

LONQUIST SEQUESTRATION LLC	Hackberry Carbon Sequestration, LLC	Hackberry Carbon Sequestration Well No. 001	
	Country: USA	State/Province: Louisiana	County/Parish: Cameron
	API No: TBD	Field:	
Louisiana License EF-7423	Permit No: TBD	Project No: 2393.4	Date: 01/27/2025
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Drawn: Joseph Lovewell	Reviewed: Joseph Lovewell	Approved: Ben H Bergman
	Rev No: 2	Notes:	

		Recompletion Procedure		Project No: 2393	
		Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plugback & Recomplete Procedure		Date: January 2025	
				Page: 1 of 7	
Well No: 001		State: Louisiana		County: Cameron Parish	
Permit No: Pending		Operator: Hackberry		Location: Sec. 11-12S-11W	
				Status: Proposed Class VI Well	

INTRODUCTION:

Hackberry Carbon Sequestration, LLC is applying for a Class VI injection well permit at its Hackberry Carbon Sequestration Well No. 001 in Cameron Parish, Louisiana. Lonquist was contracted to prepare a proposed plan to plug and abandon the disposal well as part of the Class VI permit application. Over the life of the Well, Hackberry Carbon Sequestration, LLC plans to plugback and recomplete the well to upper sands three (3) times before permanently plugging and abandoning the well. Below is a summary of the first planned plugback operation:

1. Cease injection operations
2. MIRU wireline, pressure control and logging tools
3. Perform approved temperature logging to confirm integrity. [SWO 29-N-6 §631.A.2; 40 CFR §146.92(a)]
4. Run casing inspection and cement bond log
5. Run and set CRA bridge plug in the 7" production casing at ~7,791' on wireline
6. Tag plug and pressure test plug and casing (30 min test) [SWO 29-N-6 §631.A.3.j.]
7. Perf selected sands from 7,791' to 7,540'
8. Perform injectivity test to assess frac gradient
9. Return well to service

The following procedure provides a detailed prognosis to plugback the sequestration well.

REGULATORY INFORMATION:

The Hackberry Carbon Sequestration Well No. 001 is regulated by the U.S. Environmental Protection Agency Region 6 ("EPA") and the Louisiana Department of Natural Resources ("LDNR"). The EPA and LDNR will be notified and all activities approved prior to commencing work activities.

US EPA Region 6
 UIC Section
 1201 Elm Street, Suite 500
 Dallas, TX 75270-2102

Ken Johnson, Class VI Contact
 Office: (214) 665-8473

Louisiana DNR
 Injection & Mining Division
 617 North Third Street
 LaSalle Building, 8th Floor
 Baton Rouge, Louisiana 70802

Stephen Lee, Division Director
 Office: (225) 342-5569
 stephen.lee@la.gov

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	

		Recompletion Procedure	Project No: 2393
Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plugback & Recomplete Procedure		Date: January 2025	
Page: 2 of 7			
Well No: 001	State: Louisiana	County: Cameron Parish	Field: Hackberry
Permit No: Pending	Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well

SAFETY INFORMATION – VISION STATEMENT:

Lonquist believes that all accidents and incidents are preventable. Our corporate goal is to have zero incidents, accidents, or near misses. To further our commitment to safety, Lonquist has staffed a Safety Director, whose sole purpose is to identify and mediate possible safety concerns and to be a resource for advice on such safety issues. He will be involved in work safety plans, managing JSAs, and offering oversight on our daily safety meeting program. We require that all of our employees and subcontractors accept that philosophy and uphold the standards of Lonquist. Our field supervisors are well-control certified, with both site specific and industry required safety qualifications related to new well drilling and well workovers. Lonquist supervisors are responsible to complete pre-job meetings with the contractors and clients, obtain daily work permits, complete JSAs, safety meetings, review Emergency Response Plans, identify any unsafe practices or potential hazards, and implement corrective actions to minimize employee exposure. Lonquist implements a site-specific safety plan that defines the scope of work and identifies the appropriate safety standards and responsibilities for applicable parties for each project performed. Lonquist will implement a complete HSE plan for all phases of the operation. Our goal is always to ensure compliance with all client needs, as well as all local, State, and Federal safety and environmental regulations.

Well site safety meetings will be conducted at the beginning of each day and at the beginning of critical operations by Lonquist supervisor prior to commencing any well work. All contractors involved during the day or critical operations will be required to attend the safety meeting, and all will be required to participate in the JSA process.

The following safety gear and personal protective equipment are required:

- Hard hat
- Safety glasses with side protection (shields or curvature)
- Fire retardant clothing
- Steel-toed safety shoes w/ankle support – leather or rubber
- Gloves
- Fall protection required – 4' or above
- Any additional required safety equipment
- Tour and Critical Operation Safety Meeting

Additional safety and housekeeping items include:

- All personnel will be required to complete any safety orientations required by Hackberry Carbon Sequestration, LLC
- Zero tolerance for any fluid release
- Spills and releases to be reported to Hackberry Carbon Sequestration, LLC
- Any Injuries and Near Misses are to be reported and investigated to/by Lonquist and Hackberry Carbon Sequestration, LLC
- Vehicles to have company placards or logos
- Good housekeeping standards

A completed and detailed site-specific safety plan will be included.

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	



Recompletion Procedure

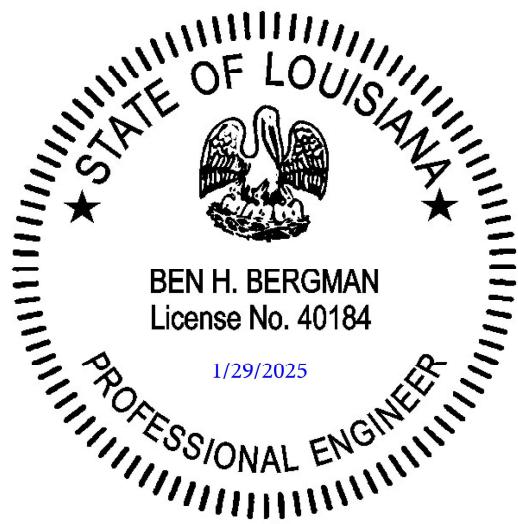
Project No: 2393

Hackberry Carbon Sequestration, LLC
Hackberry Carbon Sequestration Well No. 001
Plugback & Recomplete Procedure

Date: January 2025

Page: 3 of 7

Well No: 001	State: Louisiana	County: Cameron Parish	Field: Hackberry
Permit No: Pending	Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well



Certified By:
Lonquist Sequestration, LLC
Louisiana Registration No. EF-7423

 1/29/2025 P.E.

Ben H. Bergman, P.E.
Senior Engineer
Louisiana License No. 40184

Date Signed: January 29th, 2025
Houston, Texas

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	

		Recompletion Procedure	Project No: 2393
Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plugback & Recomplete Procedure			Date: January 2025
			Page: 4 of 7
Well No: 001	State: Louisiana	County: Cameron Parish	Field: Hackberry
Permit No: Pending	Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well

WORK PLAN:

The daily work activities will commence after all permits have been acquired and daily safety meetings have been completed. Decisions may have to be made in the field that could alter the procedure and/or result.

Plug and Abandon

1. Shut-in Storage Well
2. MIRU wireline, pumps, pressure control and logging tools
3. Review temperature data from fiber optic monitoring device
 - a. If inconclusive temperature data from fiber, perform approved temperature log
4. Run casing inspection logs and cement bond log
 - a. Evaluate logs and confirm wellbore integrity
 - b. If integrity cannot be confirmed, prepare and submit remediation plan for approval
5. RU setting tool and 7" Corrosion Resistant Alloy bridge plug on wireline
6. RIH and set bridge plug at ~7,791'
 - a. Set in alloy tubular packer seat above top perforation
 - b. Set at least 5' from a collar
7. Tag bridge plug and pressure test at 500 psi for 30 minutes
8. RU wireline, pressure control and perforating equipment
 - a. Perforate select sands based on log analysis from ~7,791' to 7,540'
9. RDMO wireline
10. Perform injectivity test with brine
11. Return well to service

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	

		Recompletion Procedure	Project No: 2393
Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plugback & Recomplete Procedure			Date: January 2025
			Page: 5 of 7
Well No: 001	State: Louisiana	County: Cameron Parish	Field: Hackberry
Permit No: Pending	Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well

SCHEDULE

- Days 1-2: MIRU workover rig and equipment.
- Days 3-4: Perform temperature logging.
- Days 5-6: Conduct casing inspection and cement bond log. Set CRA bridge plug.
- Days 7-8: Tag and pressure test plug.
- Day 9: RDMO equipment

Reporting Information

Daily Reports – Email or Fax

- Hackberry Carbon Sequestration, LLC
- Richard Lonquist
- Steve Pattee

Final Reports – Email and Hard Copy

- Hackberry Carbon Sequestration, LLC
- Lonquist & Company, LLC

Final Reports to include:

- Daily Reports
- Well Schematic
- Well Completion Report
- Well Logs
- Photos

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	

		Recompletion Procedure		Project No: 2393	
		Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plugback & Recomplete Procedure			Date: January 2025
Well No: 001		State: Louisiana	County: Cameron Parish	Field: Hackberry	
Permit No: Pending		Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well	
Well Owner Hackberry Carbon Sequestration, LLC					
Regulatory Louisiana DENR Injection & Mining Division 617 North Third Street LaSalle Building, 8th Floor Baton Rouge, Louisiana 70802					
Contractor Lonquist Field Service, LLC 1415 Louisiana St., Suite 3800 Houston, TX 77002					
<ul style="list-style-type: none"> ▪ Richard R. Lonquist, P.E. – Chairman <ul style="list-style-type: none"> ○ Telephone – (512) 699-1527 ○ Fax – (512) 732-9816 ○ Email – richard@lonquist.com ▪ Steve Pattee, P.G. – Senior Vice President <ul style="list-style-type: none"> ○ Office – (512) 600-1774 ○ Mobile – (281) 773-0728 ○ Email – steve@lonquist.com 					
PREPARED BY Cayden Sessions	DATE 12/20/2023	REVIEWED BY Joseph Lovewell	DATE 1/22/2025	APPROVED BY Ben Bergman	DATE 1/29/2025
Client Signature					

		Recompletion Procedure		Project No: 2393	
		Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plugback & Recomplete Procedure			Date: January 2025
Well No: 001		State: Louisiana	County: Cameron Parish	Field: Hackberry	
Permit No: Pending	Operator: Hackberry		Location: Sec. 11-12S-11W	Status: Proposed Class VI Well	
PROPOSED WELLBORE SCHEMATIC					
PREPARED BY Cayden Sessions	DATE 12/20/2023	REVIEWED BY Joseph Lovewell	DATE 1/22/2025	APPROVED BY Ben Bergman	DATE 1/29/2025
Client Signature					

INTRODUCTION:

Hackberry Carbon Sequestration, LLC is applying for a Class VI injection well permit at its Hackberry Carbon Sequestration Well No. 001 in Cameron Parish, Louisiana. Lonquist was contracted to prepare a proposed plan to plug and abandon the disposal well as part of the Class VI permit application. Over the life of the Well, Hackberry Carbon Sequestration, LLC plans to plugback and recomplete the well to upper sands three (3) times before permanently plugging and abandoning the well. Below is a summary of the first planned plugback operation:

1. Cease injection operations
2. MIRU wireline, pressure control and logging tools
3. Perform approved temperature logging to confirm integrity. [SWO 29-N-6 §631.A.2; 40 CFR §146.92(a)]
4. Run casing inspection and cement bond log
5. Run and set CRA bridge plug in the 7" production casing at ~7,791' on wireline
6. Tag plug and pressure test plug and casing (30 min test) [SWO 29-N-6 §631.A.3.j.]
7. Perf selected sands from 7,791' to 7,540'
8. Perform injectivity test to assess frac gradient
9. Return well to service

The following procedure provides a detailed prognosis to plugback the sequestration well.

REGULATORY INFORMATION:

The Hackberry Carbon Sequestration Well No. 001 is regulated by the U.S. Environmental Protection Agency Region 6 ("EPA") and the Louisiana Department of Natural Resources ("LDNR"). The EPA and LDNR will be notified and all activities approved prior to commencing work activities.

US EPA Region 6
UIC Section
1201 Elm Street, Suite 500
Dallas, TX 75270-2102

Ken Johnson, Class VI Contact
Office: (214) 665-8473

Louisiana DNR
Injection & Mining Division
617 North Third Street
LaSalle Building, 8th Floor
Baton Rouge, Louisiana 70802

Stephen Lee, Division Director
Office: (225) 342-5569
stephen.lee@la.gov

SAFETY INFORMATION – VISION STATEMENT:

Lonquist believes that all accidents and incidents are preventable. Our corporate goal is to have zero incidents, accidents, or near misses. To further our commitment to safety, Lonquist has staffed a Safety Director, whose sole purpose is to identify and mediate possible safety concerns and to be a resource for advice on such safety issues. He will be involved in work safety plans, managing JSAs, and offering oversight on our daily safety meeting program. We require that all of our employees and subcontractors accept that philosophy and uphold the standards of Lonquist. Our field supervisors are well-control certified, with both site specific and industry required safety qualifications related to new well drilling and well workovers. Lonquist supervisors are responsible to complete pre-job meetings with the contractors and clients, obtain daily work permits, complete JSAs, safety meetings, review Emergency Response Plans, identify any unsafe practices or potential hazards, and implement corrective actions to minimize employee exposure. Lonquist implements a site-specific safety plan that defines the scope of work and identifies the appropriate safety standards and responsibilities for applicable parties for each project performed. Lonquist will implement a complete HSE plan for all phases of the operation. Our goal is always to ensure compliance with all client needs, as well as all local, State, and Federal safety and environmental regulations.

Well site safety meetings will be conducted at the beginning of each day and at the beginning of critical operations by Lonquist supervisor prior to commencing any well work. All contractors involved during the day or critical operations will be required to attend the safety meeting, and all will be required to participate in the JSA process.

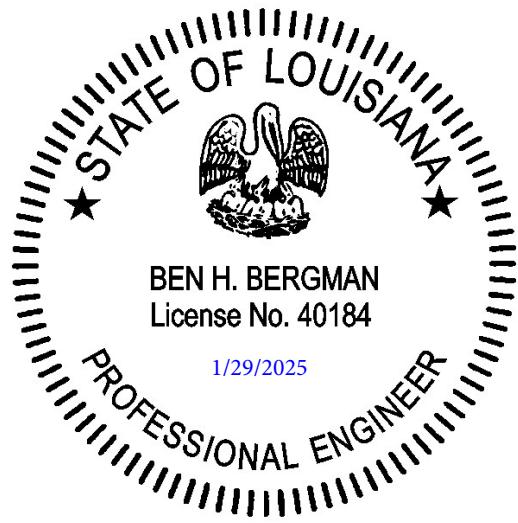
The following safety gear and personal protective equipment are required:

- Hard hat
- Safety glasses with side protection (shields or curvature)
- Fire retardant clothing
- Steel-toed safety shoes w/ankle support – leather or rubber
- Gloves
- Fall protection required – 4' or above
- Any additional required safety equipment
- Tour and Critical Operation Safety Meeting

Additional safety and housekeeping items include:

- All personnel will be required to complete any safety orientations required by Hackberry Carbon Sequestration, LLC
- Zero tolerance for any fluid release
- Spills and releases to be reported to Hackberry Carbon Sequestration, LLC
- Any Injuries and Near Misses are to be reported and investigated to/by Lonquist and Hackberry Carbon Sequestration, LLC
- Vehicles to have company placards or logos
- Good housekeeping standards

A completed and detailed site-specific safety plan will be included.



BEN H. BERGMAN
License No. 40184

1/29/2025

Certified By:
Lonquist Sequestration, LLC
Louisiana Registration No. EF-7423

Ben H. Bergman 1/29/2025 P.E.

Ben H. Bergman, P.E.
Senior Engineer
Louisiana License No. 40184

Date Signed: January 29th, 2025
Houston, Texas

WORK PLAN:

The daily work activities will commence after all permits have been acquired and daily safety meetings have been completed. Decisions may have to be made in the field that could alter the procedure and/or result.

Plug and Abandon

1. Shut-in Storage Well
2. MIRU wireline, pumps, pressure control and logging tools
3. Review temperature data from fiber optic monitoring device
 - a. If inconclusive temperature data from fiber, perform approved temperature log
4. Run casing inspection logs and cement bond log
 - a. Evaluate logs and confirm wellbore integrity
 - b. If integrity cannot be confirmed, prepare and submit remediation plan for approval
5. RU setting tool and 7" Corrosion Resistant Alloy bridge plug on wireline
6. RIH and set bridge plug at ~7,791'
 - a. Set in alloy tubular packer seat above top perforation
 - b. Set at least 5' from a collar
7. Tag bridge plug and pressure test at 500 psi for 30 minutes
8. RU wireline, pressure control and perforating equipment
 - a. Perforate select sands based on log analysis from ~7,791' to 7,540'
9. RDMO wireline
10. Perform injectivity test with brine
11. Return well to service

SCHEDULE

- **Days 1-2: MIRU workover rig and equipment.**
- **Days 3-4: Perform temperature logging.**
- **Days 5-6: Conduct casing inspection and cement bond log. Set CRA bridge plug.**
- **Days 7-8: Tag and pressure test plug.**
- **Day 9: RDMO equipment**

Reporting Information

Daily Reports – Email or Fax

- Hackberry Carbon Sequestration, LLC
- Richard Lonquist
- Steve Pattee

Final Reports – Email and Hard Copy

- Hackberry Carbon Sequestration, LLC
- Lonquist & Company, LLC

Final Reports to include:

- Daily Reports
- Well Schematic
- Well Completion Report
- Well Logs
- Photos

Well Owner

Hackberry Carbon Sequestration, LLC

Regulatory

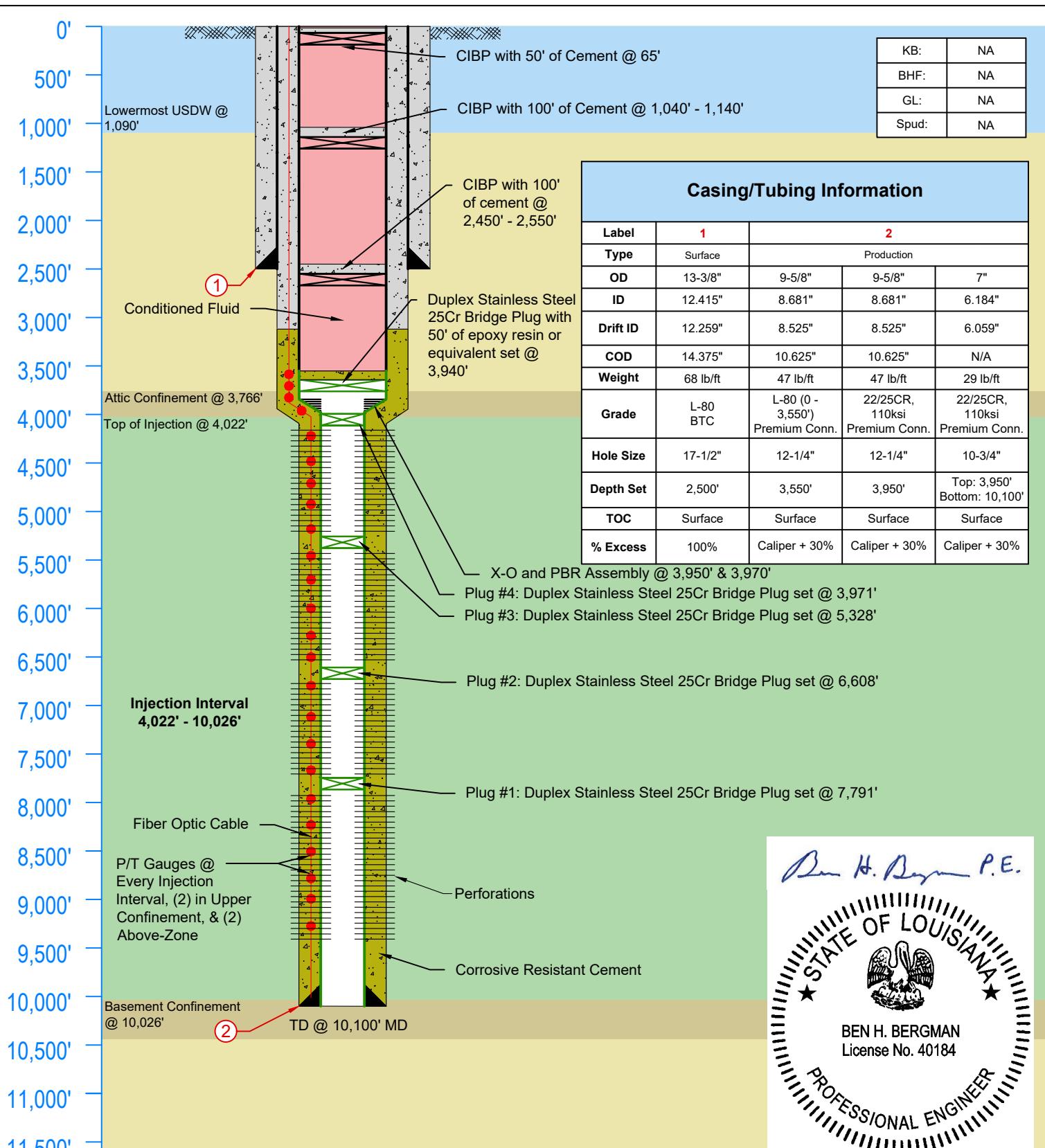
Louisiana DENR
Injection & Mining Division
617 North Third Street
LaSalle Building, 8th Floor
Baton Rouge, Louisiana 70802

Contractor

Lonquist Field Service, LLC
1415 Louisiana St., Suite 3800
Houston, TX 77002

- Richard R. Lonquist, P.E. – Chairman
 - Telephone – (512) 699-1527
 - Fax – (512) 732-9816
 - Email – richard@lonquist.com
- Steve Pattee, P.G. – Senior Vice President
 - Office – (512) 600-1774
 - Mobile – (281) 773-0728
 - Email – steve@lonquist.com

PROPOSED WELLBORE SCHEMATIC



LONQUIST SEQUESTRATION LLC	Hackberry Carbon Sequestration, LLC	Hackberry Carbon Sequestration Well No. 001	
	Country: USA	State/Province: Louisiana	County/Parish: Cameron
	API No: TBD	Field:	Well Type/Status: Class VI CCS
Louisiana License EF-7423	Permit No: TBD	Project No: 2393.4	Date: 01/27/2025
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Drawn: Joseph Lovewell	Reviewed: Joseph Lovewell	Approved: Ben Bergman
	Rev No: 2	Notes: P&A	

		P&A Procedure	Project No: 2393
Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plug and Abandon Procedure		Date: January 2025	
		Page: 1 of 9	
Well No: 1	State: Louisiana	County: Cameron Parish	Field: Hackberry
Permit No: Pending	Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well

INTRODUCTION:

Hackberry Carbon Sequestration, LLC is applying for a Class VI injection well permit at its Hackberry Carbon Sequestration Well No. 001 in Plaquemines Parish, Louisiana. Lonquist was contracted to prepare a proposed plan to plug and abandon the disposal well as part of the Class VI permit application. Over the life of the Well, Hackberry Carbon Sequestration, LLC plans to plugback and recomplete the well to upper sands three (3) times before permanently plugging and abandoning the well. Below is a summary of the final plug and abandonment operation:

- Cease injection operations.
- Determine bottom hole pressure using fiber optic pressure sensing array installed behind the production casing string. [SOW 29-N-6 §631.A.2; 40 CFR §146.92(a)]
- Determine appropriate density of plugging fluids. [40 CFR §146.92(b)(1)]
- Set CRA bridge plug in upper most portion in 7" production casing to effectively kill the well at ~3,971'.
- Pump appropriately weighted, CO₂-compatible buffer fluid to flush well. [SWO 29-N-6 §631.A.2; 40 CFR §146.92(a)]
- Install BOP.
- Pull tubing and packer.
- Perform approved temperature logging to confirm integrity. [SWO 29-N-6 §631.A.2; 40 CFR §146.92(a)]
- Run casing inspection and cement bond log.
- Run and set CRA bridge plug in the 9-5/8" production casing at ~3,940' on wireline.
- Pump epoxy resin or equivalent plug on top of bridge plug.
- Tag plug and pressure test plug and casing (30 min test). [SWO 29-N-6 §631.A.3.j.]
- Treated Drilling Mud will be circulated at least once to achieve a state of static equilibrium.
- Run and set bridge plug below the surface casing shoe at ~2,550'
- Pump 100' cement plug from 2,550' to 2,450'
- Tag and pressure test cement plug across surface casing shoe. [SWO 29-N-6 §631.A.3.j.]
- Treated Drilling Mud will be circulated at least once to achieve a state of static equilibrium.
- Run and set bridge plug below the USDW shoe at ~1,140'
- Pump 100' cement plug from 1,140' to 1,040'
- Tag and pressure test cement plug across base of USDW. [SWO 29-N-6 §631.A.3.j.]
- Treated Drilling Mud will be circulated at least once to achieve a state of static equilibrium.
- Run and set bridge plug at 65'
- Circulate 50' cement plug from 65' to 15'.
- Remove wellhead.
- Cut casing 15' below mud line and weld on 1/2" steel plate

The following procedure provides a detailed prognosis to plugback the Sequestration Well.

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	

		P&A Procedure	Project No: 2393
Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plug and Abandon Procedure		Date: January 2025	
		Page: 2 of 9	
Well No: 1	State: Louisiana	County: Cameron Parish	Field: Hackberry
Permit No: Pending	Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well

REGULATORY INFORMATION:

The Hackberry Carbon Sequestration Well No. 001 is regulated by the U.S. Environmental Protection Agency Region 6 ("EPA") and the Louisiana Department of Natural Resources ("LDNR"). The EPA and LDNR will be notified and all activities approved prior to commencing work activities.

US EPA Region 6
 UIC Section
 1201 Elm Street, Suite 500
 Dallas, TX 75270-2102

Ken Johnson, Class VI Contact
 Office: (214) 665-8473

Louisiana DNR
 Injection & Mining Division
 617 North Third Street
 LaSalle Building, 8th Floor
 Baton Rouge, Louisiana 70802

Stephen Lee, Division Director
 Office: (225) 342-5569
 stephen.lee@la.gov

SAFETY INFORMATION – VISION STATEMENT:

Lonquist believes that all accidents and incidents are preventable. Our corporate goal is to have zero incidents, accidents, or near misses. To further our commitment to safety, Lonquist has staffed a Safety Director, whose sole purpose is to identify and mediate possible safety concerns and to be a resource for advice on such safety issues. He will be involved in work safety plans, managing JSAs, and offering oversight on our daily safety meeting program. We require that all of our employees and subcontractors accept that philosophy and uphold the standards of Lonquist. Our field supervisors are well-control certified, with both site specific and industry required safety qualifications related to new well drilling and well workovers. Lonquist supervisors are responsible to complete pre-job meetings with the contractors and clients, obtain daily work permits, complete JSAs, safety meetings, review Emergency Response Plans, identify any unsafe practices or potential hazards, and implement corrective actions to minimize employee exposure. Lonquist implements a site-specific safety plan that defines the scope of work and identifies the appropriate safety standards and responsibilities for applicable parties for each project performed. Lonquist will implement a complete HSE plan for all phases of the operation. Our goal is always to ensure compliance with all client needs, as well as all local, State, and Federal safety and environmental regulations.

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	



P&A Procedure

Project No: 2393

Hackberry Carbon Sequestration, LLC
Hackberry Carbon Sequestration Well No. 001
Plug and Abandon Procedure

Date: January 2025

Page: 3 of 9

Well No: 1	State: Louisiana	County: Cameron Parish	Field: Hackberry
Permit No: Pending	Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well

Well site safety meetings will be conducted at the beginning of each day and at the beginning of critical operations by Lonquist supervisor prior to commencing any well work. All contractors involved during the day or critical operations will be required to attend the safety meeting, and all will be required to participate in the JSA process.

The following safety gear and personal protective equipment are required:

- Hard hat
- Safety glasses with side protection (shields or curvature)
- Fire retardant clothing
- Steel-toed safety shoes w/ankle support – leather or rubber
- Gloves
- Fall protection required – 4' or above
- Any additional required safety equipment
- Tour and Critical Operation Safety Meeting

Additional safety and housekeeping items include:

- All personnel will be required to complete any safety orientations required by Hackberry Carbon Sequestration, LLC
- Zero tolerance for any fluid release
- Spills and releases to be reported to Hackberry Carbon Sequestration, LLC
- Any Injuries and Near Misses are to be reported and investigated to/by Lonquist and Hackberry Carbon Sequestration, LLC
- Vehicles to have company placards or logos
- Good housekeeping standards

A completed and detailed site-specific safety plan will be included.



Certified By:
Lonquist Sequestration, LLC
Louisiana Registration No. EF-7423

 1/29/2025 P.E.

Ben H. Bergman, P.E.
Senior Engineer
Louisiana License No. 40184

Date Signed: January 29th, 2025
Houston, Texas

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	

		P&A Procedure		Project No: 2393					
		Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plug and Abandon Procedure		Date: January 2025					
Well No: 1		State: Louisiana		County: Cameron Parish					
Permit No: Pending		Operator: Hackberry		Location: Sec. 11-12S-11W					
Status: Proposed Class VI Well									
WORK PLAN:									
<p>The daily work activities will commence after all permits have been acquired and daily safety meetings have been completed. Decisions may have to be made in the field that could alter the procedure and/or result.</p>									
<p><u>Plug and Abandon</u></p>									
<ol style="list-style-type: none"> 1. Shut-in Storage Well, MIRU Workover Rig and equipment <ol style="list-style-type: none"> a. Rig beam b. Rig tank c. Rig pump d. Dog house e. Pipe racks f. BOP 2. Kill Storage Well <ol style="list-style-type: none"> a. Determine appropriate CO2-compatible fluid based on BHP reading from fiber optic pressure sensing array. b. Set CRA bridge plug in upper most portion of 7" production casing to effectively kill the well at ~3,971' 3. Pump appropriately weighted, CO2-compatible buffer fluid to flush well. 4. ND wellhead 5. NU BOP <ol style="list-style-type: none"> a. Function test BOP 6. Conduct low pressure test BOP system at 250 psi <ol style="list-style-type: none"> a. Pressure must not decrease more than 10 psi during 5-minute test period 7. Conduct high pressure test of BOP system at max working pressure <ol style="list-style-type: none"> a. Pressure must not decrease more than 10 psi during a 5-minute test period 8. Document pressures and times on daily report or provide third party test reports with daily reports <ol style="list-style-type: none"> a. Bleed pressure, remove joint of work string and remove test plug 9. MIRU wireline, pressure control and logging tools 10. Perform approved temperature logging (thru tubing) to confirm wellbore integrity <ol style="list-style-type: none"> a. If integrity cannot be confirmed, prepare and submit remediation plan for approval. 11. RDMO wireline 12. MU landing joint to tubing hanger or spear 7" tubing 13. PU tubing hanger and release packer 14. POOH laying down 7" tubing and packer <ol style="list-style-type: none"> a. Visually inspect tubing and packer b. Consider sending tubing for clean, drift, EMI and thread inspection c. Redress packer 15. PU 9-5/8" casing scraper with workstring 16. RIH with casing scraper to top of 7" production casing. 17. POOH racking back workstring 18. RU wireline, pressure control and logging tools 19. Run casing inspection log and cement bond log <ol style="list-style-type: none"> a. Evaluate logs and confirm wellbore integrity 20. RU setting tool and 9-5/8" Corrosion Resistant Alloy bridge plug on wireline 									
PREPARED BY Cayden Sessions	DATE 12/20/2023	REVIEWED BY Joseph Lovewell	DATE 1/22/2025	APPROVED BY Ben Bergman	DATE 1/29/2025	Client Signature			

		P&A Procedure		Project No: 2393		
		Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plug and Abandon Procedure		Date: January 2025		
Well No: 1		State: Louisiana		County: Cameron Parish		
Permit No: Pending		Operator: Hackberry		Location: Sec. 11-12S-11W		
21. RIH and set bridge plug at ~3,940' 22. RD wireline 23. MU muleshoe and RIH with workstring 24. Tag bridge plug and pressure test at 500 psi for 30 minutes 25. MIRU cement equipment 26. Mix and pump 50' epoxy resin or equivalent plug on top of bridge plug from 3,940' to 3,890' a. 4 bbls of epoxy resin or equivalent 27. POOH to ~3,690' and reverse circulate to clear epoxy resin or equivalent from workstring 28. POOH racking back and WOC 29. RIH and tag plug at ~3,890' a. If the plug is tagged deeper than expected or does not pressure test, additional epoxy resin or equivalent may be required. 30. Pressure test wellbore to 500 psig on chart for 30 minutes 31. POOH racking back workstring 32. RU wireline and pressure control tools 33. RU setting tool and 9-5/8" CIBP on wireline 34. RIH and set bridge plug at ~2,550' a. Surface casing shoe 35. RD Wireline 36. MU muleshoe and RIH with workstring 37. Tag bridge plug and pressure test at 500 psi for 30 minutes 38. MIRU cement equipment 39. Mix and pump 100' cement plug from ~2,550'- 2,450' a. Class H – 40 sacks, 42 ft ³ 40. POOH to 2,350' and reverse circulate to clear cement from workstring and WOC 41. RIH and tag cement plug at ~2,450' a. If the plug is tagged deeper than expected or does not pressure test, additional cement may be required. 42. Pressure test wellbore to 500 psig on chart for 30 minutes 43. POOH racking back workstring 44. RU wireline and pressure control tools 45. RU setting tool and 9-5/8" CIBP on wireline 46. RIH and set bridge plug at ~1,140' a. Base of USDW 47. RD Wireline 48. MU muleshoe and RIH with workstring 49. Tag bridge plug and pressure test at 500 psi for 30 minutes 50. MIRU cement equipment 51. Mix and pump 100' cement plug from ~1,140'- 1,040' a. Class H – 40 sacks, 42 ft ³ 52. POOH to 940' and reverse circulate to clear cement from workstring and WOC 53. RIH and tag cement plug at ~1,040' a. If the plug is tagged deeper than expected or does not pressure test, additional cement may be required. 54. Pressure test wellbore to 500 psig on chart for 30 minutes 55. POOH racking back workstring						
PREPARED BY Cayden Sessions	DATE 12/20/2023	REVIEWED BY Joseph Lovewell	DATE 1/22/2025	APPROVED BY Ben Bergman	DATE 1/29/2025	Client Signature

		P&A Procedure		Project No: 2393															
		Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plug and Abandon Procedure			Date: January 2025														
Well No: 1		State: Louisiana		County: Cameron Parish															
Permit No: Pending		Operator: Hackberry		Location: Sec. 11-12S-11W															
56. RU wireline and pressure control tools 57. RU setting tool and 9-5/8" CIBP on wireline 58. RIH and set bridge plug at 65' 59. RD Wireline 60. MU muleshoe and RIH with workstring 61. Tag bridge plug and pressure test at 500 psi for 30 minutes 62. MIRU cement equipment 63. Pump cement plug from 65' to 15'. a. Class H – 20 sacks, 21 ft ³ 64. POOH laying down 65. ND BOPE 66. ND Wellhead 67. Cut casing 15' below ground level and weld on 1/2" steel plate 68. Erect a permanent marker on the well with the following a. Well Serial No. (TBD) b. Date of Plugging c. Company Name: Hackberry Carbon Sequestration, LLC 69. RDMO all equipment																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">PREPARED BY</td> <td style="width: 15%;">DATE</td> <td style="width: 15%;">REVIEWED BY</td> <td style="width: 15%;">DATE</td> <td style="width: 15%;">APPROVED BY</td> <td style="width: 15%;">DATE</td> <td style="width: 15%;">Client Signature</td> </tr> <tr> <td>Cayden Sessions</td> <td>12/20/2023</td> <td>Joseph Lovewell</td> <td>1/22/2025</td> <td>Ben Bergman</td> <td>1/29/2025</td> <td></td> </tr> </table>						PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature	Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	
PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature													
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025														

		P&A Procedure	Project No: 2393
Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plug and Abandon Procedure		Date: January 2025	
		Page: 7 of 9	
Well No: 1	State: Louisiana	County: Cameron Parish	Field: Hackberry
Permit No: Pending	Operator: Hackberry	Location: Sec. 11-12S-11W	Status: Proposed Class VI Well

SCHEDULE

- **Days 1-2:** MIRU workover rig and equipment, ND wellhead, NU and test BOPE
- **Days 3-4:** Perform temperature logging. Pull tubing & packer.
- **Days 5-6:** Conduct casing inspection and cement bond log. Set CRA BRIDGE PLUG + 50' Epoxy resin. Tag and pressure test plug.
- **Days 7-9:** Set USDW plug, tag and pressure test plug, set surface plug, tag and pressure test surface plug.
- **Days 10-11:** RDMO equipment. Cut and cap well.

Reporting Information

Daily Reports – Email or Fax

- Hackberry Carbon Sequestration, LLC
- Richard Lonquist
- Steve Pattee
- Will George

Final Reports – Email and Hard Copy

- Hackberry Carbon Sequestration, LLC
- Lonquist & Company, LLC

Final Reports to include:

- Daily Reports
- Well Schematic
- Well Completion Report
- Well Logs
- Photos

PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	

		P&A Procedure		Project No: 2393															
		Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plug and Abandon Procedure		Date: January 2025															
Well No: 1		State: Louisiana		County: Cameron Parish															
Permit No: Pending		Operator: Hackberry		Location: Sec. 11-12S-11W															
Well Owner Hackberry Carbon Sequestration, LLC																			
Regulatory Louisiana DENR Injection & Mining Division 617 North Third Street LaSalle Building, 8th Floor Baton Rouge, Louisiana 70802																			
Contractor Lonquist Field Service, LLC 1415 Louisiana St., Suite 3800 Houston, TX 77002																			
<ul style="list-style-type: none"> ▪ Richard R. Lonquist, P.E. – Chairman <ul style="list-style-type: none"> ○ Telephone – (512) 699-1527 ○ Fax – (512) 732-9816 ○ Email – richard@lonquist.com ▪ Steve Pattee, P.G. – Senior Vice President <ul style="list-style-type: none"> ○ Office – (512) 600-1774 ○ Mobile – (281) 773-0728 ○ Email – steve@lonquist.com 																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">PREPARED BY</td> <td style="width: 15%;">DATE</td> <td style="width: 15%;">REVIEWED BY</td> <td style="width: 15%;">DATE</td> <td style="width: 15%;">APPROVED BY</td> <td style="width: 15%;">DATE</td> <td style="width: 15%;">Client Signature</td> </tr> <tr> <td>Cayden Sessions</td> <td>12/20/2023</td> <td>Joseph Lovewell</td> <td>1/22/2025</td> <td>Ben Bergman</td> <td>1/29/2025</td> <td></td> </tr> </table>						PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature	Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025	
PREPARED BY	DATE	REVIEWED BY	DATE	APPROVED BY	DATE	Client Signature													
Cayden Sessions	12/20/2023	Joseph Lovewell	1/22/2025	Ben Bergman	1/29/2025														

		P&A Procedure		Project No: 2393	
		Hackberry Carbon Sequestration, LLC Hackberry Carbon Sequestration Well No. 001 Plug and Abandon Procedure			Date: January 2025
Well No: 1		State: Louisiana		County: Cameron Parish	
Permit No: Pending		Operator: Hackberry		Location: Sec. 11-12S-11W	
PROPOSED WELLBORE SCHEMATIC					
PREPARED BY Cayden Sessions	DATE 12/20/2023	REVIEWED BY Joseph Lovewell	DATE 1/22/2025	APPROVED BY Ben Bergman	DATE 1/29/2025
Client Signature					

INTRODUCTION:

Hackberry Carbon Sequestration, LLC is applying for a Class VI injection well permit at its Hackberry Carbon Sequestration Well No. 001 in Plaquemines Parish, Louisiana. Lonquist was contracted to prepare a proposed plan to plug and abandon the disposal well as part of the Class VI permit application. Over the life of the Well, Hackberry Carbon Sequestration, LLC plans to plugback and recomplete the well to upper sands three (3) times before permanently plugging and abandoning the well. Below is a summary of the final plug and abandonment operation:

- Cease injection operations.
- Determine bottom hole pressure using fiber optic pressure sensing array installed behind the production casing string. [SOW 29-N-6 §631.A.2; 40 CFR §146.92(a)]
- Determine appropriate density of plugging fluids. [40 CFR §146.92(b)(1)]
- Set CRA bridge plug in upper most portion in 7" production casing to effectively kill the well at ~3,971'.
- Pump appropriately weighted, CO₂-compatible buffer fluid to flush well. [SWO 29-N-6 §631.A.2; 40 CFR §146.92(a)]
- Install BOP.
- Pull tubing and packer.
- Perform approved temperature logging to confirm integrity. [SWO 29-N-6 §631.A.2; 40 CFR §146.92(a)]
- Run casing inspection and cement bond log.
- Run and set CRA bridge plug in the 9-5/8" production casing at ~3,940' on wireline.
- Pump epoxy resin or equivalent plug on top of bridge plug.
- Tag plug and pressure test plug and casing (30 min test). [SWO 29-N-6 §631.A.3.j.]
- Treated Drilling Mud will be circulated at least once to achieve a state of static equilibrium.
- Run and set bridge plug below the surface casing shoe at ~2,550'
- Pump 100' cement plug from 2,550' to 2,450'
- Tag and pressure test cement plug across surface casing shoe. [SWO 29-N-6 §631.A.3.j.]
- Treated Drilling Mud will be circulated at least once to achieve a state of static equilibrium.
- Run and set bridge plug below the USDW shoe at ~1,140'
- Pump 100' cement plug from 1,140' to 1,040'
- Tag and pressure test cement plug across base of USDW. [SWO 29-N-6 §631.A.3.j.]
- Treated Drilling Mud will be circulated at least once to achieve a state of static equilibrium.
- Run and set bridge plug at 65'
- Circulate 50' cement plug from 65' to 15'.
- Remove wellhead.
- Cut casing 15' below mud line and weld on 1/2" steel plate

The following procedure provides a detailed prognosis to plugback the Sequestration Well.

REGULATORY INFORMATION:

The Hackberry Carbon Sequestration Well No. 001 is regulated by the U.S. Environmental Protection Agency Region 6 ("EPA") and the Louisiana Department of Natural Resources ("LDNR"). The EPA and LDNR will be notified and all activities approved prior to commencing work activities.

US EPA Region 6
UIC Section
1201 Elm Street, Suite 500
Dallas, TX 75270-2102

Ken Johnson, Class VI Contact
Office: (214) 665-8473

Louisiana DNR
Injection & Mining Division
617 North Third Street
LaSalle Building, 8th Floor
Baton Rouge, Louisiana 70802

Stephen Lee, Division Director
Office: (225) 342-5569
stephen.lee@la.gov

SAFETY INFORMATION – VISION STATEMENT:

Lonquist believes that all accidents and incidents are preventable. Our corporate goal is to have zero incidents, accidents, or near misses. To further our commitment to safety, Lonquist has staffed a Safety Director, whose sole purpose is to identify and mediate possible safety concerns and to be a resource for advice on such safety issues. He will be involved in work safety plans, managing JSAs, and offering oversight on our daily safety meeting program. We require that all of our employees and subcontractors accept that philosophy and uphold the standards of Lonquist. Our field supervisors are well-control certified, with both site specific and industry required safety qualifications related to new well drilling and well workovers. Lonquist supervisors are responsible to complete pre-job meetings with the contractors and clients, obtain daily work permits, complete JSAs, safety meetings, review Emergency Response Plans, identify any unsafe practices or potential hazards, and implement corrective actions to minimize employee exposure. Lonquist implements a site-specific safety plan that defines the scope of work and identifies the appropriate safety standards and responsibilities for applicable parties for each project performed. Lonquist will implement a complete HSE plan for all phases of the operation. Our goal is always to ensure compliance with all client needs, as well as all local, State, and Federal safety and environmental regulations.

Well site safety meetings will be conducted at the beginning of each day and at the beginning of critical operations by Lonquist supervisor prior to commencing any well work. All contractors involved during the day or critical operations will be required to attend the safety meeting, and all will be required to participate in the JSA process.

The following safety gear and personal protective equipment are required:

- Hard hat
- Safety glasses with side protection (shields or curvature)
- Fire retardant clothing
- Steel-toed safety shoes w/ankle support – leather or rubber
- Gloves
- Fall protection required – 4' or above
- Any additional required safety equipment
- Tour and Critical Operation Safety Meeting

Additional safety and housekeeping items include:

- All personnel will be required to complete any safety orientations required by Hackberry Carbon Sequestration, LLC
- Zero tolerance for any fluid release
- Spills and releases to be reported to Hackberry Carbon Sequestration, LLC
- Any Injuries and Near Misses are to be reported and investigated to/by Lonquist and Hackberry Carbon Sequestration, LLC
- Vehicles to have company placards or logos
- Good housekeeping standards

A completed and detailed site-specific safety plan will be included.



Certified By:
Lonquist Sequestration, LLC
Louisiana Registration No. EF-7423

Ben H. Bergman, P.E.

Ben H. Bergman, P.E.
Senior Engineer
Louisiana License No. 40184

Date Signed: January 29th, 2025
Houston, Texas

WORK PLAN:

The daily work activities will commence after all permits have been acquired and daily safety meetings have been completed. Decisions may have to be made in the field that could alter the procedure and/or result.

Plug and Abandon

1. Shut-in Storage Well, MIRU Workover Rig and equipment
 - a. Rig beam
 - b. Rig tank
 - c. Rig pump
 - d. Dog house
 - e. Pipe racks
 - f. BOP
2. Kill Storage Well
 - a. Determine appropriate CO₂-compatible fluid based on BHP reading from fiber optic pressure sensing array.
 - b. Set CRA bridge plug in upper most portion of 7" production casing to effectively kill the well at ~3,971'
3. Pump appropriately weighted, CO₂-compatible buffer fluid to flush well.
4. ND wellhead
5. NU BOP
 - a. Function test BOP
6. Conduct low pressure test BOP system at 250 psi
 - a. Pressure must not decrease more than 10 psi during 5-minute test period
7. Conduct high pressure test of BOP system at max working pressure
 - a. Pressure must not decrease more than 10 psi during a 5-minute test period
8. Document pressures and times on daily report or provide third party test reports with daily reports
 - a. Bleed pressure, remove joint of work string and remove test plug
9. MIRU wireline, pressure control and logging tools
10. Perform approved temperature logging (thru tubing) to confirm wellbore integrity
 - a. If integrity cannot be confirmed, prepare and submit remediation plan for approval.
11. RDMO wireline
12. MU landing joint to tubing hanger or spear 7" tubing
13. PU tubing hanger and release packer
14. POOH laying down 7" tubing and packer
 - a. Visually inspect tubing and packer
 - b. Consider sending tubing for clean, drift, EMI and thread inspection
 - c. Redress packer
15. PU 9-5/8" casing scraper with workstring
16. RIH with casing scraper to top of 7" production casing.
17. POOH racking back workstring
18. RU wireline, pressure control and logging tools
19. Run casing inspection log and cement bond log
 - a. Evaluate logs and confirm wellbore integrity
20. RU setting tool and 9-5/8"" Corrosion Resistant Alloy bridge plug on wireline

21. RIH and set bridge plug at ~3,940'
22. RD wireline
23. MU muleshoe and RIH with workstring
24. Tag bridge plug and pressure test at 500 psi for 30 minutes
25. MIRU cement equipment
26. Mix and pump 50' epoxy resin or equivalent plug on top of bridge plug from 3,940' to 3,890'
 - a. 4 bbls of epoxy resin or equivalent
27. POOH to ~3,690' and reverse circulate to clear epoxy resin or equivalent from workstring
28. POOH racking back and WOC
29. RIH and tag plug at ~3,890'
 - a. If the plug is tagged deeper than expected or does not pressure test, additional epoxy resin or equivalent may be required.
30. Pressure test wellbore to 500 psig on chart for 30 minutes
31. POOH racking back workstring
32. RU wireline and pressure control tools
33. RU setting tool and 9-5/8" CIBP on wireline
34. RIH and set bridge plug at ~2,550'
 - a. Surface casing shoe
35. RD Wireline
36. MU muleshoe and RIH with workstring
37. Tag bridge plug and pressure test at 500 psi for 30 minutes
38. MIRU cement equipment
39. Mix and pump 100' cement plug from ~2,550'- 2,450'
 - a. Class H – 40 sacks, 42 ft³
40. POOH to 2,350' and reverse circulate to clear cement from workstring and WOC
41. RIH and tag cement plug at ~2,450'
 - a. If the plug is tagged deeper than expected or does not pressure test, additional cement may be required.
42. Pressure test wellbore to 500 psig on chart for 30 minutes
43. POOH racking back workstring
44. RU wireline and pressure control tools
45. RU setting tool and 9-5/8" CIBP on wireline
46. RIH and set bridge plug at ~1,140'
 - a. Base of USDW
47. RD Wireline
48. MU muleshoe and RIH with workstring
49. Tag bridge plug and pressure test at 500 psi for 30 minutes
50. MIRU cement equipment
51. Mix and pump 100' cement plug from ~1,140'- 1,040'
 - a. Class H – 40 sacks, 42 ft³
52. POOH to 940' and reverse circulate to clear cement from workstring and WOC
53. RIH and tag cement plug at ~1,040'
 - a. If the plug is tagged deeper than expected or does not pressure test, additional cement may be required.
54. Pressure test wellbore to 500 psig on chart for 30 minutes
55. POOH racking back workstring

56. RU wireline and pressure control tools
57. RU setting tool and 9-5/8" CIBP on wireline
58. RIH and set bridge plug at 65'
59. RD Wireline
60. MU muleshoe and RIH with workstring
61. Tag bridge plug and pressure test at 500 psi for 30 minutes
62. MIRU cement equipment
63. Pump cement plug from 65' to 15'.
 - a. Class H – 20 sacks, 21 ft³
64. POOH laying down
65. ND BOPE
66. ND Wellhead
67. Cut casing 15' below ground level and weld on 1/2" steel plate
68. Erect a permanent marker on the well with the following
 - a. Well Serial No. (TBD)
 - b. Date of Plugging
 - c. Company Name: Hackberry Carbon Sequestration, LLC
69. RDMD all equipment

SCHEDULE

- **Days 1-2:** MIRU workover rig and equipment, ND wellhead, NU and test BOPE
- **Days 3-4:** Perform temperature logging. Pull tubing & packer.
- **Days 5-6:** Conduct casing inspection and cement bond log. Set CRA BRIDGE PLUG + 50' Epoxy resin. Tag and pressure test plug.
- **Days 7-9:** Set USDW plug, tag and pressure test plug, set surface plug, tag and pressure test surface plug.
- **Days 10-11:** RDMO equipment. Cut and cap well.

Reporting Information

Daily Reports – Email or Fax

- Hackberry Carbon Sequestration, LLC
- Richard Lonquist
- Steve Pattee
- Will George

Final Reports – Email and Hard Copy

- Hackberry Carbon Sequestration, LLC
- Lonquist & Company, LLC

Final Reports to include:

- Daily Reports
- Well Schematic
- Well Completion Report
- Well Logs
- Photos

Well Owner

Hackberry Carbon Sequestration, LLC

Regulatory

Louisiana DENR
Injection & Mining Division
617 North Third Street
LaSalle Building, 8th Floor
Baton Rouge, Louisiana 70802

Contractor

Lonquist Field Service, LLC
1415 Louisiana St., Suite 3800
Houston, TX 77002

- Richard R. Lonquist, P.E. – Chairman
 - Telephone – (512) 699-1527
 - Fax – (512) 732-9816
 - Email – richard@lonquist.com
- Steve Pattee, P.G. – Senior Vice President
 - Office – (512) 600-1774
 - Mobile – (281) 773-0728
 - Email – steve@lonquist.com

PROPOSED WELLBORE SCHEMATIC



OFFICE OF CONSERVATION

INJECTION WELL PLUG AND ABANDONMENT REPORT

UIC-P&A

MAILING ADDRESS

OFFICE OF CONSERVATION, INJECTION & MINING DIVISION
P.O. BOX 94275- CAPITOL STATION, BATON ROUGE, LA 70804-9275

PHYSICAL ADDRESS

OFFICE OF CONSERVATION-9TH FLOOR, INJECTION & MINING DIVISION
617 N. THIRD STREET, BATON ROUGE, LA 70802

FORM INSTRUCTIONS

One (1) original and one (1) copy of this report must be filed with the Injection & Mining Division (IMD) within twenty (20) days of the completion of work described on this form. Do not submit the Form UIC-P&A until all work and tests have been performed on the well. Please complete the form with as much historical and current information as possible. Do NOT submit the Form UIC-P&A for Temporary Abandonment- please report the TA on the Form UIC-WH1 and submit it to the IMD. **Incomplete and unsigned forms will not be accepted.**

FORM INSTRUCTIONS					
<p>One (1) original and one (1) copy of this report must be filed with the Injection & Mining Division (IMD) within twenty (20) days of the completion of work described on this form. Do not submit the Form UIC-P&A until all work and tests have been performed on the well. Please complete the form with as much historical and current information as possible. Do NOT submit the Form UIC-P&A for Temporary Abandonment- please report the TA on the Form UIC-WH1 and submit it to the IMD. Incomplete and unsigned forms will not be accepted.</p>					
WELL NAME	WELL NO	WELL SERIAL NO	APPLICATION NO		
FIELD NAME		FIELD CODE	DATE WORK FINISHED (MM/DD/YY)		
PARISH		PARISH CODE	SECTION	TOWNSHIP	RANGE
OPERATOR NAME		OPERATOR CODE			
MAILING ADDRESS		CITY, STATE, ZIP CODE			
CONTACT PERSON	E-MAIL ADDRESS	TELEPHONE NO		FAX NO	

CASING AND PLUG RECORD

List the Casing Sizes and Plug Depths in descending order (largest/deepest to smallest/shallowest). Acceptable plug types are Squeeze/Static Plug (SP), Balanced Cement Plugs (BCP), Cast Iron Bridge Plugs topped with at least 10 feet of cement (CIBP) or a Cement Retainer topped with at least 20 feet of cement (CR). Include the top of cement in the Upper Plug Depth. Convert Feet of Cement to Sacks of Cement.

I hereby certify this information has been prepared under my supervision, that all information contained herein is accurate and complete to the best of my knowledge, that I am authorized to make this application, and that this work was done according to the Rules and Regulations of the Office of Conservation.

WITNESS (PRINT)

WITNESS (SIGNED)

DATE

OPERATOR (COMPANY NAME)

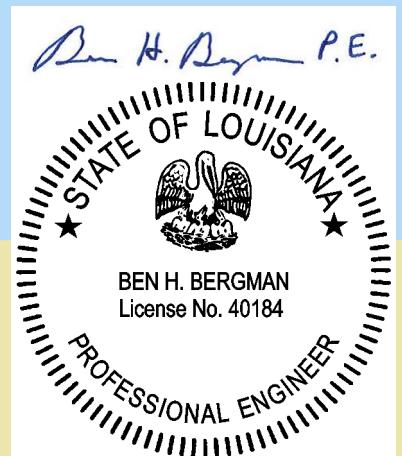
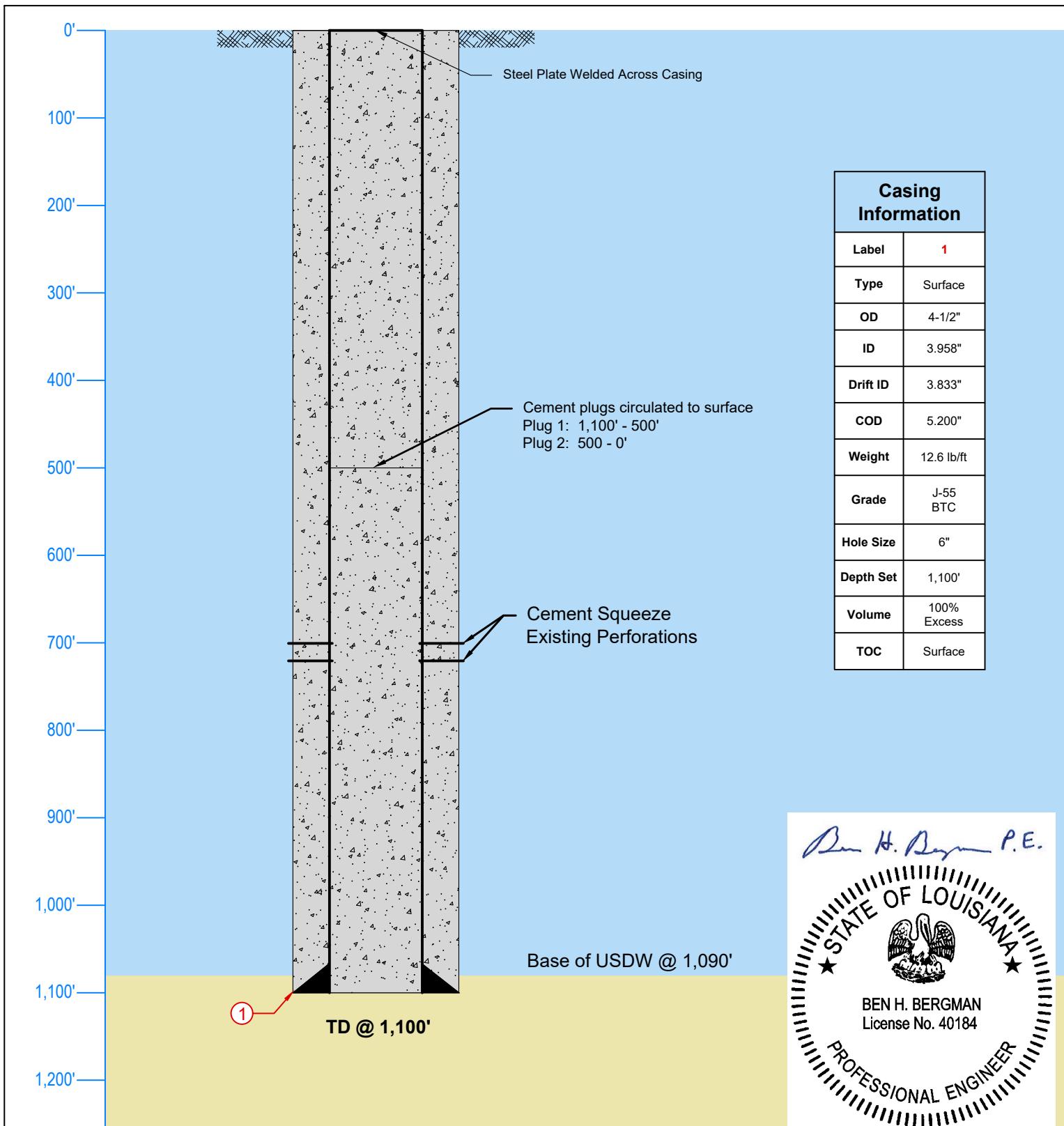
REPRESENTATIVE (SIGNED)

DATE

WORK RESUME

List below all work performed under this Injection & Mining Division permit.

DATE WORK PERFORMED (MM/DD/YY)	SERVICE COMPANY	DESCRIPTION OF WORK					
WAS A 1/4-IN STEEL PLATE WELDED ON TOP WITH THE DATE AND SERIAL NO?		WAS AN ANNULAR SQUEEZE REQUIRED BELOW THE USDW?		PERF & SQUEEZE DEPTH		CEMENT SQUEEZED (SACKS)	CEMENT YIELD (CU FT/SACK)
YES	NO	YES	NO	UPPER (FEET)	LOWER (FEET)		



 LONQUIST SEQUESTRATION LLC	Hackberry Carbon Sequestration, LLC		
	Country: USA	State/Province: Louisiana	County/Parish: Cameron
	Location: Multiple	District:	Survey:
	API No: TBD	Field:	Well Type/Status: P & A
	Louisiana License EF-7423	State Gas ID No:	Project No: 2393.4 Date: 01/30/2025
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816		Drawn: Jake Coker	Reviewed: Joseph Lovewell
		Rev No: 0	Approved: Ben H Bergman
Notes: Class VI Permit Application - Appendix J6			