

POST-INJECTION SITE CARE AND SITE CLOSURE PLAN 40 CFR 146.93(a)

Kern River Eastridge CCS

Facility Information

Facility name: Kern River Eastridge CCS
MC19001INJ, ANO9004INJ, MC19002INJ, ANO9005INJ

Facility contact: David Wessels – Project Manager
9525 Camino Media, Bakersfield, CA 93311
David.wessels@chevron.com / 661-412-6039

Well location: Bakersfield, Kern County, CA 93308
35.4404°/-118.9983°; 35.4465°/-119.0012°; 35.4401°/-118.9981°;
35.4462°/-119.0010°

This Post-Injection Site Care and Site Closure Plan (PISC) describes the activities that Chevron U.S.A., Inc. (Chevron) will perform to meet the requirements of 40 Code of Federal Regulations (CFR) 146.93. Following the cessation of injection, Chevron will monitor ground water quality and track the position of the carbon dioxide plume and pressure front for fifty (50) years or until the Underground Injection Control (UIC) Program Director approves an alternative duration based upon a demonstration by Chevron that the geologic sequestration project poses no endangerment to Underground Sources of Drinking Water (USDWs). Chevron plans to assess and update the post-injection site care timeframe based on monitoring results. Chevron may not cease post-injection monitoring until a demonstration of non-endangerment of USDWs has been approved by the UIC Program Director pursuant to 40 CFR 146.93(b)(3). Following approval for site closure, Chevron will plug all project wells, restore the site to its original condition, and submit a site closure report and associated documentation.

Pre- and Post-Injection Pressure Differential [40 CFR 146.93(a)(2)(i)]

As part of the Kern River Eastridge CCS (Project), Chevron plans to produce water from the Vedder Sands throughout the injection life to decrease the reservoir pressure to the point that the pressure differential is at or below the critical pressure, resulting in an Area of Review (AoR) which is based solely on the boundaries of the CO₂ plume. The simulated pressure response at the monitoring wells highlights the effectiveness of this strategy, as shown in **Figure 1, Figure 2, Figure 3, and Figure 4**. The simulation assumes both pressure management and CO₂ injection begin year one (1) and continue to year twenty (20). **Figure 5 and Figure 6** show the evolution of the pressure front through the life of the Project with several figures showing pressures below the critical pressure of 3.6 pounds per square inch (psi). **Figure 7 and Figure 8** show the evolution of the AoR through the life of the Project. Although Chevron plans on conducting post-injection site care for fifty (50) years or until demonstrated non-endangerment of USDWs, the simulation model was run for hundred (100) years following the cessation of injection to verify CO₂ and pressure stability.

Chevron plans to drill new water producers FEA9001P and FEA9002P and operate the wells with electric submersible pumps. The planned locations for these two (2) wells are shown in **Figure 10** along with the AoR of the Project. The producers are planned to follow a vertical recompletion strategy like the injectors, so that the producers target individual zones to effectively dewater and depressurize zones being targeted with CO₂ at that time. Comparing the simulated pressure before and after injection, the results show a small pressure decrease for each individual Vedder Sand.

The permeabilities of each Vedder Sand targets are high, ranging from 250 to 9,000 mD, while injection rates are relatively low, with averages ranging from 132,500 to 227,500 tonnes per annum. Modeling indicates that these values, in combination with water production for pressure management, yield bottomhole pressures at the injectors that are at the maximum value upon initiation of injection and decrease slightly through time. Injection and production continue together in tandem, producing more fluid than is injected to maintain pressure decreases through the life of the project, as exemplified by **Figure 9**. The highest predicted pressure differential is 18 psi in injector MC19001INJ upon re-completion and initiation of injection in the 3rd Vedder, which has the lowest expected permeability of the Vedder Sands. As **Figure 9** shows, the injection pressure drops from this maximum differential to below the initial reservoir pressure within one (1) month of the start of injection in the 3rd Vedder. It may be feasible to avoid this pressure surge by initiating pressure management in each zone prior to initiation of injection.

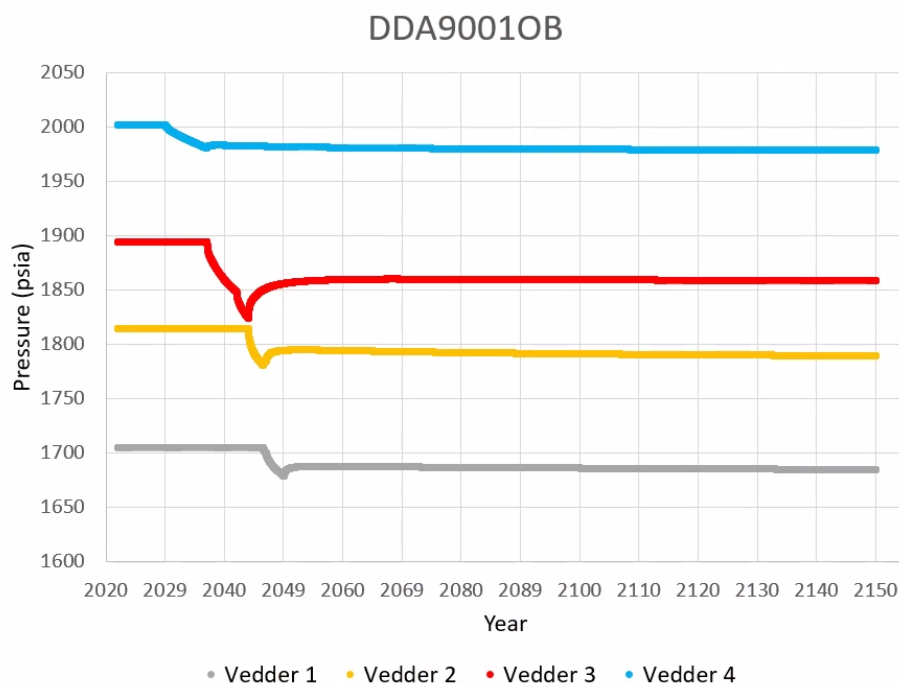


Figure 1. Pressure response by injection zone at monitoring well DDA9001OB through the life of the Project. Each sand is targeted individually for production as it is simultaneously individually targeted for CO₂ injection.

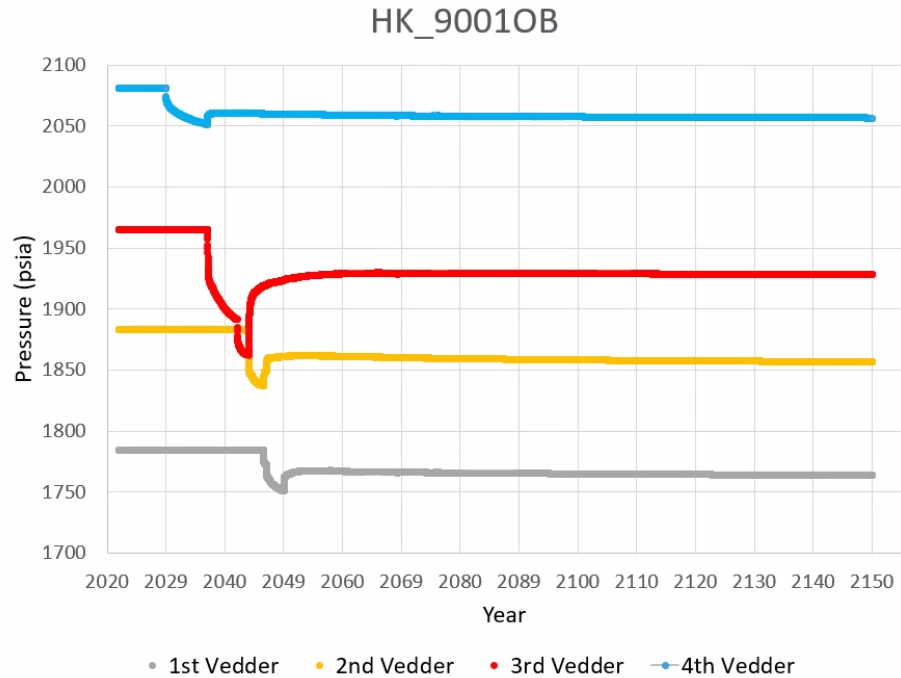


Figure 2. Pressure response by injection zone at monitoring well HK_9001OB through the life of the Project. Each sand is targeted individually for production as it is simultaneously individually targeted for CO₂ injection.

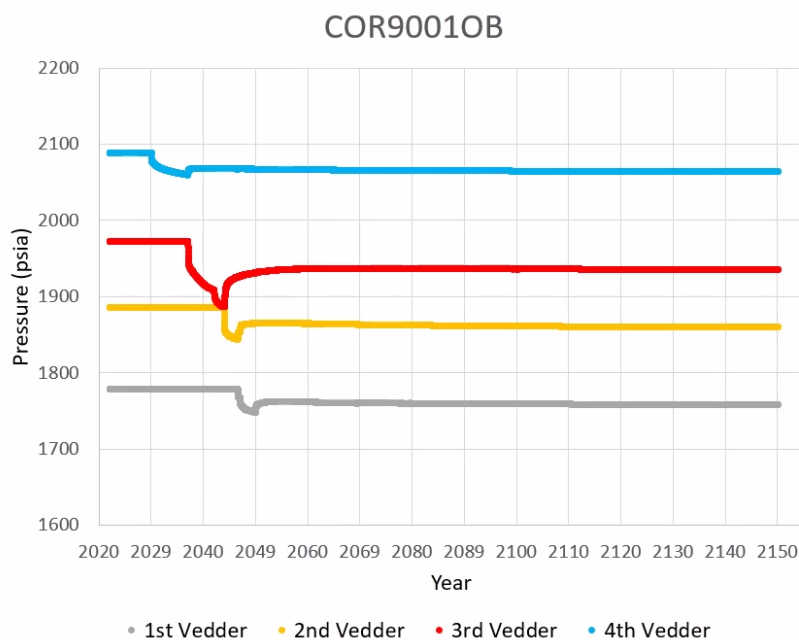


Figure 3. Pressure response by injection zone at monitoring well COR9001OB through the life of the Project. Each sand is targeted individually for production as it is simultaneously individually targeted for CO₂ injection.

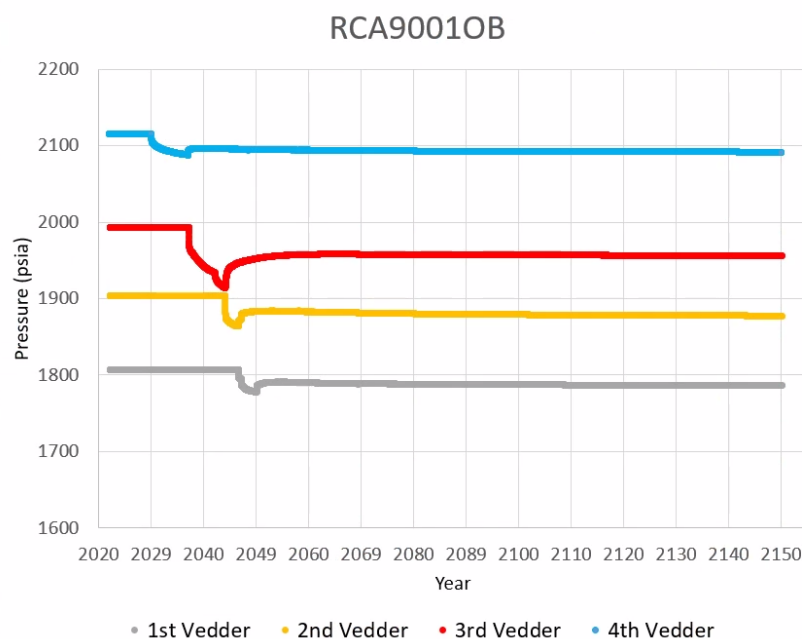


Figure 4. Pressure response by injection zone at monitoring well RCA9001OB through the life of the Project. Each sand is targeted individually for production as it is simultaneously individually targeted for CO₂ injection.

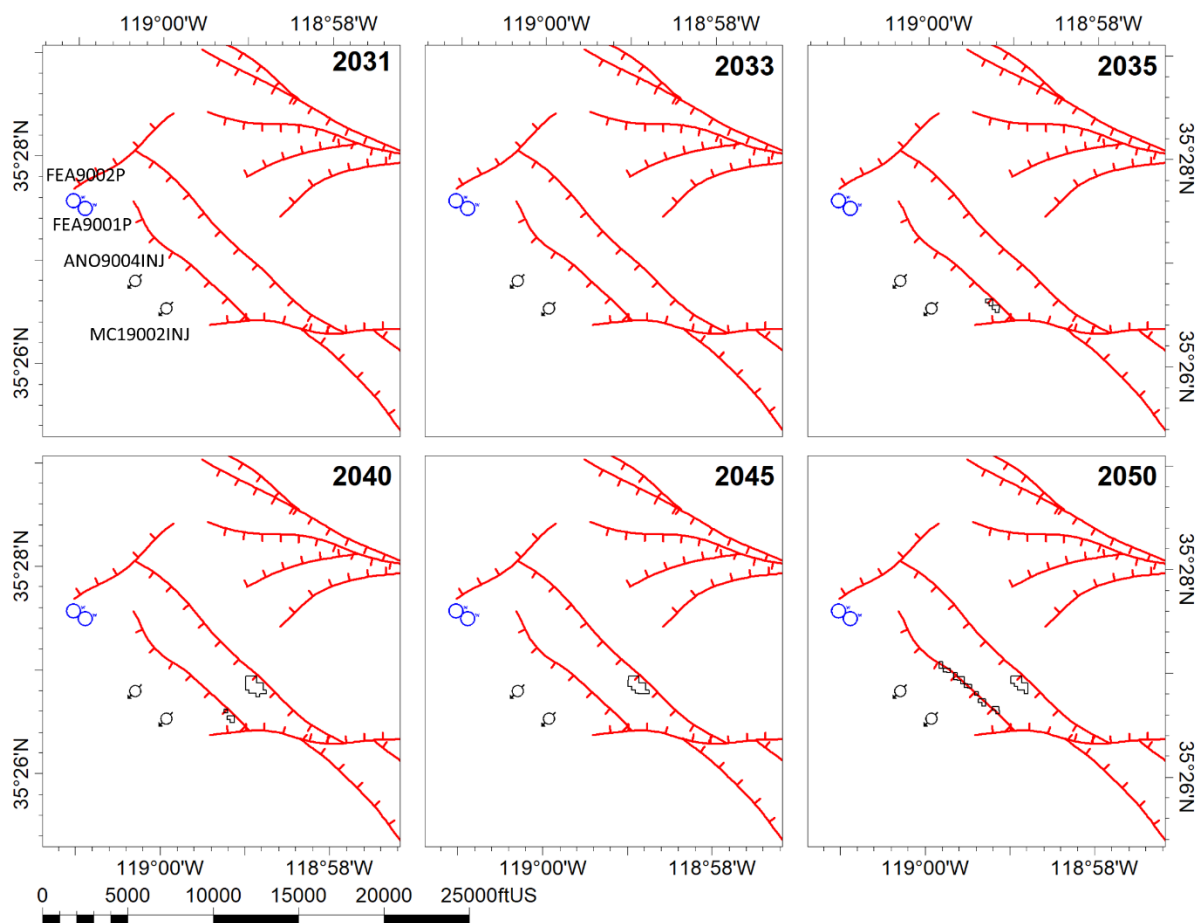


Figure 5. Critical pressure evolved over the twenty (20) year injection, assuming injection begins in 2030. Image is taken at the beginning of the year shown in the top right corner of each pane. Well locations are bottomhole locations. Black wells are injectors and blue wells are pressure management producers. The inclusion of pressure management reduces pressure buildup within the injection zones. Many of the time slices appear blank, meaning there are no regions of the model with an elevated pressure greater than 3.6 psi.

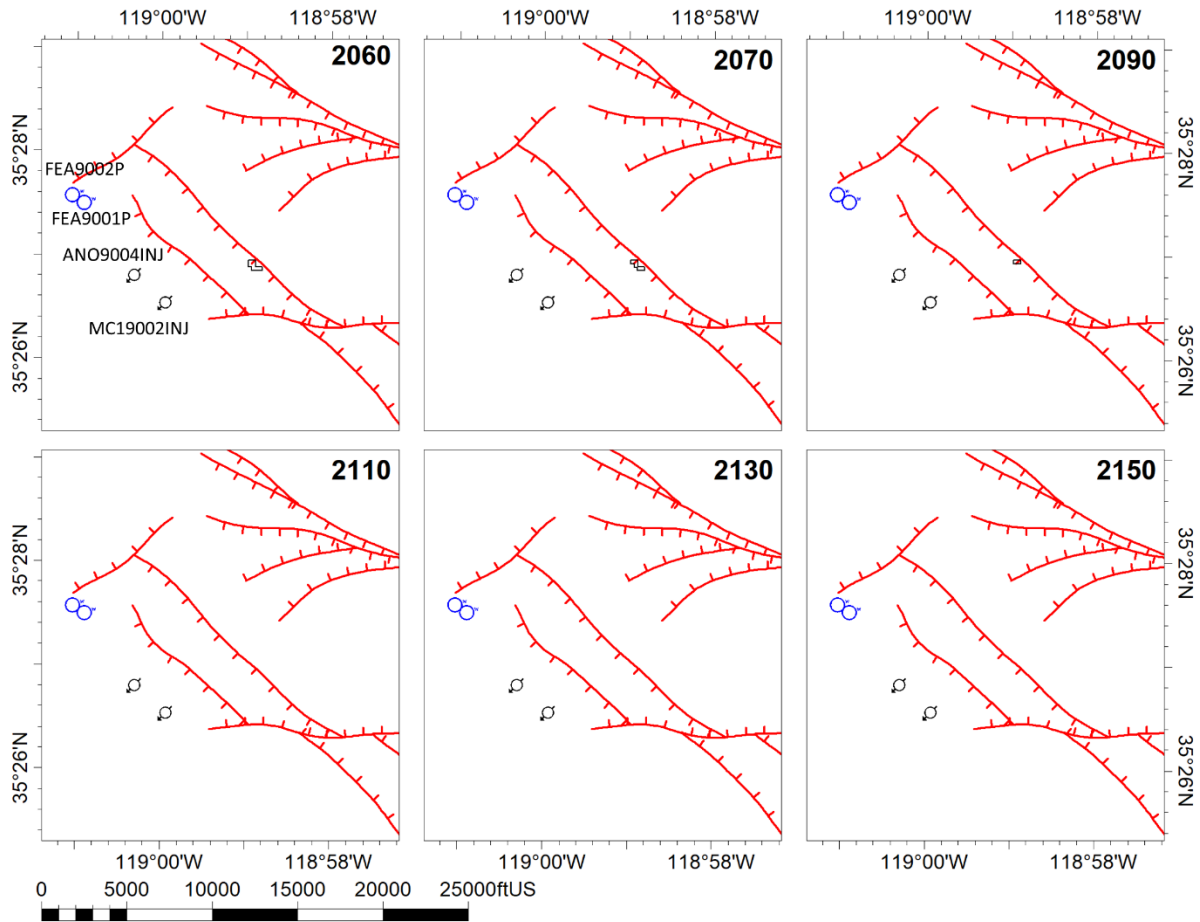


Figure 6. Critical pressure evolution after cessation of injection assuming injection ends in 2050. Image is taken at the beginning of the year shown in the top right corner of each pane. Well locations are bottomhole locations. Black wells are injectors and blue wells are pressure management producers. Many of the time slices appear blank, meaning there are no regions of the model with an elevated pressure greater than 3.6 psi.

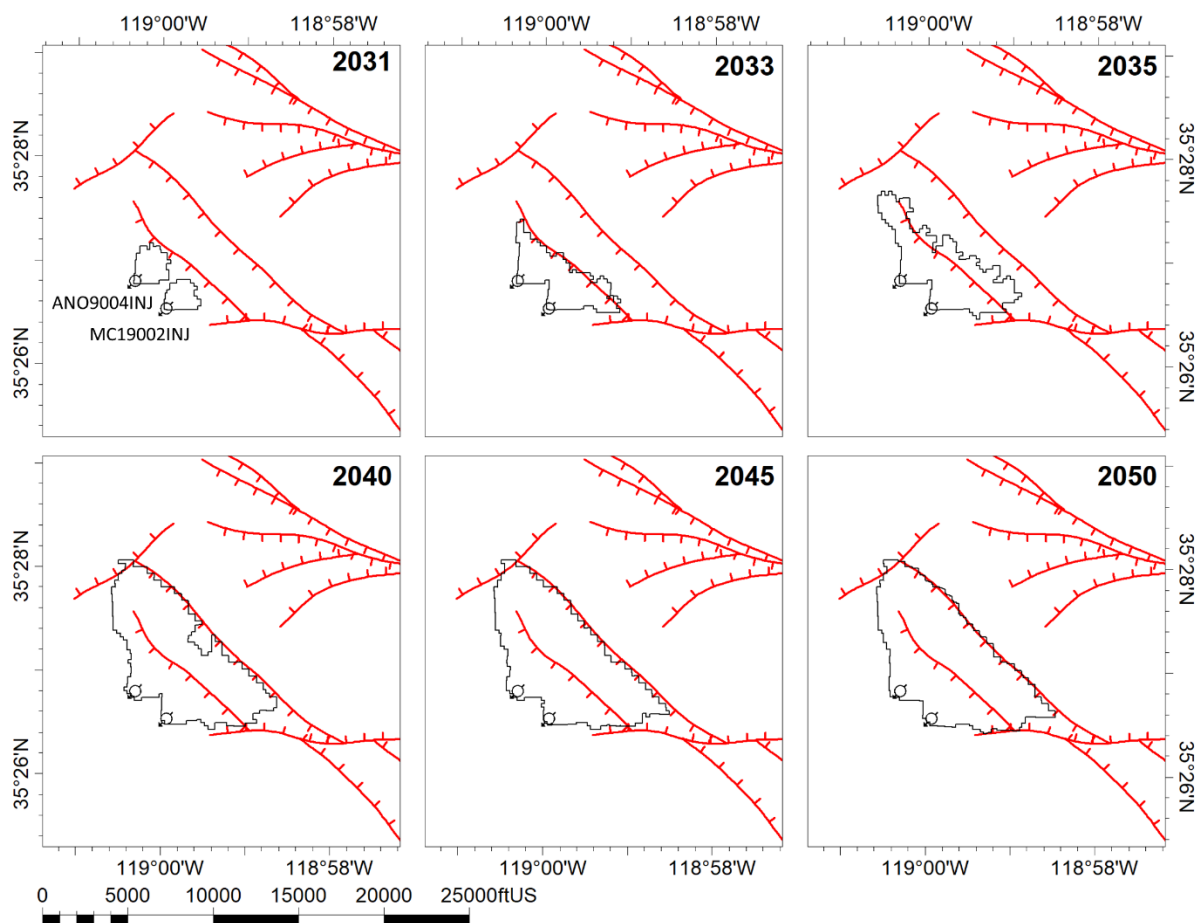


Figure 7. AoR evolution over the twenty (20) year injection period, assuming injection which begins in 2030. Image is taken at the beginning of the year shown in the top right corner of each pane. Well locations are bottomhole locations.

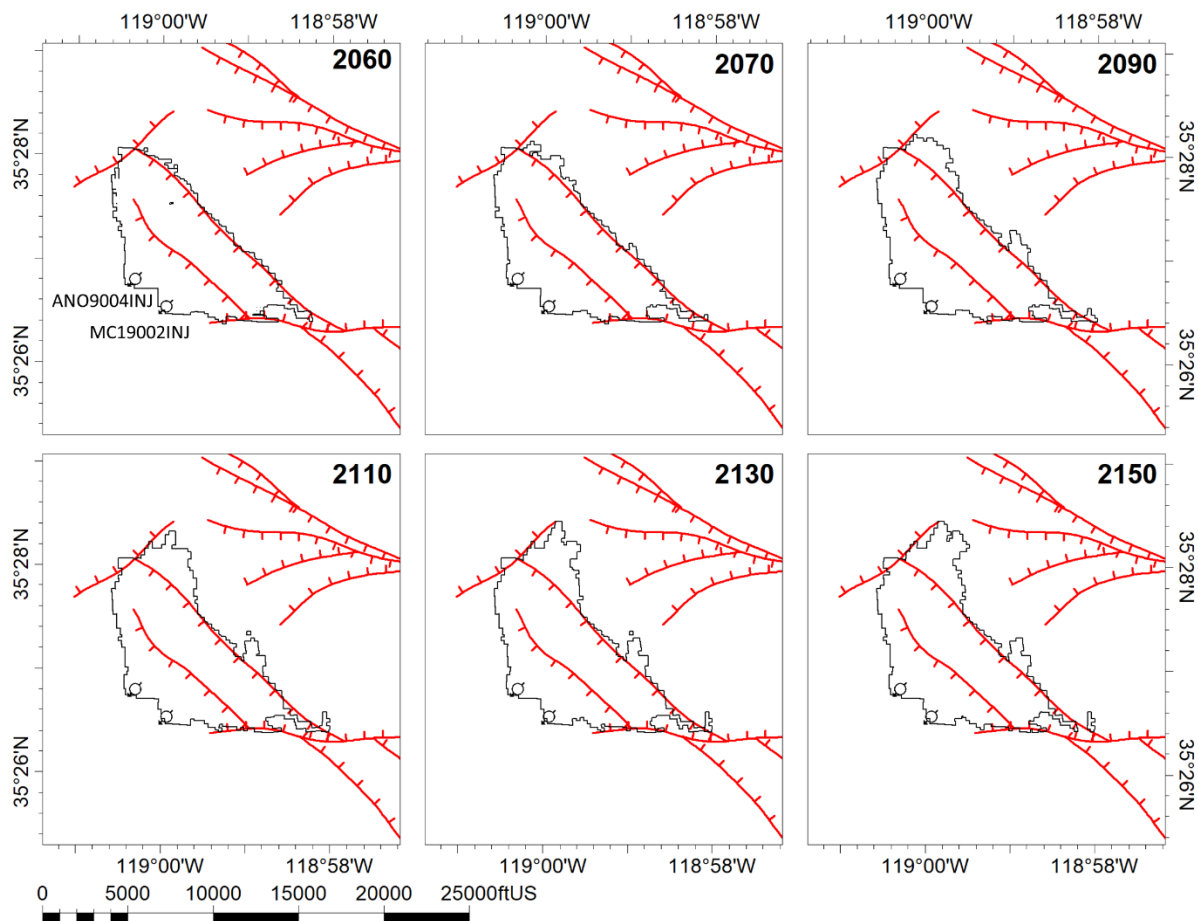


Figure 8. AoR evolution after cessation of injection, assuming injection ends in 2050. Image is taken at the beginning of the year shown in the top right corner of each pane. Well locations are bottomhole locations.

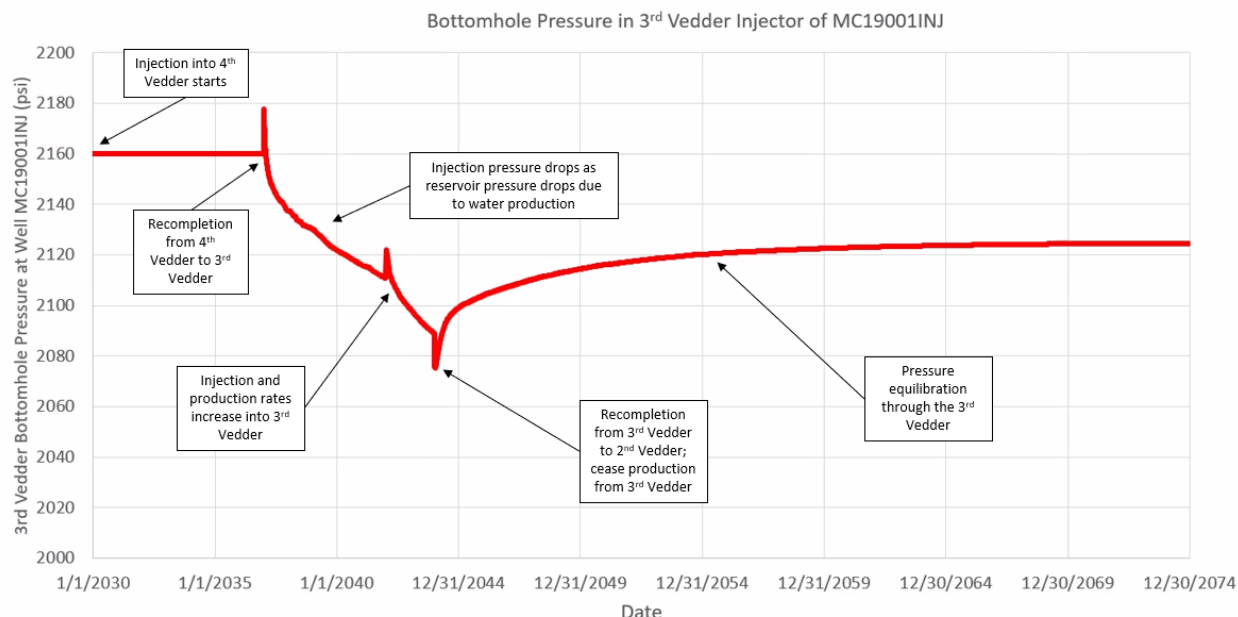


Figure 9. Bottomhole pressure of the 3rd Vedder at injector MC19001INJ. This plot illustrates the initial pressure of the 3rd Vedder and the change through time because of water production and CO₂ injection. (Dates are approximate)

Additional information on the projected post-injection pressure declines and differentials is presented in the AoR and Corrective Action Plan.

Predicted Position of the CO₂ Plume and Associated Pressure Front at Site Closure [40 CFR 146.93(a)(2)(ii)]

Figure 10 shows the predicted extent of the plume and pressure front at the end of the PISC timeframe, representing the maximum extent of the plume and pressure front. This map is based on the final AoR delineation modeling results submitted pursuant to 40 CFR 146.84.

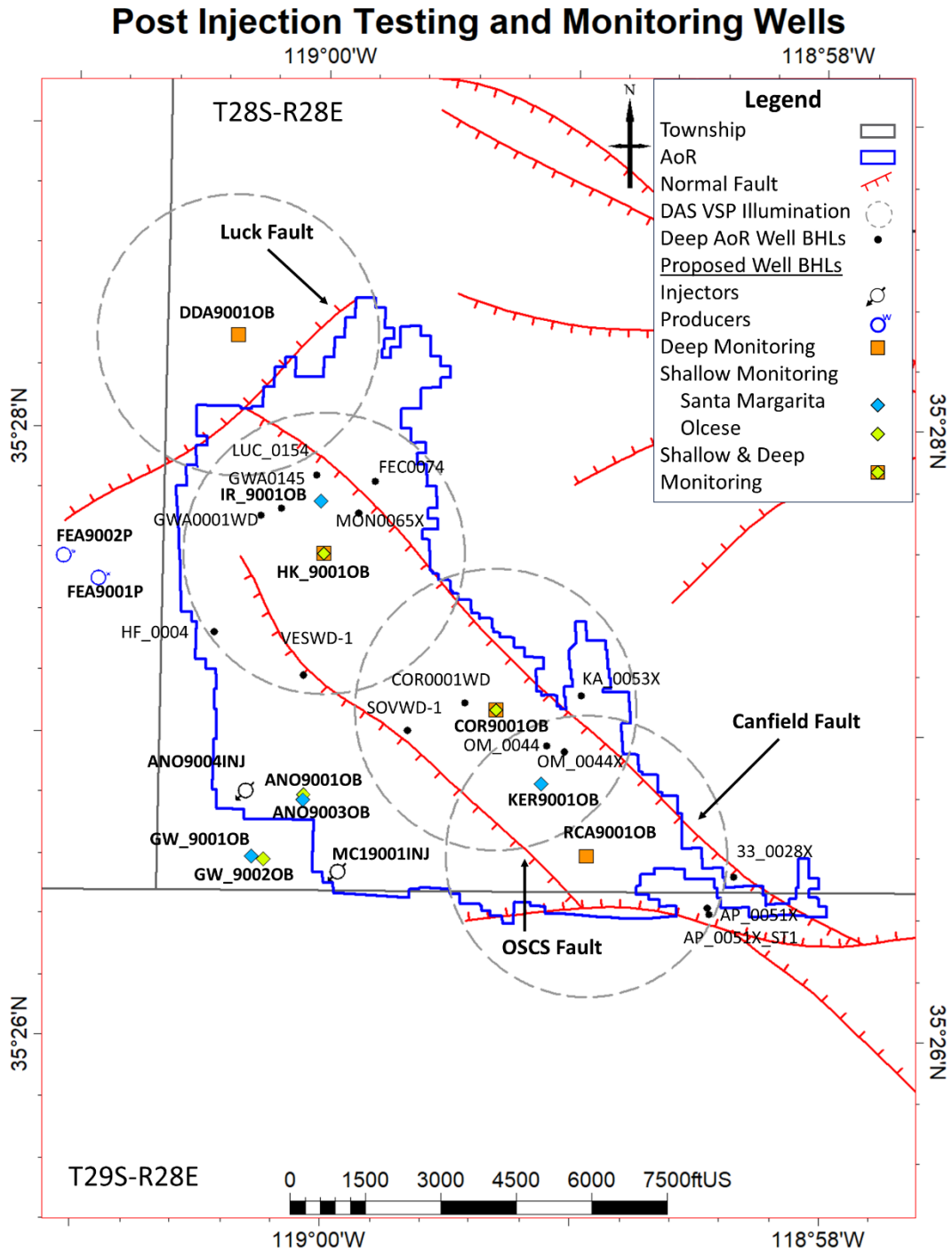


Figure 10. Map of the predicted AoR based on the CO₂ plume and pressure front over the life of the Project. The map also includes CO₂ injectors, pressure management water producers, deep monitoring wells, shallow monitoring wells, identified faults, and wells that penetrate the confining layer.

Post-Injection Monitoring Plan [40 CFR 146.93(b)(1)]

Shallow ground water fluid sample collection and analysis, in-zone pressure monitoring, cased-hole logging (pulsed neutron or equivalent), and seismic survey collection and analysis (distributed acoustic sensing vertical seismic profile or equivalent) during the post-injection phase are designed to meet the requirements of 40 CFR 146.93(b)(1). The results of post-injection phase testing and monitoring will be submitted annually, within ninety (90) days of the anniversary of the last date of injection, as described under “Schedule for Submitting Post-Injection Monitoring Results” below.

Post-injection monitoring will be a continuation of activities discussed in the Testing and Monitoring Plan at different testing frequencies. Proposed monitoring well locations are shown in **Figure 10**. Access to monitoring wells will continue into the post-injection phase of the project through Chevron’s ownership and existing access agreements.

Monitoring Above the Confining Zone

Table 1 presents a summary of the monitoring methods, locations, and frequencies for monitoring above the confining zone.

Fluid sampling from the Santa Margarita Sandstone and Olcese Sand will take place up to 60 days before the anniversary date of authorization of injection unless alternatively scheduled with prior approval of the UIC Program Director. Samples will be lifted via a tubing conveyed U-tube sampling system or via a fluid sampling tool deployed on coil tubing or wireline. To represent downhole conditions, both sampling methods will maintain reservoir pressure in the samples collected. Samples will be analyzed using the analytical methods described in **Table 2**. Chevron will analyze groundwater chemistry results to monitor for unexpected significant changes from baseline data. The results will be compiled and presented to the Environmental Protection Agency (EPA) as described in the Schedule for Submitting Post-Injection Monitoring results section of this permit.

For additional details on Chevron’s fluid sampling collection and analysis, please refer to the Quality Assurance and Surveillance Plan (QASP).

If approved by the UIC Program Director, post-injection monitoring frequencies may be adaptive with decreasing frequency as justified by fluid analysis, CO₂ plume and pressure stabilization rates from Vedder Sand pressure data, seismic surveys, or cased-hole log suites.

Table 1. Monitoring of ground water quality and geochemical changes above the confining zone

Target Formation	Monitoring Activity	Monitoring Location(s)	Top Formation Depth (TVDSS)	Sampling Technology*	Frequency
Santa Margarita	Fluid sampling and analysis	ANO9003OB, GW_9001OB, KER9001OB, IR_9001OB	-810 to -1350 ft	Fluid sampling tool deployed on tubing or wireline	Annual
Olcese	Fluid sampling and analysis	ANO9001OB, GW_9002OB, COR9001OB, HK_9001OB	-1840 to -2420 ft	Fluid sampling tool deployed on tubing or wireline	Annual

* Chevron recognizes that technologies will improve over the life of the project, technologies have a lifetime, and that equipment may fail and require replacement or repair throughout the life of the project. Chevron has listed primary technology and contingency technology if primary selection fails. If such an instance occurs, Chevron will work with EPA to identify a valid replacement technology.

Table 2. Summary of analytical and field parameters for ground water samples

Post-Injection: Olcese and Santa Margarita***		
Parameter	Analytical Method*	Frequency
pH (lab)	SM 4500 H+B	Annual
pH (field)	Standard Method 4500-H+ B-2000 Field instrument	Annual
Specific conductance (lab)	EPA 120.1	Annual
Specific conductance (field)	Standard Method 2510 B-1997 Field instrument	Annual
Temperature (field)	Thermistor, Standard Method 2550 B-2000 Field instrument	Annual
Total Alkalinity (total and bicarbonate)	SM 2320B	Annual
Oxidation-Reduction Potential (field)	Platinum Button; Ag/AgCl Reference Field instrument	Annual
Total dissolved solids	SM 2540C	Annual
Cations: Al, Ba, Mn, As, Cr, Pb, Se, Sr, Tl, Zn, Ca, Fe, K, Mg, Na, Si, B	ICP-MS, EPA Method 6020B, ICP, EPA Method 6010D	Annual
Anions: Br, Cl, F, and SO₄	Ion chromatography, EPA Method 300.0	Annual
Alkalinity (total and bicarbonate)	SM 2320B	Annual
Dissolved Inorganic Carbon (DIC)	SM 5310B	Annual
δ¹³C of DIC	IRMS	Annual
Water density (lab)	Density Meter (ASTM D4052/D5002)	Annual
Water density (field)	Hydrometer Field Instrument	Annual
Turbidity (lab)	U.S. EPA Method 180.1 (Same as APHA SM 2130B)	Annual
Turbidity (field)	Nephelometric - Optical, 90° ScatterField Instrument	Annual
Sulfide (lab)	EPA 9034	Annual

<p>* Analytical methods subject to change based on project specific benchmarks with approval from UIC director</p> <p>**Specialized analysis we may collect less than frequently depending on results</p> <p>***Analyte list may change depending on results from baseline assessment</p>	
---	--

Carbon Dioxide Plume and Pressure Front Tracking [40 CFR 146.93(a)(2)(iii)]

Direct and indirect methods will be used to track the extent of the carbon dioxide plume and the presence or absence of elevated pressure as described in **Table 3**.

Four (4) deep monitoring wells will be drilled into the Vedder Sand to monitor the CO₂ plume and pressure front during the post-injection phase of the Project. Direct methods for measuring the pressure front will consist of pressure measurements every five (5) years within the Vedder Sand from pressure array sensors or equivalent technology installed in deep monitoring wells. Direct monitoring of the CO₂ plume will consist of cased-hole pulsed neutron logs (PNLs) in the monitoring wells performed every five (5) years to measure gas saturation changes through time. Indirect monitoring of the CO₂ plume will consist of distributed acoustic sensing fiber optic vertical seismic profiles (DAS VSP), which will be collected in years ten (10), thirty (30), and fifty (50) after cessation of injection to geophysically image plume migration. Post-injection monitoring frequencies may be decreased, based on evidence of plume stabilization, with the prior written approval of the UIC Director.

Locations for the deep monitoring wells used for CO₂ plume and pressure front tracking are shown in **Figure 10**. **Figure 10** also includes the calculated seismic illumination radius surrounding each individual monitoring well. These well locations were selected based on the calculated illumination radius using site specific parameters so that the illumination areas would overlap.

Cased-hole pulsed neutron logs from the Vedder Sand will be run up to sixty (60) days prior to the due date (as described above or approved by the UIC Program Director). The results will be compiled and presented to the EPA as described in the Schedule for Submitting Post-Injection Monitoring results section of this permit.

Seismic surveys will be conducted up to two (2) years prior to the due date (as described above or approved by the UIC Program Director). Data will be analyzed and presented to the EPA as described in the Schedule for Submitting Post-Injection Monitoring results section of this permit.

Monitoring well data from within the Vedder Sand will be used to evaluate the extent of the pressure front and CO₂ plume both during the injection and post-injection phases of the project. Through the life of injection, Chevron will collect monitoring data which will be used to calibrate static and dynamic models if they prove to inadequately represent the subsurface. Chevron will continue this process into the post-injection phase of the Project, incorporating newly acquired data so that models provide an accurate representation of the subsurface and can be used to in conjunction with post-injection monitoring data to validate stability and non-endangerment of USDWs.

In the event of model changes based on monitoring data, Chevron will submit a report to EPA listing the changes and providing proper justification.

Table 3. Post-injection phase CO₂ plume and pressure front monitoring

Monitoring Category & Class VI Rule Citation	Target Formation	Monitoring Activity	Monitoring Locations*	Spatial Coverage	Frequency (Post-Injection Phase)
Direct & Indirect Monitoring Plume Monitoring [40 CFR 146.90(g)]	Vedder Sand	Distributed Acoustic Sensing Vertical Seismic Profile (DAS VSP)	DDA9001OB, HK_9001OB, COR9001OB, RCA9001OB	Within and outside of AoR	Post-Injection Years ten (10), thirty (30) and fifty (50)
		Pulsed Neutron Logging	DDA9001OB, HK_9001OB, COR9001OB, RCA9001OB	Within and outside of AoR	One (1) per every five (5) years
Direct Monitoring Pressure Monitoring [40 CFR 146.90(g)]	Vedder Sand	Pressure Array Sensors	DDA9001OB, HK_9001OB, COR9001OB, RCA9001OB	Within and outside of AoR	One (1) per every five (5) years

****Chevron recognizes that monitoring wells will require routine mechanical integrity testing and may over time develop integrity concerns at which point they may be abandoned. The specified wells represent Chevron's initial proposed locations. If one of these monitoring wells must be abandoned prior to site closure, Chevron will work with UIC Program Director to determine if remaining data sources are sufficient.***

Schedule for Submitting Post-Injection Monitoring Results [40 CFR 146.93(a)(2)(iv)]

Post-injection monitoring data will be collected using the methods described above and submitted to EPA within ninety (90) days following the anniversary date on which injection ceases. The reports will contain information and data which has been collected and fully analyzed. Due to the extended processing time required for DAS VSP surveys, surveys will be collected several years prior to the final reports (i.e., surveys will be conducted several years prior to the reporting frequency shown in **Table 3**).

Non-Endangerment Demonstration Criteria

Prior to approval of the end of the post-injection phase, Chevron will submit a demonstration of non-endangerment of USDWs to the UIC Program Director, per 40 CFR 146.93(b)(2) and (3). This report will make a demonstration of USDW non-endangerment based on the evaluation of the site monitoring data used in conjunction with the project's computational model. The report will detail how the non-endangerment demonstration evaluation uses site-specific conditions to confirm and demonstrate non-endangerment. The report will include relevant monitoring data and interpretation, model documentation, supporting data, and other information necessary for the UIC Program Director to review the analysis. The report will include the following sections:

Introduction and Overview

A summary of relevant background information will be provided, including the operational history of the injection project, the date of the non-endangerment demonstration relative to the post-injection period outlined in this PISC and Site Closure Plan, and a general overview of how monitoring and modeling results will be used to support a demonstration of USDW non-endangerment.

Summary of Existing Monitoring Data

A summary of monitoring data collected at the site, including data collected during the pre-injection, injection, and post-injection phases of the project, will be submitted to help demonstrate non-endangerment. Data submittals will be in a format acceptable to the UIC Program Director [40 CFR 146.91(e)], and will include a narrative explanation of monitoring activities, including the dates of monitoring events, changes to the monitoring program over time, and an explanation of monitoring infrastructure. Injection and post-injection phase data will be compared with baseline data [40 CFR 146.82(a)(6) and 146.87(d)(3)].

Summary of Computational Modeling History

Specifics of the computational model and how the observed data will be compared with simulation results are described in detail within the AoR & Corrective Action document. Chevron will continue this process into the post-injection phase of the Project, incorporating newly acquired data so that models remain an accurate representation of the subsurface and can be used to in conjunction with post-injection monitoring data to validate stability and non-endangerment of USDWs.

In the event of model changes based on monitoring data, Chevron will submit a report to EPA listing the changes and providing proper justification.

Evaluation of Reservoir Pressure

Monitoring well pressure data from within the Vedder Sand will be used to evaluate the extent of the pressure front both during the injection and post-injection phases of the project. Throughout the life of injection, Chevron will collect pressure data which will be used to calibrate static and dynamic models. Chevron will continue this process into the post-injection phase of the Project, incorporating newly acquired data in model updates, which will be used to in conjunction with post-injection monitoring data to validate stability and non-endangerment of USDWs.

In the event of model changes based on monitoring data, Chevron will submit a report to EPA listing the changes and providing proper justification.

Evaluation of Carbon Dioxide Plume

Pressure data, seismic surveys (using DAS VSP or other), and cased-hole pulsed neutron logs will be used to evaluate the extent of the CO₂ plume. Through the life of injection, Chevron will collect injection zone pressure data, seismic surveys, and cased-hole pulsed neutron log data from monitoring wells which will be used to calibrate static and dynamic models if they prove to inadequately represent the subsurface. Chevron will continue this process into the post-injection phase of the Project, incorporating newly acquired data so that models provide an accurate representation of the subsurface and can be used to in conjunction with post-injection monitoring data to validate CO₂ plume stability and non-endangerment of USDWs.

In the event of model changes based on monitoring data, Chevron will submit a report to EPA listing the changes and providing proper justification.

Evaluation of Emergencies or Other Events

Chevron will continue collecting shallow groundwater samples from the Olcese and Santa Margarita annually in the post-injection phase to demonstrate non-endangerment of the USDWs.

Computational modeling of the AoR along with monitoring data (during and post-injection) will also be used to demonstrate non-endangerment. Specifically, this includes but is not limited to pressure data, groundwater fluid sampling, seismic surveys (using DAS VSP or other), and pulsed neutron logs. Throughout the life of injection, Chevron will collect operating and monitoring data to verify and if necessary, refine static and dynamic models that may prove to inadequately represent the subsurface. Chevron will continue this process into the post-injection phase of the Project, incorporating newly acquired data so that models provide an accurate representation of the subsurface and can be used in conjunction with post-injection monitoring data to validate stability and non-endangerment of USDWs.

Figure 10 shows the position of monitoring well locations relative to the CO₂ injectors, identified faults, and wells that have been identified as penetrating the Freeman-Jewett Silt.

Chevron will evaluate the quality of well construction using a variety of methods, including cement bond logs, casing inspection logs, historical well file analysis, and mechanical integrity tests. Chevron will use monitoring data as described above in combination with historical well file data to verify the quality of plugging for artificial penetrations. When abandoning project wells, Chevron will follow the Plugging Procedures listed in this document to verify barriers are in place.

Site Closure Plan

Chevron will conduct site closure activities to meet the requirements of 40 CFR 146.93(e) as described below. Chevron will submit a final Site Closure Plan and notify the permitting agency at least 120 days prior to its intent to close the site. Once the permitting agency has approved closure of the site, Chevron will plug the remaining Project wells, reclaim surface well locations, and submit a site closure report to EPA. The activities, as described below, represent the planned activities based on information provided to EPA. The actual site closure plan may employ different methods and procedures. A final Site Closure Plan will be submitted to the UIC Program Director for approval with the notification of the intent to close the site.

Planned Tests or Measures to Determine Bottomhole Reservoir Pressure of Monitoring Wells

The deep monitoring wells will be equipped with pressure array sensors for monitoring pressure throughout the life cycle of the well. Prior to commencing plug and abandoning (P&A) activities, the bottomhole pressure can be determined using these downhole pressure array sensors. For the shallow monitoring wells, or for wells where the pressure array sensors are no longer functioning, bottomhole pressure will be calculated using the wellhead pressure. The wells will be circulated with a single fluid and surface pressure allowed to stabilize. Once surface pressure is stabilized, bottomhole pressure will be calculated using the average fluid density, true vertical depth of the well and surface pressure.

Information on Monitoring Wells Plugs

Chevron will use the materials and methods noted in **Table 4** and **Table 5** to plug the monitoring wells. The volume and depth of the plug or plugs will depend on the final geology and downhole conditions of the well as assessed during construction. The cement(s) formulated for plugging will be compatible with the carbon dioxide stream for the deep monitoring wells penetrating the Vedder. Class G cement will be used for the shallow monitoring wells. The cement formulation and required certification documents will be submitted to the agency with the well plugging plan.

Cement blends that have a minimum 1,000 psi ultimate compressive strength and a maximum liquid permeability of 0.1 mD will be utilized. The monitoring wells will have cement placed inside casing across all casing strings, formation to formation, from total depth (TD) of the well to surface. The cement will be placed using multiple balanced plugs in compliance with Chevron standards and current regulations in place at the time of well abandonment.

Table 4. Plugging Details- Deep Monitoring Wells

Plug Information	Plug #1	Plug #2	Plug #3
Diameter of boring in which plug will be placed (inches)	6.366	6.366	6.366
Depth to bottom of tubing or drill pipe (ft)	6150	4900	3650
Sacks of cement to be used	144	144	420
Slurry volume to be pumped (ft ³)	276	276	807
Slurry weight (lb./gal)	13	13	13
Calculated top of plug (ft)	4900	3650	0
Bottom of plug (ft)	6150	4900	3650
Type of cement or other material	CO ₂ Resistant Blend	CO ₂ Resistant Blend	CO ₂ Resistant Blend
Method of emplacement (e.g., balance method, retainer method, or two-plug method)	Balance	Balance	Balance

Table 5. Plugging Details – Shallow Monitoring Wells

Plug Information	Plug #1	Plug #2
Diameter of boring in which plug will be placed (inches)	6.366	6.366
Depth to bottom of tubing or drill pipe (ft)	2500	1900
Sacks of cement to be used	83	263
Slurry volume to be pumped (ft ³)	133	420
Slurry weight (lb./gal)	15.6	15.6
Calculated top of plug (ft)	1900	0
Bottom of plug (ft)	2500	1900
Type of cement or other material	Class G	Class G
Method of emplacement (e.g., balance method, retainer method, or two-plug method)	Balance	Balance

Monitoring Well Plugging Procedures

1. Move in rig and/or coil tubing unit and rig up.
2. If applicable and functioning, use the bottomhole pressure from the pressure array sensor to calculate the kill weight density fluid. For the shallow monitoring wells, or for wells where the pressure array sensors are no longer functioning, bottomhole pressure will be calculated using the wellhead pressure.
3. Kill the well to allow for the removal of the completion string.
4. Pull completion equipment, including tubing and packers from well.
5. Cleanout well to effective depth (ED).
6. Use a rig and/or a coil tubing unit to perform the following operations:
 - a. For deep monitoring wells, section mill a minimum of two (2) 100' length sections of 7" casing above the top of the Vedder sands to isolate the casing conveyed fiber optic line so the fiber optic line does not provide a conduit for CO₂ migration.
 - b. Spot CO₂ resistant cement plugs from ED to surface in stages utilizing balanced plugs as outlined in **Table 4** and **Table 5**. After spotting the balanced plug, pull above the top of the cement and circulate the hole clean.
 - c. Wait for the cement to set. After the cement has set, run in the hole and tag the top of the cement plug to verify the depth and hardness of the plug before initiating the next cement plug.
 - d. Repeat steps b and c until cement is placed at the surface.
7. Cut the wellhead and casing at a minimum of 5' below grade and weld a permanent steel plate with well identifying information onto the casing stub.
8. Backfill hole above the casing stub to original grade.

Site Closure Report

A site closure report will be prepared and submitted within ninety (90) days following site closure, documenting the following:

- Plugging of remaining Project wells,
- Location of sealed injection well on a plat of survey that has been submitted to the Kern County Planning and Natural Resources Department,
- Notifications to state and local authorities as required at 40 CFR 146.93(f)(2),
- Records regarding the nature, composition, and volume of the injected CO₂, and
- Post-injection monitoring records.

Chevron will record a notation to the property's deed on which the injection well was located that will indicate the following:

- That the property was used for carbon dioxide sequestration,
- The name of the local agency to which a plat of survey with injection well location was submitted,
- The volume of fluid injected,
- The formation into which the fluid was injected, and
- The period over which the injection occurred.

The site closure report will be submitted to the permitting agency and maintained for a period of ten (10) years following site closure. Additionally, Chevron will maintain the records collected during the post-injection period for a period of ten (10) years after which these records will be delivered to the UIC Program Director.