Denbury Carbon Solutions, LLC

Post-Injection Site Care and Site Closure Plan

Draco Storage Facility, Allen, Beauregard, and Vernon Parishes, Louisiana

Denbury

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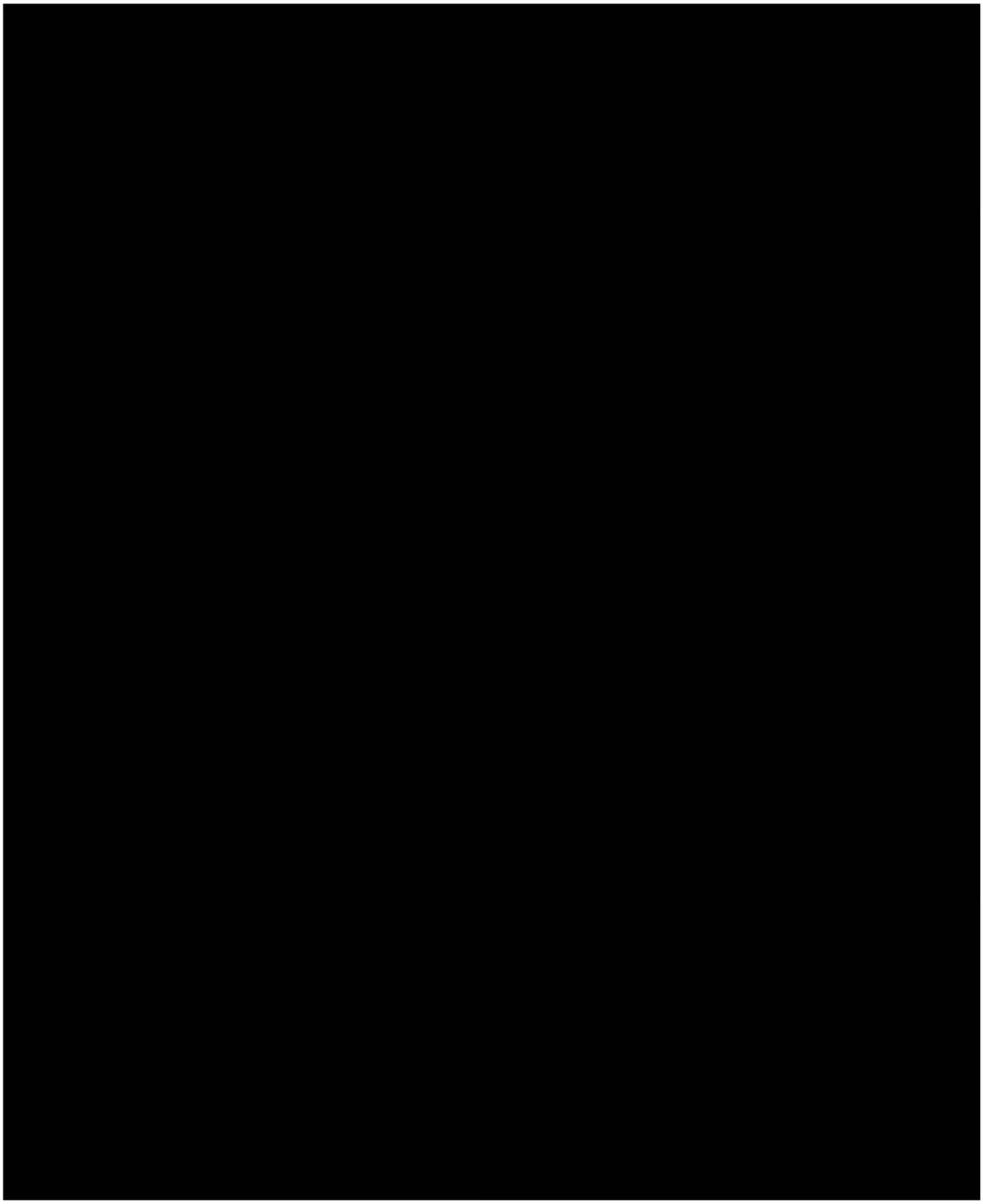

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Acronyms/Abbreviations	Definition
ACZ	Above Confining Zone
Ag	Silver
Al	Aluminum
AoR	Area of Review
As	Arsenic
aq	Aqueous Phases
B	Boron
Ba	Barium
Be	Beryllium
bgs	Below Ground Surface
BHP	Bottom Hole Pressure
BHT	Bottom Hole Temperature
Br	Bromine
C	Land's Coefficient
°C	Degrees Celsius
Ca	Calcium
$CaCl_2$	Calcium Chloride
$CaCO_3$	Calcium Carbonate
Cd	Cadmium
CF	Continuous Flow
CFR	Code of Federal Regulations
CH_4	Methane
Cl	Chlorine
cm	Centimeters
CMG	Computer Modeling Group
CO_2	Carbon Dioxide

Cr	Chromium
CRDS	Cavity Ring-Down Spectroscopy
Cu	Copper
$\delta^{13}C$	Lower Carbon Isotope
DIC	Dissolved Inorganic Carbon
DO	Dissolved Oxygen
DRO	Diesel Range Organics
ERRP	Emergency and Remedial Response Plan
Fe	Iron
Fl	Flerovium
Ft	feet
g/cc	Grams per Cubic Centimeters
GRO	Gasoline Range Organics
GSA	Geological Society of America
GSDT	Geologic Sequestration Data Tool
H	Hydrogen
Hg	Mercury
H_2O	Hydrogen Dioxide
H_2S	Hydrogen Sulfide
IRMS	Isotope Ratio Mass Spectrometry
K	Potassium
°K	Degrees Kelvin
LAC	Louisiana Administrative Code
LDNR	Louisiana Department of Natural Resources
Li	Lithium
LLC	Limited Liability Company
mBq/L	Megabecquerel per Liter
µg/L	Microgram per Liter
Mg	Magnesium
mg/L	Milligrams per Liter
MITIA	Mechanical Integrity Testing of the Inner Annulus
MMT	Metric Million Tons
MMSCF	Million Standard Cubic Feet

Mn	Magnesium
mol	Mol
mol/kg	Mol per kilogram
MPa	Megapascals
MS	Mass Spectrometry
mS/cm	Millisiemens per Centimeter
MSD	Mass Spectrometry Detector
mV	Millivolts
N_2	Nitrogen
Na	Sodium
NaCl	Sodium Chloride
NAD27	North American Datum 1927
Ni	Nickle
NO_3	Nitrate
O_2	Oxygen
ORO	Oil Range Organics
ORP	Oxidation Reduction Potential
Pb	Lead
pCi/L	Picocuries per Liter of Air
pH	Potential of Hydrogen
PISC	Post-Injection Site Care and Site Closure
PNL	Pulsed Neutron Logging
psi	Pounds per Square Inch
P/T	Pressure and Temperature
QA	Quality Assurance
QASP	Quality Assurance and Surveillance Plan
QC	Quality Control
R	Universal Gas Constant
Ra	Radium
Rn	Radon
Sb	Antimony
Se	Selenium
SN	Serial Number

SO_4	Sulfate
SOP	Standard Operating Procedure
Sr	Strontium
SU	Standard Unit
T	Temperature
TBD	To be Determined
Tl	Thallium
TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbon
U	Uranium
UIC	Underground Injection Control
USDW	Underground Source of Drinking Water
USEPA	United States Environmental Protection Agency
USIT	Ultrasonic Imager Tool
VOC	Volatile Organic Compound
VSP	Vertical Seismic Profile
Zn	Zinc
3D	3 Dimensional
4D	4 Dimensional

1.0 FACILITY INFORMATION

Facility Name: Draco Storage Facility

Facility Location: [redacted]

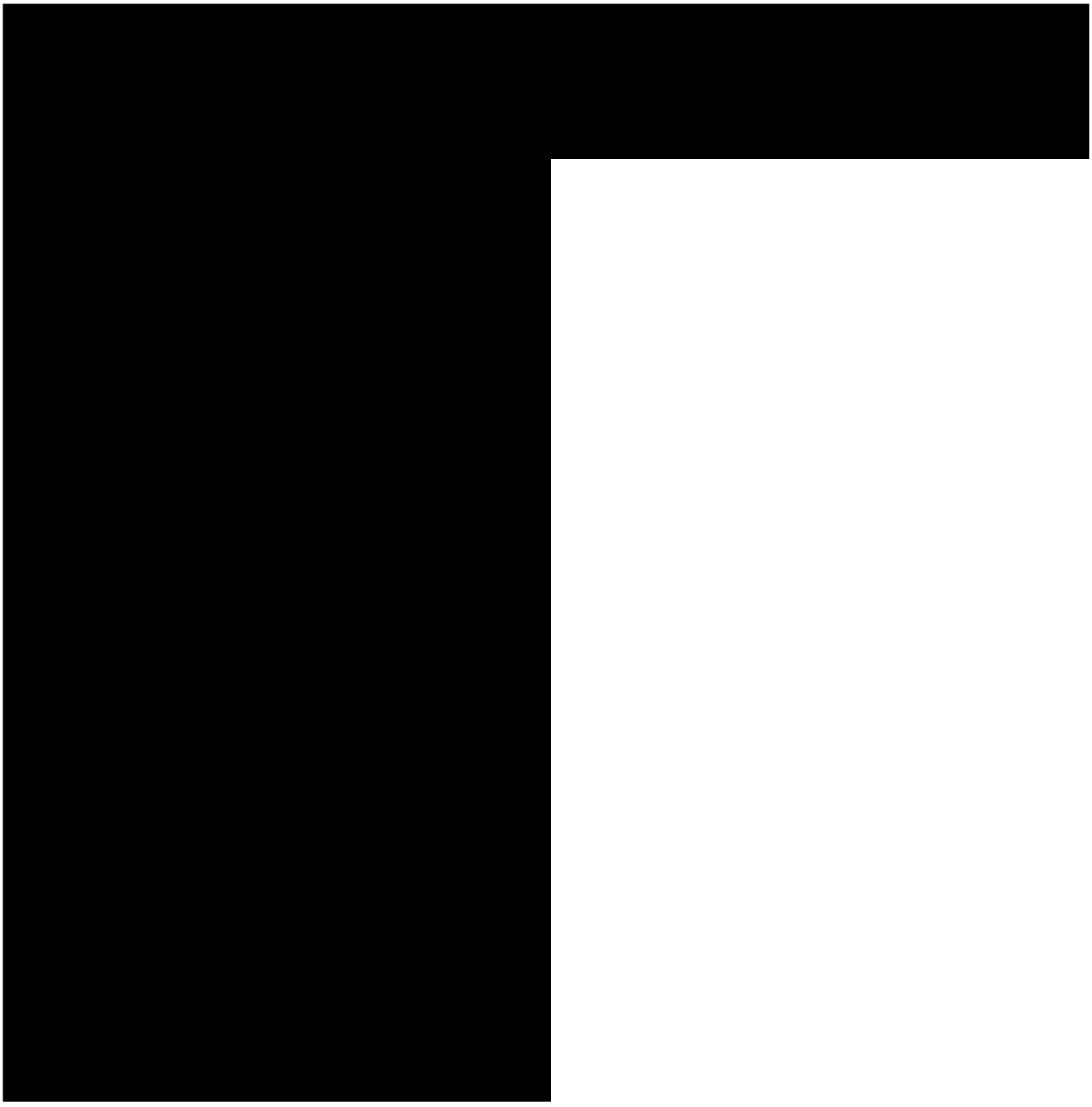
Mailing Address: 5851 Legacy Circle, Suite 1200
Plano, Texas 75024

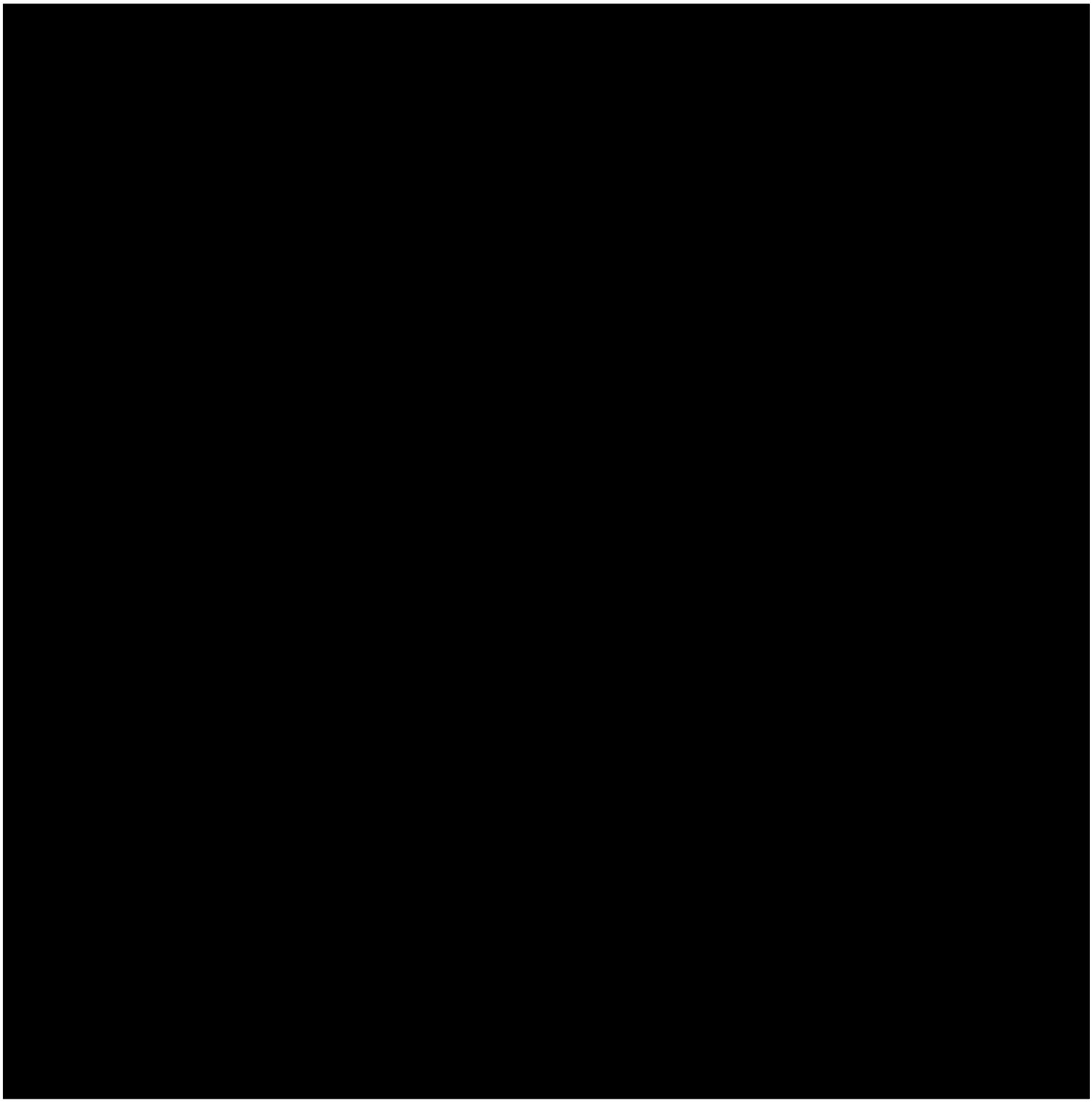
Well Location(s) [redacted]

This Post-Injection Site Care and Site Closure (PISC) Plan describes the activities that Denbury Carbon Solutions, LLC (Denbury) will perform at the Draco Storage Facility to meet the requirements of USEPA 40 CFR §146.93 and LAC43: XVII §3633. [redacted] Denbury may not cease post-injection monitoring until a demonstration of non-endangerment of underground source of drinking water (USDW) has been approved by the Underground Injection Control (UIC) Program Director and Louisiana Department of Natural Resources (LDNR) Commissioner pursuant to USEPA 40 CFR §146.93(b)(3) and LAC43: XVII 3633.A.2.c. [redacted]

2.0 PREDICTED POSITION OF THE CO_2 PLUME AND ASSOCIATED PRESSURE FRONT AT SITE CLOSURE

[redacted]





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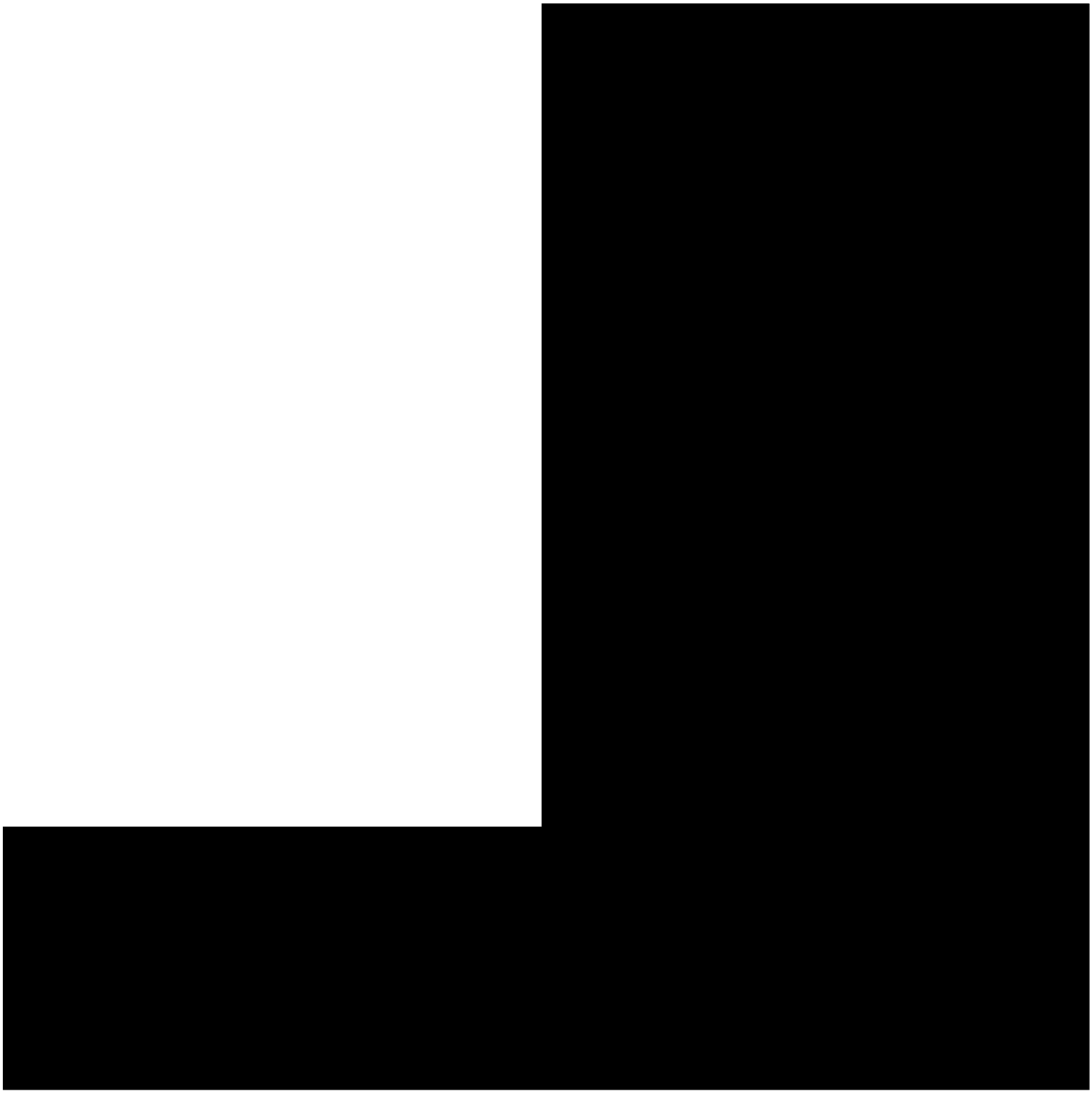

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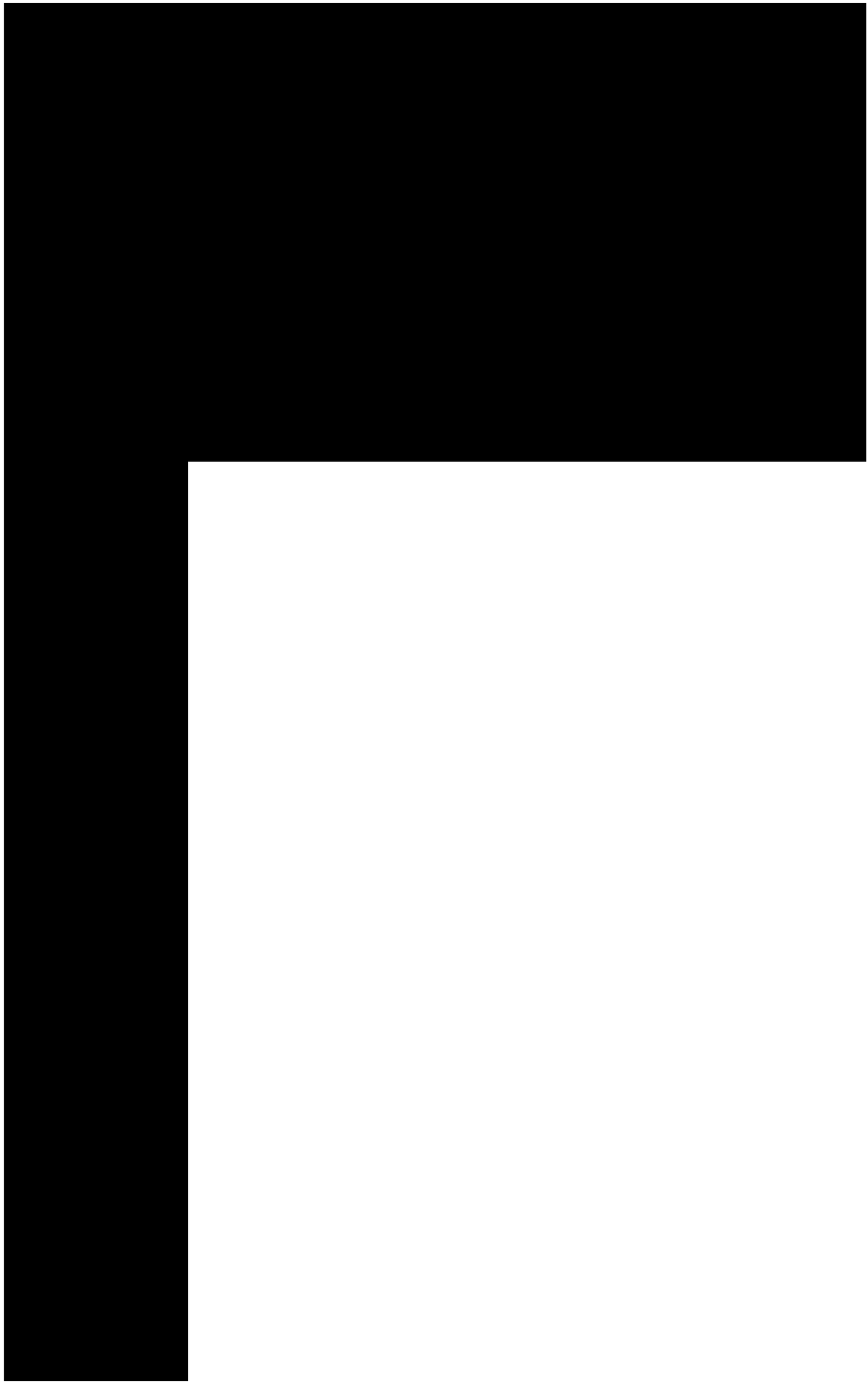
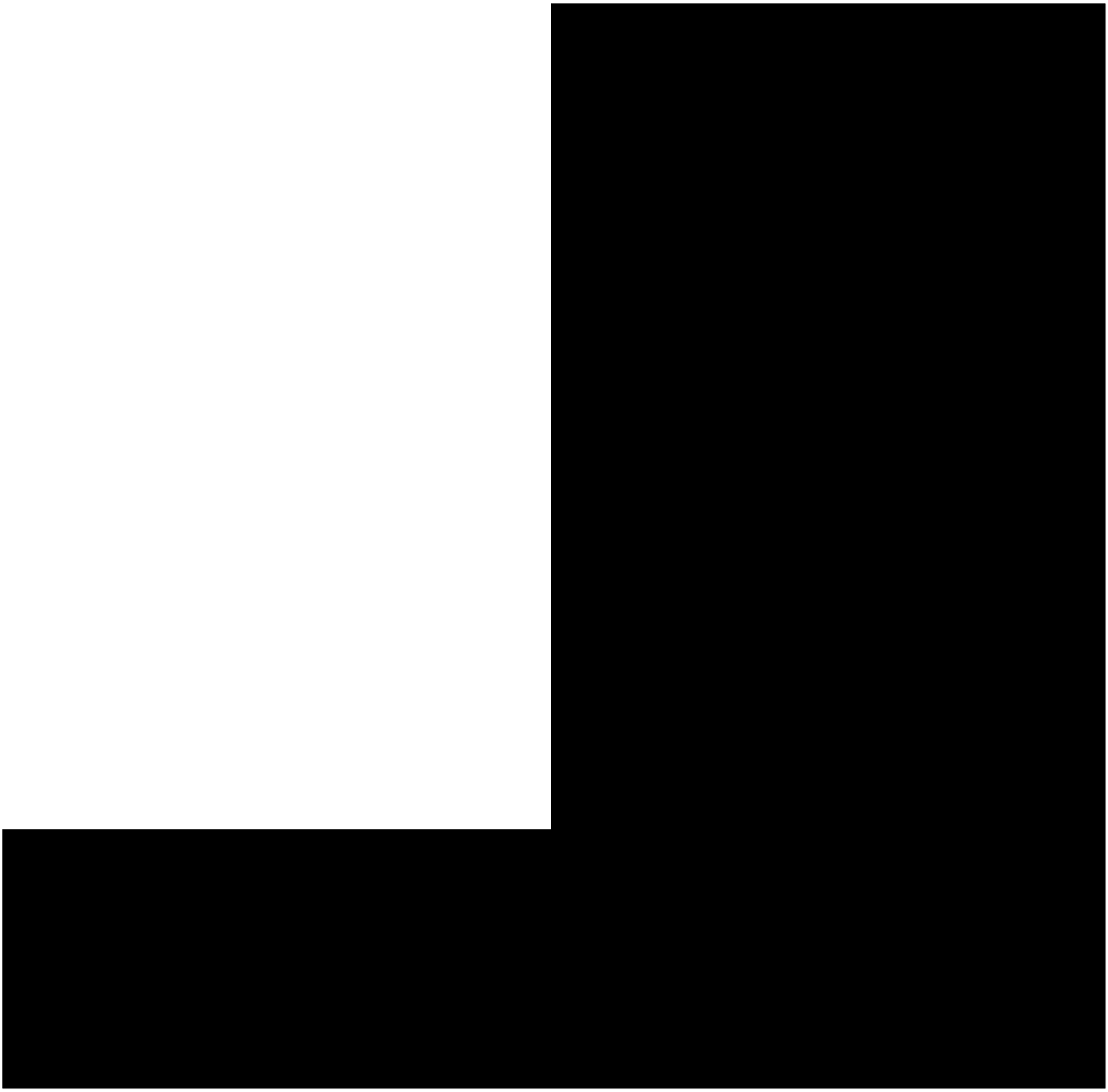
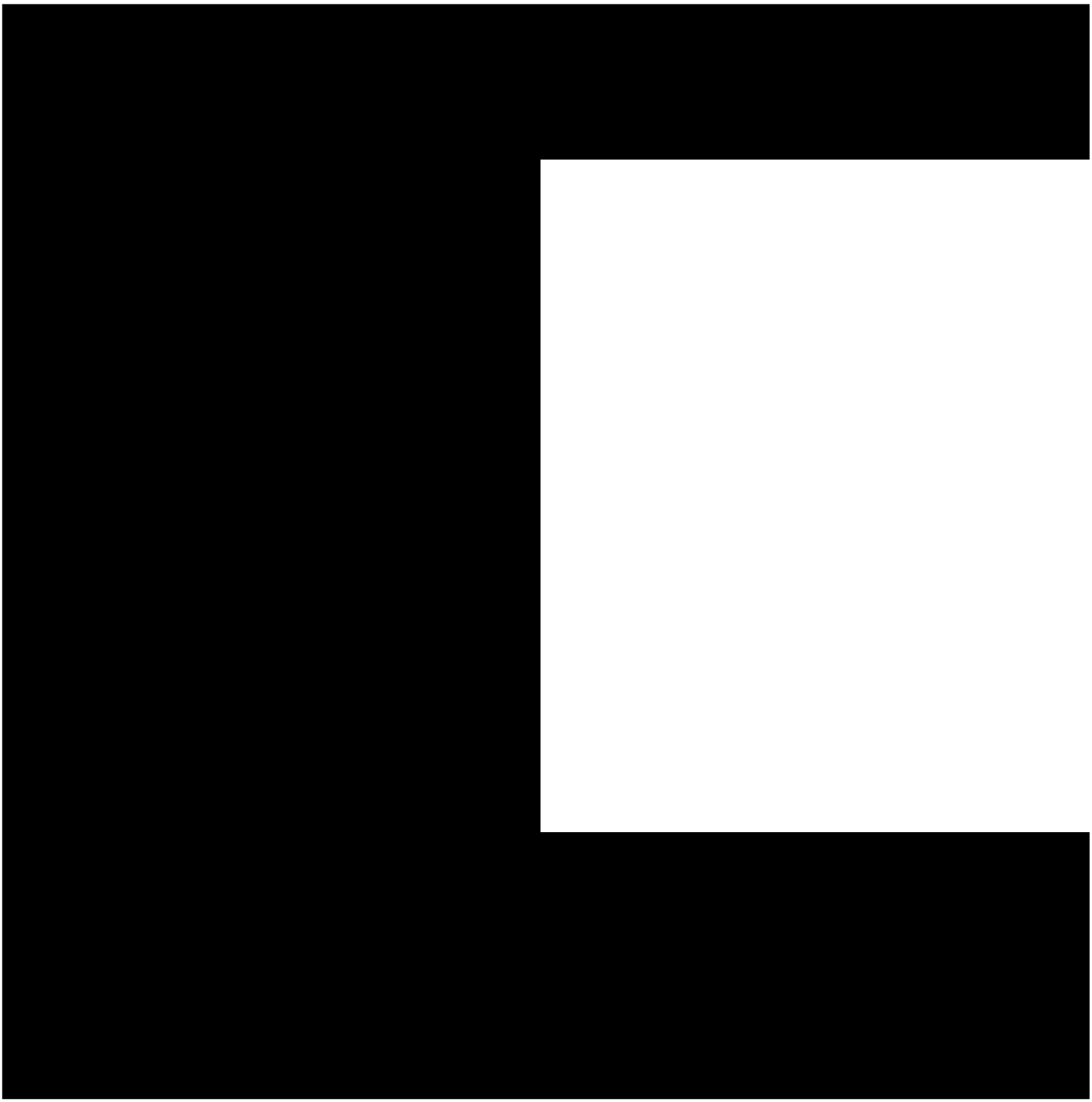
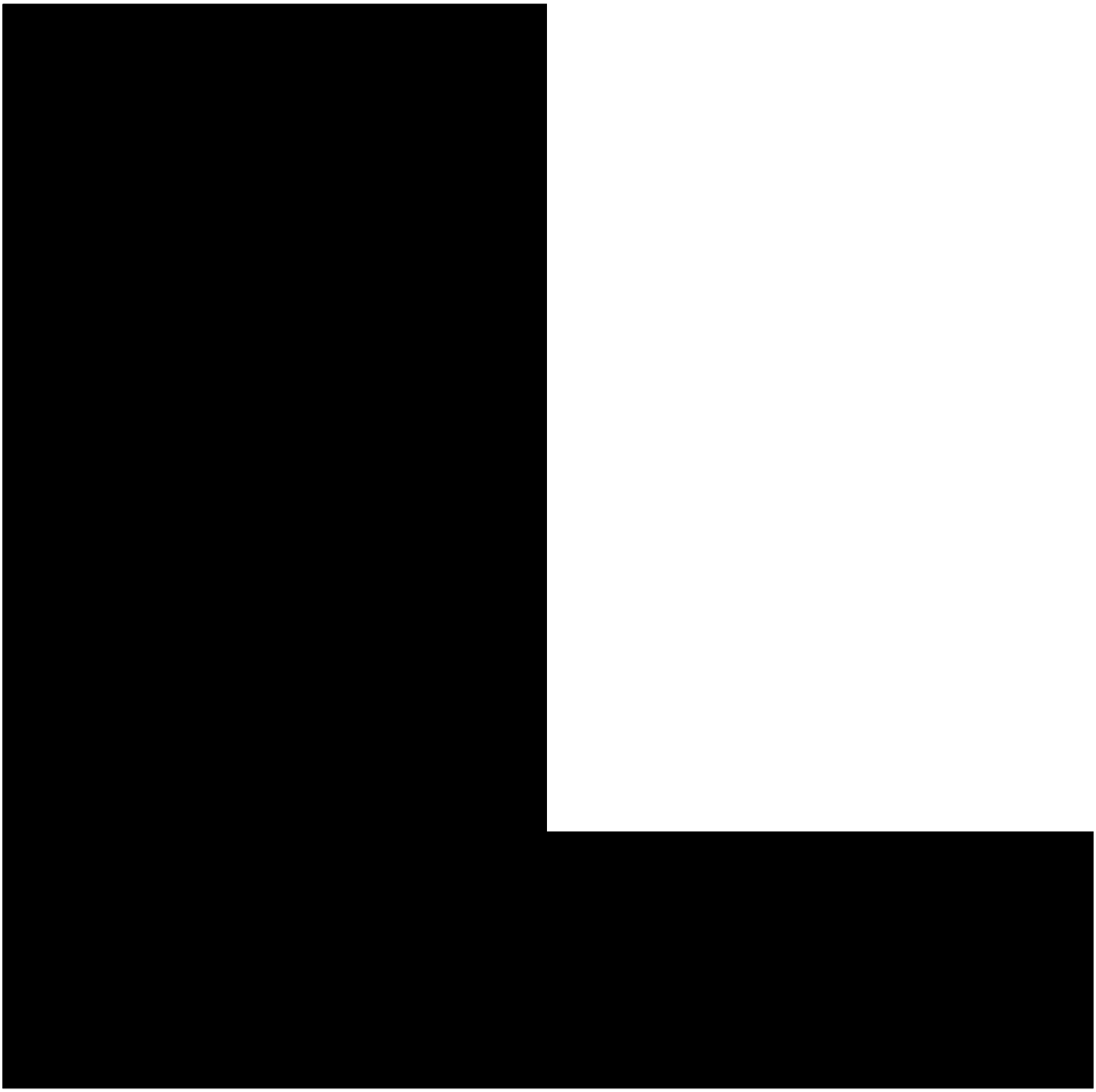
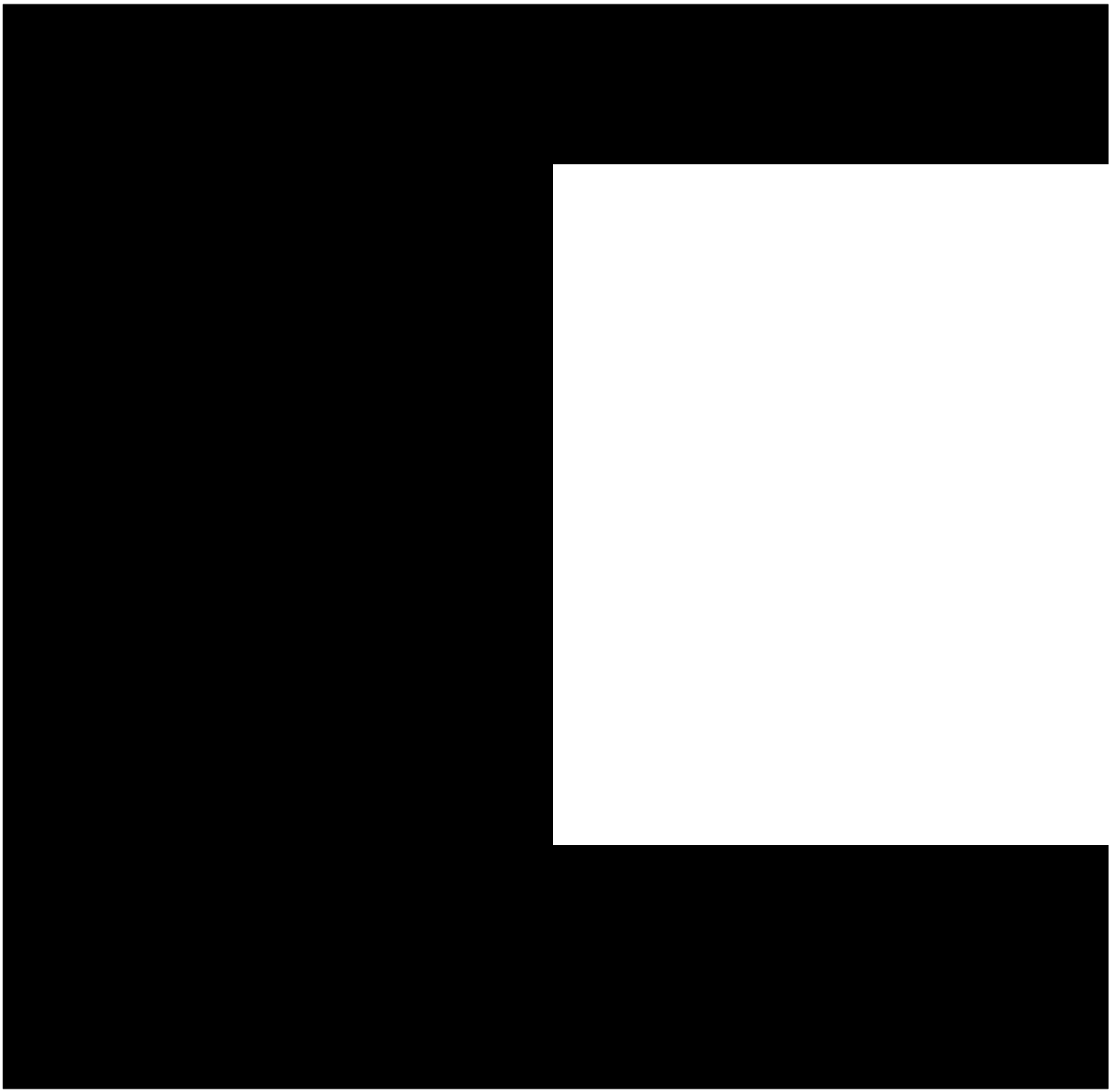
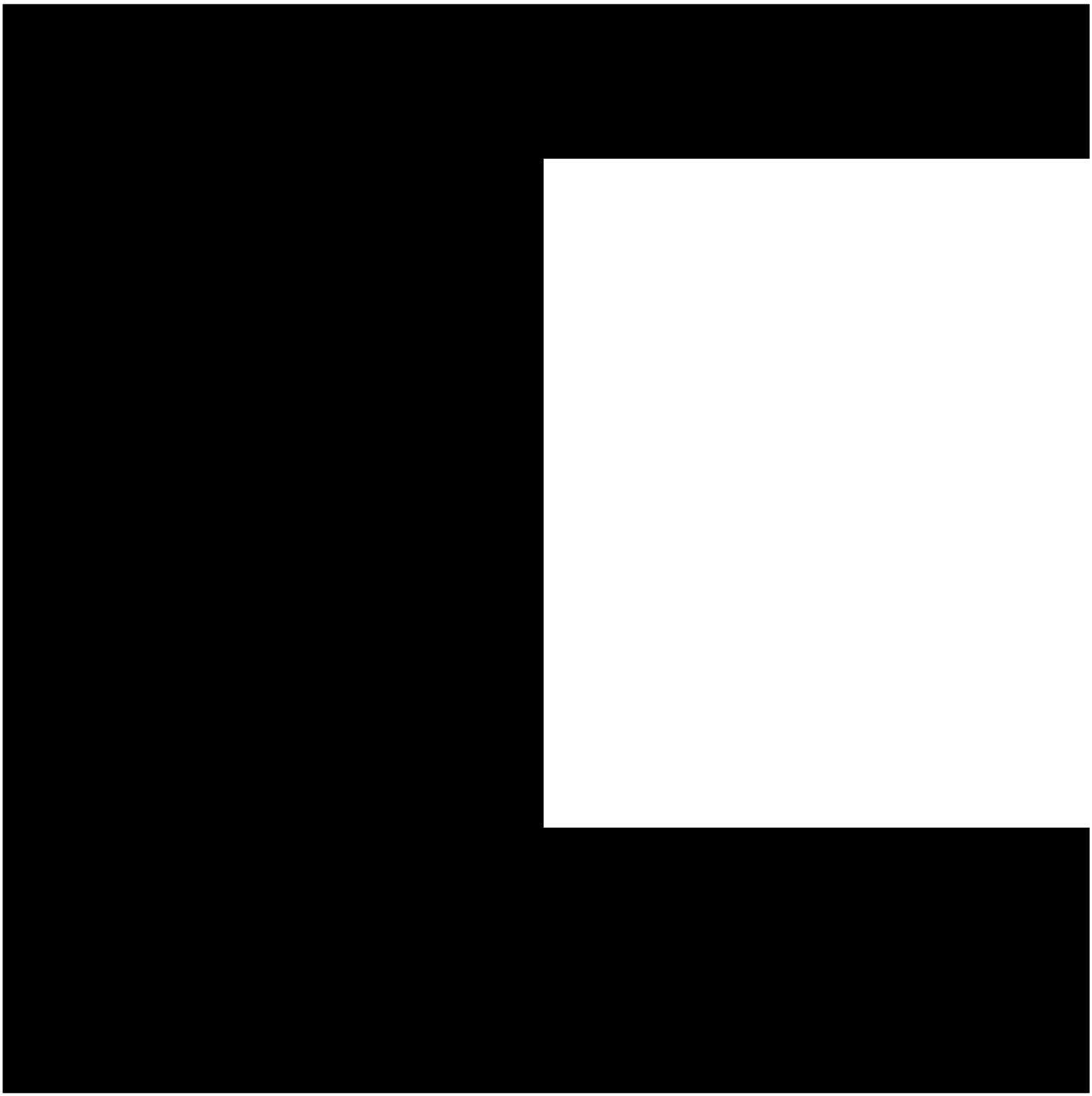


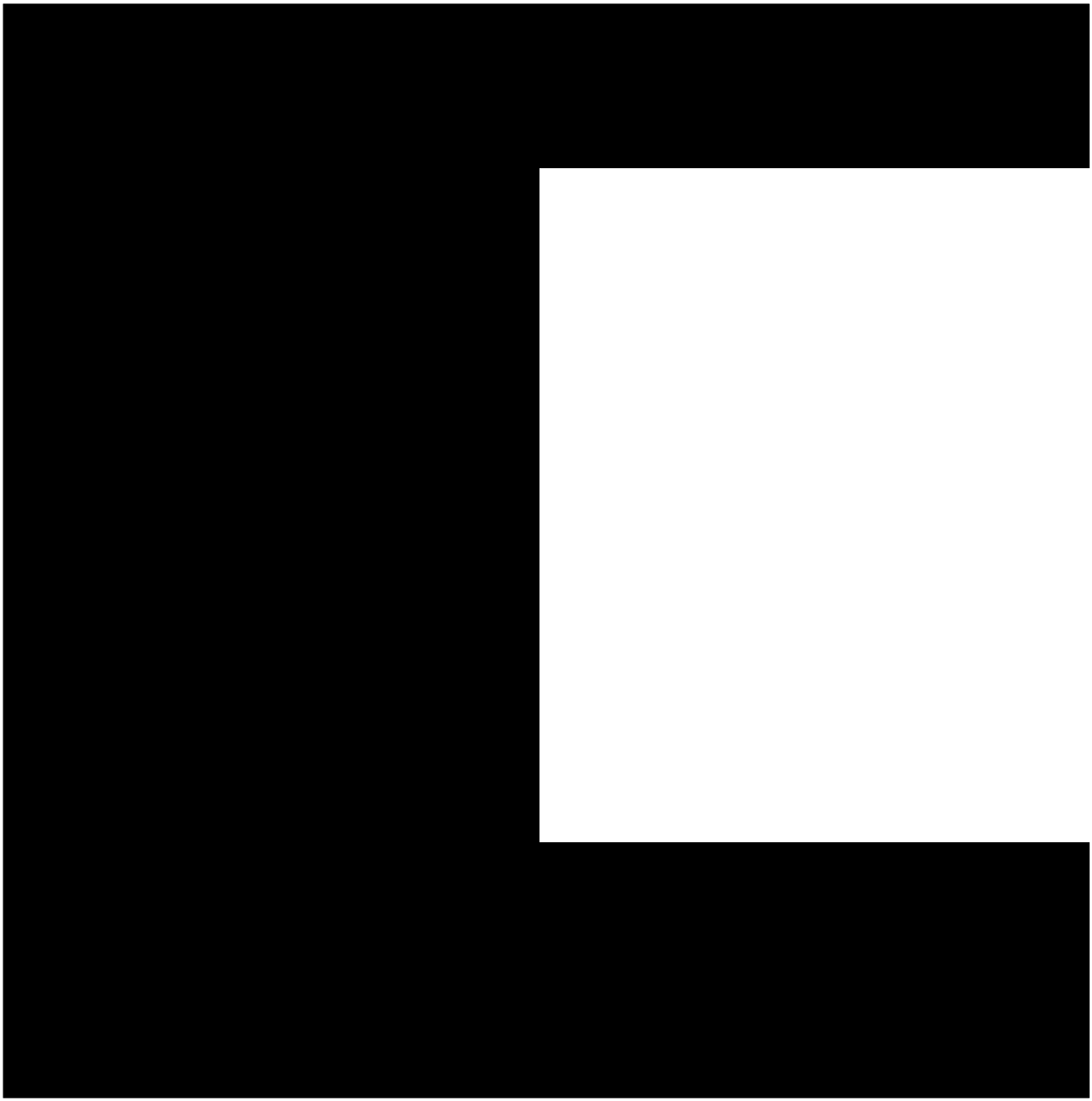


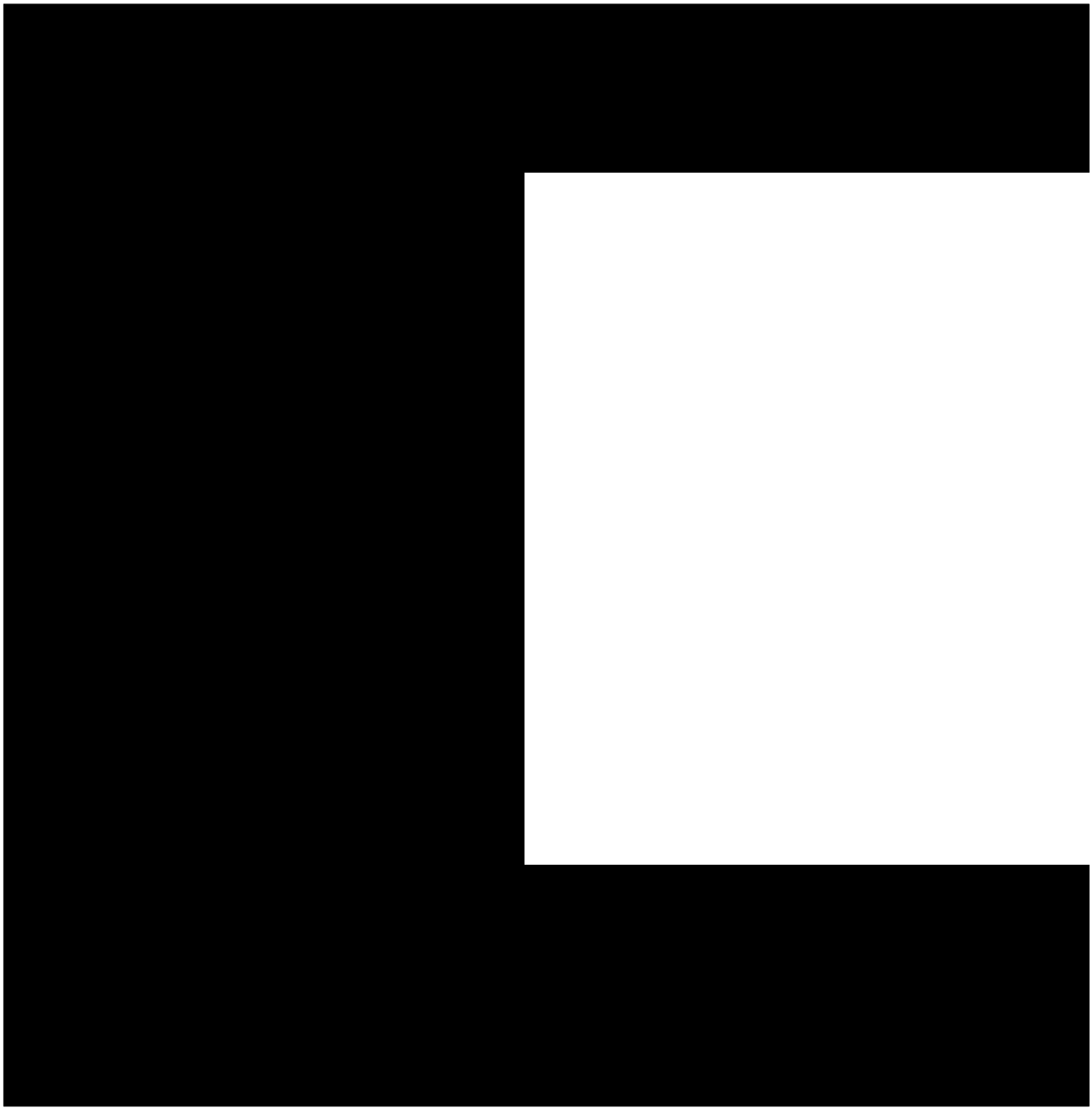




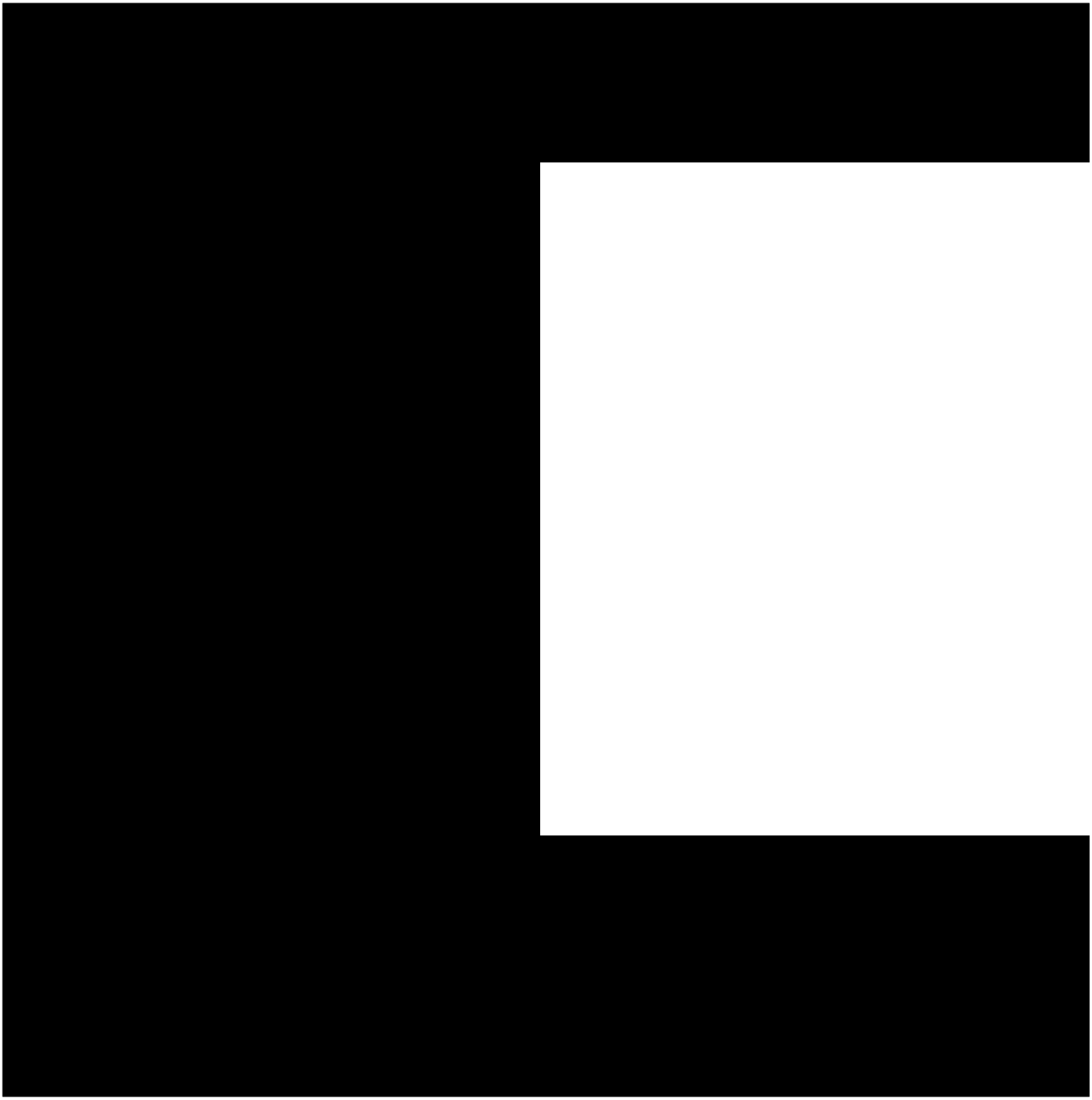


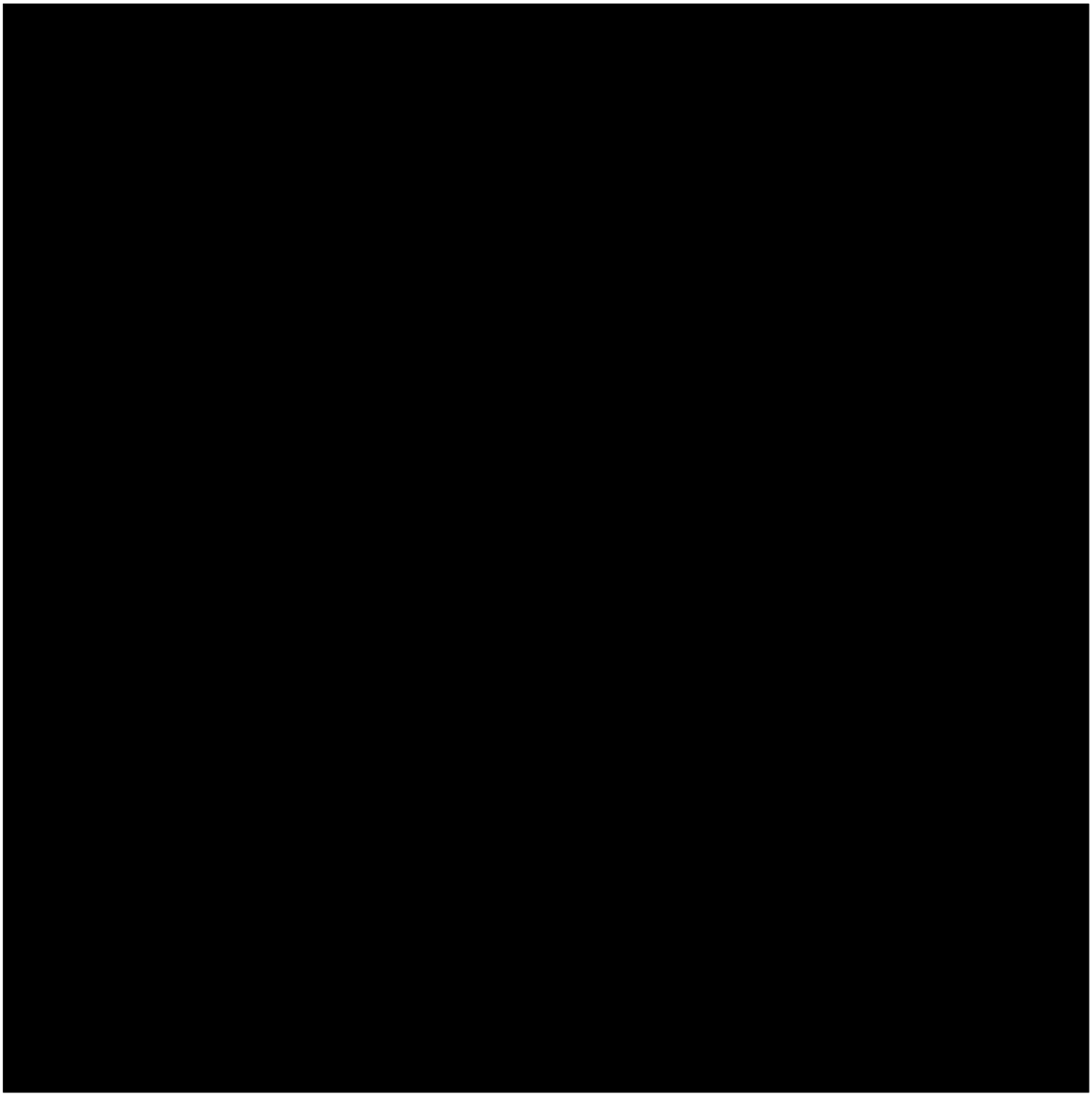


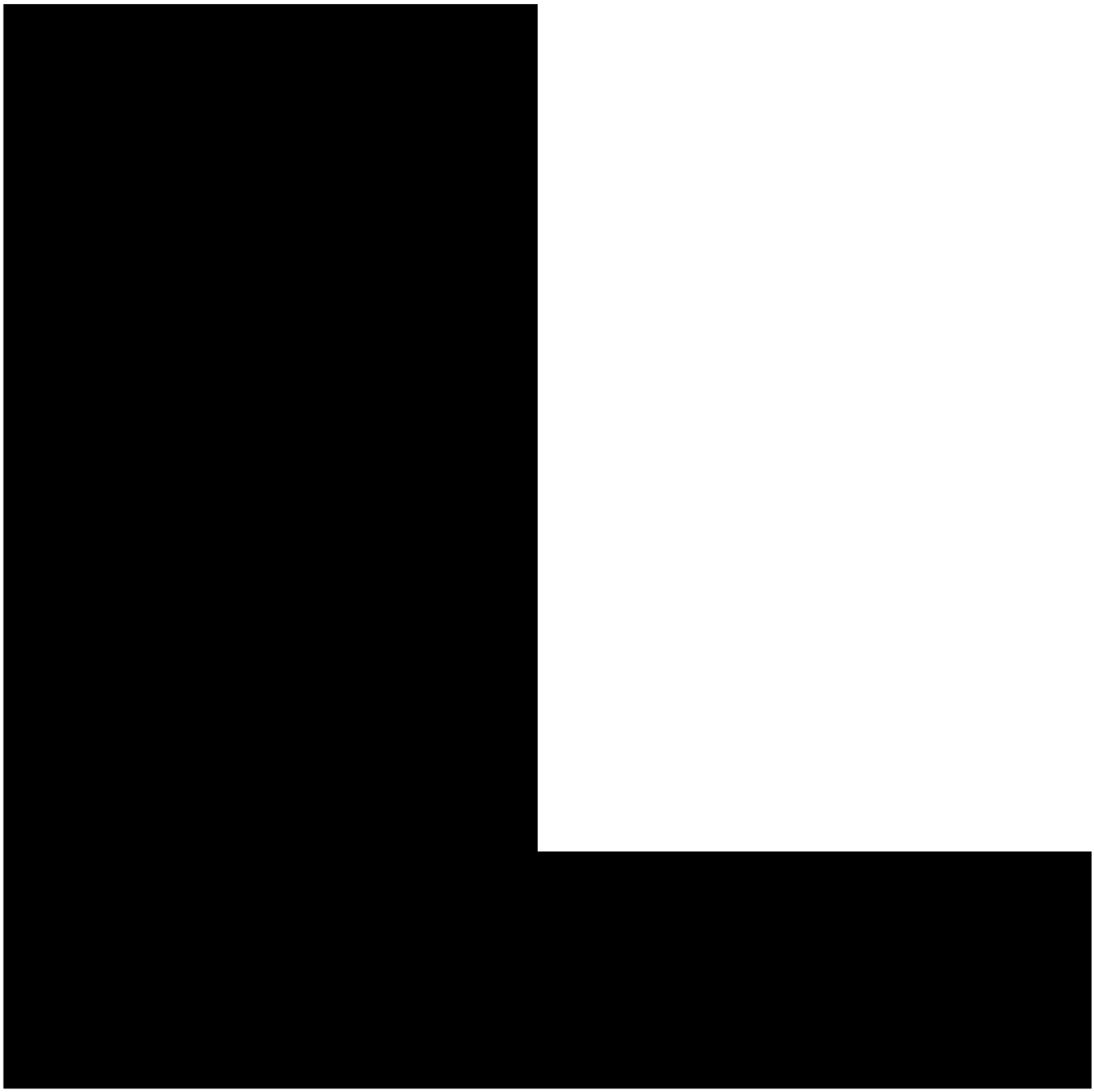


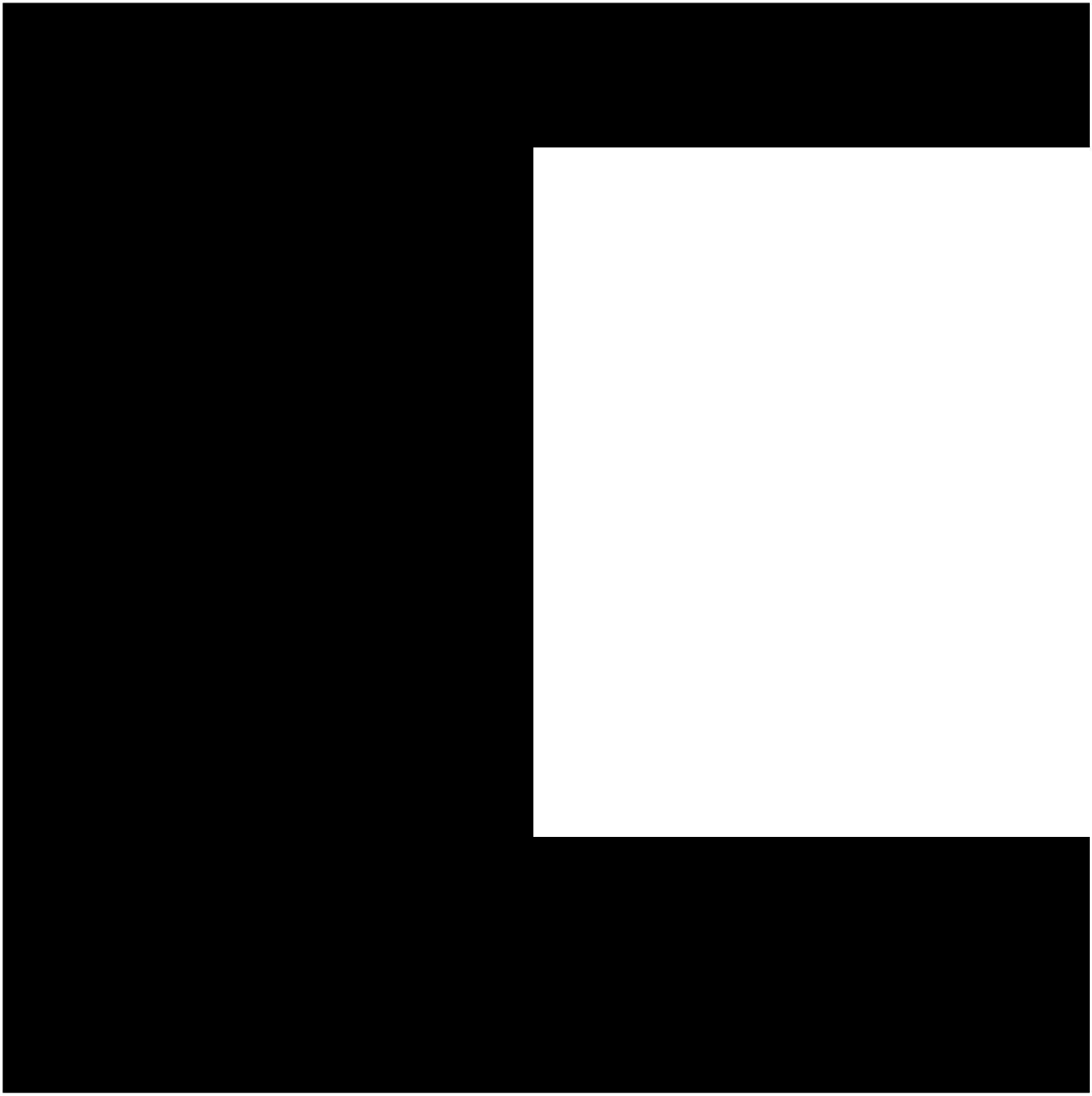


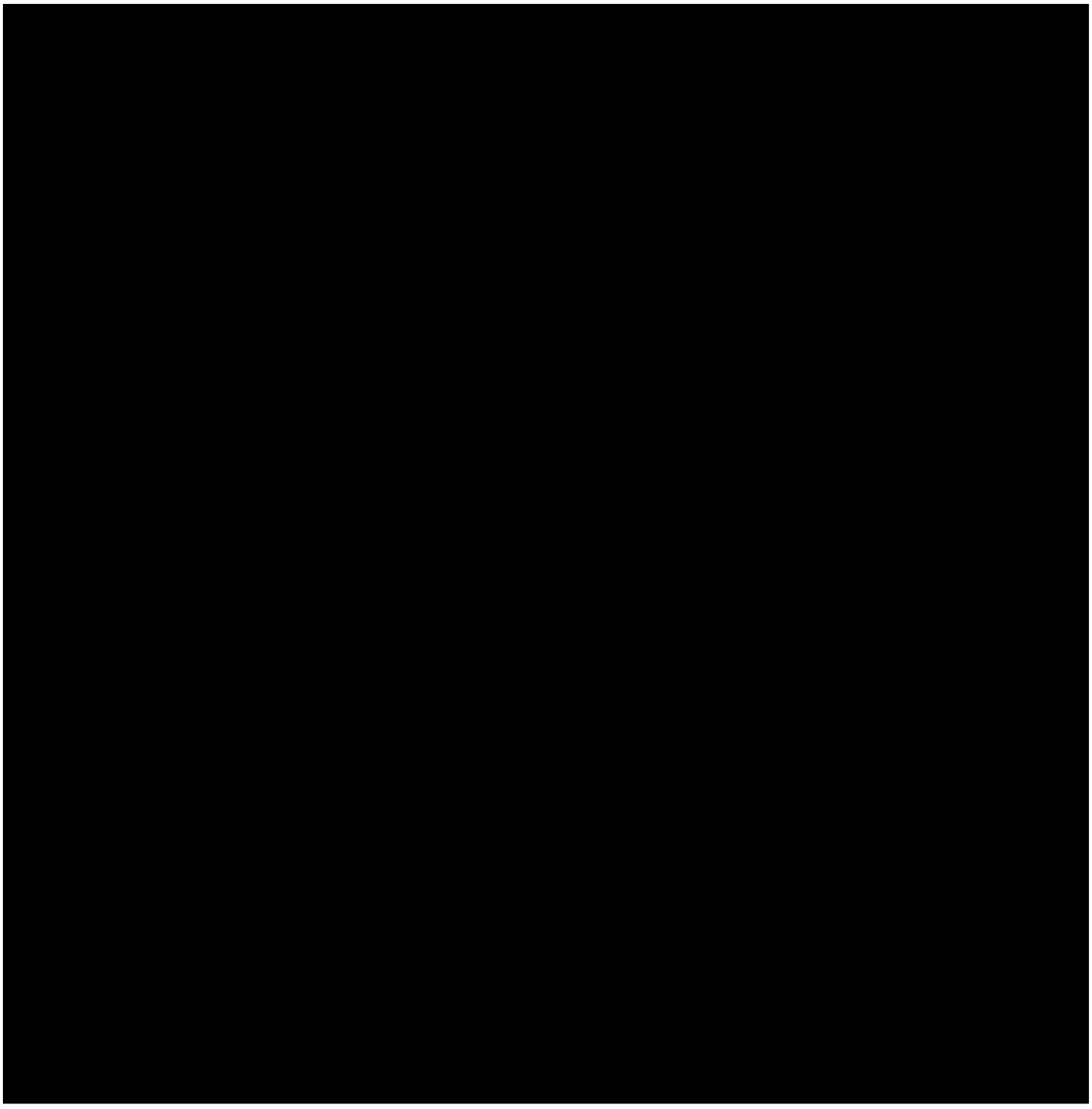
2.2 PREDICTED TIMEFRAME FOR PRESSURE DECLINE

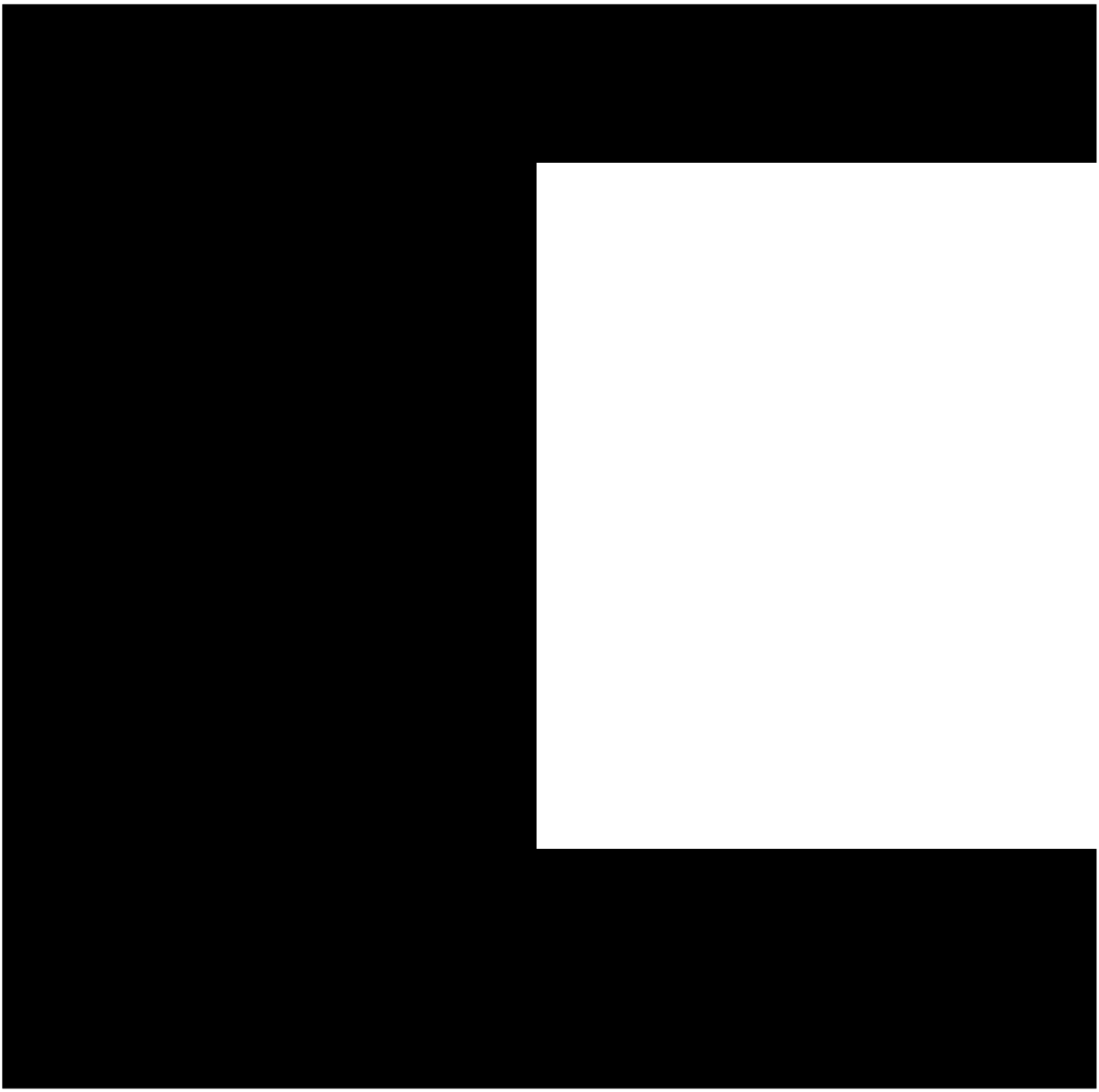


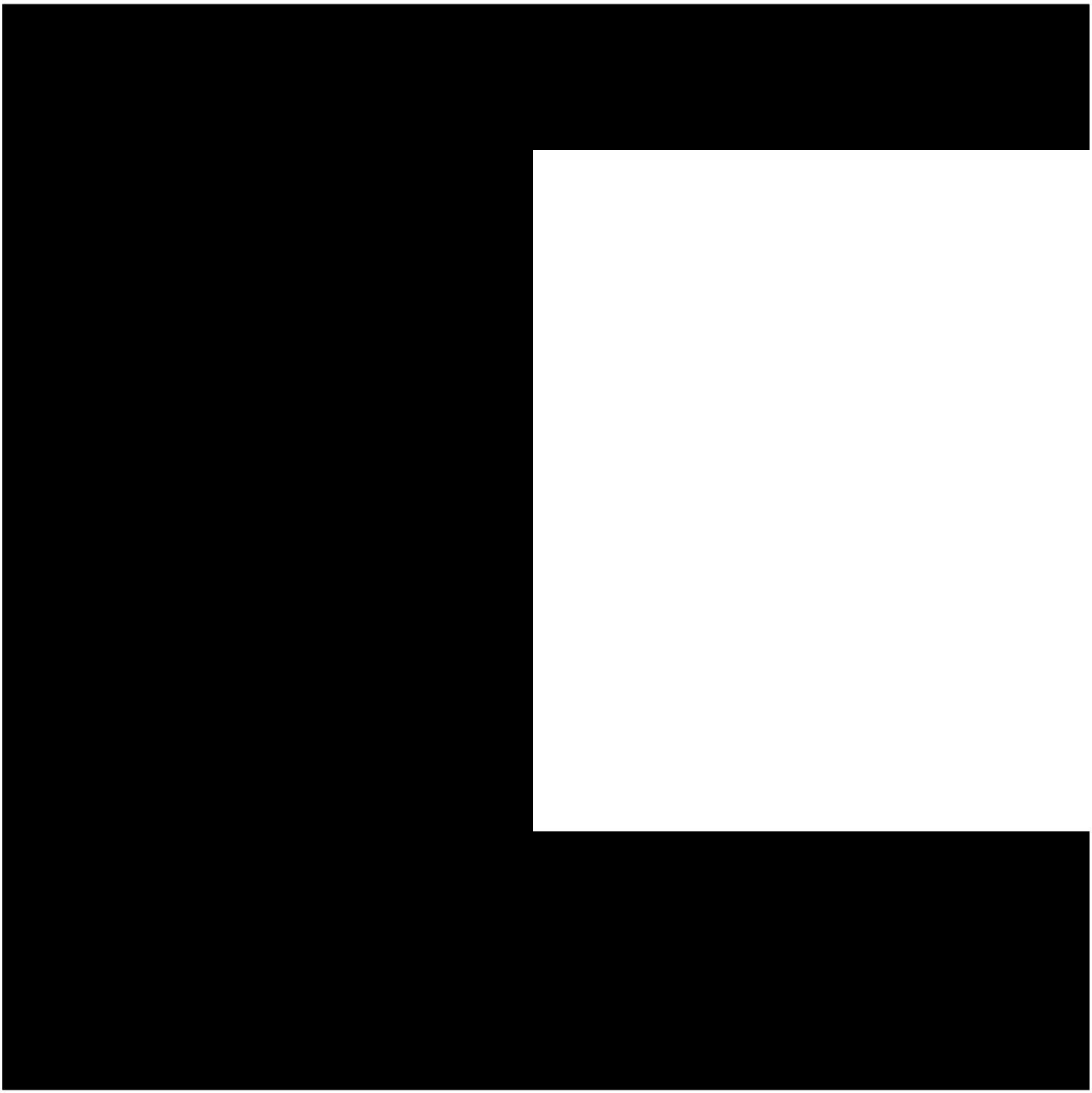


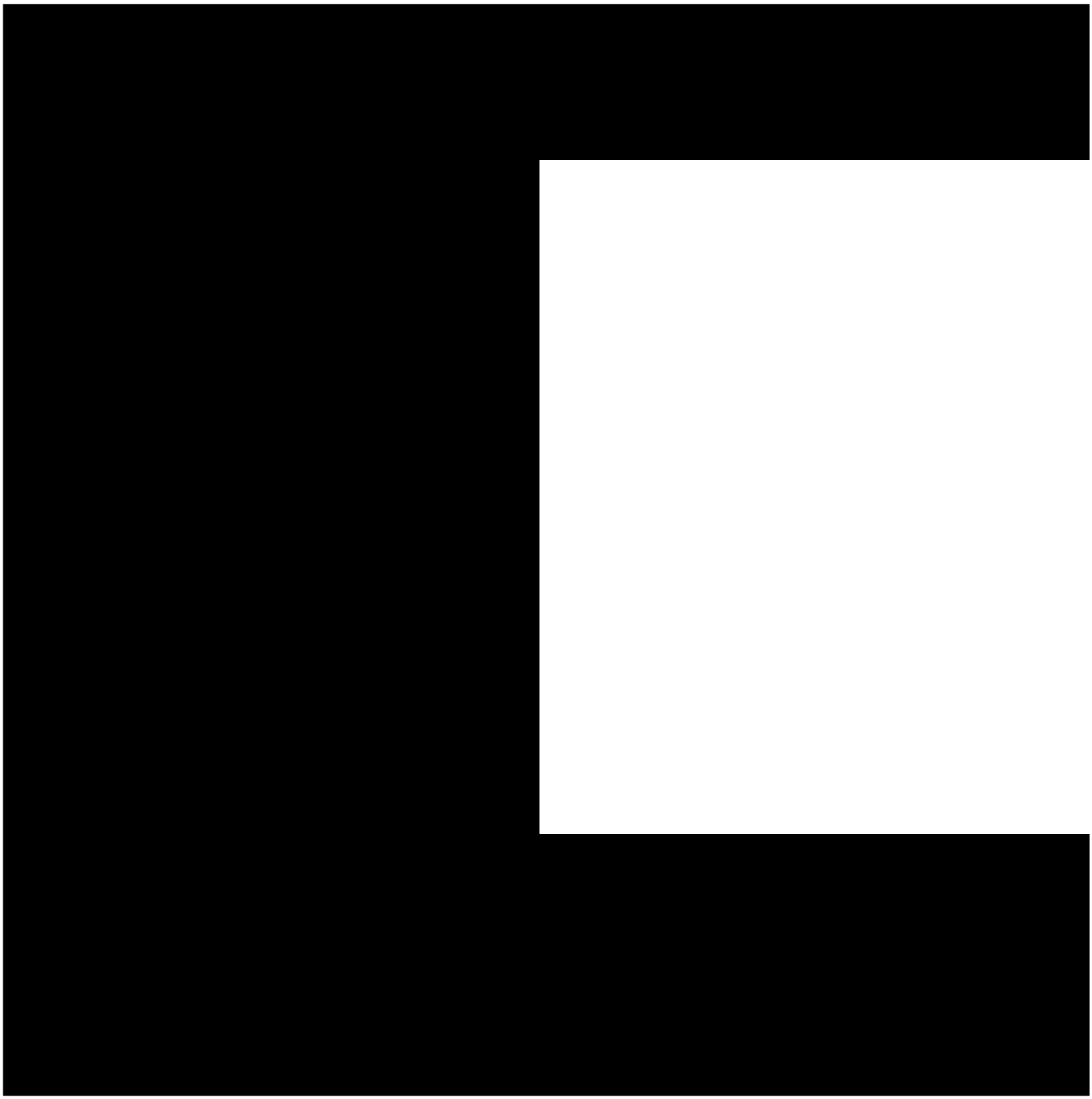


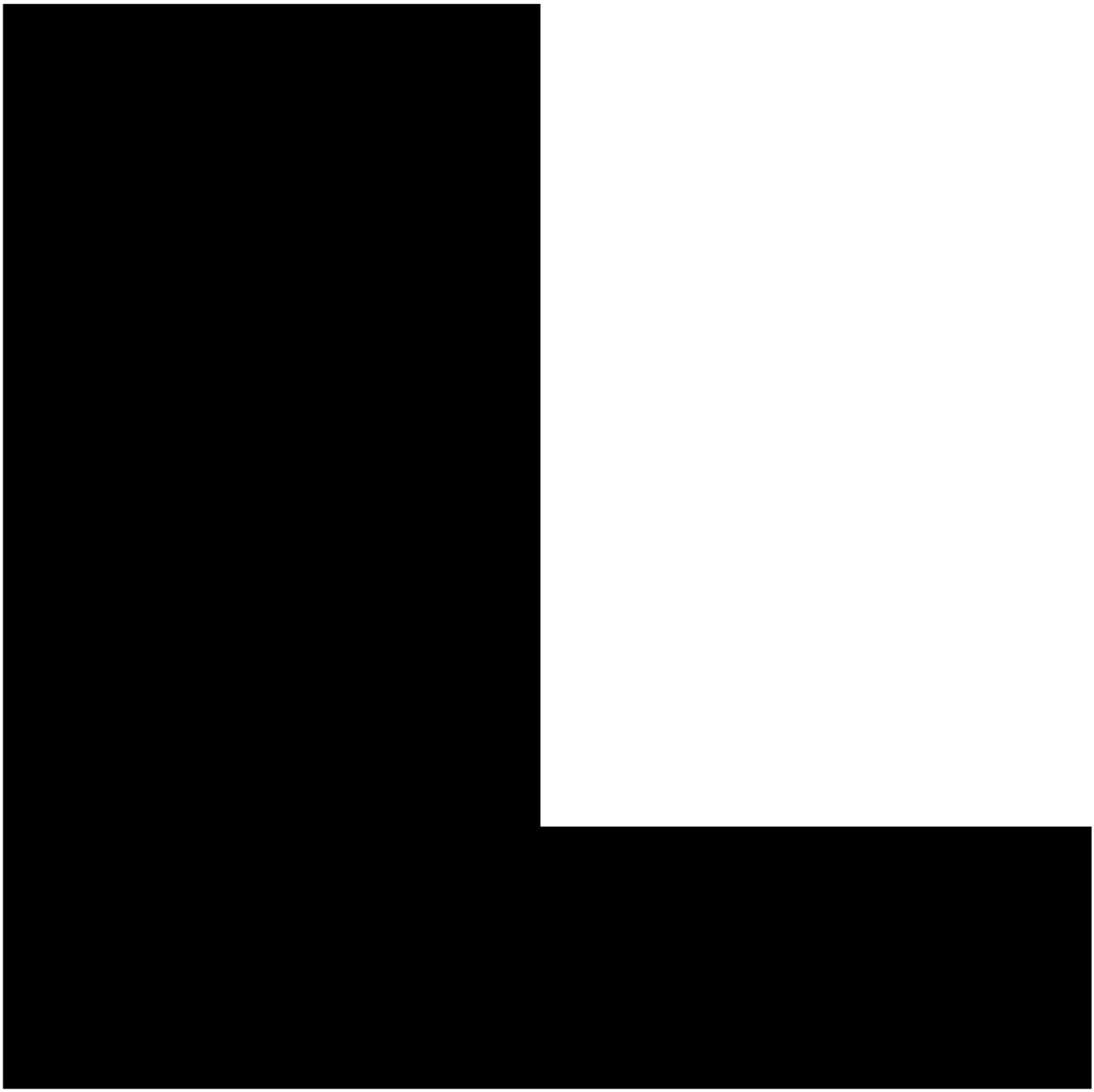


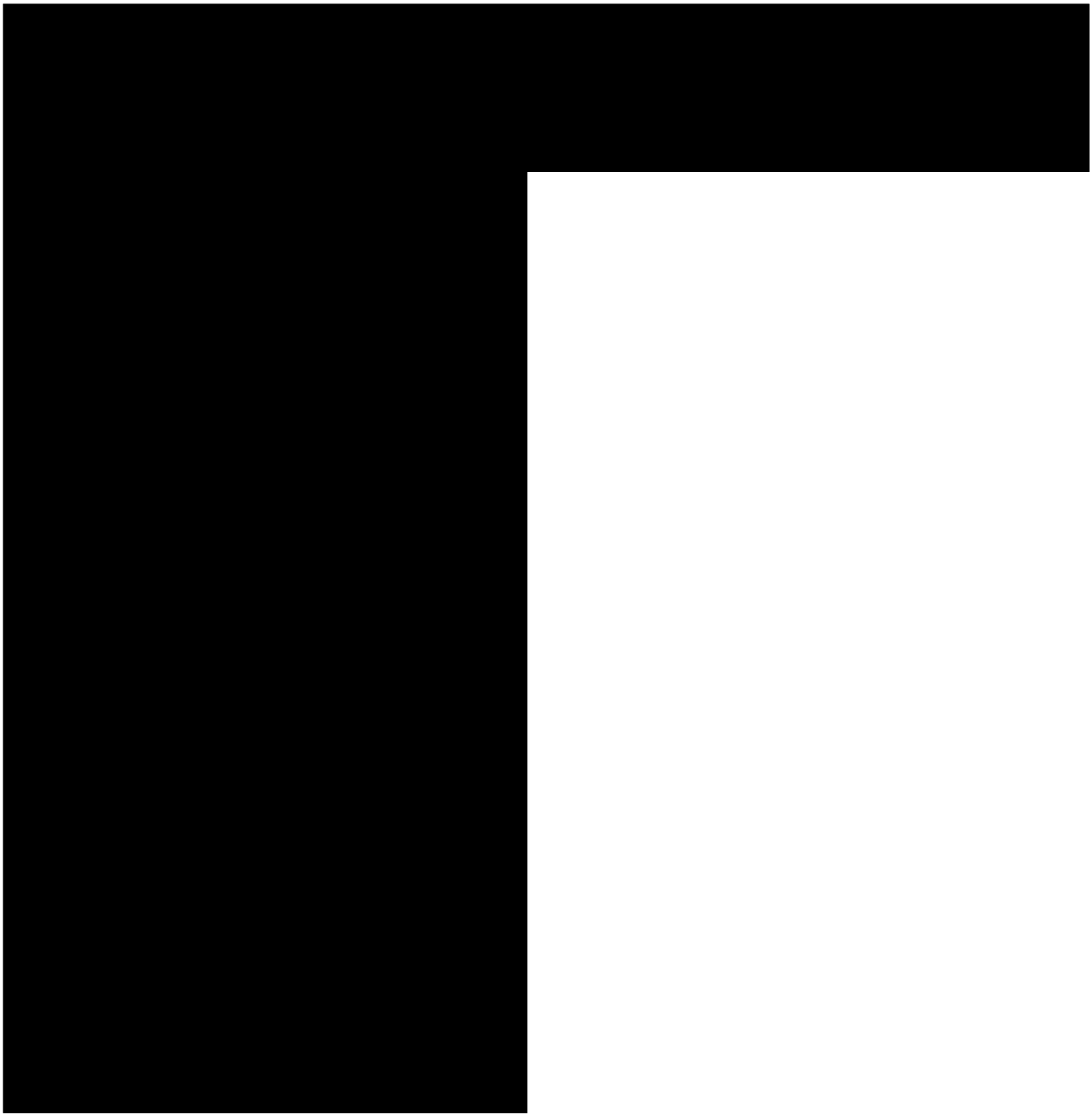


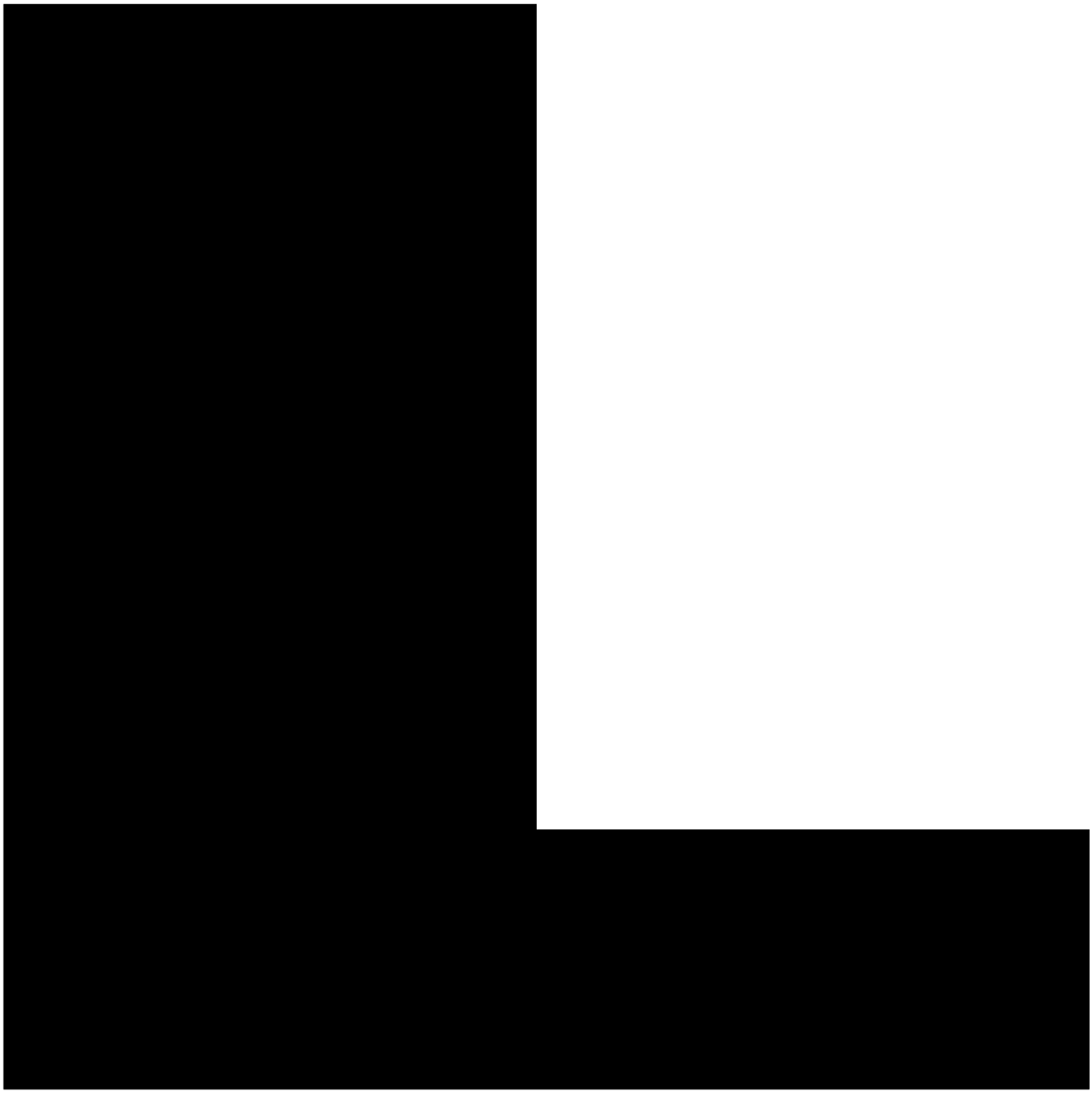


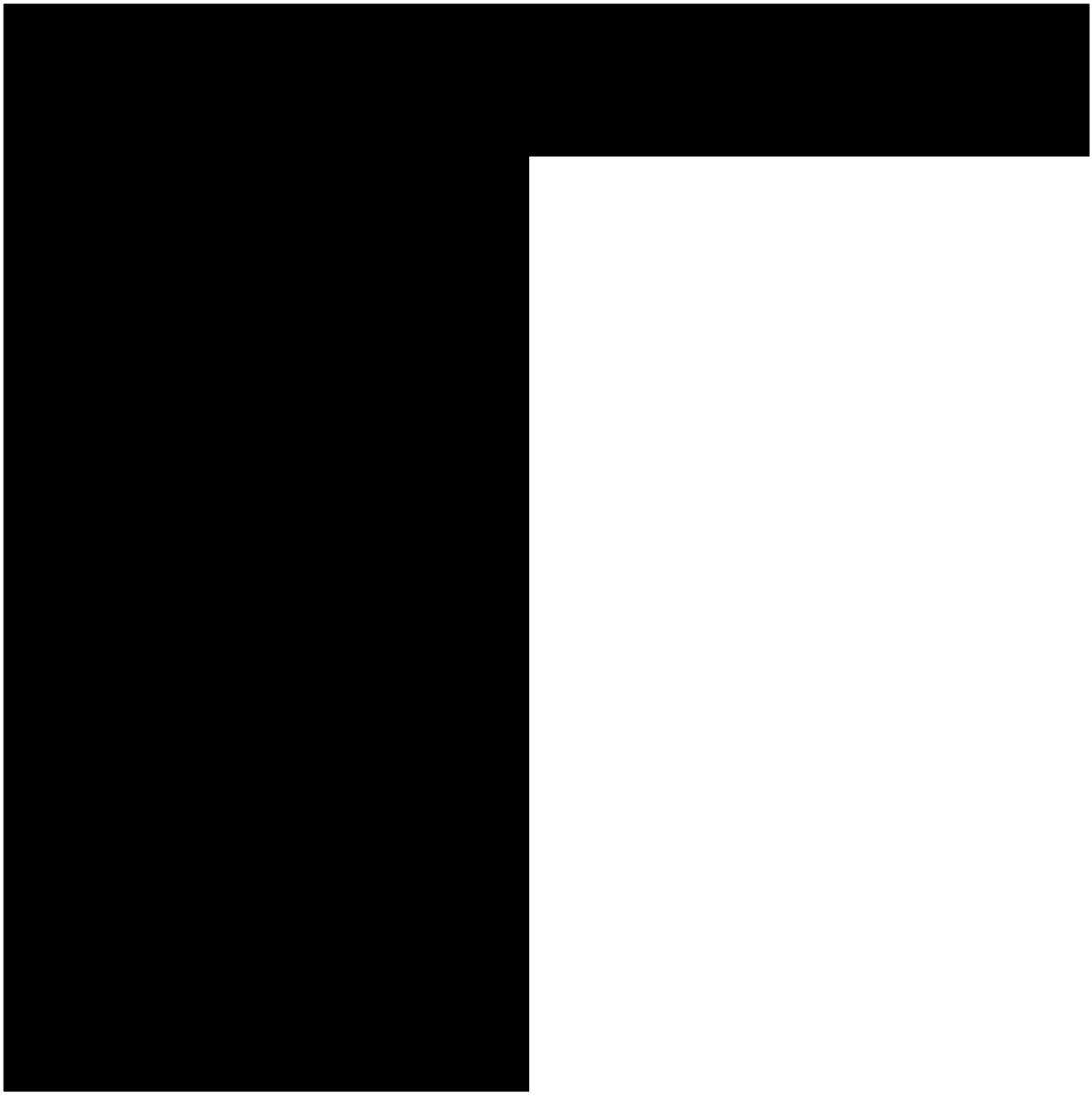


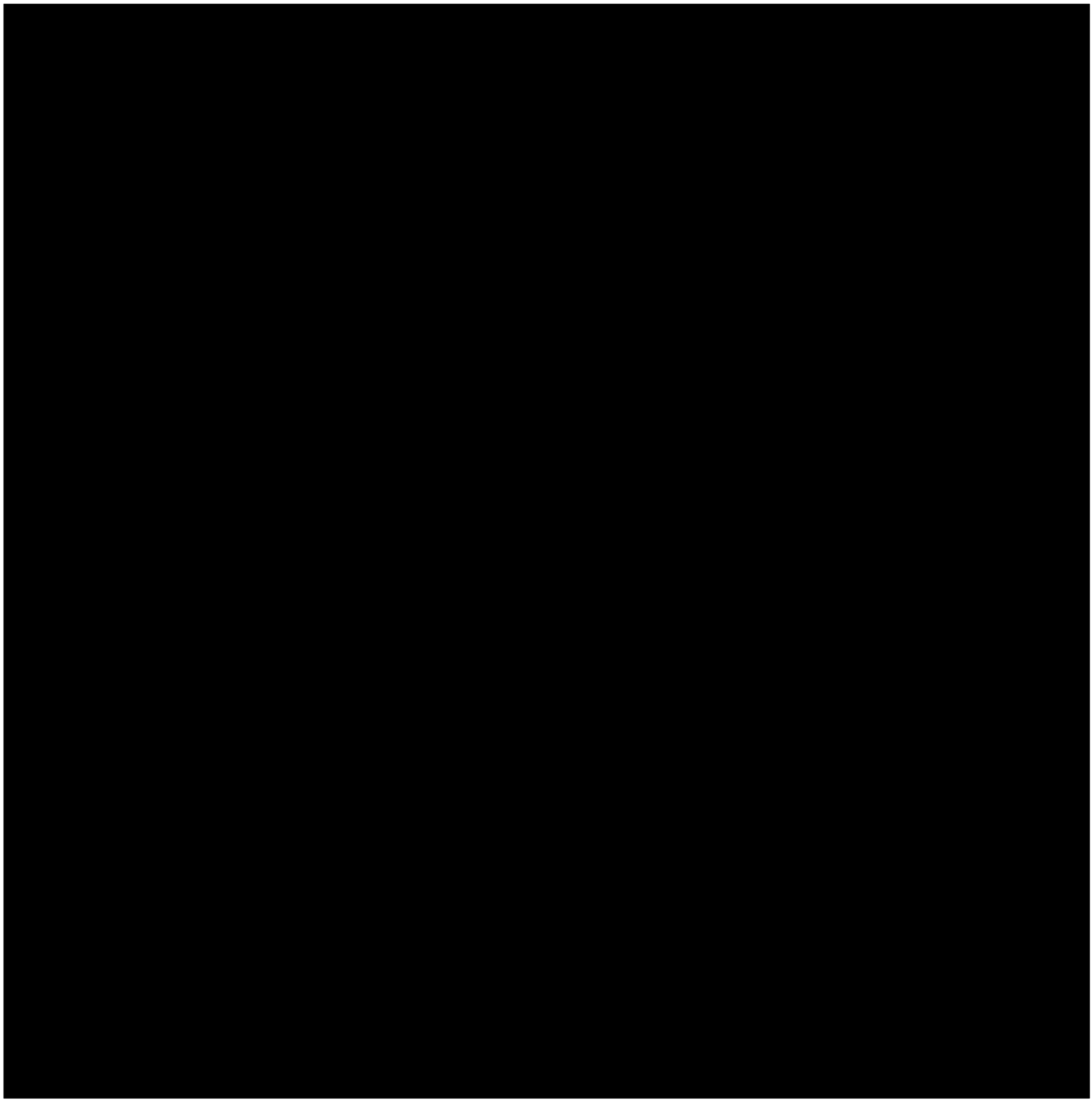


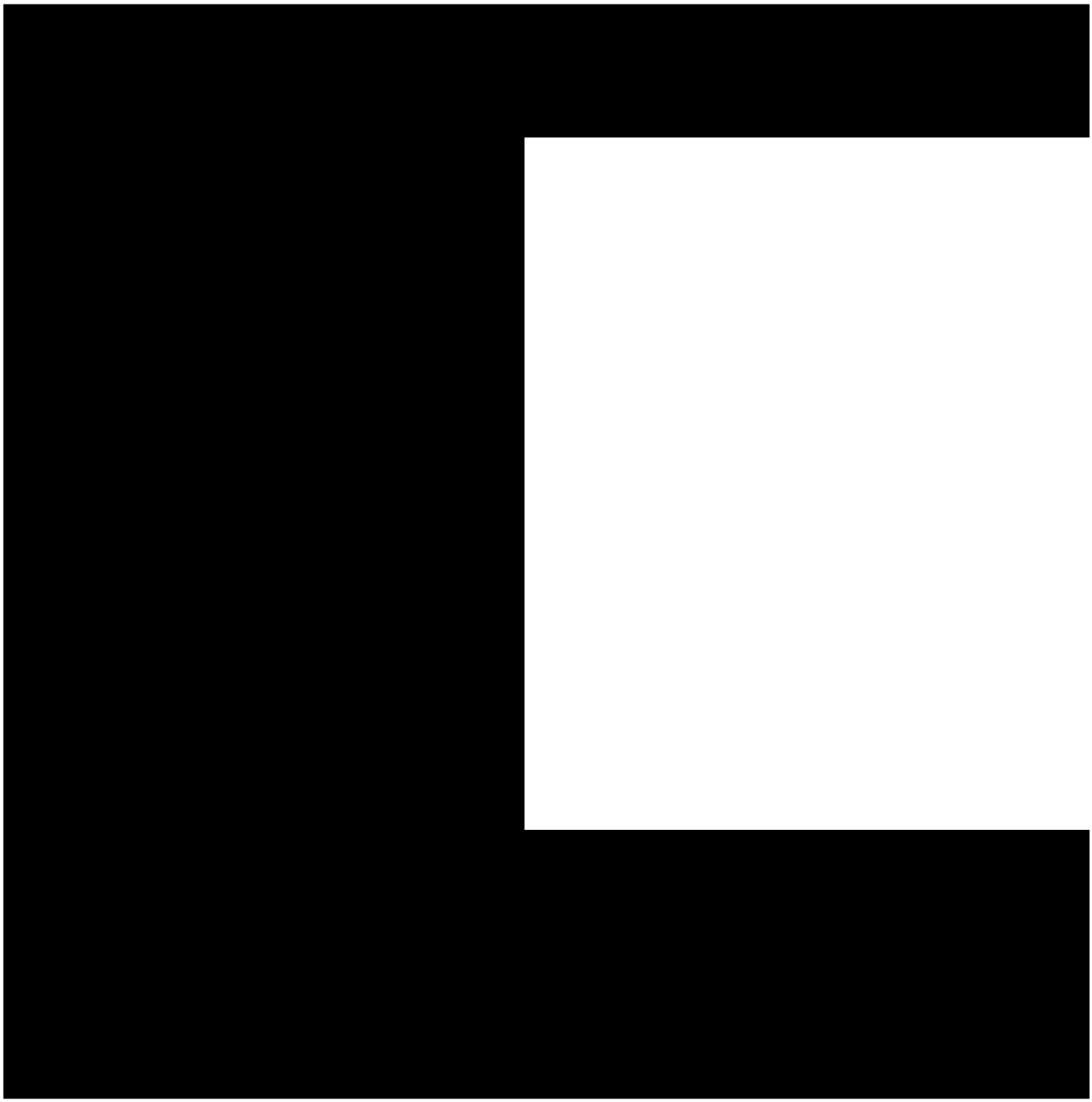


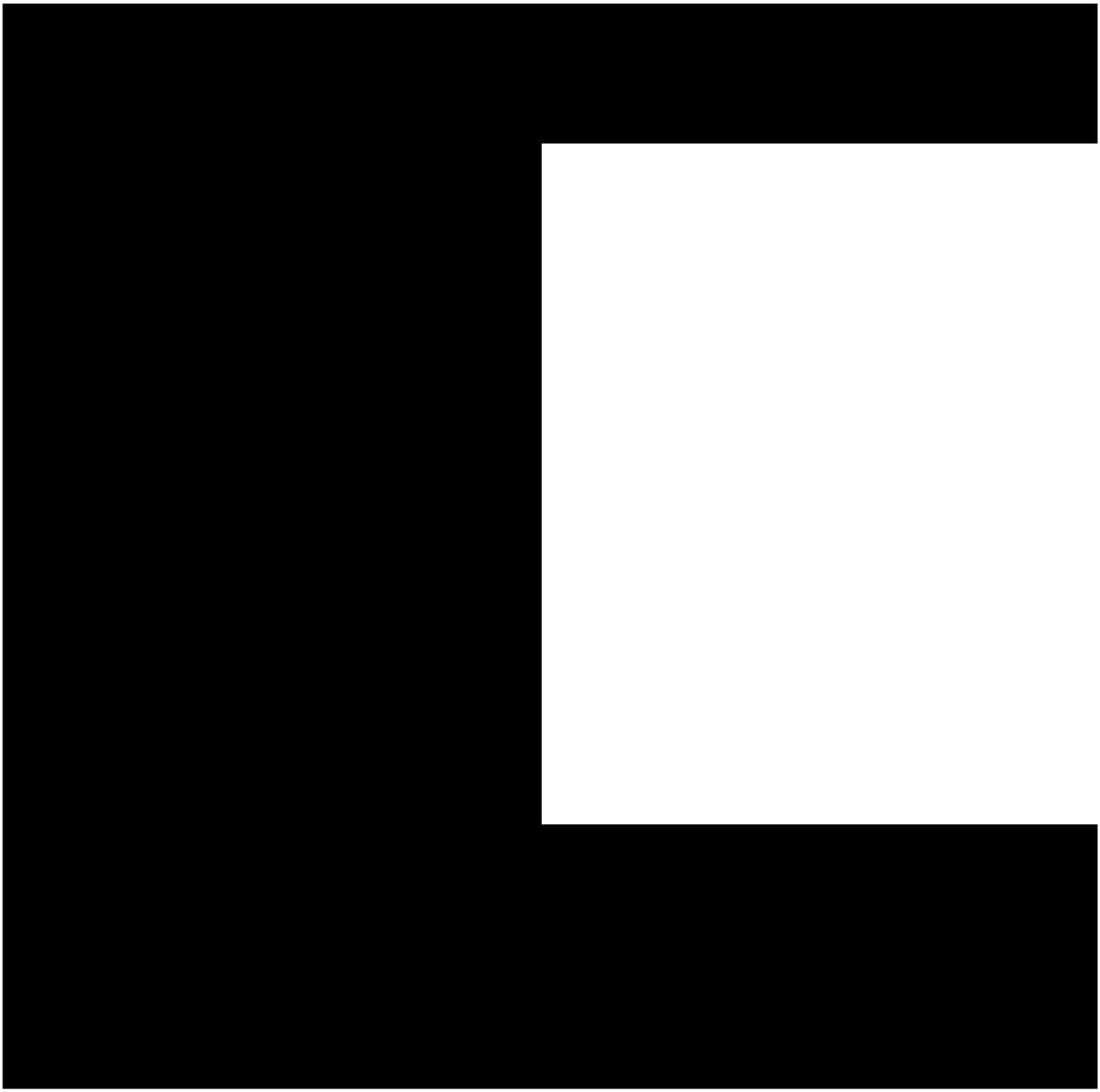


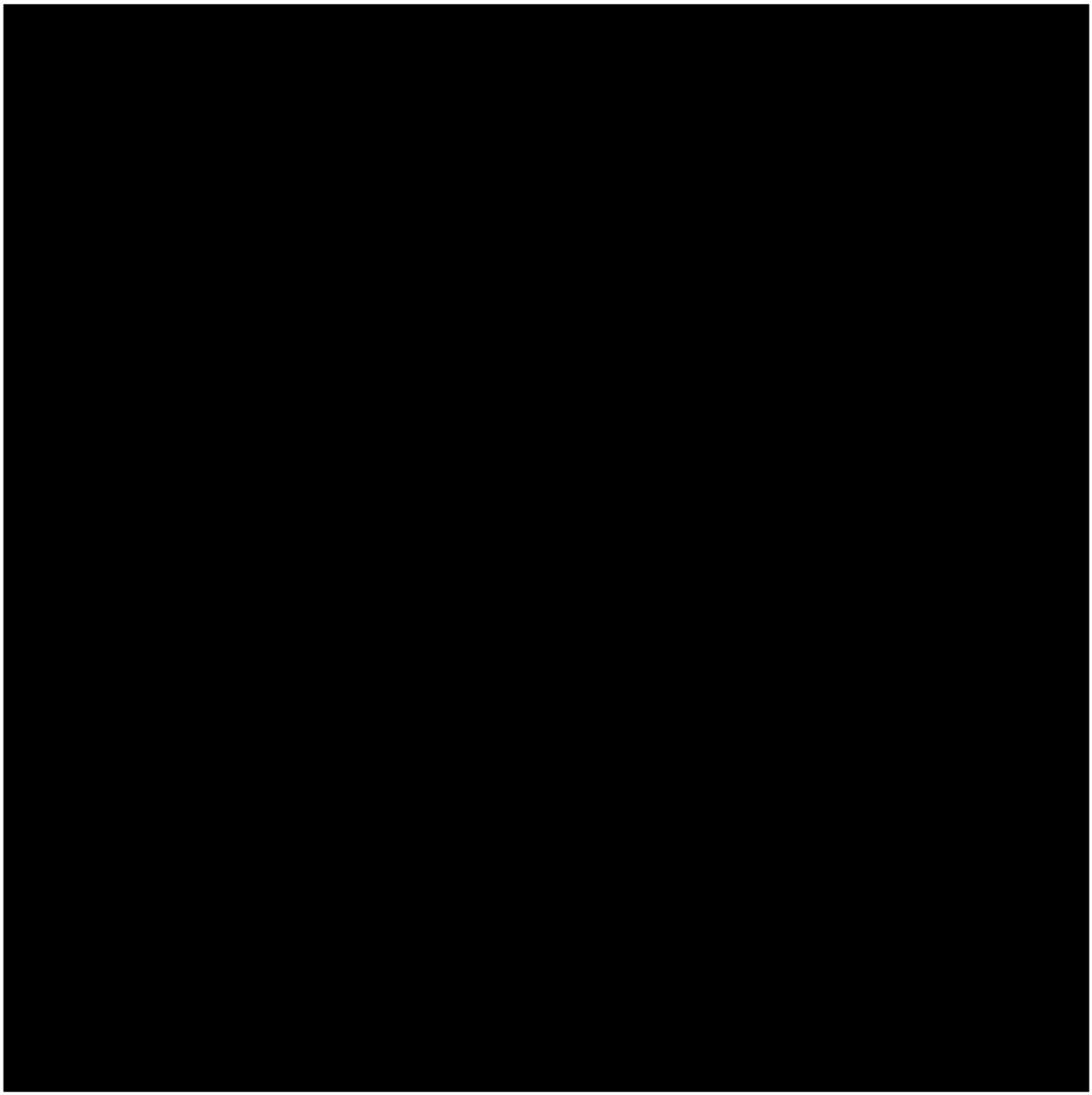


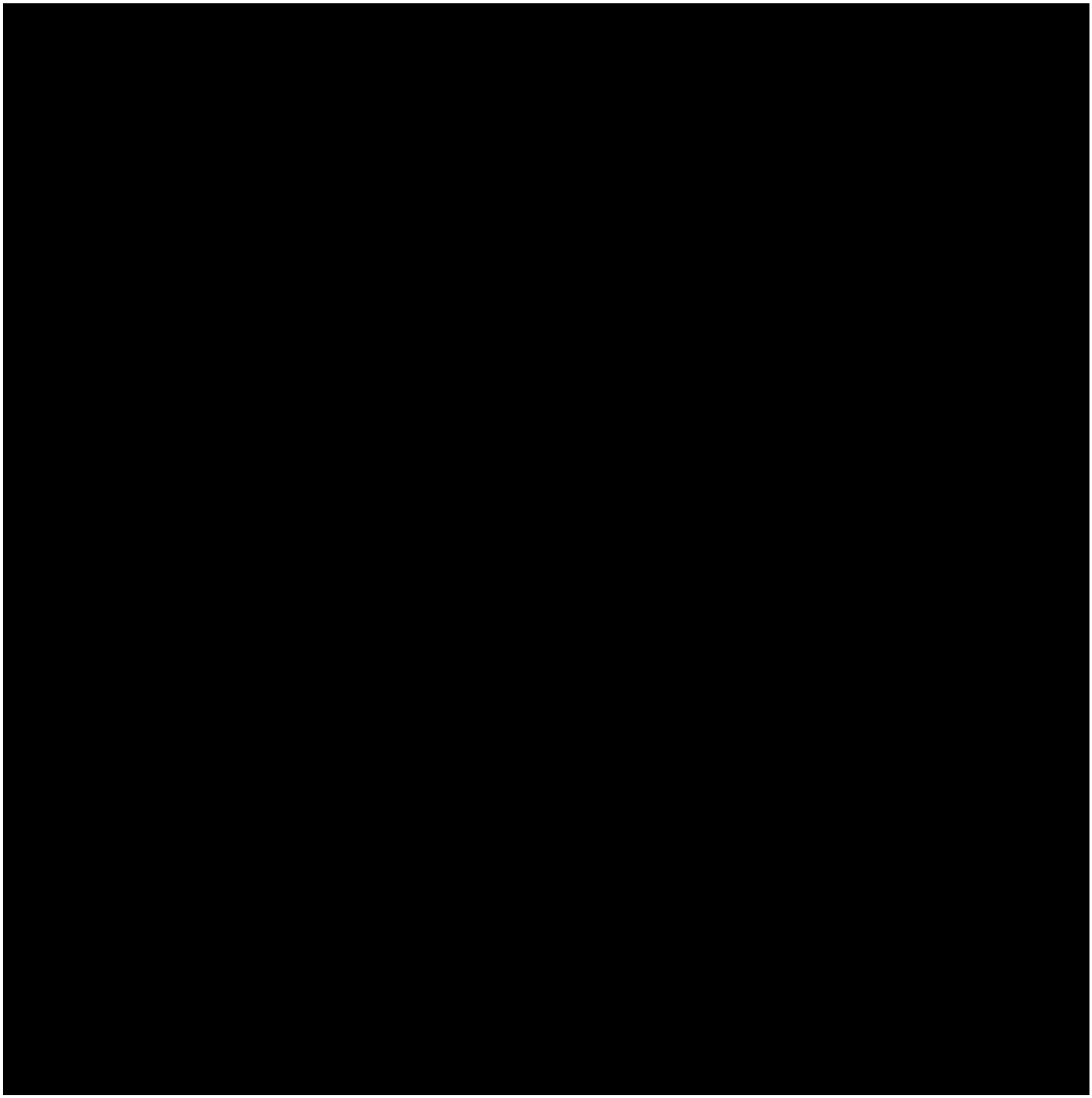


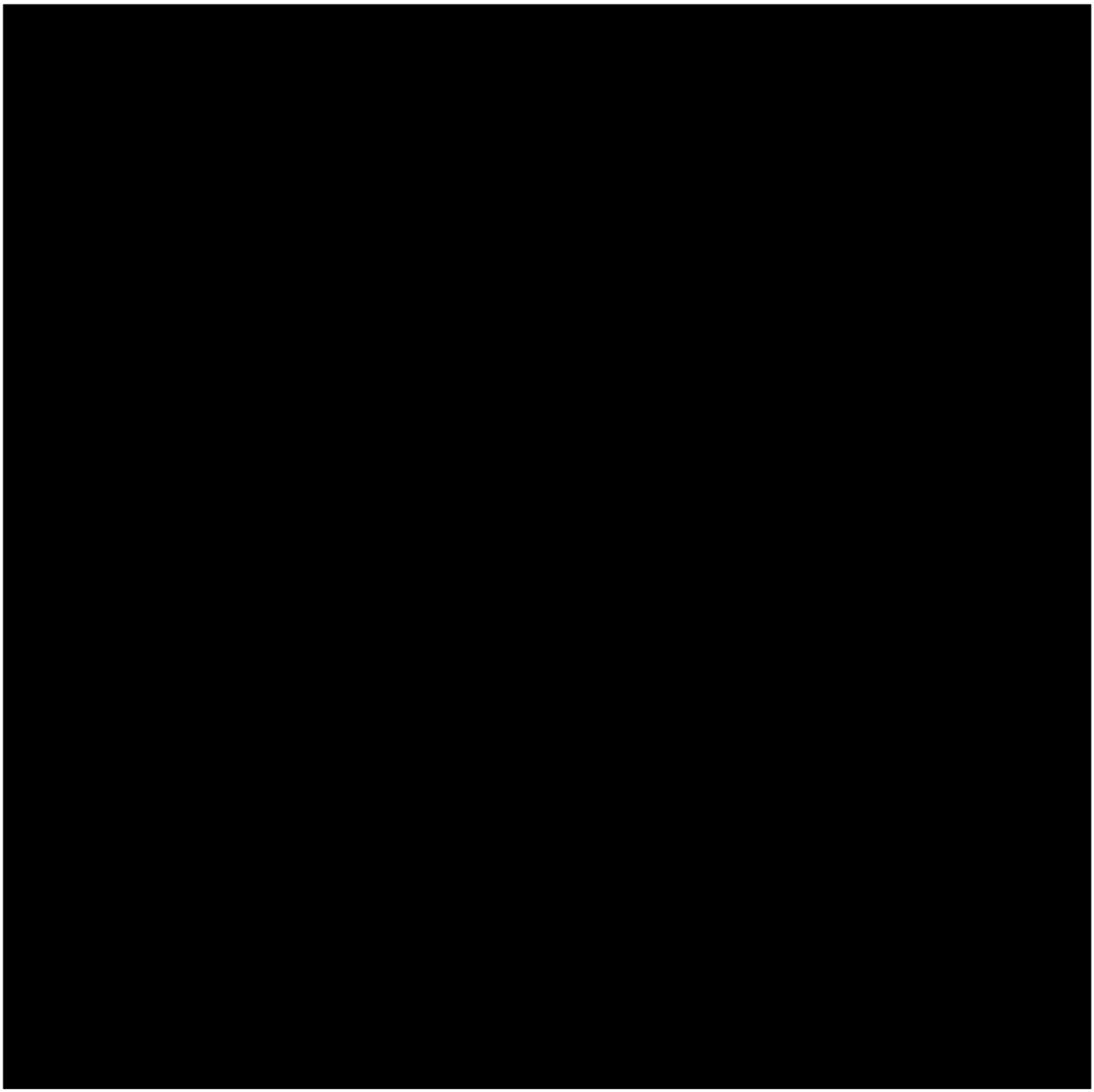












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2.3 SITE-SPECIFIC TRAPPING PROCESSES

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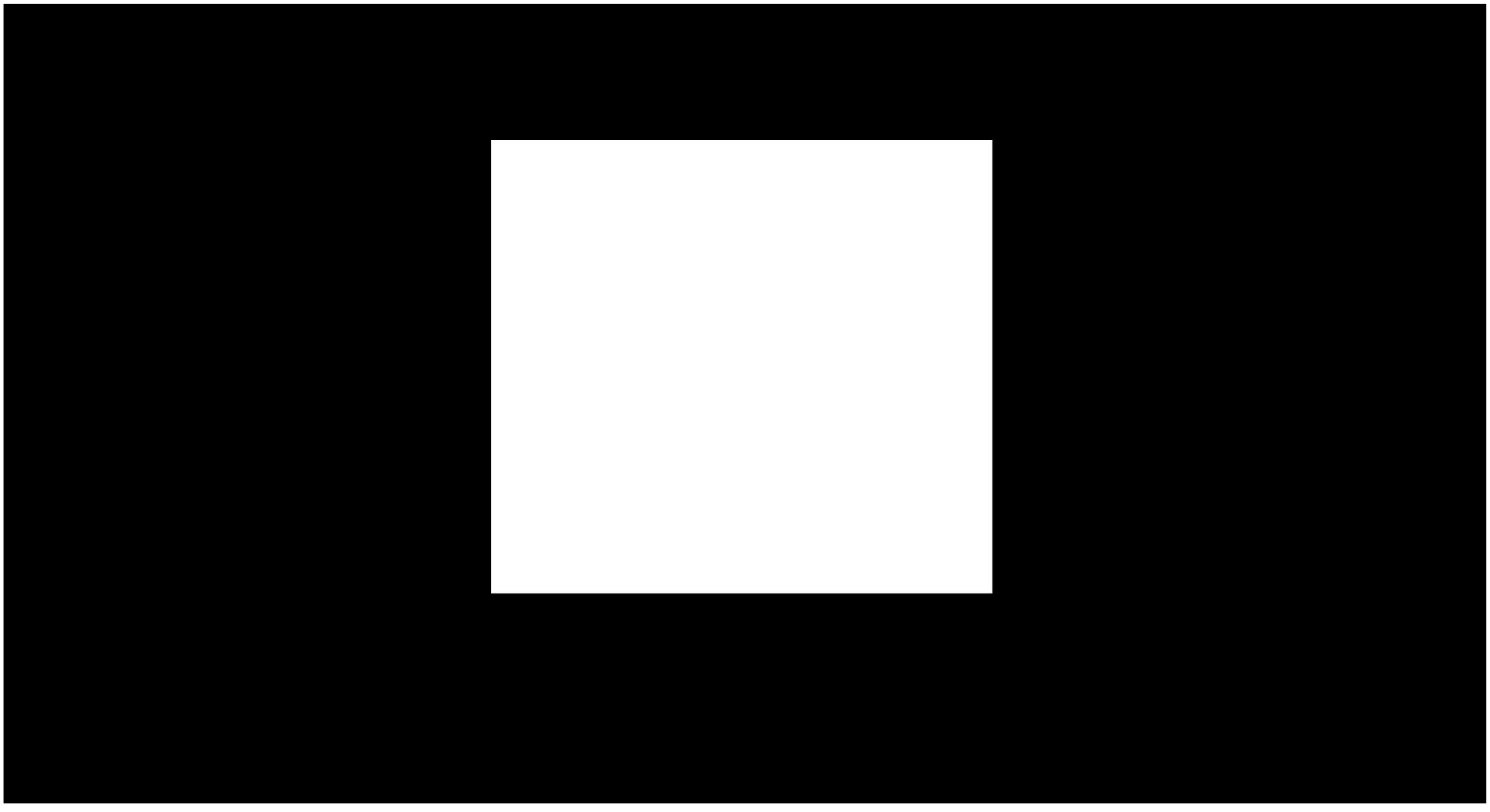

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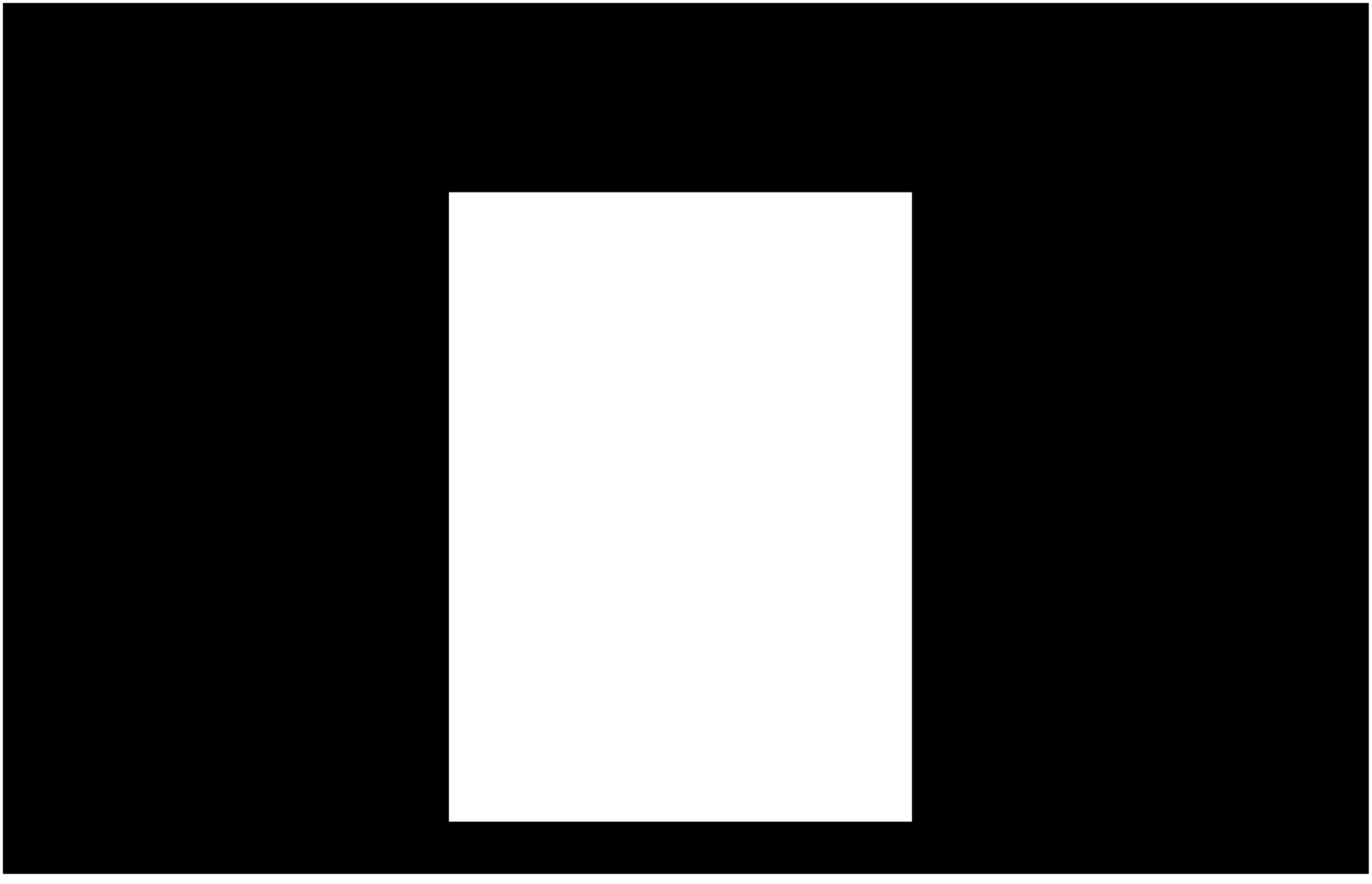

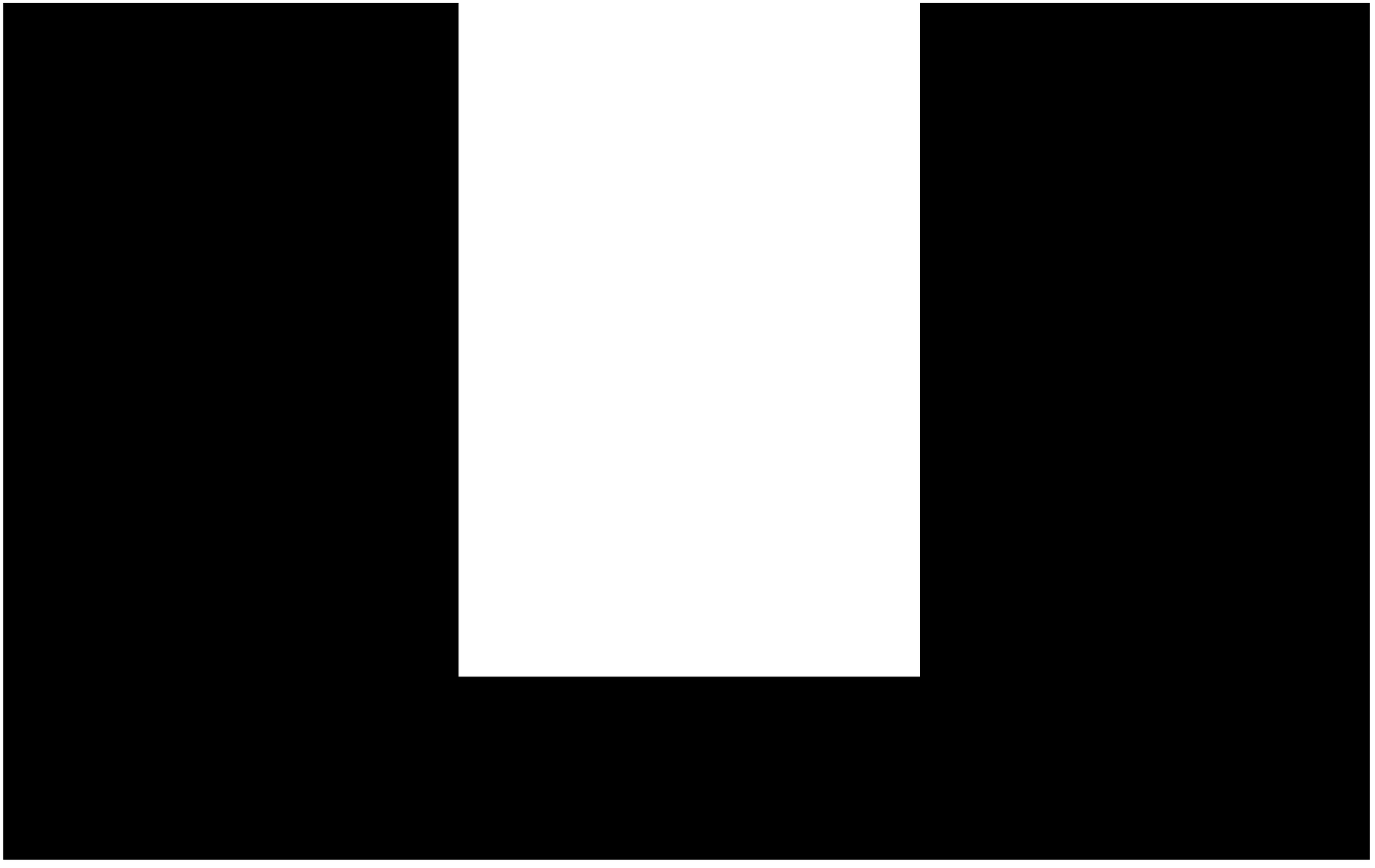

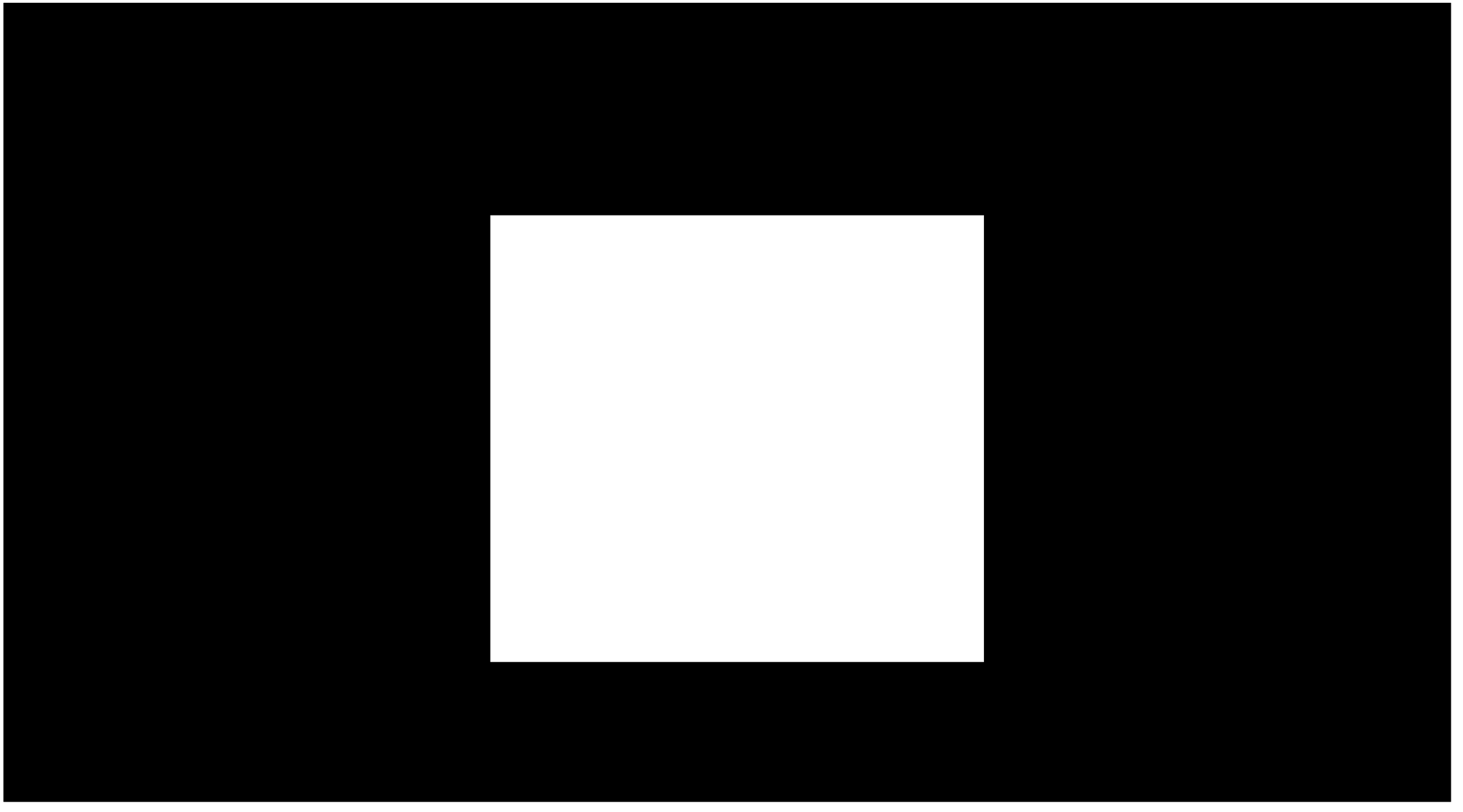

2.3.1 Solubility Trapping

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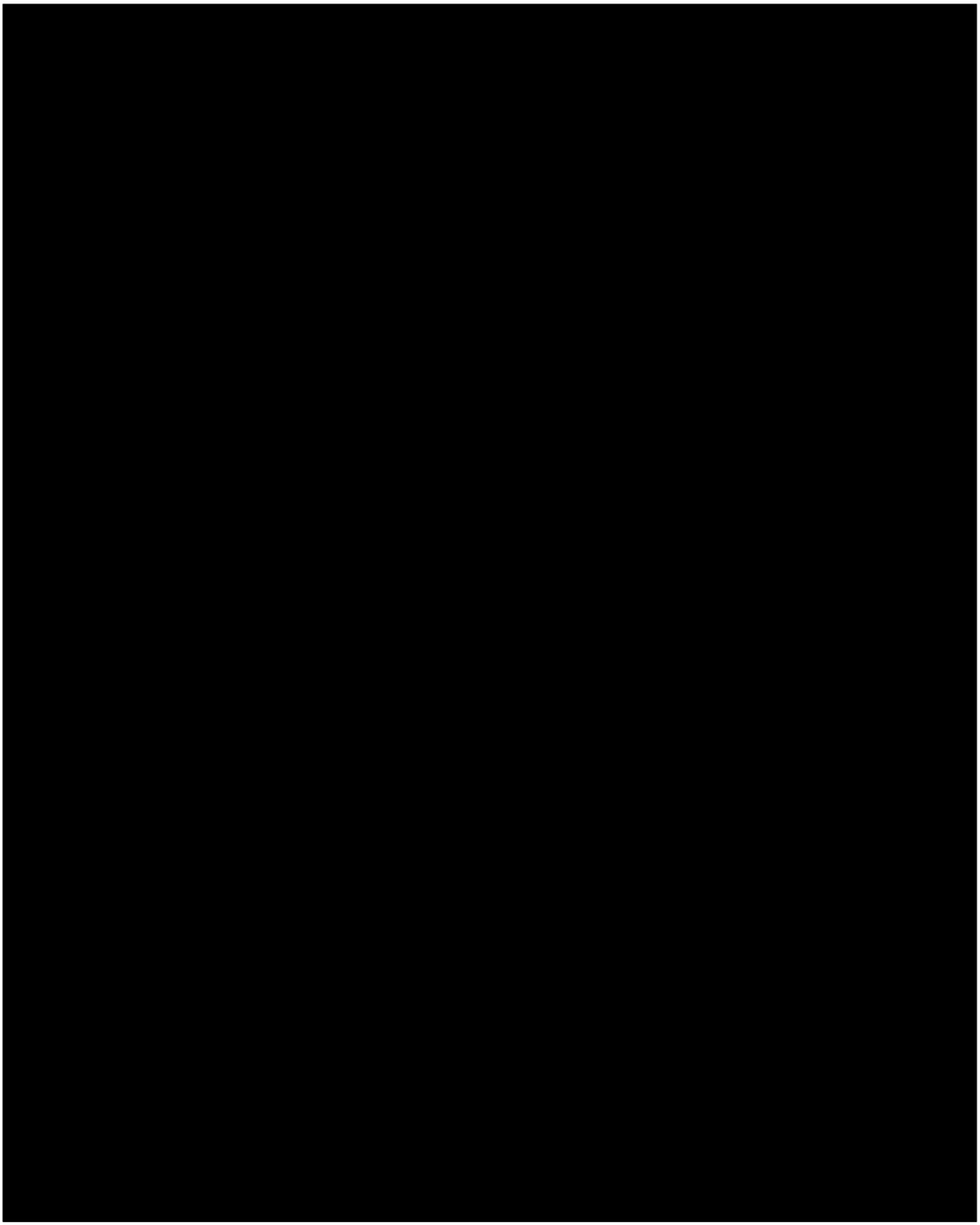

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2.3.2 Residual Trapping

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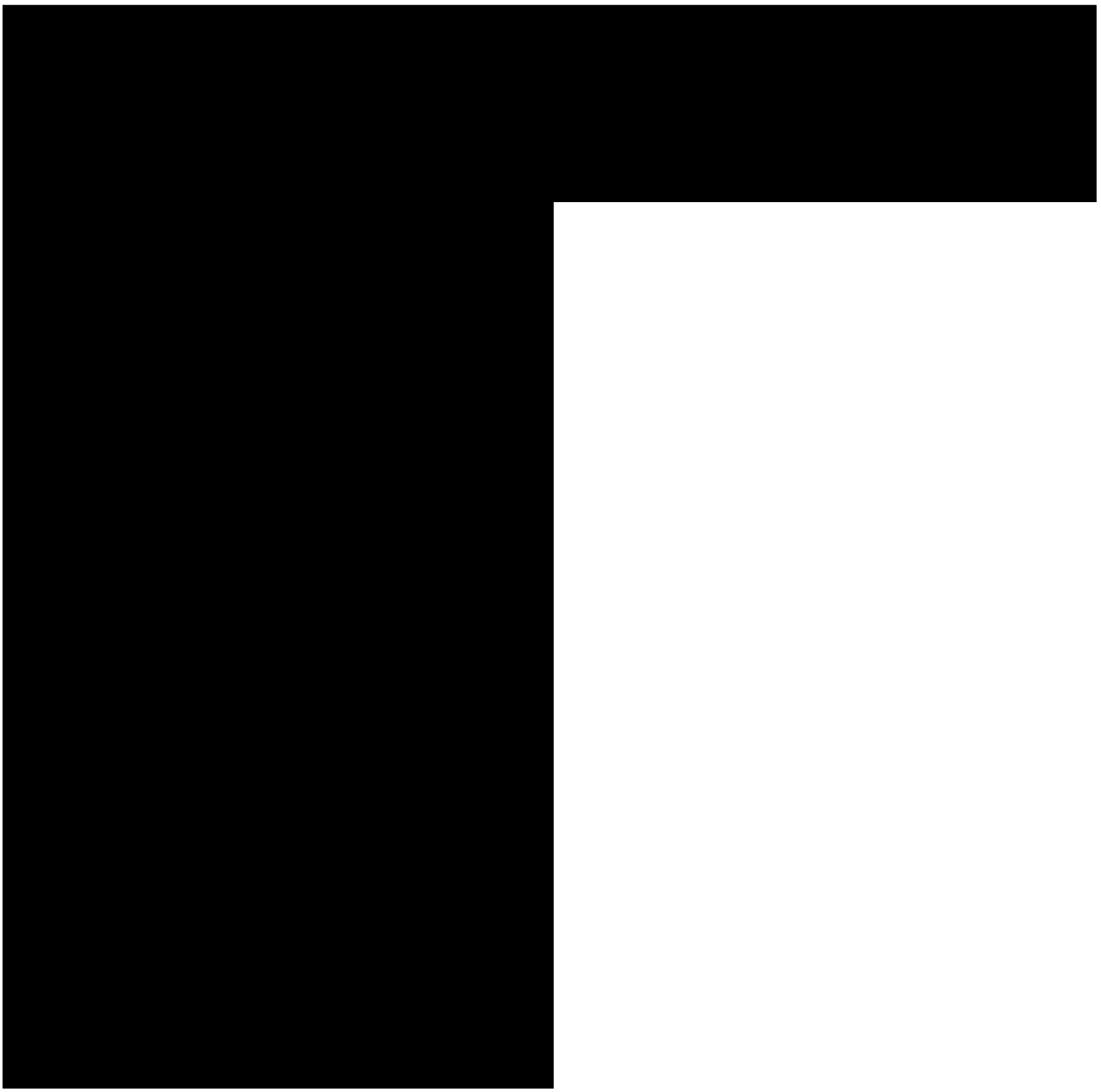
[redacted]

2.3.3 Mineral Trapping

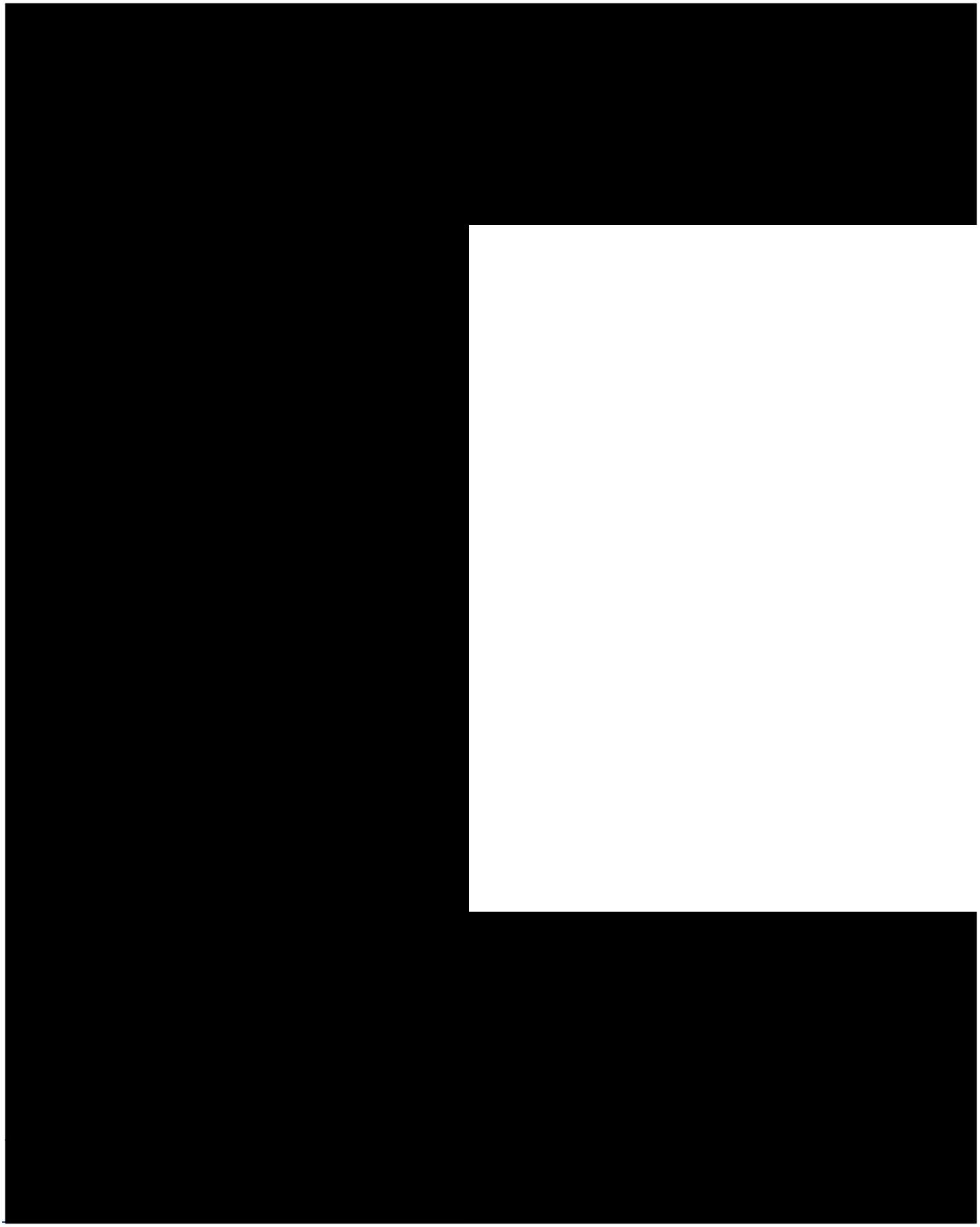
[redacted]



3.0 POST-INJECTION MONITORING PLAN

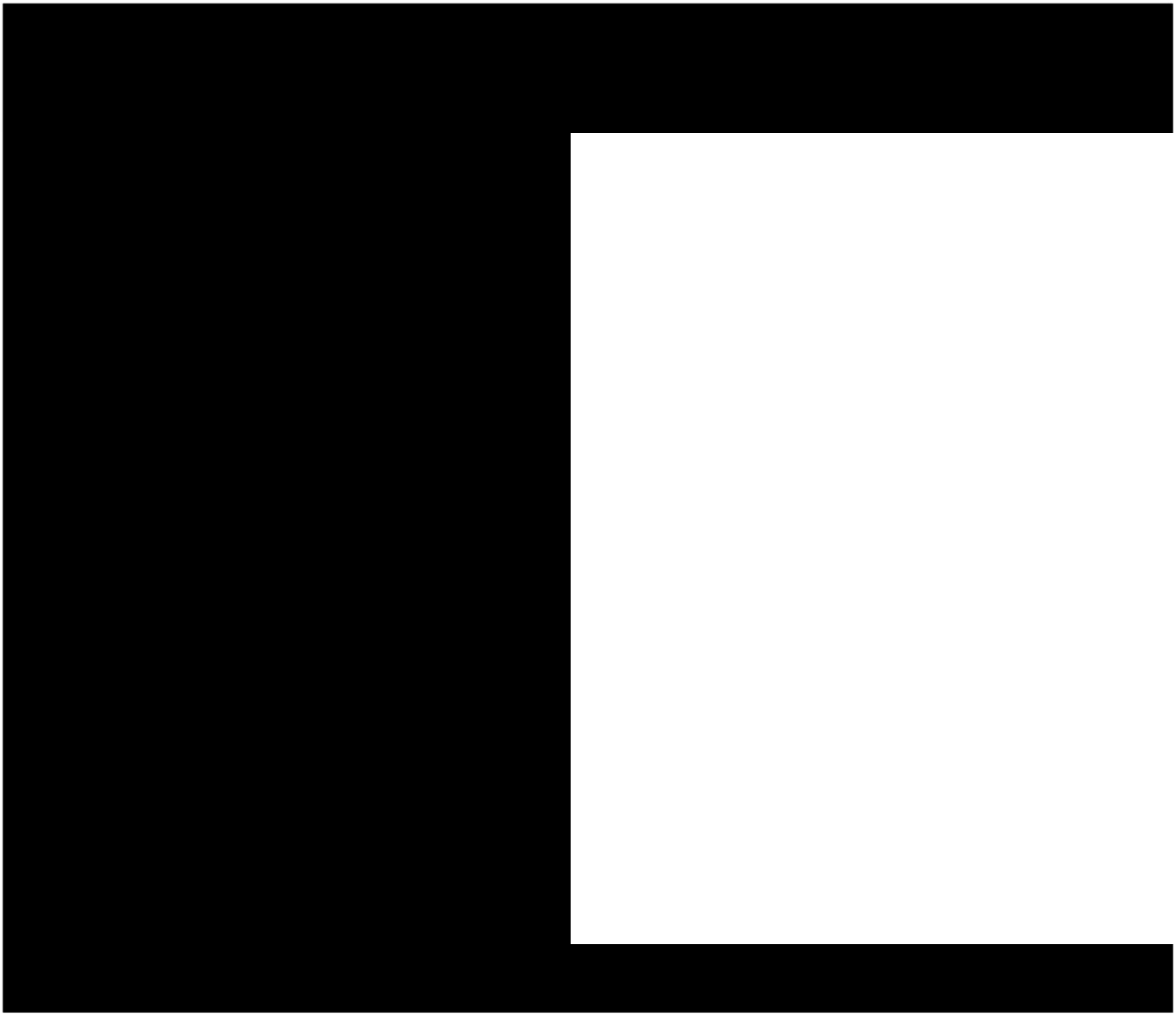
Brief descriptions and durations of the post-injection monitoring activities and the frequency of data sampling

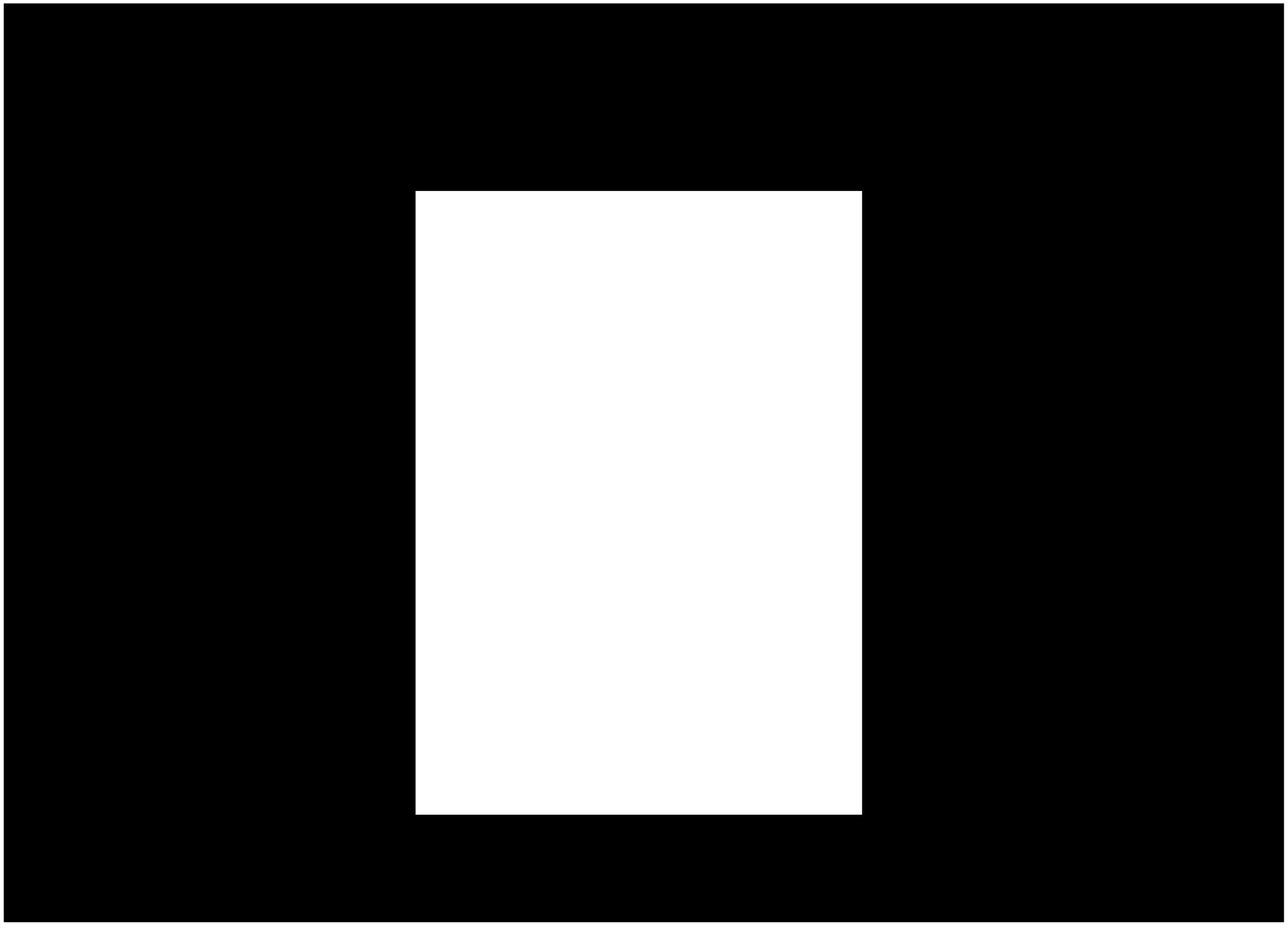
[redacted]

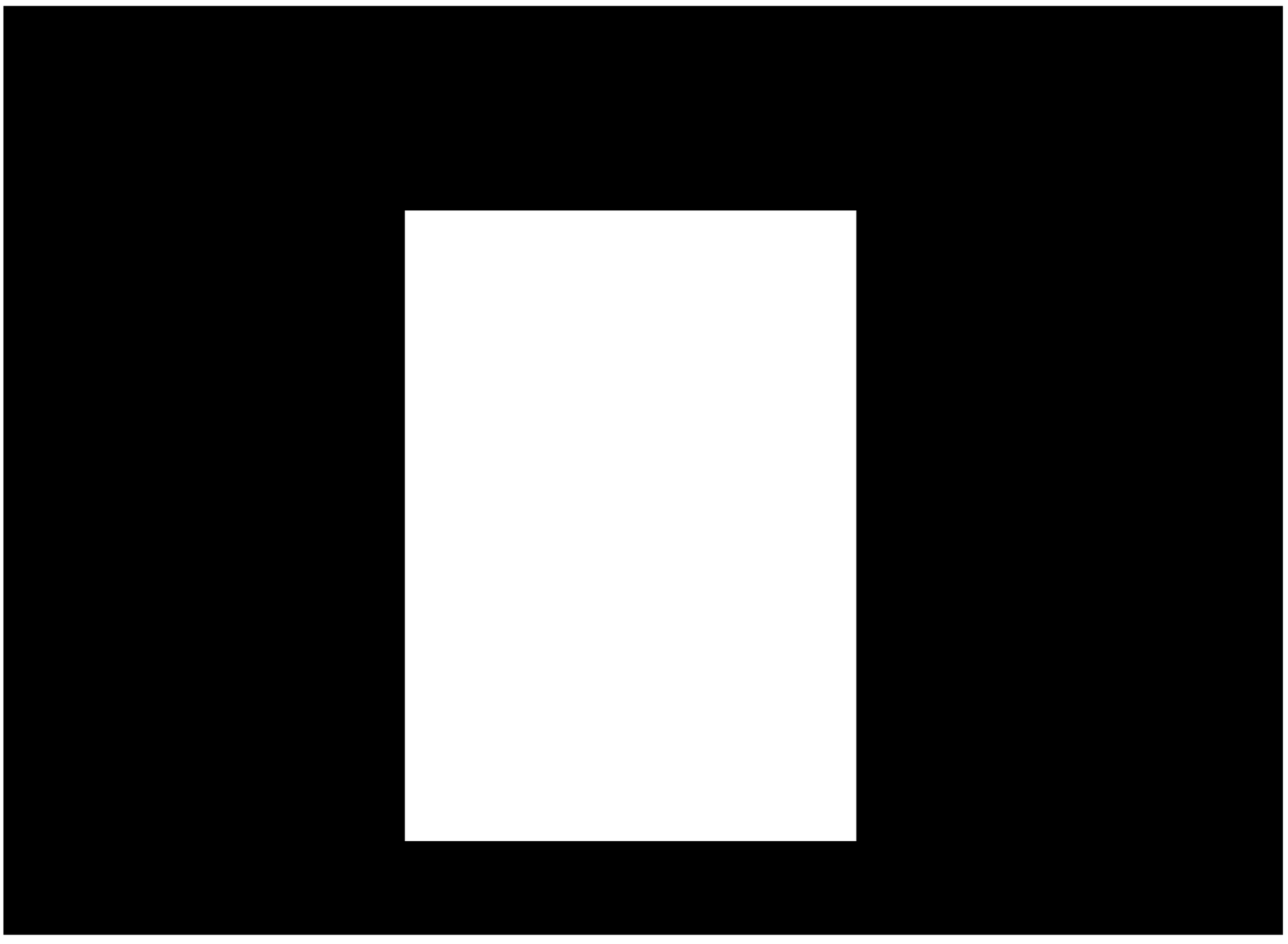


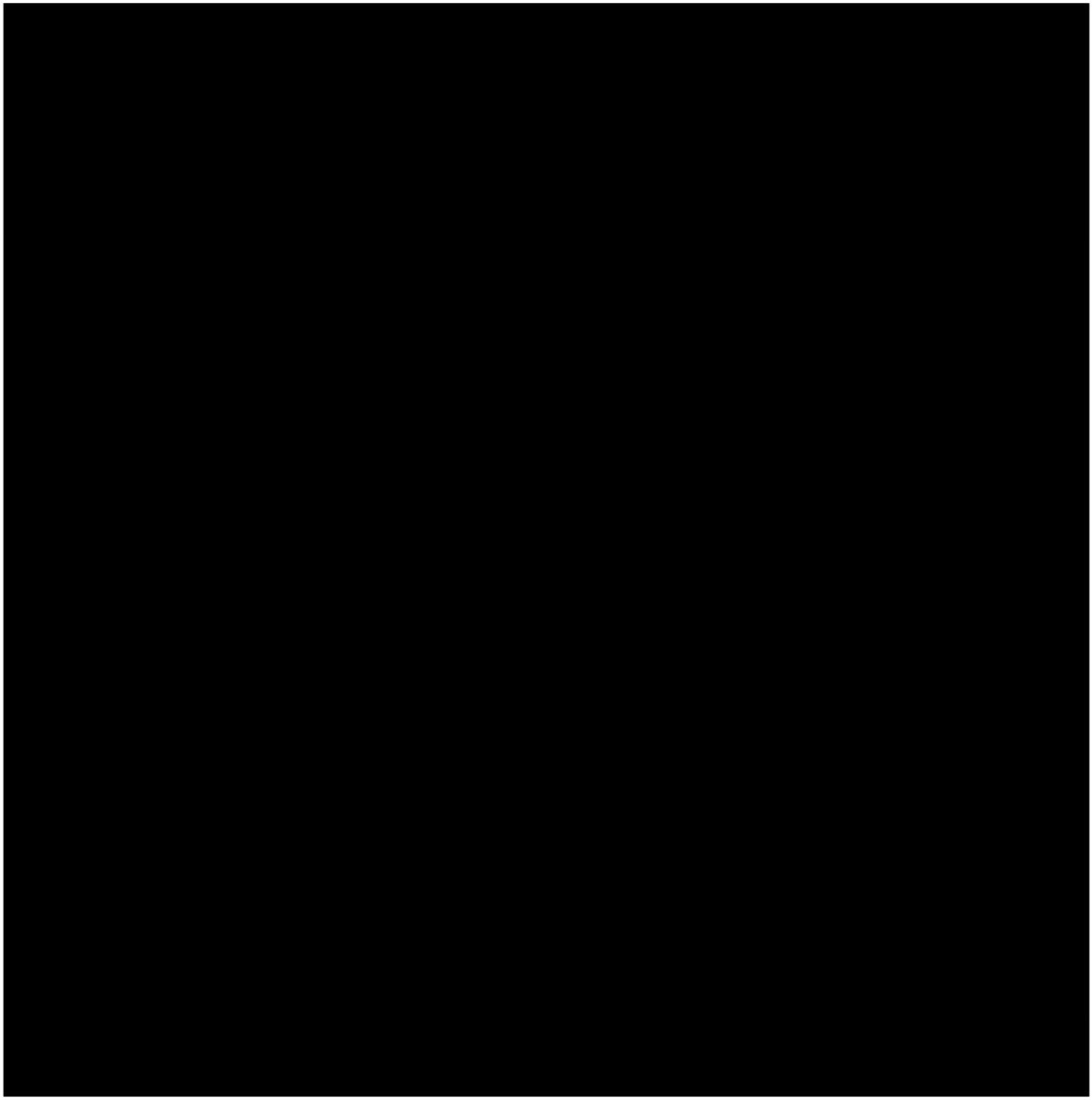
3.1 NEAR-SURFACE TO LOWERMOST USDW MONITORING

3.1.1 Soil Gas Monitoring



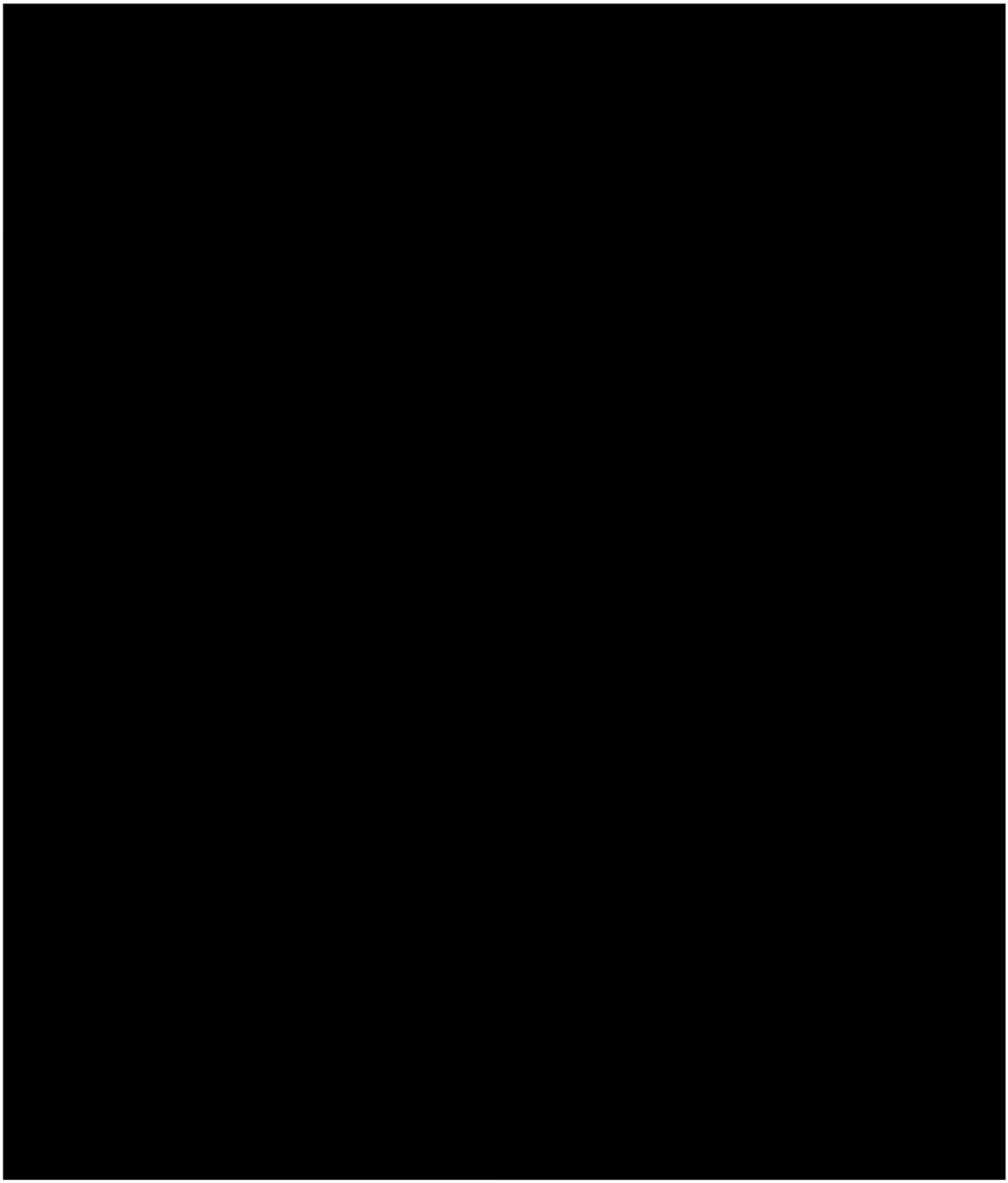






[redacted]

[redacted] The list is consistent with the parameters and analyses planned for baseline and operational monitoring, as described in detail in the Testing and Monitoring Plan document. [redacted]



[redacted]

3.2 CO_2 PLUME AND PRESSURE FRONT TRACKING

[redacted] The timeframe of these monitoring efforts will encompass the PISC period. [redacted]

3.2.1 Direct Monitoring Methods

[redacted]

[redacted]

3.2.2 Indirect Monitoring Methods

[redacted]

3.3 SCHEDULE FOR SUBMITTING POST-INJECTION MONITORING RESULTS

All post-injection site care monitoring data and monitoring results collected using the methods described above will be submitted to USEPA and/or LDNR in reports submitted [redacted] The reports will contain information and data generated during the reporting period [redacted]

3.4 ALTERNATIVE POST-INJECTION SITE CARE TIMEFRAME

[redacted]

4.0 NON-ENDANGERMENT DEMONSTRATION CRITERIA

Prior to approval of the end of the post-injection phase, Denbury will submit a demonstration of non-endangerment of USDW to the UIC Program Director, per USEPA 40 CFR §146.93(b)(2), (3) and LDNR Commissioner per LAC43: XVII §3633.A.2.b and c. Denbury may also issue a non-endangerment demonstration report to propose for early site closure to the UIC Program Director and LDNR Commissioner with substantial evidence that the geologic sequestration project no longer poses a risk of endangerment to USDW. [redacted] In addition to the considerations, each explained in the following sections, the report will also include any other site-specific data or information that may support a demonstration of USDW protection and non-endangerment.

4.1 OPERATIONAL AND POST-INJECTION PHASE MONITORING DATA AND INFORMATION

A summary and synthesis of all testing and monitoring data collected during the injection and PISC phases of the project will be submitted to help demonstrate non-endangerment. [redacted] The summary of monitoring information will be in a narrative form including an explanation of monitoring activities, the dates of all monitoring events, changes to the monitoring program over time, and an explanation of all monitoring infrastructure that has existed at the site. [redacted]

4.2 CURRENT AOR EVALUATION

[redacted]

4.3 LOCATION OF USDW

[redacted]

4.4 THE STATUS OF POTENTIAL CONDUITS FOR FLUID MOVEMENT WITHIN THE AOR

[redacted]

[redacted]The demonstration will include a narrative explanation of the analyses conducted to identify potential conduits, a listing of all potential conduits, and an explanation of why each conduit will not pose an endangerment to USDW, supplemented by monitoring data confirming no existing leakage. [redacted]

5.0 SITE CLOSURE PLAN

Post-injection reclamation will occur at the end of the PISC period to meet the requirements of 40 CFR §146.93(e) and LAC43: XVII §3633.A.5. [redacted]The USEPA Region 6: UIC Branch will be notified at least 120 days before site closure. A revised site closure plan will be submitted if any changes have been made to the original site closure plan. After site closure is authorized, site closure field activities will be completed.

5.1 SURFACE EQUIPMENT DECOMMISSIONING

[redacted]

5.2 MONITORING WELL PLUGGING

[redacted]

[redacted]

5.3 SITE RESTORATION/REMEDIAL ACTIVITIES

[redacted]

5.4 SITE CLOSURE REPORTING

A site closure report will be submitted to the USEPA Region 6 UIC Branch and LDNR within 90 days of site closure. The site closure report will include the following information:

- Documentation of appropriate well plugging, including a survey plat of the injection well location;
- Documentation of the well-plugging report to Louisiana and local agencies that have authority over drilling activities at the facility site; and
- Records reflecting the nature, composition, and volume of the CO_2 injected in UIC wells.

In association with site closure, a record of notation on the facility property deed will be added to provide any potential purchaser of the property with the following information:

- Notification that the subsurface is used for CO_2 storage;
- The name of the Louisiana local agencies and USEPA Region 6 Office to which the survey plat was submitted; and
- The volume of fluid injected, the injection zone, and the period over which injection occurred.

PISC records will be retained for 10 years after site closure. At the conclusion of this 10-year period, these records will be delivered to the USEPA Region 6 UIC Branch for further storage.

6.0 REFERENCES

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