

9 POST-INJECTION SITE CARE AND SITE CLOSURE PLAN

40 CFR 146.93

TULARE COUNTY CARBON STORAGE PROJECT (TCCSP)

Facility Information

Facility (site) Name: Tulare County Carbon Storage Project (TCCSP)

Facility Operator: TCCSP, LLC.

Facility Contact:



Project Location:



Injection Well Name and Coordinates:

Well Name	Latitude	Longitude
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

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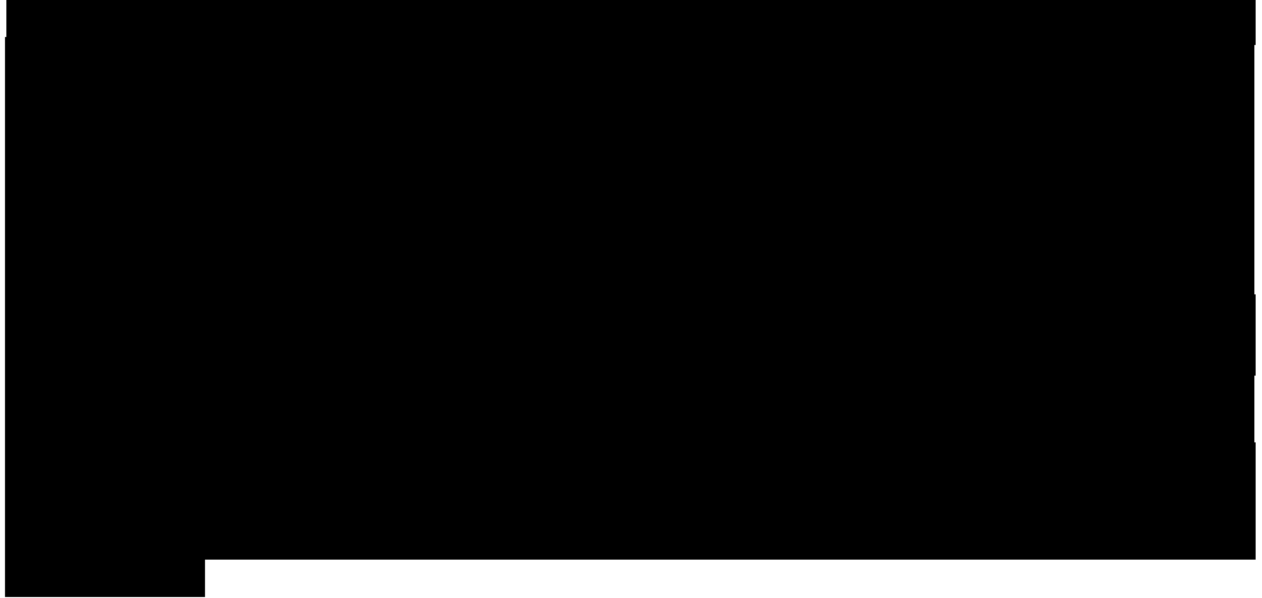
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Abbreviations and Acronyms

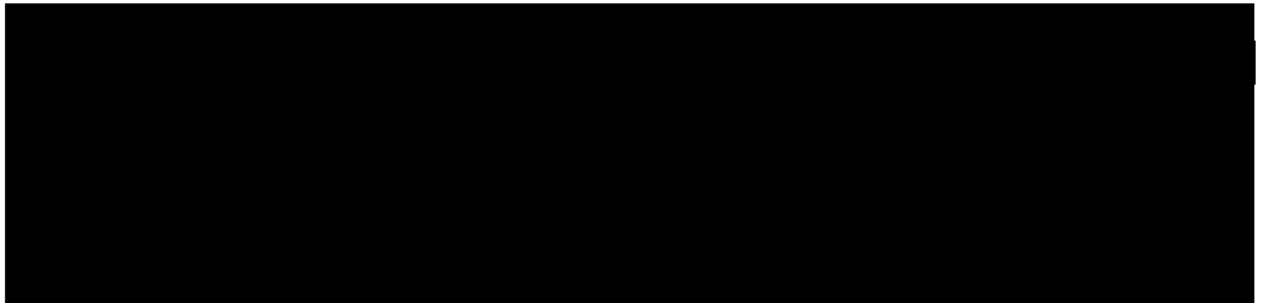
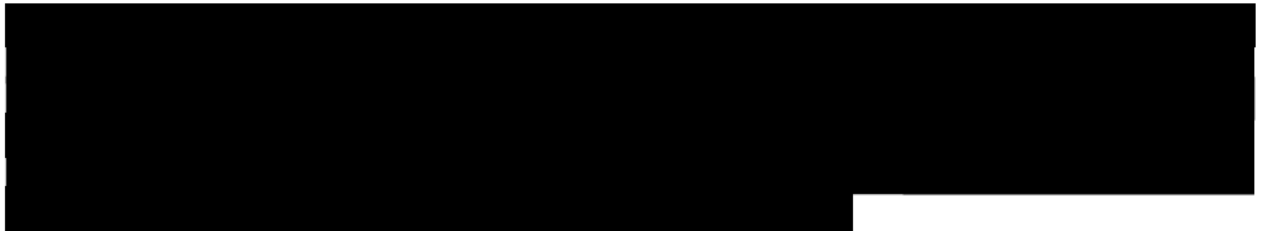
2D	Two Dimensional
3D	Three Dimensional
ANSI	American National Standards Institute
AoR	Area of Review

ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing Materials
AZ	Above-Zone
CBL	Cement Bond Log
CCS	Carbon, Capture, Storage
CI	Casing Inspection
CO ₂	Carbon Dioxide
DAS	Distributed Acoustic Sensing
DOE	Department of Energy
DTS	Distributing Temperature Sensing
DZMW	Dual Zone Monitoring Well
ERRP	Emergency and Remedial Response Plan
EOR	Enhanced Oil Recovery
EPA	Environmental Protection Agency
Ft	Feet
gm	Gram
GS	Geologic Sequestration
GW	Groundwater
in	Inch
IW	Injection Well
IZ	In-Zone
MD	Measured Depth
MIT	Mechanical Integrity Test
MMtpa	Million Metric Tons Per Annum
mt/d	Metric Tons Per Day
NACE	National Association of Corrosion Engineers
P/T	Pressure/Temperature
PISC	Post-Injection Site Care and Site Closure
PNC	Pulsed Neutron Capture
PSI	Pounds Per Square Inch
QASP	Quality Assurance and Surveillance Plan
SG	Shallow Groundwater
TD	Total Depth
TDS	Total Dissolved Solids
UIC	Underground Injection Control
USDW	Underground Source of Drinking Water
VSP	Vertical Seismic Profile

9.1 Post-Injection Site Care and Site Closure Approach



9.2 Pre- and Post-Injection Pressure Differential



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

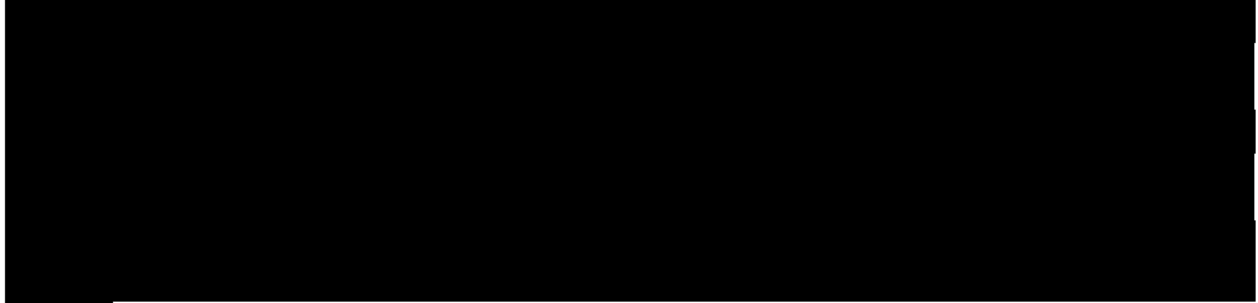
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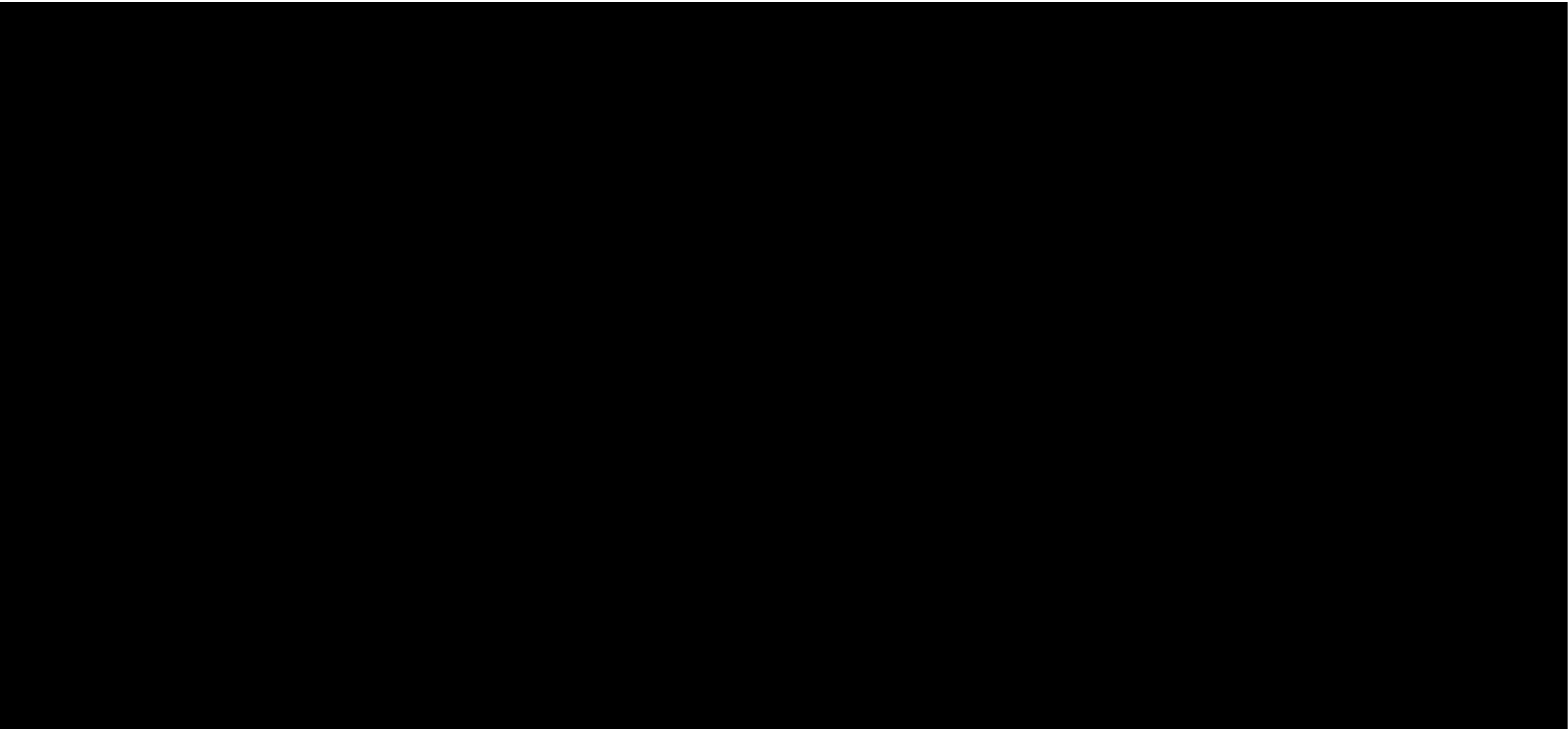
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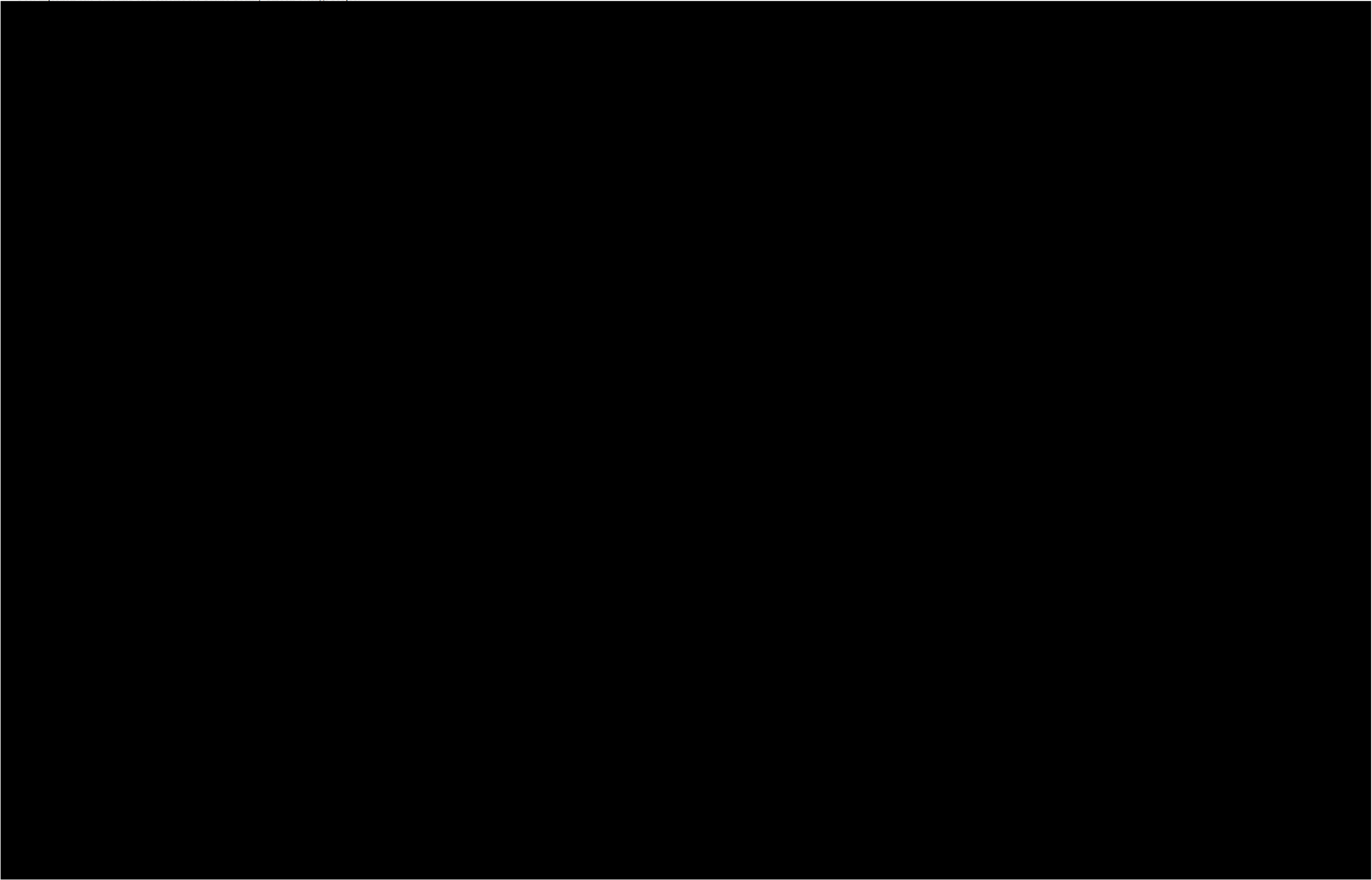
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9.3 Predicted Position of the Free-Phase CO₂ Plume and Associated Elevated Pressure Front at Site Closure [40 CFR 146.93(a)(2)(ii)]

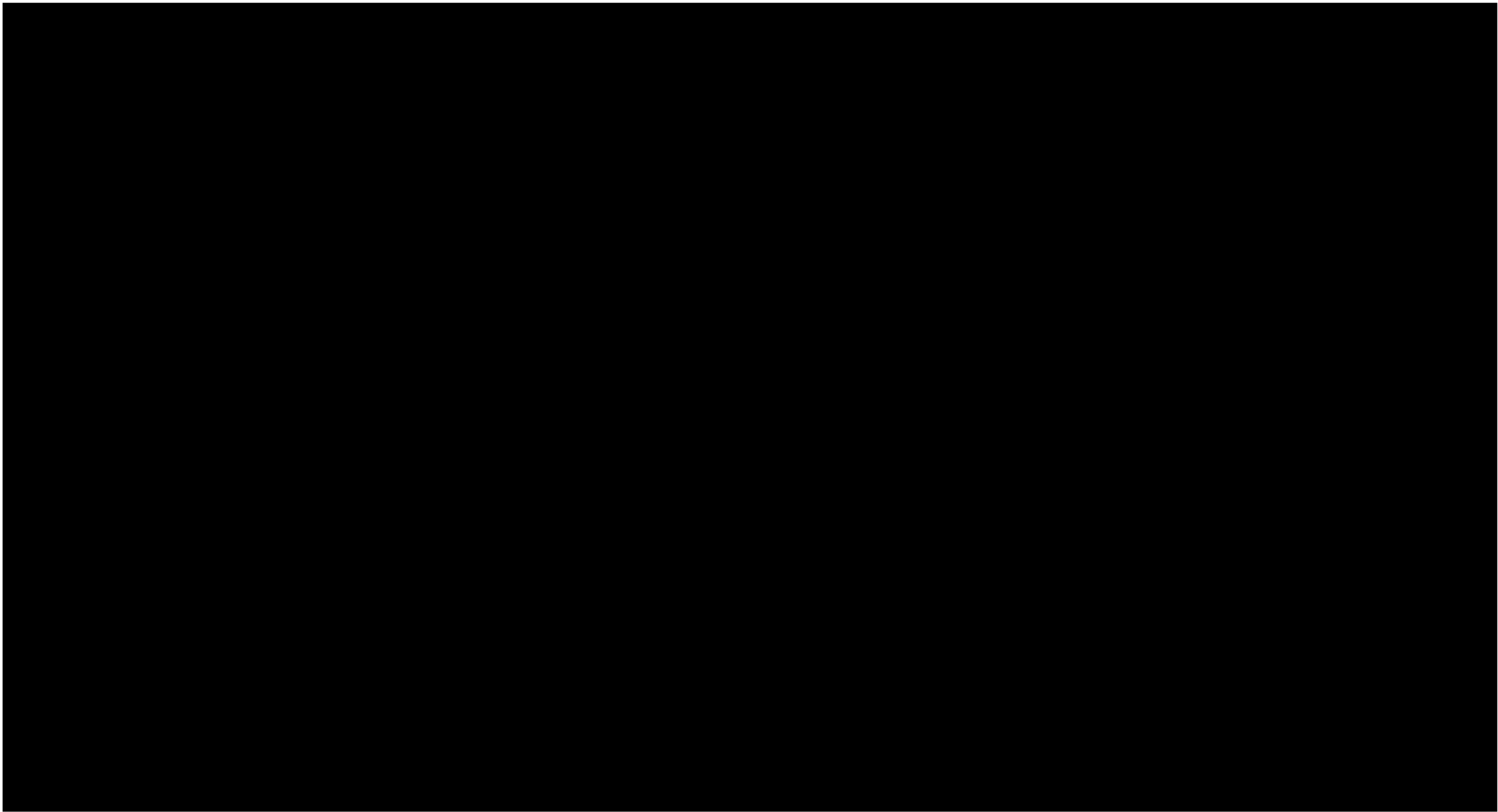


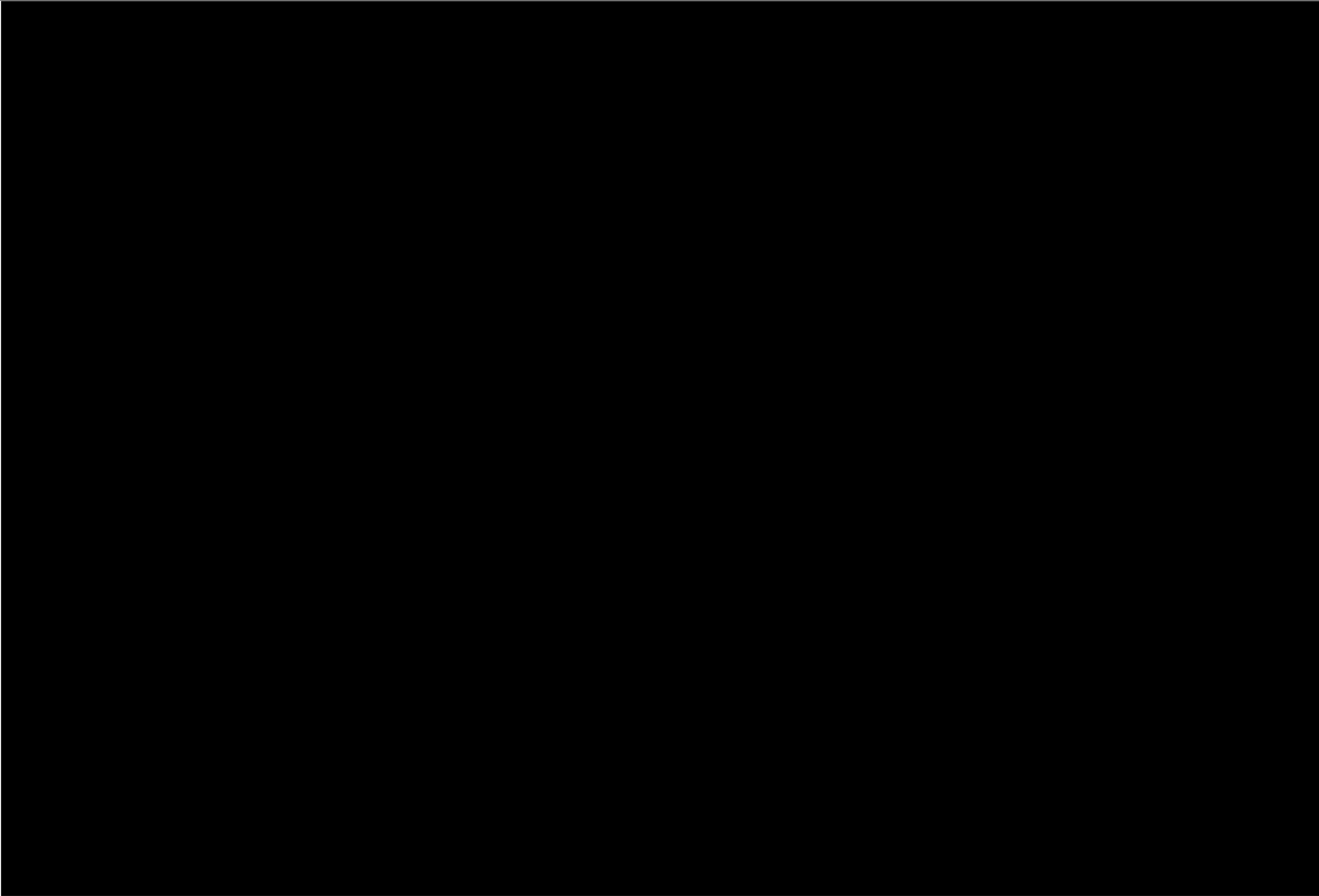




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9.4 Post-Injection Monitoring Plan

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[REDACTED]

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		[REDACTED]	[REDACTED]	[REDACTED]
		[REDACTED]	[REDACTED]	[REDACTED]

9.4.1. Mechanical Integrity Testing

9.4.2. Monitoring Above the Confining Zone

[REDACTED]

[REDACTED]

9.4.3. Carbon Dioxide Plume and Pressure Front Tracking

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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

[REDACTED]

9.5 Alternative Post-Injection Site Care Timeframe

[REDACTED]

9.5.1. Computational Modeling Results [40 CFR 146.93(c)(1)(i)]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

9.5.2. Predicted Timeframe for Pressure Decline [40 CFR 146.93(c)(1)(ii)]

[REDACTED]

[REDACTED]



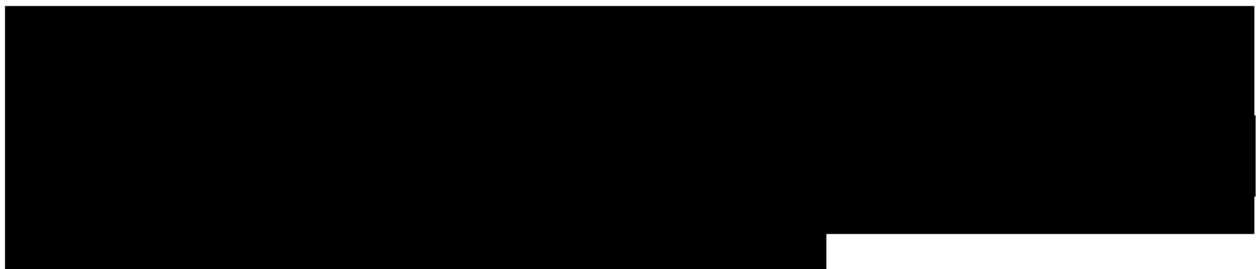
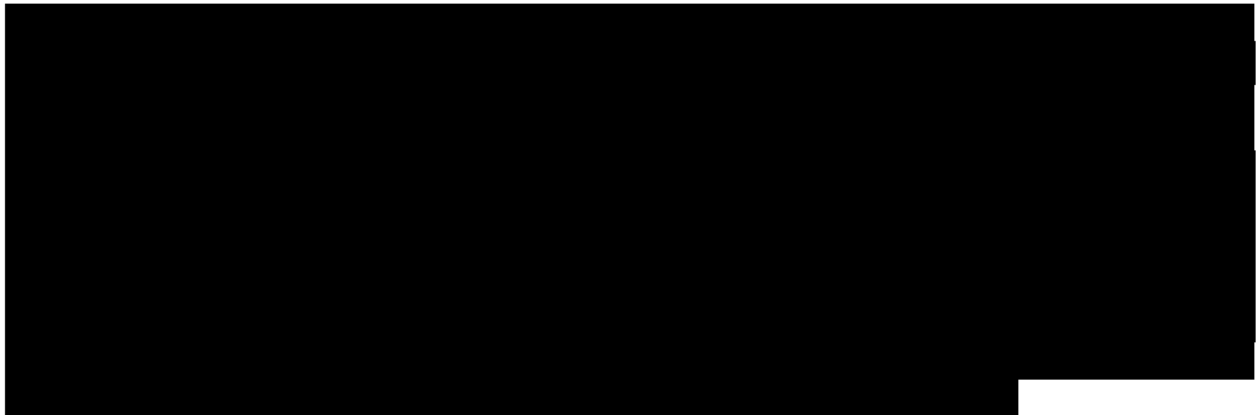
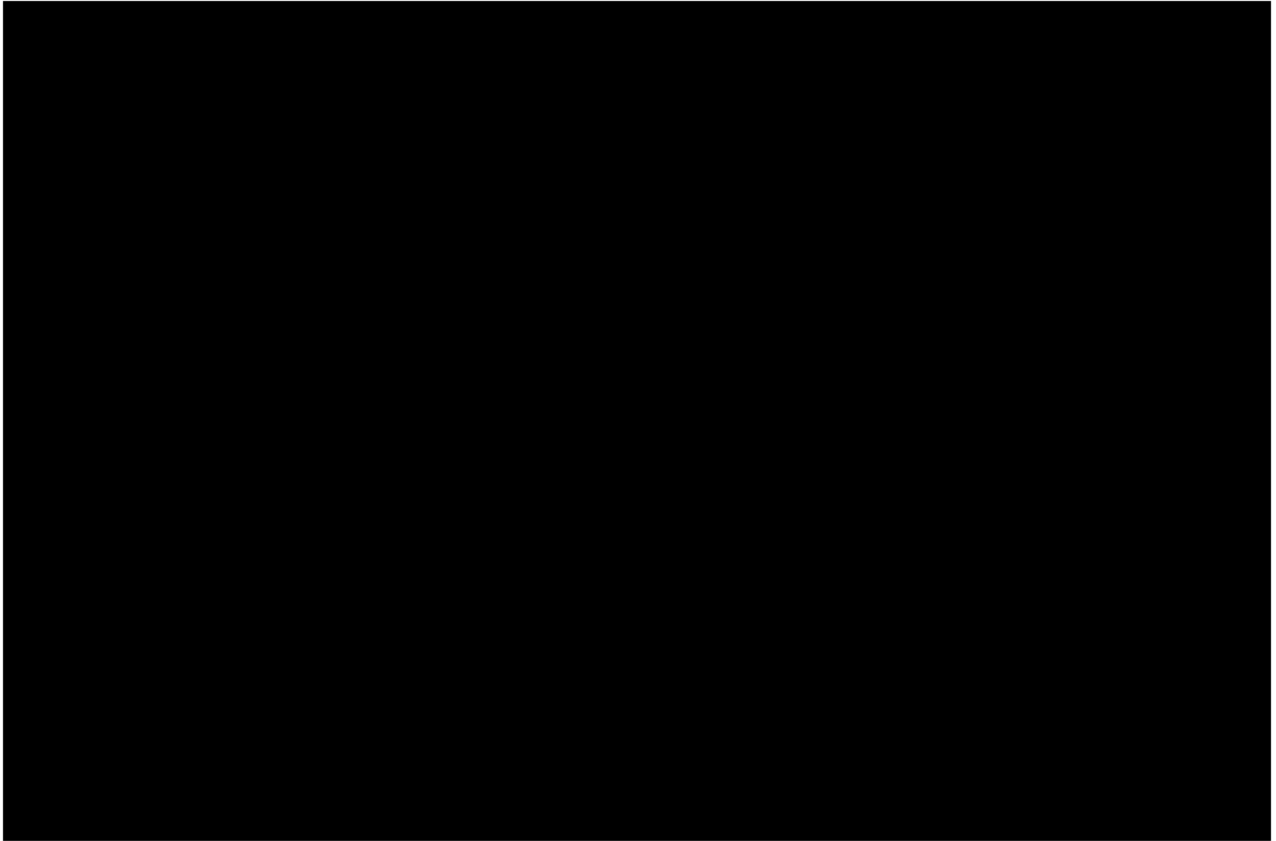


9.5.3. Predicted Rate of Plume Migration [40 CFR 146.93(c)(1)(iii)]



9.5.4. Site-Specific Trapping Processes [40 CFR 146.93(c)(1)(iv)-(v)]





[REDACTED]

9.5.5. Confining Zone Characterization [40 CFR 146.93(c)(1)(vii)]

[REDACTED]

9.5.6. Assessment of Fluid Movement Potential [40 CFR 146.93(c)(1)(viii)-(ix)]

[REDACTED]

[REDACTED]

[REDACTED]

9.5.7. Location of USDWs [40 CFR 146.93(c)(1)(x)]

[REDACTED]

9.6 Non-Endangerment Demonstration Criteria

[REDACTED]

[REDACTED]

9.6.1. Introduction and Overview

[REDACTED]

9.6.2. Summary of Existing Monitoring Data

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9.6.3. Summary of Computational Modeling History

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9.6.4. Evaluation of Reservoir Pressure

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[REDACTED]

9.6.5. Evaluation of Carbon Dioxide Plume

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9.6.6. Evaluation of Emergencies or Other Events

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9.7 Site Closure Plan

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9.7.1. Site Closure Procedure

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9.7.2. Equipment Decommissioning

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9.7.3. Site Closure Plugging Program

[REDACTED]

9.7.4. Site Restoration

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9.7.5. Site Closure Report

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9.8 References

- [1] Eaton, Ben A. 1969. "Fracture Gradient Prediction and Its Application in Oilfield Operations."
Journal of Petroleum Technology 21(10):1353–60. doi: 10.2118/2163-PA.