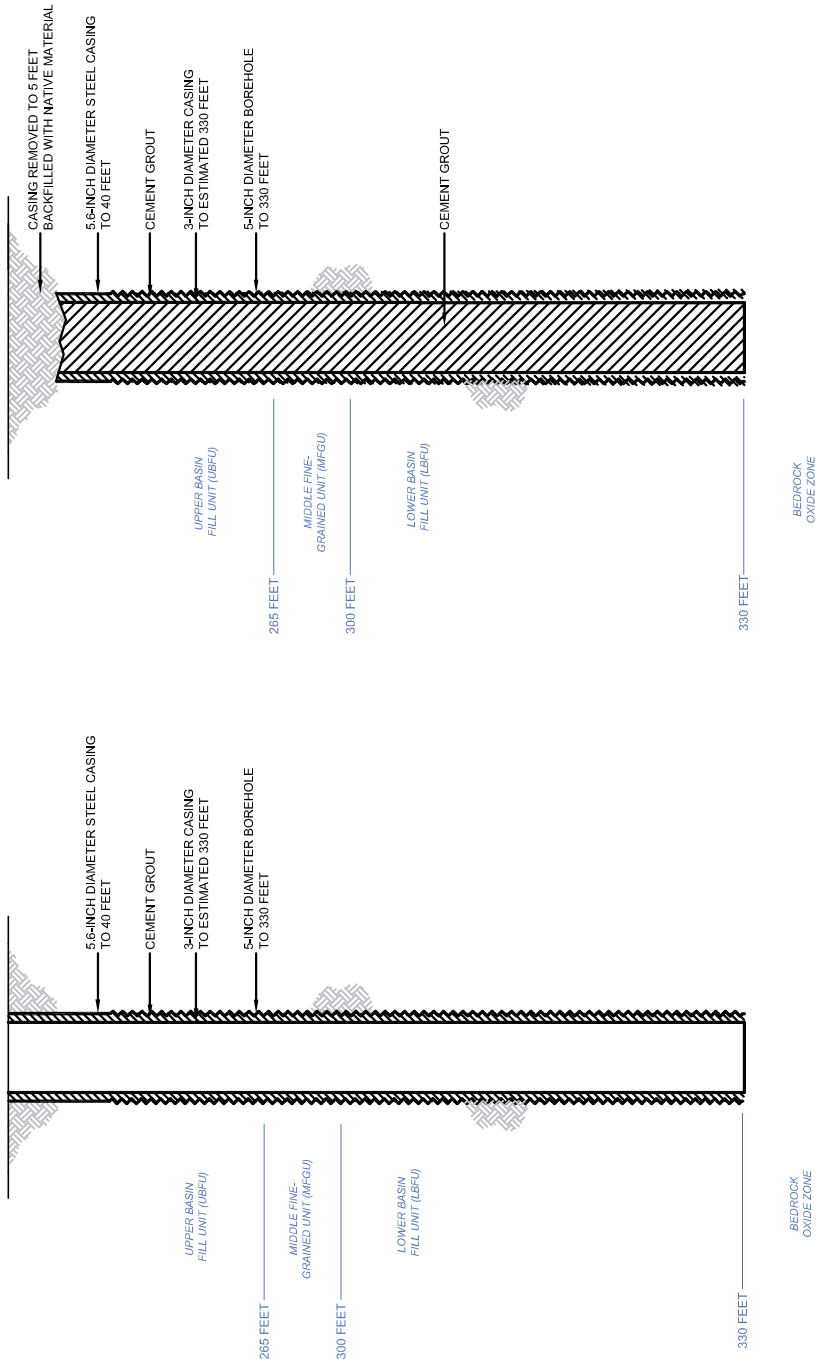
Signature

Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
338S COREHOLE

AS-BUILT 338S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

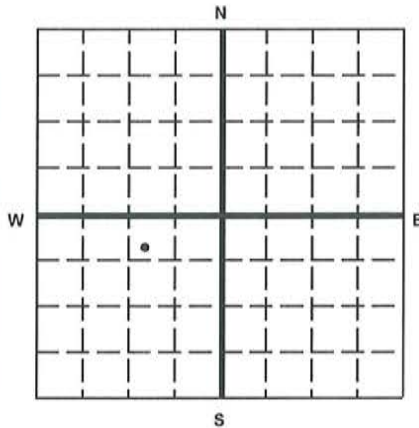
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 530 ft. from (N/S) N Line of quarter section
and 1090 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 356S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
5.6	13.7-EST.	0	40	6.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	5					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	473					
Sacks of Cement To Be Used (each plug)	60.8	49.8					
Slurry Volume To Be Pumped (cu. ft.)	78	63.8					
Calculated Top of Plug (ft.)	473	5					
Measured Top of Plug (if tagged ft.)	473	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2094	473		
473	5		

Estimated Cost to Plug Wells

\$13,715

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)

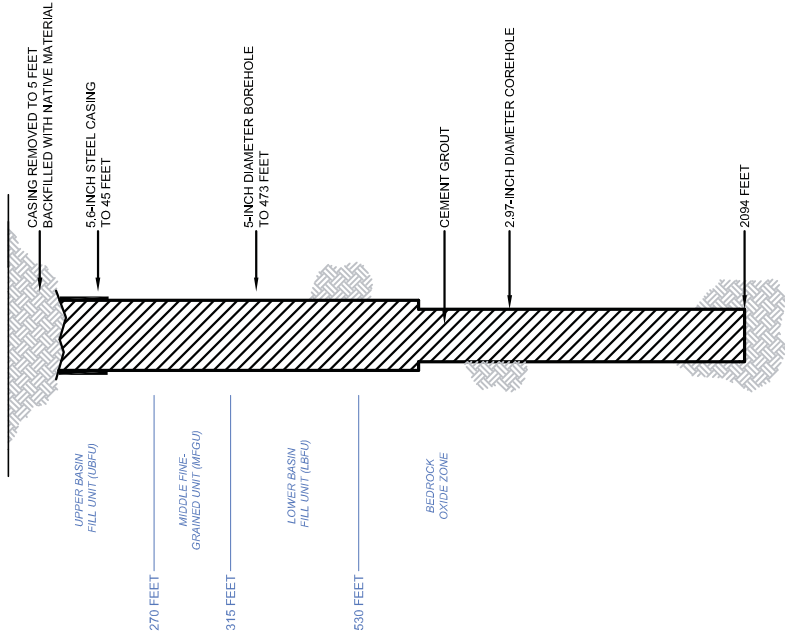
Dan Johnson, VP Environment and Technical Services

Signature

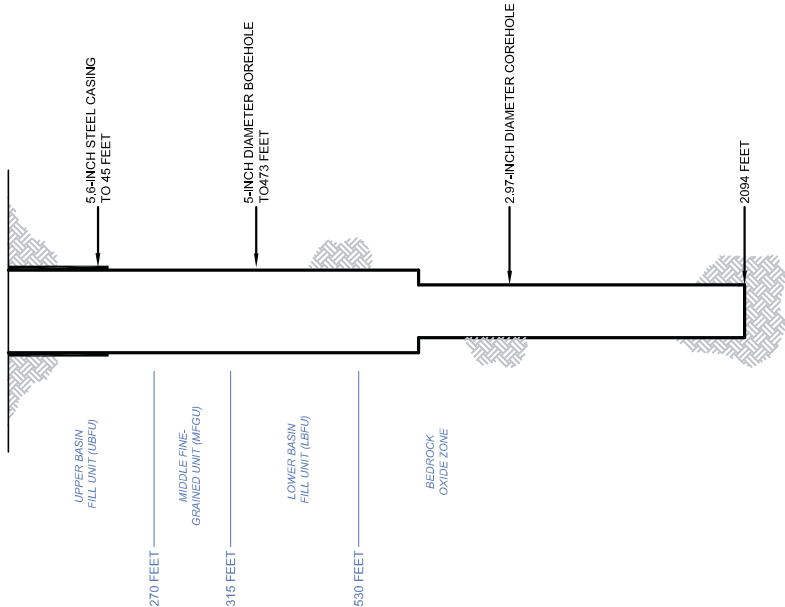
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
356S COREHOLE



AS-BUILT 356S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

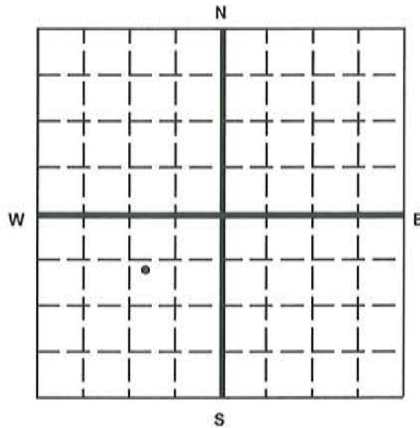
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 730 ft. from (N/S) N Line of quarter section
and 1220 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 357S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
5.6	13.70	0	40	6.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	5					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	455					
Sacks of Cement To Be Used (each plug)	68.5	47.9					
Slurry Volume To Be Pumped (cu. ft.)	87.8	61.2					
Calculated Top of Plug (ft.)	455	5					
Measured Top of Plug (if tagged ft.)	455	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2280	455		
455	5		

Estimated Cost to Plug Wells

\$13,715

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)

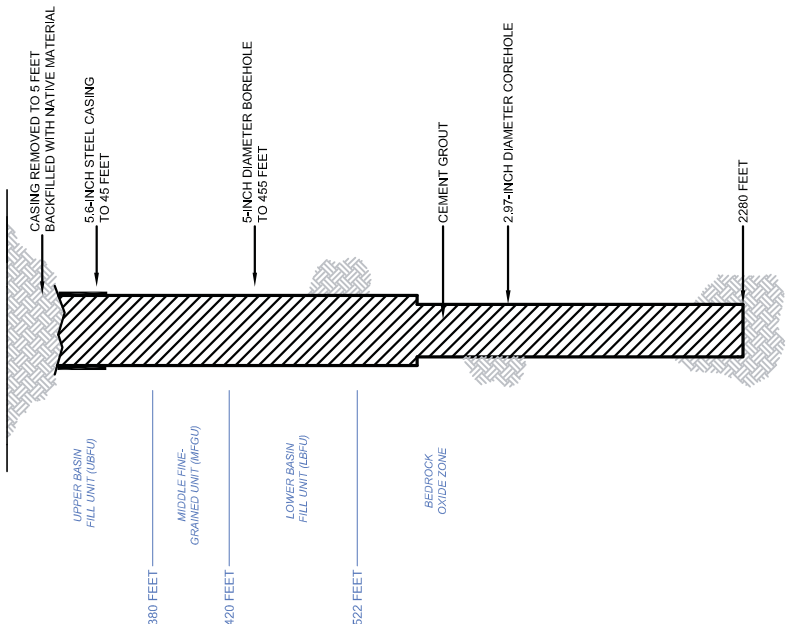
Dan Johnson, VP Environment and Technical Services

Signature

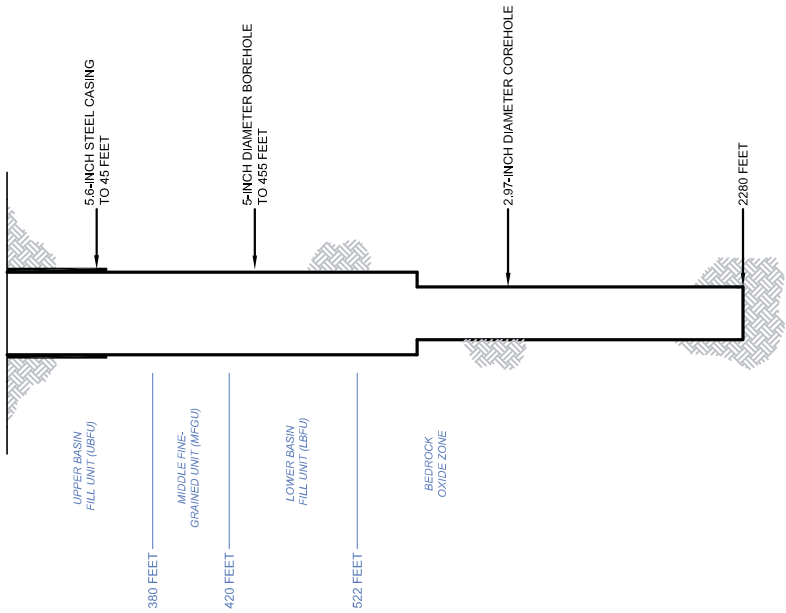
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
357S COREHOLE



AS-BUILT 357S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

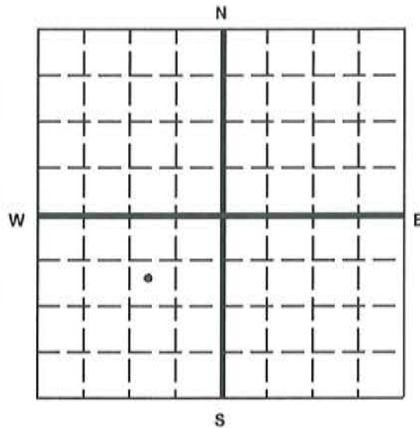
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 950 ft. from (N/S) N Line of quarter section
and 1090 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 366S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
5.6	13.70-est	0	40	6.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	5						
Depth to Bottom of Tubing or Drill Pipe (ft)	425 est						
Sacks of Cement To Be Used (each plug)	44.7						
Slurry Volume To Be Pumped (cu. ft.)	57.3						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
425	5		

Estimated Cost to Plug Wells

\$13,715

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)

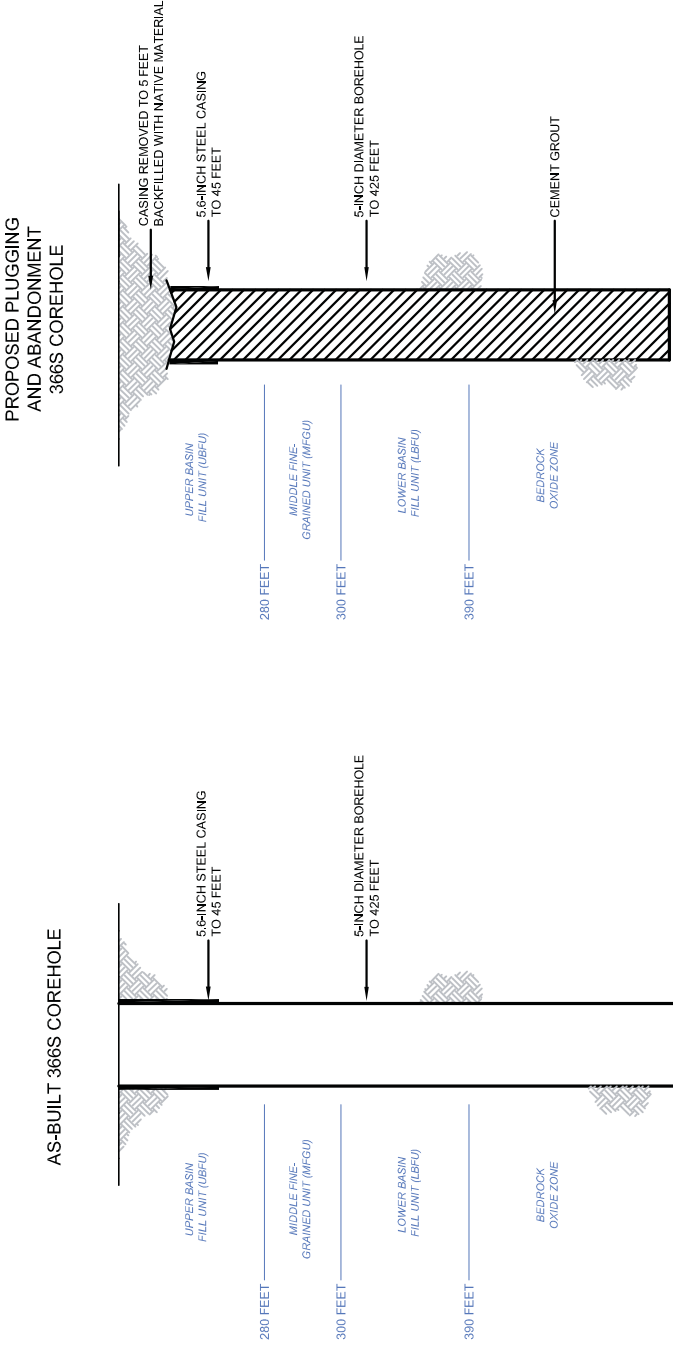
Name and Official Title (Please type or print)

Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

09/07/2012





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

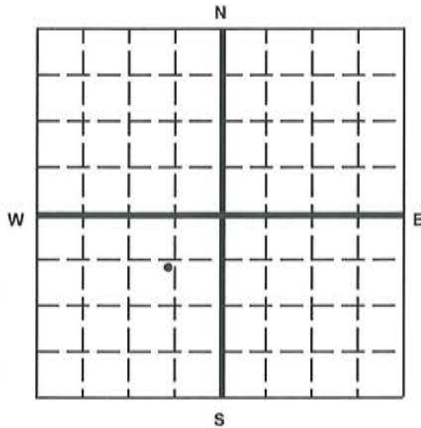
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 740 ft. from (N/S) N Line of quarter section
and 710 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 414S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	13.70	0	375	5
5.6	13.70	0	45	6.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	380					
Sacks of Cement To Be Used (each plug)	70.8	14.4					
Slurry Volume To Be Pumped (cu. ft.)	90.78	18.41					
Calculated Top of Plug (ft.)	380	5					
Measured Top of Plug (if tagged ft.)	380	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2267	380		
380	5		

Estimated Cost to Plug Wells

\$13,715

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)

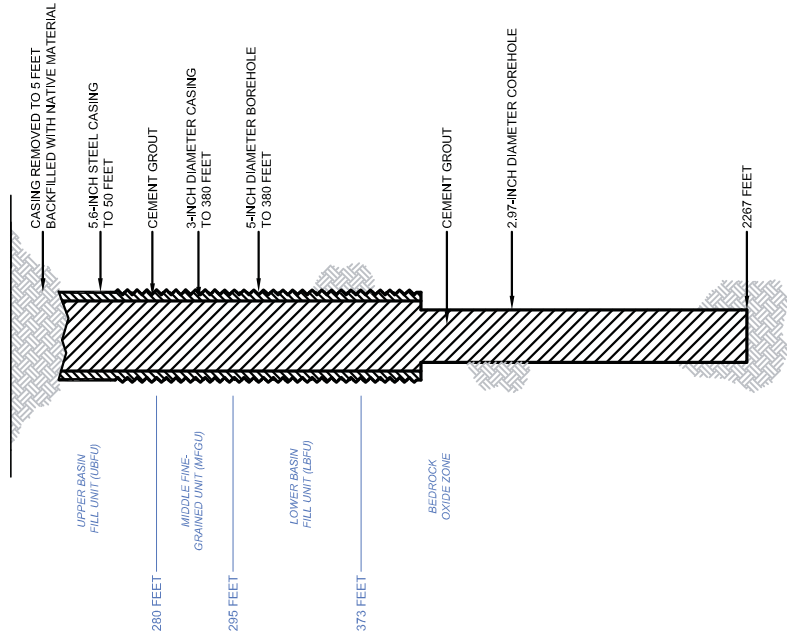
Dan Johnson, VP Environment and Technical Services

Signature

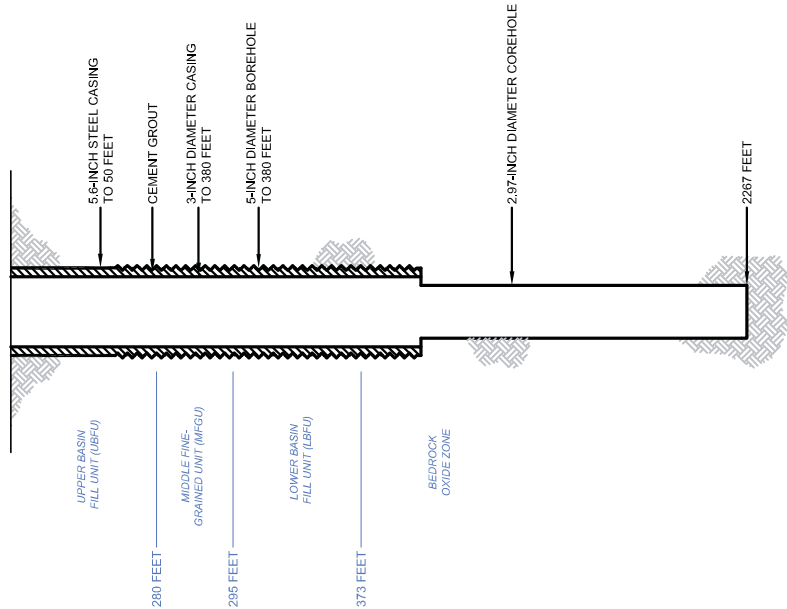
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
414S COREHOLE



AS-BUILT 414S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

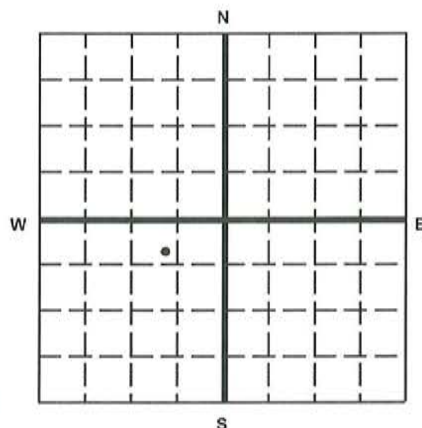
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 520 ft. frm (N/S) N Line of quarter section

and 830 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 415S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	275	5
5.6-est	13.70-EST.	0	35	6.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	2.97	3					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	280					
Sacks of Cement To Be Used (each plug)	66.1	10.5					
Slurry Volume To Be Pumped (cu. ft.)	84.7	13.5					
Calculated Top of Plug (ft.)	280	5					
Measured Top of Plug (if tagged ft.)	280	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
2042	280		
280	5		

Estimated Cost to Plug Wells

\$13,715

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)

Dan Johnson, VP Environment and Technical Services

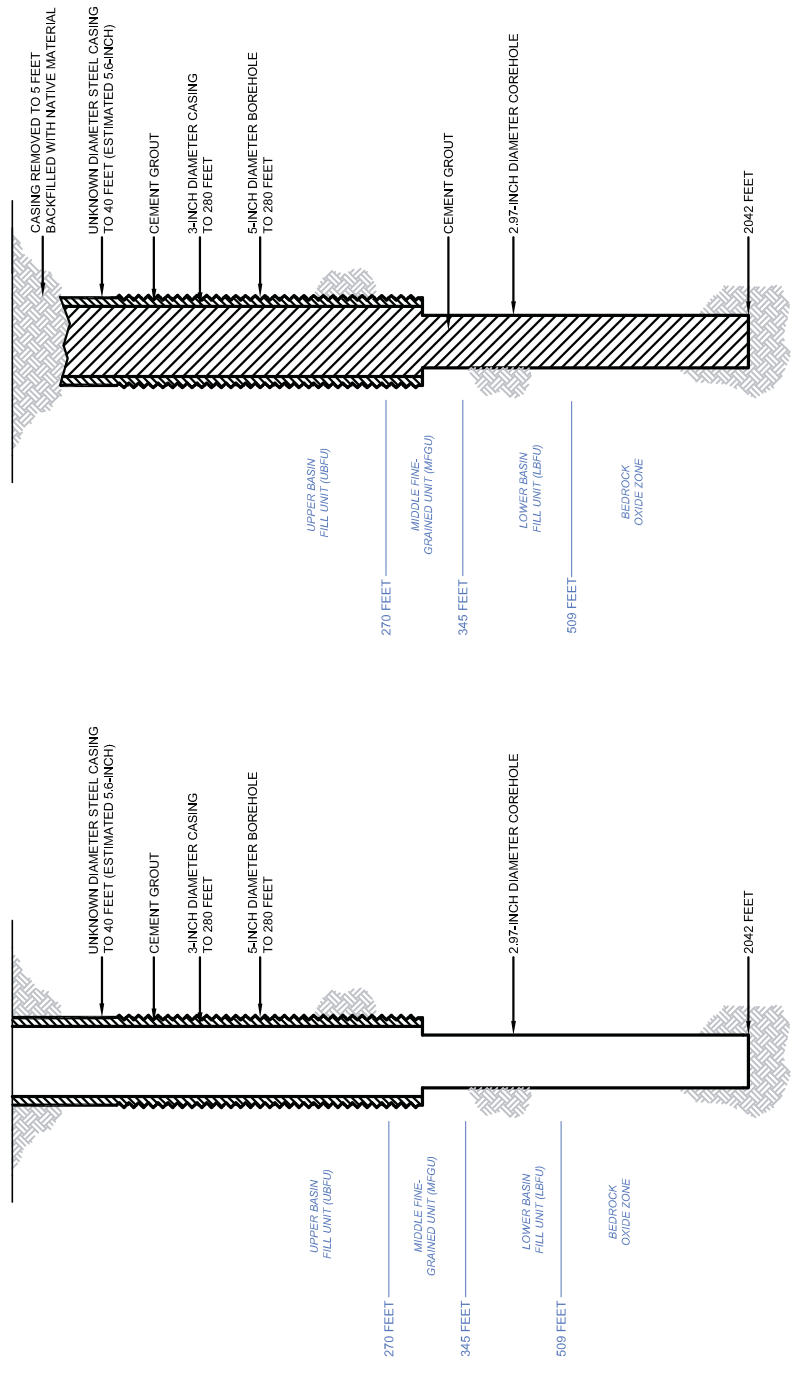
Signature

Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
415S COREHOLE

AS-BUILT 415S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

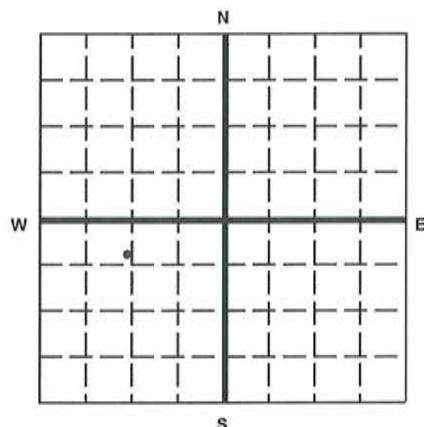
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 540 ft. from (N/S) N Line of quarter section
and 1260 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 447S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
4-est	10.79-EST	0	588-EST	5
5.6	13.70-EST	0	35	6.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	4						
Depth to Bottom of Tubing or Drill Pipe (ft)	593-EST						
Sacks of Cement To Be Used (each plug)	40						
Slurry Volume To Be Pumped (cu. ft.)	51.3						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
593	5		

Estimated Cost to Plug Wells

\$13,715

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)

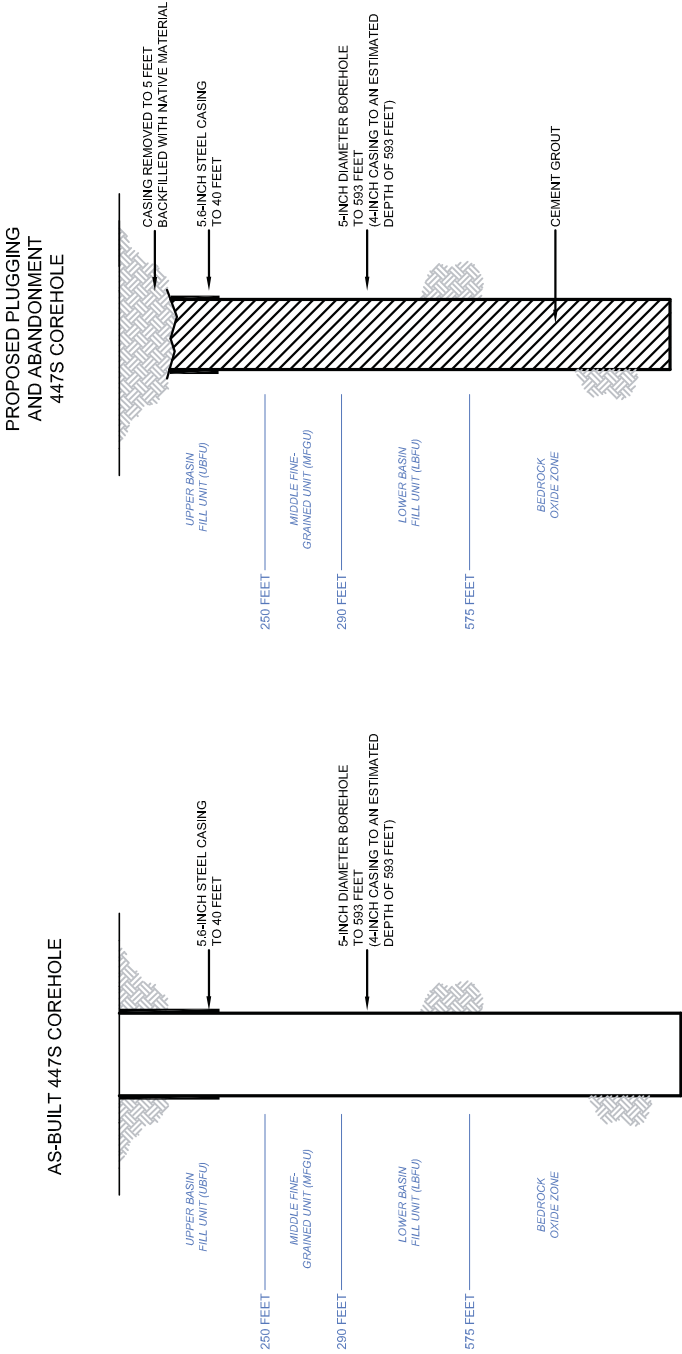
Name and Official Title (Please type or print)

Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

09/07/2012



G:\PROJECTS\CURIS RESOURCES\38706-CURIS FEASIBILITY\DRAWINGS\EPWELL\ABANDON\447S_ABANDON.DWG



United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

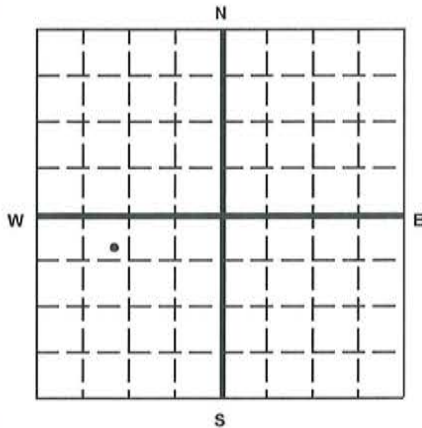
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 530 ft. from (N/S) N Line of quarter section
and 1060 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 448S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	745	5
5.6est	13.70-EST.	0	35	6.75

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	750						
Sacks of Cement To Be Used (each plug)	28.5						
Slurry Volume To Be Pumped (cu. ft.)	36.57						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
750	5		

Estimated Cost to Plug Wells

\$13,715

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)

Dan Johnson, VP Environment and Technical Services

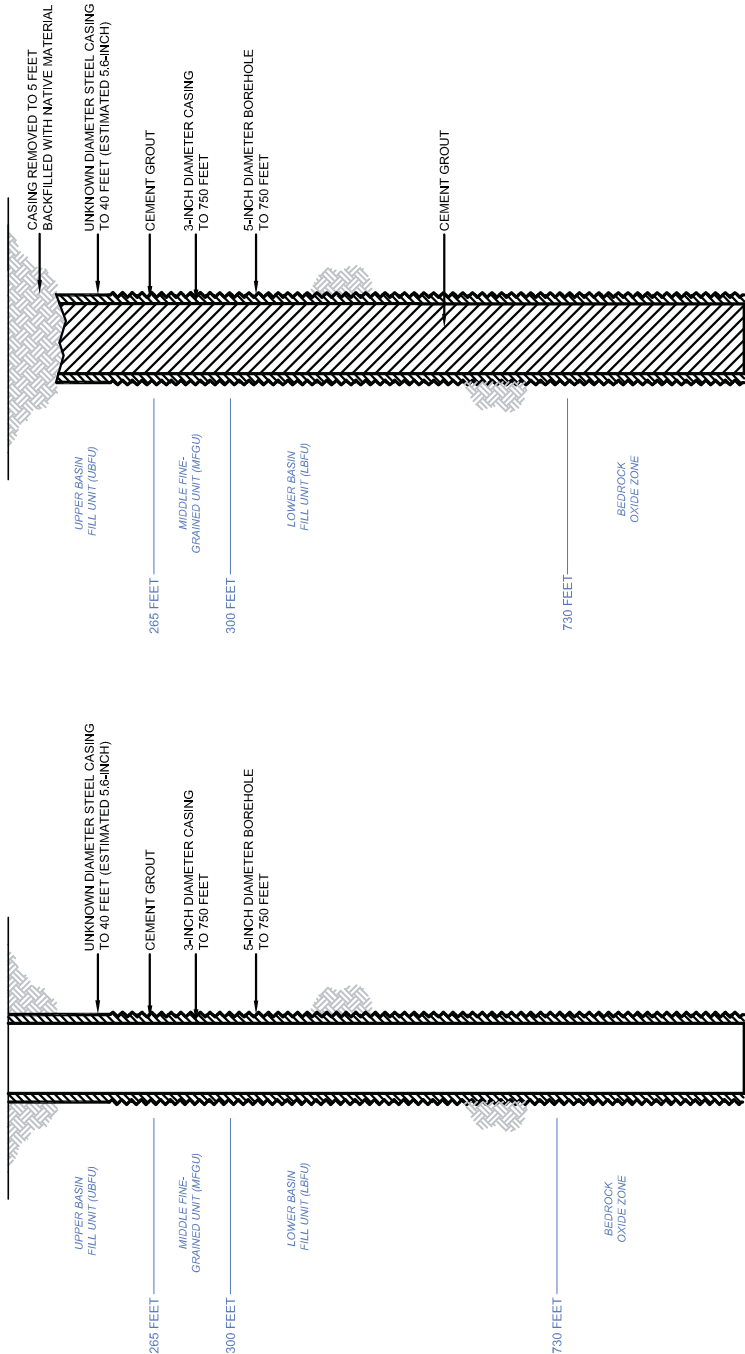
Signature

Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
448S COREHOLE

AS-BUILT 448S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

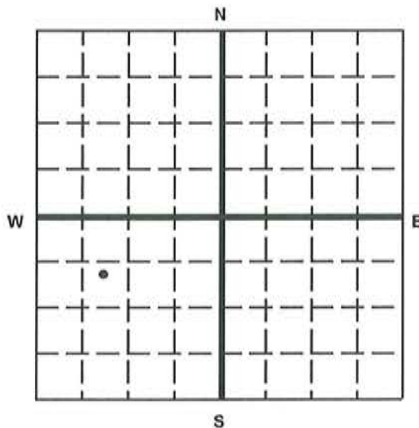
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 750 ft. from (N/S) N Line of quarter section
and 930 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 453S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	865	5
5.6est	13.70-EST	0	35	6.75

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	870						
Sacks of Cement To Be Used (each plug)	33.1						
Slurry Volume To Be Pumped (cu. ft.)	42.46						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
870	5		

Estimated Cost to Plug Wells

\$13,715

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)

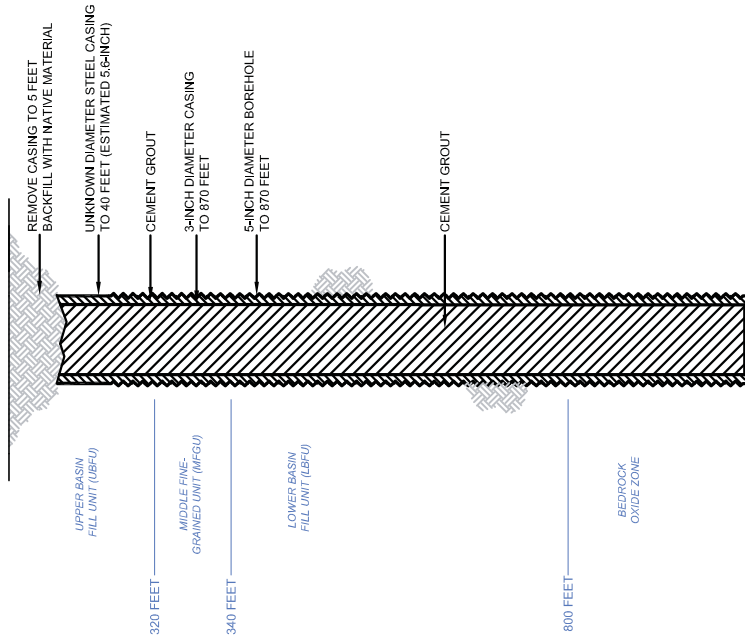
Dan Johnson, VP Environment and Technical Services

Signature

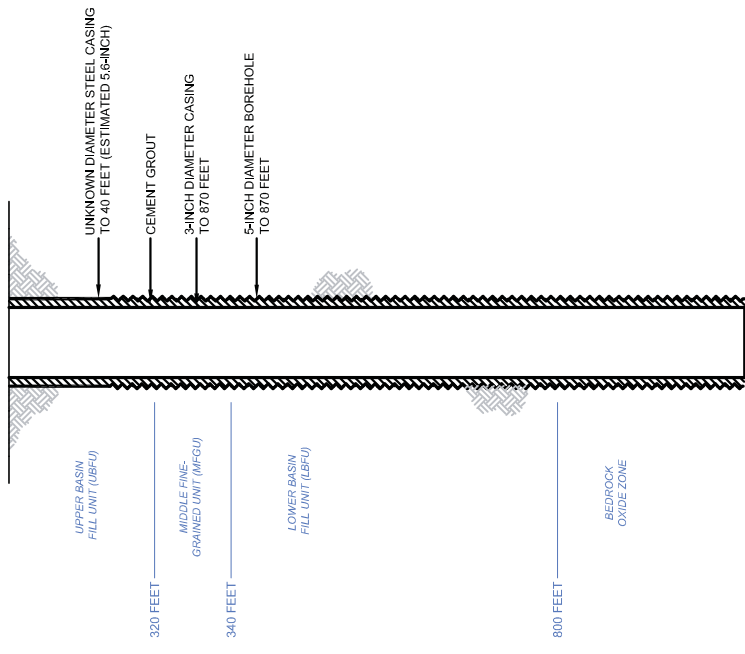
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
453S COREHOLE



AS-BUILT 453S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

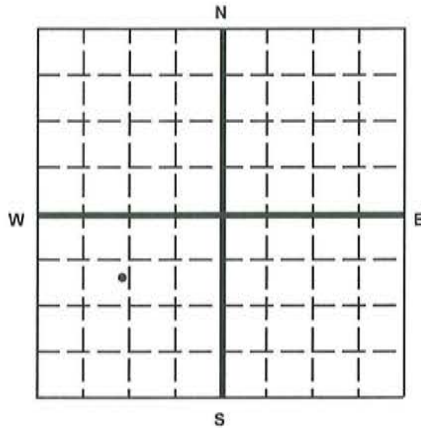
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 950 ft. from (N/S) N Line of quarter section
and 1280 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Lease Name NA

Well Number 454S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
4	10.79-EST.	0	398 - ESTIMATED	5
5.6	13.70-EST.	0	35	6.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	4						
Depth to Bottom of Tubing or Drill Pipe (ft)	403 est						
Sacks of Cement To Be Used (each plug)	27.1						
Slurry Volume To Be Pumped (cu. ft.)	34.7						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
403	5		

Estimated Cost to Plug Wells

\$13,715

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)

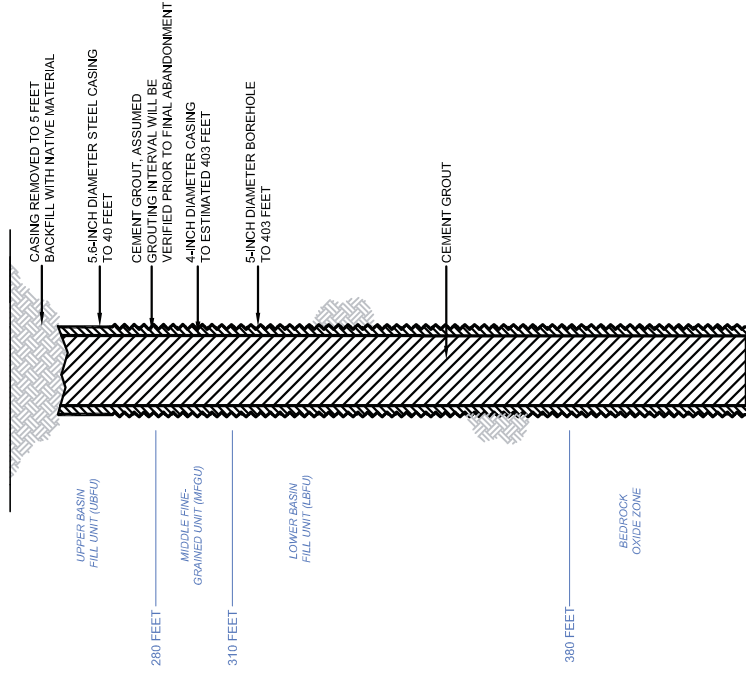
Dan Johnson, VP Environment and Technical Services

Signature

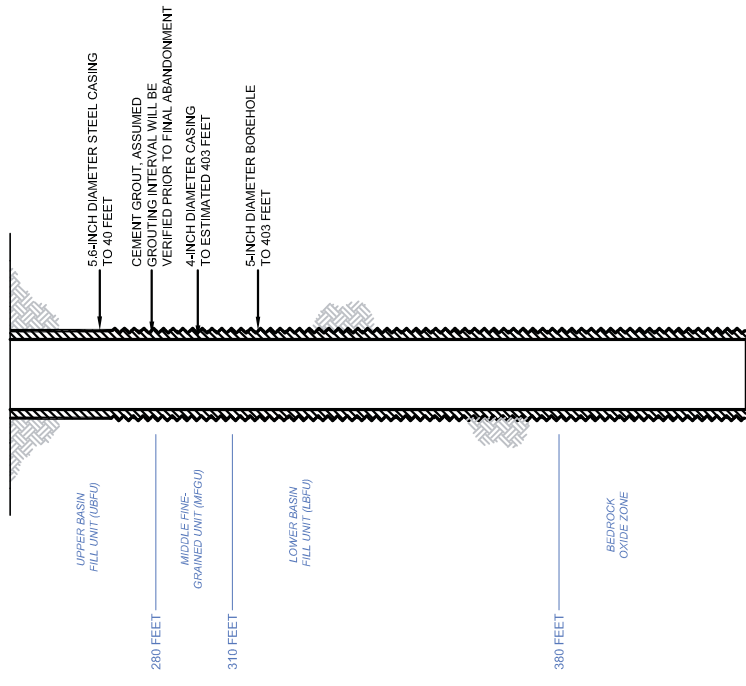
Date Signed

09/07/2013

PROPOSED PLUGGING
AND ABANDONMENT
454S COREHOLE



AS-BUILT 454S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

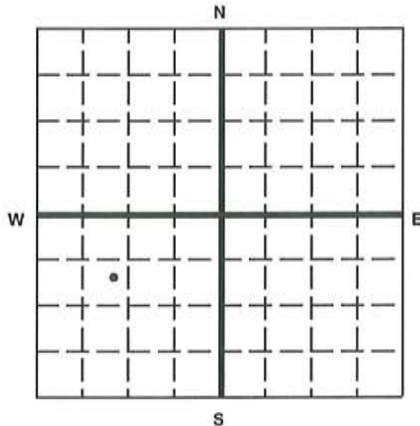
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 960 ft. from (N/S) N Line of quarter section
and 1060 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 455S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST	0	548 est	5
5.6	13.70-EST	0	35	7.88

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	553 est						
Sacks of Cement To Be Used (each plug)	21						
Slurry Volume To Be Pumped (cu. ft.)	26.9						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
553 est	5		

Estimated Cost to Plug Wells

\$13,715

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)

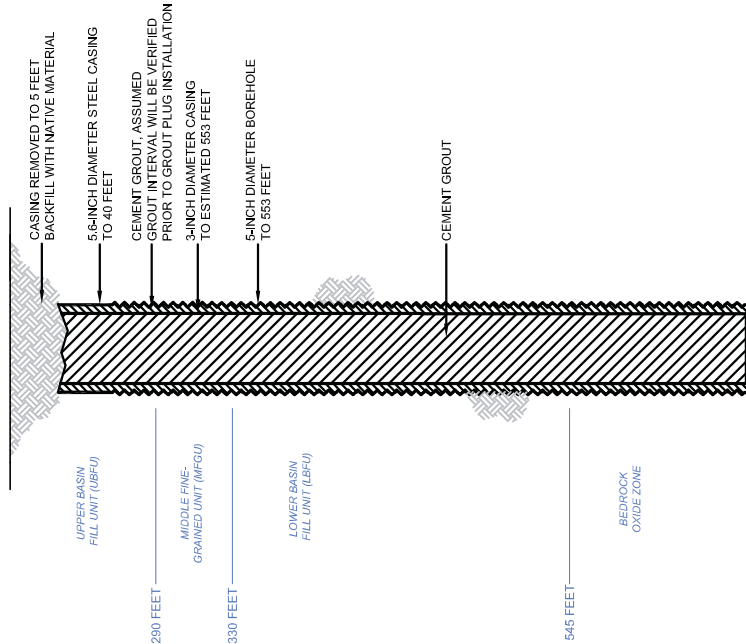
Dan Johnson, VP Environment and Technical Services

Signature

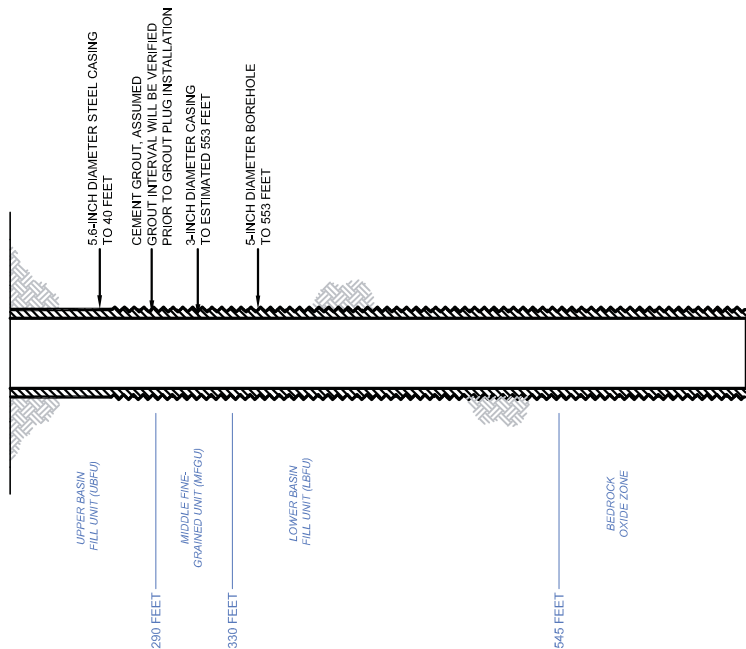
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
455S COREHOLE



AS-BUILT 455S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

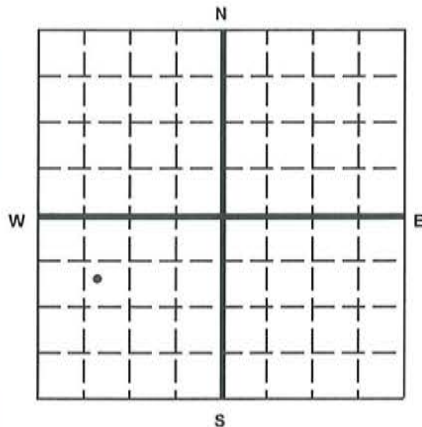
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State
Arizona

County
Pinal

Permit Number
AZ396000001

Surface Location Description

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

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

Surface

Location 960 ft. from (N/S) N Line of quarter section
and 810 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 456S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	820	5
5.6est	13.70-EST.	0	35	6.75

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	825						
Sacks of Cement To Be Used (each plug)	31.4						
Slurry Volume To Be Pumped (cu. ft.)	40.3						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
825	5		

Estimated Cost to Plug Wells

\$13,715

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)

Dan Johnson, VP Environment and Technical Services

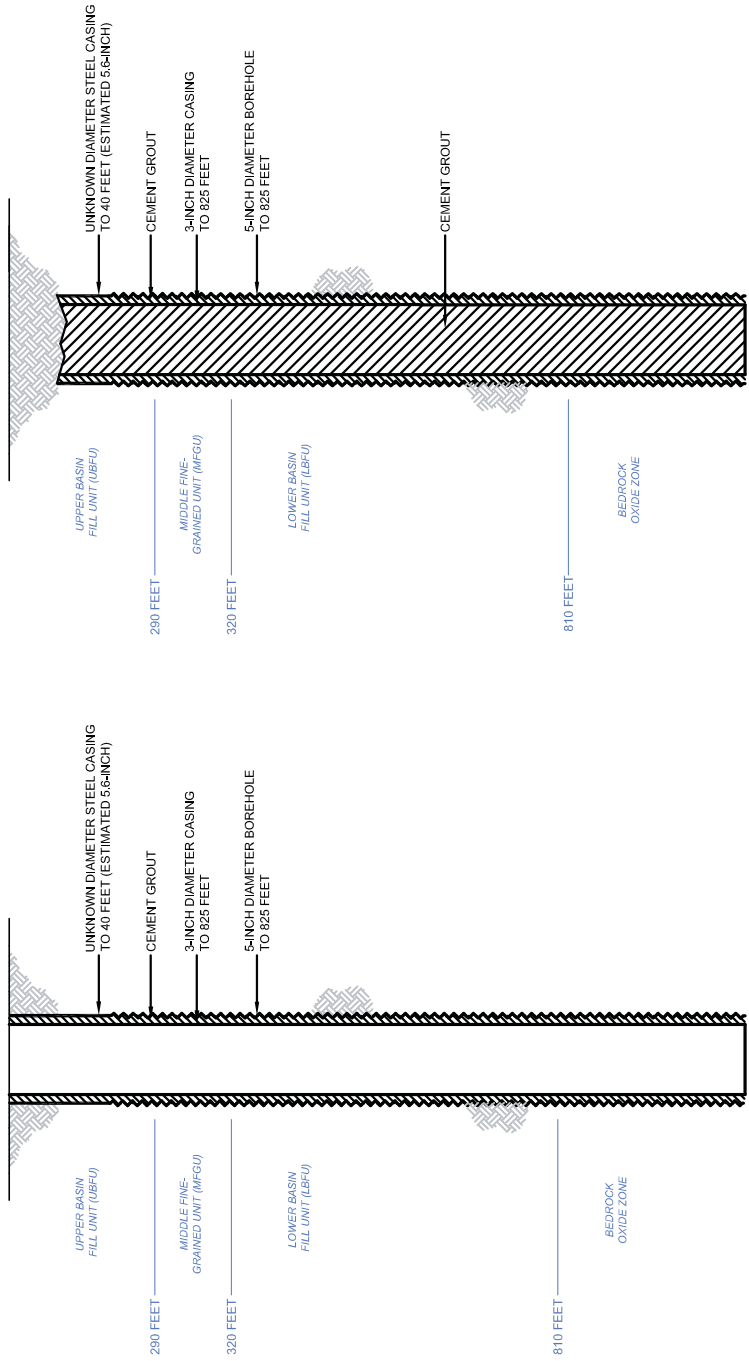
Signature

Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
456S COREHOLE

AS-BUILT 456S COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

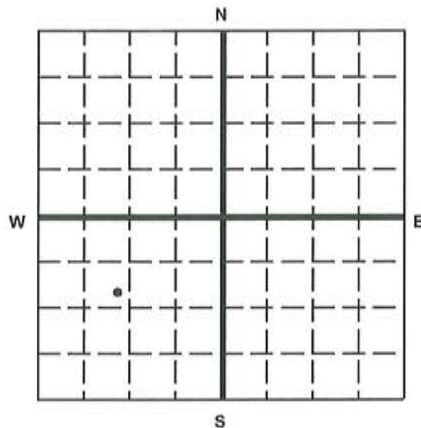
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1170 ft. from (N/S) N Line of quarter section
and 1190 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 459S

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
5.6est	13.70-EST	0	35	6.5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	5						
Depth to Bottom of Tubing or Drill Pipe (ft)	NA						
Sacks of Cement To Be Used (each plug)	50.8						
Slurry Volume To Be Pumped (cu. ft.)	65.2						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
483	5		

Estimated Cost to Plug Wells

\$13,715

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)

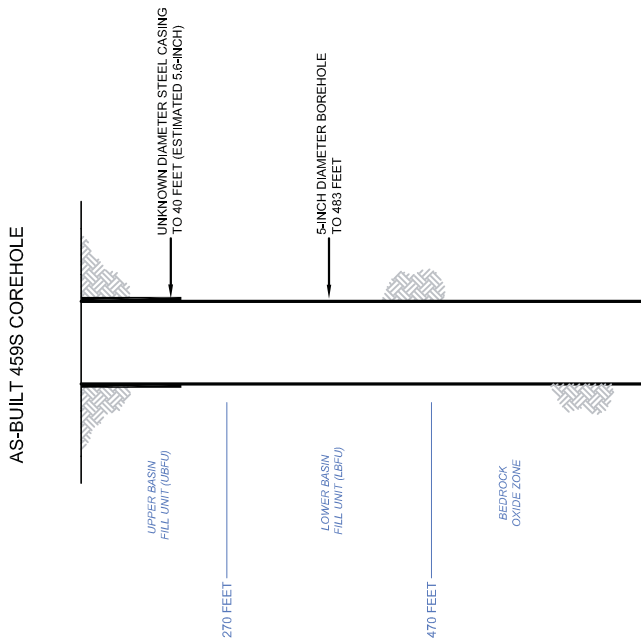
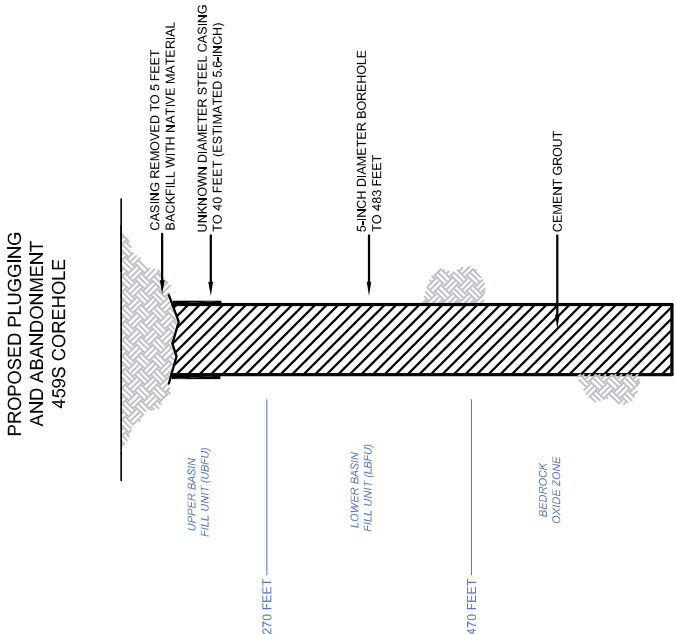
Name and Official Title (Please type or print)

Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

09/07/2012





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

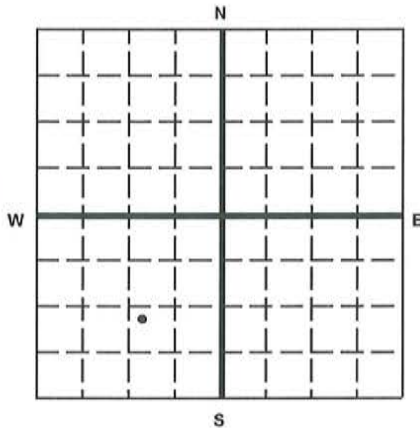
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1190 ft. from (N/S) S Line of quarter section
and 1080 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 460MF

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST	0	469	5
6	13.70	0	45	7.88

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	474						
Sacks of Cement To Be Used (each plug)	18						
Slurry Volume To Be Pumped (cu. ft.)	23.02						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
474	5		

Estimated Cost to Plug Wells

\$13,715

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)

Dan Johnson, VP Environment and Technical Services

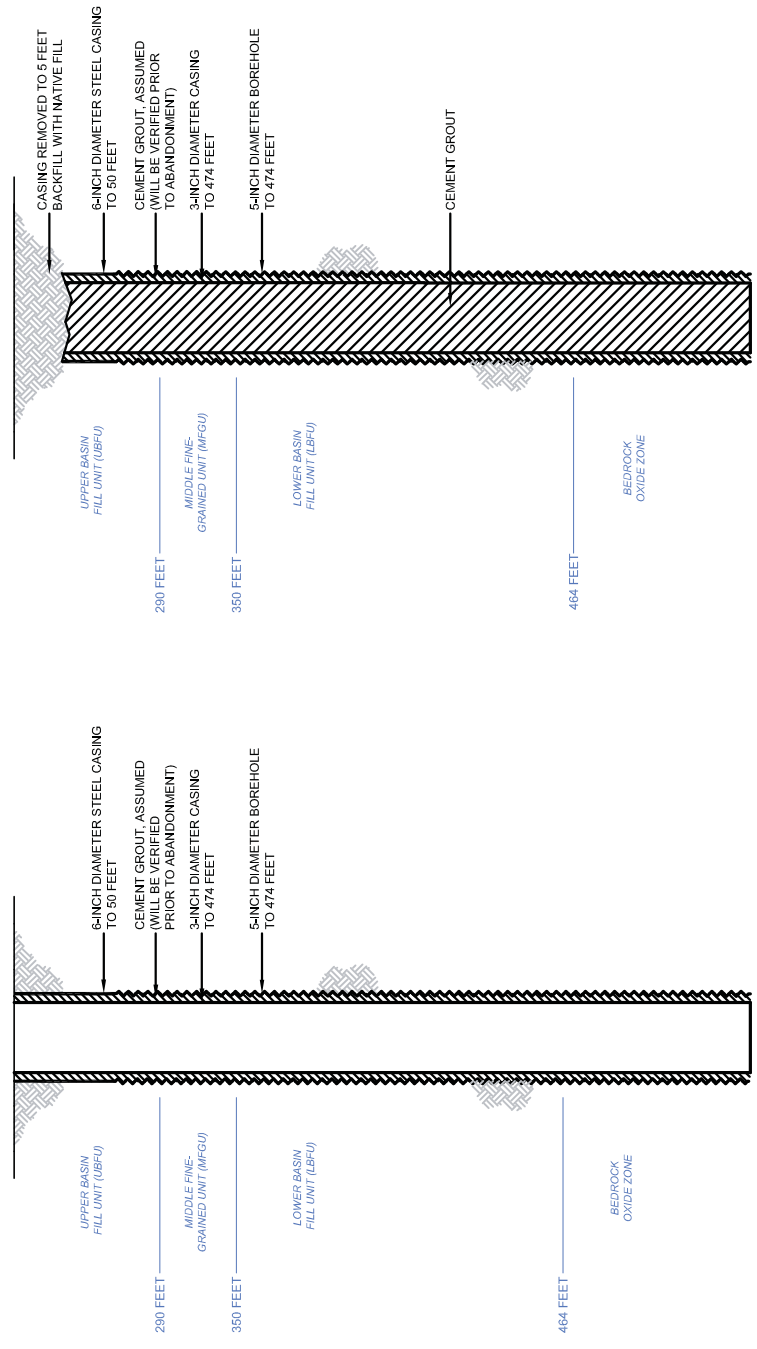
Signature

Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
460MF COREHOLE

AS-BUILT 460MF COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

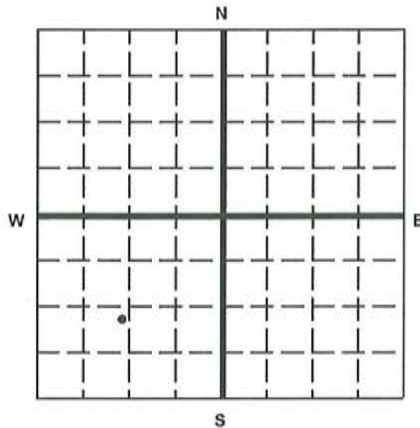
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1180 ft. from (N/S) S Line of quarter section
and 1260 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 461MF

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
6	13.70-EST	0	50	7.88
3	9.11-EST.	0	380	5

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	385						
Sacks of Cement To Be Used (each plug)	14.5						
Slurry Volume To Be Pumped (cu. ft.)	18.7						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
385	5		

Estimated Cost to Plug Wells

\$13,715

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)

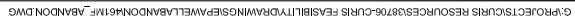
Name and Official Title (Please type or print)

Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

09/07/2012





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

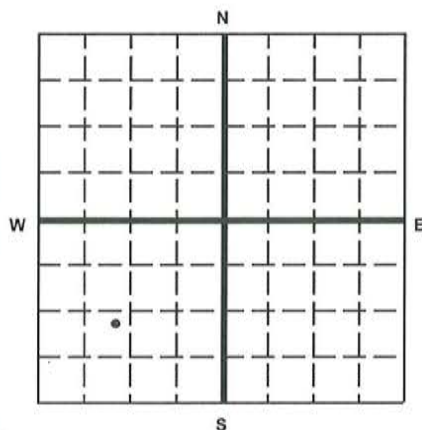
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State
Arizona

County
Pinal

Permit Number
AZ396000001

Surface Location Description

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

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

Surface

Location 1190 ft. from (N/S) S Line of quarter section
and 1060 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 462MF

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	489	5
6	13.70-EST.	0	60	7.88

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	494						
Sacks of Cement To Be Used (each plug)	18.7						
Slurry Volume To Be Pumped (cu. ft.)	24						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
494	5		

Estimated Cost to Plug Wells

\$13,715

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)

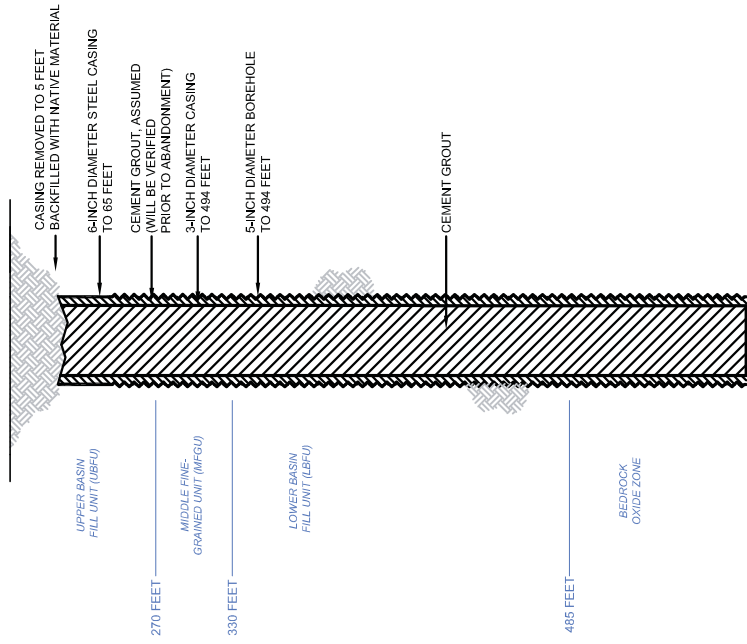
Dan Johnson, VP Environment and Technical Services

Signature

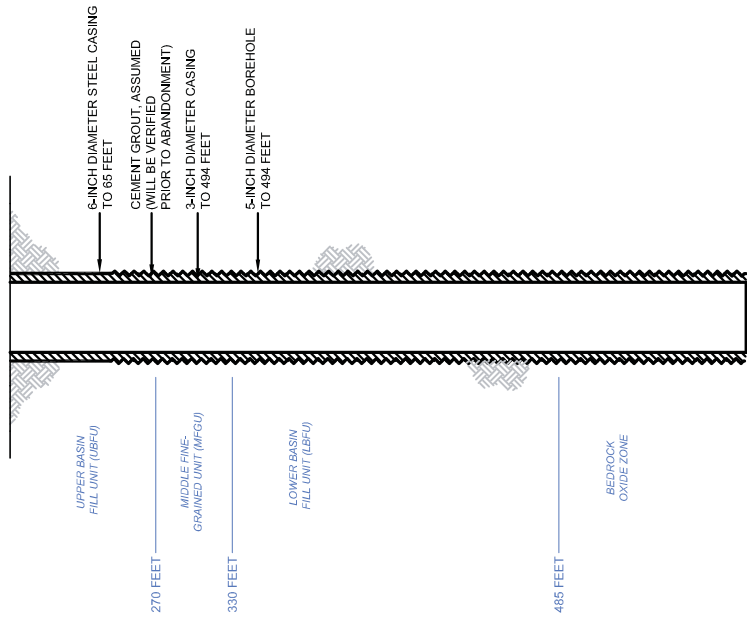
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
462MF COREHOLE



AS-BUILT 462MF COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

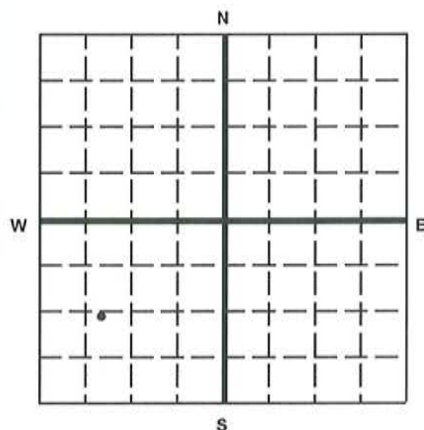
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State
Arizona

County
Pinal

Permit Number
AZ396000001

Surface Location Description

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

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

Surface

Location 1290 ft. from (N/S) S Line of quarter section
and 850 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 463MF

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3	9.11-EST.	0	715	5
6	13.70-EST.	0	45	7.88

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (Inches)	3						
Depth to Bottom of Tubing or Drill Pipe (ft)	720						
Sacks of Cement To Be Used (each plug)	27.4						
Slurry Volume To Be Pumped (cu. ft.)	35.10						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
720	5		

Estimated Cost to Plug Wells

\$13,715

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)

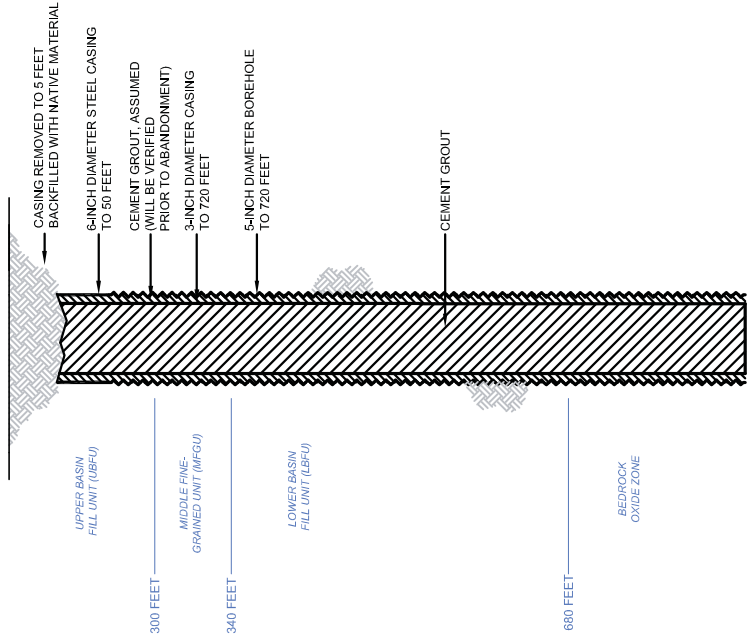
Dan Johnson, VP Environment and Technical Services

Signature

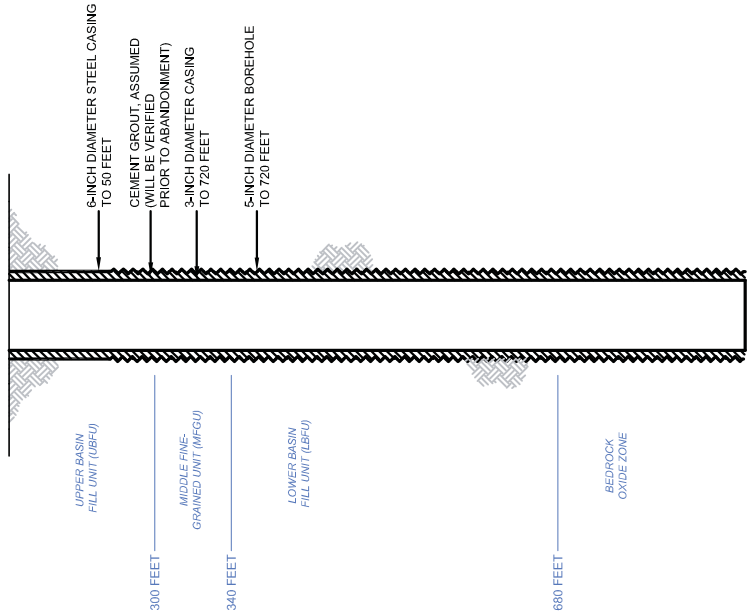
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
463MF COREHOLE



AS-BUILT 463MF COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

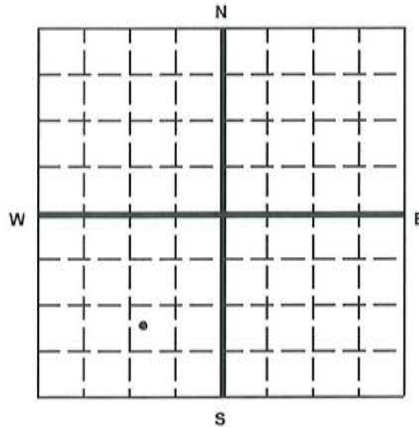
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State
Arizona

County
Pinal

Permit Number
AZ396000001

Surface Location Description

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

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

Surface

Location 1010 ft. from (N/S) S Line of quarter section
and 1190 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number 465MF

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
NA	NA	NA	NA	NA

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	5-EST						
Depth to Bottom of Tubing or Drill Pipe (ft)	NA						
Sacks of Cement To Be Used (each plug)	36.7						
Slurry Volume To Be Pumped (cu. ft.)	47						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
350	5		

Estimated Cost to Plug Wells

\$13,715

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)

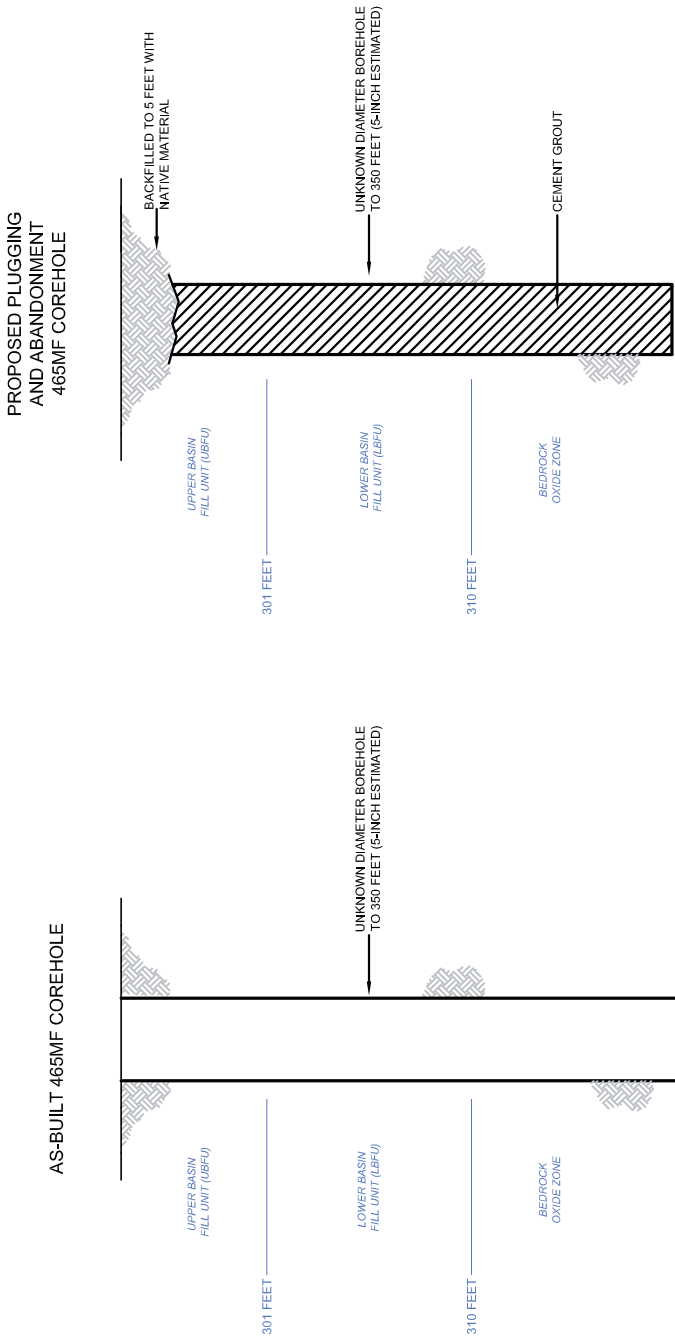
Name and Official Title (Please type or print)

Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

09/07/2012



G:\PROJECTS\CURIS RESOURCES\38706-CURIS FEASIBILITY\DRAWINGS\EPWELL\ABANDON\465MF_ABANDON.DWG



United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

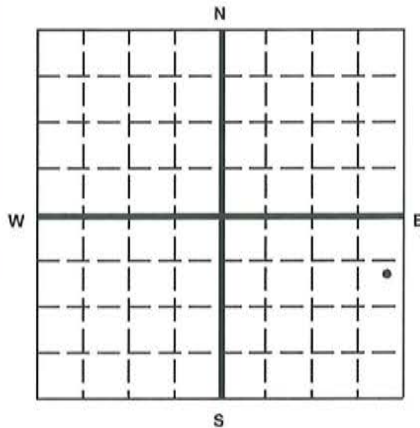
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 720 ft. from (N/S) N Line of quarter section
and 310 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number M32-UBF

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
5.6	15-EST.	0	165	6

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	5.6						
Depth to Bottom of Tubing or Drill Pipe (ft)	180						
Sacks of Cement To Be Used (each plug)	22.0						
Slurry Volume To Be Pumped (cu. ft.)	28.2						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
170	129-PERFORATED		
129	5-BLANK		

Estimated Cost to Plug Wells

\$13,715

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)

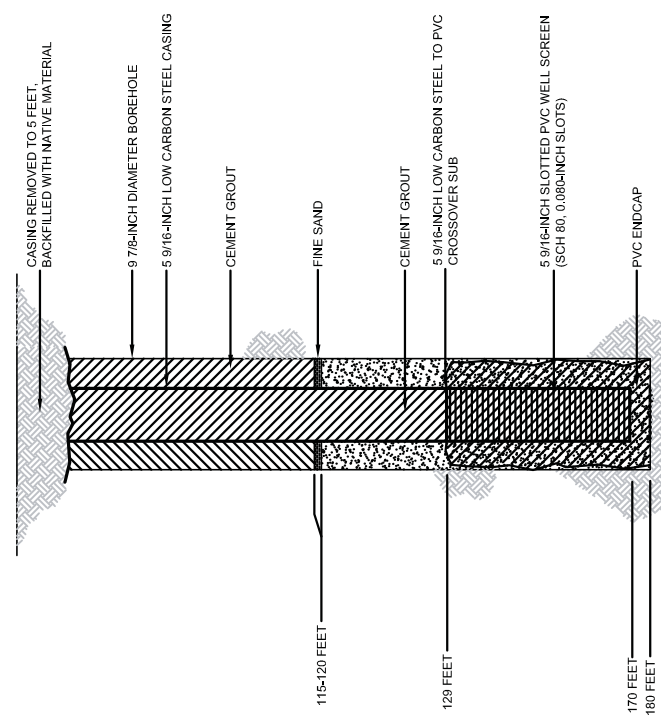
Dan Johnson, VP Environment and Technical Services

Signature

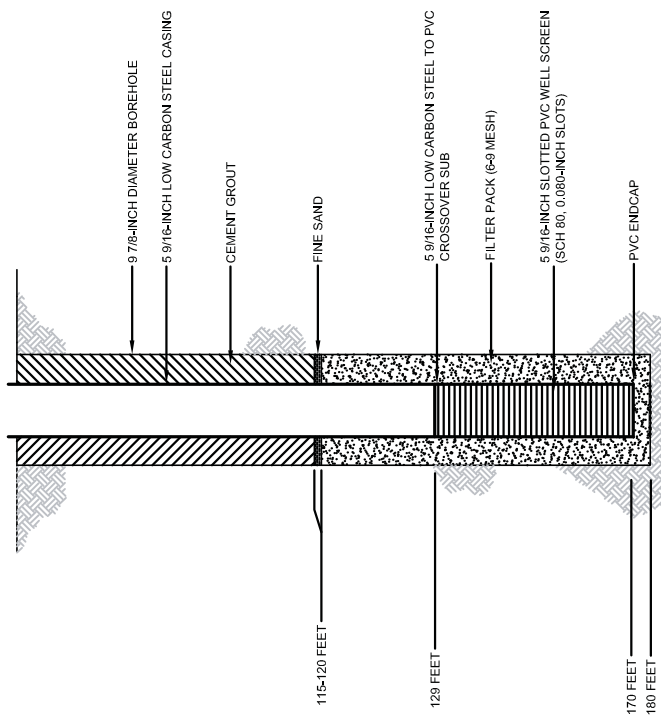
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
M32-UBF CASSED WELL



AS-BUILT
M32-UBF CASSED WELL





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

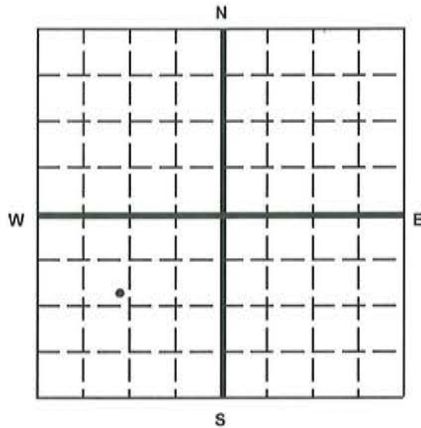
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1180 ft. from (N/S) N Line of quarter section
and 1170 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number MCC544

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
4	10.79-EST.	0	375	5 EST

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	3.88	4					
Depth to Bottom of Tubing or Drill Pipe (ft)	NA	380					
Sacks of Cement To Be Used (each plug)	60.2	25.5					
Slurry Volume To Be Pumped (cu. ft.)	77.22	32.72					
Calculated Top of Plug (ft.)	380	5					
Measured Top of Plug (if tagged ft.)	380	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
1320.5	380		
380	5		

Estimated Cost to Plug Wells

\$13,715

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)

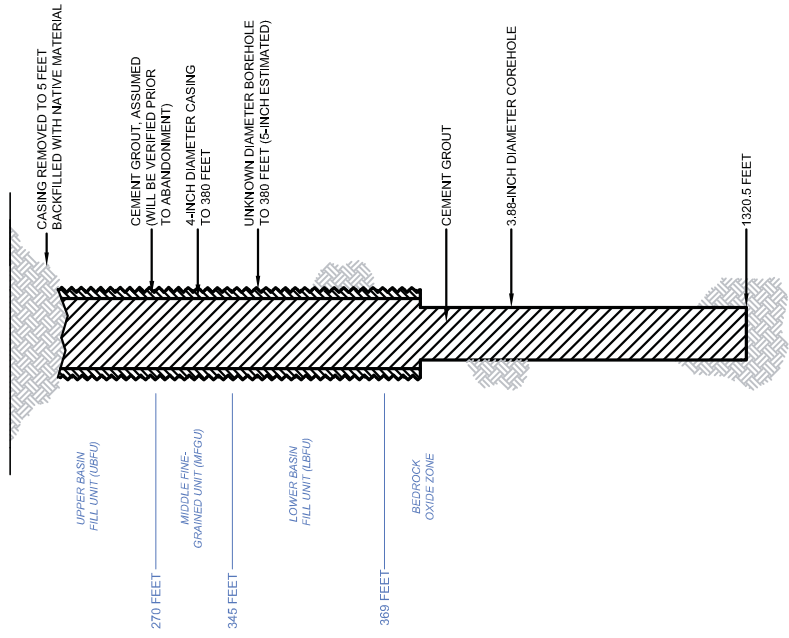
Dan Johnson, VP Environment and Technical Services

Signature

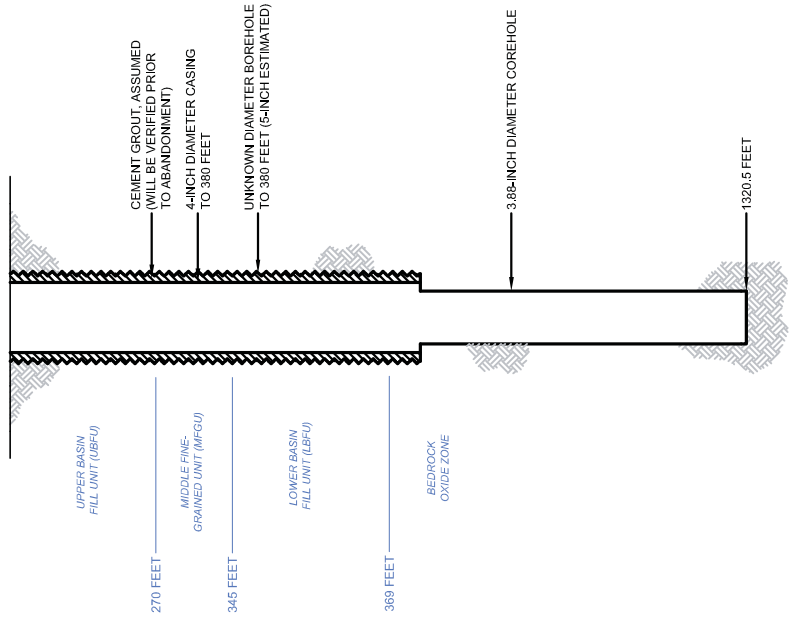
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
MCC544 COREHOLE



AS-BUILT MCC544 COREHOLE





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

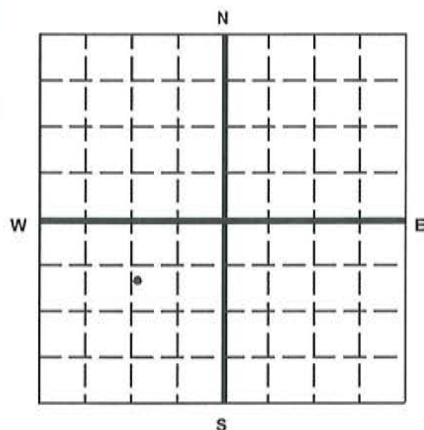
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 940 ft. from (N/S) N Line of quarter section
and 1280 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name

NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number OB3-1

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
4	2.78-EST.	0	795	UNK
12	41.45-EST.	0	15	UNK

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	4						
Depth to Bottom of Tubing or Drill Pipe (ft)	800						
Sacks of Cement To Be Used (each plug)	54.1						
Slurry Volume To Be Pumped (cu. ft.)	69.4						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
800	780-BLANK		
780	500-PERFORATED		
500	5-BLANK		

Estimated Cost to Plug Wells

\$13,715

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)

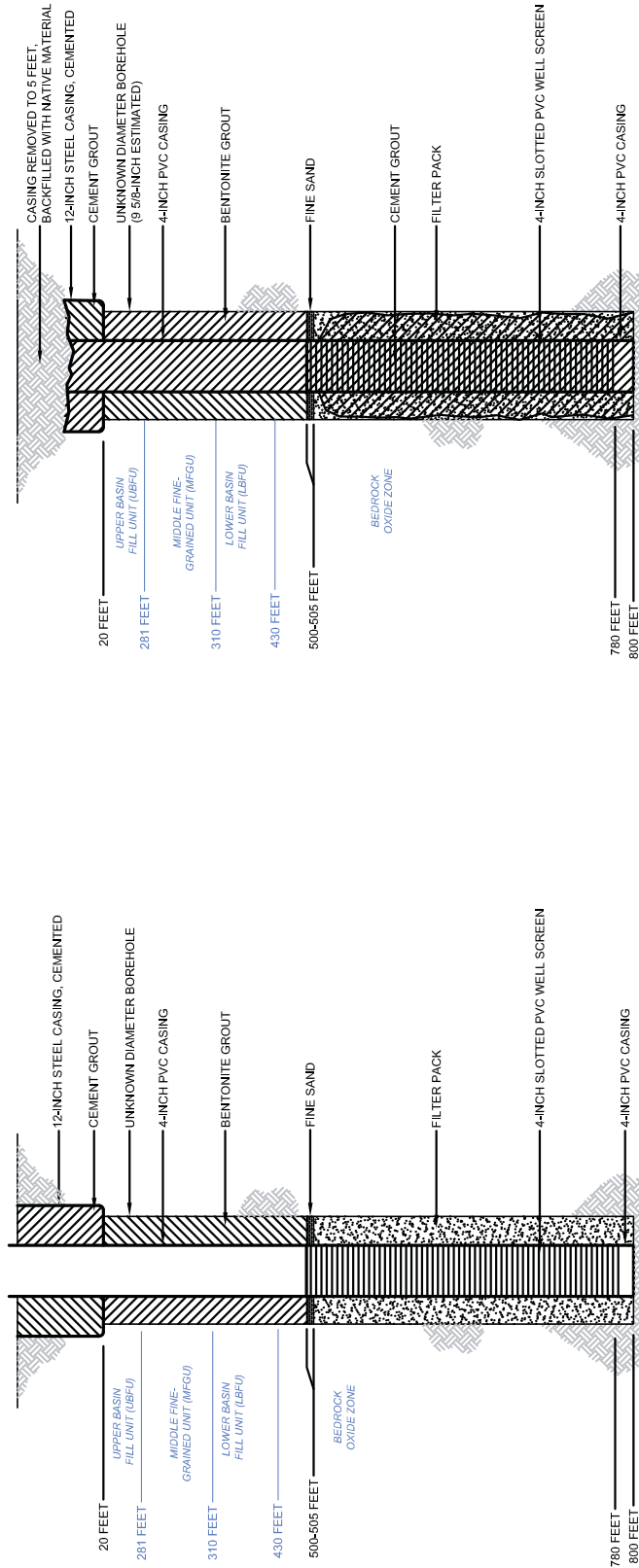
Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

09/07/2012

AS-BUILT
OB3-1 CASED WELL





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

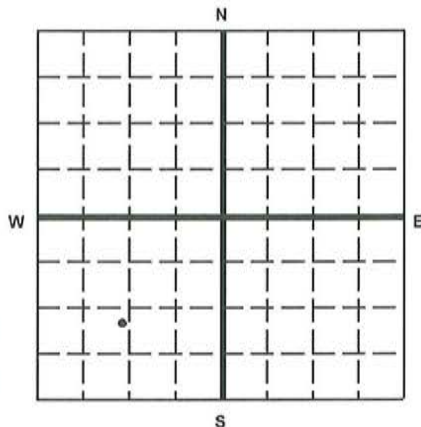
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 1070 ft. from (N/S) S Line of quarter section

and 1260 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number OB4-1

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
4	2.78-EST.	0	795	UNK
12	41.45-EST.	0	15	UNK

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	4						
Depth to Bottom of Tubing or Drill Pipe (ft)	800						
Sacks of Cement To Be Used (each plug)	54.1						
Slurry Volume To Be Pumped (cu. ft.)	69.4						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
800	780-BLANK		
780	440-PERFORATED		
440	5-BLANK		

Estimated Cost to Plug Wells

\$13,715

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)

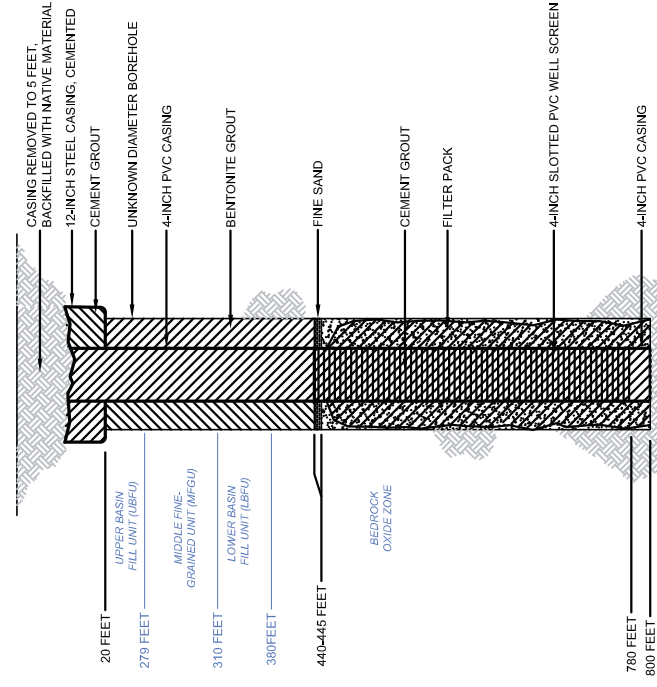
Dan Johnson, VP Environment and Technical Services

Signature

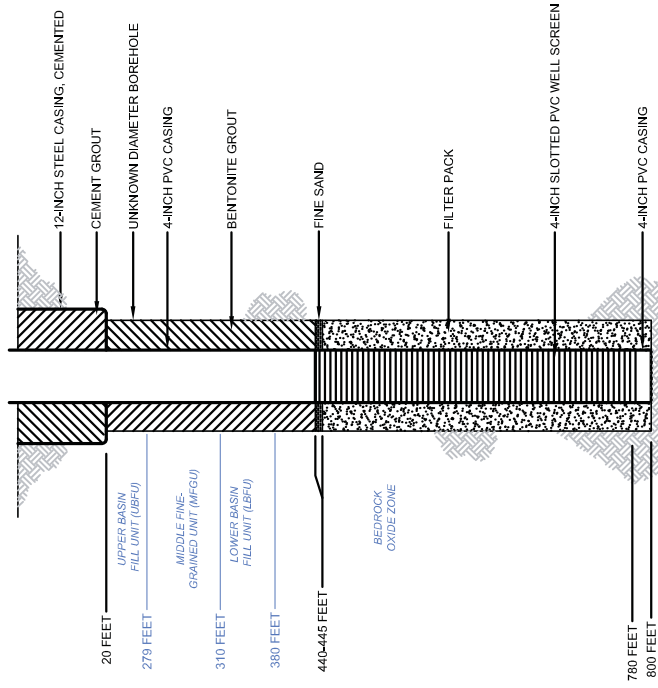
Date Signed

09/07/2012

PROPOSED PLUGGING AND ABANDONMENT OB4-1 CASED WELL



AS-BUILT
OB4-1 CASED WELL





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

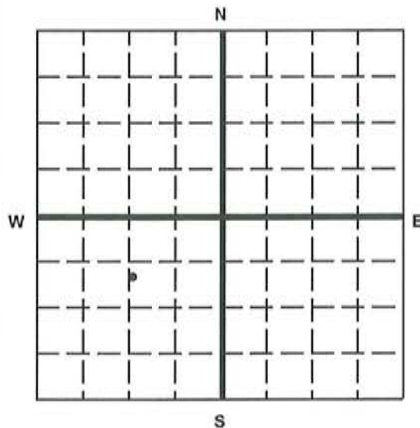
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 870 ft. from (N/S) N Line of quarter section
and 1290 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number PW3-1

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
6	5.31-EST.	0	795	UNK
12	41.47-EST.	0	15	UNK

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	6						
Depth to Bottom of Tubing or Drill Pipe (ft)	800						
Sacks of Cement To Be Used (each plug)	121.8						
Slurry Volume To Be Pumped (cu. ft.)	156.1						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
800	780-BLANK		
780	500-PERFORATED		
500	5-BLANK		

Estimated Cost to Plug Wells

\$13,715

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)

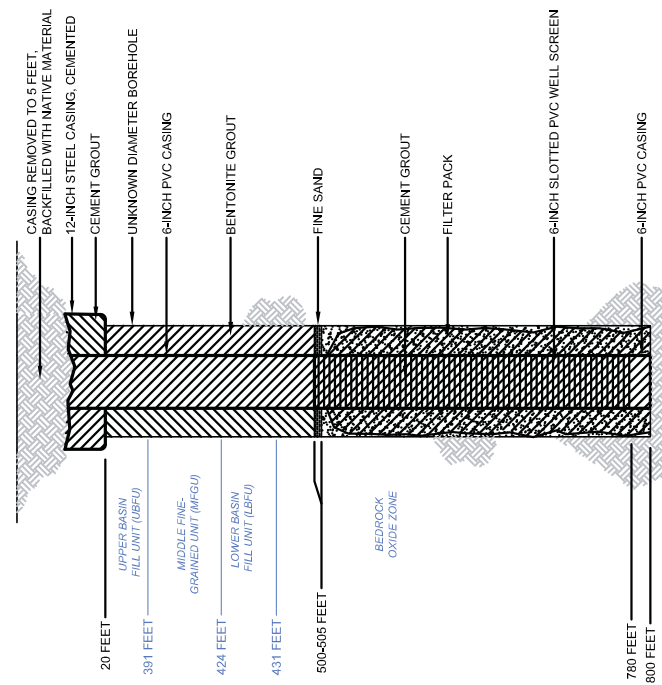
Dan Johnson, VP Environment and Technical Services

Signature

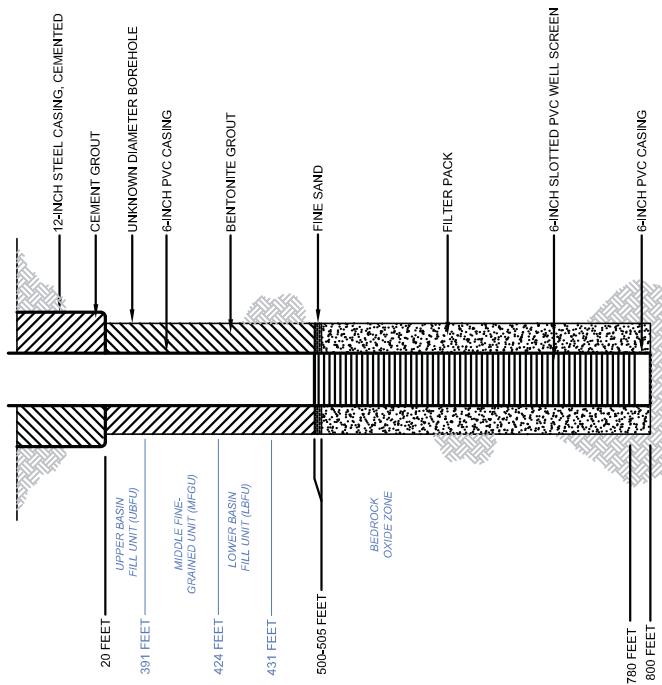
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
PW3-1 CASSED WELL



AS-BUILT
PW3-1 CASSED WELL



HALEY & ALDRICH
CURIS RESOURCES (ARIZONA) INC.
FLORENCE, ARIZONA

PW3-1 CASSED WELL DIAGRAM

HDI CURIS
SCALE: NOT TO SCALE
AUGUST 2012

FIGURE 1



United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

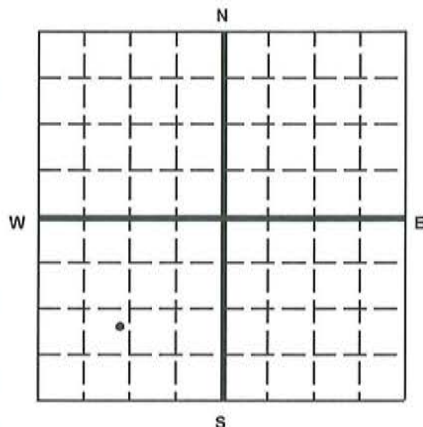
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State
Arizona

County
Pinal

Permit Number
AZ396000001

Surface Location Description

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

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

Surface

Location 1020 ft. from (N/S) S Line of quarter section

and 1250 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number PW4-1

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
6	5.31-EST.	0	795	UNK
12	41.47-EST.	0	15	UNK

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	6						
Depth to Bottom of Tubing or Drill Pipe (ft)	800						
Sacks of Cement To Be Used (each plug)	121.8						
Slurry Volume To Be Pumped (cu. ft.)	156.1						
Calculated Top of Plug (ft.)	5						
Measured Top of Plug (if tagged ft.)	5						
Slurry Wt. (Lb./Gal.)	15.6						
Type Cement or Other Material (Class III)	V						

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
800	780-BLANK		
780	440-PERFORATED		
440	5-BLANK		

Estimated Cost to Plug Wells

\$13,715

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)

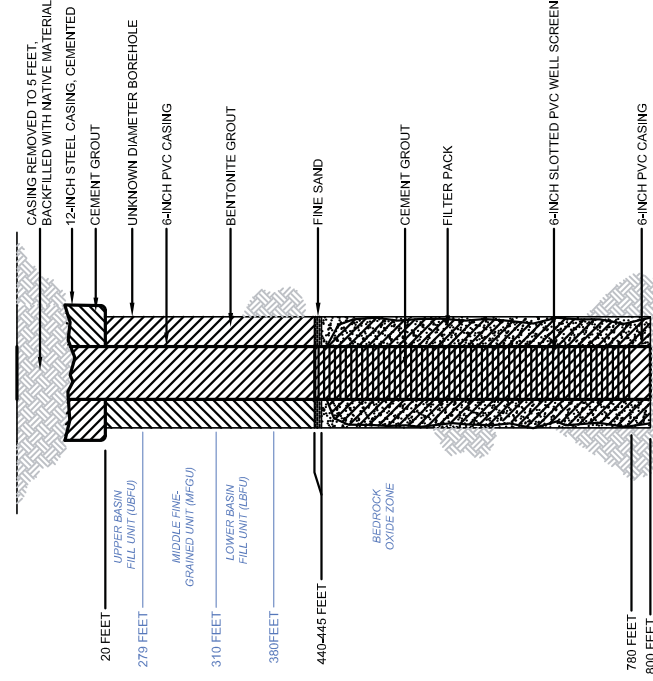
Dan Johnson, VP Environment and Technical Services

Signature

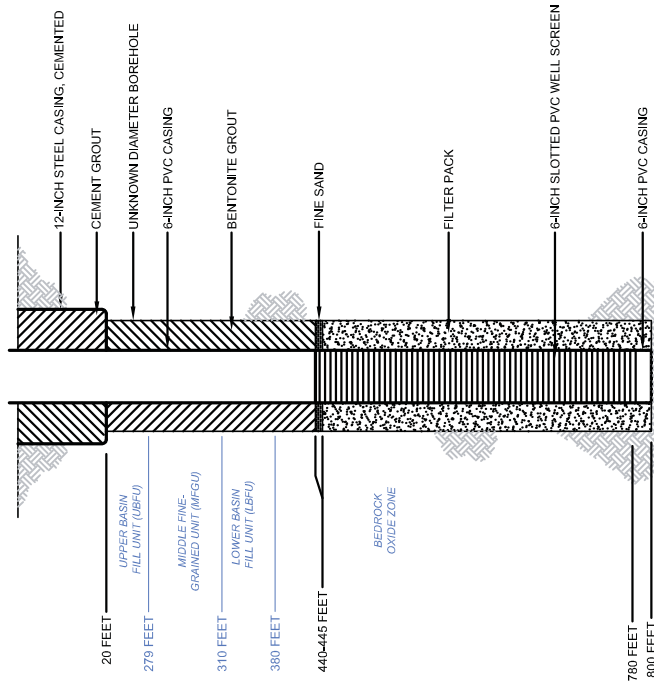
Date Signed

09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
PW4-1 CASED WELL



AS-BUILT
PW4-1 CASED WELL





United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

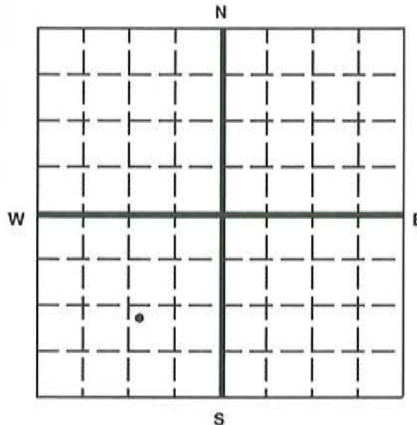
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on
Section Plat - 640 Acres



State
Arizona

County
Pinal

Permit Number
AZ396000001

Surface Location Description

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

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

Surface

Location 1170 ft. from (N/S) S Line of quarter section
and 1190 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number WW3

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
14	45-EST.	0	933	UNK
18	70-EST.	0	928	UNK
24	80-EST.	0	76	UNK

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	14	18					
Depth to Bottom of Tubing or Drill Pipe (ft)	933	496					
Sacks of Cement To Be Used (each plug)	364.4	677.9					
Slurry Volume To Be Pumped (cu. ft.)	467.2	869.1					
Calculated Top of Plug (ft.)	496	5					
Measured Top of Plug (if tagged ft.)	496	5					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
933	496-PERFORATED 14"		
496	240-PERFORATED 18"		
240	5-BLANK 18"		

Estimated Cost to Plug Wells

\$13,715

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)

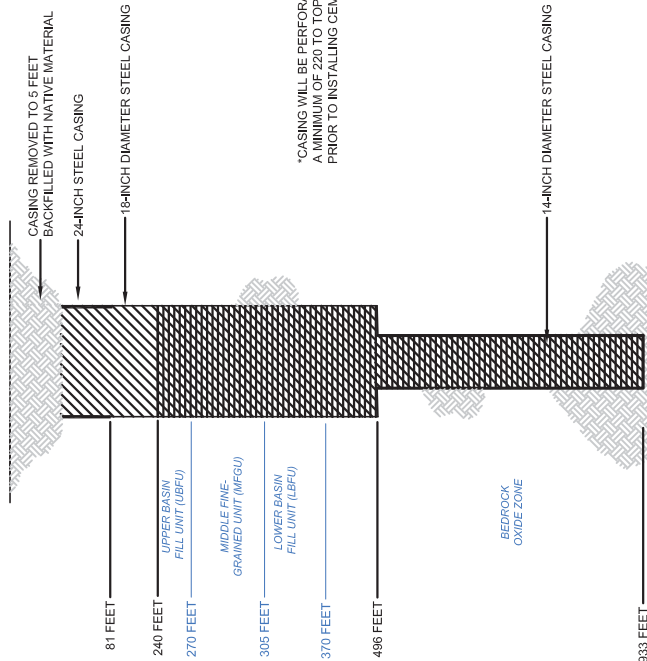
Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

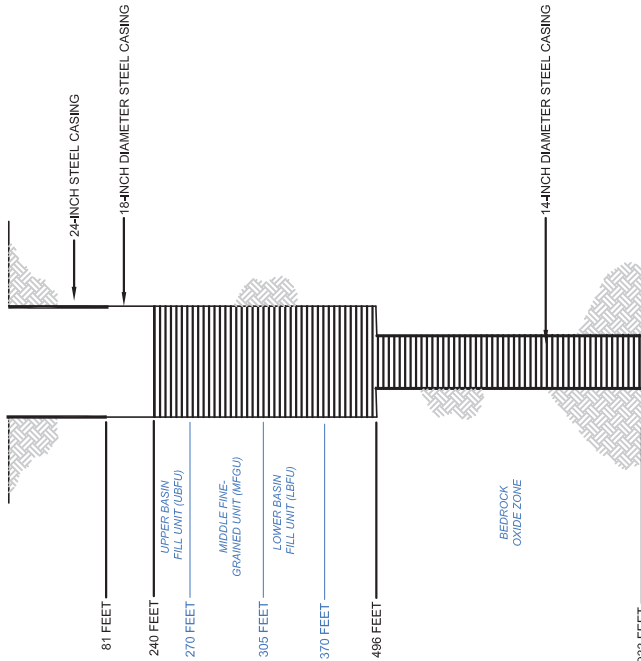
09/07/2012

PROPOSED PLUGGING
AND ABANDONMENT
WW3 CASED WELL



*CASING WILL BE PERFORATED FROM
A MINIMUM OF 220 TO TOP OF PERFORATIONS
PRIOR TO INSTALLING CEMENT PLUG.

AS-BUILT
WW3 CASED WELL



HALEY & ALDRICH
CURIS RESOURCES (ARIZONA) INC.
FLORENCE, ARIZONA

WW3 CASED WELL DIAGRAM

HDICURIS
SCALE: NOT TO SCALE
AUGUST 2012

FIGURE 1



United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

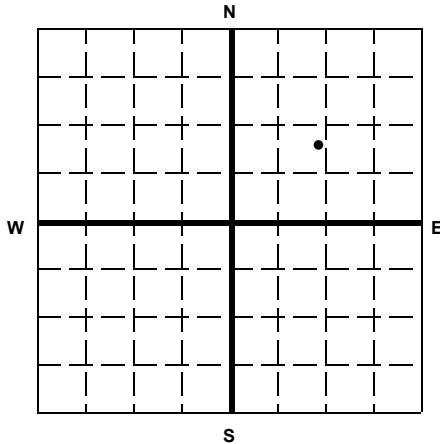
Name and Address of Facility

Florence Copper Project
1575 W Hunt Hwy, Florence Arizona 85132

Name and Address of Owner/Operator

Curis Resources (Arizona) Inc
1575 W Hunt Hwy, Florence, Arizona 85132

Locate Well and Outline Unit on Section Plat - 640 Acres



State

Arizona

County

Pinal

Permit Number

AZ396000001

Surface Location Description

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

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

Surface

Location 785 ft. frm (N/S) N Line of quarter section
and 700 ft. from (E/W) E Line of quarter section.

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 1

Lease Name NA

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number DM-B

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
5	unknown	0	611	unknown
4	unknown	0	89	unknown

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	5	4					
Depth to Bottom of Tubing or Drill Pipe (ft)	611	700					
Sacks of Cement To Be Used (each plug)	65	6.1					
Slurry Volume To Be Pumped (cu. ft.)	83	7.8					
Calculated Top of Plug (ft.)	0	611					
Measured Top of Plug (if tagged ft.)	unk	unk					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	V	V					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
UNKNOWN			

Estimated Cost to Plug Wells

\$13,715

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)

Dan Johnson, VP Environment and Technical Services

Signature

Date Signed

10/01/2014

