

## Liberty Energy (LBRT)

For \$3.6b you can purchase a prudently managed firm generating \$500m+ annual FCF by providing necessary services to a maturing industry. This opportunity exists because allocators avoid O&G servicers as an undifferentiated batch and have yet to understand Liberty's positioning in a formerly cyclical industry.

### Synopsis

Liberty provides well completion services for shale operators across North America and are expanding into CNG delivery and localized power provision. They've been in the news recently as Chris Wright, their CEO, is the incoming Energy Secretary.

They have a thoughtful management team in an industry defined by caprice. Delays are endemic in OGS – 40% employee turnover is the norm and frequent 4h–48h delays from scheduling mishaps are common. Liberty addresses these by creating a culture to retain professionals – as evidenced by overwhelmingly positive commentary on industry job forums. Their data-oriented approach is an overlooked advantage: they win contracts by sharing their project design insights; their ML-driven sand delivery logistics contrast with competitors' dispatch + spreadsheet approach. In short – they provide a differentiated service business, saving their customers time and money, and can price accordingly.

Unlike competitors who try to capitalize on commodity cycle upswings and through topline acquisitions, Liberty's organic capital allocation approach lets them survive the cyclicity while being able to take advantage of attractive opportunities in down markets: e.g. acquiring Schlumberger's frac business in 2020.

These compounding cultural and team differences are showing up in economic divergence. Liberty has retained revenue share and gaining gross profit share as the market rationalizes – I expect their unit economics to improve going forward. Fracking is a required input into shale production – which is at the core of US energy production.

The situation is reminiscent of service-oriented managers in other industries: regional airlines (SKYW), server interconnects (MLNX), and metal credit cards (CMPO). Such businesses appear to operate in commoditized markets with limited control over margins, but their approach builds structural advantages invisible to spreadsheets.

### Potential Upside

The company has been returning ~\$180m annually to shareholders via dividends and buybacks. I estimated forward EBITDA to be between \$700–900m, with \$200m maintenance capex and upside to spread demand in a tight market. At \$20 baseline offers 5.5% implicit yield while the company consolidates profitable market share.

I see 1y upside to \$30, implying an EV of \$5.4b at 10% FCF yield, with further potential upside from new business lines, and a longer term convergence to HAL's US fracking EV of ~\$10b+. The CEO's block being resolved could lead to near-term re-pricing, with capital return, proved performance, and investor awareness as mid-term catalysts.

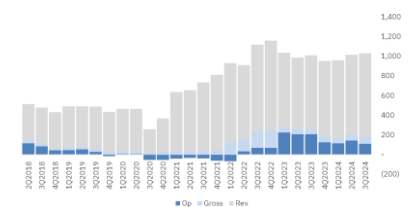
The main risk is valuation – at 1.8x TBV, an asset-heavy business offers limited margin of safety. This price risk could be mitigated through paired shorts in HAL and ACDC – competitors with high valuations and structural weaknesses in the same sector.

## Capital Structure & Valuation

Current Price	19.83
Shares	163
Market Cap	3241
+ Debt	471
+ Preferred	-
+ Minority	-
- Cash, ST	23
Ent. Value	3689

P/E (3y avg)	13.1
EV/EBITDA (3y avg)	4.9
P/TBV	1.7

## Operating History



## Competitors

	Revenue	Gross	EBITDA	P/TBV	EV/E	FCF Yield
LBRT	4,447	16%	22%	1.8	4.0	9%
HAL	23,073	19%	21%	3.3	6.5	8%
PTEN	5,800	7%	8%	1.6	9.7	12%
ACDC	2,225	14%	16%	1.7	7.1	4%
PUMP	1,472	11%	6%	1.4	13.5	10%
CFW.TO	1,608	10%	13%	0.5	3.4	-4%
STEP.TO	1,003	12%	17%	0.8	2.5	10%
TCW.TO	960	20%	24%	2.1	4.4	8%

## Price History



## Portfolio fit

Dominant player in an emerging oligopoly. Overlooked due to misperceptions around OGS, CEO alignment and fracking demand concerns.

## Key dates

FY '24 Earnings: Jan 29

Business model

Liberty provides well completion services for North American shale operators through three business lines: hydraulic fracturing, wireline services, and proppant delivery. They have built internal businesses around data analytics for well design and logistics. They are also building LPI to service mobile CNG assets that require short-term local energy solutions. Liberty also has minority stakes in related business – under \$10m invested in each.

A standard frac spread delivers 45-60k HHP through 15-20 pumps (2.5-3k HHP each), requiring 20-30 crew members, 2-3 blenders, and 3-4 hydration units coordinated through a central data van across 2-3 acres of pad space. Spreads earn between \$40-60m on the low end to \$80-120m on the high end annually, depending on efficiency, pricing, and utilization. Unlike rigs, which charge by the day, fracs spreads are generally priced by well completion stages.

Spreads earning below \$40m are burning cash, leading to closure. Second-hand equipment sold in distress tend to not have much of a recovery value, as evidenced by the BJ liquidation. When fleets are retired, old equipment is sold to the Middle East – usually for a markup as they’ve already been written off after 5-7 yrs of depreciation.

LBRT	2023-12-31	2022-12-31	2021-12-31	2020-12-31	2019-12-31
Fleets EOP	40.0	40.0	29.4	29.4	23
Average Active Fleets	40.0	34.7	29.4	13.2	22
Rev / Fleet	113,326.2	115,325.2	83,285.4	73,165.7	86,494
EBITDA / Fleet	29,552.3	23,605.9	2,774.9	231.7	11,797
GA / Fleet	5,535.2	5,189.8	4,200.0	6,371.1	4,280
Rev	4,533,048	4,000,780	2,447,140	965,787	1,972,051
EBITDA	1,182,093	818,918	81,533	3,058	268,917
Capex	(603,298)	(451,905)	(198,794)	(103,637)	(195,117)

Labor, equipment, and proppant (sand) are the major cost components of a frac job. On a spreadsheet, these appear to be commodities. A closer look suggests otherwise. Delays on projects due to personnel and logistic issues are major pain points – missed shifts and delivery

delays are common (especially on crowded Permian routes). This leads to lower effective utilization rates and slower time to market for customers. Liberty has systematically addressed these issues:

Labor: While the industry suffers 40% annual turnover, Liberty maintains experienced crews through thoughtful policies – 2/2 schedules versus standard 2/1, equity ownership via RSUs, and benefits like paternity leave and IVF coverage. This shows up in consistent 9-10 stages completed daily versus industry 6-8.

Equipment: They've vertically integrated where third-party solutions proved unreliable, building their own gas engine assembly and service facility to reduce fleet downtime. Their new LPI division was founded to service the unaddressed need of newer e-frac fleets, which require mobile backup sources of fuel or power to ensure up-time.

Sand Logistics: As the industry's largest sand buyer, they have purchasing power that they use to ensure preferential delivery (valuable during sand shortages) and lower prices on long-term contracts that they can share with their customers. Liberty has transformed what appears to be a commodity input into competitive advantage. Their ML-driven logistics system has reduced delivery downtime 90% while decreasing truck count and delivery times by 35% – a sharp contrast to competitors' manual dispatch operations.

This integration of people, equipment, and technology has positioned Liberty's fleets at the premium end of the market despite owning 40 of the ~200 spreads currently commissioned. They're maintaining revenues and cash flows through the current industry downturn,

though 2025 will see their first fleet retirement in two years, leading to an expected 5% revenue decline and 6-7% drop in operating income. However, as spreads become more efficient and simulfrac requires different spread compositions, there's an opportunity for Liberty to improve revenue per spread while maintaining the customer relationships.

Industry: Customers

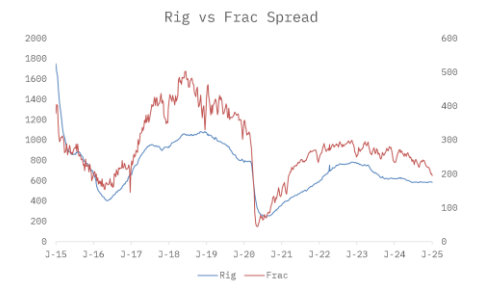
Hydraulic fracturing enables hydrocarbon extraction in shale assets, which require continuous drilling as decline rates are steep. LNG gasification projects coming online over the next few years are expected to offer stable offtakes for US shale production. Fracking demand is primarily concentrated in the Permian Basin, with an estimated 118/200 spreads currently allocated there, with the rest spread across the Bakken, Williston, DJ & Niobrara, Marcellus, and Utica.

Drilling costs vary, but a typical horizontal well costs ~\$8m, of which \$1.2m is spent on hydraulic fracturing and \$300k on wireline services. The \$1.2m frac spend is roughly \$500k equipment and labor, \$500k sand, \$100k chemicals, and \$100k water. Unlike drilling rigs that charge by the day, frac operators are generally paid by stages completed – wells can have 20-50 stages. Time on location is usually 5-10 days per well (about 2-4 hours per stage). Multi-pad and simul-frac techniques affect this calculation. About 8-12k wells are drilled annually.

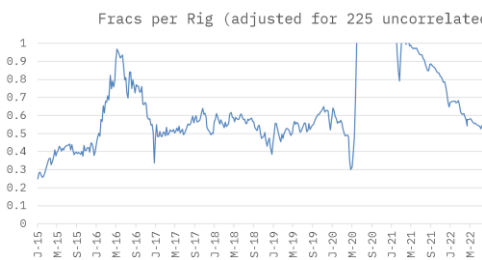
The industry has historically struggled with capital efficiency – operators chase market share during upcycles by adding capacity, then face painful consolidation in downturns. Recent cycles have shifted focus toward operational excellence and

stable returns. Unlike the last cycle that saw major operators adding indiscriminately to their fleets, current additions are targeted toward upgrading or replacing equipment rather than expansion.

Mid-tier producers typically maintain 2-4 spreads on long-term contracts, while majors run 8-9 spreads distributed across Tier 1/2 providers. This bifurcation creates natural segmentation between premium and commodity service providers. The industry is starting to recognize the false economy of choosing lowest-cost providers - the efficiency gains from experienced crews and reliable equipment more than offset modest pricing premiums.



The rig/frac (Baker Hughes/Primary Vision) chart is often quoted but is hard to interpret. I tried to find a baseline for frac demand given by running regressions till the remaining r-squared. This came out to between 200-250 rigs i.e. after that count there was a reliable ratio of rigs/fracs between 0.4-0.6. At 0.5, the median of the range in the previous cycle, this implies 180 frac spreads vs the current count of 195. Math aside, this number rhymes with operator commentary in rigs and fracs across conference calls.



While certainty in commodity macro trends is aspirational, the data and the anecdotes indicate that efficiency-led rationalization should plateau in 2025. Additionally, refracs seem a material upside opportunity just entering the conversation around frac spread demand.

“Redev and refrac testing has been a key part of what we’ve long described as our organic enhancement program, which typically comprises 5% to 10% of our total capital budget for a given year.” “25 refracs a year” “But when you look at the cost, we’re kind of thinking about it roughly 80% of a new grassroots well”

Marathon CEO on refracs

“High level, we can see, we see the simul-frac crews completing a little over 100 wells per year per crew. And it’s just amazing the efficiencies that both sides of the ledger have squeezed out of the business here in a year where, we keep saying, oh, they’re close to the asymptotic curve of efficiency.”

Kaes Van’t Hof. Diamondback CEO 3Q24

“Range can maintain this higher level of production with just one electric frac crew. I think this message is worth repeating.”

Dennis Degner, RRC 3Q24

Industry: Competitors

Well completion includes multiple functions: frac spreads, wireline crews, cementing, water delivery/disposal, proppant suppliers, and chemical suppliers.

Competitors across these services who also focus on hydraulic fracturing include: Halliburton (HAL), Profrac

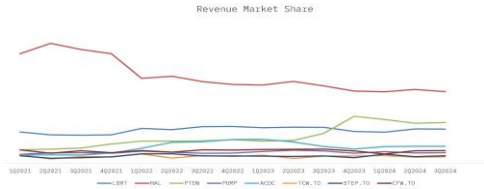
(ACDC), Trican Well (TCW.TO), Patterson-UTI (PTEN), Step (STEP.TO), ProPetro (PUMP), and Calfrac (CFW.TO). While Halliburton is a diversified, global oilfield service provider, 40% of their operating income is generated from US well completion activity, and they’ve been losing share consistently.

	Revenue	Gross	EBITDA	P/TBV	EV/E	FCF Yield
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Weatherford and Schlumberger are notable oilfield services that do not compete with Liberty directly. Weatherford sold their OneStim fracing business to Schlumberger in 2018, which Liberty then acquired at the end of 2021. Two Schlumberger executives are currently on Liberty’s board.

Liberty seeks partners who can deliver the level of service they aspire to and builds businesses where it perceives gaps. They expressed frustration in being unable to find adequate partners within the industry but mentioned ProPetro as an operator with aligned philosophy.

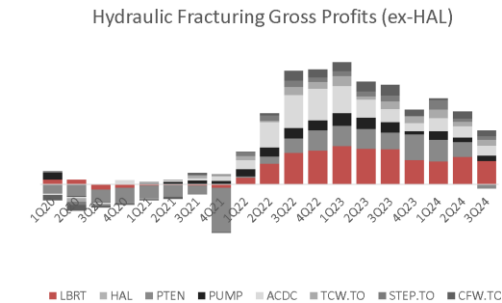
While competitors chase scale through acquisitions, evidence suggests such moves provide only temporary advantages. ProFrac's buying spree and Patterson-UTI's merger with NexTier delivered initial revenue bumps but minimal efficiency gains. Market share data shows these combinations often destroy value - culture clashes and integration issues offset potential synergies.



The industry has been moving towards gas engines. While initially marketed as a differentiator to capital markets, this seems to be a structural change in frac spread composition as gas engines can use burn-off gas from customers to lower fuel costs (relative to diesel) by 50-80%. Additionally, equipment in this industry has a depreciable life of 5-7 years. Buildups occur during booms, and the previous Tier 2 diesel engines from the 2016-2019 cycle (which also had regulatory emissions limitations) were naturally due to be retired. The technology does bring about challenges as burn-off gas might not be consistent – coordinating backup generation and fuel is key. Competitors are in various stages of realization on this issue.

The competitors I spoke to do not seem to have a differentiated approach to hiring or logistics. They operate primarily on the dispatch + spreadsheet model, and job boards indicate dissatisfaction at most non-Liberty operations for a variety of reasons.

The industry appears to be reaching an inflection point that favors Liberty's model, as evidenced by their organic capture of gross profit share during sector gyrations. ACDC's roll-up strategy looks increasingly fragile given balance sheet constraints. Meanwhile, quality-focused operators like Step (STEP.TO) and the transformed Weatherford (WFRD) are seeing improved returns by following elements of Liberty's playbook.



“Chris is a legend. I don’t think we have much of an opportunity to pick up contracts after he leaves – he’s been a figurehead for a while anyway. Ron manages things there, so we don’t see any cracks opening”.

Competitor’s Investor Relations manager

“Liberty is better for the equipment quality, safety, and growth opportunities. You can work up very well within that company. I have no idea about pay, but I’ll say for certain that I’d rather work for them. There’s a reason that the company I work for dropped our NexTier fleets and enlisted an extra Liberty fleet.”

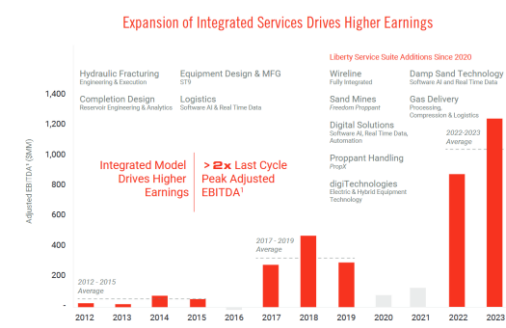
Anon from O&G job board

Capital Allocation & Management Incentives

Liberty has generated over \$3B in operating cash flow since IPO on \$20B revenue. Their capital allocation reflects clear priorities: \$2.2B reinvested in fleet maintenance and upgrades, while returning \$650M to shareholders through dividends and buybacks. Unlike competitors who chase market share, they maintain strict return thresholds – targeting 20-25% cash IRR on new investments.

Maintenance capex is expected to be \$200m, about \$5m per fleet. Current capex levels are higher at ~\$600m as Liberty builds out their power generation and ancillary frac businesses. While it’s hard to model novel businesses from a distance, I am relying on my understanding of management to trust them not to destroy capital. Liberty retains more balance sheet flexibility than most with \$500m asset-backed financing vs \$1.6b PPE.

Management demonstrates unusual discipline in M&A, preferring organic growth and internal development. Their opportunistic acquisition of Schlumberger's OneStim business in 2020 is the exception that proves the rule – buying quality assets at distressed prices (\$137M vs SLB's purchase price of \$430M two years prior). They've focused investment on reducing operational friction points: building their own gas engine facility when third-party solutions proved unreliable, developing proprietary logistics systems to optimize sand delivery.



They've selectively invested in adjacent opportunities that leverage their operational expertise. Stakes in Oklo (advanced nuclear) and Tamboran (Beetaloo Basin) represent calculated bets on energy infrastructure evolution. The emerging LPI business targeting mobile CNG/power generation builds on their gas handling capabilities and customer relationships.

Chris Wright, the CEO, is leaving to take a position in the incoming cabinet. Chris has a Mechanical Engineering background, with stints at MIT and Berkeley. Founded an O&G data company (Pinnacle), then became an operator (Stroud, Liberty Resources), before launching Liberty Energy) at the beginning of the shale boom.

Chris’ team has worked together for almost a decade. Ron Gusek, the incoming CEO, has been the de-facto



operator for several years now, after joining them in 2014 – Ron has been focused on people and efficiency for over a decade, which is apparent in his candid interviews. Anjali Voria, their investor relations head, was extremely knowledgeable about business operations and the decision-making process around capital allocation – speaks to the high caliber of team Chris has built around him. Michael Stock (CFO), Sean Elliott (CLO), Ryan Gosney (CAO) all joined before 2017. Chris’ shares (<3% of outstanding) will likely be put into a trust and continue to be sold at 40k shares per month.

The company has a tax receivable agreement from their up-C IPO: 85% of tax savings from the transaction are payable to the LLC unit holders. While the up-C structure was collapsed when unitholders fully converted their shares in April 2023, the TRA will be a drag on cash to shareholders.

Their board of nine seems thoughtfully designed – rotating 3 a year – currently a combination of O&G operators, private equity investors, and Schlumberger executives. Executive base pay is reasonable at around \$400k, with total compensation tied to shareholder-aligned targets.

Performance Metric	Weighting	Threshold (50% Payout)	Target (100% Payout)
Adjusted Pre-Tax EPS <sup>(1)</sup>	25%	\$1.09	\$4.71
ROCE <sup>(2)</sup>	25%	13%	46%
Comparative ROCE <sup>(3)</sup>	30%	See Comparative ROCE Chart	
Discretionary	20%	N/A	N/A

“You have to have trust in people, you have to give them freedom to go out and do a great job, and then you have to hold them accountable.”

Ron Gusek, 2021

Valuation, Risks and Mitigants

From a business perspective, it is unlikely that Liberty experiences the median outcome for an O&G servicer – bankruptcy or a forced sale of assets due to an unsustainable operating structure.

At \$20/share, Liberty has a \$3.2B market cap and \$3.7B enterprise value, trading at ~10x forward P/E, ~8x forward free cash flows and 1.8x TBV with a clean balance sheet (\$471M debt offset by modest cash). The company returns approximately \$180M annually to shareholders through dividends and buybacks. That implies a 5.5% baseline yield with room for growth on organic capital return as they consolidate market share and begin monetizing their ancillary businesses.

Repricing to OGS peers suggests upside to 6x EBITDA, or a share price of \$30. 40% of HAL’s operating earnings are attributable to US fracking – implying an EV north of \$10b for that business. ACDC (levered roll-up) and HAL (structurally losing share in fracking EBIT) are shorts worth exploring.

The main risk to the investment is the entry price – 1.8x TBV is high for a capital-intensive business, and ETF flows in the sector could affect short term movements. The risk could be mitigated if research on structurally disadvantaged business in the sector leads to alpha short positions.

Catalysts include:

- Industry consolidation accelerating share gains
- Refrac opportunity expansion
- Multiple re-rating as investors recognize structural advantages (currently not a name investors know about)
- Clarity on Chris Wright’s stake removes stock sale overhang.

Concerns

High short interest

- I’ve been unable to find a research-based short thesis within the community. I suspect the short interest is an artefact of views “expressed” through ETFs and of pod-shops putting on sector bets based on frac spread counts.

Does Chris Wright leaving affect operations?

- Companies like this exist because the founder built a capable team around him. From competitor anecdotes, it seems Chris has been a figurehead for a while.

What prevents competitors from copying Liberty to close the service gap?

- Much of Liberty’s advantage is cultural – which takes intent and years to change. In the meantime, the incumbent compounds the benefits from their structure (access to better customers and employees) ProPetro (PUMP) seems to be on the right path, but they’re at smaller scale and are a few years behind Liberty

Why has Chris been selling shares?

- Executive comp has a low cash component – about \$400k each. Comp is heavily weighted towards shareholder aligned incentives. Chris sells 40k shares a month – it’s just the way he collects his salary. Liberty’s total SBC over five years was \$125m, vs \$1.5b cash flows and \$950m in net income and ~450m equity repurchases.