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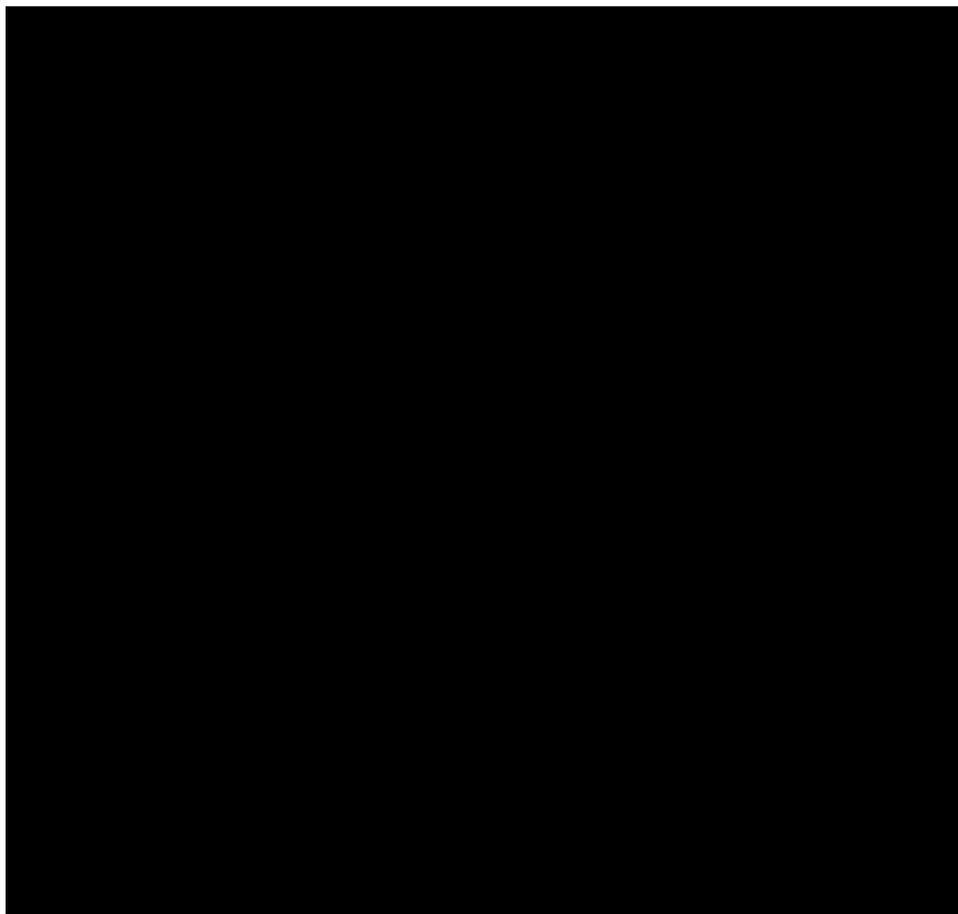
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20 October 1966

SPACE EVENT REPORT

LUNA-7 -- 4 OCTOBER 1965

CENTRAL INTELLIGENCE AGENCY
DIRECTORATE OF SCIENCE AND TECHNOLOGY
FOREIGN MISSILE & SPACE ANALYSIS CENTER

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SPACE EVENT REPORT

LUNA-7 -- 4 OCTOBER 1965

SUMMARY

Luna-7, a Soviet probe intended to soft land on the moon, was launched from the Tyuratam Missile Test Range [REDACTED] on 4 October 1965. The vehicle was initially placed in a parking orbit using the SS-6 booster/sustainer combination and the Venik third stage. At approximately 0903Z on orbit one, the vehicle was successfully injected into a lunar trajectory. A mid-course correction attempted on 5 October was also successful; however, the mission ended in failure. The probe impacted the moon at 2208:27Z on 7 October near Kepler Crater in the Ocean of Storms.

Luna-7 is the seventeenth failure in the nineteen attempts identified with the lunar program. The only fully successful lunar probes were Luna-2 and Luna-3, both direct ascent launches in 1959. Of the ten lunar attempts using the parking-orbit technique none achieved any significant degree of success.

This report was produced by the CIA. It was prepared solely by the Foreign Missile and Space Analysis Center of the Directorate of Science and Technology.

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DATA

Soviet Press Announcements

Announcements by TASS as they appeared in various issues of Pravda are as follows:

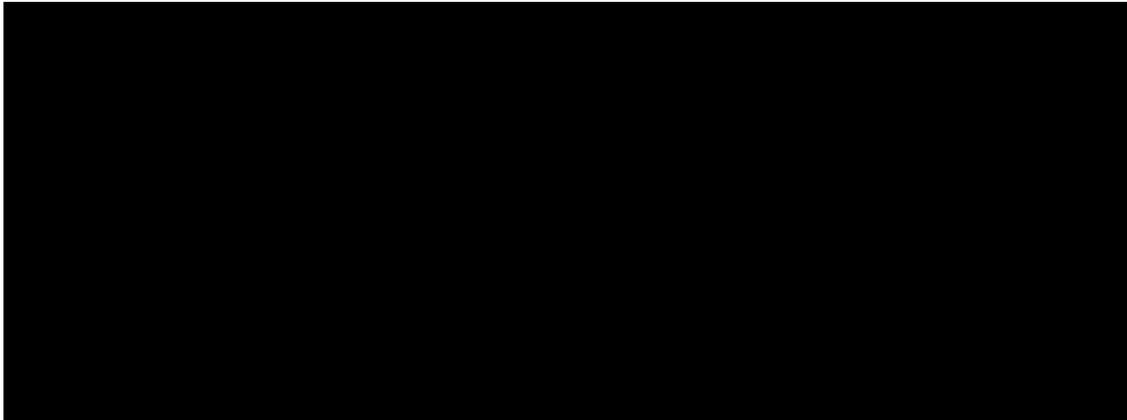
5 October: "In accordance with the program for investigations of cosmic space and planets of the solar system, on 4 October 1965 in the Soviet Union a cosmic rocket was launched toward the moon. On board the cosmic rocket is automatic station 'Luna-7', weighing 1506 kg, which is equipped with measuring equipment for conducting scientific research. The launch was made with the aid of a multi-staged rocket. The last stage of the rocket was initially placed in an intermediate orbit of a satellite of the earth and afterward, in accordance with the assigned program, injected the automatic station into a trajectory toward the moon. The telemetric measuring and scientific equipment was switched on automatically in accordance with the flight program and also on radio command from the earth. Observation of the flight of 'Luna-7', determination of its trajectory parameters, and receipt of scientific information on the earth are being conducted by a special measuring complex. Automatic station 'Luna-7' is moving along a trajectory near the calculated. At 17 hours Moscow time on 4 October 1965 station 'Luna-7' was located at a distance of 67,300 kilometers from the earth over a point on the earth's surface with coordinates 13°20'N and 113°2'E. All the equipment on board automatic station 'Luna-7' is functioning normally. The coordinating-measuring center is processing incoming information."

7 October: "Automatic station 'Luna-7', launched on 4 October, continues its flight toward the moon. On the morning of 5 October a scheduled radio session was held with the station, at which time, in accordance with the flight program, a correction was made in the flight trajectory of the station. The station was oriented on the sun and moon and then the correcting engine was switched on, making it possible to change the flight trajectory to the assigned direction."

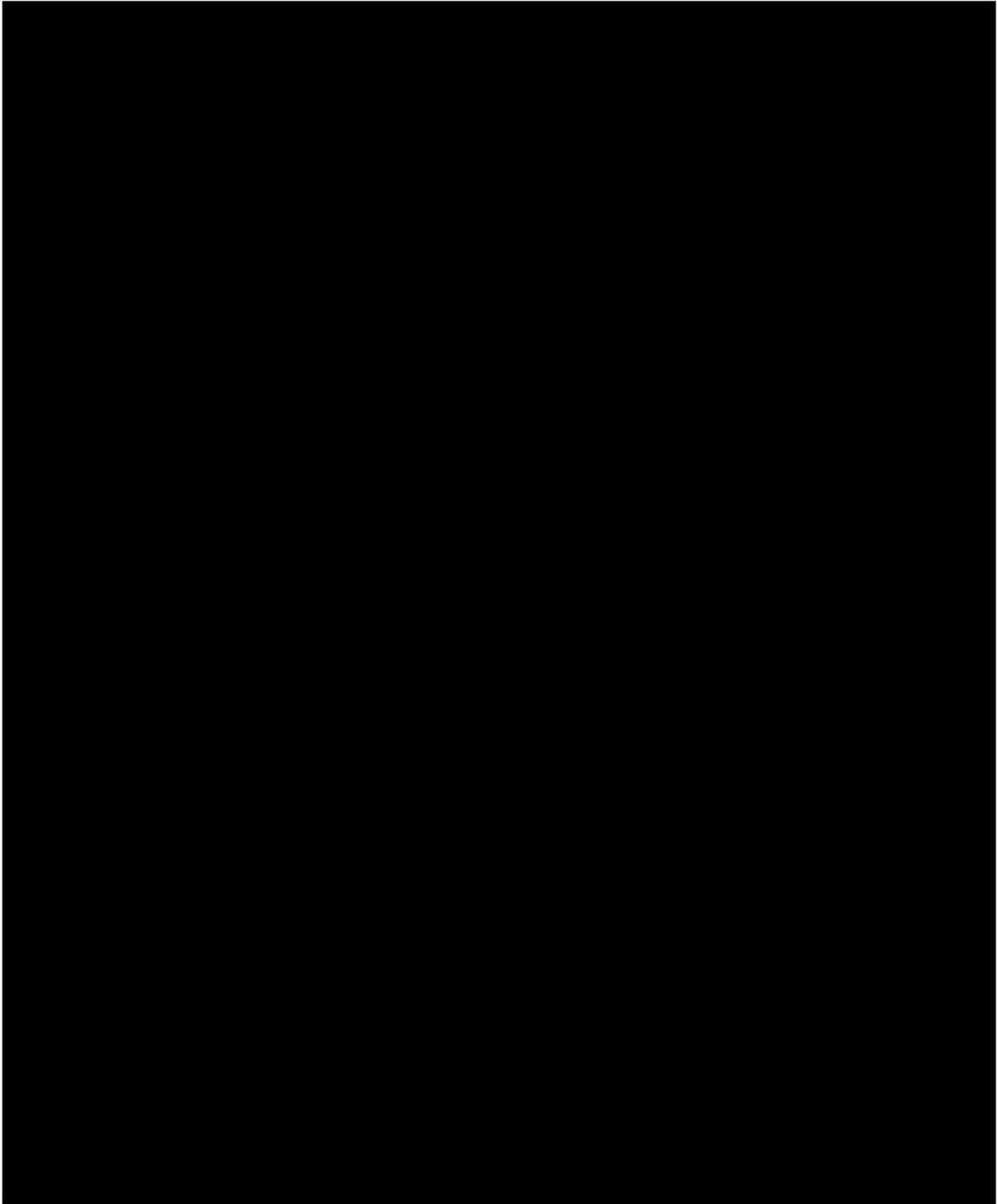
Preliminary processing of the results of radio measurements of trajectory parameters indicated that, as the result of trajectory correction, station 'Luna-7' should contact the moon on 8 October about 1:00 AM Moscow time. Stable radio communications are being maintained with the station. According to telemetry data, all systems of the station are continuing to function normally following the trajectory correction."

8 October: "Automatic station 'Luna-7' is approaching the moon. At 12:00 noon on 7 October the station was located at a distance of 60,000 kilometers from the moon. According to measurement data, contact with the moon should occur on 8 October at 1 hr 08 min Moscow time. Communications with the station are stable. Twelve radio communications have been held with the station since the beginning of the flight. Analysis of telemetric measurements received from the station show normal functioning of onboard systems. The flight trajectory of the station is near the calculated."

9 October: Automatic station 'Luna-7' reached the surface of the moon on 8 October at 1 hr 08 min 24 sec Moscow time in the region of the Ocean of Storms west of Kepler Crater. During the approach to the moon following the correction which was made on 5 October, a large number of operations were performed which were necessary for accomplishing a soft landing on its surface. Certain operations were not accomplished in accordance with the program and require further testing. During the flight of station 'Luna-7' much practical material was obtained for future operations."



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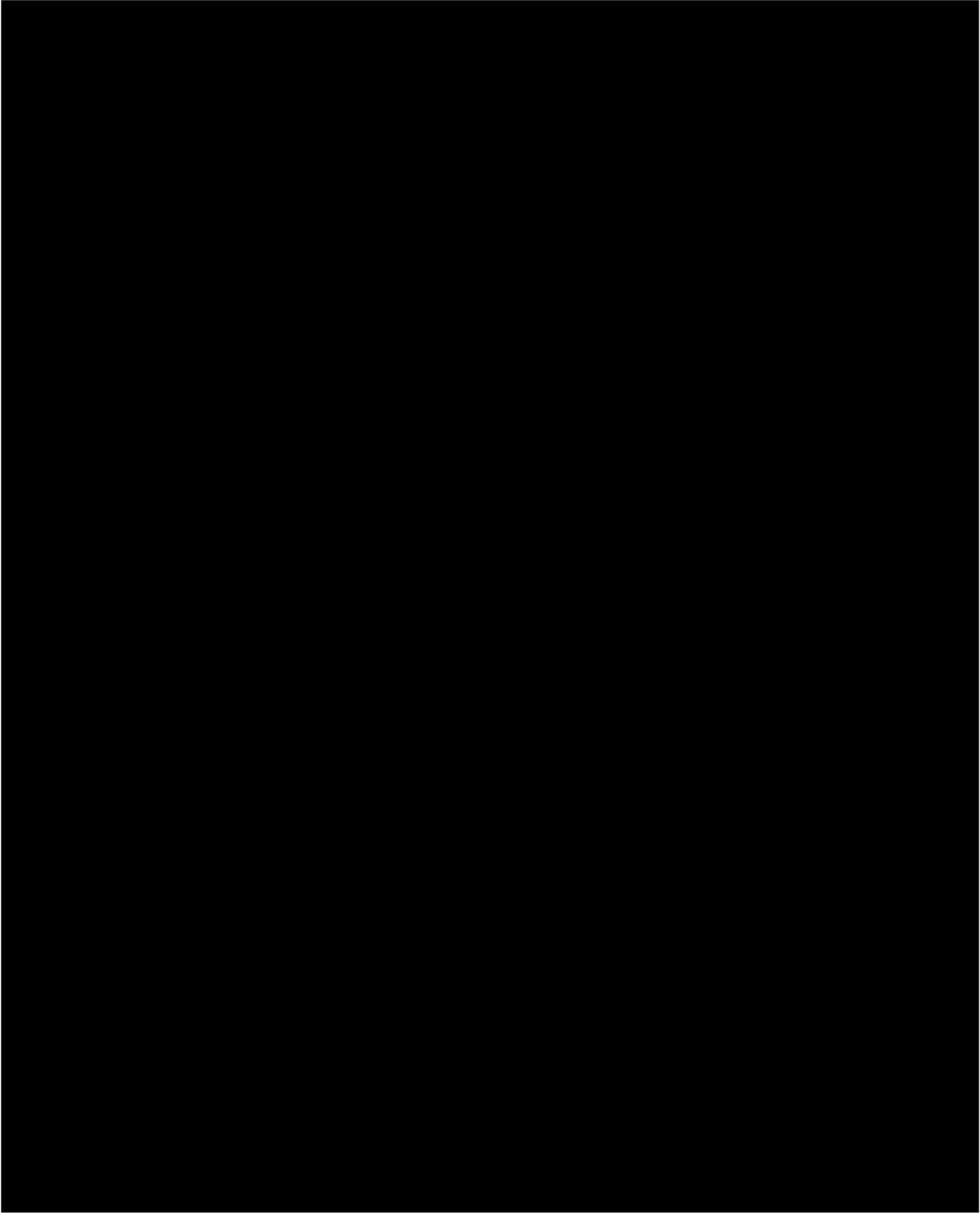


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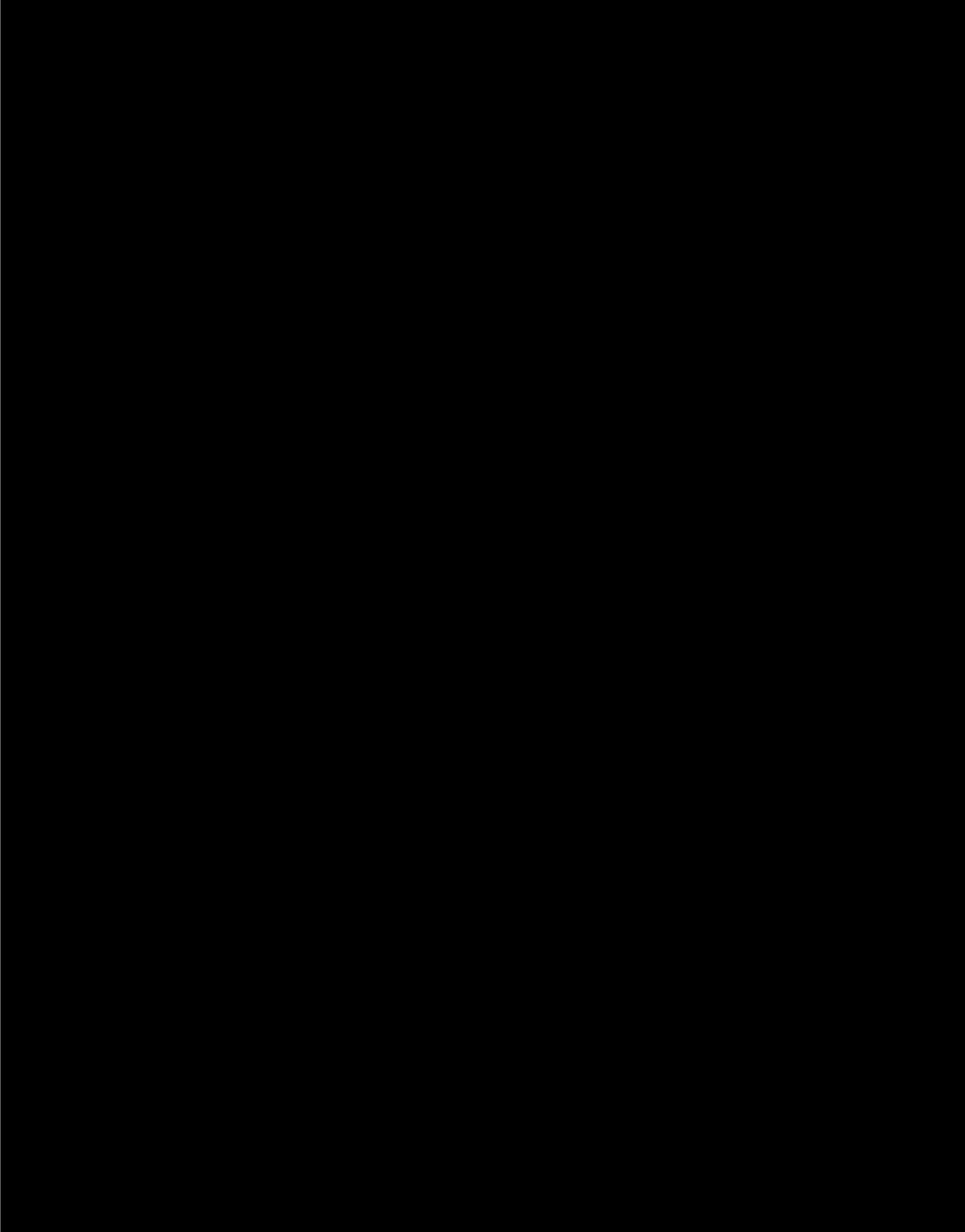


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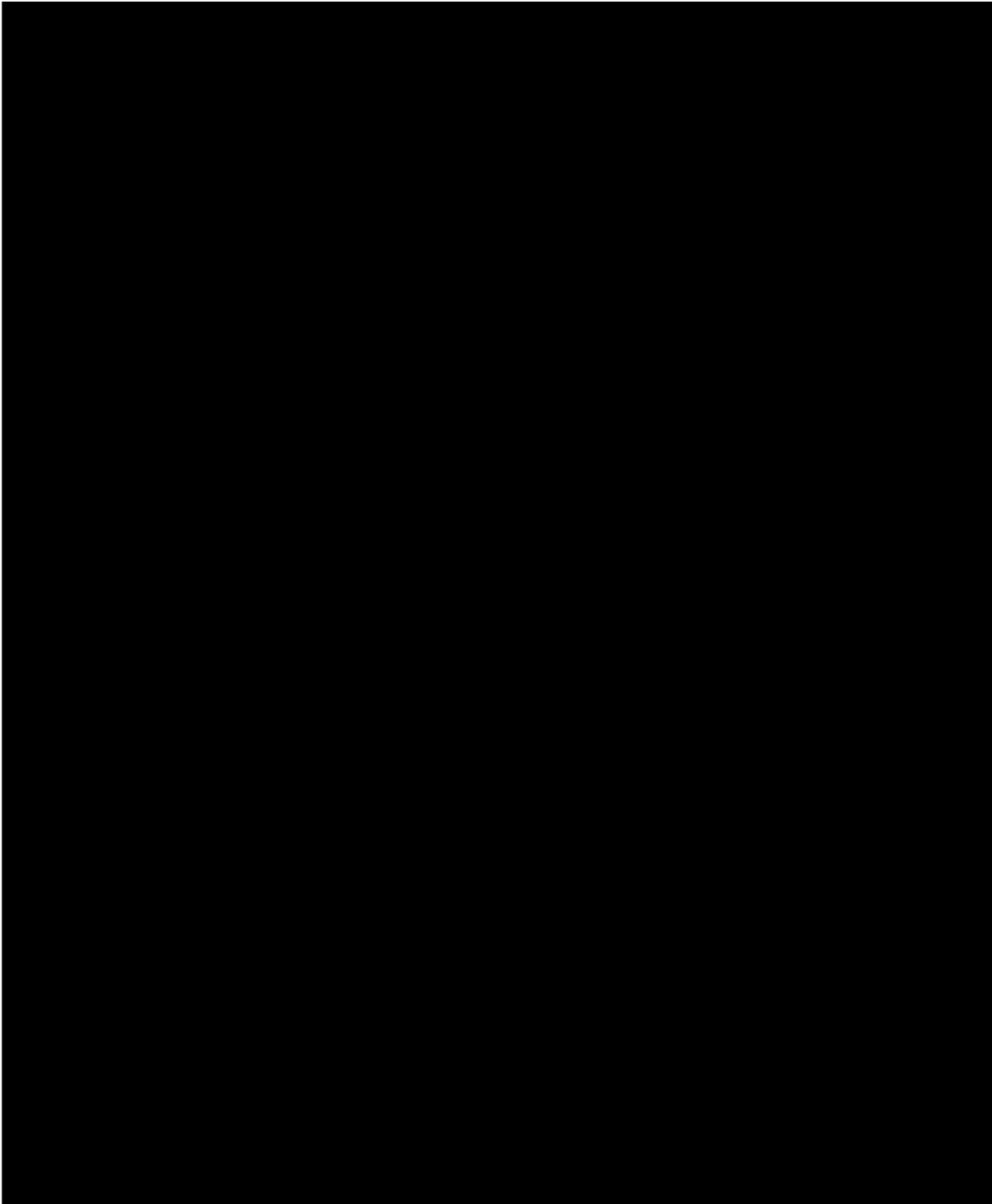
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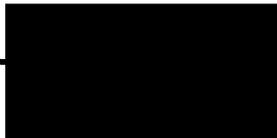
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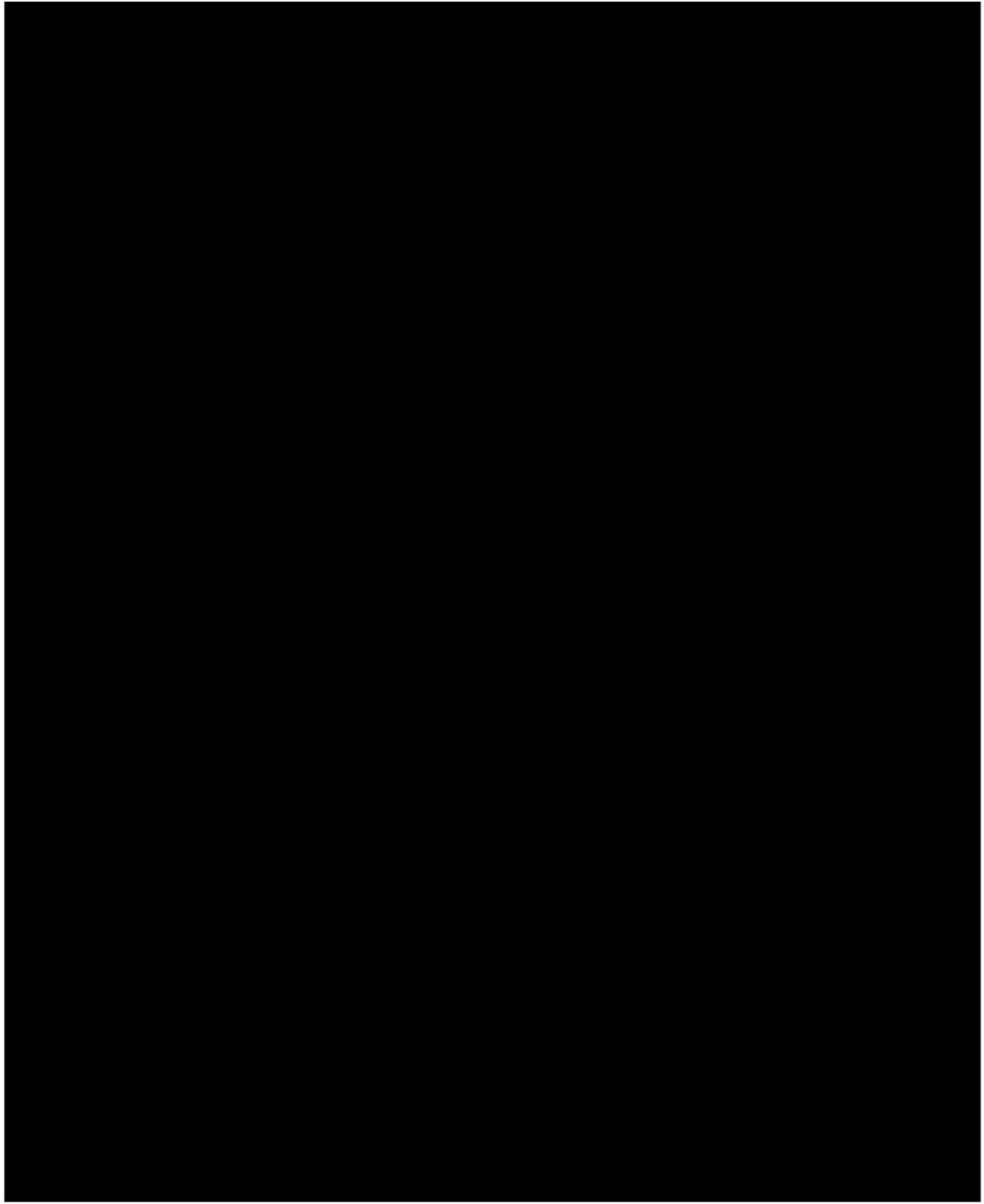
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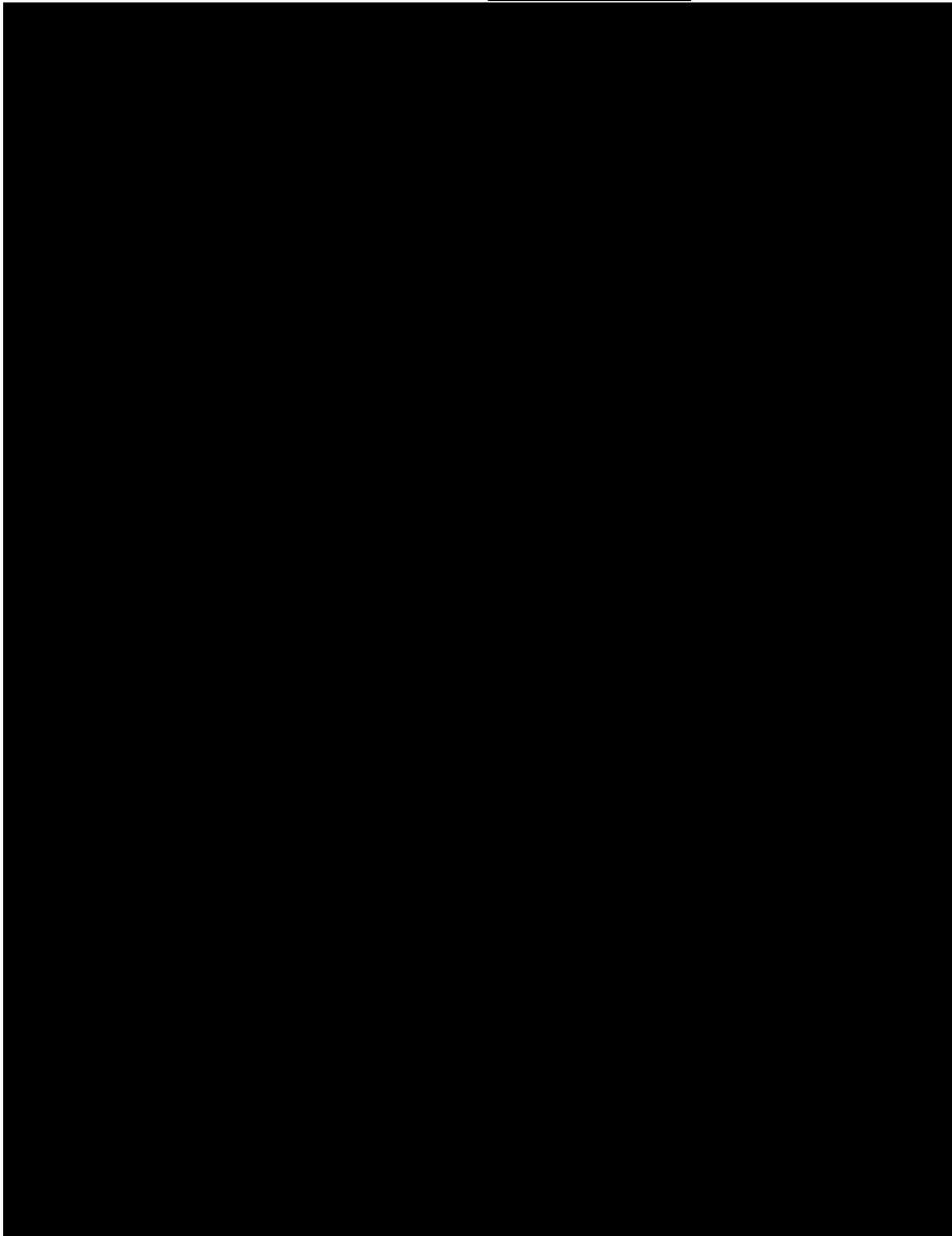
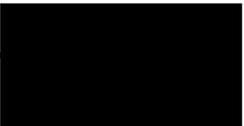
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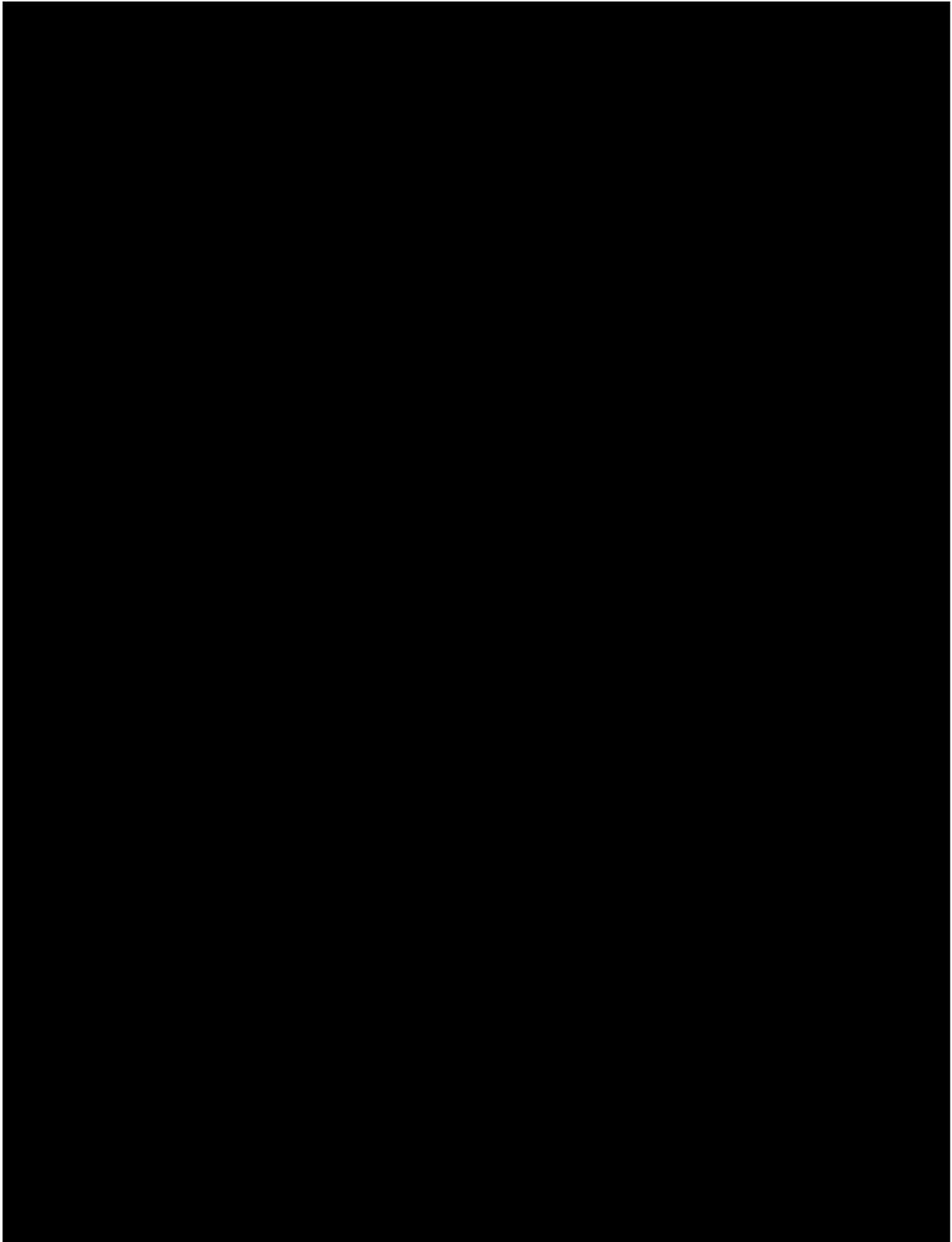
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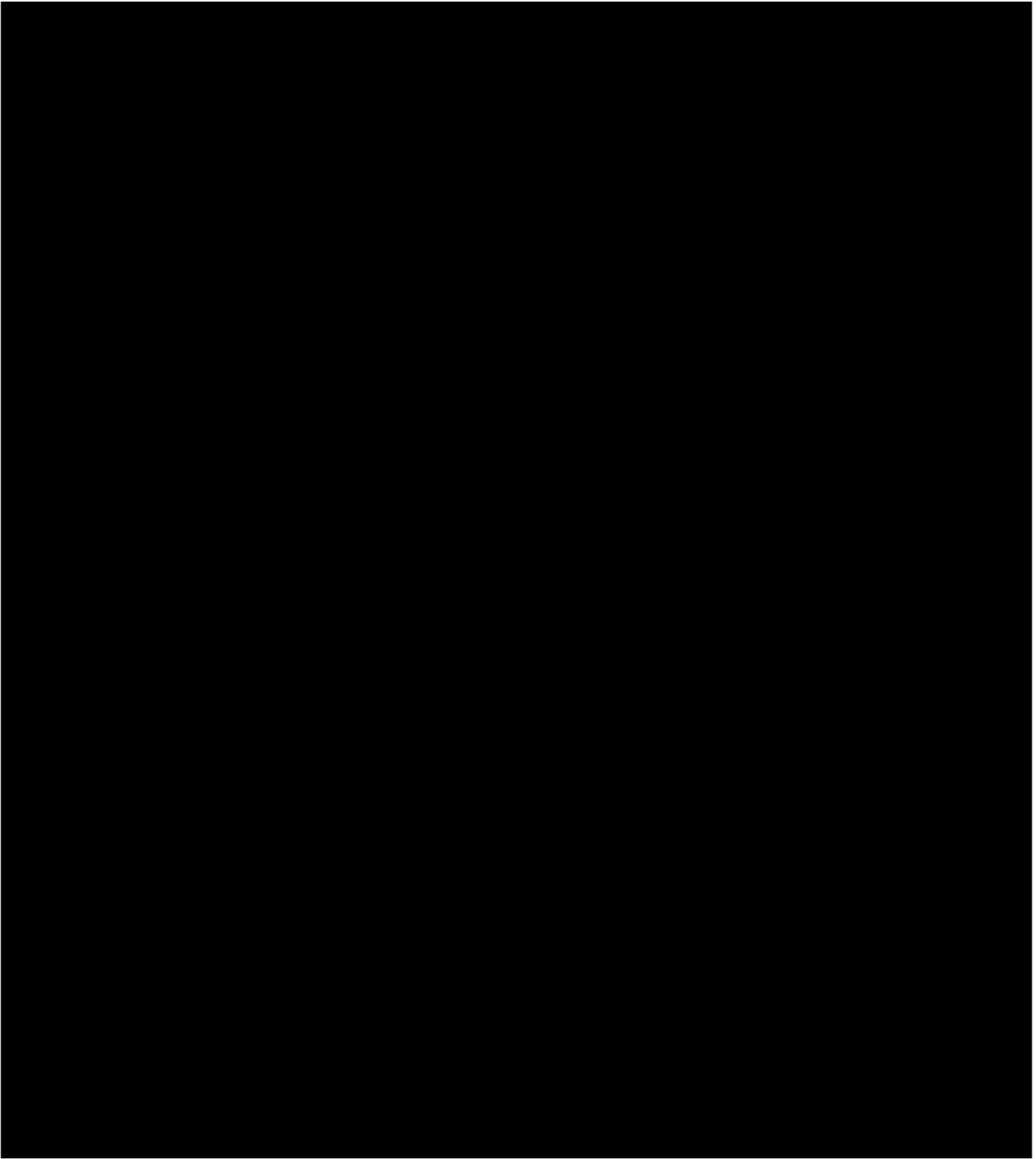
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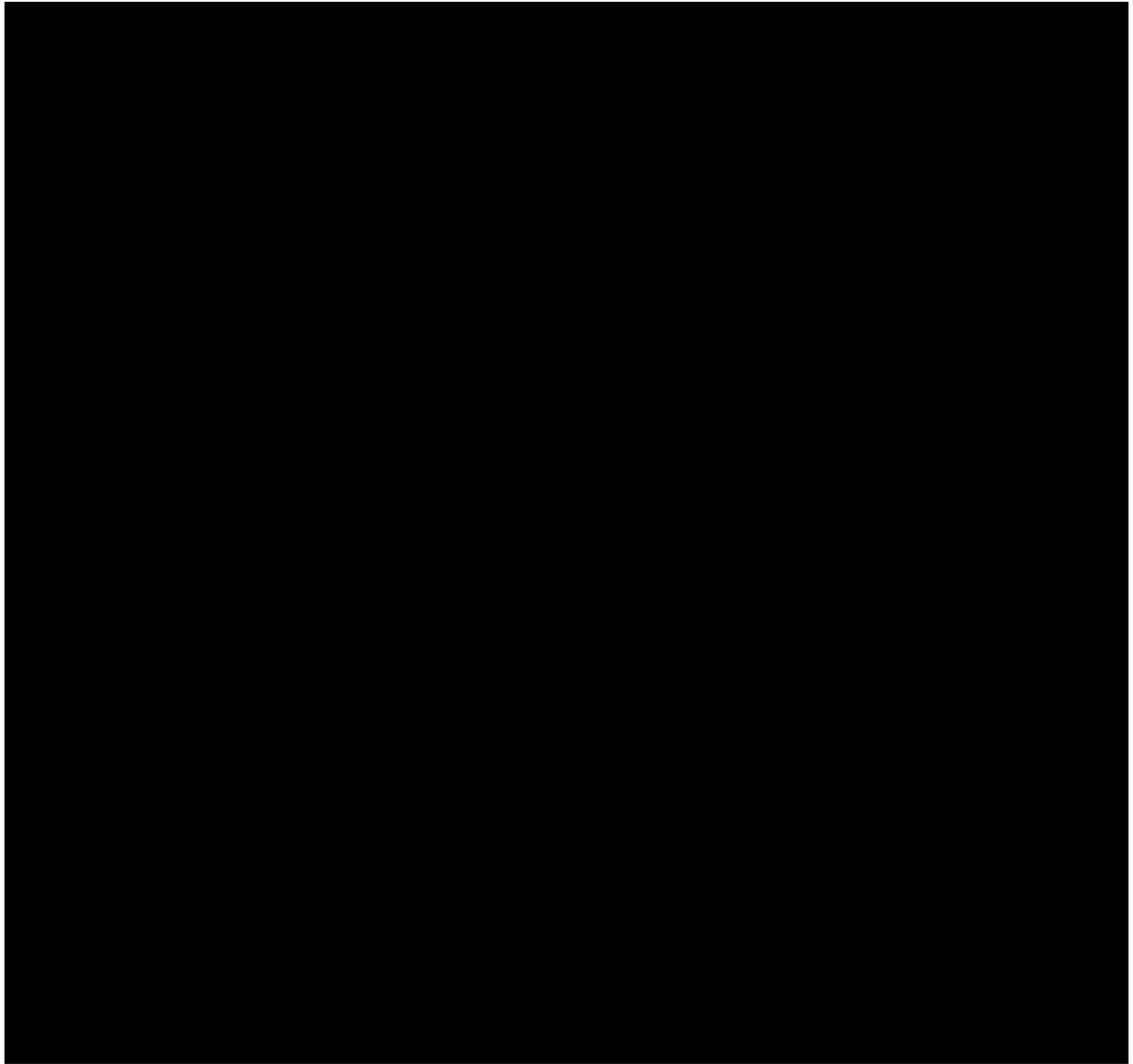


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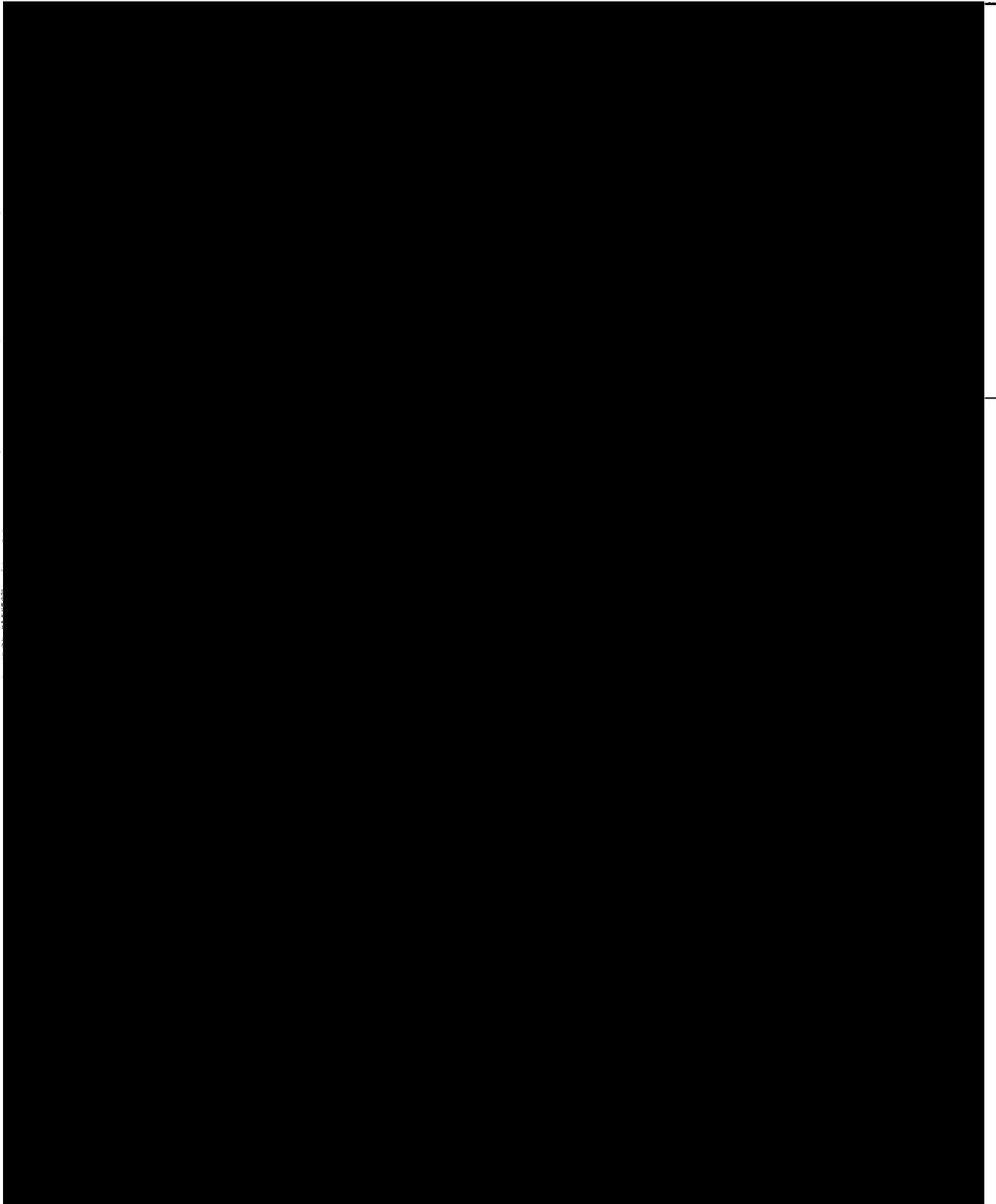


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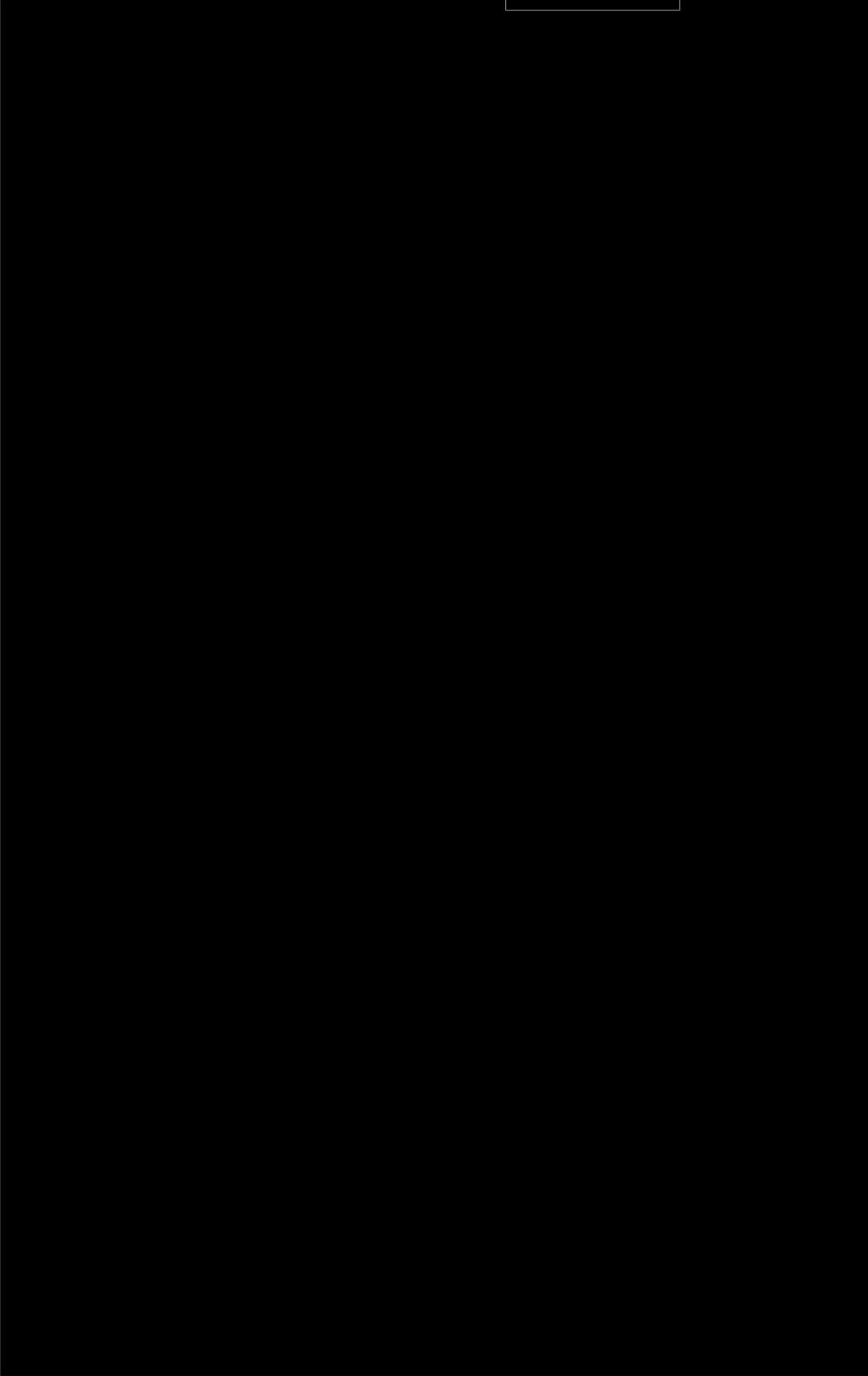
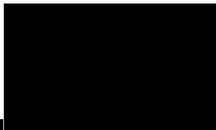
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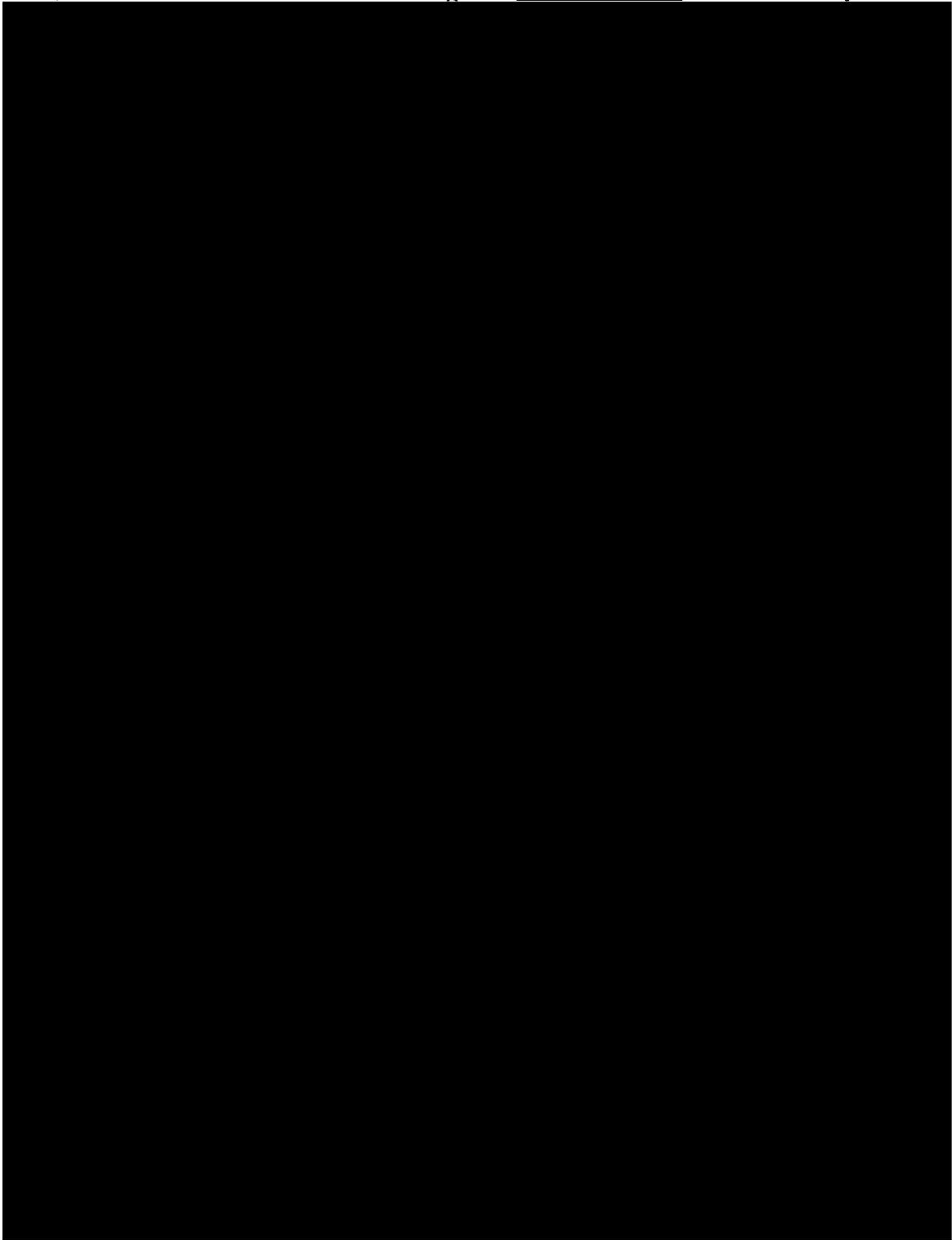


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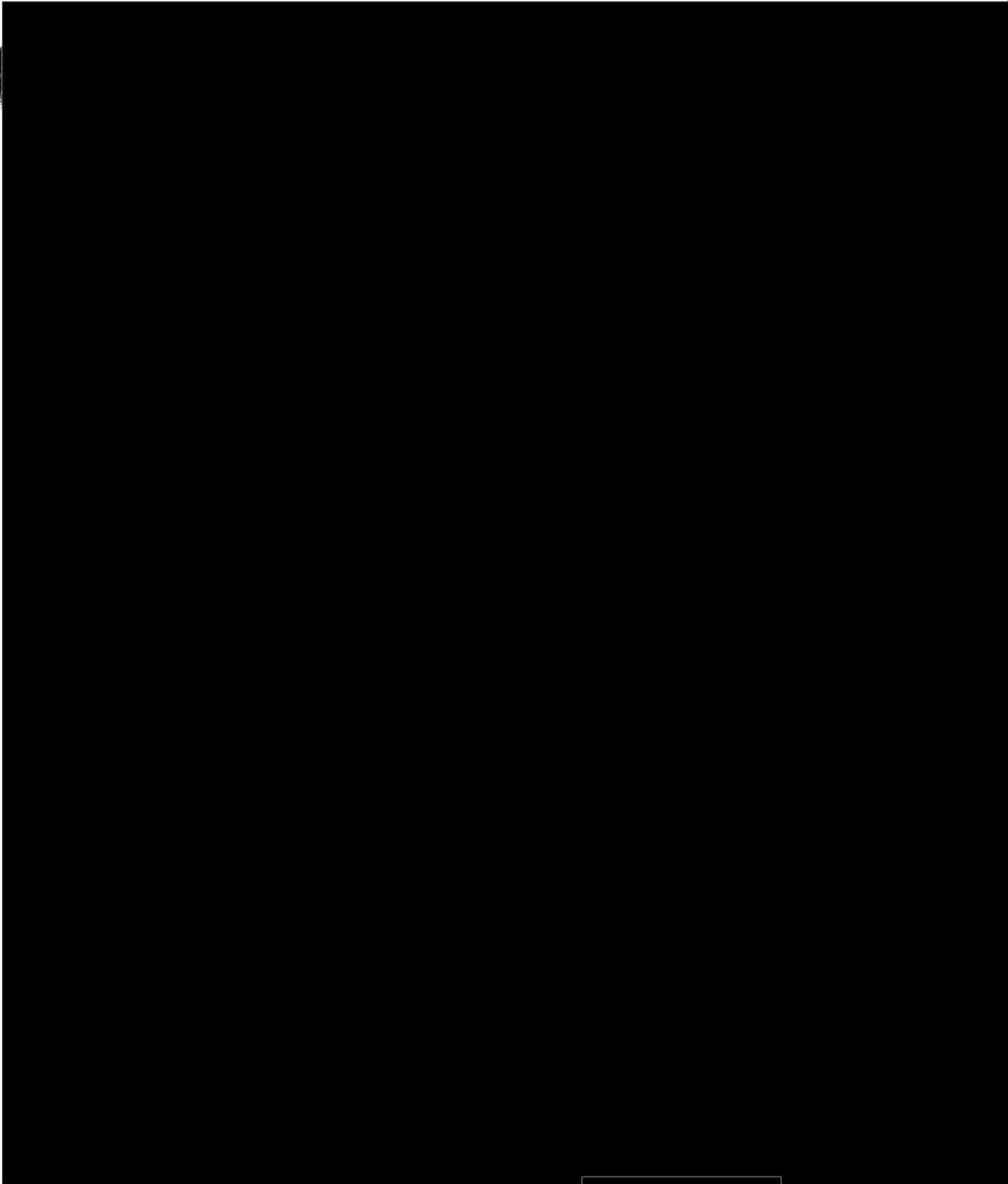
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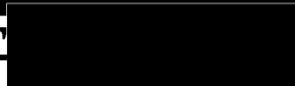
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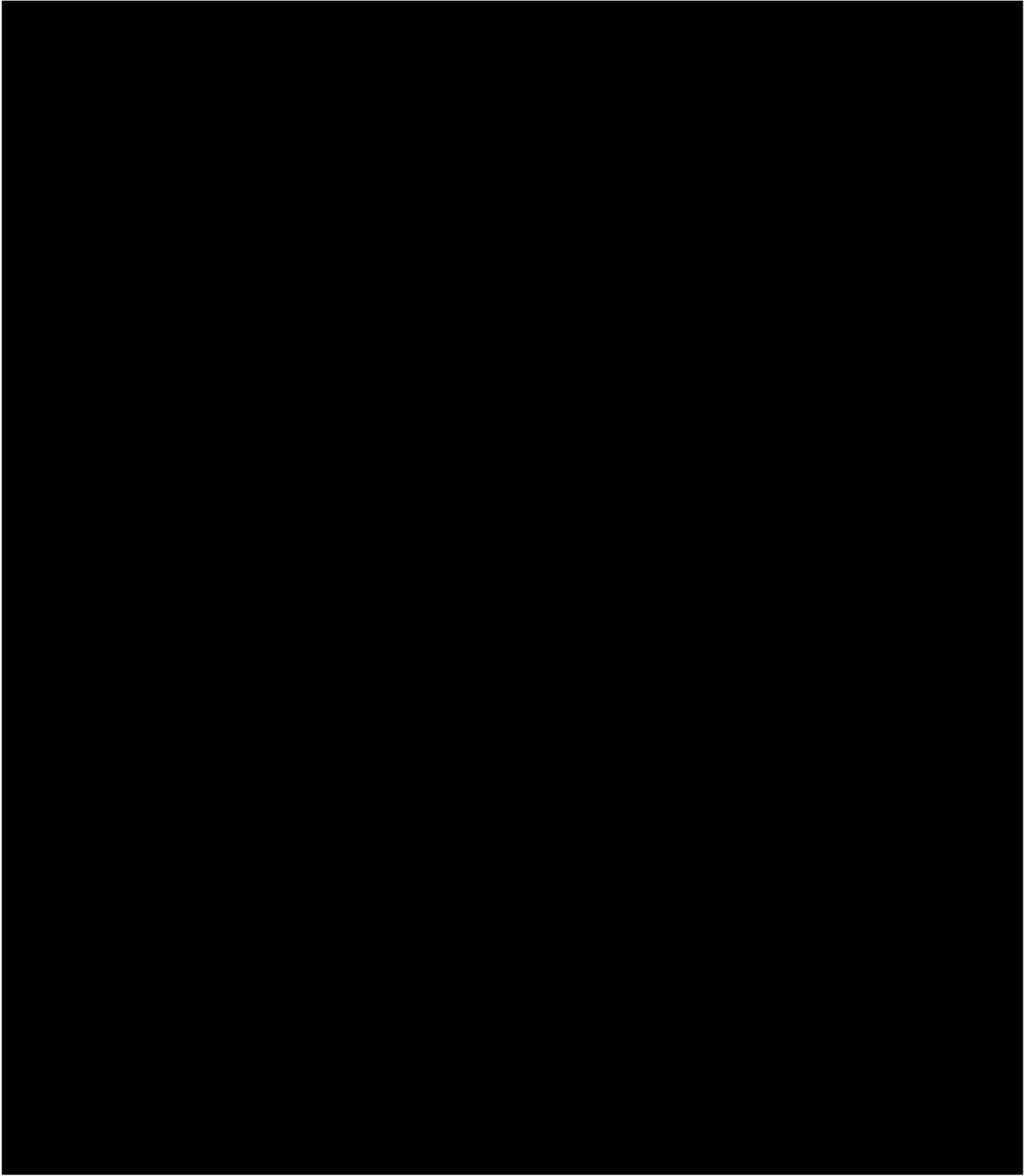
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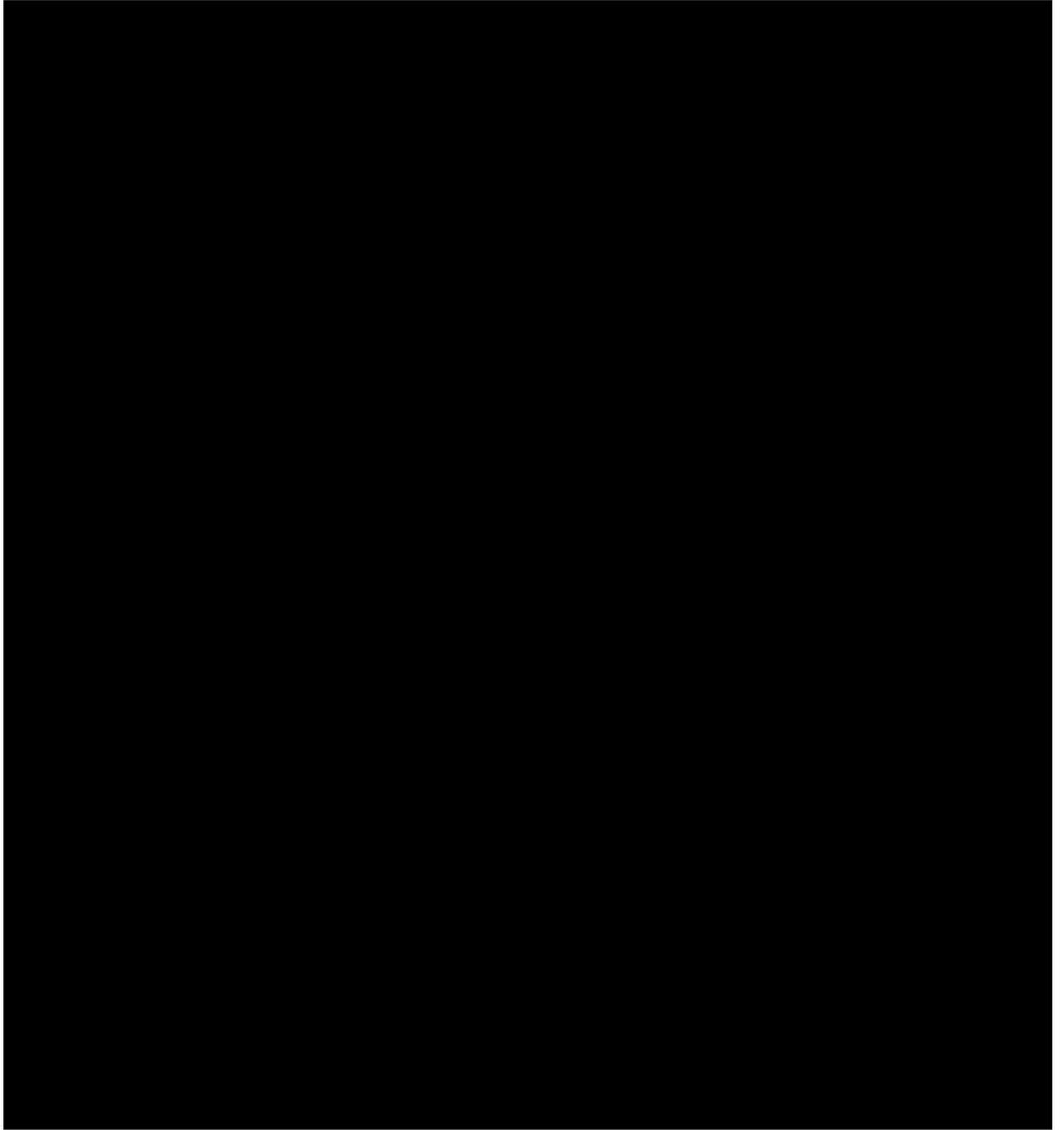


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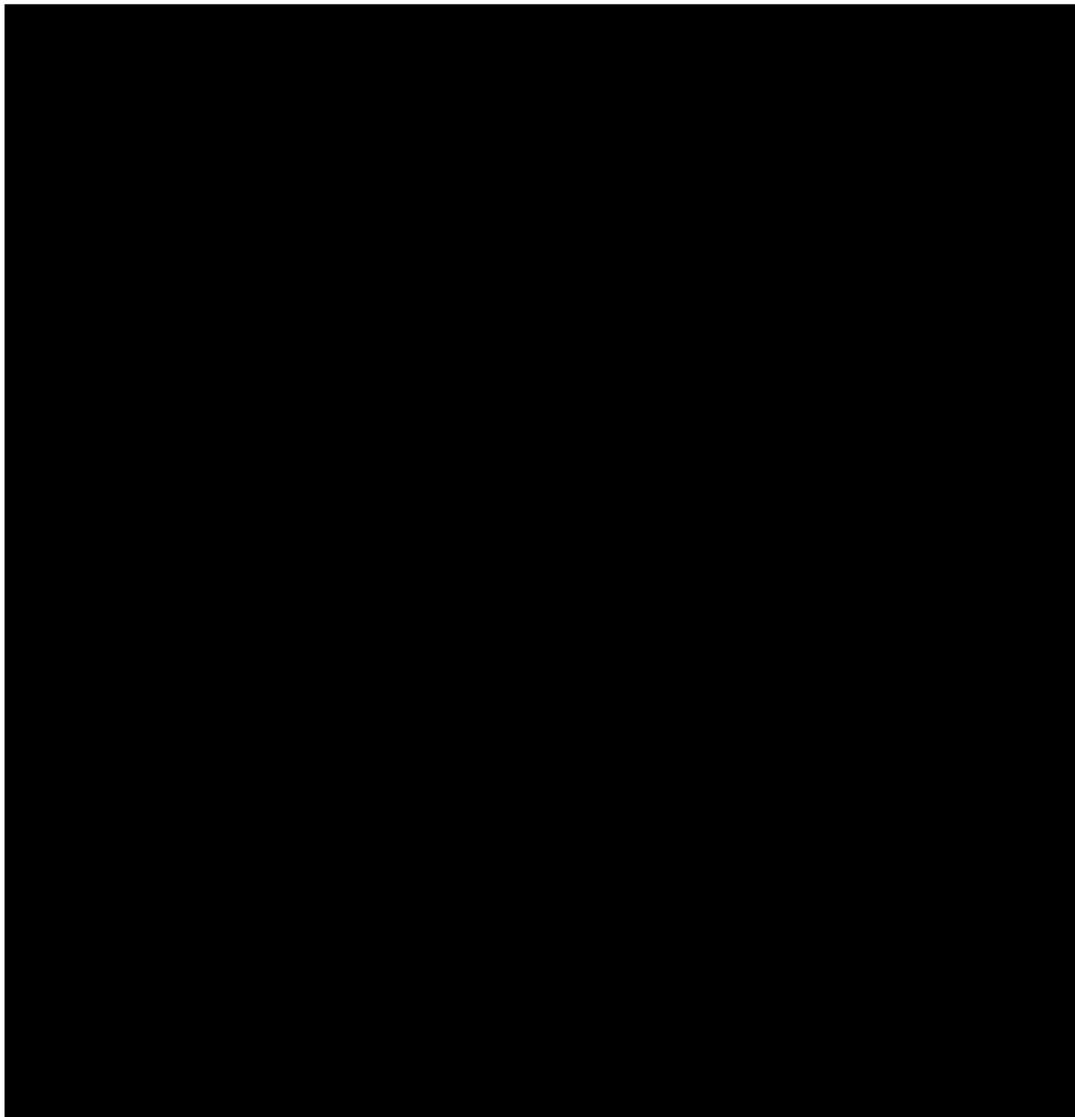
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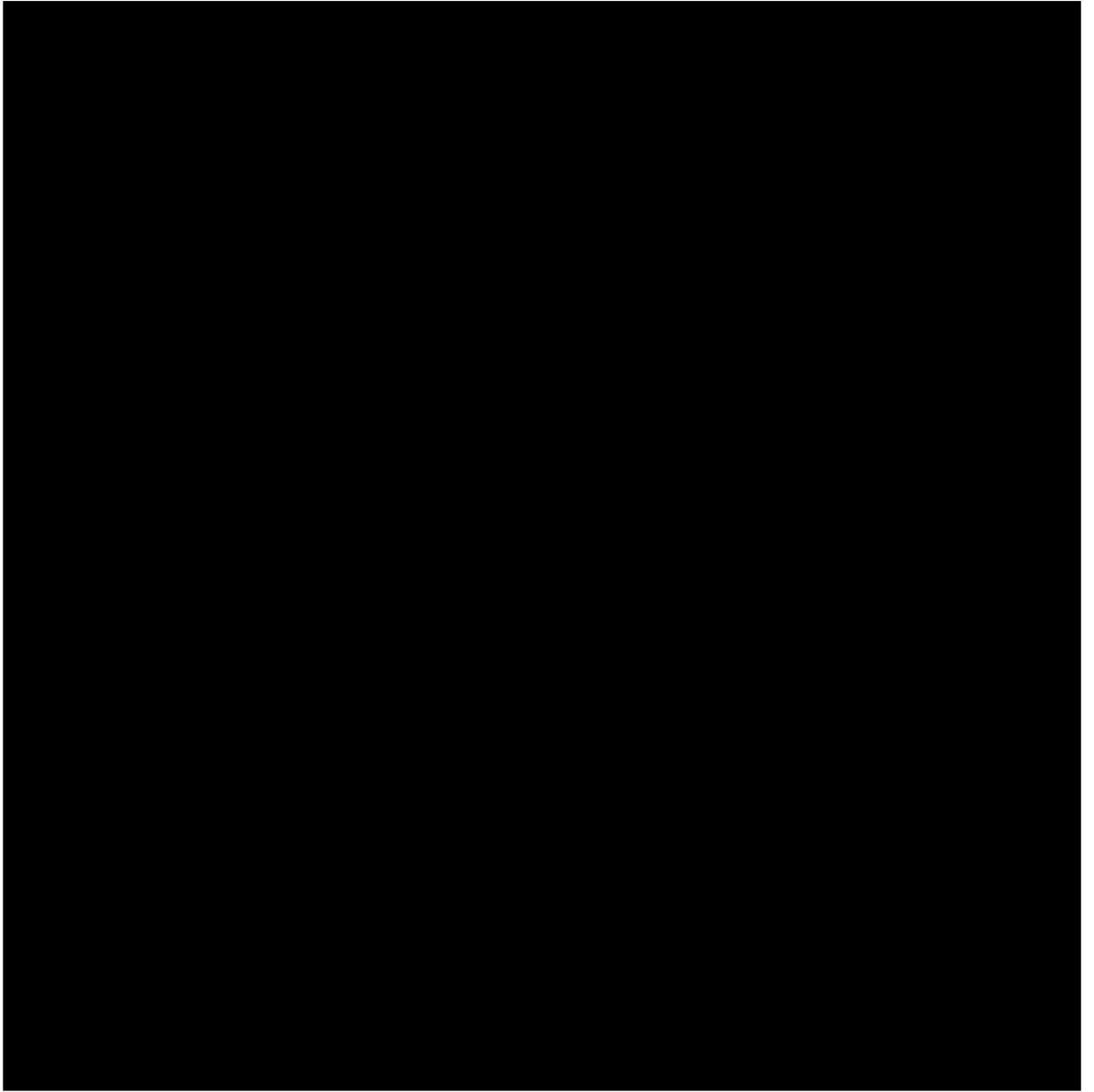
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