



March 12, 2025

THE LONG PULL: Analyzing IDR's Latest Drill Results

Idaho Strategic (IDR) [released new drill results this week](#) that dramatically improve the company's potential production, average grade, costs/margins, and cash flow.

The results from its Red Star, Bush, Jumbo, H, and Paymaster veins reveal massive high-grade gold intercepts close to existing underground operations (500-600 meters).

I'm so excited: These results confirm IDR's path toward **doubling annual production in three years** with minimal expansion capex at higher average grades and margins. This will generate substantial free cash flow and create reinvestment opportunities.

But before we continue, I want to explain **how to interpret drill results, value an assay** (or intercept), and **judge a good drill result from a bad one**.

We'll then apply that knowledge to IDR's results.

Let's get after it!

How To Interpret Drill Results

Drill results are typically presented with three primary metrics: **intercept length, grade, and metal equivalent calculations**.

The intercept length refers to the continuous mineralized zone encountered in a drill hole, measured in meters or feet (usually meters). Grade represents the concentration of valuable metals within that interval, expressed as grams per tonne (g/t) for precious metals or percentages (%) for base metals.

There are two main types of deposits: **Bulk-tonnage** and **High-Grade Narrow**.

Bulk-tonnage deposits are usually low grade (~0.30% Cu, for example) with significant intercepts of 100m+. Think of porphyry copper and iron ore deposits that require large-scale open-pit mining operations.

High-Grade Narrow intercepts are smaller (sub-3m) but often carry higher average grades (3g/t+). Most underground gold mining operations are from High-Grade Narrow deposits.

IDR is a High-Grade Narrow deposit so we'll focus our time here.

Here's a simple rubric for evaluating High-Grade underground drill results:

- Bad: <1g/t
- Decent: 1-3g/t
- Good: 5g/t
- Great: 6-9g/t
- Are You S**ting Me?: 10g/t+

But you can't only rely on grams per ton. You also need Drilled Thickness (usually expressed in meters), which measures the length of the intersection.

The thicker the mineralization, the greater the odds of a significant discovery.

It's like sticking straws into two birthday cakes. If you love cake, you want to eat the one with the most cake in the straw.

Mining companies will report both grams-per-ton and drilled thickness. This allows us to use a quickhand formula to rank intercepts: **Grams-Per-Ton x Drilled Thickness**.

The higher the number, the more significant the drill hole:

- 50g/t across 0.5m = 25
- 25g/t across 3m = 75

Don't get fooled by a high headline g/t number. Always cross-reference with drilled thickness.

How To Value A Drill Result

So far, we've learned how to interpret and rank drill results. Now let's value them.

Here's the formula for valuing a company's assays (or in-situ value):

$$\text{In-Situ Value} = \text{Grade} \times \text{Metal Price} \times \text{Tonnage Factor}$$

This is where things get technical. But bear with me because it gets easier.

Tonnage factor takes a drill hole's density and volume to get an expected metal amount in tons, which we can convert to pounds or ounces. You'll also hear this called "bulk density" factor. Here's how to calculate bulk density:

- Density: 2.8 tons/m³
- Volume: Intercept Length x 0.25m³

➤ Tons: Density x Volume

From here you multiply the metal amount by the metal price (lean conservative) to get a dollar value per assay.

Let's use IDR's 4.5m drill hole of 50.86 g/t gold as an example:

1. Calculate Volume and Tonnage:

- a. Volume: $4.5\text{m} \times 0.25\text{m} = 1.125\text{m}^3$
- b. Tonnage: $1.125\text{m}^3 \times 2.8\text{t/m}^3 = 3.15\text{t}$

2. Calculate Gold Content in Ounces

- a. $(3.15\text{t} \times 50.86 \text{ g/t}) / 31.1035 = 5.08\text{oz}$

3. Calculate In-Situ Value

- a. $5.08\text{z} \times \$2,750 = \$13,972$

Compare that to Agnico Eagle's recent drill results, which show in-situ values of \$1,225 (7g/t over 5 meters) and \$8,911 (15.6g/t over 16.3 meters).

Understanding Risk Factors

The final step is to identify any potential risk factors in your analysis. Risk Factors fall into three buckets:

Technical

- **Overstated Widths:** Sub-meter high-grade intervals in wider low-grade zones
- **Depth Penalty:** Each 100m depth adds \$5–15/tonne in mining costs
- **Metallurgy:** Refractory ores (e.g., 85% vs. 95% recovery) alter NPV by 20–40%

Market

- **Metal Price Sensitivity:** A drop in metals prices raises cut-off grades, which impacts NPV
- **Jurisdictional Factors:** Permitting delays can impact IRR

Data Quality

- **Historical Assays:** Pre-NI 43-101 data often lacks QA/QC (e.g., missing blanks/duplicates)
- **Core Loss:** >10% core recovery invalidates grade estimates

I know it's a lot of information. But the more you practice, the easier it gets to answer each question, and the better you become at analyzing drill results and mining companies.

Alright, let's apply this knowledge to IDR's latest drill results.

Interpreting IDR's Latest Drill Results

Here are IDR's drill results.

Hole	Target Vein	From (m)	To (m)	Drilled Thickness (m)	Gold Assay (gpt)
GC 24-255	Bush	10.4	12.1	1.7	4.45
including		10.8	11.1	0.3	19.00
GC 24-256	Bush	15.3	16.4	1.1	11.00
GC 24-257	Bush	12.8	14.0	1.2	8.62
including		13.7	14.0	0.3	19.00
GC 24-261	Red Star	0.9	2.1	1.2	6.20
including		1.6	1.8	0.2	18.00
GC 24-263	Red Star	2.9	3.7	0.8	31.00
GC 24-263	Red Star	151.0	151.9	0.9	7.04
GC 24-264	Red Star	34.4	37.3	2.9	8.76
including		34.4	36.3	1.9	11.80
GC 24-264	Red Star	46.4	46.9	0.5	23.20
GC 24-264	Red Star	58.5	60.7	2.2	14.38
including		58.5	58.9	0.4	24.80
including		59.3	60.7	1.4	15.30
GC 24-265	Red Star	2.1	3.8	1.7	10.02
including		2.1	3.2	1.1	13.40
GC 24-265	Red Star	38.2	42.7	4.5	50.86
including		40.8	42.1	1.3	150.25
including		42.1	42.7	0.6	42.50
GC 24-265	Red Star	44.5	46.8	2.3	19.74
including		44.5	45.5	1.0	20.70
including		45.5	46.5	1.0	21.40
GC 24-275	Paymaster	208.4	211.5	3.1	4.67
including		209.9	210.2	0.3	24.70
GC 24-285	Paymaster	211.1	213.8	2.7	5.58
including		212.5	213.8	1.3	8.00
GC 24-286	Paymaster	208.2	208.5	0.3	16.60
GC 24-286	Paymaster	222.1	223.5	1.5	6.93
including		222.5	222.9	0.4	13.30
GC 24-287	Jumbo	111.6	111.8	0.2	7.00
GC 24-288	Jumbo	76.1	76.5	0.4	5.65
GC 24-289	H-Vein	113.3	113.6	0.3	9.80
GC 24-290	H-Vein	149.6	150.4	0.7	5.01
GC 24-291	Un-named	46.1	46.3	0.2	15.20
GC 24-291	H-Vein	92.2	93.2	1.0	4.90
including		92.8	93.2	0.4	10.40

Let's focus on a few significant drill holes:

- Red Star Vein: 4.5m of 50.86 g/t gold including 1.3m of 150.25 g/t
- Multiple Veins: Five additional veins with grades from 10.4-30.8 g/t

The weighted average grade across all reported intercepts is 33.4 g/t gold. This matters because:

1. Grade Scale: At 33.4 g/t, this is roughly 5x richer than their current 6.7 g/t production.
2. Infrastructure Proximity: 600m from existing workings (reduces costs).
3. Vein Orientation: Similar to currently mined structures, suggesting compatible mining methods.

The Grade Escalation Flywheel

Here's where it gets interesting. IDR has demonstrated consistent grade improvement:

- 2022: 5.6 g/t average → 6,100 oz production
- 2023: 6.7 g/t average → 8,247 oz production
- 2024: 9.3 g/t annualized → ~12,500 oz projected

With each gram per tonne increase, their economics improve disproportionately. At \$2,750/oz gold:

- A 5 g/t deposit generates ~\$250/tonne value (minus ~\$150/tonne costs) = \$100/tonne margin
- A 10 g/t deposit generates ~\$500/tonne value (minus ~\$150/tonne costs) = \$350/tonne margin

That's not a 2x improvement. It's 3.5x better margins. This explains IDR's financial trajectory:

- 2022: 18% gross margin
- 2023: 34% gross margin
- 2024: 52% gross margin (annualized)

We're also being conservative with our per-ton costs. Historically, IDR has spent ~\$92/ton on processing, compared to the \$150/ton assumed above.

Mining is the ultimate fixed-cost business. Grade improvements drop straight to the bottom line.

The Three-Year Roadmap

Using IDR's operational history and these new drill results, I modeled what the next three years could look like:

2025:

- Avg. Grade: 11.5 g/t (25% increase from 2024)

- Production: 16,200 oz gold
- Revenue: \$44.6M (@\$2,750/oz)
- AISC: \$1,500/oz (down from \$1,609 in 2024)
- Cash Flow: \$20.3M

2026:

- Avg. Grade: 13.2 g/t
- Production: 21,800 oz gold
- Revenue: \$60.0M
- AISC: \$1,450/oz
- Cash Flow: \$28.34M

2027:

- Avg. Grade: 14.5 g/t
- Production: 27,500 oz gold
- Revenue: \$75.6M
- AISC: \$1,400/oz
- Cash Flow: \$37.12M

This projection assumes:

1. Red Star Vein contributes increasingly to mill feed
2. Paste backfill plant reduces dilution from 40% to 25%
3. Mill throughput increases from 33% capacity to 70% capacity (252 tons/day).

Even if we haircut these numbers by 25% (assume 12 g/t instead of 14.5 g/t by 2027), the cash flow growth remains compelling.

The Bottomline

Idaho Strategic's Red Star discovery could be a company-maker. A 33.4 g/t average grade places it among North America's highest-grade gold deposits.

The three-year runway suggests cumulative cash flow equal to ~54% of the current market cap, creating a rare scenario where a junior miner could self-fund growth, explore adjacent properties, and potentially return capital to shareholders.

Here's the best part. IDR can fund this growth with cash from operations. I know I say that a lot, but it's unheard of in this industry.

Grade is king in mining. And these drill results could confirm IDR's crown jewel.