Montney



Duvernay



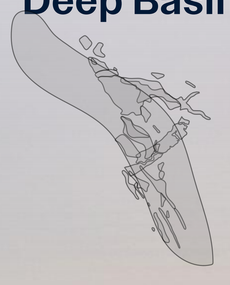
Charlie Lake



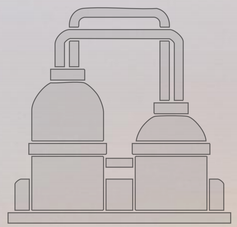
Oil Sands



Deep Basin



Infrastructure



Private E&Ps



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WCSB Atlas

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

We're pleased to offer an abbreviated version of our WCSB Atlas to the public. Our goal was to create an extremely comprehensive set of maps that rivals the usefulness of our flagship BasinScout software. Maps that can be referenced continuously with analyst commentary that can be used to appreciate the mechanics of each play; providing clients with a place to go to answer questions, or become familiar and comfortable with parts of the basin without needing to wait for us to provide an opinion. A 'proactive', instead of 'reactive' resource. We hope these maps will help clients make better informed decisions, and make them faster than others.

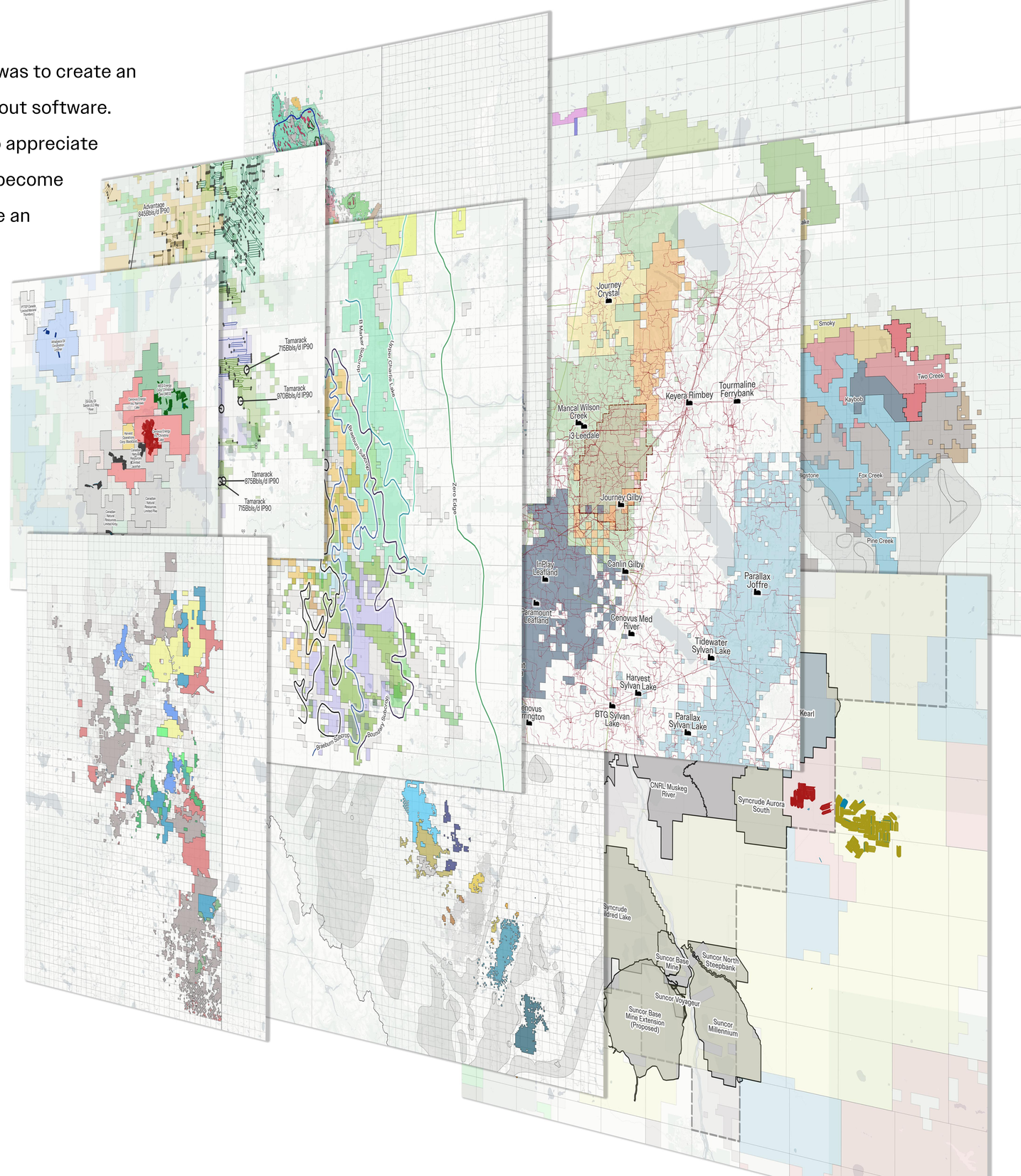
Inside we include a mix of local and regional play maps, national and international infrastructure maps, and private producer tear-sheets; among other useful data extracts. None of the shown map features included are sourced from third-party providers, a key tenet of our business which we think helps us make decisions unblemished by greater industry bias. We foster a culture of unlimited curiosity that drives a unique appreciation for the underlying assets and industry. We've focused this Atlas on the Montney and Duvernay, our areas of expertise, though clients can access this resource for every major resource play in the WCSB.

This map package showcases thousands of hours of meticulous analyst work building detailed acreage layers; auditing single sections by hand, but also leveraging our extensive set of learning algorithms to contour plays, build geologic tiering models, place inventory locations, forecast well EURs and decline rates, model private E&Ps using just public data, allocate broker parcels, build midstream linkage models, and more. All with the goal of providing clarity into acreage quality, and asset potential.

This massive foundational data library allows our analysts to focus on long-term idea generation, play appraisal, and ultimately allocate more time to the manual asset work that makes HTM's process truly differentiated.

Please enjoy your copy of HTM's WCSB Atlas.

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WCSB Play Acreage Maps



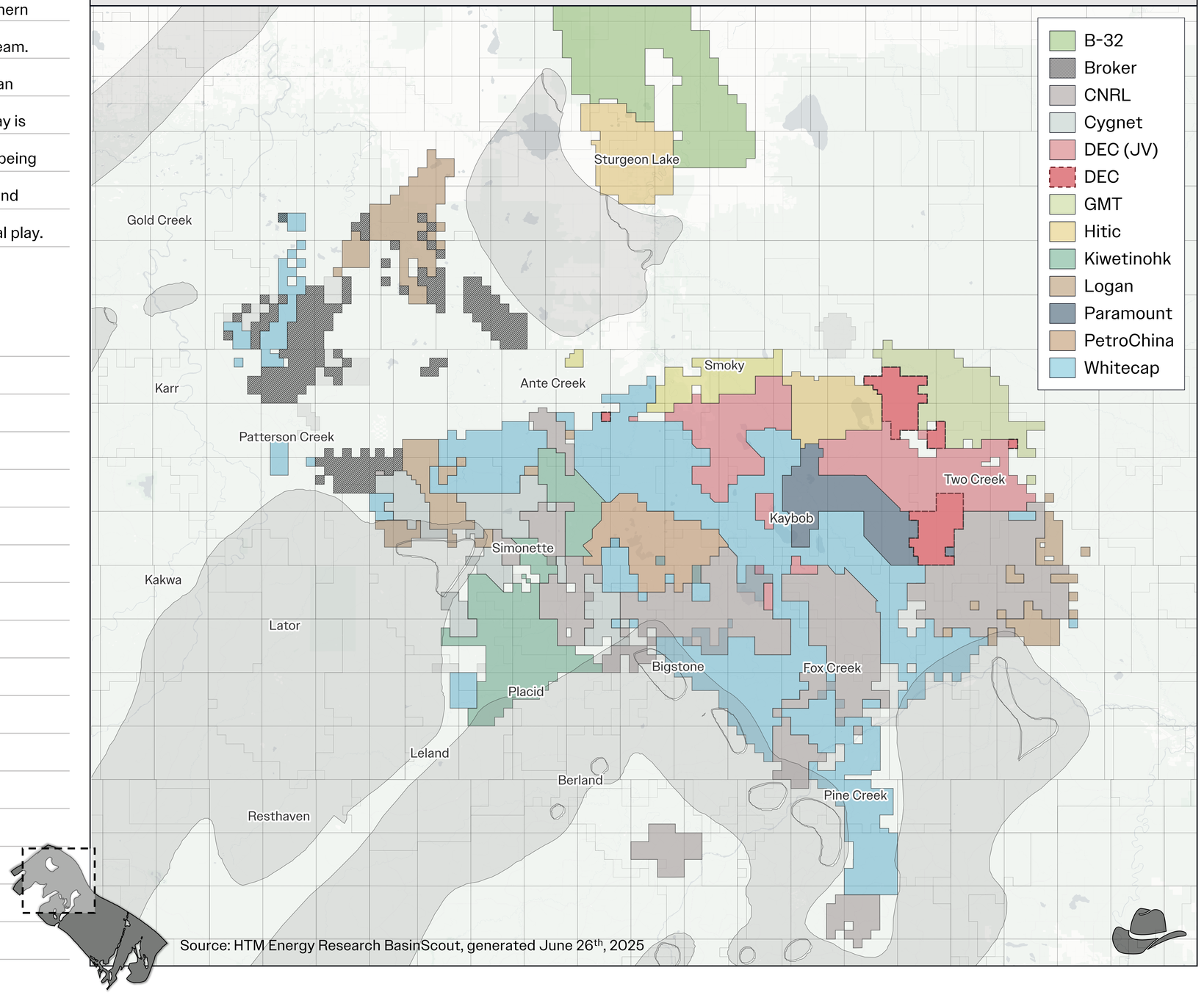
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Information contained within may be incomplete or incorrect.

HTM Analyst Notes

The Kaybob Duvernay is very consistent, and all liquids-rich, save for the very southern part of Simonette where both depth, and basement heat make for a leaner gas stream. The core overpressure condensate window (CNRL and Whitecap largest owners) can consistently deliver condensate EURs of >400,000Bbls. To the south, the Duvernay is bound by the Leduc Formation; where reef buildups prevented the Duvernay from being deposited. The Kaybob Duvernay benefits from extreme overpressure conditions and despite low permeability, extremely high porosity; making it an ideal unconventional play.

Client Notes

Greater Kaybob Duvernay Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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Information contained within may be incomplete or incorrect.

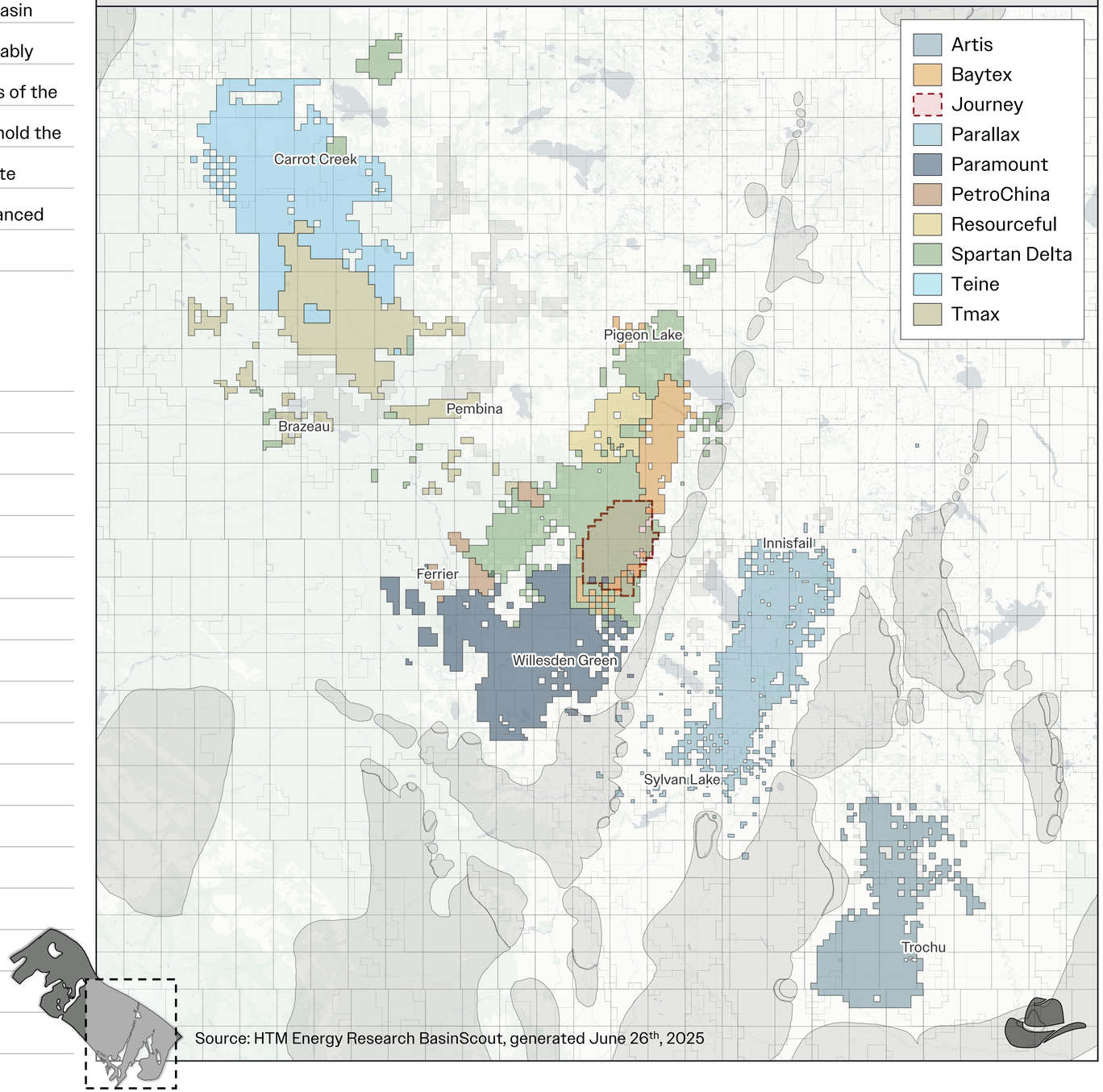
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HTM Analyst Notes

The emerging West Shale Basin is competitive, or better than Kaybob. Parts of the northern West Shale Basin suffer from a persistent middle carbonate that bifurcates the Upper and Lower Duvernay much less favorably than at Kaybob. In some areas of Edson, limestone chunks are also apparent. At Willesden Green and parts of the southern Pembina/Brazeau area, the middle carbonate thins dramatically. Paramount and Spartan Delta hold the largest, best positions in the Tier 1 oil and condensate window. Higher intensity completions that can create complex fracture networks in the rock's inferior mineralogy (compared to Kaybob) have meaningfully advanced the play. These fracs work best in areas of high wettability; of which we use bulk density as a proxy for.

Client Notes

West & East Shale Basin Duvernay Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
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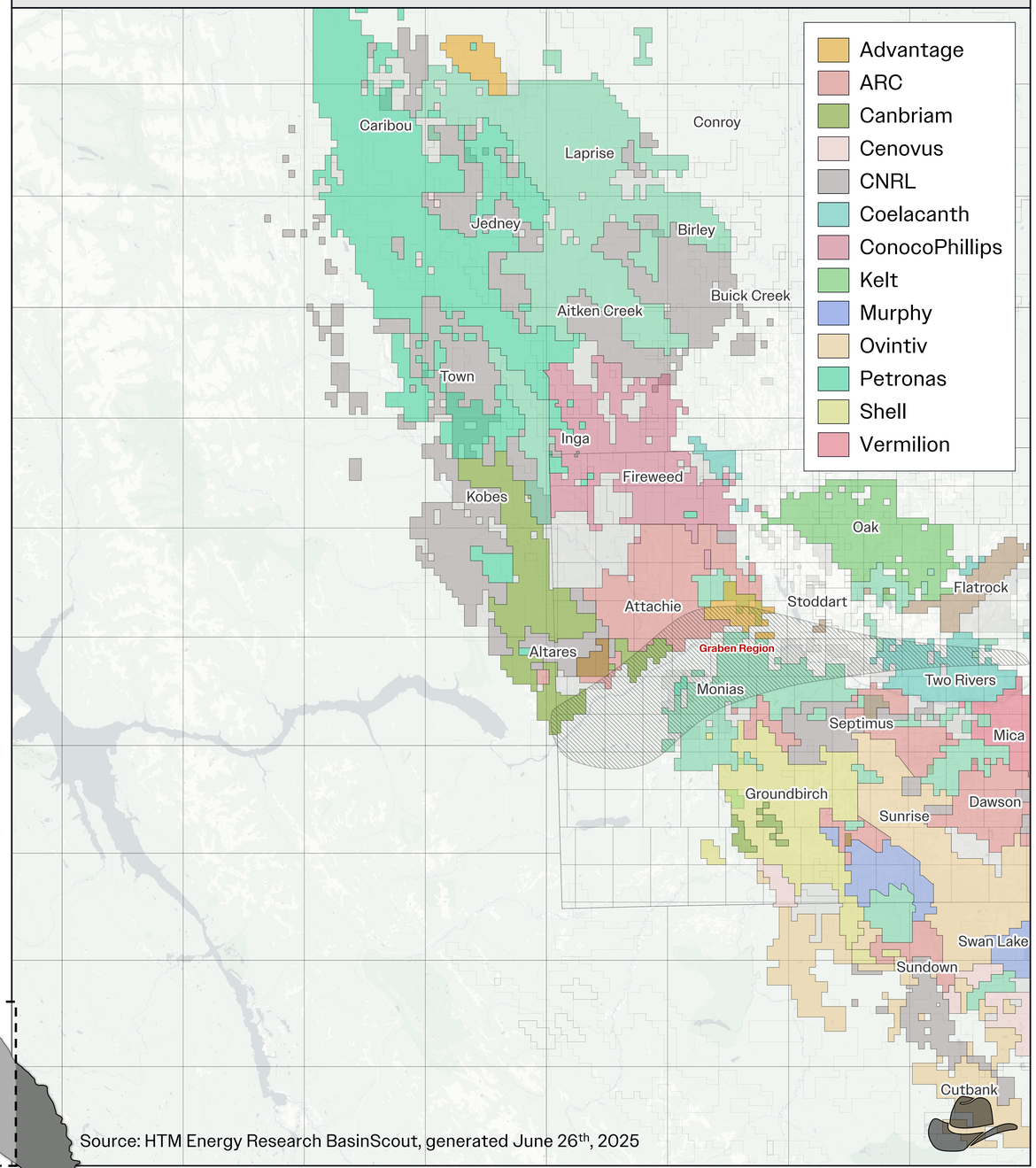
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HTM Analyst Notes

The BC Montney is more rich- and lean-gas focused, and benefits from generally higher pressure gradients compared to Alberta, though shallower drilling depths. The best parts of the play for oil and condensate are Inga and Fireweed, and for leaner gas – Sundown through Groundbirch reign supreme. Unlike Alberta, moving northeast updip in the BC Montney is still within the Deep Basin overpressure system and an offshore dominated deposition. The BC Montney is split into a northern and southern portion of the play by the Fort St. John Graben system; a series of extreme faulting that makes it technically challenging to develop. The southern parts of the play (Groundbirch and Sundown) are directly competitive with the Haynesville and Marcellus, with more OGIP per section, and single-well EURs that can consistently deliver 15Bcf of gas.

Client Notes

NEBC Montney Fairway Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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Information contained within may be incomplete or incorrect.

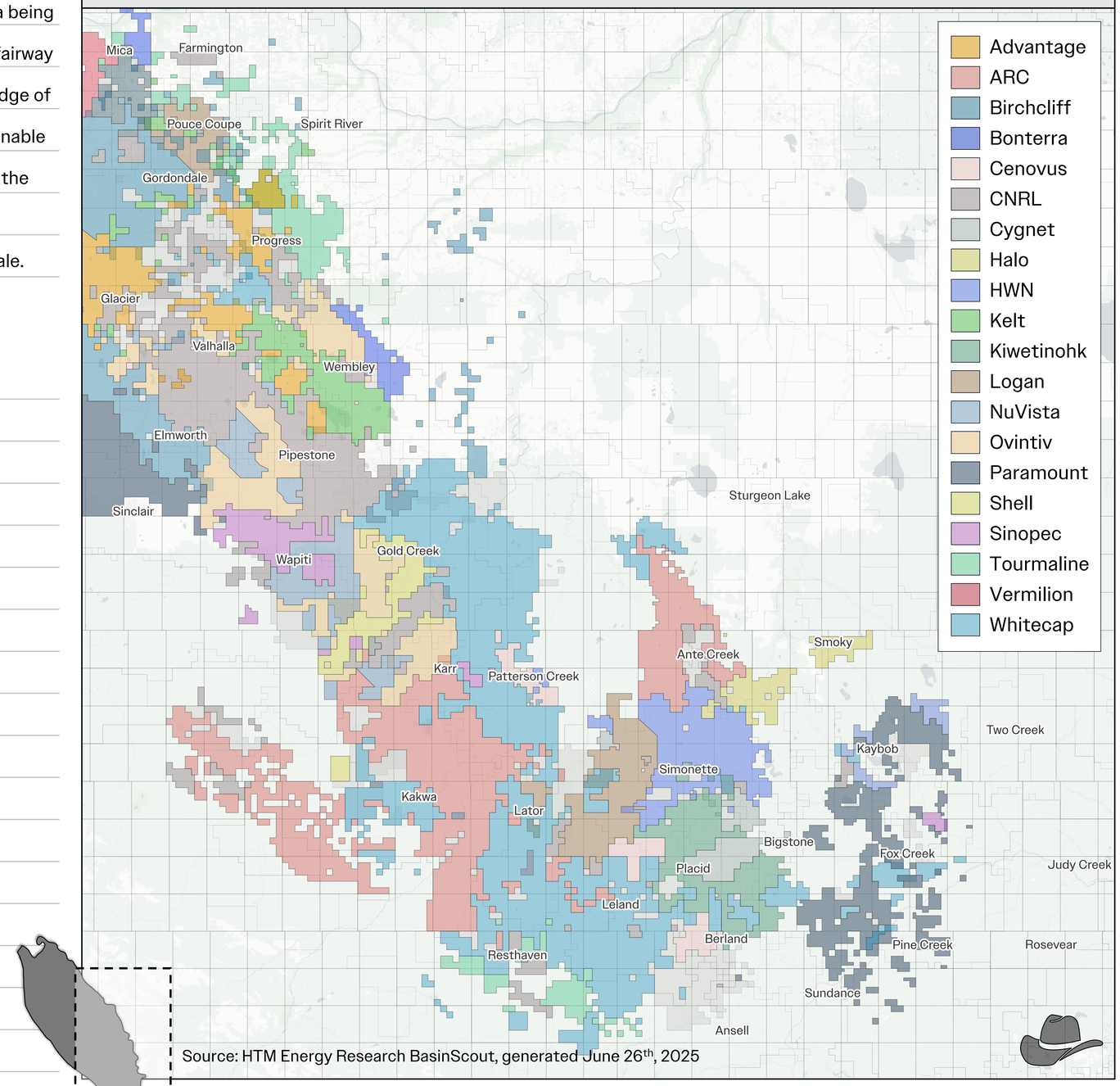
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HTM Analyst Notes

The Alberta Montney fairway is generally all liquids-weighted aside from Glacier & Elmworth; the later area being an emerging lean gas play owned entirely by Birchcliff and Paramount. The best parts of the condensate fairway are at Kakwa & Karr, where ARC and Ovintiv have the dominant positions. Moving towards the northeast edge of the play it turns semi-conventional, though the consistent vertical porosity and lithology has made it amenable to high intensity completions. Only the Lower and Middle Montney are pervasive throughout Alberta; with the Lower Montney the thickest throughout Lator, and Pouce Coupe/Gordondale. The Middle bench is more consistent in thickness, generally >100m throughout; with the highest porosity at Gold Creek at Gordondale.

Client Notes

Alberta Montney Fairway Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

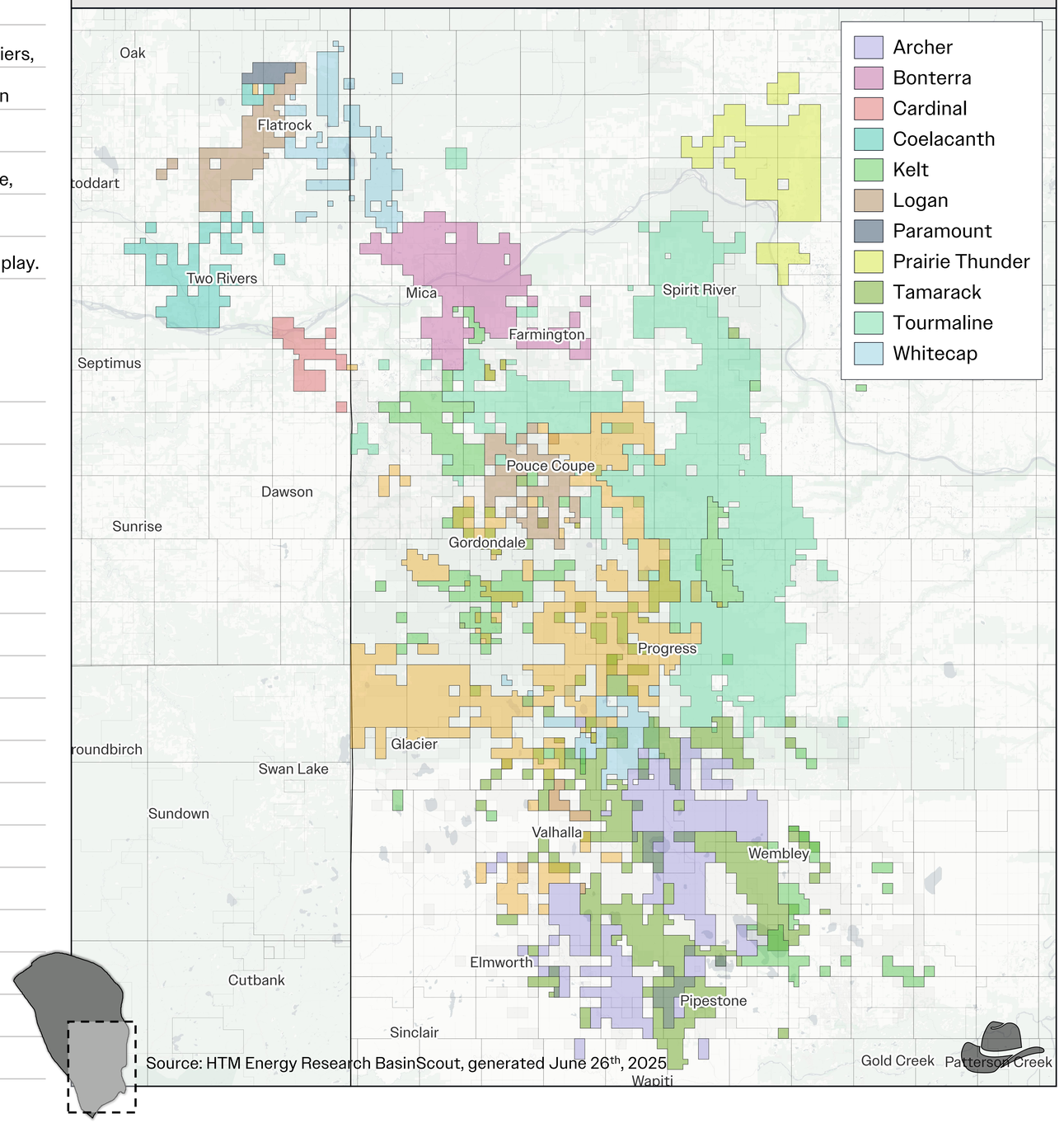
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HTM Analyst Notes

The Charlie Lake is a semi-conventional play notorious for its regional inconsistency due to multiple internal unconformities resulting in unpredictable reservoir facies. Historical development focused on porous erosional inliers, while horizontal development focuses on the tidal flat successions. Recent results from all over the play have been phenomenal, including step-outs in the Upper Charlie Lake. The Charlie Lake has multiple members; with the Boundary/Braeburn member the most commonly targeted. The Charlie Lake struggles with interbedded anhydrite, making more intense fracture stimulations necessary. Some operators have tried to develop the Charlie Lake in a 'cube' style, with 3 intervals from one pad; there's evidence to support >5 wells per section is overcapitalizing the play.

Client Notes

Alberta Charlie Lake Fairway Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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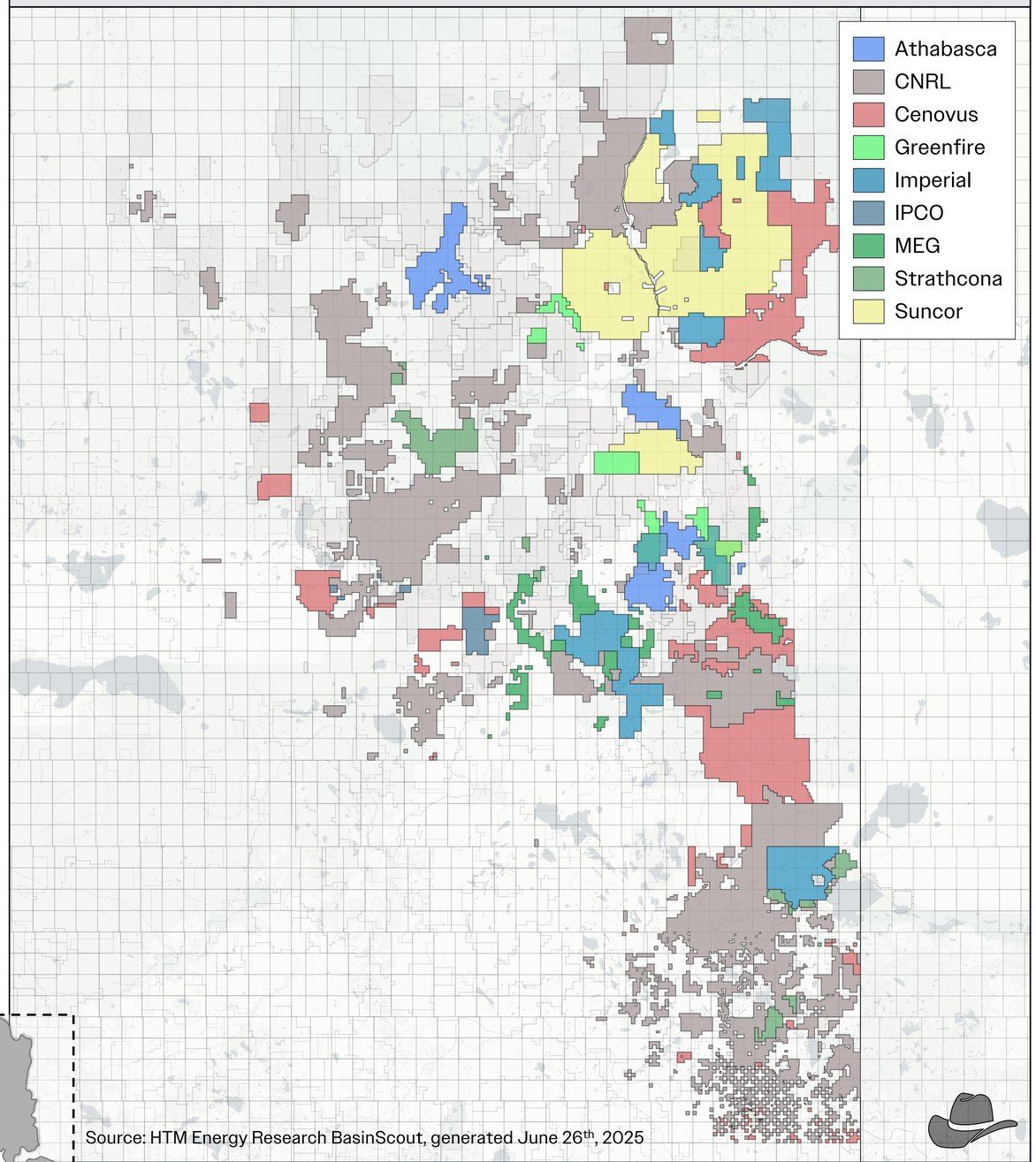
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HTM Analyst Notes

The Athabasca oil sands are the highest quality oil sands in Alberta, with the McMurray formation the most targeted. Majority of the oil sands are developed with using SAGD, with the shallower extremely thick pay in the north accessed via mining. The best McMurray oil sands deposits are >50m thick, though not laterally continuous with a point bar and channel deposition. Recently, in the southern Cold Lake area, operators have began expanding into the Grand Rapids, a more continuous shoreface deposit, but thinner, lower quality sand. IPC's Blackrock asset is the second full-scale Grand Rapids project (Strathcona Lindbergh the first). The Alberta and Saskatchewan oil sands have nearly 3 trillion barrels of bitumen in place, with another trillion barrels of bitumen in the Grosmont carbonates (commerciality not yet demonstrated).

Client Notes

Athabasca Oil Sands Lease Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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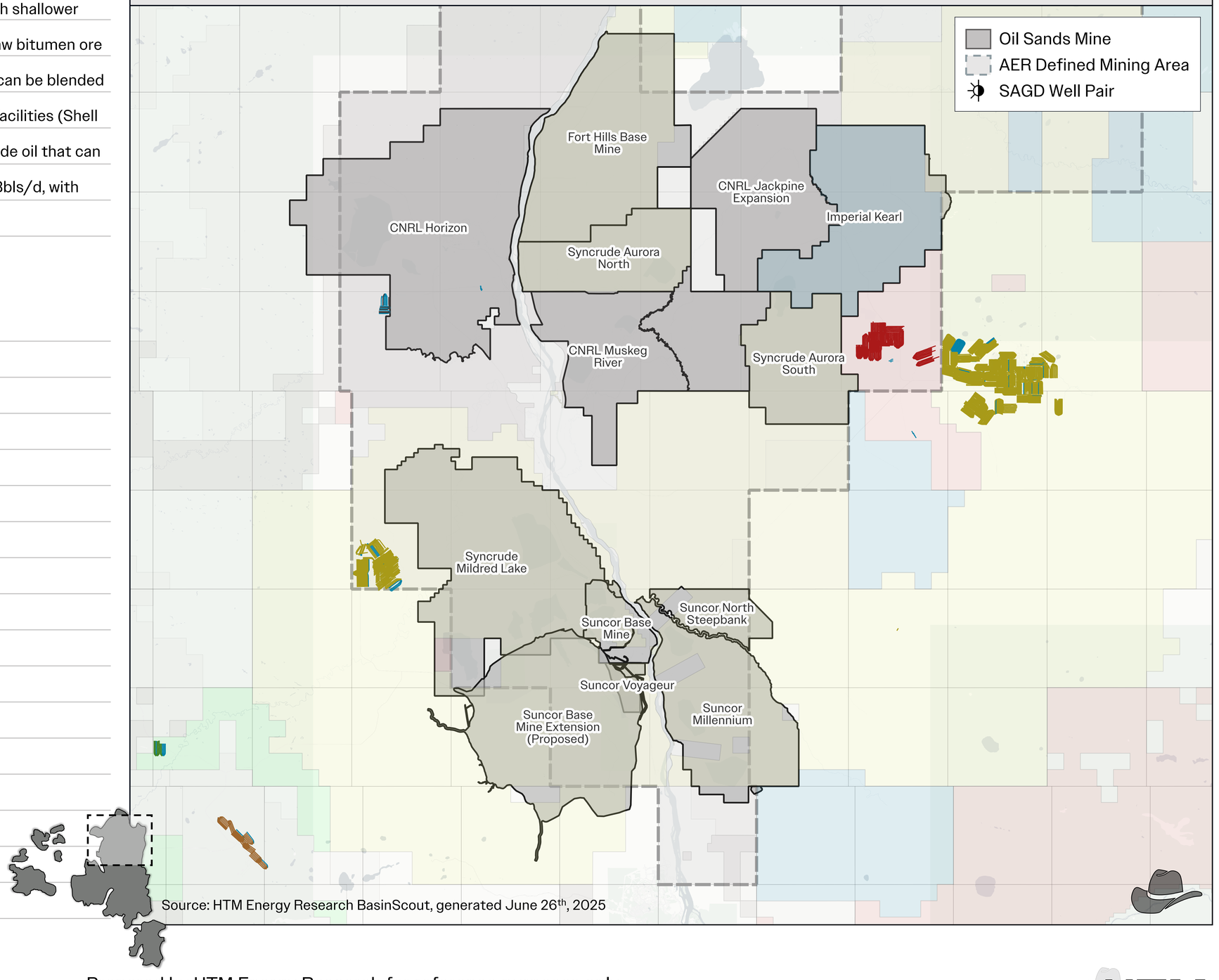
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HTM Analyst Notes

The oil sands mining areas access raw bitumen that is deposited much shallower than the southern parts of the oil sands fairway (<100m deep). This raw bitumen ore is mixed with hot water, then treated and typically upgraded, though can be blended to sell as dilbit. If upgraded through one of the provinces half-dozen facilities (Shell and Suncor main operators), the bitumen is converted into lighter crude oil that can then be sold directly to refineries. Oil sands mining produces ~1.7MMBbls/d, with CNRL, Suncor (Syncrude), and Imperial the only mine operators.

Client Notes

Oil Sands Mining Area Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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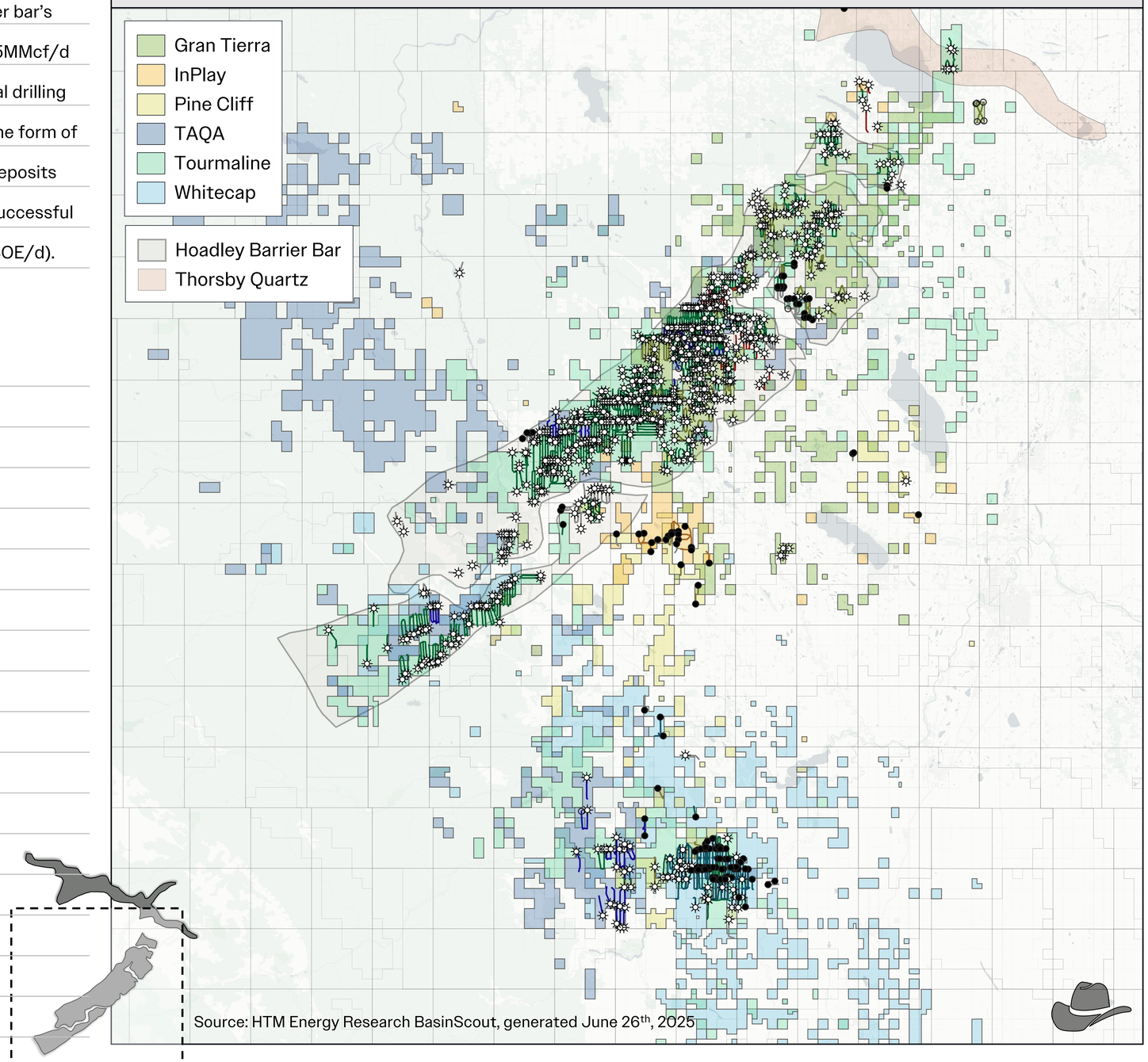
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HTM Analyst Notes

The Glauconite's main target is a massive sand bar complex with huge rich gas in place. The barrier bar's porosity improves moving north, though the reservoir pressure increases moving south, (IP_{30} ~3-5MMcf/d updip, 6-12MMcf/d downdip); as such, the Hoadley Barrier Bar has seen a renaissance of horizontal drilling into the historically unproducible lower-porosity sands. Moving southeast, the Glauconite takes the form of stringy lithic channels that continue throughout Southern Alberta with other, smaller shoreface deposits throughout the Caroline and Willesden Green area. TAQA, Whitecap, and Pine Cliff have all been successful targeting smaller, but equally prolific shoreface sands south of the Barrier Bar (IP_{30} rates >1,000BOE/d).

Client Notes

Central Alberta Glauconite Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

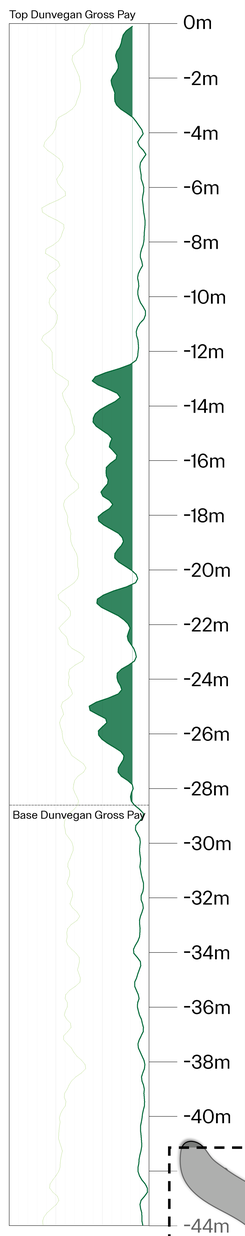
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HTM Analyst Notes

The Dunvegan as has seen excellent results from higher intensity fracs throughout Karr and Simonette. As the Dunvegan moves southeast, it transitions from a channel-type deposition, to a delta plain/shoreface type deposition, the individual Dunvegan members becomes less consistent. Historically, operators have targeted massive lowstand channels, though we think some of the best recent wells have *not* tried to contain the frac in the main member, accessing all vertical porosity, as shown on the type log.

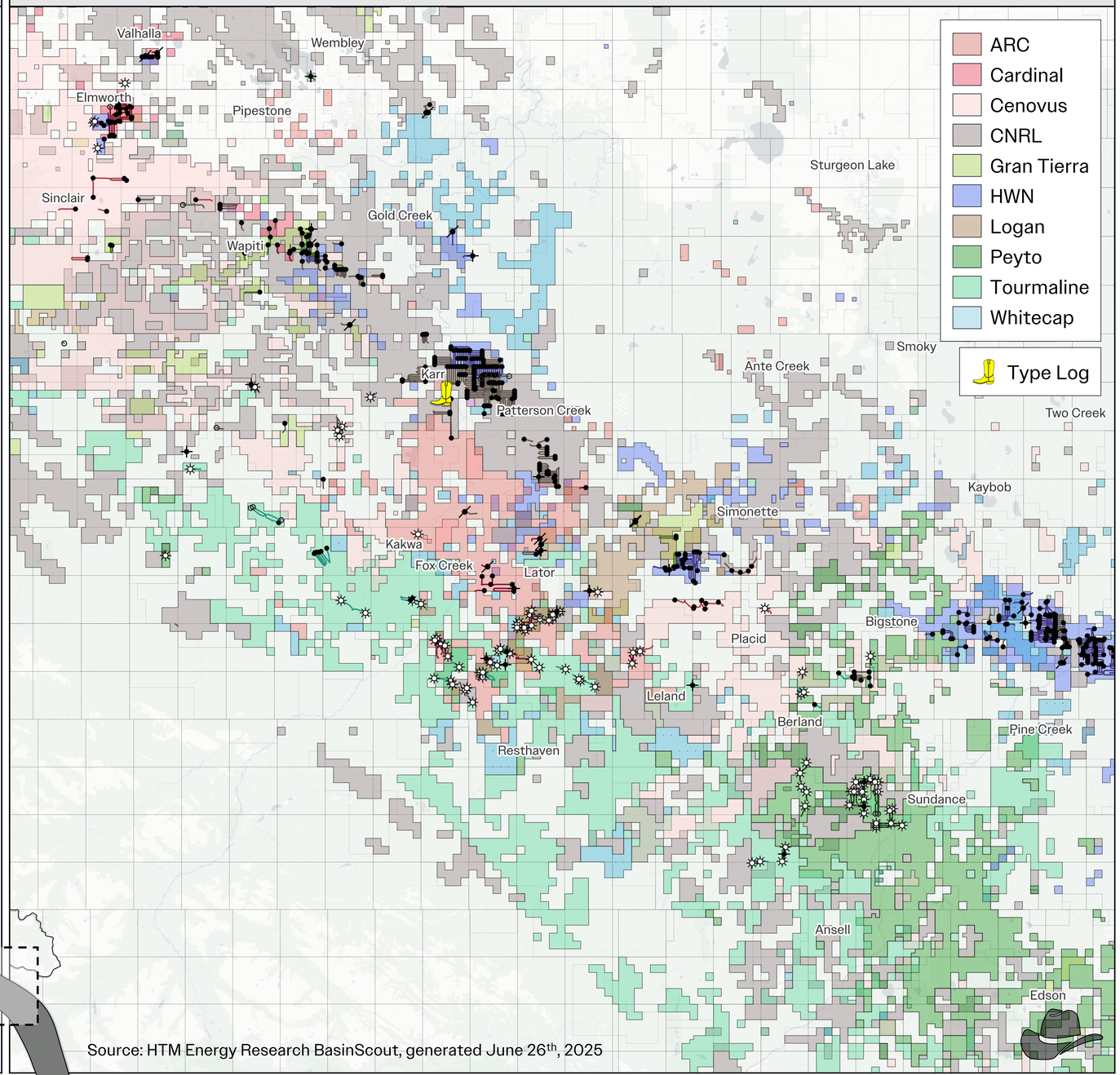
Client Notes

Phi Type Log



Source: HTM Energy Research

Northwest Alberta Dunvegan Acreage and Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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Information contained within may be incomplete or incorrect.

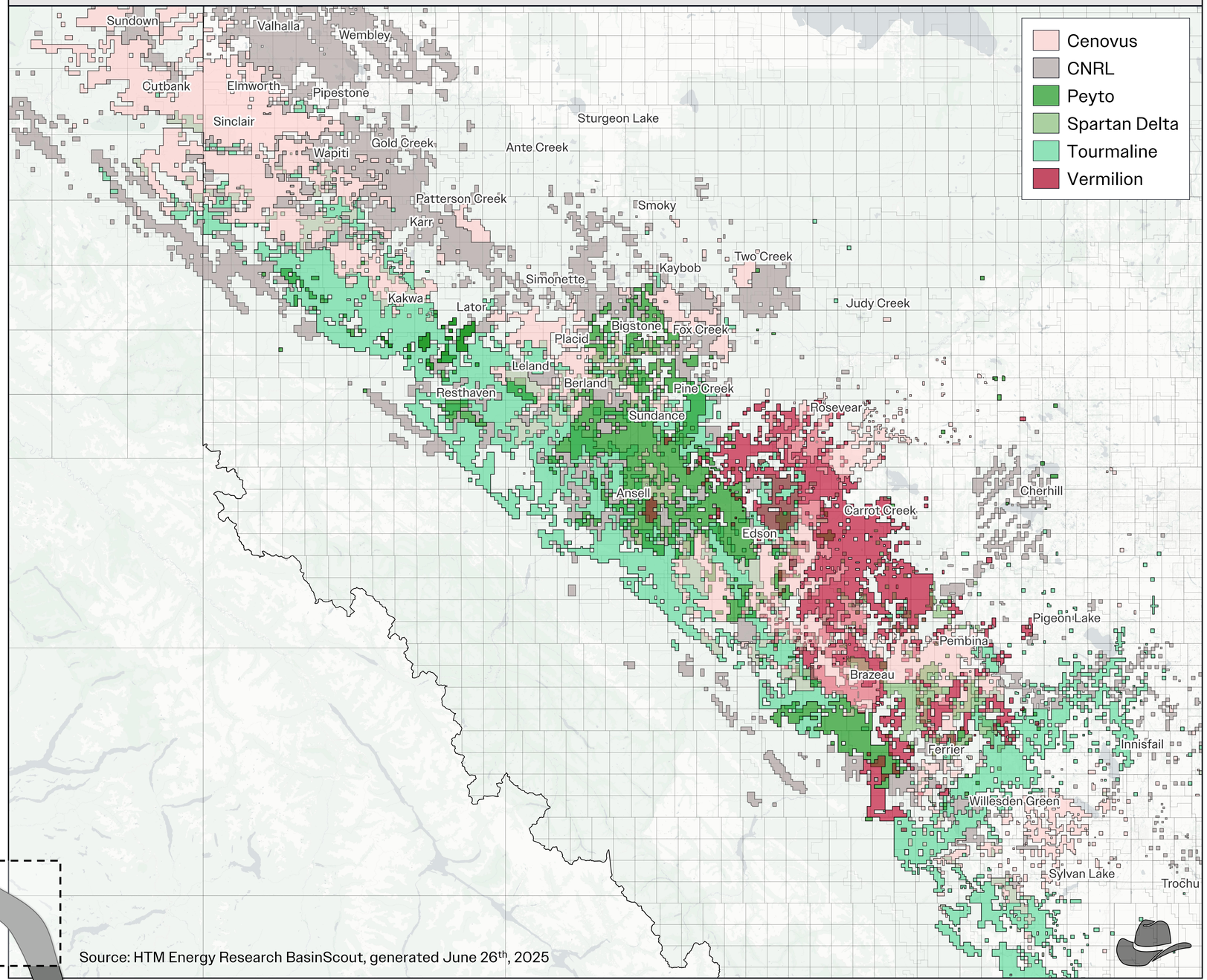
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HTM Analyst Notes

The greater Deep Basin fairway is comprised of multiple stacked, tight sands and stretches over 600km from the southeast to northwest. Horizontal production from the play is ~650MBOE/d, and essentially entirely from the largest producers; with the companies shown on the map to the right making up ~80% of production. The most promising gas results have been from the Falher sandstone in the Kakwa area where operators target large shoreface 'shingles' which are highly productive (EURs as high as 4MMBOE).

Client Notes

Generic Deep Basin Key Players Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

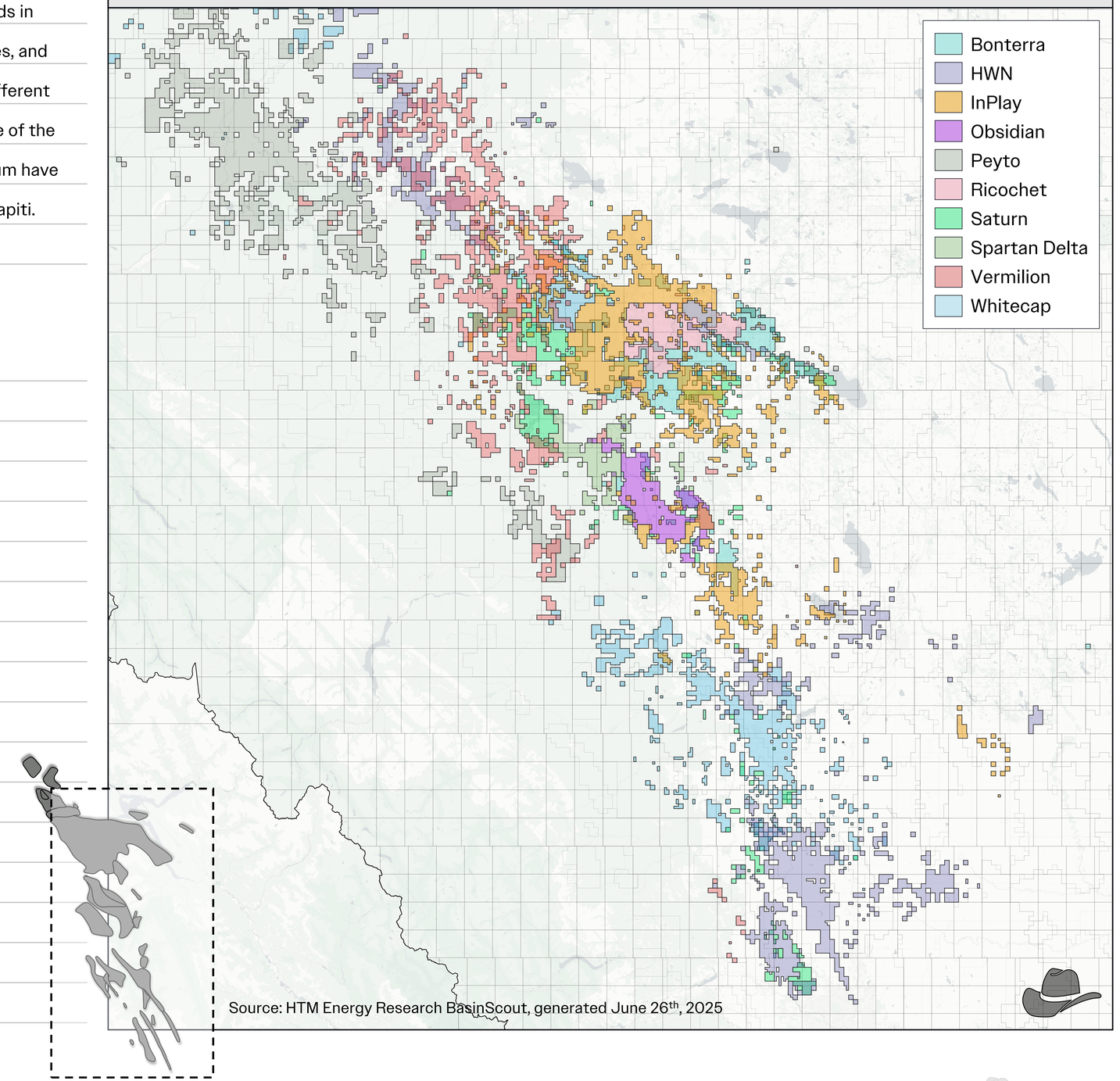
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HTM Analyst Notes

The Pembina Cardium has been producing for several decades and is one of the most prolific oilfields in Canada. Historically produced conventionally (with waterflood implementation), recovery techniques, and different play styles have evolved greatly since the first well in the 50s. The Cardium has several different sub-plays; high permeability conglomerates, upper Cardium clean sands, horizontal wells in the core of the play targeting banked oil, and long-reach horizontals into halo plays. Recent results from the Cardium have been incredibly strong across all sub-plays, especially the halo extension fairway at Lochend and Wapiti.

Client Notes

Central Alberta Cardium Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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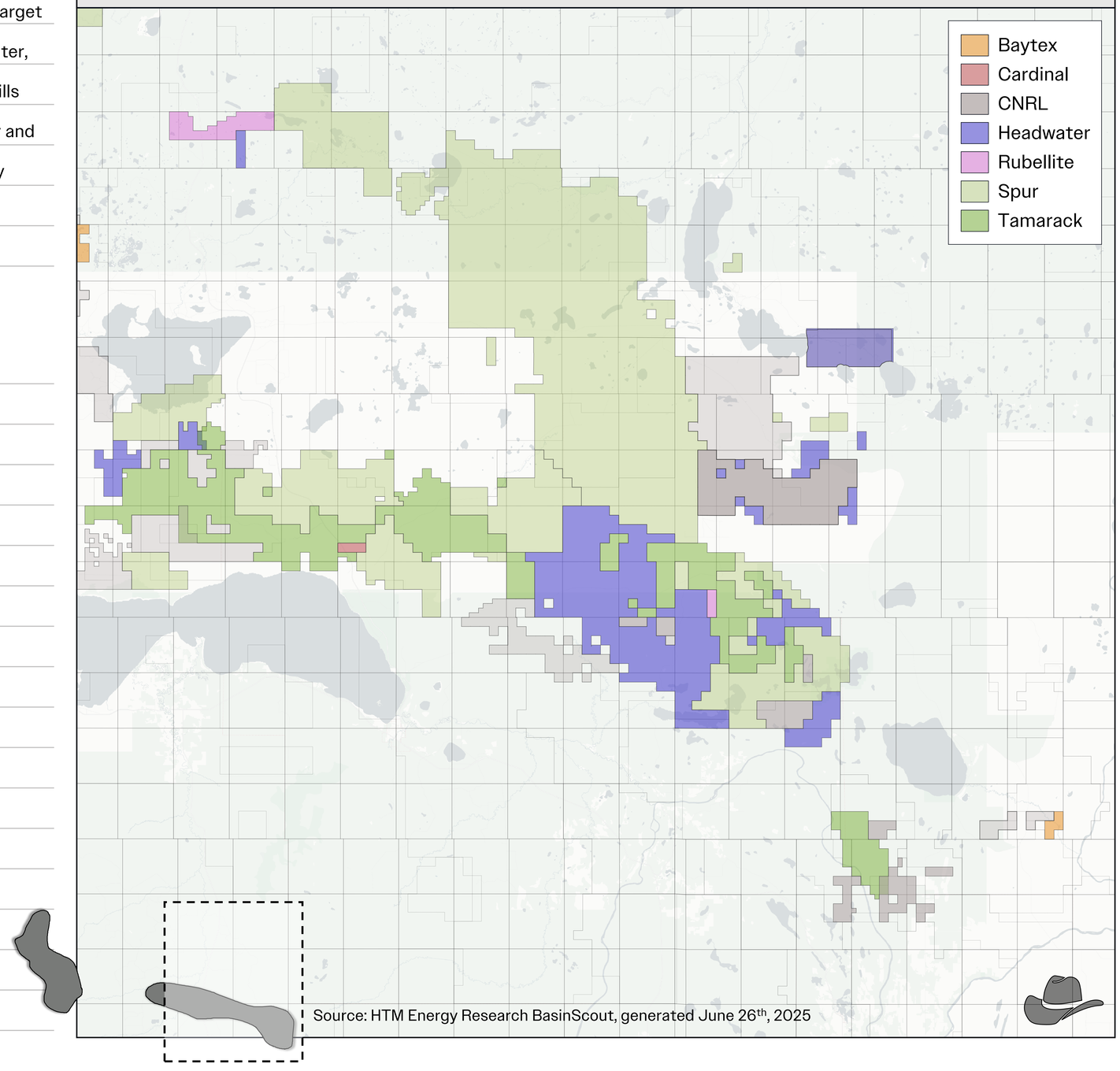
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HTM Analyst Notes

The Marten Hills and Nipisi Clearwater are dominated by Headwater, Spur, and Tamarack. The main target is a thick, clean sandstone pervasive throughout the greater fairway, with other sands in the Clearwater, Grand Rapids, and Wabiskaw all providing localized inventory upside. Waterflood results at Marten Hills have been stunning, with oil rates rising rapidly once >1x voidage replacement is reached. Headwater and Tamarack both have material upside to continued waterflood outperformance. While we were initially worried about water breakthrough, it seems sand production concerns are minimal.

Client Notes

Marten Hills Clearwater Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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WCSB Reference Maps

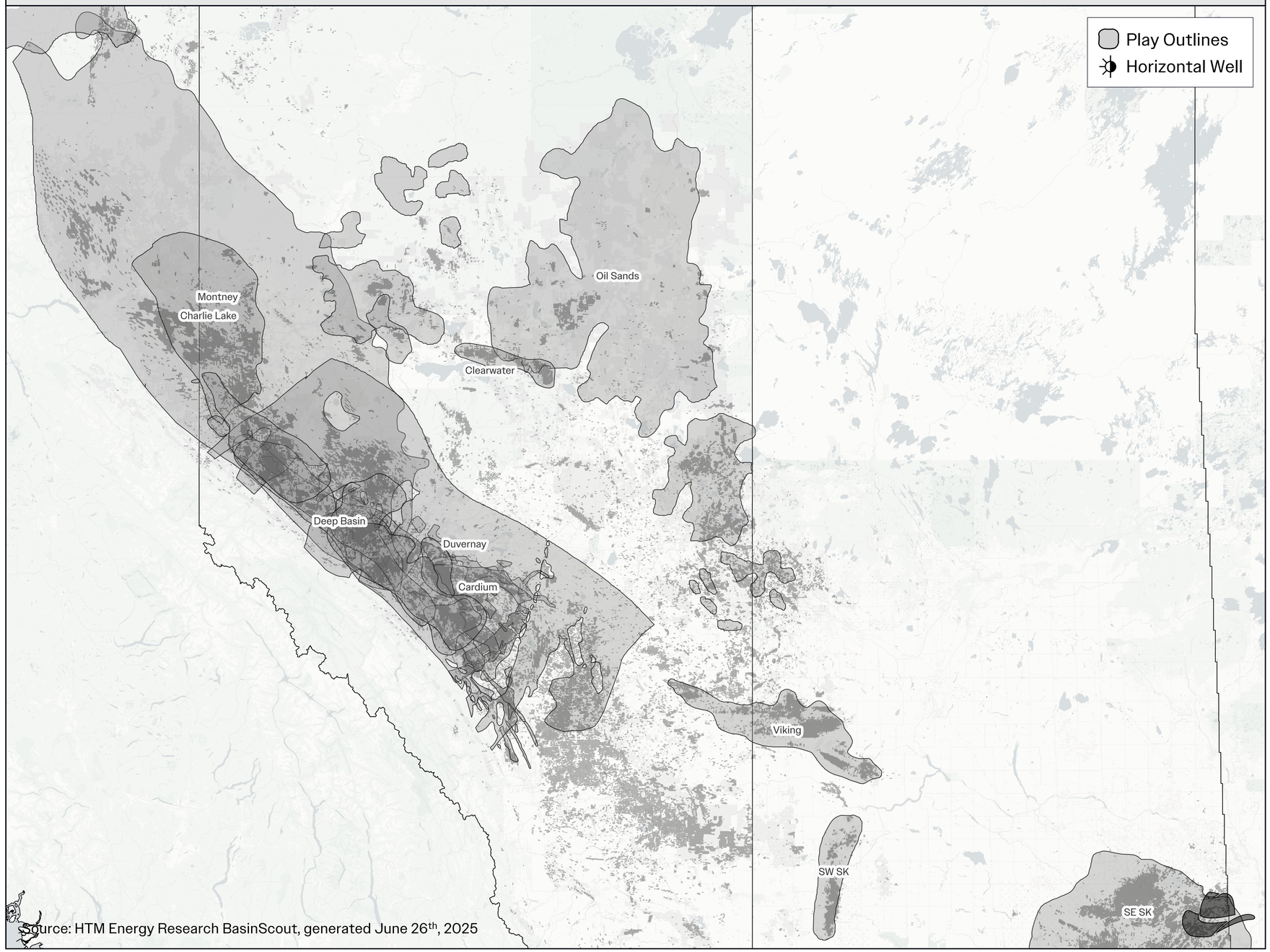
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Information contained within may be incomplete or incorrect.

HTM Analyst Notes

We split the WCSB in a ~dozen key plays that account for 95% of the WCSB's oil and gas production. We don't actively focus on shallow gas, or other conventional plays. While we still pay attention to emerging opportunities in the greater southern Alberta Mannville fairway; since 2023 it has only attracted ~$1.3Bn in industry capital (~1%). As such, we spend our time on scalable ideas in emerging, and proven resource plays.

Client Notes

WCSB Key Plays Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
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HTM Analyst Notes

Together, our 6 key WCSB companies produce ~4.7MMBOE/d;

CNRL – 26MM gross acres, production of 1,580MBOE/d (70% oil)

Cenovus – 7MM gross acres, production of 705MBOE/d (90% oil)

Whitecap – 5.3MM gross acres, production of 380MBOE/d (55% oil)

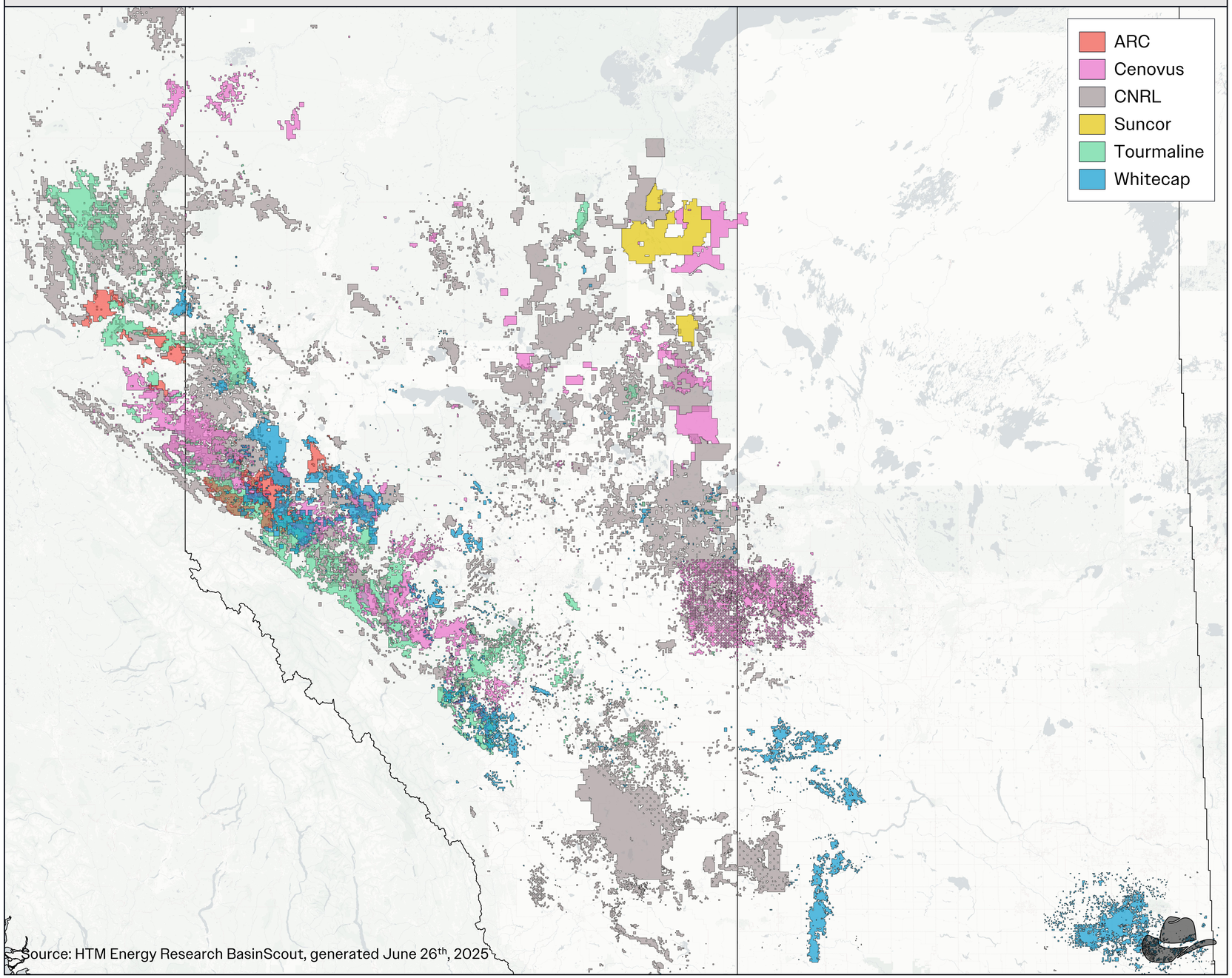
Tourmaline – 5.1MM gross acres, production of 700MBOE/d (10% oil)

ARC – 1.4MM gross acres, production of 430MBOE/d (30% oil)

Suncor – 1.1MM gross acres, production of 850MBOE/d (100% oil)

Client Notes

WCSB Key Players Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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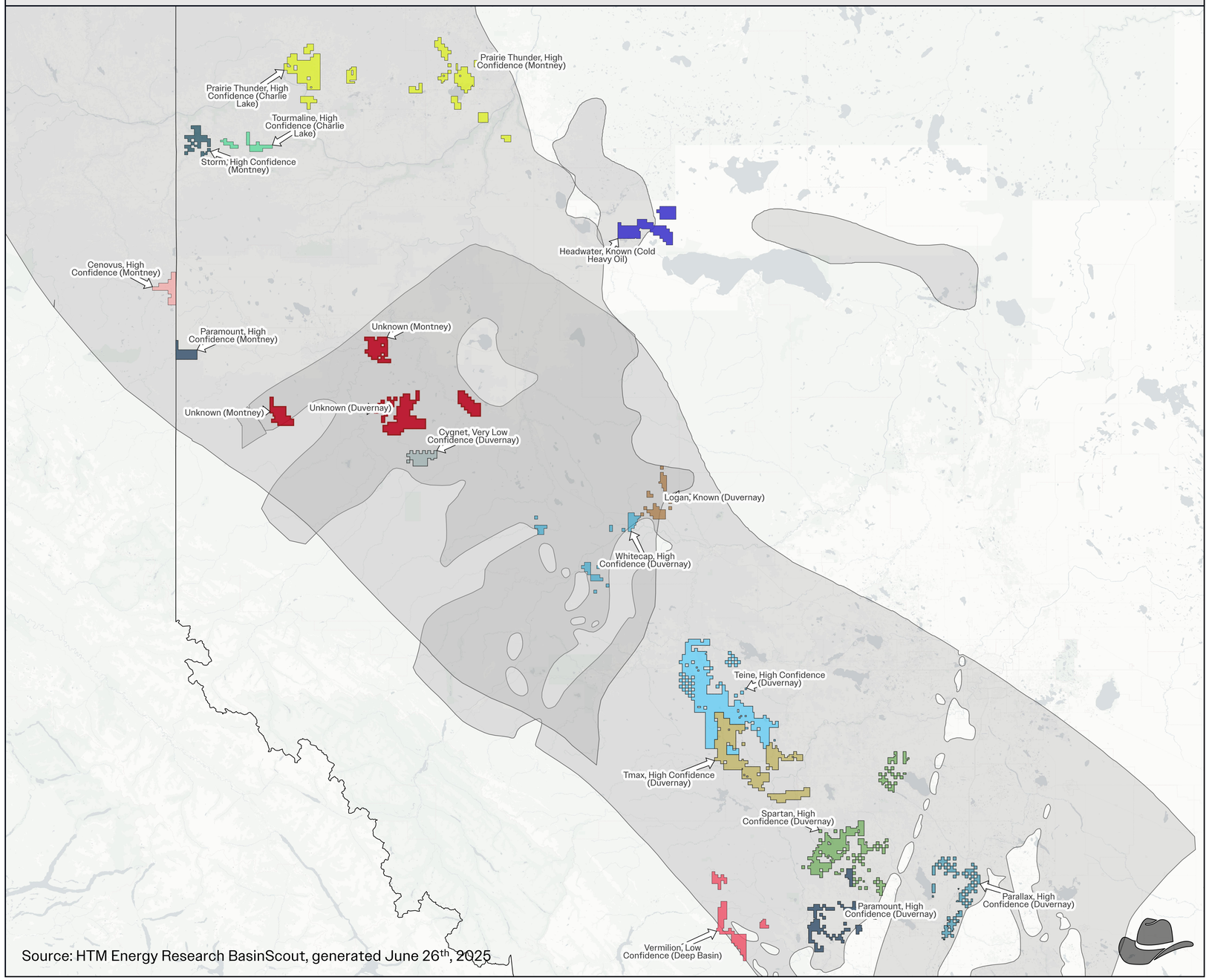
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HTM Analyst Notes

We're not sure who is buying the Montney and Duvernay rights in the Karr and Gold Creek area. The northernmost unknown Montney block belongs to Rand Resources, and when we pull the corporate registration for that shell, it links back to Donnybrook Energy. The two large unknown Duvernay blocks are ~85K acres, with the western one in what we believe is a prospective condensate window. Elsewhere, Prairie Thunder has been rapidly expanding their multilateral Montney and Charlie Lake play fairway.

Client Notes

Large PNG Blocks Under Broker Ownership & HTM Allocated Ownership Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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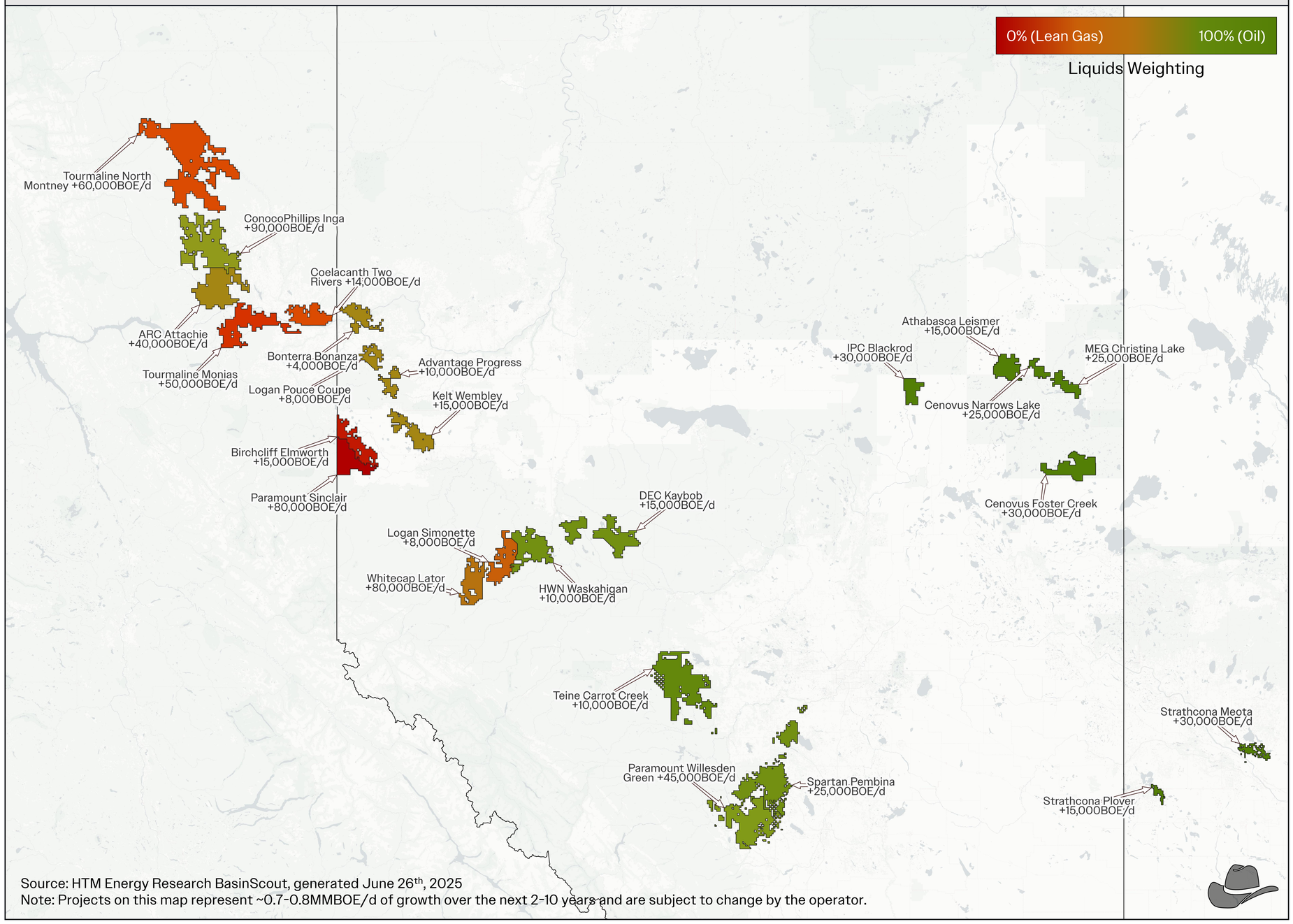
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HTM Analyst Notes

Effectively all the WCSB's growth is coming from the Montney, Duvernay, and Oil Sands, with ~70MBOE/d from the West Shale Basin Duvernay, ~100MBOE/d from the Simonette/Lator Montney, and nearly 1Bcf/d (~150MBOE/d) from the South Montney lean gas window. Shown in-progress oil sands projects account for another ~200MBbls/d of growth.

Client Notes

Key Single-Asset Communicated Growth Project Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025
Note: Projects on this map represent ~0.7-0.8MMBOE/d of growth over the next 2-10 years and are subject to change by the operator.

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Information contained within may be incomplete or incorrect.

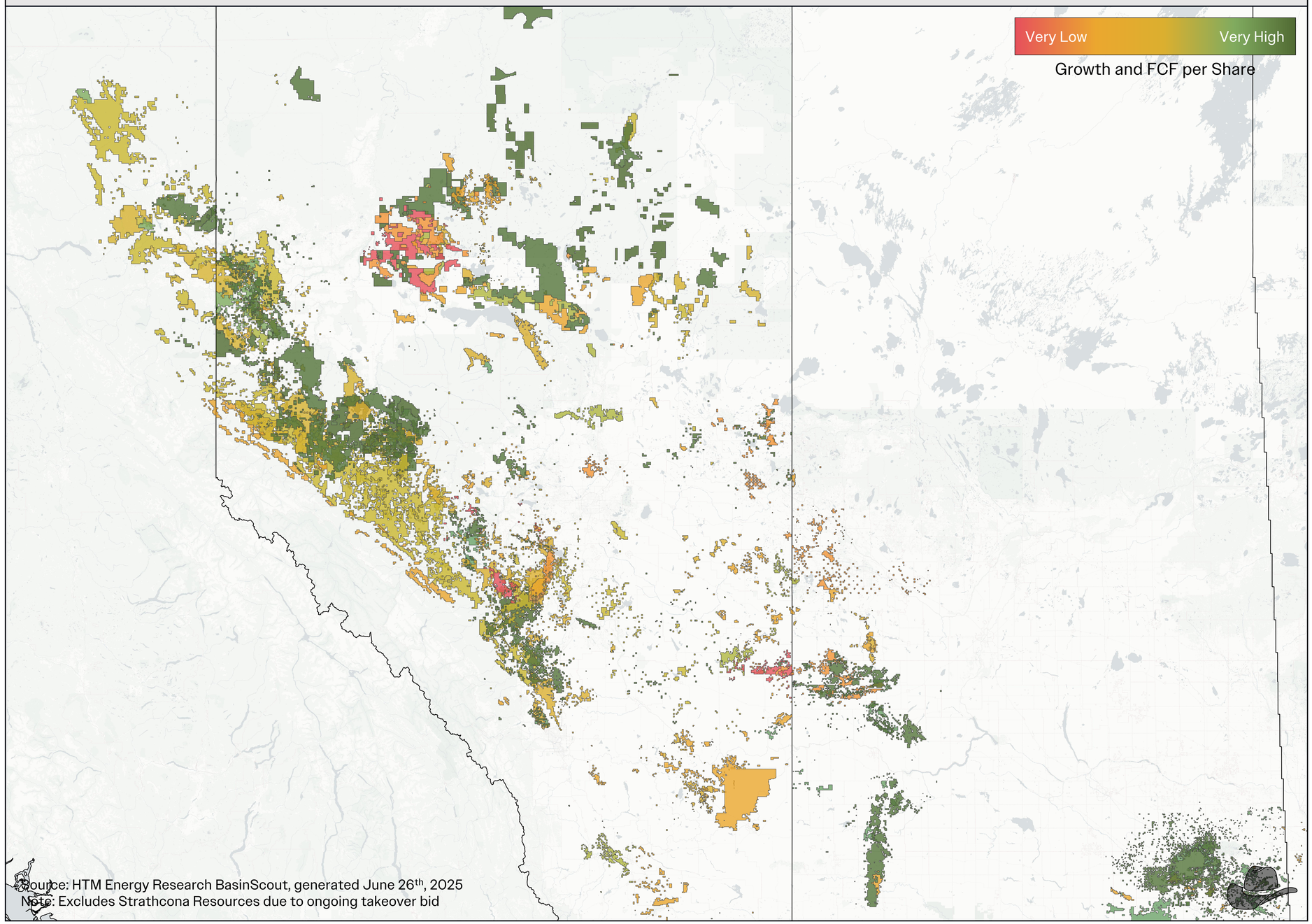
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HTM Analyst Notes

The updip Montney, West Shale Basin Duvernay, and greater Marten Hills cold flow heavy oil fairways screen as the most attractively priced opportunities in our universe; with certain E&Ps able to generate high-single-digits levered free cashflow yields while growing volumes at 5-8% per year in a highly capital efficient manner.

Client Notes

HTM SMID WCSB Coverage 2024 Exit to 2027 Exit Run-Rate Levered FCF & Volume Growth per Share Heatmap



Source: HTM Energy Research BasinScout, generated June 26th, 2025
Note: Excludes Strathcona Resources due to ongoing takeover bid

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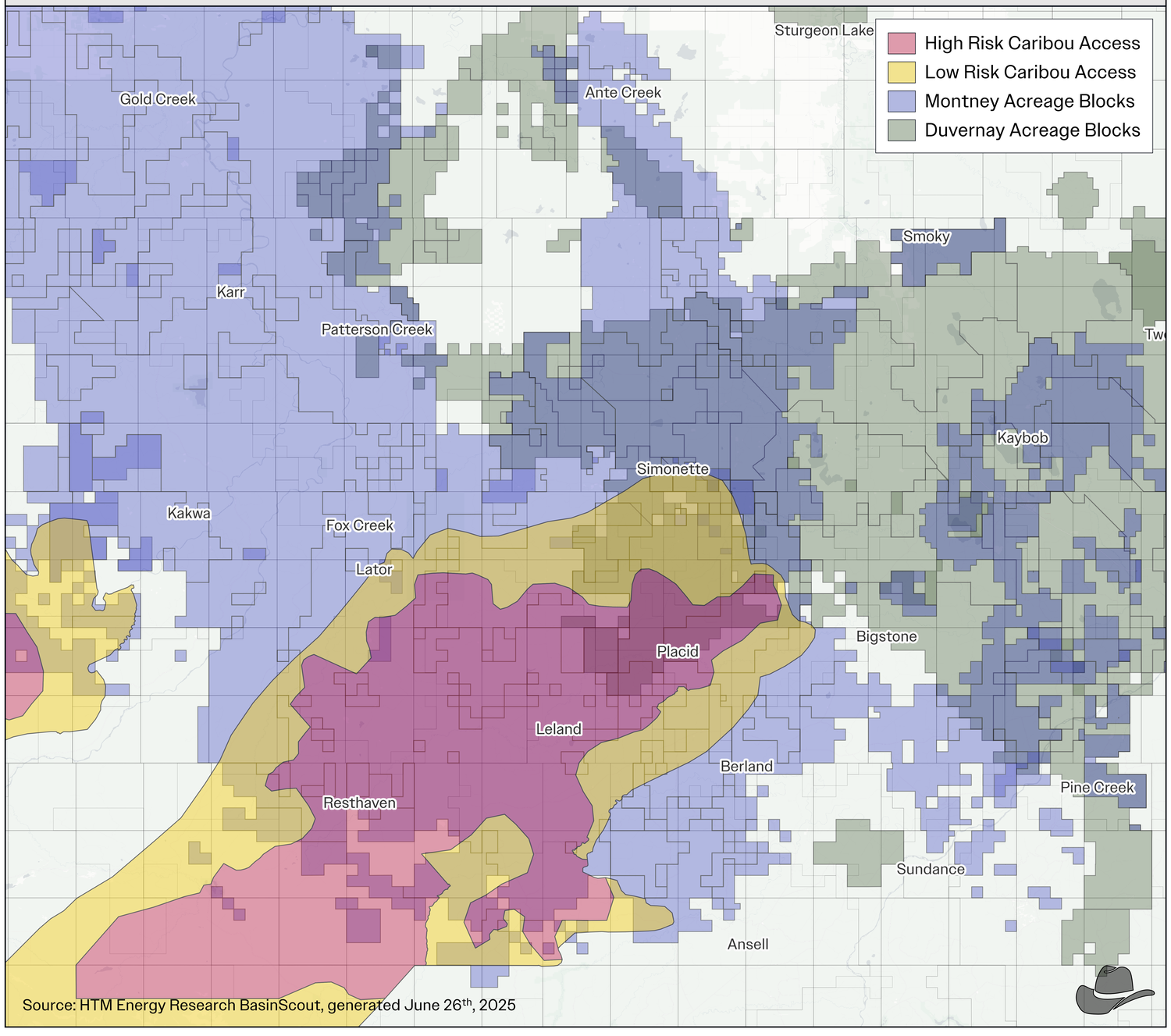
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HTM Analyst Notes

Caribou protection areas restrict surface access on a seasonal basis to parts of the Deep Basin, Duvernay, and Montney. New Crown mineral licenses can also not be nominated in these areas. Whitecap is the most exposed, with ~260K acres of Montney rights in the high-risk area, followed by Kiwetinohk with ~70K acres. If we assume that 3-mile laterals can be drilled into the high-risk zone from the low-risk zone, Whitecap's exposure shrinks to ~150K acres. The Alberta government has shown a willingness to work with the industry to alleviate this access burden.

Client Notes

Southern Montney and Duvernay Caribou Risk Areas Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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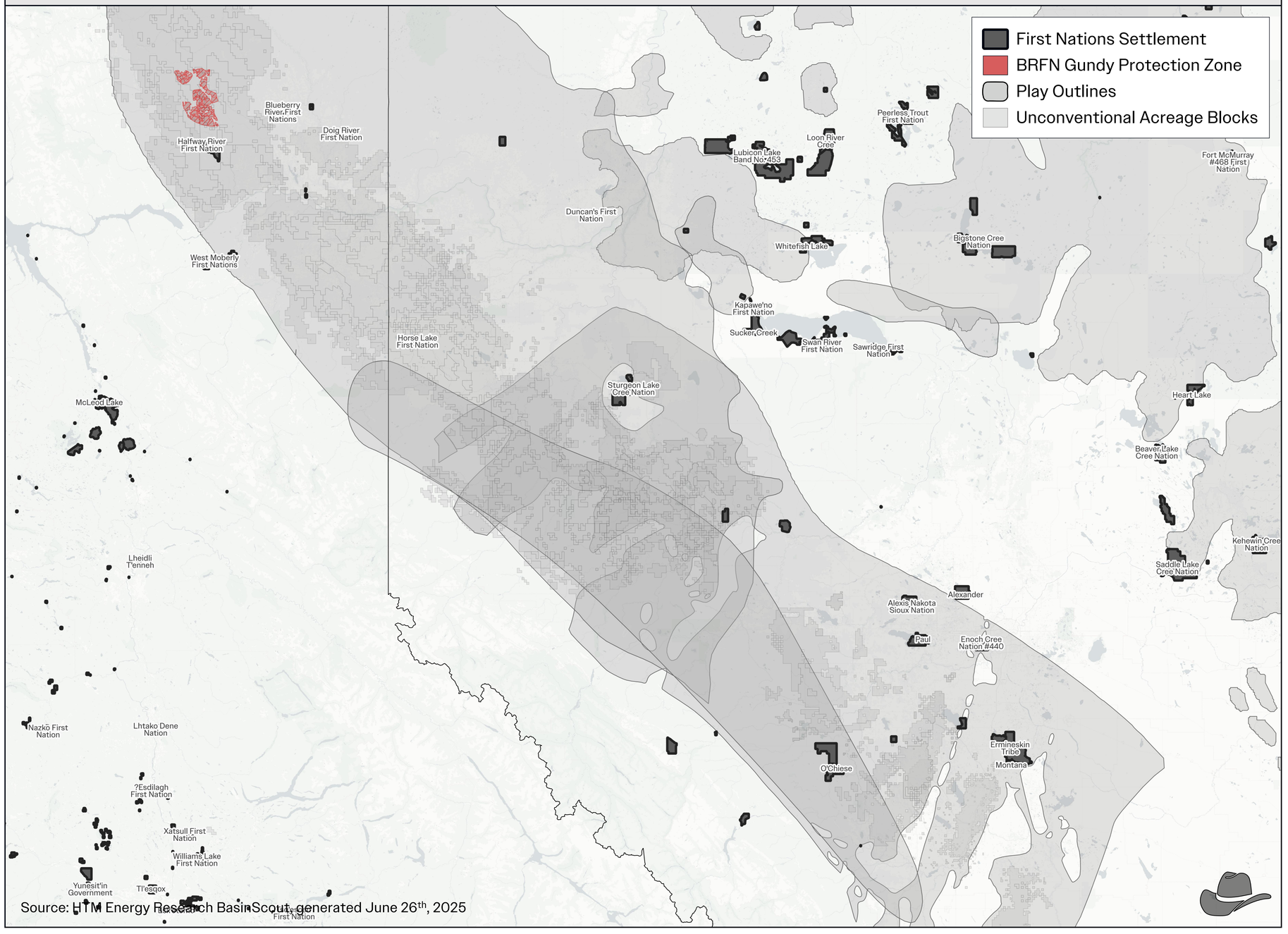
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HTM Analyst Notes

Throughout the WCSB's unconventional and oil sands fairways there are multiple First Nations Settlements and land claims. Generally, the industry works well with; and is respectful of territorial claims by the Indigenous peoples of Canada. Many large infrastructure projects are partially owned by various First Nations bands, both local projects, and larger-scale ones (i.e. Ksi Lisims LNG).

Client Notes

Greater WCSB First Nations Settlement Map



Source: HTM Energy Research Basin Scout, generated June 26th, 2025

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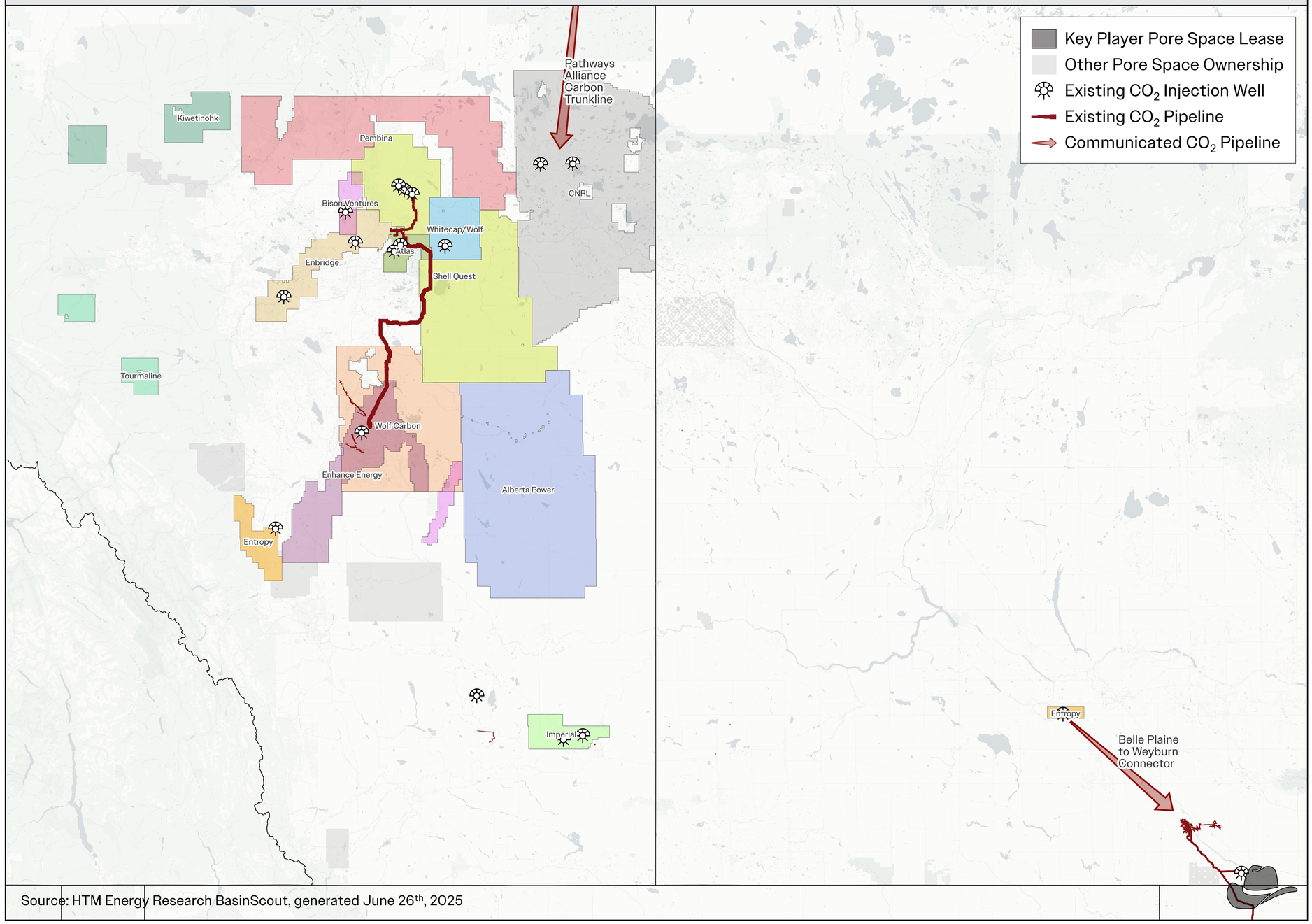
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HTM Analyst Notes

The Basal Cambrian Sandstone can store up to 2Mt of CO_2 per section. Shell the most CCUS active injector, though there are ~20 for-purpose injection wells spud throughout Alberta and Saskatchewan. In June of 2025, Whitecap sold their Belle Plaine Hub (100% interest), and their Rolling Hills Carbon Hub (AltaGas JV) to Entropy (Advantage) for $20MM.

Client Notes

WCSB CCUS Infrastructure Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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Information contained within may be incomplete or incorrect.

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North American Energy Infrastructure

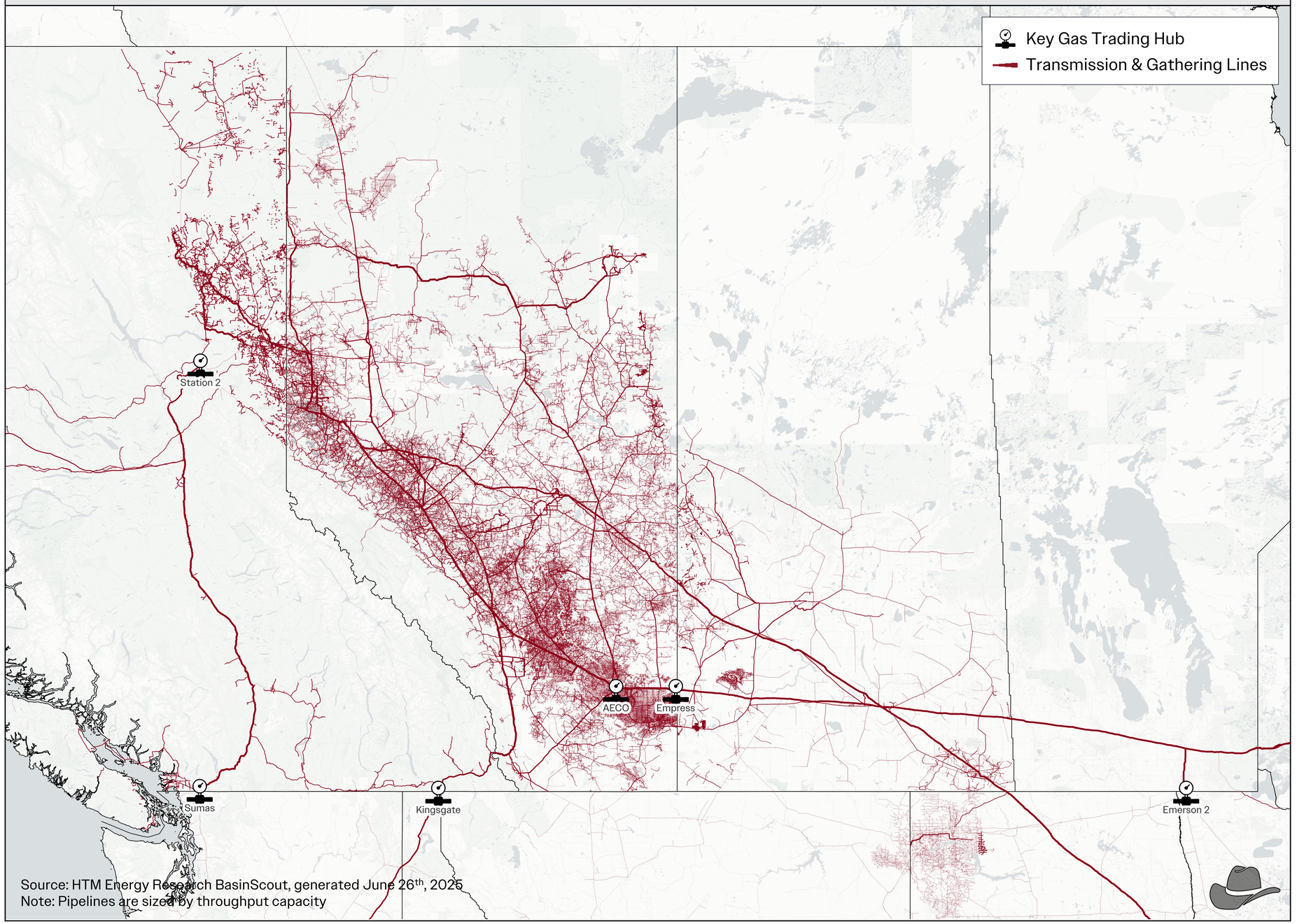
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Information contained within may be incomplete or incorrect.

HTM Analyst Notes

The WCSB has been a major natural gas producer for decades. The NGTL system controls almost all of the intra-provincial transmission; with BC's gas largely moving west on Enbridge's infrastructure. To produce gas, an E&P must own NGTL meter space, at current there is a multi-year wait for new tie-in capacity with the next major expansion planned for late-2027.

Client Notes

WSCB Natural Gas Egress and Key Sales Points Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025
Note: Pipelines are sized by throughput capacity

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

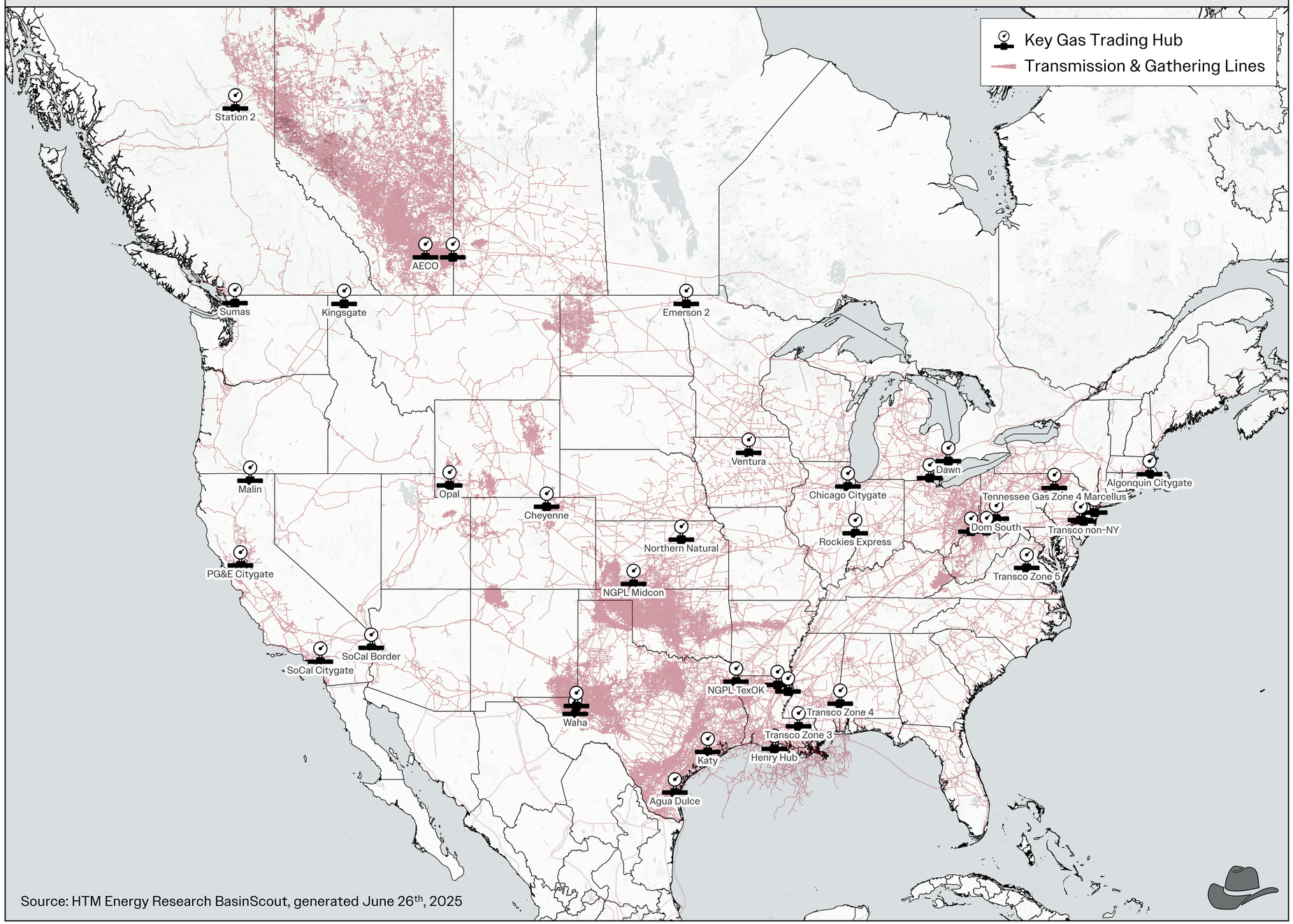
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HTM Analyst Notes

Key premium hubs include Dawn, Malin, Sumas, and Chicago; and are the most commonly accessed by WCSB E&Ps given the simple flow path. Many E&Ps access Henry Hub synthetically through basis swaps; though deliver that gas physically to AECO. Flowing to the Gulf Coast under producer custody is rare, and largely for LNG deals (ARC, Tourmaline, and CNRL).

Client Notes

North American Key Natural Gas Sales Points and Transmission/Gathering Infrastructure Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

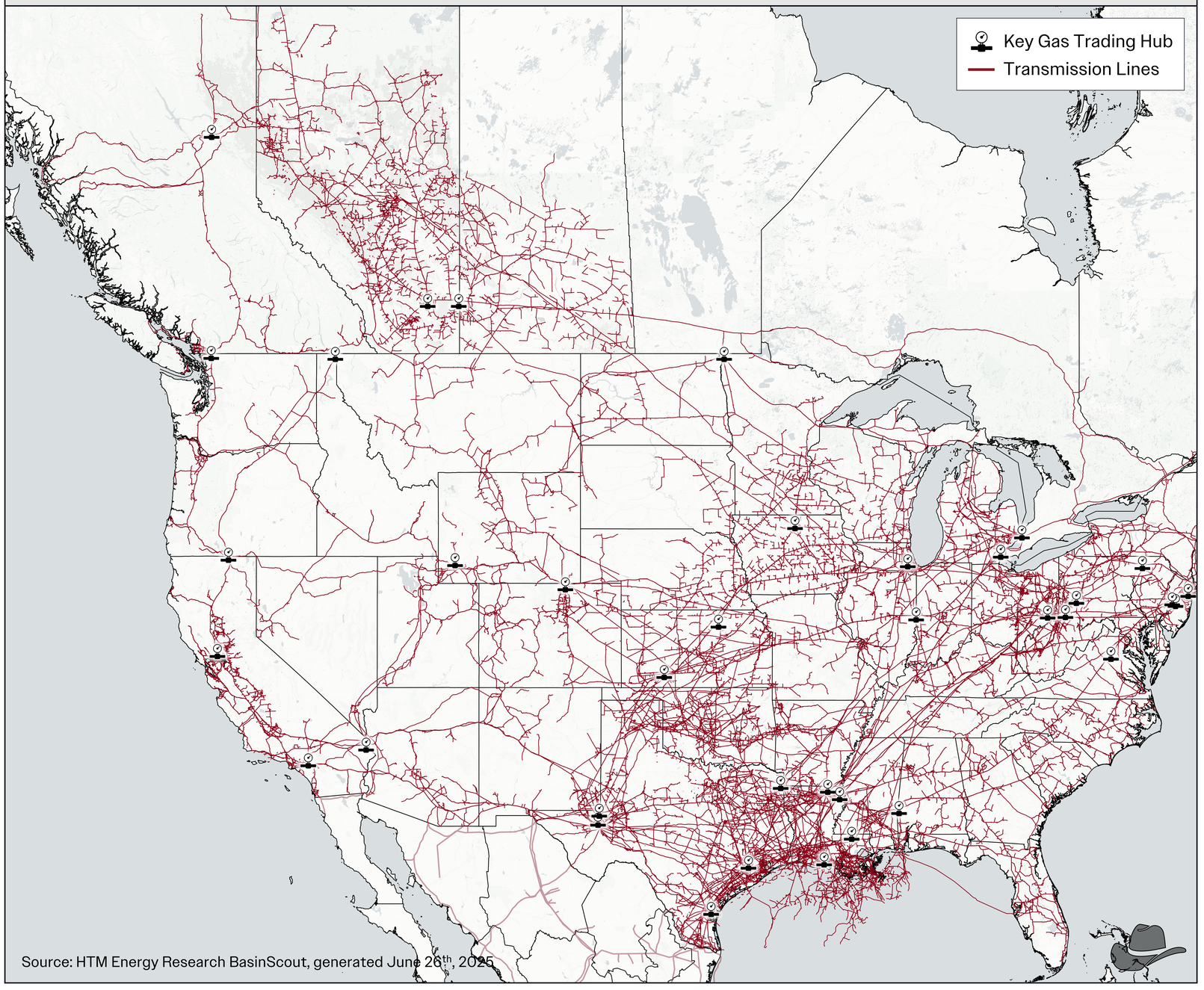
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HTM Analyst Notes

The WCSB has 4 key pipeline exit points. Via Pembina's Alliance which delivers ~1.7Bcf/d of liquids rich gas to Chicago; via the Foothills System (West Gate) that delivers ~3Bcf/d of gas into the Northwest US; via Enbridge's Westcoast pipeline which takes ~1.7Bcf/d to the Pacific Coast; and via the TC Mainline (East Gate) that takes ~5Bcf/d, and delivers it to multiple points along the pipeline's path, terminating in Eastern Canada. That's roughly 11Bcf/d in total pipeline export capacity.

Client Notes

North American Natural Gas Transmission Line Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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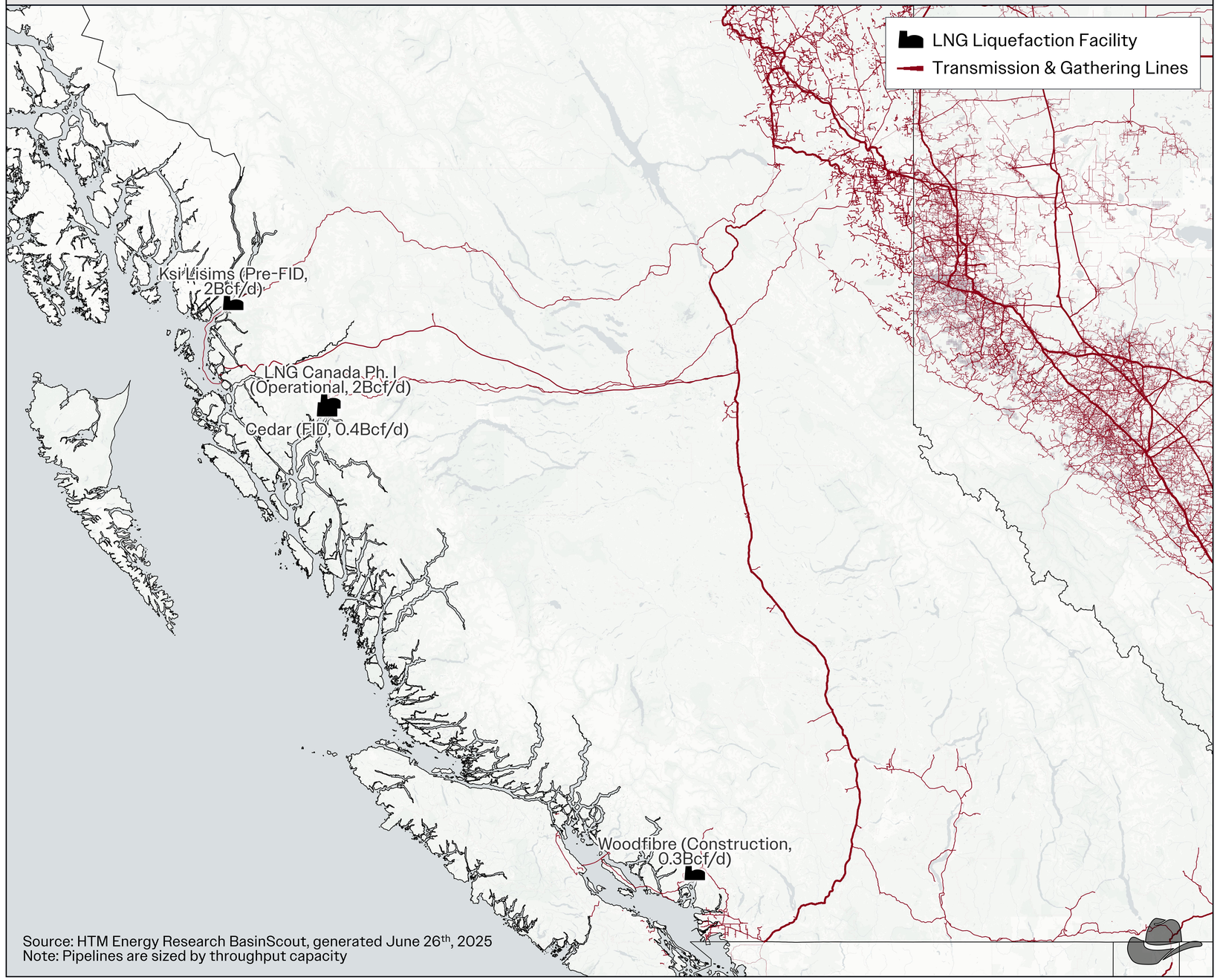
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HTM Analyst Notes

Canada has 2Bcf/d of operational LNG liquefaction capacity via LNG Canada. There are 4 projects in various pre-operational stages. Ksi Lisims and LNG Canada Ph. I (4Bcf/d combined capacity) are pre-FID, with decisions expected in the next 1-2 years. Cedar and Woodfibre are under construction (0.7Bcf/d) and expected to be operational around 2028. Ksi Lisims is fed by the already-approved Prince Rupert Gas Transmission pipeline and is backed by the Nisga'a First Nation.

Client Notes

Canadian West Coast LNG Key Projects



Source: HTM Energy Research BasinScout, generated June 26th, 2025
Note: Pipelines are sized by throughput capacity

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

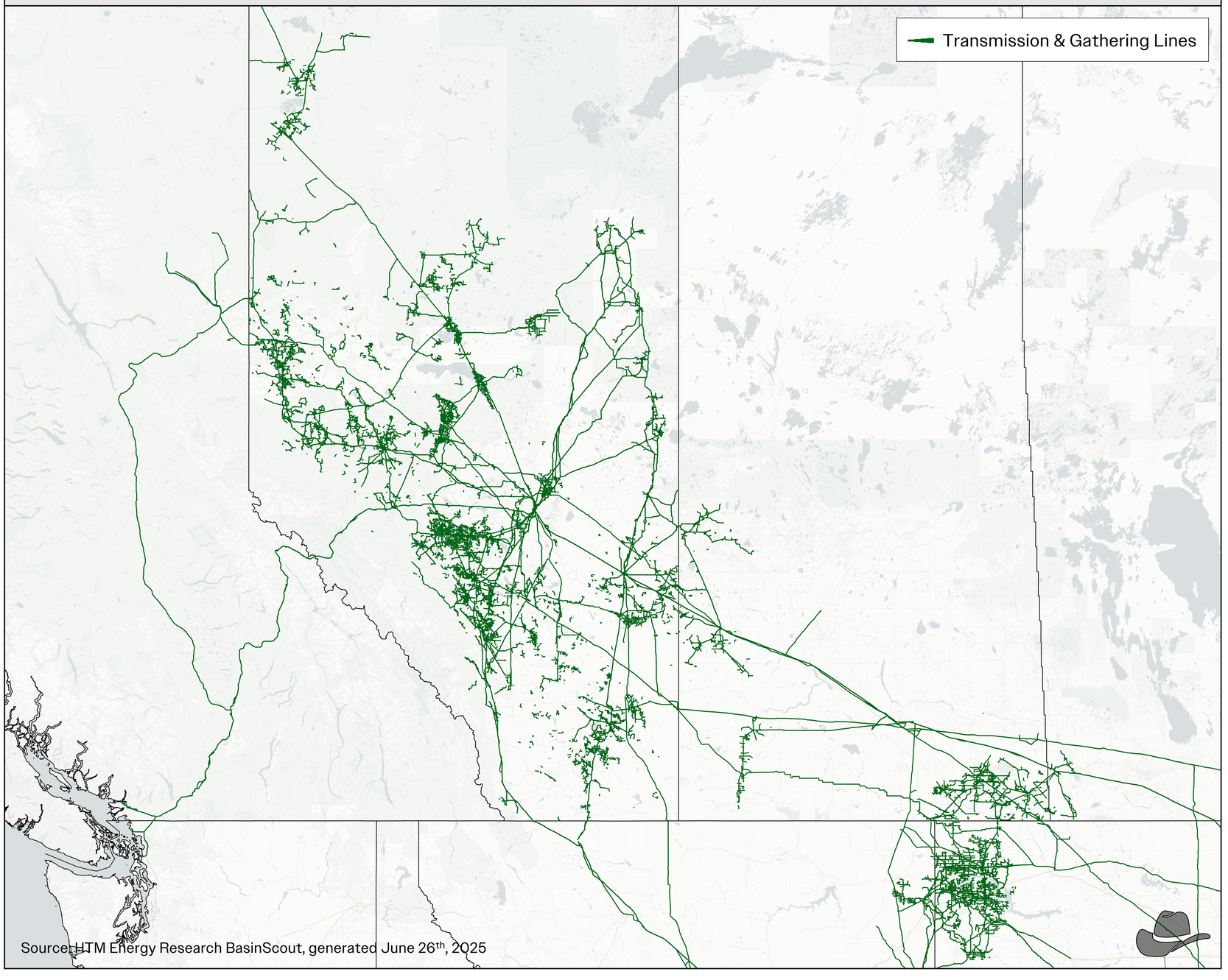
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HTM Analyst Notes

Enbridge, TC Energy, and the Canadian Government control almost all of the national crude export capacity, with the Government owning the westbound pipelines (Trans Mountain), and Enbridge/TC owning the eastbound pipelines that ultimately feed Midwest US refiners via the Mainline system, and Keystone. Intra-provincial gathering for NGLs and condensates is generally served by Pembina and Keyera, with rich gas being fractionated in Fort Saskatchewan, or Aux Sable via Alliance.

Client Notes

WCSB Crude Oil and Condensate Pipeline Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

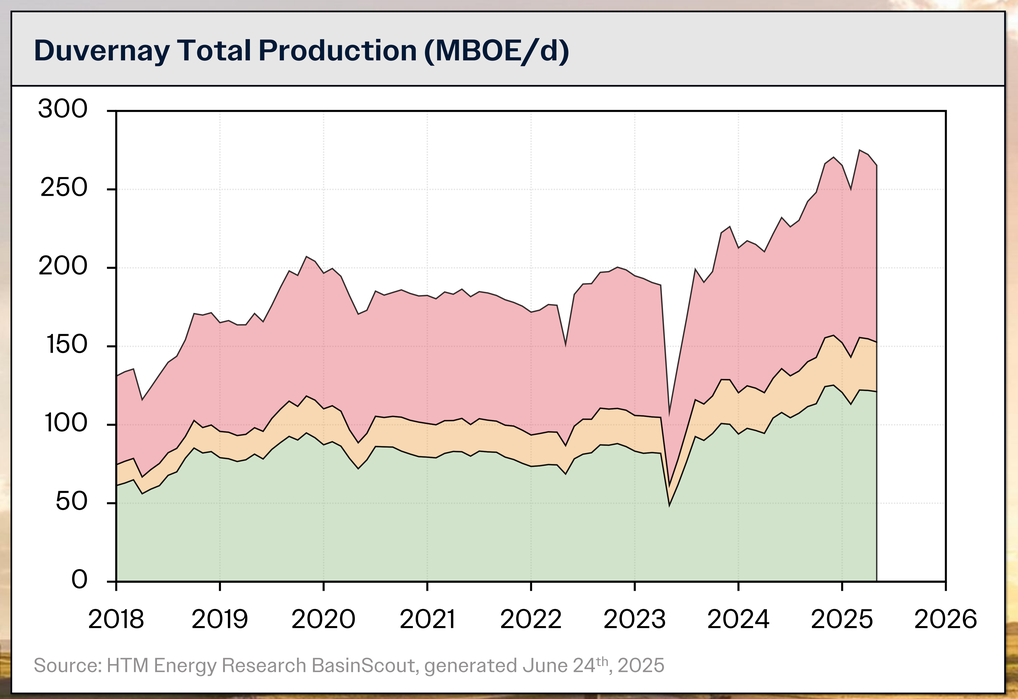
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Duvernay

Asset-Level Well Maps
Delineation Detail Maps
Infrastructure Maps



Source: HTM Energy Research BasinScout, generated June 24th, 2025

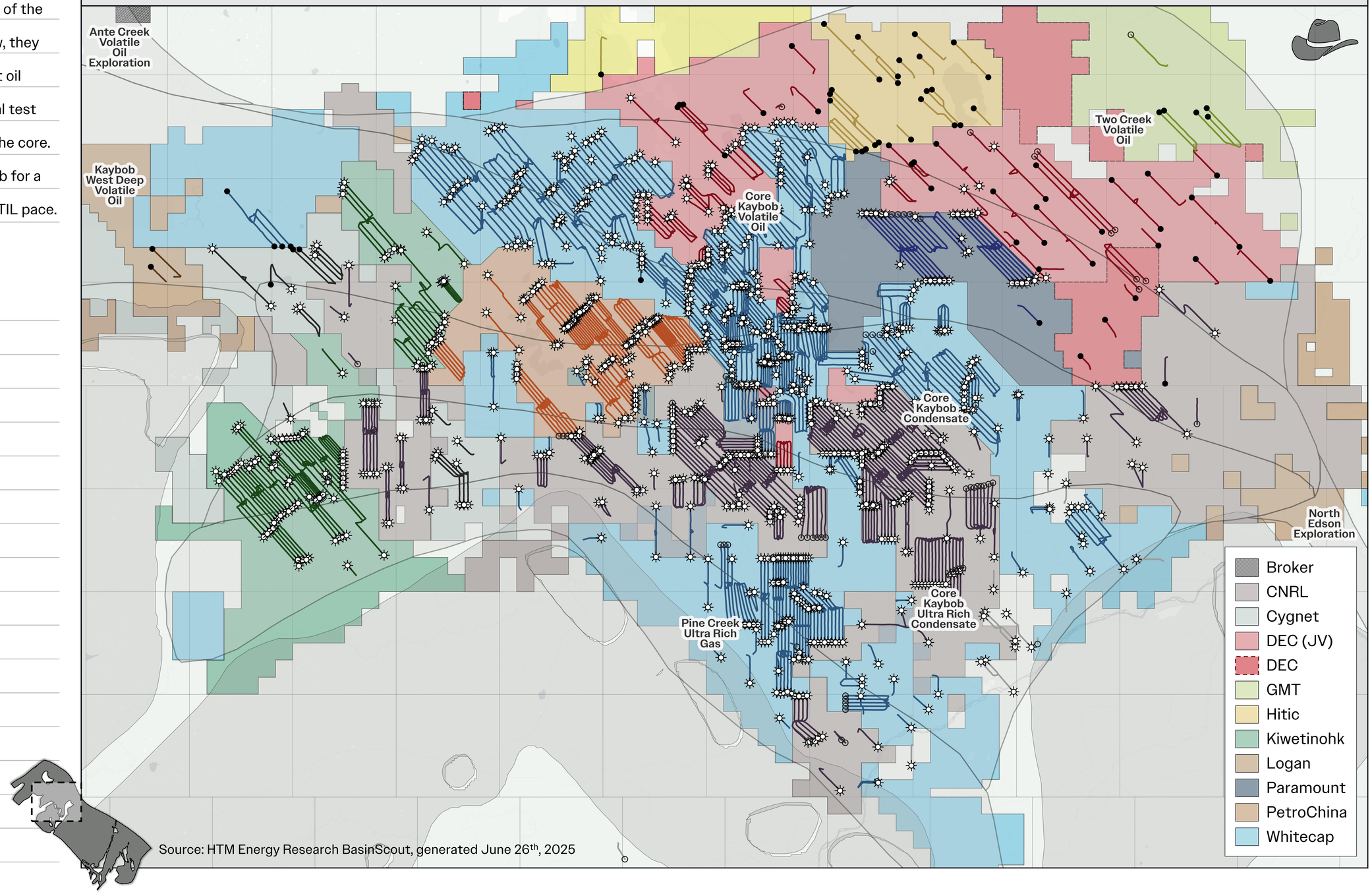
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Information contained within may be incomplete or incorrect.

HTM Analyst Notes

As operators drill through the core of the Kaybob condensate and oil window, they have moved into the east and west oil windows, which are delivering initial test results that are competitive with the core. We see >3,000 locations at Kaybob for a >20-year inventory life at current TIL pace.

Client Notes

Core Kaybob Duvernay Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

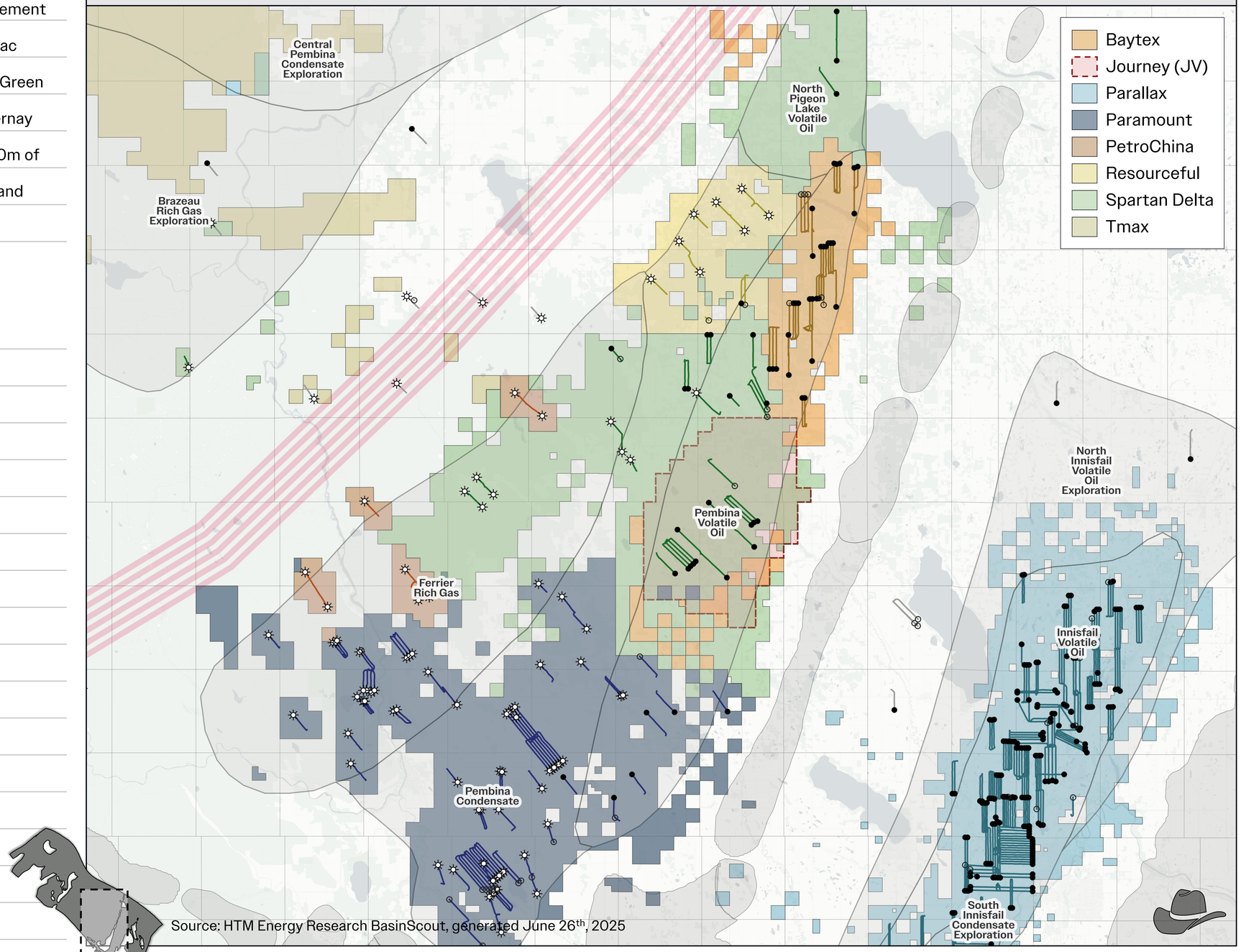
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HTM Analyst Notes

The West Shale Basin becomes leaner moving west on account of basement heat from the Snowbird Tectonic Zone (STZ). The middle carbonate frac barrier also thickens moving north, with the cleanest pay at Willesden Green and Pembina. While not currently an industry focus, we see good Duvernay potential in 3-4TWPs on the west side of the STZ where there is 20-30m of continuous Lower Duvernay Shale pay, CGRs are 80-200Bbls/MMcf, and initial reservoir pressures are highly deliverable at 50-60MPa.

Client Notes

West Shale Basin Pembina/Willesden Green Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

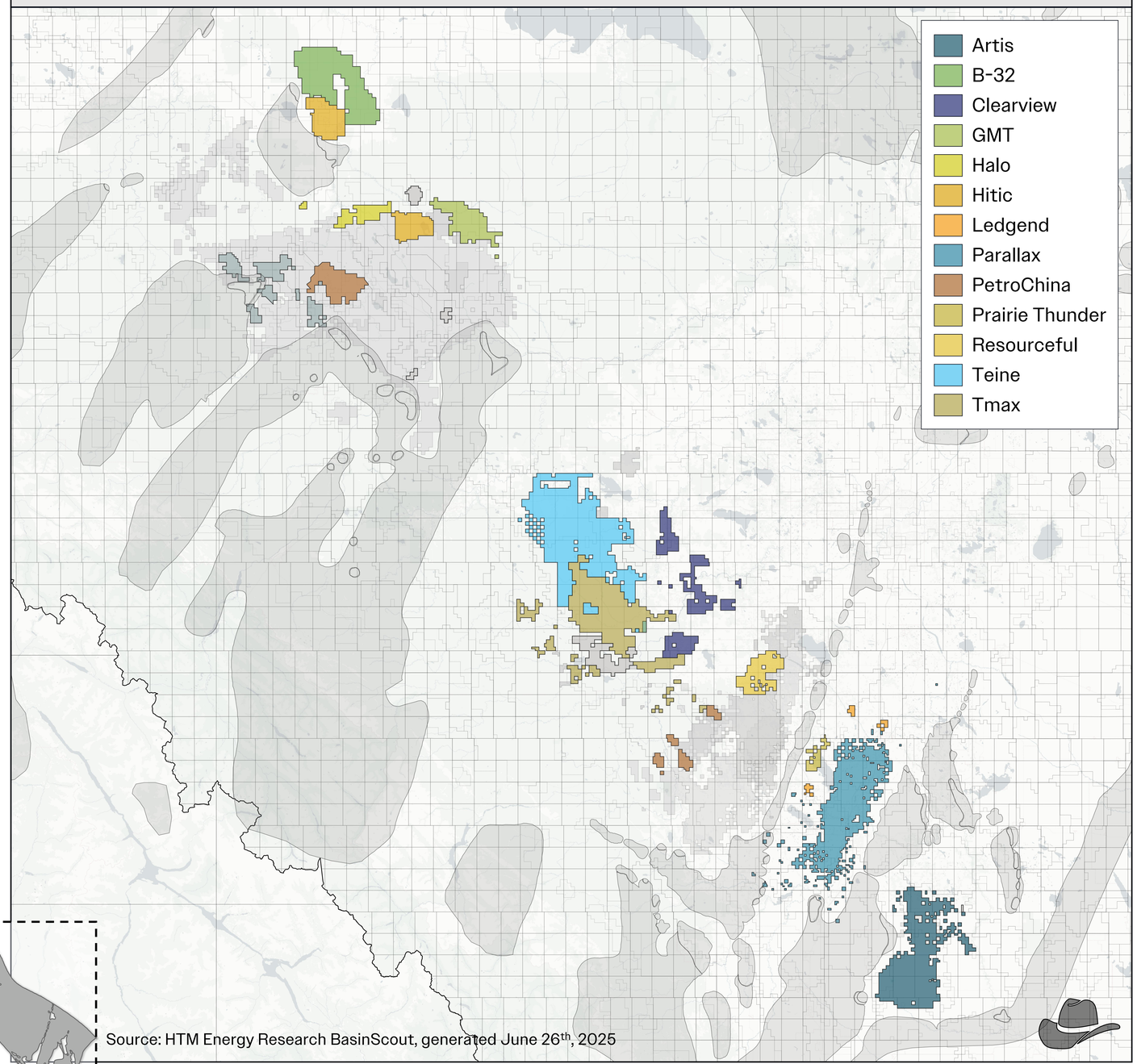
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Information contained within may be incomplete or incorrect.

HTM Analyst Notes

There are multiple private, independent producers in the Duvernay; notably, all of the secondary plays are privately held – Sturgeon Lake (B-32 & Hitic), Carrot Creek (Clearview, Teine & Tmax), and the East Shale Basin (Artis & Parallax). At Kaybob – GMT, Hitic, and Halo hold ~150K acres in the Two Creek oil window, and Cygnet holds ~80K acres in the overpressured oil and rich gas windows. Parallax (formerly Vesta) is the largest private with 16MBOE/d of production, and ~260K net acres. While the private producers outside of the East Shale Basin own lots of land (1.35MM acres), their combined production is a relatively low 25MBOE/d, 60% of which is PetroChina.

Client Notes

Duvernay Private Operator Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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Information contained within may be incomplete or incorrect.

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HTM Analyst Notes

Artis is privately held, with a large land base the Ghost Pine embayment of the East Shale Basin. While Artis' land shows good gross thickness and high oil in place, it's underpressured, and struggles with poor intragranular porosity which leads to very high first year declines from new wells (~70-90%), ultimately resulting in a much higher capital intensity than their Duvernay peers at Kaybob and Willesden Green.

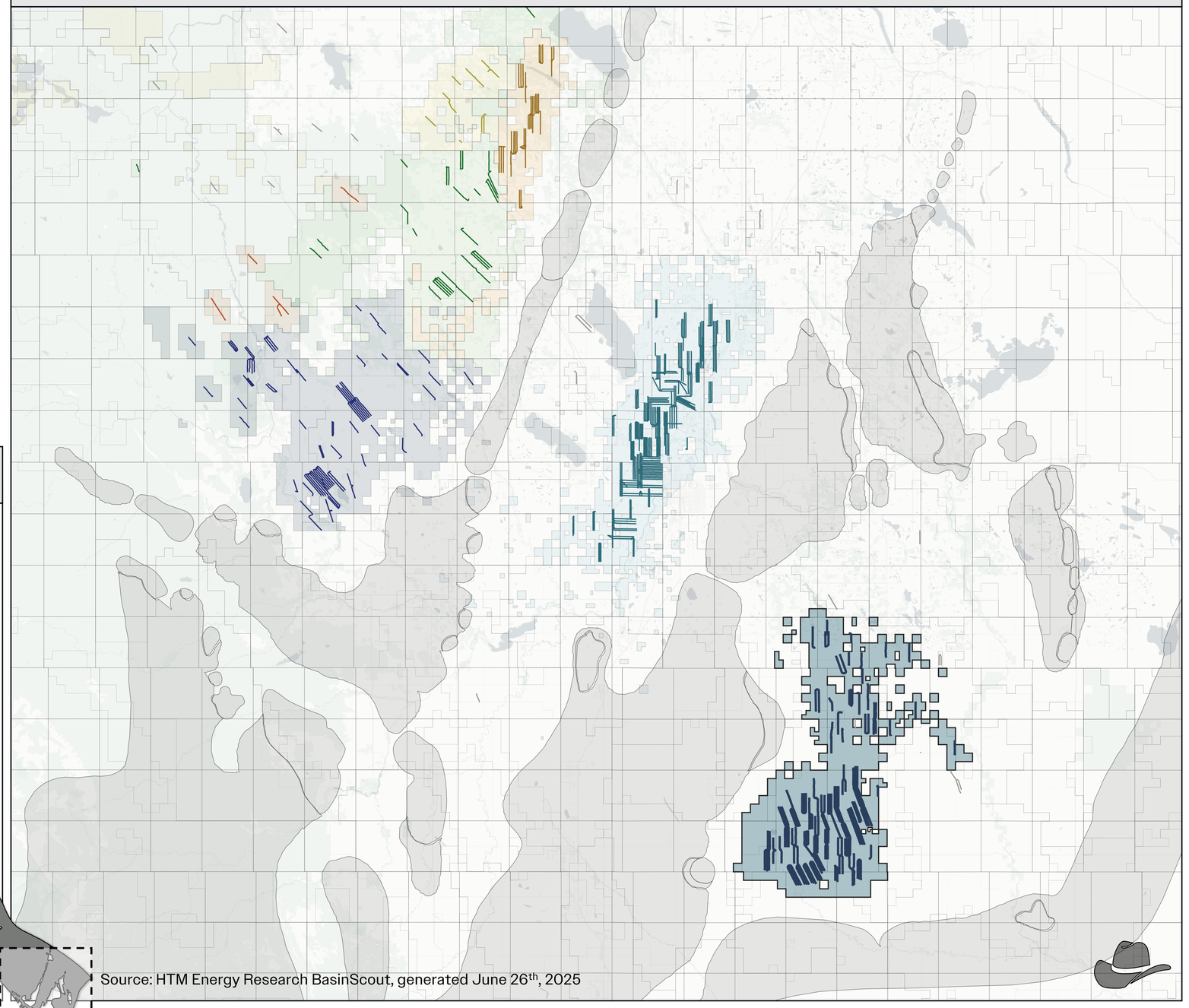
Client Notes

Artis Exploration Statistics at a Glance

Total Production (BOE/d)	**12,700**
Oil & Condensate Production (Bbls/d)	9,500
Viable Future Drilling Locations (HTMe)	~350
2024a/2025e TILs	22/23-26
Gross Land Position (acres)	240,000
2025e FFO/FFF ($MM, HTMe)	$245/$20-40
Year 1 PDP Base Decline Rate (HTMe)	~45%
PDP Wellbores	155
Owned Processing (MMcf/d)	15

Source: HTM Energy Research BasinScout, generated June 26th, 2025

Artis Exploration Duvernay Asset Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

HTM Analyst Notes

Parallax was formed through the acquisition of Vesta Energy, the prior operator of their Innisfail Duvernay asset. Parallax is backed by Carnelian Energy Capital, a US based private equity fund. Parallax has widened spacing throughout the asset since acquiring it, with generally successful results. Wells across Parallax's land base will recover on average ~300-350MBbls of oil, with strong consistency throughout.

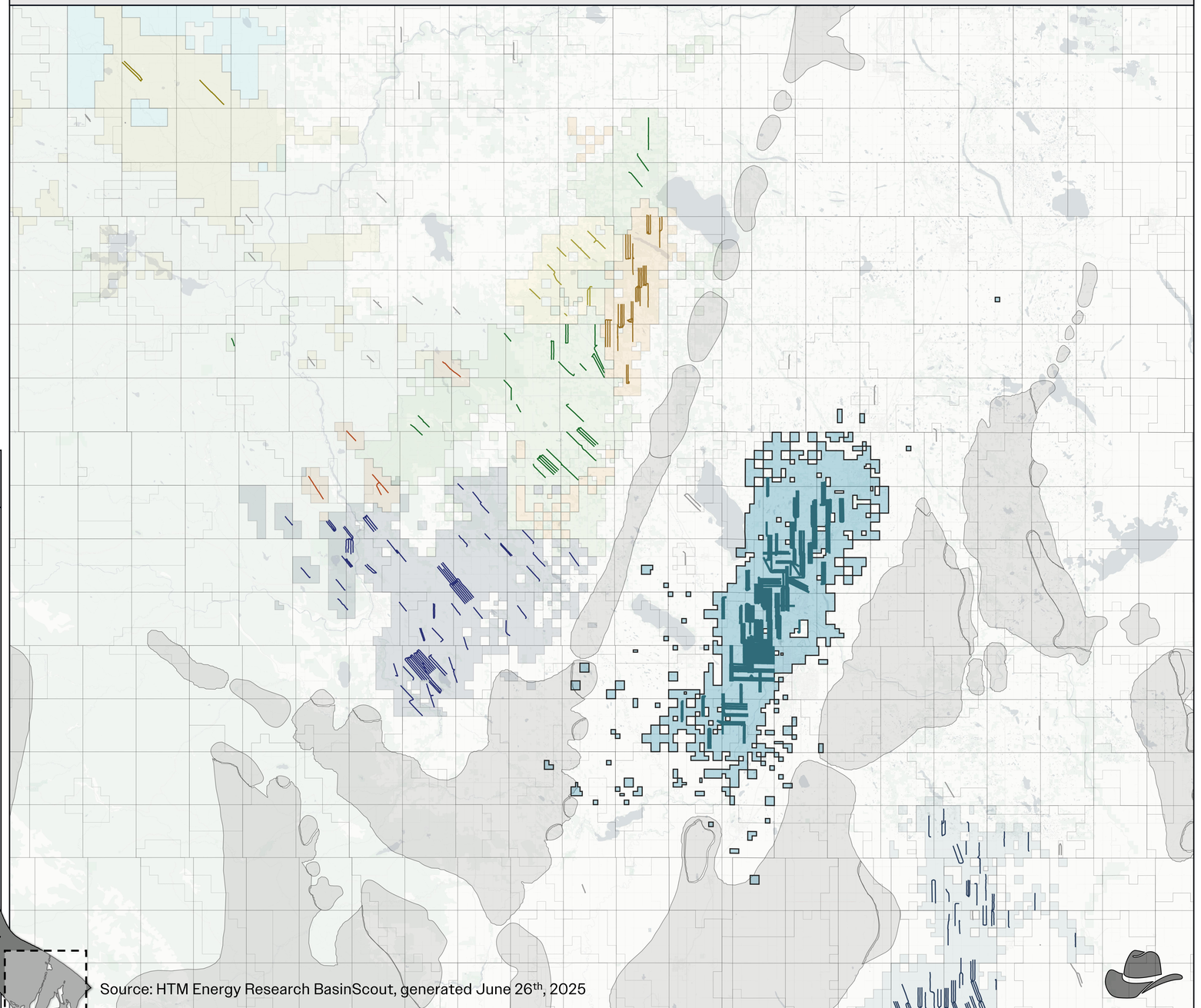
Client Notes

Parallax Energy Statistics at a Glance

Total Production (BOE/d)	**16,500**
Oil & Condensate Production (Bbls/d)	12,600
Viable Future Drilling Locations (HTMe)	570
2024a/2025e TILs	24/28
Gross Land Position (acres)	290,000
2025e FFO/FFF ($MM, HTMe)	$350/$65
Year 1 PDP Base Decline Rate (HTMe)	~40%
PDP Wellbores	200
Owned Processing (MMcf/d)	25

Source: HTM Energy Research BasinScout, generated June 26th, 2025

Parallax Energy East Shale Basin Duvernay Asset Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

HTM Analyst Notes

Teine is owned by the CPP, and focused on scalable oil-weighted plays throughout the WCSB. Teine has diversified from their Viking-heavy portfolio by entering the light oil window of the Duvernay at Carrot Creek, with encouraging well results to date. They have also built a small Doe Creek play. We estimate that Teine's Duvernay wells will recover ~280-340MBbls of oil, making it F&D-competitive with the Viking.

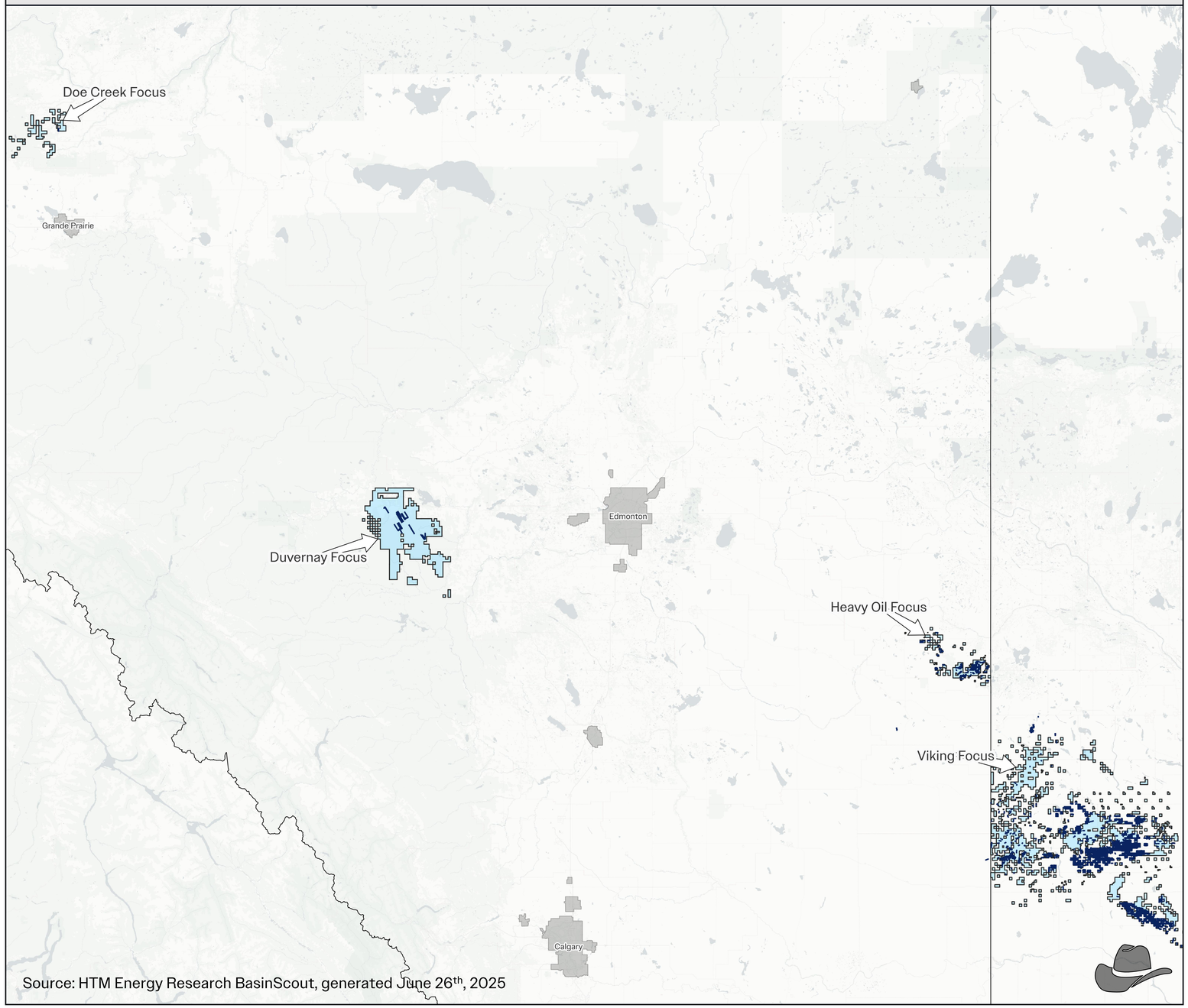
Client Notes

Teine Energy Statistics at a Glance

Total Production (BOE/d)	**41,500**
Oil & Condensate Production (Bbls/d)	39,000
Viable Future Drilling Locations (HTMe)	3,100
2024a/2025e TILs	210/230
Gross Land Position (thousand acres)	1,350 (350 Duv)
2025e FFO/FFF ($MM, HTMe)	$480/$90
Year 1 PDP Base Decline Rate (HTMe)	25-30%
PDP Wellbores	7,700
Owned Processing (MMcf/d)	50

Source: HTM Energy Research BasinScout, generated June 26th, 2025

Teine Energy WCSB Asset Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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HTM Analyst Notes

Tmax was spun out of Westbrick when Vermilion acquired their Deep Basin assets. It is owned by the former management team of Westbrick, with a large position in the Central Pembina condensate exploration fairway. We don't think that Tmax has a very high-quality acreage position. To our knowledge, Tmax intends to monitor local Duvernay development, and will not drill any new wells in 2025.

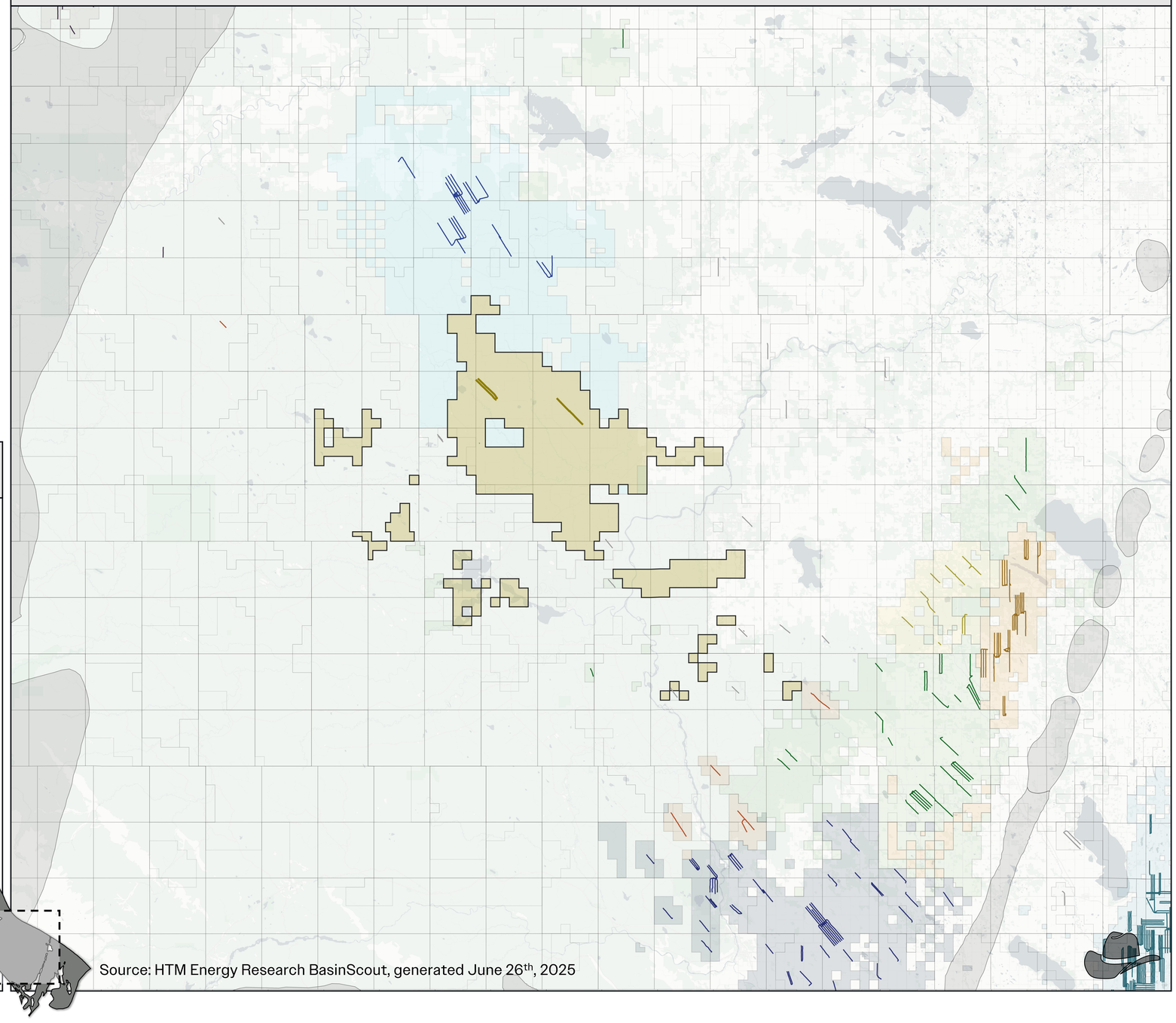
Client Notes

Tmax Statistics at a Glance

Total Production (BOE/d)	**850**
Oil & Condensate Production (Bbls/d)	300
Potential Drilling Locations (HTMe)	650
2024a/2025e TILs	2/0
Gross Land Position (acres)	270,000
2025e FFO/FFF ($MM, HTMe)	$10/$10
Year 1 PDP Base Decline Rate (HTMe)	n.m.f.
PDP Wellbores	5
Owned Processing (MMcf/d)	nil

Source: HTM Energy Research BasinScout, generated June 26th, 2025

Tmax West Shale Basin Duvernay Asset Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

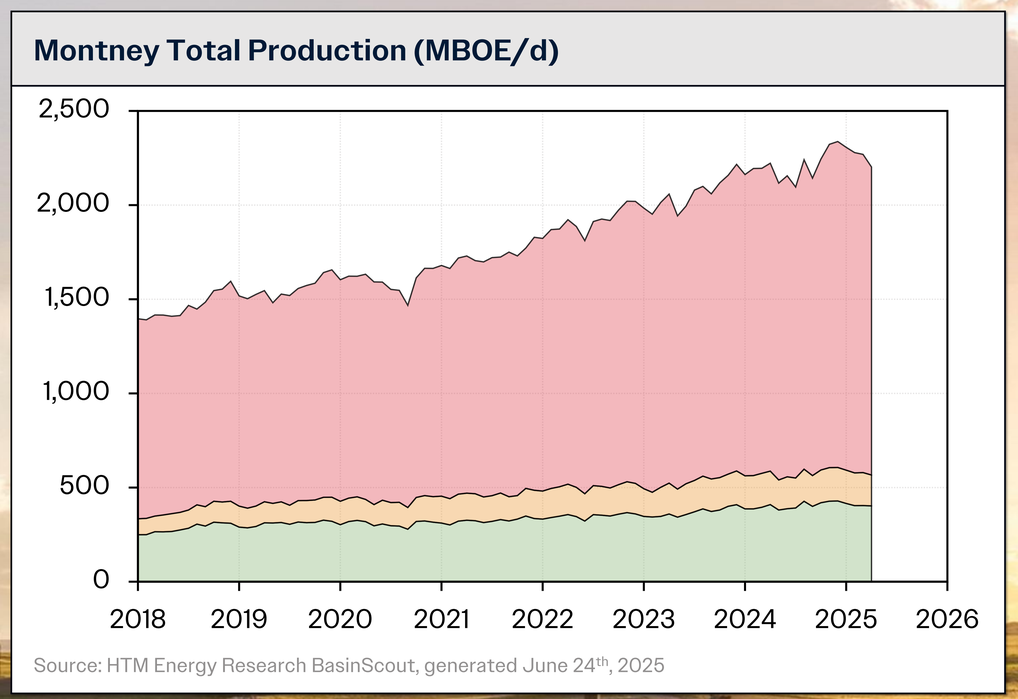
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Montney

Asset-Level Well Maps
Delineation Detail Maps
Infrastructure Maps



Source: HTM Energy Research BasinScout, generated June 24th, 2025

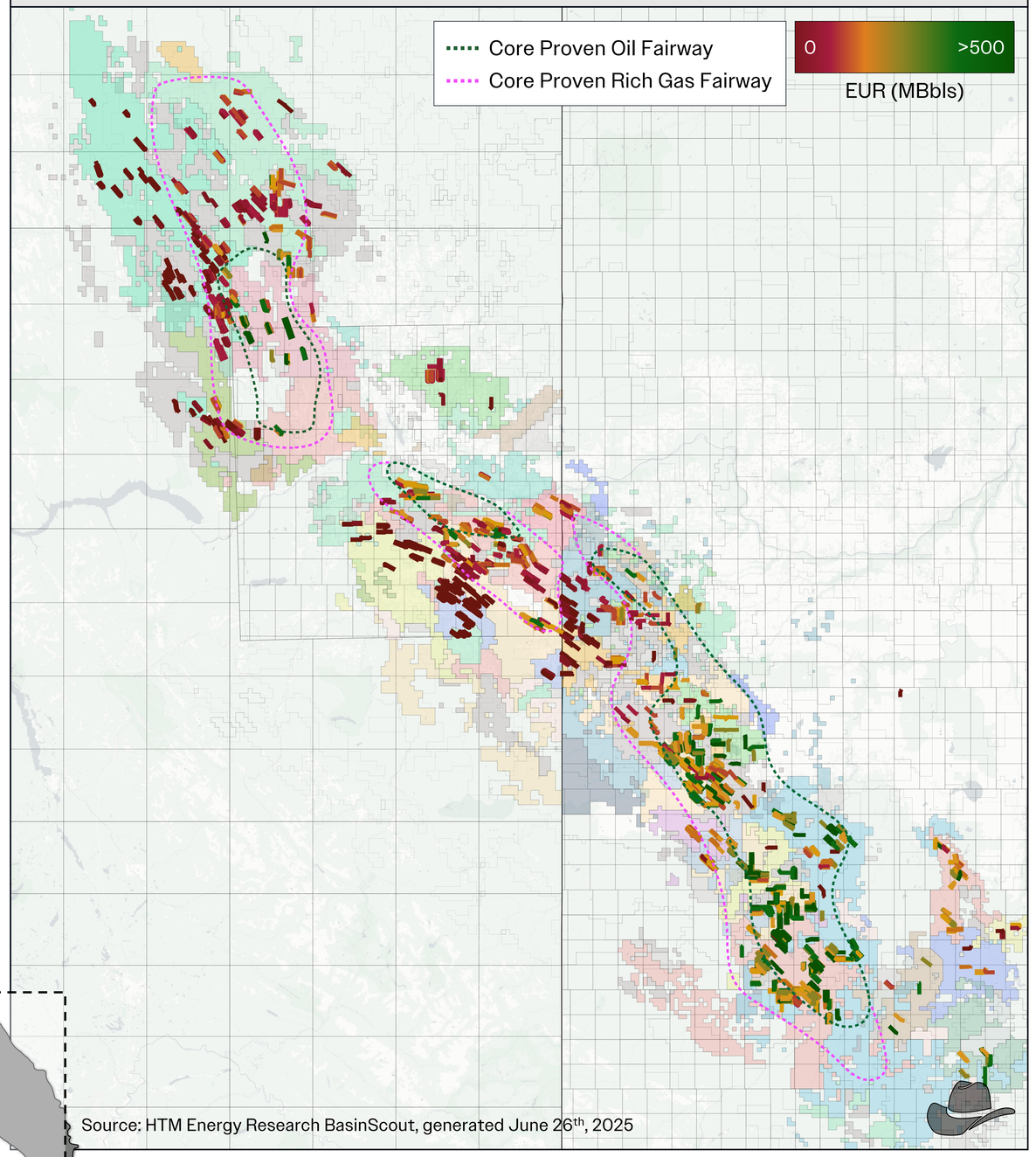
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HTM Analyst Notes

The core downdip condensate fairway is tightly controlled by ARC and Ovintiv at Karr, ConocoPhillips at Inga. Compared to the condensate fairways, there is much more Tier 1 inventory remaining in the updip oil fairway (Kelt, Whitecap largely exposed), though results are much less consistent as the oil is not fully self-sourced like the Duvernay. The core rich gas fairway is largely controlled by Tourmaline and CNRL in the North and Central Montney. The rich gas fairway, where EURs tend to cluster around 150MBbls of oil/condensate, is far wider than the core oil fairway and more predictable. Throughout most of the rich gas fairway, gas breakevens are <$1/MMBtu owing to the liquids stream. This is unlike US gas plays which are typically dry (no NGLs).

Client Notes

Modern Montney Well Oil & Condensate EUR Heatmap



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

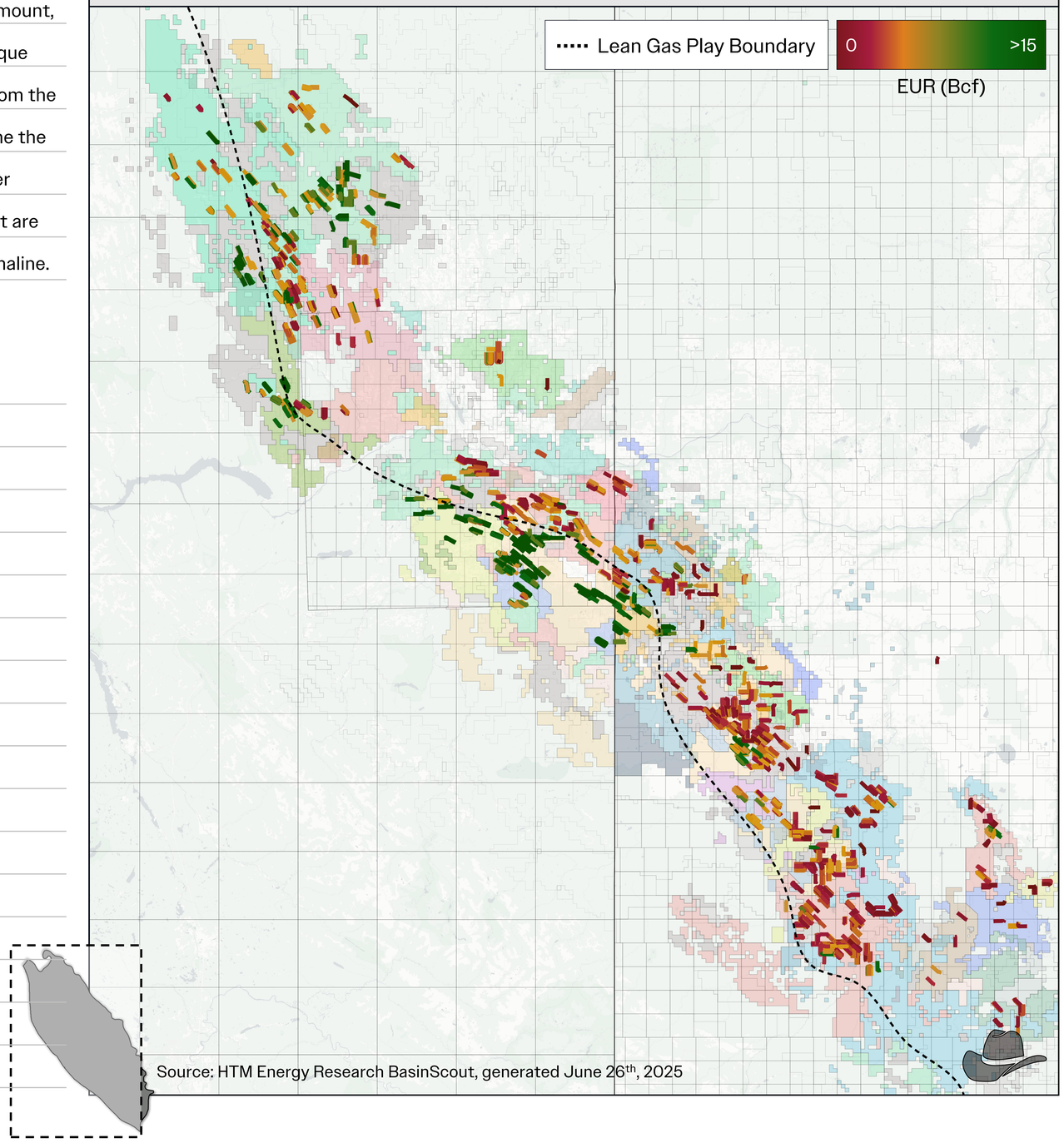
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HTM Analyst Notes

The eastern/southern edge of the Montney is a highly prolific lean gas play; with Advantage, Murphy, Ovintiv, Paramount, and Shell leading the play in terms of modern completions that deliver staggering EURs. The South Montney is unique compared to the Haynesville in that EURs are similar, but IP rates are lower as the long-term matrix contribution from the Montney's tight siltstone is far superior to the Haynesville and Bossier shales. Large plug-n'-perf fracs have become the norm in the South Montney, where we note that total shots has a strong correlation with recovery factor. The better mineralogy of the reservoir, we think, makes it amenable to pushing fracs higher, delivering EUR improvements that are defensible on an F&D basis. We think this represents meaningful upside for ball-drop-focused operators like Tourmaline.

Client Notes

Modern Montney Well Gas EUR Heatmap



Source: HTM Energy Research BasinScout, generated June 26th, 2025

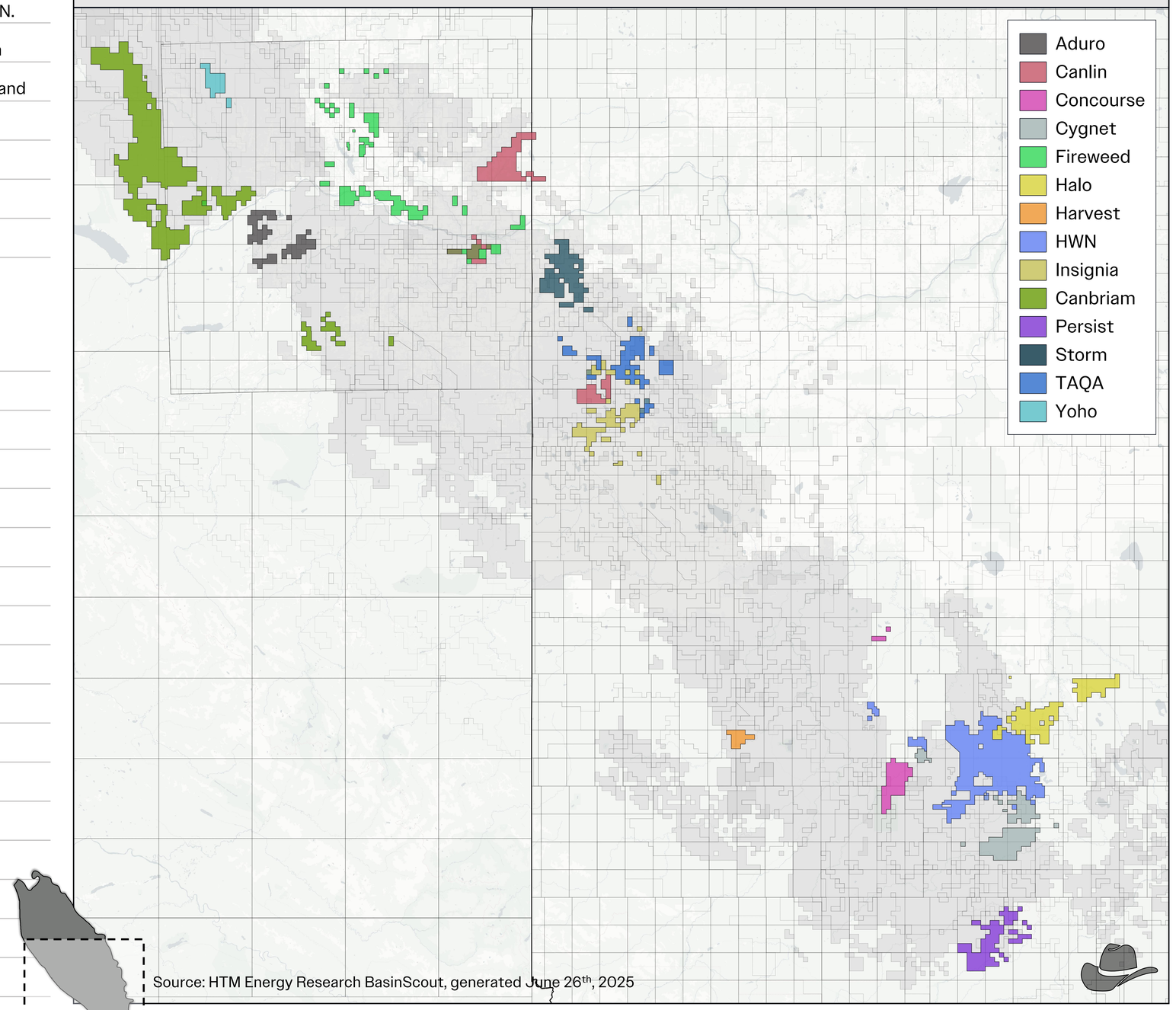
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HTM Analyst Notes

The largest independent private operators in the Montney are Pacific Canbriam, and HWN. Canbriam is integrated with the Woodfibre LNG project, and HWN is backed by Carnelian Energy Capital, a notable US PE firm. Of the independent private operators, Yoho, HWN, and Cygnet have the best acreage positions; all situated firmly in highly productive oil and condensate fairways. These 3 E&Ps are followed closely in quality by Insignia (acquired Paramount's Valhalla assets in 2017) and then Harvest (offsetting ARC's Kakwa asset). In our view, the lowest quality assets belong to Concourse and Fireweed.

Client Notes

Montney Private Operator Acreage Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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Information contained within may be incomplete or incorrect.

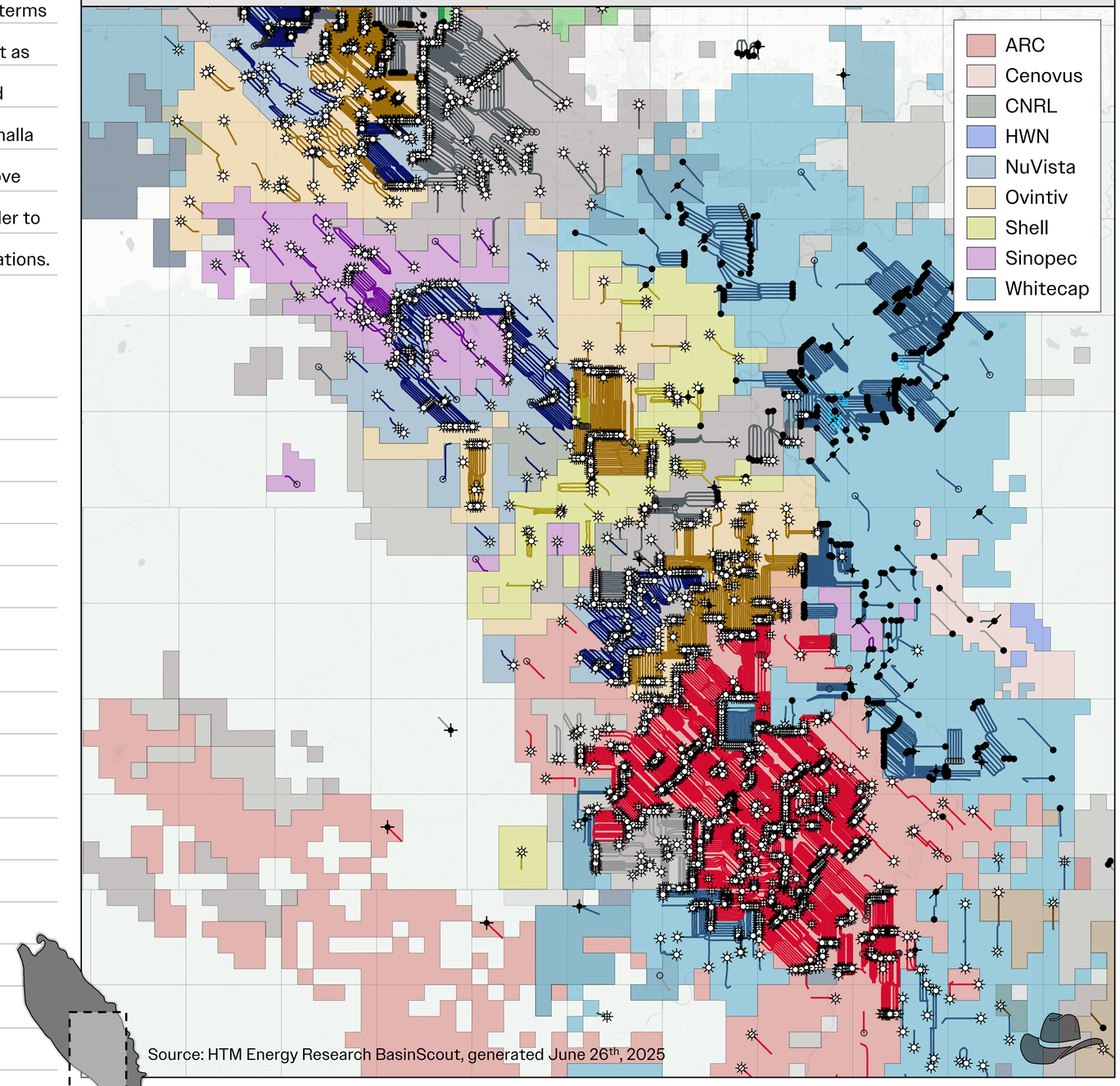
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HTM Analyst Notes

The Kakwa/Karr area of the Alberta Montney is the best part of the Montney (tied with Inga/Fireweed) in terms of condensate productivity. Moving towards the northern edge of the play, results become less consistent as the depositions changes from offshore to shoreface with turbidite and channel complexes, with increased complexity from localized gas migration in the Karr area. Though, these localized facies (including the Valhalla turbidites) have produced some of the most prolific wells in the Montney, with oil EURs in some cases above 1MMBbls. On the map shown we see 6,500 co-developable Montney locations; 3,900 of which we'd consider to be 'Core' or 'Tier 1'. Whitecap is the largest owner of Core/Tier 1 inventory in the map area, with ~1,500 locations.

Client Notes

Wapiti/Gold Creek/Kakwa Condensate Fairway Montney Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

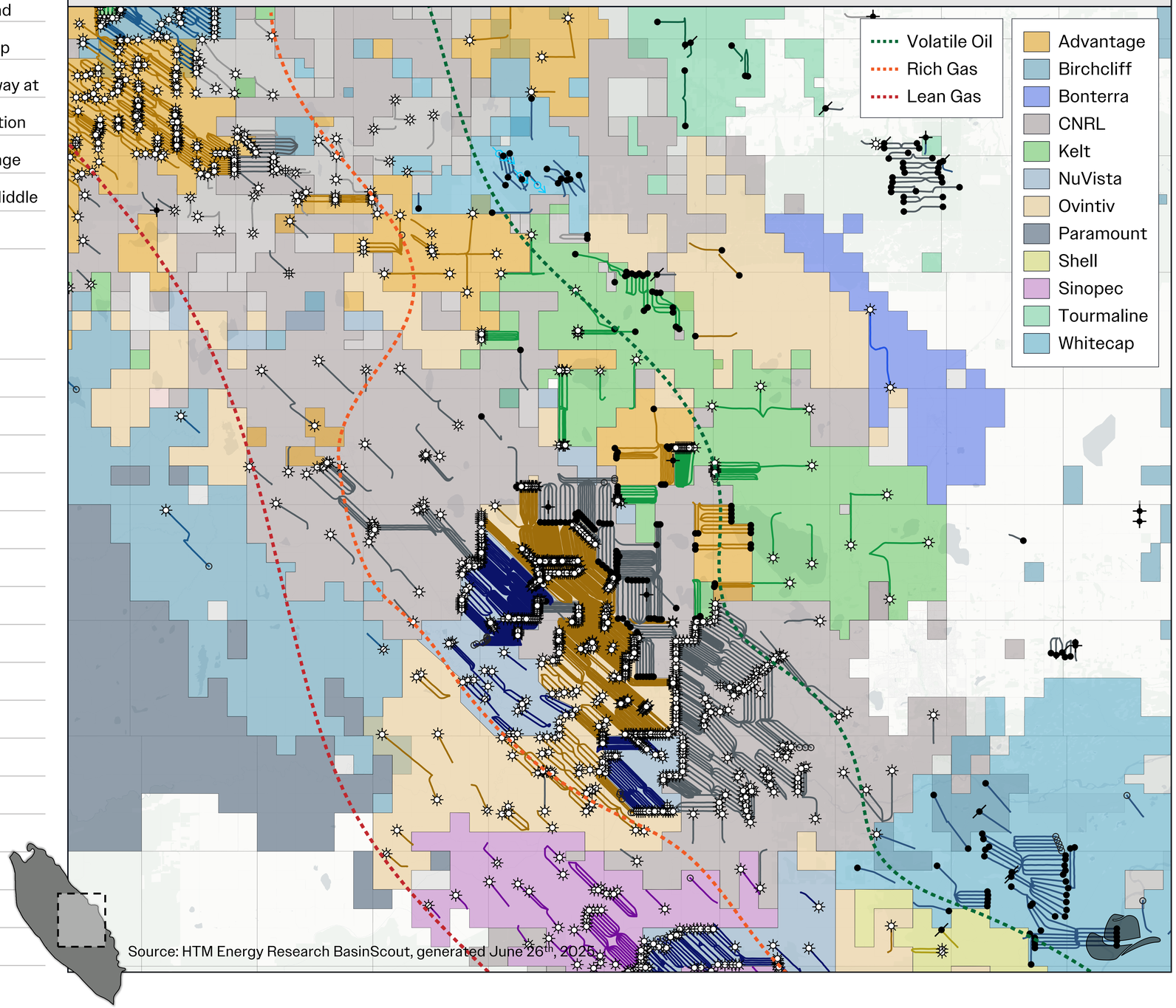
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HTM Analyst Notes

The Grande Prairie ranges from highly productive lean gas in the west (Birchcliff, and Paramount) to a core condensate fairway in the center (Ovintiv, CNRL), and an updip volatile oil window to the east (Kelt, Whitecap, Bonterra). The core condensate fairway at Pipestone is very thick, but fairly limited. Its best developed in a 2-bench configuration as the Middle Montney acts as one flow unit. Outside of Pipestone, results can change rapidly with phase windows again defined by gas migration. Moving north a Lower Middle Montney interval emerges which delivers exceptional oil productivity.

Client Notes

Grande Prairie/Sinclair Central Montney Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
Information contained within may be incomplete or incorrect.

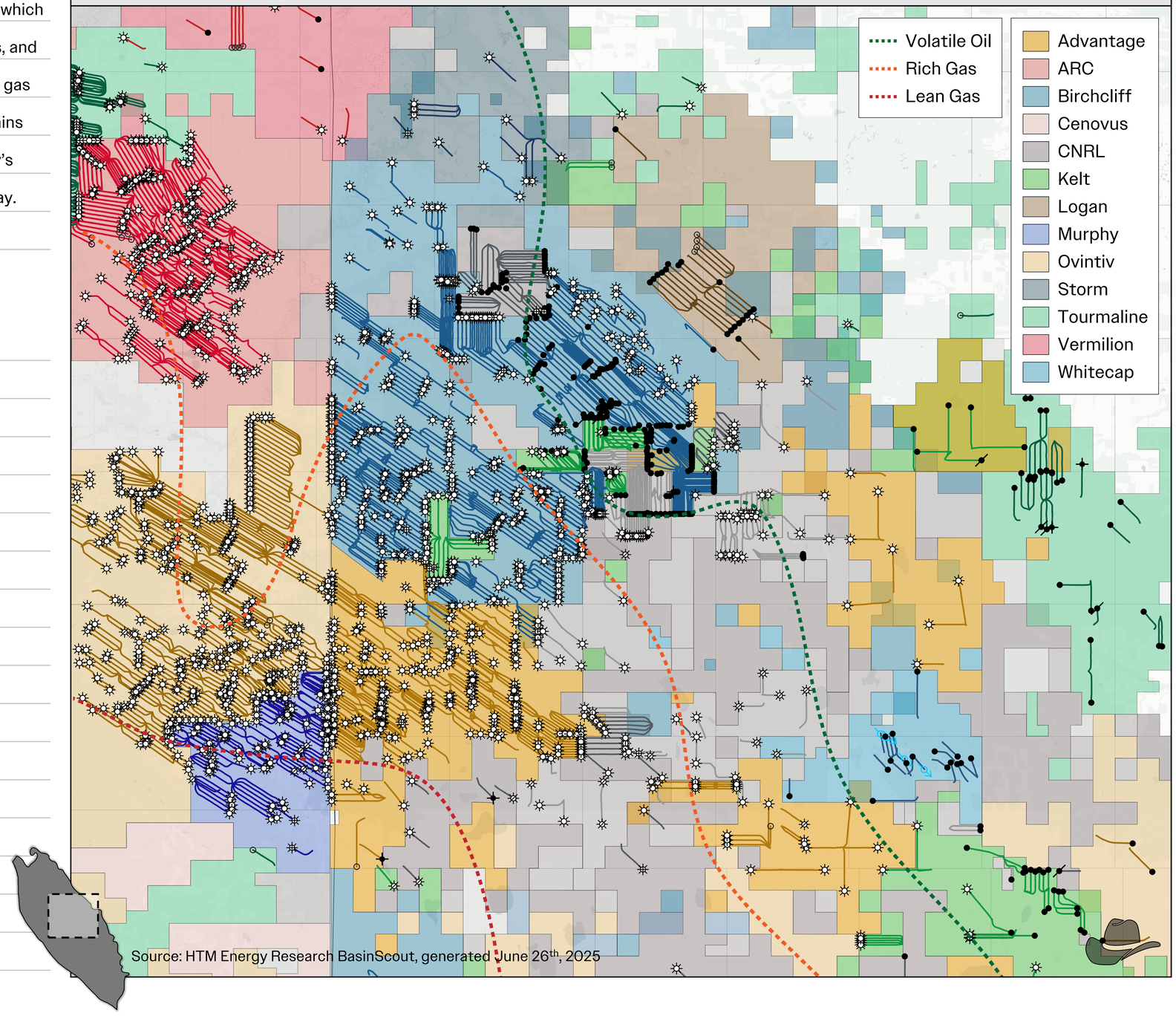
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HTM Analyst Notes

The Pouce Coupe area also lies in an area of extreme gas migration, in the middle of which is Birchcliff's Gordondale oil pool. Phases can vary widely between adjacent sections, and even between vertical intervals. In the south, Advantage owns some of the best lean gas acreage with pacesetter EURs over 15Bcf. Birchcliff has also realized productivity gains changing their frac design. Moving further north (Logan, Storm, Advantage) the play's structural water saturation becomes higher, defining the northern edge of the fairway.

Client Notes

Pouce Coupe/Progress Montney Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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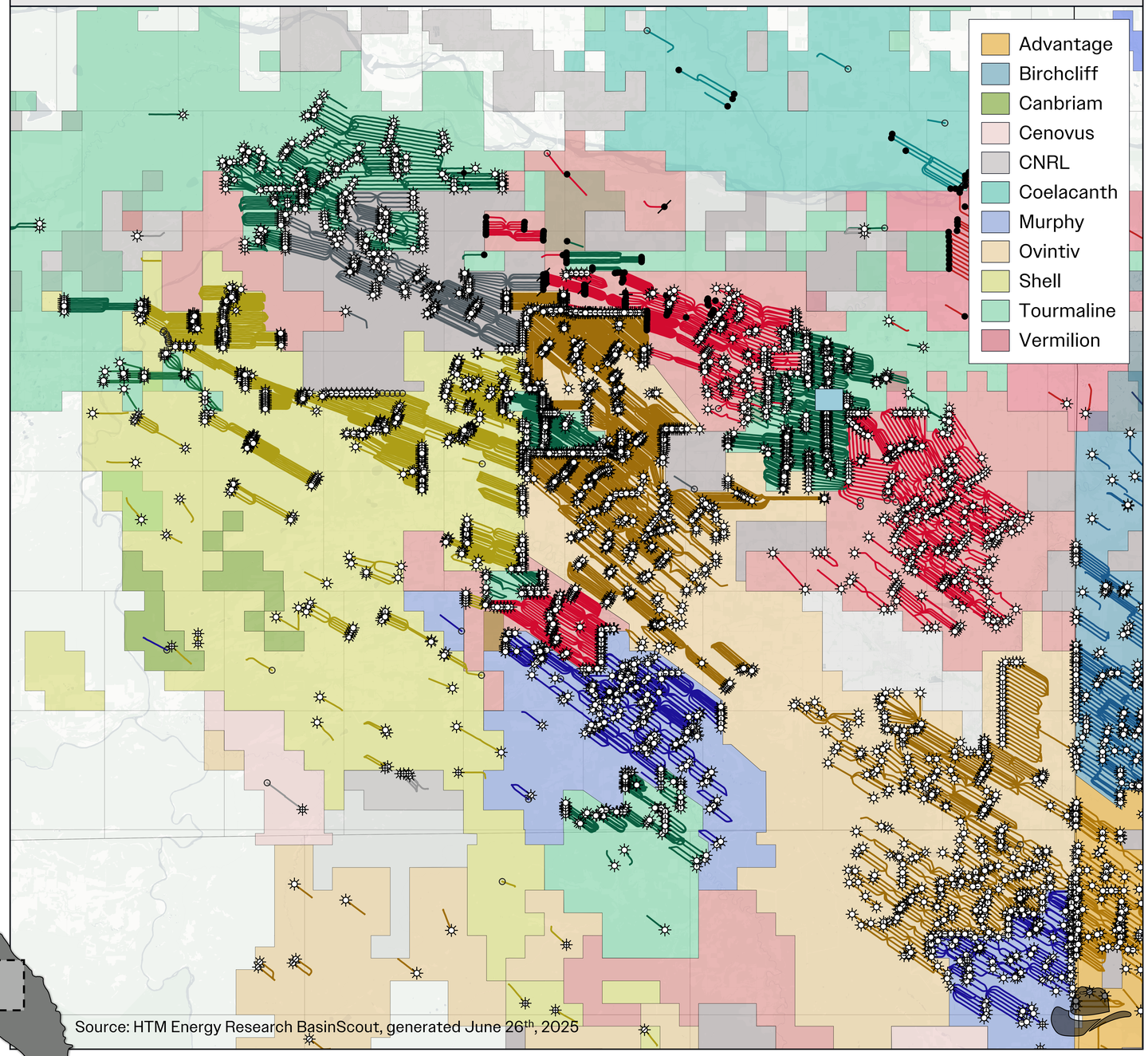
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HTM Analyst Notes

The Town area of the Montney is where it all started in the mid-2000s, and it has continued to deliver some of the most prolific wells in North America with EURs >400MBbls of condensate and >20Bcf of gas. The core is largely controlled by Ovintiv (CRP) and Shell (Groundbirch JV). Moving north, the most productive target are turbidite facies in the more-liquids-weighted Lower Montney, while the southern Upper Montney segment delivers massive gas wells. The play is bounded to the north by the Tower oil pool and FSJ Graben, an area of extreme faulting. Tourmaline plans to drill one pad in the Graben this year.

Client Notes

Dawson/Cutbank Ridge Montney Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

Prepared by HTM Energy Research for reference purposes only.
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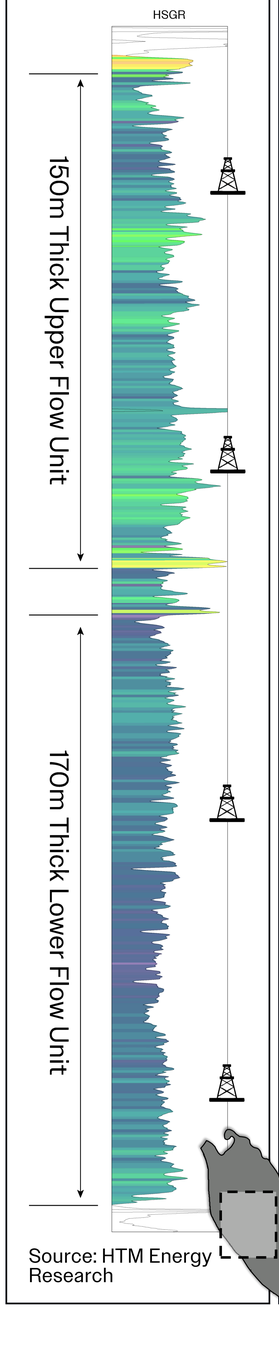
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HTM Analyst Notes

The greater Town/Inga area is the best part of the northern BC fairway, benefitting from good liquids yields, and multiple *truly* co-developable benches. To the west of our 'Elite Reservoir Boundary', the Montney has 3 defining characteristics that make it unbelievably good – it's highly overpressured, extremely thick (>250m of gross Montney), and there are significant changes in lithology throughout the vertical section that deliver two fully separated flow units, each thick enough for up to 2 wells. To the west, ConocoPhillips is trialing developing each flow unit with a single well and are seeing very promising results.

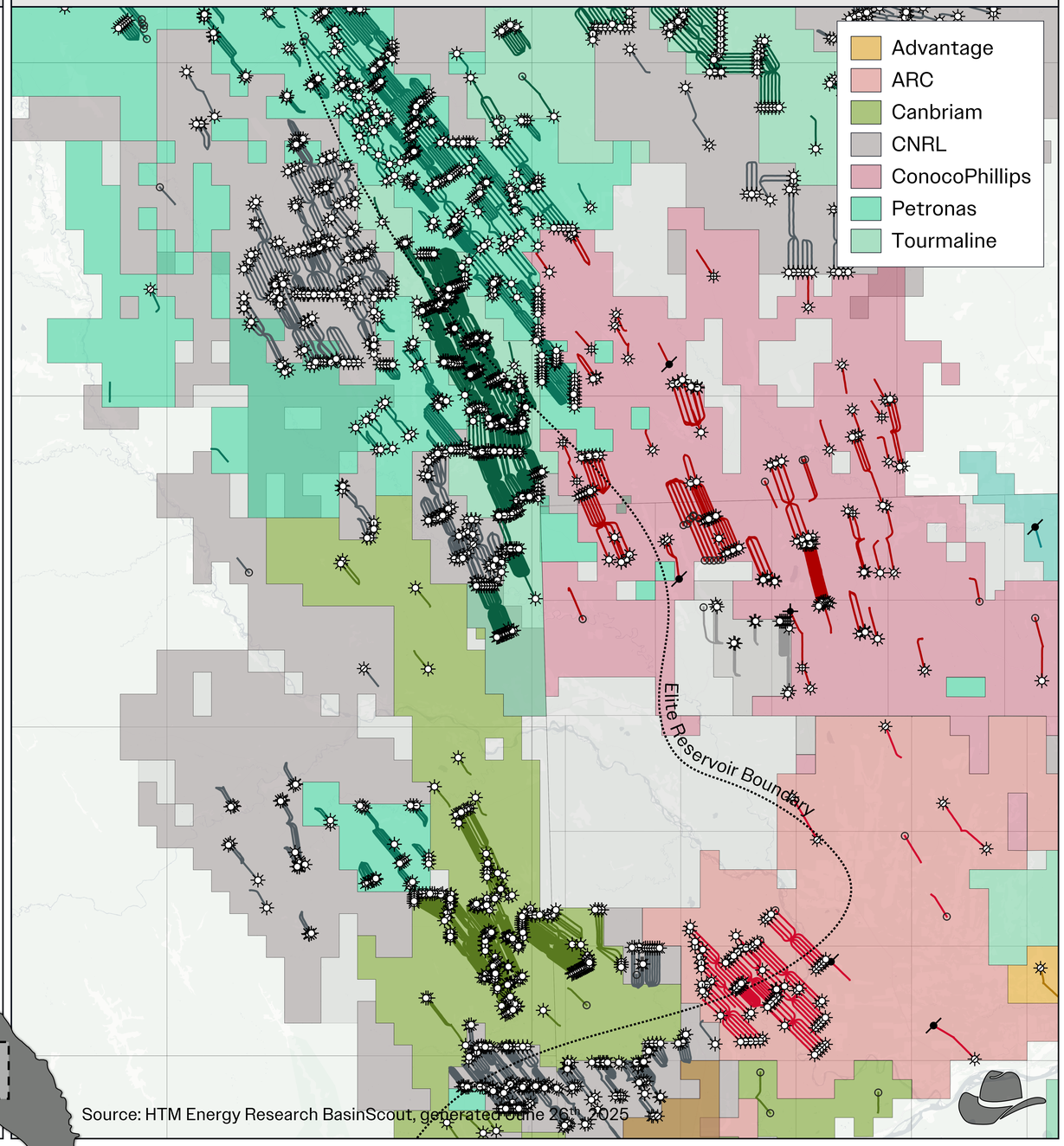
Client Notes

GR Type Log



Source: HTM Energy Research

Attachie/Town Liquids Rich Montney Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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Information contained within may be incomplete or incorrect.

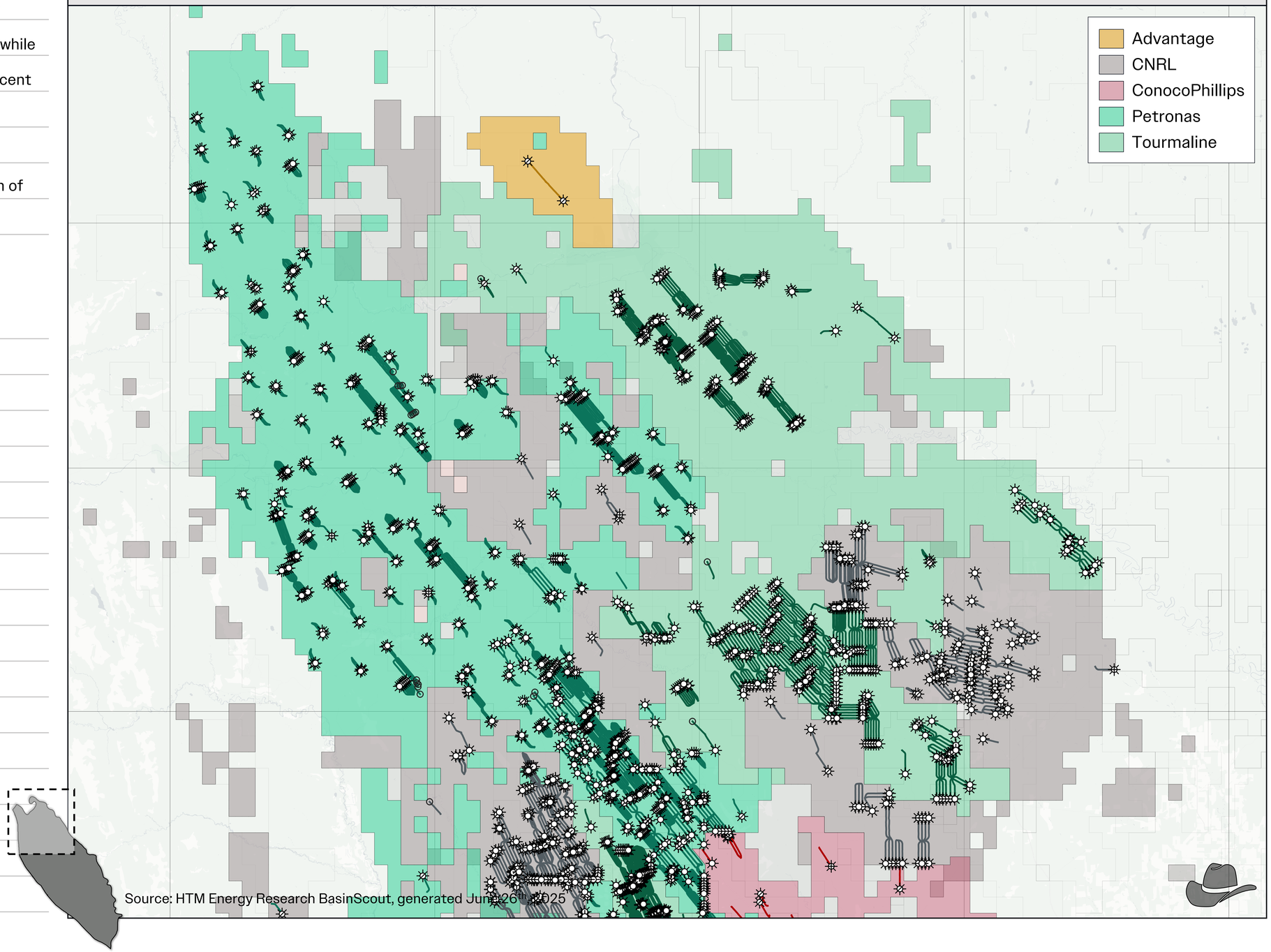
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HTM Analyst Notes

The North Montney gas complex is owned almost entirely by Petronas and Tourmaline. Petronas' position is all fairly lean, while Tourmaline's position to the east is generally liquids-rich. Recent notable successes include CNRL at Birch, where they are codeveloping 2 benches, with single-well EURs >2.5MMBOE. Advantage entered the area in late-2023 with the acquisition of Calima Energy's ~30,000-acre asset.

Client Notes

North Montney Well Map



Source: HTM Energy Research BasinScout, generated June 26th, 2025

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