UPSTREAM SIGNALS

WEEKLY BRIEF
ISSUE 007 · July 20, 2026

The weekly brief on the U.S. critical-minerals, rare-earth, and coal build-out, for the people who staff and supply it.

TOP SIGNAL OF THE WEEK

A U.S. plant just separated dysprosium from American magnet scrap

USA Rare Earth (Nasdaq: USAR) said on July 14, 2026 that its hydrometallurgical plant in Wheat Ridge, Colorado produced commercial-grade dysprosium oxide and neodymium-praseodymium oxide samples from recycled magnet scrap, the machining residue called swarf, sourced from its own magnet plant in Stillwater, Oklahoma. Dysprosium is the point: it is among the hardest rare earths to separate at commercial purity, it holds a neodymium-iron-boron magnet's coercivity at aerospace, defense and electric-vehicle operating temperatures, and the company says virtually all of it is produced in China today. Swarf is projected to cover up to 30 percent of future feedstock, with the oxides going to the company's UK subsidiary Less Common Metals for conversion before returning to U.S. magnet plants. For recruiters and vendors, the signal is that the Western magnet constraint is separation skill, not ore: a plant running around the clock in suburban Denver, not a mine, produced this milestone. Two days later the IEA flagged rare earth refining as a notable exception to rising supply concentration, crediting new U.S. projects.

Source: **USA Rare Earth, Inc.**, July 14, 2026, company release; refining-concentration finding per **IEA, Global Critical Minerals Outlook 2026**, July 16, 2026.

BUILD-OUT & FUNDING MOVES

MARKET OUTLOOK · Jul 16

The International Energy Agency put a number on the rare earth risk and named the skills gap as part of the cure. Its Global Critical Minerals Outlook 2026 finds that full implementation of China's October 2025 export controls, now suspended until November 2026, could put an estimated $6.5 trillion a year of downstream production outside China at risk across the automotive, high-tech, defense and energy sectors. Two findings matter most for our readers. Rare earth refining was the notable exception to rising supply concentration in 2025, credited to new U.S. projects and higher Malaysian output. And the agency states plainly that diversification requires closing gaps in technology, equipment and skilled workers, noting that refining projects outside China carry capital costs 20 to over 150 percent higher and operating costs about 50 percent higher. The magnet gap Issue 006 flagged is quantified too: diversified refining capacity reaches about two-thirds of expected mined supply by 2035, magnets only about one-third.

Source: **IEA, Global Critical Minerals Outlook 2026, executive summary**, July 16, 2026 (IEA, license CC BY 4.0).

PUBLIC LANDS · Jul 17

Two presidential proclamations signed July 13 and published July 17 open nearly three million acres of Utah to mineral entry. Bears Ears falls to about 121,096 acres (excluding 1,238,904); Grand Staircase-Escalante to about 181,541 acres (excluding roughly 1.69 million), about 2.93 million combined. The operative detail is the clock: at 9:00 a.m. eastern on September 11, 2026, sixty days after signing, the excluded lands open to mineral and geothermal leasing and to location, entry and patent under the mining laws, subject to valid existing rights. The Grand Staircase proclamation names fifteen critical minerals, including cobalt, copper, nickel, thorium, uranium and vanadium; Bears Ears names seven. One caution for any client weighing claim-staking: these boundaries have been set four times since 1996 and the 2017 round drew litigation, so treat the lines as contestable. Near-term work is staking, title and exploration, not construction. For coal readers, the 2026 proclamation says the 1996 Grand Staircase designation came "as part of an effort to prevent development of significant coal reserves" on the Kaiparowits Plateau.

Source: **Proclamation 11043, Bears Ears, 91 FR 45169**, and **Proclamation 11044, Grand Staircase-Escalante, 91 FR 45179**, both signed July 13 and published July 17, 2026. Acreages and the 60-day provision are as stated in the proclamations; the September 11 date is computed from the signing date.

FEDERAL FUNDING · Jul 13

The Department of War announced a $25 million investment through its Industrial Base Fund to expand refining capacity at ReElement Technologies' Marion, Indiana campus, funding equipment, production-line installation and working capital toward high-purity rare earth oxides plus yttrium, gadolinium, germanium and gallium from recycled feedstocks. Read alongside Issue 006, the instrument is the story: ReElement walked away from an $80 million Office of Strategic Capital loan in early July after struggling with federal due diligence, then roughly ten days later took federal money as a direct equipment-and-working-capital investment instead. Vendors should read the shift, not just the amount: the Industrial Base Fund buys capacity directly, and it moves faster than credit underwriting.

Source: **U.S. Department of War**, July 13, 2026; company announcement and campus detail per **American Resources Corporation (Nasdaq: AREC)**, July 14, 2026.

RARE EARTHS · Jul 17

A Malaysian parliamentary select committee, chaired by MP Wong Chen, met July 16 to examine Lynas Rare Earths' (ASX: LYC) US$96 million arrangement to supply the U.S. Department of War, and recommended the government set a clearer foreign investment policy, giving it two weeks to issue an official position, a decision point in early August. The instrument is worth stating precisely: Lynas signed a binding Letter of Intent in March 2026, through Lynas USA LLC, to finalize a four-year supply of light and heavy rare earth oxides at a US$110-per-kilogram floor on neodymium-praseodymium oxide, exactly the demand-side instrument the IEA recommends for thin markets. Lynas is the largest producer of separated rare earths outside China, and the letter replaced an earlier deal after uncertainty over a heavy rare earth plant at Seadrift, Texas, a domestic build-out worth tracking.

Source: **Lynas Rare Earths Ltd, "Lynas and US DoW sign Letter of Intent for rare earth supply," ASX announcement**, March 16, 2026 (value, product scope, four-year term, price floor and the Seadrift reference); committee proceedings and the two-week commitment per **MINING.COM**, July 17, 2026.

WHAT THE UTAH PROCLAMATIONS PUT ON THE CALENDAR

- Jul 13 — Both proclamations signed
- Jul 17 — Published, 91 FR 45169 and 91 FR 45179
- **Sep 11 — About 2.93M acres open to mineral entry, 9:00 a.m. ET**

Bears Ears falls to about 121,096 acres, Grand Staircase-Escalante to about 181,541. September 11 is computed from the July 13 signing.

ALSO THIS WEEK

Offshore leasing. The Marine Minerals Administration opened a Proposed Leasing Notice for the American Samoa OCS Pacific Mineral Lease Sale 1 (91 FR 44870, July 17), proposing a November 19 sale; stipulations require the lessee to hire American Samoans, use local businesses, and use the Port of Pago Pago. **BOEM/MMA; Federal Register**.

NRC licensing. The Nuclear Regulatory Commission proposed its first major revision to radiation-protection standards since 1991 (91 FR 43456, July 15); it amends 10 CFR Part 40 source-material licensing, which reaches thorium-bearing rare earth ores. Comments close August 31. **Federal Register, 91 FR 43456**.

Antimony resource. NevGold (TSXV: NAU) published a maiden gold-antimony resource at Limo Butte, Nevada: 29,600 tonnes of antimony measured and indicated and 48,100 inferred, the third domestic antimony story in three issues. An early-stage milestone, not a construction decision. **NevGold Corp.**

HIRING & STAFFING DEMAND

Where projects are ramping and what roles they need, for our recruiter readers.

HIRING · Rare-earth separation · Colorado and Oklahoma

USA Rare Earth runs the Wheat Ridge demonstration plant around the clock, fully instrumented, with the data feeding the design of a planned commercial separation facility; further campaigns on Round Top and Serra Verde material are under way. A round-the-clock hydrometallurgical operation implies shift coverage: separation and hydrometallurgical operators, process and instrumentation-and-controls engineers, analytical chemists and laboratory technicians, and quality staff certifying product to specification. Stillwater is the paired demand center and now the feedstock source. Roles inferred from the operation described.

Source: **USA Rare Earth, Inc.**, July 14, 2026, including the facility description.

HIRING · Critical-mineral refining · Indiana

ReElement Technologies now has $25 million aimed at equipment and working capital at Marion. Its June 22 update puts Phase 1 at a four-line platform expected to create about 100 positions, rising toward 300 as the campus expands, on a 42-acre, 400,000-square-foot site; the first line targets germanium, gallium and related materials at over 500 tonnes a year, commercial in the third quarter of 2026. This is the one entry with company-stated job numbers. Roles: chromatographic separation operators, process and analytical chemists, electrical and instrumentation technicians, and quality and regulatory staff.

Source: **American Resources Corporation**, June 22, 2026 (job and site figures); July 13 and 14, 2026 funding announcements as cited above.

HIRING · Antimony and gold · Nevada

NevGold has two rigs turning at Limo Butte within a 20,000-meter 2026 program, and plans to test past-producing antimony workings it could not reach last year. The near-term pull is exploration-side: drillers and drill-support crews, project and resource geologists, samplers and core-shack staff, assay-lab throughput, and the metallurgical and study consultants for a prefeasibility study and a preliminary economic assessment. Roles inferred from the program described.

Source: **NevGold Corp.**, July 15, 2026.

ROLES IN DEMAND THIS WEEK

USA Rare Earth — Wheat Ridge, Colorado — *no headcount announced*
- Separation operators
- Process engineers
- I&C engineers
- Analytical chemists
- Lab technicians
- Quality staff

ReElement Technologies — Marion, Indiana — ~100 rising to 300
- Chromatographic separation operators
- Process chemists
- E&I technicians
- Quality staff

NevGold — Limo Butte, Nevada — *no headcount announced*
- Drillers
- Project geologists
- Samplers
- Core-shack staff
- Assay-lab staff

Roles as named or directly implied by each company.

FEATURED COMMODITY EXPLAINER

FEATURED: GERMANIUM

Germanium is the quiet chokepoint behind this week's federal money. The United States recorded zero primary refinery production of germanium every year from 2021 through 2025; domestic supply comes from zinc concentrates at an Alaska mine, some exported to Canada for recovery, while a Tennessee mine that also yielded germanium has been suspended since November 2023. Downstream pockets persist: a St. George, Utah plant makes germanium wafers for satellite solar cells, and a Quapaw, Oklahoma plant makes germanium tetrachloride for fiber optics, both from imported and recycled material. Then China banned germanium exports to the U.S. in December 2024 and the market repriced: imports fell 67 percent in 2025 to an estimated 7,000 kilograms, and USGS puts the metal's average price at an estimated $4,100 per kilogram in 2025 against $1,991 in 2024, with the European 99.999 percent benchmark climbing from $3,150 to $5,380 between January and October. The IEA adds that European germanium now runs almost three times Chinese domestic prices. End uses run to fiber and infrared optics, semiconductors, solar cells and radiation detectors, defense and telecom rather than consumer. That is the gap ReElement's first Marion line targets, and why recycling and refining reach the market years before any new mine could.

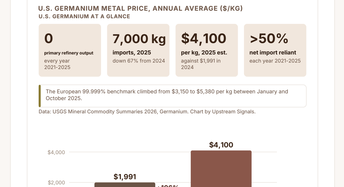
U.S. GERMANIUM METAL PRICE, ANNUAL AVERAGE ($/KG)

U.S. GERMANIUM AT A GLANCE

0	7,000 kg	$4,100	>50%
primary refinery output every year 2021-2025	imports, 2025 down 67% from 2024	per kg, 2025 est. against $1,991 in 2024	net import reliant each year 2021-2025

The European 99.999% benchmark climbed from $3,150 to $5,380 per kg between January and October 2025.

Data: USGS Mineral Commodity Summaries 2026, Germanium. Chart by Upstream Signals.



Annual-average metal price roughly doubled in 2025. The European spot benchmark (min. 99.999% purity) reached $5,380/kg by October 2025. Chart by Upstream Signals; data: USGS Mineral Commodity Summaries 2026, Germanium.

0
U.S. primary germanium refinery production, every year 2021 through 2025

7,000 kg
U.S. germanium metal imports, 2025 (USGS: down 67% from 2024)

Figures: **USGS Mineral Commodity Summaries 2026, Germanium**, February 2026. Net import reliance is reported by USGS as greater than 50 percent of estimated consumption for each year 2021 through 2025. Chart by Upstream Signals per the IEA outlook cited above.

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