

Casing/Tubing Information

Label	1	2	3	
Type	Conductor	Surface	Production	
OD	20"	9-5/8"	7"	7"
ID	18.75"	8.835"	6.276"	6.276"
Drift ID	NA	Special Drift: 8.750"	6.151"	6.151"
Weight	129.33 lb/ft	40 lb/ft	26 lb/ft	26 lb/ft
Grade	X-42	J-55 LTC	HCL-80 LTC	25CR - 80ksi VAM-21
Hole Size	NA	13-1/2"	8-3/4"	8-3/4"
Depth Set	280'	3,250'	0' - 3,260' & 8,100' - 9,975'	3,260' - 8,100'
TOC	NA	Surface	Surface	
% Excess	NA	100%	20%	

Plug Information

Label	1	2	3	4
Top Depth	7,890'	3,150'	1,103'	0'
Bottom Depth	8,429'	3,605'	1,303'	50'
Type	Corrosion Resistant	Corrosion Resistant	Class H	Class H
Volume	90 sks	77 sks	41 sks	10 sks



Lapis Energy
(LA Development), LP

Simoneaux CCS Injector No. 001 P&A

Country: USA

State/Province: Louisiana

County/Parish: St. Charles

Location: 90° 22' 17.226" W, 29° 48' 35.315" N (NAD 27)

District:

Survey:

API No:

Field:

Well Type/Status:

Louisiana License EF-7423

Serial No: TBD

Project No: LS169

Date: 11/18/2024

12912 Hill Country Blvd. Ste F-200
Austin, Texas 78738
Tel: 512.732.9812
Fax: 512.732.9816

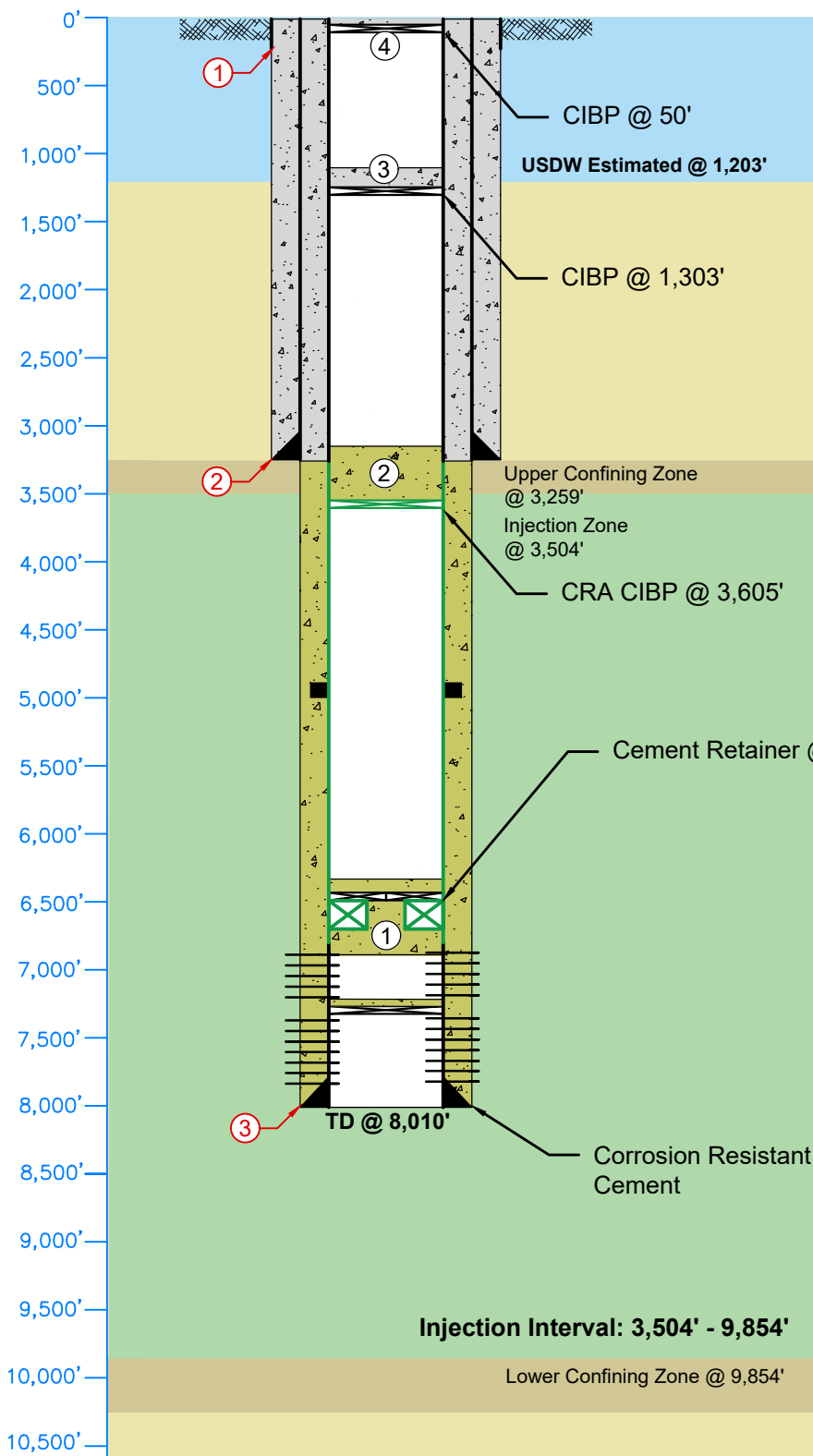
Drawn: Connor Lofton

Reviewed: Andrew Ellis

Approved: William H. George, P.E.

Rev No: 1

Notes:



Casing/Tubing Information

Label	1	2	3	
Type	Conductor	Surface	Production	
OD	20"	9-5/8"	7"	7"
ID	18.75"	8.835"	6.276"	6.276"
Drift ID	NA	Special Drift: 8.750"	6.151"	6.151"
Weight	129.33 lb/ft	40 lb/ft	26 lb/ft	26 lb/ft
Grade	X-42	J-55 LTC	HCL-80 LTC	25CR - 80ksi VAM-21
Hole Size	NA	13-1/2"	8-3/4"	8-3/4"
Depth Set	280'	3,250'	0' - 3,260' & 6,800' - 8,010'	3,260' - 6,800'
TOC	NA	Surface	Surface	
% Excess	NA	100%	20%	

Plug Information

Label	1	2	3	4
Top Depth	6,550'	3,150'	1,103'	0'
Bottom Depth	6,896'	3,605'	1,303'	50'
Type	Corrosion Resistant	Corrosion Resistant	Class H	Class H
Volume	50 sks	77 sks	41 sks	10 sks



Lapis Energy
(LA Development), LP

Simoneaux CCS Injector No. 002 P&A

Country: USA

State/Province: Louisiana

County/Parish: St. Charles

Location: 90° 22' 17.510" W, 29° 48' 35.317" N (NAD 27)

District:

Survey:

API No: TBD

Field:

Well Type/Status:

Louisiana License EF-7423

Serial No: TBD

Project No: LS169

Date: 11/18/2024

12912 Hill Country Blvd. Ste F-200
Austin, Texas 78738
Tel: 512.732.9812
Fax: 512.732.9816

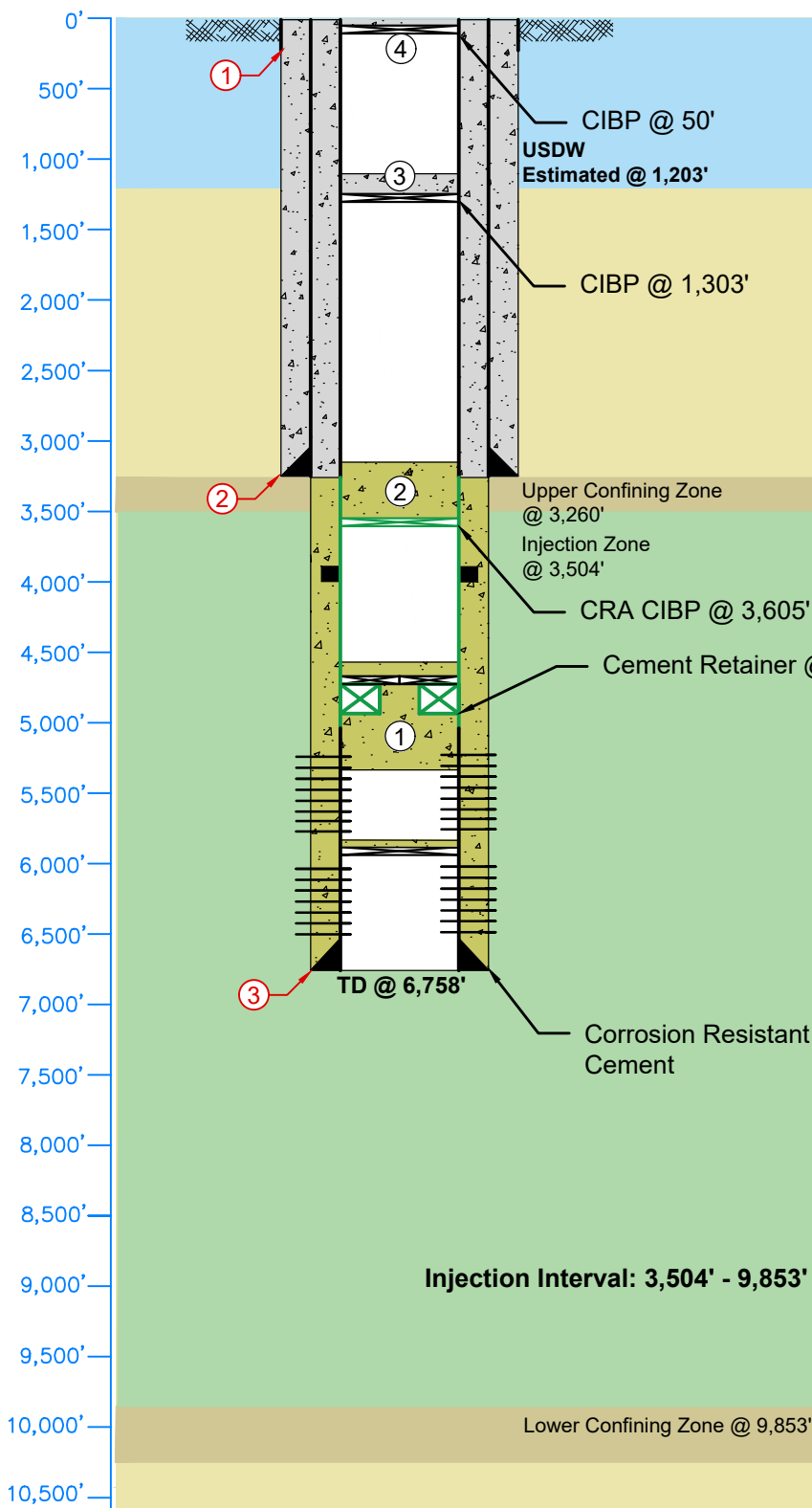
Drawn: Connor Lofton

Reviewed: Andrew Ellis

Approved: William H. George, P.E.

Rev No: 1

Notes:



Casing/Tubing Information

Label	1	2	3	
Type	Conductor	Surface	Production	
OD	20"	9-5/8"	7"	7"
ID	18.75"	8.835"	6.276"	6.276"
Drift ID	NA	Special Drift: 8.750"	6.151"	6.151"
Weight	129.33 lb/ft	40 lb/ft	26 lb/ft	26 lb/ft
Grade	X-42	J-55 LTC	HCL-80 LTC	25CR - 80ksi VAM-21
Hole Size	NA	13-1/2"	8-3/4"	8-3/4"
Depth Set	280'	3,250'	0' - 3,260' & 5,040' - 6,758'	3,260' - 5,040'
TOC	NA	Surface	Surface	
% Excess	NA	100%	20%	

Plug Information

Label	1	2	3	4
Top Depth	4,830'	3,150'	1,103'	0'
Bottom Depth	5,334'	3,605'	1,303'	50'
Type	Corrosion Resistant	Corrosion Resistant	Class H	Class H
Volume	84 sks	77 sks	41 sks	10 sks



Lapis Energy
(LA Development), LP

Simoneaux CCS Injector No. 003 P&A

Country: USA

State/Province: Louisiana

County/Parish: St. Charles

Location: 90° 22' 17.793 W, 29° 48' 35.319" N (NAD 27)

District:

Survey:

API No: TBD

Field:

Well Type/Status:

Louisiana License EF-7423

Serial No: TBD

Project No: LS169

Date: 11/18/2024

12912 Hill Country Blvd. Ste F-200
Austin, Texas 78738
Tel: 512.732.9812
Fax: 512.732.9816

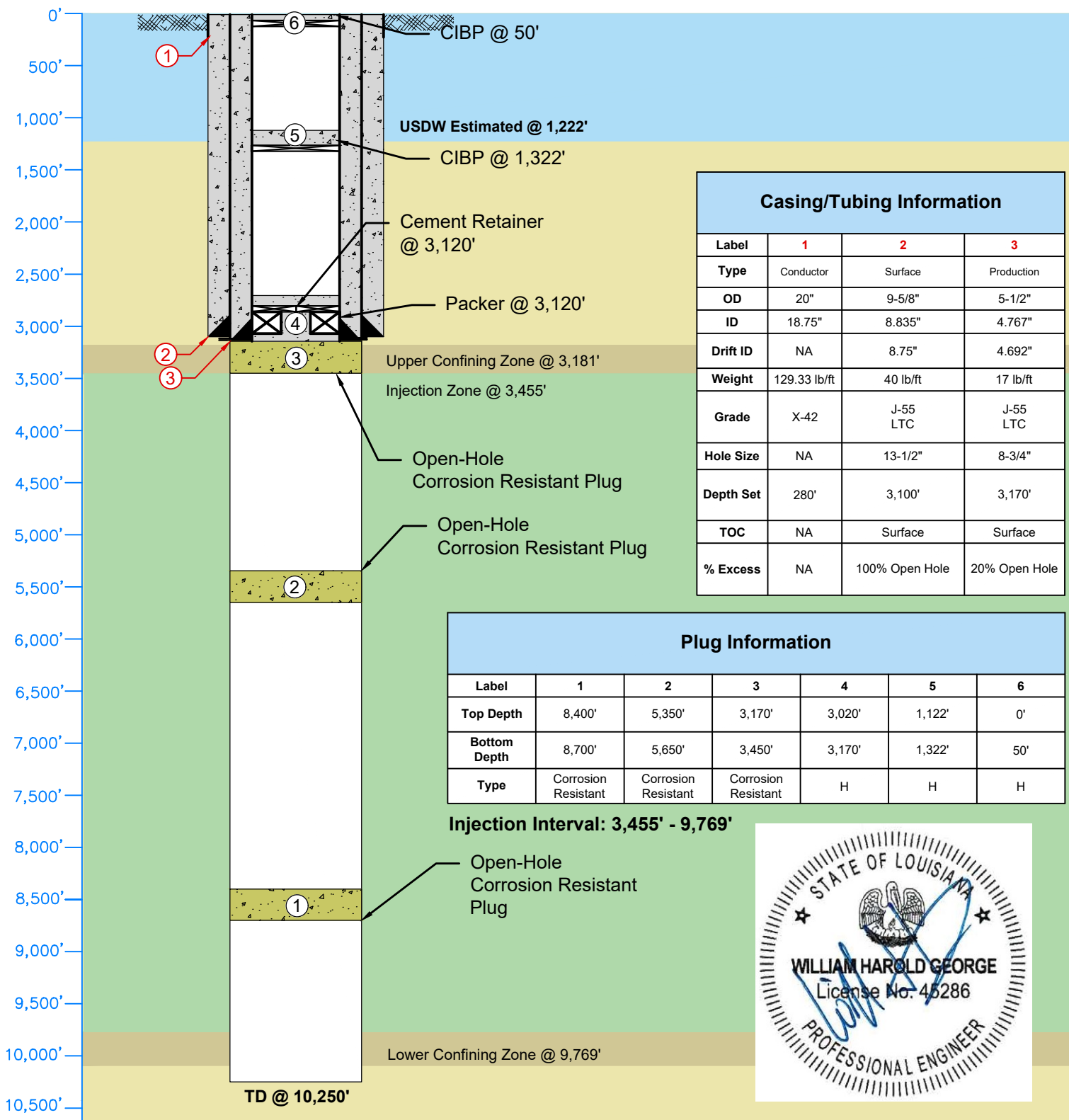
Drawn: Connor Lofton


Reviewed: Andrew Ellis

Approved: William H. George, P.E.

Rev No: 1

Notes:



	Lapis Energy (LA Development), LP		Simoneaux AZM No. 001	
	Country: USA	State/Province: Louisiana	County/Parish: St. Charles	
	Location: 90° 21' 39.164" W, 29° 49' 03.506" N (NAD 27)	District:	Survey:	
	API No:	Field:	Well Type/Status:	
Louisiana License EF-7423	Serial No: TBD	Project No: LS169	Date: 11/18/2024	
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Drawn: Connor Lofton	Reviewed: Andrew Ellis	Approved: William H. George, P.E.	
	Rev No: 1	Notes:		

**Permanent P&A Program
Project Libra
Well: Deep Injection Well**



Revision 0 – September 6, 2024

		Date
Prepared by:	Eric Burnett – Director of Engineering	09/06/2024
Approved by:	William H. George P.E. – Lonquist Sequestration	11/15/2024



Introduction:

This procedure covers the permanent P&A of Libra INJ-1 at the end of the life of the Libra Project. The tubing will be pulled, and the perforations will be squeezed to abandon the perforations. A series of plugs will then be set to secure the confining zone, surface casing shoe, USDW, and surface. Finally, the wellhead will be removed and the site left for full reclamation.

Procedure:

1. Mobilize the crew and equipment to the location.
2. Spot and rig up the equipment.
3. Nipple Down (N/D) wellhead and Nipple Up (N/U) blowout preventers (BOPs).
4. Pull and lay down 4 ½ inch (in.) tubing.
5. Run in hole with the junk basket and gauge ring for 7-in. casing to the packer at 7,990 feet (ft).
6. Set the cement retainer above the packer at 7,990 ft.
7. Trip in hole with the work string, stab into the cement retainer, and establish injection.
8. Squeeze the perforations with 94 cubic ft of cement (14.13 pounds per gallon (ppg) of acid-resistant blend).
9. Pull out of the retainer and spot 21.5 cubic ft (100 ft) of cement on top of the retainer.
10. Pull above the cement and circulate the work string clean.
11. Tag and test the cement/cement retainer to 500 pounds per square inch (psi) for 30 minutes.
12. Pull out of hole with the work string.
13. Run in hole with the junk basket and gauge ring for 7-in. casing to 3,605 ft.
14. Set the corrosion-resistant alloy (CRA) Cast Iron Bridge Plug (CIBP) in 7-in. casing at 3,605 ft.
15. Trip in hole with the work string to 3,605 ft.
16. Mix and spot a balanced plug with 98 cubic ft of cement (14.13 ppg of acid-resistant blend).
 - a. Top of Cement (TOC) = 3,150 ft.
17. Pull above the cement and circulate the work string clean.
18. Tag and test the cement/CIBP to 500 psi for 30 minutes.
19. Pull out of hole with the work string.
20. Run in hole with the junk basket and gauge ring for 7-in. casing to 1,303 ft.
21. Set CIBP in 7-in. casing at 1,303 ft.
22. Trip in hole with the work string to 1,303 ft.
23. Mix and spot a balanced plug with 43 cubic ft of cement (16.4 ppg of Class H).
24. Pull above the cement and circulate the work string clean.
25. Tag and test the cement/CIBP to 500 psi for 30 minutes.

26. Pull out of hole with the work string.
27. Run in hole with the junk basket and gauge ring for 7-in. casing to 50 ft.
28. Set the CIBP in 7-in. casing at 50 ft.
29. Trip in hole with the work string to 50 ft.
30. Mix and spot 11 cubic ft of cement (16.4 ppg of Class H).
31. Pull and lay down the remaining work string.
32. Confirm the cement at surface.
33. Secure the well. Cut the casing 6 ft below the ground line and weld a plate on top of the casing with required well identification information.
34. Rig down and move out (RDMO) the equipment.

Permanent P&A Program
Project Libra
Well: Mid Injection Well



Revision 0 – September 6, 2024

		Date
Prepared by:	Eric Burnett – Director of Engineering	09.06.24
Approved by:	William H. George P.E. – Lonquist Sequestration	11/15/2024



Introduction:

This procedure covers the permanent P&A of Libra INJ-2 at the end of the life of the Libra Project. The tubing will be pulled, and the perforations will be squeezed to abandon the perforations. A series of plugs will then be set to secure the confining zone, surface casing shoe, USDW, and surface. Finally, the wellhead will be removed and the site left for full reclamation.

Procedure:

1. Mobilize the crew and equipment to the location.
2. Spot and rig up the equipment.
3. N/D wellhead and N/U BOPs.
4. Pull and lay down 4 ½ in. tubing.
5. Run in hole with the junk basket and gauge ring for 7-in. casing to the packer @ 6,650 ft.
6. Set the cement retainer above the packer at 6,650 ft.
7. Trip in hole with the work string, stab into the cement retainer, and establish injection.
8. Squeeze the perforations with 53 cubic ft of cement (14.13ppg of acid-resistant blend).
9. Pull out of the retainer and spot 21.5 cubic ft (100 ft) of cement on top of the retainer.
10. Pull above the cement and circulate the work string clean.
11. Tag and test the cement/cement retainer to 500 psi for 30 minutes.
12. Pull out of hole with the work string.
13. Run in hole with the junk basket and gauge ring for 7-in. casing to 3,605 ft.
14. Set the CRA CIBP in 7-in. casing at 3,605 ft.
15. Trip in hole with the work string to 3,605 ft.
16. Mix and spot a balanced plug with 98 cubic ft of cement (14.13 ppg of acid-resistant blend).
 - a. TOC = 3,150 ft.
17. Pull above the cement and circulate the work string clean.
18. Tag and test the cement/CIBP to 500 psi for 30 minutes.
19. Pull out of hole with the work string.
20. Run in hole with the junk basket and gauge ring for 7-in. casing to 1,322 ft.
21. Set the CIBP in 7-in. casing at 1,303 ft.
22. Trip in hole with the work string to 1,303 ft.
23. Mix and spot a balanced plug with 43 cubic ft of cement (16.4 ppg of Class H).
24. Pull above the cement and circulate the work string clean.
25. Tag and test the cement/CIBP to 500 psi for 30 minutes.
26. Pull out of hole with the work string.
27. Run in hole with the junk basket and gauge ring for 7 in. to 50 ft.

28. Set the CIBP in 7-in. casing at 50 ft.
29. Trip in hole with the work string to 50 ft.
30. Mix and spot 11 cubic ft of cement (16.4 ppg of Class H).
31. Pull and lay down the remaining work string.
32. Confirm the cement at surface.
33. Secure the well. Cut casing 6 ft below the ground line and weld a plate on top of the casing with required well identification information.
1. RDMO the equipment.

**Permanent P&A Program
Project Libra
Well: Shallow Injection Well**



Revision 0 – September 6, 2024

		Date
Prepared by:	Eric Burnett – Director of Engineering	09.06.24
Approved by:	William H. George P.E. – Lonquist Sequestration	11/15/2024



Introduction:

This procedure covers the permanent P&A of Libra INJ-3 at the end of the life of the Libra Project. The tubing will be pulled, and the perforations will be squeezed to abandon the perforations. A series of plugs will then be set to secure the confining zone, surface casing shoe, USDW, and surface. Finally, the wellhead will be removed and the site left for full reclamation.

Procedure:

1. Mobilize the crew and equipment to the location.
2. Spot and rig up the equipment.
3. N/D wellhead and N/U BOPs.
4. Pull and lay down 4 ½ in. tubing.
5. Run in hole with the junk basket and gauge ring for 7-in. casing to the packer at 4,930 ft.
6. Set the cement retainer above the packer at 4,930 ft.
7. Trip in hole with the work string, stab into the cement retainer, and establish injection.
8. Squeeze the perforations with 87 cubic ft cement (14.13 ppg of acid-resistant blend).
9. Pull out of the retainer and spot 21.5 cubic ft (100 ft) of cement on top of the retainer.
10. Pull above the cement and circulate the work string clean.
11. Tag and test the cement/cement retainer to 500 psi for 30 minutes.
12. Pull out of hole with the work string.
13. Run in hole with the junk basket and gauge ring for 7-in. casing to 3,605 ft.
14. Set the CRA CIBP in 7-in. casing at 3,605 ft.
15. Trip in hole with the work string to 3,605 ft.
16. Mix and spot a balanced plug with 98 cubic ft of cement (14.13 ppg of acid-resistant blend).
 - a. TOC = 3,150 ft.
17. Pull above the cement and circulate the work string clean.
18. Tag and test the cement/CIBP to 500 psi for 30 minutes.
19. Pull out of hole with the work string.
20. Run in hole with the junk basket and gauge ring for 7-in. casing to 1,303 ft.
21. Set the CIBP in 7-in. casing at 1,303 ft.
22. Trip in hole with the work string to 1,303 ft.
23. Mix and spot a balanced plug with 43 cubic ft of cement (16.4 ppg of Class H).
24. Pull above the cement and circulate the work string clean.
25. Tag and test the cement/CIBP to 500 psi for 30 minutes.
26. Pull out of hole with the work string.
27. Run in hole with the junk basket and gauge ring for 7-in. to 50 ft.
28. Set the CIBP in 7-in. casing at 50 ft.

29. Trip in hole with the work string to 50 ft.
30. Mix and spot 11 cubic ft of cement (16.4 ppg of Class H).
31. Pull and lay down the remaining work string.
32. Confirm the cement at surface.
33. Secure well. Cut the casing 6 ft below the ground line and weld a plate on top of the casing with the required well identification information.
1. RDMO the equipment.

**Permanent P&A Program
Project Libra
Well: Simoneaux AZM No. 1
Originally Simoneaux Strat Test #1**



Revision 1 – September 20, 2024

		Date
Prepared by:	Eric Burnett – Director of Engineering	09.20.24
Approved by:	William H. George P.E. – Lonquist Sequestration	11/15/2024

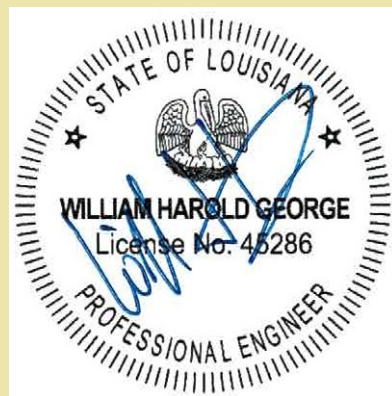
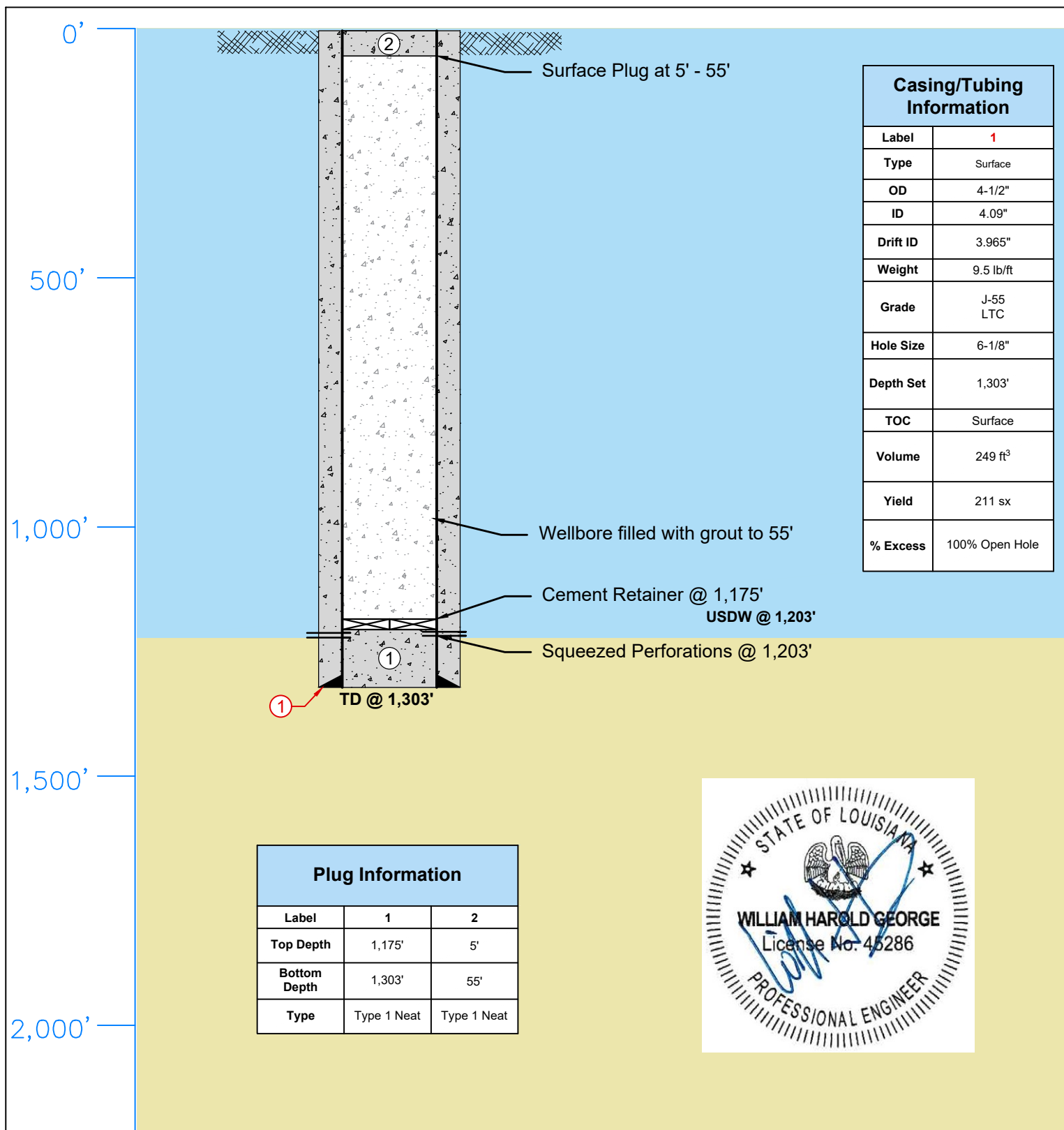



Introduction:

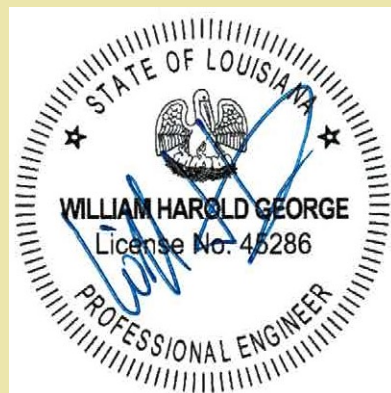
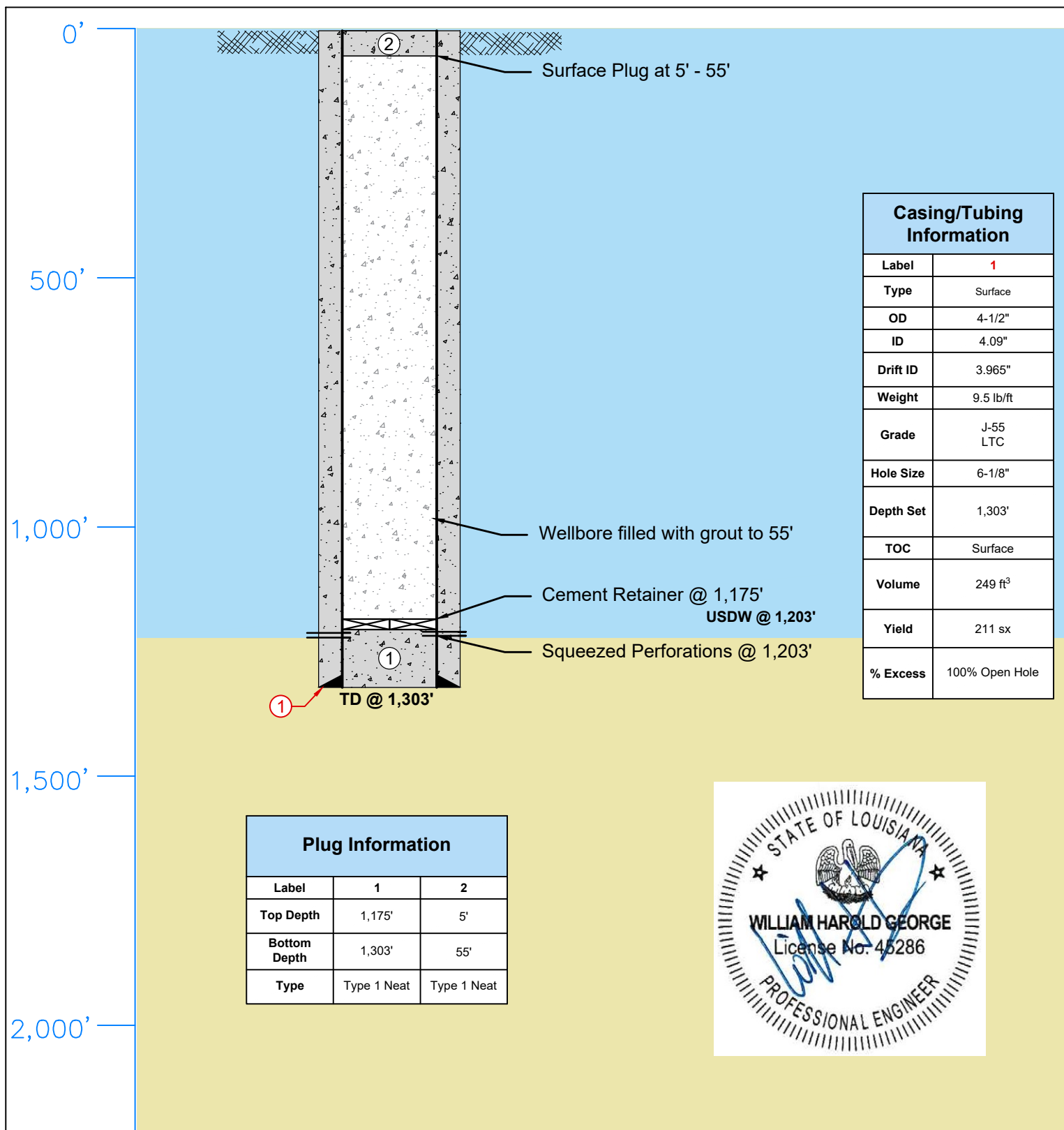
This procedure cover the permanent P&A of the Simoneaux AZM No. 1 well at the end of the life of Project Libra. The tubing will be pulled, and the perforations will be squeezed to abandon the monitor sand. Then a series of plugs will be set to secure the USDW and surface. Finally, the wellhead will be removed and the site left for full reclamation.


Procedure:

1. Mobilize Crew and Equipment to Location.
2. Spot and rig up equipment.
3. N/D Xmas tree and N/U BOP's.
4. Pull and lay down 2 7/8" tubing.
5. Run in hole with Junk Basket and Gauge ring for 5 1/2" casing to the packer @ 3,120'.
6. Wireline set cement retainer above the packer at 3,120'.
7. Trip in hole with work string and stab into cement retainer and establish injection.
8. Squeeze the perforations with 11 cubic ft of cement (16.4 ppg Class H Cement).
9. Pull out of retainer and spot 21.5 cubic ft (100') of cement on top of retainer.
10. Pull above the cement and circulate string clean.
11. Pull out of hole with work string.
12. Test Cement/Cement retainer to 500 psi for 30 minutes.
13. Run in hole with Junk Basket and Gauge ring for 5 1/2" casing to 1322'.
14. Set CIBP in 5 1/2" casing at 1322'.
15. Trip in hole with work string to 1322'.
16. Mix and pump 43 cubic ft of cement (16.4 ppg Class H Cement).
17. Pull above cement and circulate the work string clean.
18. Pull out of hole with work string.
19. Test Cement/CIBP to 500 psi for 30 minutes.
20. Run in hole with Junk Basket and Gauge ring for 5 1/2" to 50'.
21. Set CIBP in 9 5/8" at 50'.
22. Trip in hole with work string to 50'.
23. Mix and pump 11 cubic ft of cement (16.4 ppg Class H Cement).
24. Pull and lay down the remaining work string.
25. Test Cement (as per Requirements)
26. Tag Top of Cement.
27. Secure Well. Cut casing 6' below ground line and weld a plate on top of the casing.
28. RDMO equipment.



	Lapis Energy (LA Development), LP		Simoneaux USDW No. 001	
	Country: USA		State/Province: Louisiana	County/Parish: St. Charles
	Location: 90° 22' 15.764" W, 29° 48' 33.819" N (NAD 27)		District:	Survey:
	API No:		Field:	Well Type/Status:
Louisiana License EF-7423	Serial No: TBD		Project No: LS169	Date: 11/18/2024
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512.732.9812 Fax: 512.732.9816	Drawn: Connor Lofton		Reviewed: Andrew Ellis	Approved: William H. George, P.E.
	Rev No: 1		Notes:	



	Lapis Energy (LA Development), LP		Simoneaux USDW No. 002	
	Country: USA		State/Province: Louisiana	County/Parish: St. Charles
	Location: 90° 21' 40.359" W, 29° 49' 04.471" N (NAD 27)		District:	Survey:
	API No:		Field:	Well Type/Status:
Louisiana License EF-7423	Serial No: TBD		Project No: LS169	Date: 11/18/2024
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	Rev No: 1		Notes:	