

Crude Oil Pipelines – Regional Pipes Annual Review

June 17, 2020



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Summary

- We are again publishing our annual review of Crude Oil pipelines. We break down the crude pipes into two categories, Major systems ([published 6/10/20](#)) and Regional (this report).
- This is the second of our four-part liquids pipelines series, where we compile data from the FERC Form 6s filed annually, provide summaries for each pipeline, and point out big picture trends when looking at the pipelines in aggregate. Changes from our 2018 piece include: 1) moved four pipes from Regional to Major; 2) added four new pipes to our Regional review; and 3) removed two pipes as they have not filed 2019 Form 6s yet. The new pipes added to the report this year include EPIC Crude Pipeline, Enable Bakken Crude, Oryx Delaware Oil Transport and Oryx Delaware Oil Gathering NM. We combined the new Oryx pipes with the existing Oryx Southern Delaware system and show as Oryx Combined Pipelines. There are a total of 28 pipes in our study this year.
- The data set for liquids pipelines is much less robust than for gas pipelines given: 1) no need to report contract counterparties or expirations; 2) a lack of transparency on exactly which assets are included in the FERC filings; 3) companies can lump multiple pipelines into one filing; and 4) some pipelines include intrastate segments which may or may not be included in the data filed.
- **Key Takeaways:**
 - **EBITDA:** Regional crude oil pipeline EBITDA was up 22% or \$526mm in 2019 and is up 98% since 2016 (26% CAGR). Majority of y/y growth was driven by Permian pipes, accounting for 63% of growth, and DJ Basin/Rockies pipes accounting for 18% of growth. The \$3.0B of aggregate Regional EBITDA compares with \$10.2B for the Major Systems.
 - **Throughput:** Regional crude oil throughput was 7.5 mmbpd in 2019, up 838 mbpd or 13% y/y and roughly in line with the 3-yr CAGR of 15% for the group. Since 2016, throughput is up 2.6 mmbpd or +53%. Permian pipes accounted for roughly 72% of the y/y growth in 2019. The 7.5 mmbpd of Regional throughput compares with 28.6 mmbpd for the Major Systems.
 - **Per-Barrel Economics:** On a weighted average basis, per-unit revenue for Regional Pipes grew 3% in 2019 and has grown at a 3% CAGR over the last three years.
 - **Capital Efficiency:** Cumulative investment multiple for the group was 5.0x on 2019 EBITDA. Regional pipes have spent \$7.8B over the last five years, which compares with ~\$28B for Major Crude pipes.
 - **Over/Under Earning:** On a weighted average basis, the group over earned their cost of service (including return) by 7% in 2019. This contrasts with the 2015-17 period, which saw pipes largely under earning their cost of service each year.

Overview and Methodology

What's in this Report?

- A review of earnings, throughput trends, rates and capital spending for 28 regional crude oil pipelines. There are many other smaller crude oil pipelines that file FERC Form 6s, but we generally limited this analysis to those with Gross PP&E of >\$100mm and EBITDA of >\$10mm. We also excluded the Alaskan pipelines. Four new pipes were added to the report this year: EPIC Crude Pipeline, Enable Bakken Crude, Oryx Delaware Oil Transport and Oryx Delaware Oil Gathering NM. We combined the new Oryx pipes with existing Oryx Southern Delaware and show as Oryx Combined Pipelines.
- Slides 5-10: Summarize the key measures for the group.
- Slides 12-42: Broken out by geographic region, individual pipeline reviews with a description and map of the pipeline as well as details on throughput and financial metrics.

Methodology

- **Earnings Data:** FERC data, per Form 6s.
- **Capital Spend:** FERC data, per Form 6 cash flow statements.
- **Throughput:** FERC data, per Form 6s.
- **Page 700 Data:** In the last couple of years, the FERC began requiring companies to report additional information on page 700 of the Form 6. The rule change is intended to make it easier for shippers and the FERC to determine whether pipelines are over earning. On the individual pipeline sheets, we have included a section on the page 700 data along with a line item showing whether the pipeline is under or over earning its cost of service.

Pipelines Included in this Report

USCA Crude Oil Pipeline Review - Regional Systems

Permian Pipes	Page	DJ Basin/Rockies Pipes	Page
BridgeTex Pipeline Company (OMERS 50%/MMP 30%/PAA 20%)	12	Grand Mesa Pipeline (NGL)	29
Centurion Pipeline (Lotus Midstream)	13	Pony Express (Blackstone)	30
EnLink Crude Pipeline (ENLC)	14	PRG Pipelines (Blackstone 51%/Silver Creek Midstream 49%)	31
EPIC Crude Pipeline (Private 45%/NBLX 30%/ATLM 15%/RTLRL 10%)	15	Saddlehorn Pipeline (MMP 30%/PAA 30%/WES 20%/Black Diamond 20%)	32
Kinder Morgan Wink (KMI)	16		
Medallion Pipeline (Global Infrastructure Partners)	17		
NuStar Permian Transportation and Storage (NS)	18		
Oryx Combined Pipelines (Stonepeak/QIA)	19	Other Regional Pipes	
Rattler Midstream Operating LLC (FANG 78%/RTLRL 22%)	20	BP Pipelines North America (BP)	34
		Chicap Pipe Line Co (BP 56%/ENB 44%)	35
Bakken Pipes		Genesis Pipeline USA (GEL)	36
Belle Fourche Pipeline (True Family)	22	Mars Oil Pipeline (SHLX 71%/BPMP 29%)	37
Bridger Pipeline (True Family)	23	Minnesota Pipe Line Company (Koch 74%/MPC 17%/Trof Inc 9%)	38
Butte Pipe Line (True Family)	24	Mustang Pipeline (XOM 70%/ENB 30%)	39
Enable Bakken Crude (ENBL)	25	SLC Pipeline (HEP)	40
Hiland Crude LLC (KMI)	26	Valero Partners Lucas (VLO)	41
Sacagawea Pipeline (PSXP 49.5%/Paradigm 49.5%/Grey Wolf 1%)	27	Zydeco Pipeline Co. (SHLX 93%/RDS 7%)	42

Pipeline EBITDA – Permian Driving Growth

- **Regional crude oil pipeline EBITDA was up 22% or \$526mm in 2019 and is up 98% since 2016 (26% CAGR).**

- Majority of y/y growth was driven by Permian pipes, accounting for 63% of growth. DJ Basin/Rockies pipes accounted for 18% of growth, while Bakken and other regional pipes accounted for 9% and 10%, respectively.

- **Biggest absolute gains in 2019 were Rattler Midstream (\$150mm), Medallion (\$63mm), Oryx Combined Pipelines (\$59mm) and BridgeTex (\$59mm), all Permian pipes.**

- The \$3.0B of aggregate Regional EBITDA compares with \$10.2B for the Major Systems.

Pipeline	EBITDA (\$mm)					1-Year Change	3-Year CAGR
	2015	2016	2017	2018	2019		
Pony Express	\$213	\$271	\$248	\$316	\$335	6%	7%
BridgeTex Pipeline Company LLC	na	na	na	\$260	\$319	23%	na
Rattler Midstream Operating LLC	na	na	\$29	\$105	\$255	142%	na
Hiland Crude LLC	\$156	\$166	\$152	\$209	\$213	2%	9%
Mars Oil Pipeline	\$129	\$156	\$185	\$167	\$199	19%	8%
Grand Mesa Pipeline	na	\$17	\$97	\$139	\$171	23%	114%
Medallion Pipeline	\$31	\$62	\$108	\$104	\$167	60%	39%
Oryx Combined Pipelines	na	\$5	\$53	\$102	\$162	58%	216%
Bridger Pipeline	\$106	\$109	\$108	\$145	\$157	8%	13%
Centurion Pipeline	\$172	\$123	\$126	\$146	\$142	-2%	5%
Saddlehorn Pipeline	na	\$18	\$63	\$94	\$140	50%	97%
NuStar Permian Transportation and Storage	\$1	\$12	\$27	\$81	\$128	58%	121%
Minnesota Pipe Line Company	\$113	\$155	\$147	\$132	\$107	-19%	-12%
Zydeco Pipeline Co.	\$155	\$155	\$147	\$129	\$99	-23%	-14%
BP Pipelines North America	\$16	\$28	\$68	\$44	\$97	124%	51%
Belle Fourche Pipeline	\$83	\$76	\$71	\$39	\$54	39%	-11%
Sacagawea Pipeline Company LLC	na	(\$0)	\$4	\$25	\$35	41%	na
Kinder Morgan Wink	\$26	\$29	\$30	\$32	\$33	3%	5%
Enable Bakken Crude	\$9	\$21	\$24	\$26	\$31	19%	15%
Valero Partners Lucas	\$23	\$19	\$24	\$27	\$30	14%	18%
Mustang Pipeline	\$27	\$3	\$4	\$9	\$26	201%	115%
SLC Pipeline LLC	\$15	\$20	\$4	\$18	\$23	26%	5%
Butte Pipe Line	\$20	\$22	\$17	\$22	\$21	-2%	0%
Genesis Pipeline USA	\$12	\$10	\$17	\$21	\$19	-10%	24%
EnLink Crude Pipeline LLC	na	na	\$11	\$12	\$17	39%	na
Chicap Pipe Line Co	\$20	\$17	\$8	\$17	\$16	-5%	-2%
PRG Pipelines LLC	na	\$2	\$7	\$11	\$9	-22%	56%
EPIC Crude Pipeline LP	na	na	na	na	(\$48)	na	na
Total	\$1,326	\$1,495	\$1,780	\$2,433	\$2,959	22%	26%

Pipeline Throughput – Also Driven By Permian

- **Regional crude oil throughput was 7.5 mmbpd in 2019, up 838 mbpd or 13% y/y and roughly in line with the 3-yr CAGR of 15% for the group. Since 2016, throughput is up 2.6 mmbpd or 53%.**
- The largest y/y growth came from Oryx Combined Pipelines (+198 mbpd), Medallion (+132 mbpd) and NuStar Permian (+109 mbpd), again all Permian pipes.
- Largest absolute declines were at Valero Partners Lucas (-28 mbpd), Belle Fourche (-26 mbpd) and Centurion (-17 mbpd).
- **Permian pipes accounted for roughly 72% of the y/y growth in throughput, while DJ Basin/Rockies and Bakken pipes accounted for 8% and 4%, respectively.**
- The 7.5 mmbpd of Regional throughput compares with 28.6 mmbpd for the Major Systems.

Pipeline	Throughput (mmbpd)					1-Year Change	3-Year CAGR
	2015	2016	2017	2018	2019		
Mars Oil Pipeline	593	421	469	832	907	9%	29%
Zydeco Pipeline Co.	778	1,046	1,098	857	896	5%	-5%
Centurion Pipeline	545	466	471	542	525	-3%	4%
BridgeTex Pipeline Company LLC	na	na	na	379	428	13%	na
Minnesota Pipe Line Company	278	369	400	410	414	1%	4%
BP Pipelines North America	739	732	707	393	412	5%	-17%
Medallion Pipeline	43	107	200	275	407	48%	56%
Oryx Combined Pipelines	na	5	107	195	393	101%	340%
NuStar Permian Transportation and Storage	6	68	150	281	389	39%	79%
Pony Express	237	285	269	337	359	7%	8%
Valero Partners Lucas	193	142	181	337	309	-8%	30%
Hiland Crude LLC	194	242	238	273	282	3%	5%
Bridger Pipeline	149	154	140	170	206	21%	10%
Genesis Pipeline USA	59	65	133	154	158	3%	34%
Belle Fourche Pipeline	168	177	182	181	155	-14%	-4%
Chicap Pipe Line Co	121	127	99	142	154	8%	6%
Saddlehorn Pipeline	na	42	52	157	153	-2%	53%
Kinder Morgan Wink	127	131	130	131	144	10%	3%
Grand Mesa Pipeline	na	4	79	111	126	13%	206%
Mustang Pipeline	94	57	65	101	100	-1%	21%
Butte Pipe Line	144	140	117	101	97	-5%	-12%
SLC Pipeline LLC	74	91	16	82	94	16%	1%
Sacagawea Pipeline Company LLC	na	na	45	81	92	14%	na
Rattler Midstream Operating LLC	na	na	na	47	85	80%	na
EPIC Crude Pipeline LP	na	na	na	na	73	na	na
PRG Pipelines LLC	na	9	21	36	70	95%	95%
EnLink Crude Pipeline LLC	na	na	26	42	50	18%	na
Enable Bakken Crude	14	25	26	29	36	25%	13%
Total	4,557	4,908	5,421	6,676	7,514	13%	15%

Pipeline Throughput – A Look at Barrel Miles

- Generally the longer the distance a barrel moves, the higher the per-unit revenue. So in addition to looking at throughput in terms of bbl/d, we also pulled barrel miles, which is just total throughput multiplied by average miles per bbl.
- **Notable y/y increases include Oryx Combined Pipelines (+115%), Saddlehorn (+104%) and PRG Pipelines (+108%). On a 3-year basis Saddlehorn, Oryx, PRG and Grand Mesa stand out the most, with each system increasing barrel-miles at ~100% or greater CAGRs.**
- As a group, regional crude pipes have grown at an impressive 22% CAGR over the last three years, driven largely by booming production in the Permian.
- Regional Crude pipes move barrels an average of 175 miles per shipment.

Pipeline	Million Barrel Miles					1-Year Change	3-Year CAGR
	2015	2016	2017	2018	2019		
Pony Express	58,632	68,979	65,435	80,877	87,065	8%	8%
BridgeTex Pipeline Company LLC	na	na	na	58,912	67,809	15%	na
Minnesota Pipe Line Company	36,574	36,972	40,234	41,927	42,464	1%	5%
Zydeco Pipeline Co.	34,311	34,055	38,414	36,368	36,360	0%	2%
BP Pipelines North America	36,100	31,896	36,633	32,096	31,710	-1%	0%
Saddlehorn Pipeline	na	2,793	10,244	15,385	31,390	104%	124%
Centurion Pipeline	26,267	18,803	16,427	26,755	28,301	6%	15%
Grand Mesa Pipeline	na	899	7,464	22,691	25,481	12%	205%
Oryx Combined Pipelines	na	194	4,465	8,131	17,518	115%	349%
EPIC Crude Pipeline LP	na	na	na	na	15,370	na	na
Mars Oil Pipeline	11,118	2,069	13,612	12,125	13,073	8%	85%
NuStar Permian Transportation and Storage	na	na	6,496	12,135	12,989	7%	na
Hiland Crude LLC	8,694	11,429	11,280	12,582	12,632	0%	3%
Belle Fourche Pipeline	10,787	12,238	13,062	13,062	11,511	-12%	-2%
Butte Pipe Line	15,017	14,647	12,030	11,164	10,485	-6%	-11%
Kinder Morgan Wink	9,619	10,304	9,950	9,891	10,469	6%	1%
Bridger Pipeline	6,149	6,735	6,689	8,068	8,778	9%	9%
Mustang Pipeline	6,497	2,010	3,133	5,083	5,219	3%	37%
SLC Pipeline LLC	2,363	2,917	513	2,601	3,029	16%	1%
Chicap Pipe Line Co	1,793	3,307	2,021	3,344	2,833	-15%	-5%
PRG Pipelines LLC	na	249	553	947	1,969	108%	99%
Sacagawea Pipeline Company LLC	na	na	1,108	1,174	1,232	5%	na
EnLink Crude Pipeline LLC	na	na	640	1,035	1,225	18%	na
Valero Partners Lucas	1,196	862	989	1,145	1,043	-9%	7%
Genesis Pipeline USA	823	806	852	870	797	-8%	0%
Enable Bakken Crude	na	na	na	na	na	na	na
Rattler Midstream Operating LLC	na	na	na	na	na	na	na
Medallion Pipeline	na	na	na	na	na	na	na
Total	265,941	262,163	302,243	418,366	480,751	15%	22%

Unit Rates – Slowly increasing

- Chart to the right shows revenue per bbl for each pipeline, sorted from highest to lowest in 2019. These may or may not correspond to tariff rates given that some pipelines may receive ship-or-pay payments which artificially boost per-unit revenue, and the data may aggregate multiple systems.
- **Unit rates grew 3% in 2019 and have grown at a 3% CAGR over the last three years.**
- On a weighted average basis the increase in 2019 was largely attributable to three pipes: Saddlehorn (rate +57%), BP Pipelines North America (+21%) and Valero Partners Lucas (+25%).
- Biggest drags on unit rates for 2019 include Zydeco (rate -30%), Minnesota Pipe Line (-15%) and Oryx Combined Pipelines (-10%).

Pipeline	Revenue Per Barrel					1-Year Change	3-Year CAGR
	2015	2016	2017	2018	2019		
Grand Mesa Pipeline	na	10.56	4.87	4.73	5.04	7%	na
Pony Express	3.45	3.61	3.61	3.54	3.62	2%	0%
Saddlehorn Pipeline	na	4.36	4.19	1.93	3.02	57%	-11%
Bridger Pipeline	2.98	2.90	3.27	3.31	3.01	-9%	1%
Hiland Crude LLC	2.98	2.60	2.43	2.56	2.89	13%	4%
BridgeTex Pipeline Company LLC	na	na	na	2.76	2.75	0%	na
Enable Bakken Crude	4.66	2.81	2.66	2.42	2.35	-3%	-6%
Belle Fourche Pipeline	2.28	2.22	2.11	1.73	2.15	24%	-1%
Oryx Combined Pipelines	na	10.30	1.85	1.89	1.70	-10%	na
EPIC Crude Pipeline LP	na	na	na	na	1.49	na	na
Medallion Pipeline	2.50	2.06	1.81	1.36	1.39	2%	-12%
Centurion Pipeline	1.49	1.41	1.47	1.41	1.37	-3%	-1%
BP Pipelines North America	0.67	0.69	0.73	1.06	1.28	21%	23%
EnLink Crude Pipeline LLC	na	na	1.37	1.11	1.24	12%	na
NuStar Permian Transportation and Storage	na	0.72	0.83	1.13	1.23	8%	19%
Butte Pipe Line	1.06	1.06	1.03	1.21	1.22	1%	5%
Mustang Pipeline	1.21	0.78	0.66	1.17	1.20	2%	15%
Minnesota Pipe Line Company	2.09	1.61	1.51	1.31	1.11	-15%	-12%
Kinder Morgan Wink	0.99	1.00	0.97	0.99	1.00	1%	0%
Sacagawea Pipeline Company LLC	na	na	0.45	0.91	0.88	-4%	na
Rattler Midstream Operating LLC	na	na	na	0.93	0.88	-6%	na
Mars Oil Pipeline	0.95	1.50	1.51	0.80	0.84	5%	-18%
SLC Pipeline LLC	0.70	0.74	0.73	0.75	0.81	9%	3%
PRG Pipelines LLC	na	1.12	1.15	0.99	0.77	-22%	-12%
Zydeco Pipeline Co.	0.79	0.59	0.61	0.79	0.55	-30%	-2%
Genesis Pipeline USA	1.10	0.90	0.56	0.56	0.52	-6%	-17%
Chicap Pipe Line Co	0.58	0.52	0.43	0.47	0.50	6%	-1%
Valero Partners Lucas	0.40	0.45	0.45	0.25	0.32	25%	-11%
Weighted Average	\$1.34	\$1.34	\$1.39	\$1.45	\$1.49	3%	3%

Capital Efficiency – Good, And Much of it Recent

- Table to the right illustrates capital efficiency as measured two ways: 1) cumulative track record; and 2) five-year track record.

- **Cumulative Track Record:** Looks at Gross PP&E invested over the life of the pipe divided by current EBITDA. ***Average invested multiple was 5.0x based on '19 EBITDA (vs. 4.9x last year). That compares with 6.9x for Major Crude pipes.***

- **Five-Year Track Record:** ***Investment returns over the last five years are even better, at 3.4x, with much of the difference attributable to new pipes ramping up operations after several years of capital outlays.***

- In aggregate, the group spent \$7.8B over the last five years, which compares with ~\$28B for Major Crude pipes.

Pipeline	Gross PP&E 2019 (\$mm)	EBITDA 2019 (\$mm)	Gross PP&E/ EBITDA	5-Yr Δ in Gross PP&E (\$mm)	5-Yr Δ in EBITDA (\$mm)	5-Yr Inv Multiple
Rattler Midstream Operating LLC	\$130	\$255	0.5x	\$130	\$255	0.5x
Mars Oil Pipeline	\$302	\$199	1.5x	\$1	\$99	na
Grand Mesa Pipeline	\$282	\$171	1.6x	\$282	\$171	1.6x
Butte Pipe Line	\$56	\$21	2.6x	\$21	(\$2)	na
BridgeTex Pipeline Company LLC	\$886	\$319	2.8x	\$886	\$319	2.8x
Mustang Pipeline	\$78	\$26	3.0x	\$20	(\$6)	na
Saddlehorn Pipeline	\$491	\$140	3.5x	\$491	\$140	3.5x
Bridger Pipeline	\$590	\$157	3.7x	\$231	\$39	6.0x
Kinder Morgan Wink	\$143	\$33	4.3x	\$10	\$2	4.2x
Valero Partners Lucas	\$134	\$30	4.4x	\$11	\$7	1.6x
Belle Fourche Pipeline	\$256	\$54	4.7x	\$60	\$10	6.4x
Sacagawea Pipeline Company LLC	\$172	\$35	4.9x	\$172	\$35	4.9x
Centurion Pipeline	\$698	\$142	4.9x	(\$474)	\$29	na
Pony Express	\$1,653	\$335	4.9x	\$312	\$290	1.1x
Zydeco Pipeline Co.	\$512	\$99	5.1x	\$128	\$29	4.4x
BP Pipelines North America	\$539	\$97	5.5x	\$76	\$166	0.5x
Medallion Pipeline	\$933	\$167	5.6x	\$827	\$168	4.9x
Chicap Pipe Line Co	\$98	\$16	6.0x	\$15	\$9	1.6x
NuStar Permian Transportation and Storage	\$795	\$128	6.2x	\$795	\$128	6.2x
Hiland Crude LLC	\$1,470	\$213	6.9x	\$430	\$133	3.2x
Minnesota Pipe Line Company	\$761	\$107	7.1x	\$120	\$67	1.8x
Oryx Combined Pipelines	\$1,155	\$162	7.1x	\$1,155	\$162	7.1x
SLC Pipeline LLC	\$166	\$23	7.4x	(\$88)	\$8	na
Enable Bakken Crude	\$267	\$31	8.5x	\$105	\$33	3.2x
EnLink Crude Pipeline LLC	\$162	\$17	9.6x	\$162	\$17	9.6x
Genesis Pipeline USA	\$198	\$19	10.4x	\$44	\$4	9.9x
PRG Pipelines LLC	\$212	\$9	24.8x	\$212	\$9	24.8x
EPIC Crude Pipeline LP	\$1,665	(\$48)	na	\$1,665	(\$48)	na
Total	\$14,803	\$2,959	5.0x	\$7,797	\$2,274	3.4x

Regional Pipes – Oscillating Between Over/Under Earning

- Chart to the right shows dollar amount of over or under earning, as reported on page 700 of the Form 6s, sorted by 2019 over earning.
- ***On a weighted average basis, the group over earned their cost of service (including return) by 7% in 2019***, albeit with a wide distribution of over/under earning across the group. This contrasts with the 2015-2017 period, which saw pipes largely under earning their cost of service each year.
- While we cannot recall any FERC actions related to a crude pipe's over earnings, we keep this chart in our report as a sort of hedge against unexpected FERC actions and/or customer complaints.

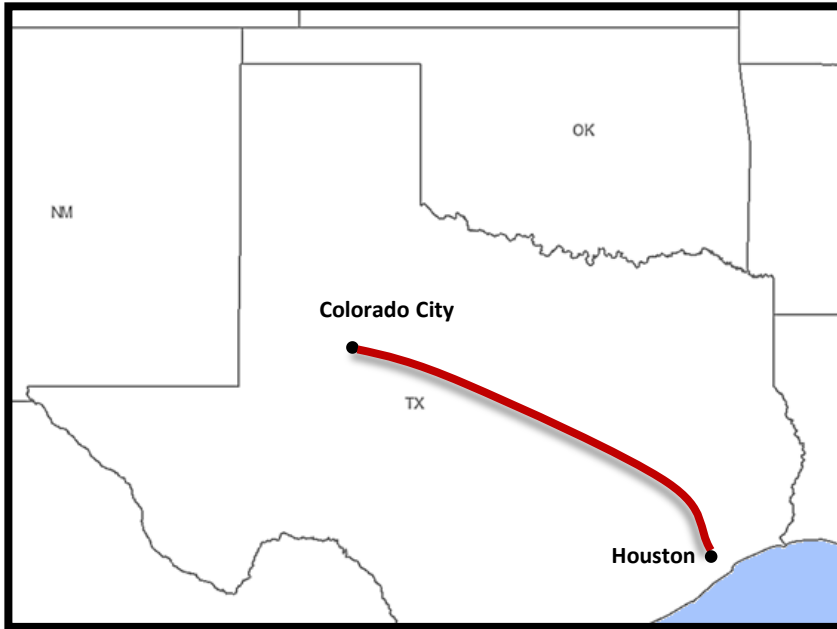
Pipeline	Over (Under) Earnings (\$mm)					% Over Earning
	2015	2016	2017	2018	2019	
BridgeTex Pipeline Company LLC	na	na	na	\$92	\$102	89%
Grand Mesa Pipeline	na	\$1	\$40	\$70	\$98	76%
Pony Express	(\$63)	\$85	\$42	\$61	\$84	22%
Saddlehorn Pipeline	na	(\$4)	\$7	\$31	\$84	109%
Zydeco Pipeline Co.	\$112	\$101	\$103	\$75	\$33	27%
Bridger Pipeline	\$10	\$3	(\$27)	\$18	\$21	13%
Valero Partners Lucas	\$14	\$11	\$16	\$19	\$21	141%
BP Pipelines North America	(\$81)	(\$82)	(\$22)	(\$29)	\$18	11%
Mustang Pipeline	\$18	(\$6)	(\$6)	(\$1)	\$16	57%
Butte Pipe Line	\$8	\$10	\$5	\$9	\$8	30%
Medallion Pipeline	(\$10)	(\$12)	\$6	\$6	\$7	11%
Chicap Pipe Line Co	\$10	\$5	(\$1)	\$7	\$5	26%
Sacagawea Pipeline Company LLC	na	(\$14)	(\$16)	\$1	\$5	20%
Belle Fourche Pipeline	\$38	\$30	\$23	\$3	\$3	3%
Oryx Combined Pipelines	na	(\$23)	(\$9)	\$37	\$3	2%
Kinder Morgan Wink	\$11	\$9	\$11	\$4	\$3	18%
Hiland Crude LLC	\$10	(\$57)	(\$87)	(\$41)	\$2	1%
Genesis Pipeline USA	(\$2)	(\$1)	\$0	\$0	\$0	0%
EnLink Crude Pipeline LLC	na	na	(\$7)	(\$12)	(\$12)	-47%
Enable Bakken Crude	(\$31)	(\$18)	(\$20)	(\$24)	(\$12)	-28%
SLC Pipeline LLC	(\$21)	(\$15)	(\$4)	(\$23)	(\$18)	-39%
PRG Pipelines LLC	na	(\$0)	(\$3)	(\$4)	(\$19)	-52%
Rattler Midstream Operating LLC	na	na	(\$7)	(\$11)	(\$20)	-100%
Minnesota Pipe Line Company	(\$20)	\$23	\$11	(\$0)	(\$31)	-17%
NuStar Permian Transportation and Storage	na	\$3	(\$23)	(\$60)	(\$48)	-39%
EPIC Crude Pipeline LP	na	na	na	na	(\$70)	-64%
Centurion Pipeline	(\$31)	(\$68)	(\$91)	(\$82)	(\$93)	-40%
Mars Oil Pipeline	na	na	na	na	na	na
Total	(\$29)	(\$20)	(\$57)	\$149	\$190	7%



Individual Pipelines

Permian

BridgeTex Pipeline (OMERS/MMP/PAA)



- BridgeTex is a 400 mbpd, 20" crude pipe from Colorado City, TX to Houston, with further connectivity for shippers to the Texas City area. System capacity was expanded to 440 mbpd in early 2019. Operations began in September 2014, and the pipeline is operated by MMP.
- On Oct. 1, 2018, OMERS (Canadian pension plan) purchased a 50% stake in BridgeTex – 30% from PAA and 20% from MMP – for \$1.4B.
- 2018 was the first FERC Form 6 filing of BridgeTex.

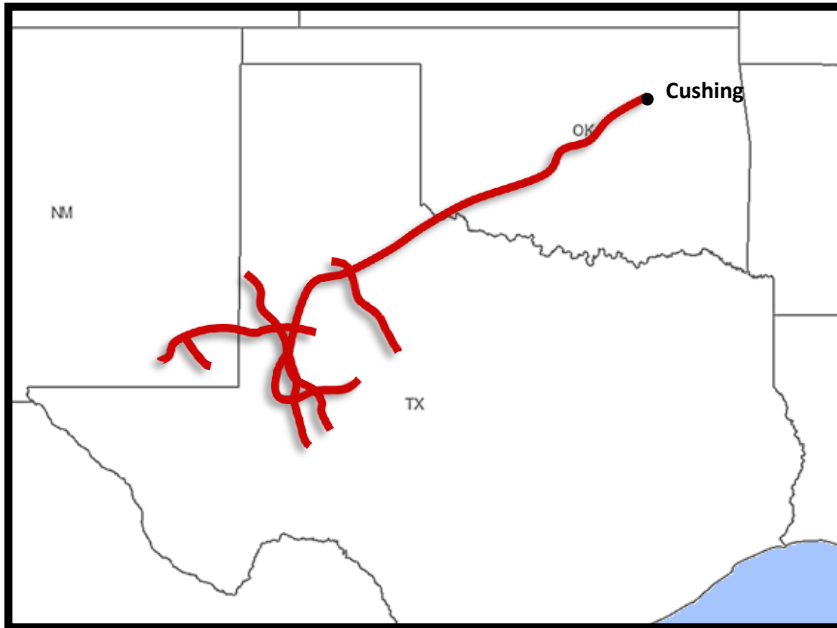
BridgeTex Pipeline Company LLC

(\$mm)	2015	2016	2017	2018	2019
Revenue				\$382	\$430
% Change					13%
EBITDA				\$260	\$319
% Change					23%
Throughput (mbpd)				379	428
% Change					13%
Throughput (mmbbl-mi)				58,912	67,809
% Change					15%
Rev/bbl				\$2.76	\$2.75
Rev/1,000 bbl-mi				\$6.48	\$6.34
Avg. miles/bbl				426	434
Capex				\$11	\$5
Gross PP&E				\$884	\$886
Gross PP&E / EBITDA				3.4x	2.8x

Page 700 Data (FERC Form 6)

Revenue		\$248	\$216
Cost of Service		<u>\$155</u>	<u>\$114</u>
Over (Under) Earning		\$92	\$102

Centurion Pipeline (Lotus Midstream)



- Centurion is a ~2,900-mile oil gathering and transportation pipeline from southeast New Mexico across the Permian Basin to Cushing, OK.
- In August '18, Centurion (and related non-regulated assets) were acquired by Lotus Midstream from OXY, for an undisclosed sum. However, the portion attributed to the regulated Centurion assets was \$643mm.
- In Jan. '20, Centurion announced the successful open season for the Augustus Pipeline. The pipe will connect their Midland terminal to multiple long-haul pipes at Crane and have initial throughput of 150 mbpd by Q4'20.

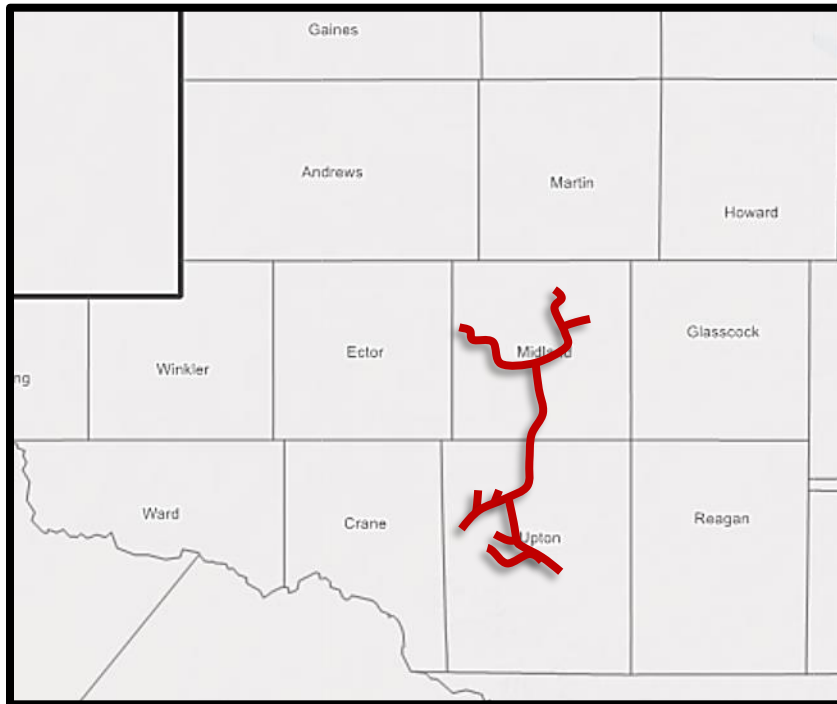
Centurion Pipeline

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$297	\$240	\$252	\$278	\$262
% Change	31%	-19%	5%	10%	-6%
EBITDA	\$172	\$123	\$126	\$146	\$142
% Change	52%	-28%	3%	15%	-2%
Throughput (mbpd)	545	466	471	542	525
% Change	21%	-15%	1%	15%	-3%
Throughput (mmbbl-mi)	26,267	18,803	16,427	26,755	28,301
% Change	10%	-28%	-13%	63%	6%
Rev/bbl	\$1.49	\$1.41	\$1.47	\$1.41	\$1.37
Rev/1,000 bbl-mi	\$11.30	\$12.76	\$15.36	\$10.39	\$9.24
Avg. miles/bbl	132	111	96	135	148
Capex	\$68	\$46	\$76	\$19	\$61
Gross PP&E	\$1,218	\$1,264	\$1,339	\$642	\$698
Gross PP&E / EBITDA	7.1x	10.3x	10.6x	4.4x	4.9x

Page 700 Data (FERC Form 6)

Revenue	\$133	\$121	\$113	\$151	\$143
Cost of Service	<u>\$164</u>	<u>\$189</u>	<u>\$204</u>	<u>\$233</u>	<u>\$236</u>
Over (Under) Earning	(\$31)	(\$68)	(\$91)	(\$82)	(\$93)

EnLink Crude Pipeline (ENLC)

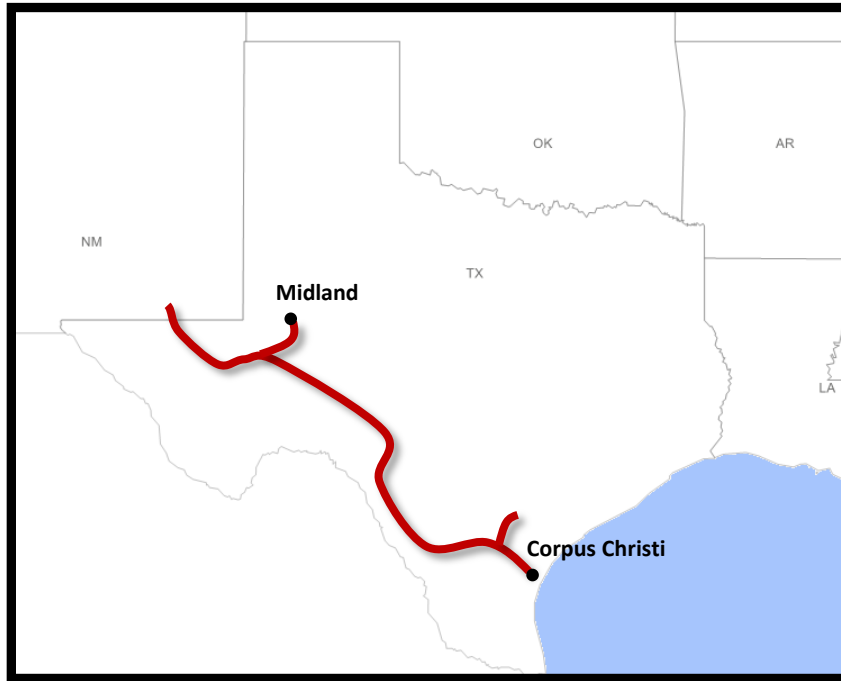


- EnLink Crude Pipeline is a ~250-mile gathering and transportation system in Midland and Upton counties that provides connectivity to ET's SunVit pipeline and EPD terminals in Midland, TX.
- The system began operations in 2017.

EnLink Crude Pipeline LLC

(\$mm)	2015	2016	2017	2018	2019
Revenue			\$13	\$17	\$22
% Change				31%	33%
EBITDA			\$11	\$12	\$17
% Change				15%	39%
Throughput (mbpd)			26	42	50
% Change				62%	18%
Throughput (mmbbl-mi)			640	1,035	1,225
% Change				62%	18%
Rev/bbl			\$1.37	\$1.11	\$1.24
Rev/1,000 bbl-mi			\$20.17	\$16.34	\$18.30
Avg. miles/bbl			68	68	68
Capex			\$97	\$7	\$13
Gross PP&E			\$136	\$149	\$162
Gross PP&E / EBITDA			13.0x	12.3x	9.6x
Page 700 Data (FERC Form 6)					
Revenue			\$13	\$13	\$13
Cost of Service			<u>\$20</u>	<u>\$25</u>	<u>\$25</u>
Over (Under) Earning			(\$7)	(\$12)	(\$12)

EPIC Crude Pipeline (Private/NBLX/ALTM/RTLRL)

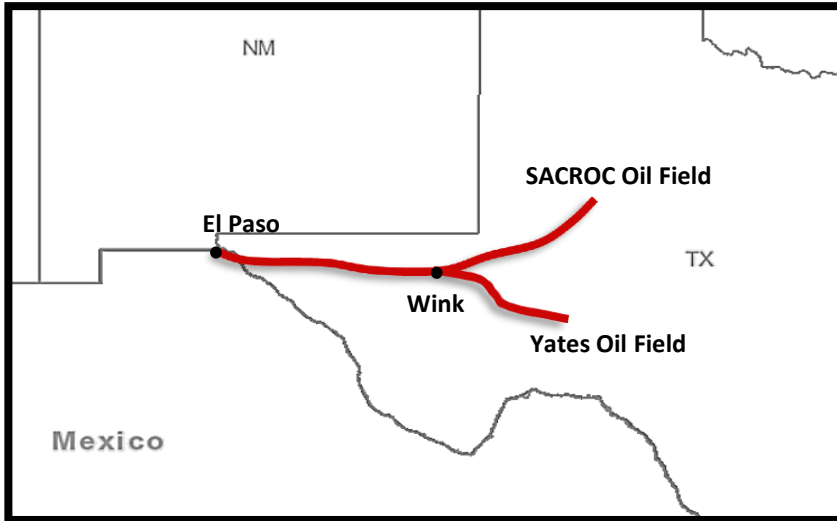


- EPIC is a new common carrier interstate crude oil pipeline that began operations in August 2019. Assets consist of ~700 miles of 30" pipeline and 5.4 mmbbls of operational storage. EPIC will transport up to 600 mbpd of crude oil from Orla, TX to Corpus Christi.

EPIC Crude Pipeline LP

(\$mm)	2015	2016	2017	2018	2019
Revenue					\$39
% Change					
EBITDA					(\$48)
% Change					
Throughput (mbpd)					73
% Change					
Throughput (mmbbl-mi)					15,370
% Change					
Rev/bbl					\$1.49
Rev/1,000 bbl-mi					\$2.56
Avg. miles/bbl					581
Capex					\$1,665
Gross PP&E					\$1,665
Gross PP&E / EBITDA					na
Page 700 Data (FERC Form 6)					
Revenue					\$39
Cost of Service					<u>\$109</u>
Over (Under) Earning					(\$70)

Kinder Morgan Wink (KMI)



- Kinder Morgan Wink is a ~450-mile crude oil pipeline in west Texas consisting of three mainline sections, two gathering systems and numerous truck delivery stations.
- The segment that runs from Wink to El Paso has capacity of 145 mbpd and delivers oil into MPC's 135 mbpd refinery in El Paso.

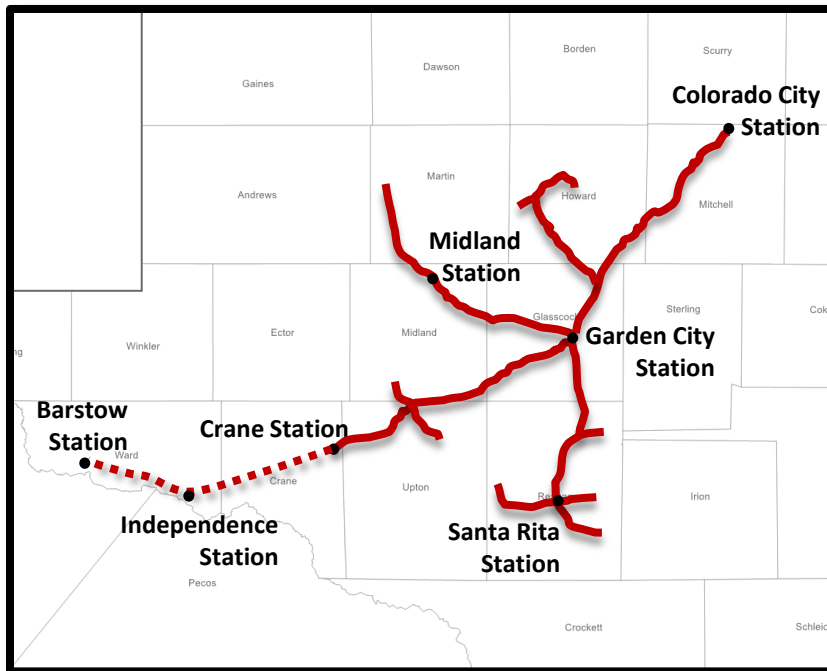
Kinder Morgan Wink

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$46	\$48	\$46	\$47	\$53
% Change	-3%	4%	-4%	3%	11%
EBITDA	\$26	\$29	\$30	\$32	\$33
% Change	-16%	13%	3%	7%	3%
Throughput (mbpd)	127	131	130	131	144
% Change	4%	3%	-1%	1%	10%
Throughput (mmbbl-mi)	9,619	10,304	9,950	9,891	10,469
% Change	-5%	7%	-3%	-1%	6%
Rev/bbl	\$0.99	\$1.00	\$0.97	\$0.99	\$1.00
Rev/1,000 bbl-mi	\$4.79	\$4.65	\$4.62	\$4.77	\$5.02
Avg. miles/bbl	207	215	209	207	199
Capex	\$2	\$2	\$4	\$1	\$2
Gross PP&E	\$135	\$137	\$140	\$141	\$143
Gross PP&E / EBITDA	5.3x	4.8x	4.7x	4.4x	4.3x

Page 700 Data (FERC Form 6)

Revenue	\$17	\$17	\$17	\$15	\$19
Cost of Service	<u>\$6</u>	<u>\$8</u>	<u>\$7</u>	<u>\$10</u>	<u>\$16</u>
Over (Under) Earning	\$11	\$9	\$11	\$4	\$3

Medallion Pipeline (Global Infrastructure Partners)



- Medallion is a crude oil transportation system that was built over the past six years in the Midland Basin. The system has ~1,050 miles of pipeline, ~670k dedicated acres and total AMIs of nearly 4mm acres.
- Medallion also owns the Delaware Express Pipeline (dashed above), which we do not think is included in the FERC data shown above.
- In late October 2018, Global Infrastructure Partners closed on the purchase of Medallion from EMG and Laredo Petroleum for \$1.825B.

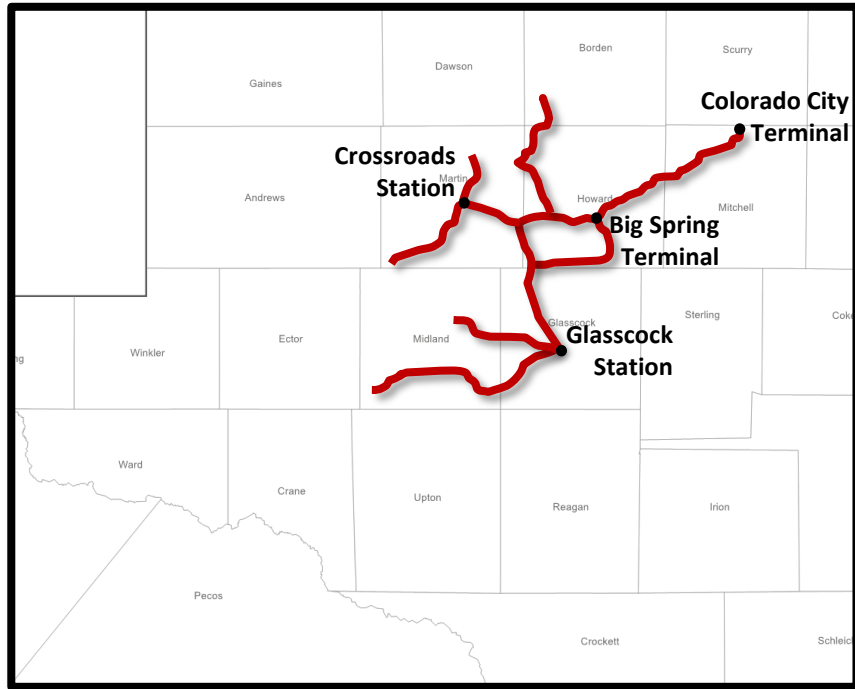
Medallion Pipeline

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$39	\$81	\$132	\$137	\$207
% Change	1873%	106%	63%	4%	51%
EBITDA	\$31	\$62	\$108	\$104	\$167
% Change	-5130%	98%	75%	-4%	60%
Throughput (mbpd)	43	107	200	275	407
% Change	1675%	149%	86%	38%	48%
Throughput (mmbbl-mi)					
% Change					
Rev/bbl	\$2.50	\$2.06	\$1.81	\$1.36	\$1.39
Rev/1,000 bbl-mi					
Avg. miles/bbl					
Capex	\$238	\$133	\$148	\$137	\$219
Gross PP&E	\$344	\$478	\$586	\$720	\$933
Gross PP&E / EBITDA	11.0x	7.7x	5.4x	6.9x	5.6x

Page 700 Data (FERC Form 6)

Revenue	\$39	\$71	\$123	\$127	\$69
Cost of Service	<u>\$50</u>	<u>\$83</u>	<u>\$117</u>	<u>\$121</u>	<u>\$62</u>
Over (Under) Earning	(\$10)	(\$12)	\$6	\$6	\$7

NuStar Permian Transportation and Storage (NS)

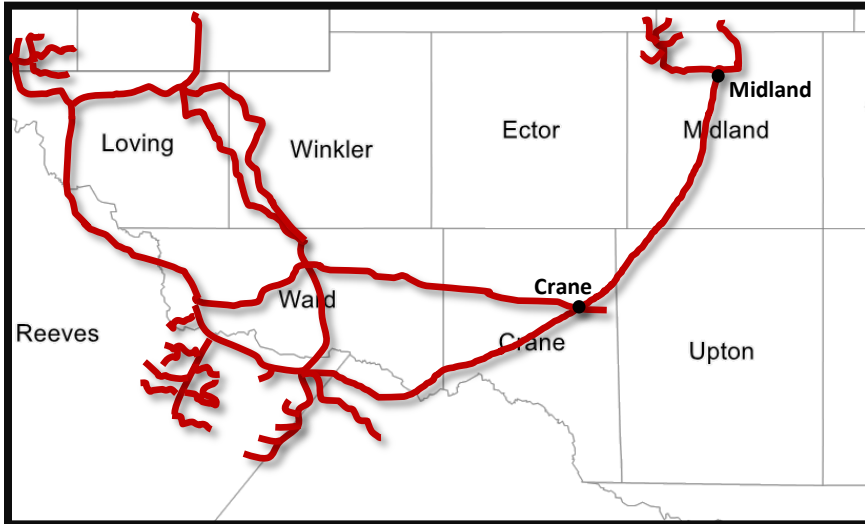


- NuStar Permian is an ~900-mile crude pipeline running through Midland, Martin, Howard, Mitchell and Glasscock counties in the Midland basin.
- Operation began in Q4'15. Also operates 1 mmbbls of crude storage.
- NuStar Permian, formerly known as Navigator, was acquired by NuStar in May 2017 for \$1.475B.
- For reference, in corporate presentations, NS reported Permian EBITDA of \$128mm in 2019 and throughput averaging ~390 mbpd.

NuStar Permian Transportation and Storage

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$2	\$18	\$45	\$116	\$174
% Change		<i>nm</i>	152%	158%	50%
EBITDA	\$1	\$12	\$27	\$81	\$128
% Change		<i>nm</i>	129%	197%	58%
Throughput (mbpd)	6	68	150	281	389
% Change		<i>nm</i>	120%	88%	39%
Throughput (mmbbl-mi)			6,496	12,135	12,989
% Change				87%	7%
Rev/bbl		\$0.72	\$0.83	\$1.13	\$1.23
Rev/1,000 bbl-mi			\$6.94	\$9.58	\$13.41
Avg. miles/bbl			119	118	91
Capex	\$129	\$144	\$177	\$188	\$151
Gross PP&E	\$64	\$208	\$328	\$644	\$795
Gross PP&E / EBITDA	55.8x	17.5x	12.0x	7.9x	6.2x
Page 700 Data (FERC Form 6)					
Revenue		\$18	\$30	\$56	\$75
Cost of Service		<u>\$15</u>	<u>\$53</u>	<u>\$115</u>	<u>\$123</u>
Over (Under) Earning		\$3	(\$23)	(\$60)	(\$48)

Oryx Combined Pipelines (Stonepeak/QIA)



- The aggregate Oryx system includes ~1,200 miles of crude transportation and gathering pipe and 2.1 mmbbls of storage.
- Given the integrated nature of Oryx's systems, we have consolidated three separate Oryx FERC filers into the combined system shown in the map above. Data in the chart to the right includes Oryx Southern Delaware, Oryx Delaware Oil Transport and Oryx Delaware Oil Gathering NM.
- The system's initial capacity was 160 mbpd, and they have since expanded capacity to ~900 mbpd.
- The system provides interconnects with MMP's Longhorn Pipeline in Crane and EPD's Midland terminal.

Oryx Combined Pipelines

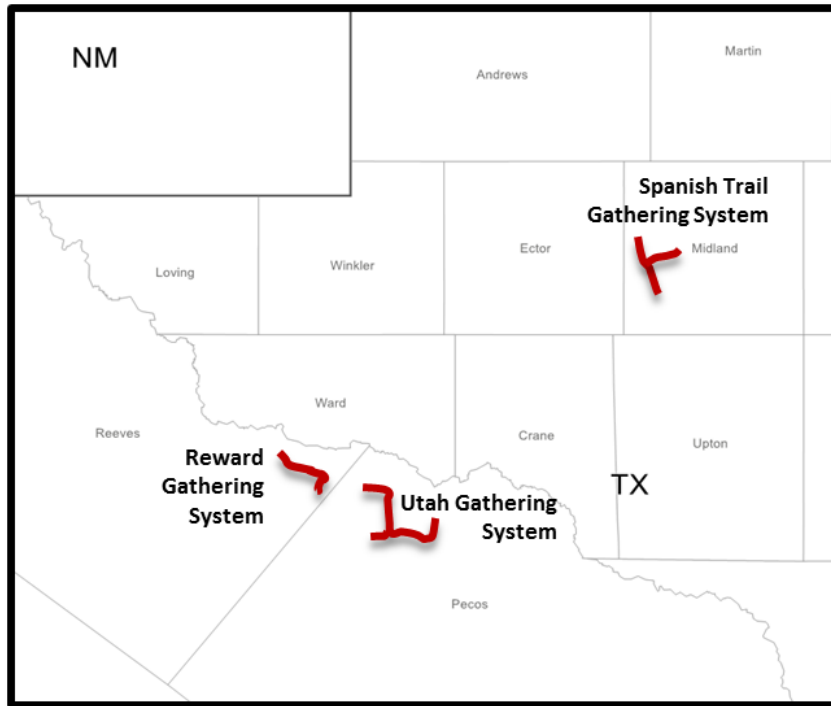
(\$mm)	2015	2016	2017	2018	2019
Revenue		\$17	\$72	\$135	\$244
% Change			316%	86%	81%
EBITDA		\$5	\$53	\$102	\$162
% Change			928%	93%	58%
Throughput (mbpd)		5	107	195	393
% Change			nm	82%	101%
Throughput (mmbbl-mi)		194	4,465	8,131	17,518
% Change			2202%	82%	115%
Rev/bbl		\$10.30	\$1.85	\$1.89	\$1.70
Rev/1,000 bbl-mi		\$89.62	\$16.20	\$16.54	\$13.92
Avg. miles/bbl		115	114	114	122
Capex		\$150	\$85	\$70	\$306
Gross PP&E		\$212	\$297	\$367	\$1,155
Gross PP&E / EBITDA		41.2x	5.6x	3.6x	7.1x

Page 700 Data (FERC Form 6)

Revenue	\$17	\$50	\$94	\$167
Cost of Service	<u>\$40</u>	<u>\$59</u>	<u>\$58</u>	<u>\$164</u>
Over (Under) Earning	(\$23)	(\$9)	\$37	\$3

- In April 2019, Quantum Energy, Post Oak Capital, CXO, WPX and other investors agreed to sell Oryx Southern Delaware and Oryx Delaware to Stonepeak Infrastructure partners for \$3.6B.
- In August 2019, the Qatar Investment Authority (QIA), announced they acquired a \$550mm stake in Oryx from Stonepeak.

Rattler Midstream Operating (FANG/RTLRL)



- Rattler Midstream Operating is a ~100-mile Delaware Basin gathering system built primarily to serve Diamondback Energy (FANG) under long-term, fixed-fee contracts.
- Bulk of EBITDA stems from Non-carrier Property – \$194mm in '19, \$68mm in '18 and \$19mm in '17 – which is primarily from their water disposal and freshwater businesses.
- Rattler Midstream LP owns a much larger, intrastate system, with crude, gas and produced water pipelines.

Rattler Midstream Operating LLC

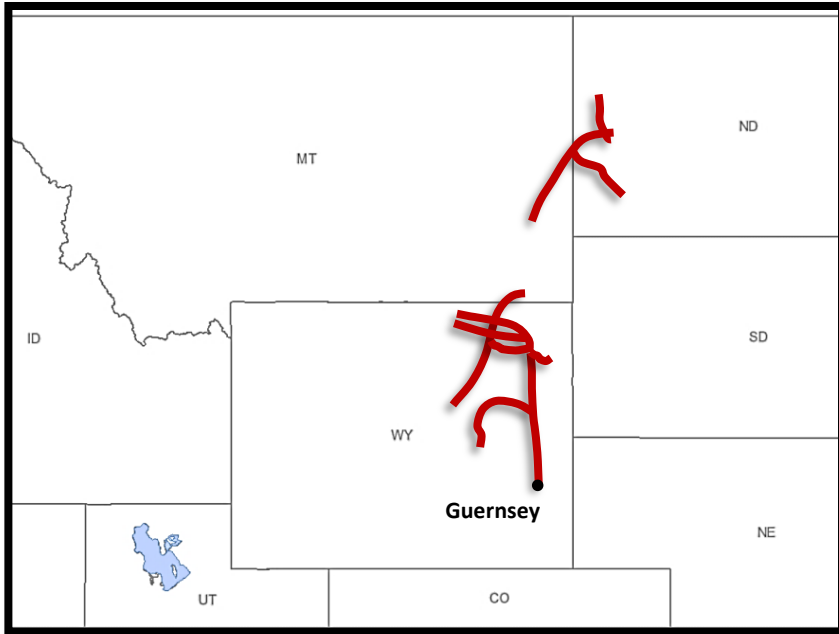
(\$mm)	2015	2016	2017	2018	2019
Revenue			\$8	\$16	\$27
% Change				110%	70%
EBITDA			\$29	\$105	\$255
% Change				266%	142%
Throughput (mbpd)				47	85
% Change					80%
Throughput (mmbbl-mi)					
% Change					
Rev/bbl				\$0.93	\$0.88
Rev/1,000 bbl-mi					
Avg. miles/bbl					
Capex				\$165	\$242
Gross PP&E			\$50	\$64	\$130
Gross PP&E / EBITDA			1.7x	0.6x	0.5x
Page 700 Data (FERC Form 6)					
Revenue			\$0	\$0	\$0
Cost of Service			<u>\$7</u>	<u>\$11</u>	<u>\$20</u>
Over (Under) Earning			(\$7)	(\$11)	(\$20)



Individual Pipelines

Bakken

Belle Fourche Pipeline (True Family)



- Belle Fourche Pipeline gathers and transports crude oil from the Bakken in Montana/North Dakota and the Powder River Basin in Wyoming.
- The pipeline interconnects and has joint tariffs with Pony Express, Rocky Mountain Pipeline and Bridger Pipeline.

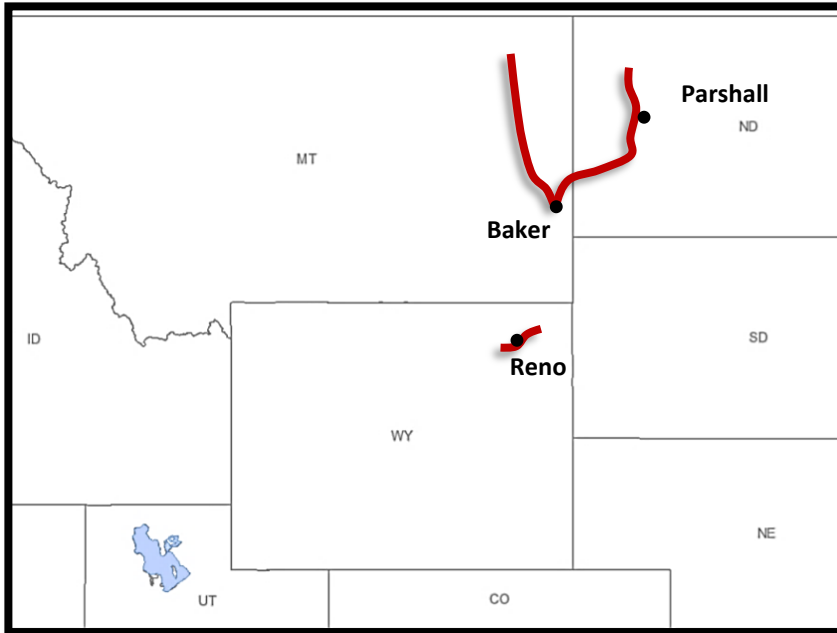
Belle Fourche Pipeline

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$140	\$143	\$140	\$114	\$122
% Change	76%	2%	-2%	-18%	7%
EBITDA	\$83	\$76	\$71	\$39	\$54
% Change	84%	-8%	-7%	-45%	39%
Throughput (mbpd)	168	177	182	181	155
% Change	69%	5%	3%	0%	-14%
Throughput (mmbbl-mi)	10,787	12,238	13,062	13,062	11,511
% Change	179%	13%	7%	0%	-12%
Rev/bbl	\$2.28	\$2.22	\$2.11	\$1.73	\$2.15
Rev/1,000 bbl-mi	\$13.00	\$11.68	\$10.71	\$8.77	\$10.60
Avg. miles/bbl	176	190	197	198	203
Capex	\$19	\$9	\$9	\$12	\$16
Gross PP&E	\$214	\$220	\$229	\$240	\$256
Gross PP&E / EBITDA	2.6x	2.9x	3.2x	6.1x	4.7x

Page 700 Data (FERC Form 6)

Revenue	\$124	\$127	\$125	\$98	\$99
Cost of Service	<u>\$87</u>	<u>\$97</u>	<u>\$101</u>	<u>\$95</u>	<u>\$96</u>
Over (Under) Earning	\$38	\$30	\$23	\$3	\$3

Bridger Pipeline (True Family)



Bridger Pipeline owns four systems:

- **Poplar System:** A 10" and 12" line that moves crude oil from the Bakken in Montana south to Baker for further transportation to Guernsey.
- **Four Bears:** A 105 mbpd, 12" crude oil line in central McKenzie and Dunn Counties, ND, with delivery to Baker, Montana.
- **Parshall Gathering:** Gathers Bakken crude from >250 wells in Mountrail County, ND with delivery to Stanley, ND.
- **Powder River Pipeline:** Gathering system with receipt points in central Campbell County, WY and delivery to the Rocky Mountain Pipeline at Reno, WY.

Bridger Pipeline

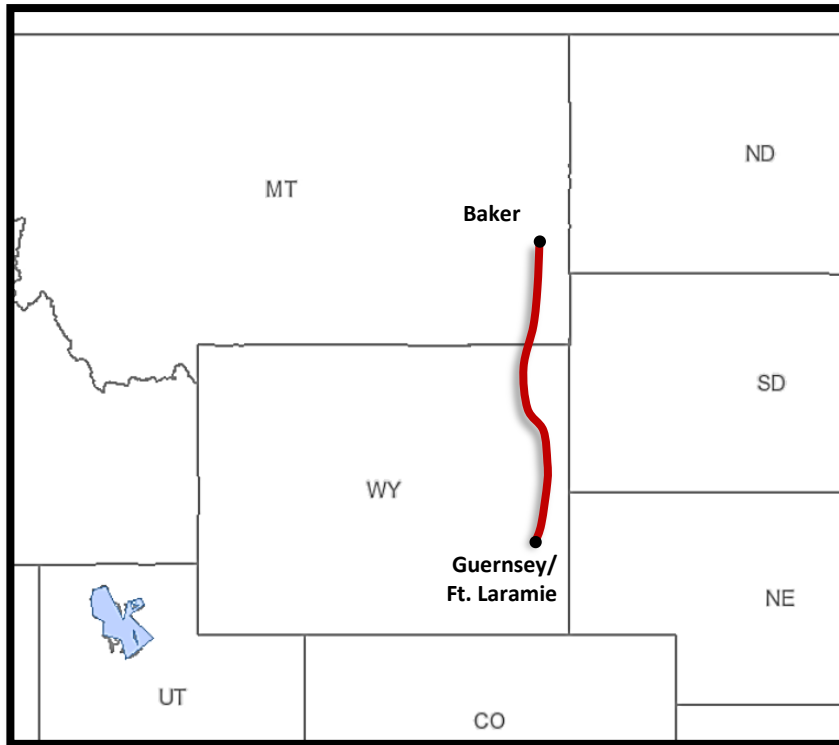
(\$mm)	2015	2016	2017	2018	2019
Revenue	\$162	\$163	\$167	\$205	\$226
% Change	3%	1%	2%	23%	10%
EBITDA	\$106	\$109	\$108	\$145	\$157
% Change	-11%	3%	-1%	34%	8%
Throughput (mbpd)	149	154	140	170	206
% Change	-38%	3%	-9%	22%	21%
Throughput (mmbbl-mi)	6,149	6,735	6,689	8,068	8,778
% Change	9%	10%	-1%	21%	9%
Rev/bbl	\$2.98	\$2.90	\$3.27	\$3.31	\$3.01
Rev/1,000 bbl-mi	\$26.36	\$24.20	\$24.92	\$25.43	\$25.71
Avg. miles/bbl	113	120	131	130	117
Capex	\$49	\$25	\$66	\$38	\$55
Gross PP&E	\$408	\$433	\$498	\$536	\$590
Gross PP&E / EBITDA	3.9x	4.0x	4.6x	3.7x	3.7x

Page 700 Data (FERC Form 6)

Revenue	\$145	\$140	\$132	\$159	\$180
Cost of Service	<u>\$136</u>	<u>\$138</u>	<u>\$159</u>	<u>\$141</u>	<u>\$159</u>
Over (Under) Earning	\$10	\$3	(\$27)	\$18	\$21

- Bridger Pipeline entered into a 50/50 agreement with PSX to build the Liberty Pipeline, from Guernsey to Cushing. The pipeline would be a \$1.6B, 700-mile system. Initial in-service target was 1H'21, but in March, PSX postponed the pipeline. Work had commenced in building the pipelines/station equipment that will eventually feed the pipe, and Bridger invested \$34mm on Liberty in 2019.

Butte Pipe Line (True Family)

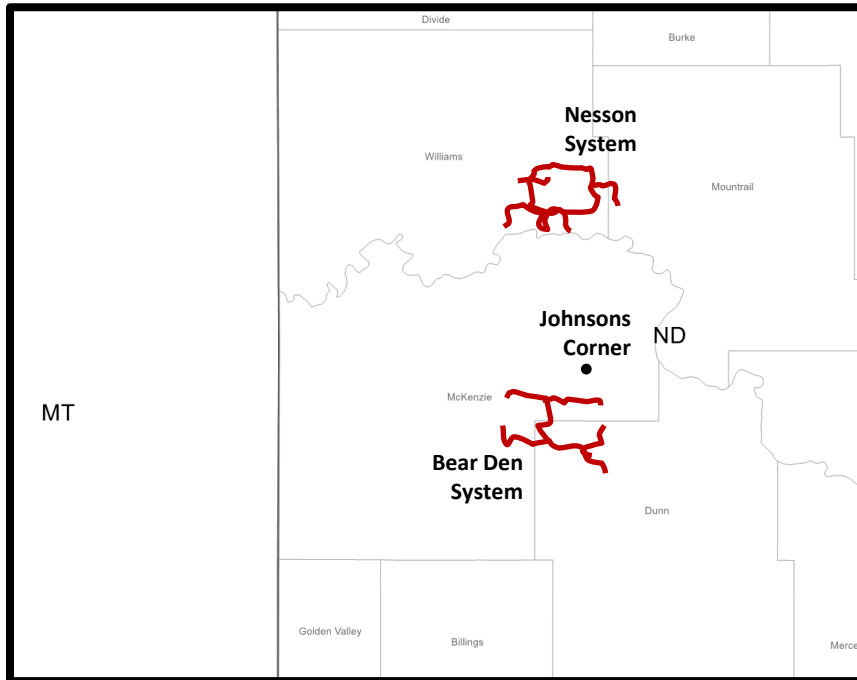


Butte Pipe Line

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$55	\$55	\$44	\$45	\$43
% Change	3%	-2%	-19%	2%	-4%
EBITDA	\$20	\$22	\$17	\$22	\$21
% Change	-14%	8%	-20%	27%	-2%
Throughput (mbpd)	144	140	117	101	97
% Change	6%	-2%	-17%	-13%	-5%
Throughput (mmbbl-mi)	15,017	14,647	12,030	11,164	10,485
% Change	5%	-2%	-18%	-7%	-6%
Rev/bbl	\$1.06	\$1.06	\$1.03	\$1.21	\$1.22
Rev/1,000 bbl-mi	\$3.69	\$3.72	\$3.66	\$4.00	\$4.11
Avg. miles/bbl	286	286	282	301	298
Capex	\$2	\$12	\$2	\$0	\$5
Gross PP&E	\$38	\$50	\$52	\$52	\$56
Gross PP&E / EBITDA	1.9x	2.3x	3.0x	2.4x	2.6x
Page 700 Data (FERC Form 6)					
Revenue	\$47	\$47	\$38	\$37	\$36
Cost of Service	<u>\$39</u>	<u>\$37</u>	<u>\$33</u>	<u>\$29</u>	<u>\$28</u>
Over (Under) Earning	\$8	\$10	\$5	\$9	\$8

- Butte Pipe Line is a ~365-mile, 6"-18" oil pipeline from Baker, MT to Ft. Laramie and Guernsey, WY. The system primarily transports oil from the Bakken via its Baker, MT receipt point, and delivers to connecting carriers at Ft. Laramie and Guernsey, WY.

Enable Bakken Crude (ENBL)

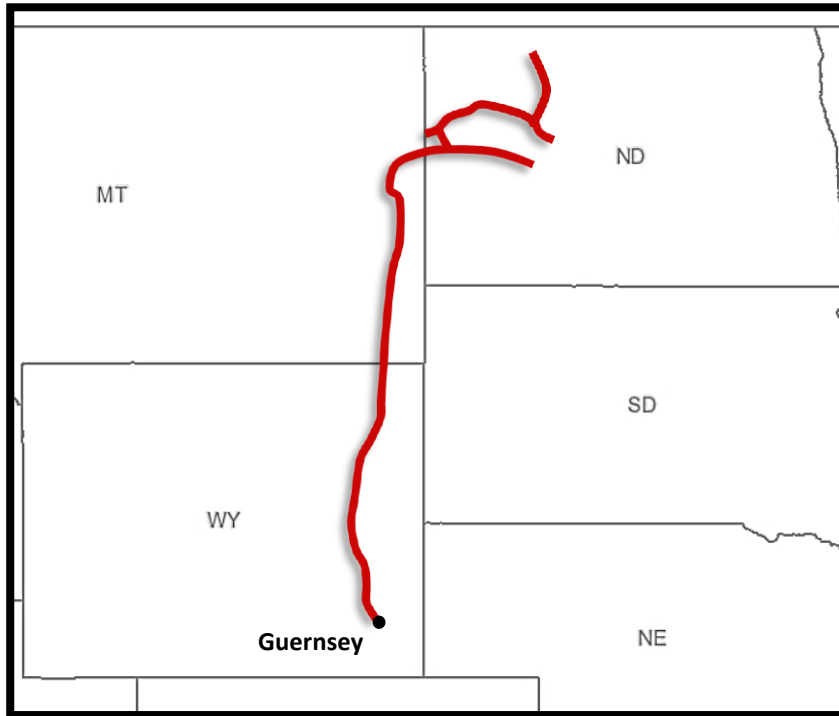


- Enable Bakken Crude consists of two crude oil gathering systems in Western North Dakota: the Bear Den gathering system, which came online in 2013, and flows into the Bakken Link Pipeline and DAPL; and the Nesson gathering system, which came online in 2015, and delivers crude into Enbridge's North Dakota Pipeline system and DAPL.

Enable Bakken Crude

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$23	\$26	\$25	\$25	\$31
% Change	405%	10%	-3%	3%	21%
EBITDA	\$9	\$21	\$24	\$26	\$31
% Change	-771%	125%	15%	11%	19%
Throughput (mbpd)	14	25	26	29	36
% Change	274%	82%	2%	13%	25%
Throughput (mmbbl-mi)					
% Change					
Rev/bbl	\$4.66	\$2.81	\$2.66	\$2.42	\$2.35
Rev/1,000 bbl-mi					
Avg. miles/bbl					
Capex	\$87	\$30	\$12	\$13	\$20
Gross PP&E	\$225	\$252	\$259	\$257	\$267
Gross PP&E / EBITDA	24.4x	12.1x	10.8x	9.7x	8.5x
Page 700 Data (FERC Form 6)					
Revenue	\$14	\$25	\$25	\$26	\$31
Cost of Service	<u>\$45</u>	<u>\$43</u>	<u>\$44</u>	<u>\$49</u>	<u>\$43</u>
Over (Under) Earning	(\$31)	(\$18)	(\$20)	(\$24)	(\$12)

Hiland Crude LLC (KMI)

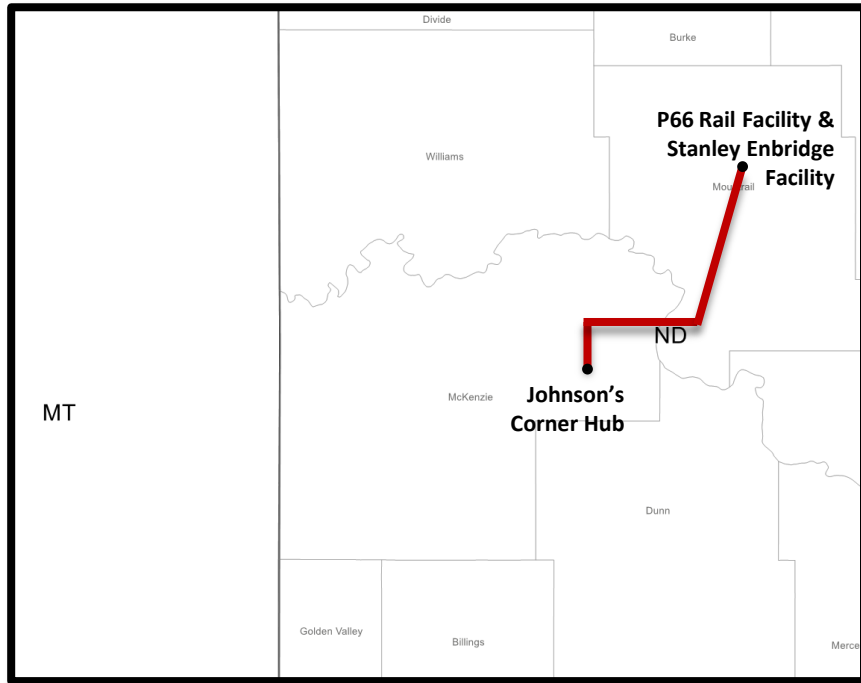


- Hiland Crude owns ~1,585 miles of 4"-12" crude gathering pipes in the Williston basin region and ~510 miles of 12" crude oil pipes that transports crude oil from the Williston basin to SE Wyoming.
- The pipeline offers both individual and joint tariffs with Pony Express.

Hiland Crude LLC

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$211	\$230	\$211	\$256	\$297
% Change	99%	9%	-8%	21%	16%
EBITDA	\$156	\$166	\$152	\$209	\$213
% Change	95%	7%	-9%	37%	2%
Throughput (mbpd)	194	242	238	273	282
% Change	26%	25%	-2%	15%	3%
Throughput (mmbbl-mi)	8,694	11,429	11,280	12,582	12,632
% Change	472%	31%	-1%	12%	0%
Rev/bbl	\$2.98	\$2.60	\$2.43	\$2.56	\$2.89
Rev/1,000 bbl-mi	\$24.25	\$20.13	\$18.71	\$20.34	\$23.55
Avg. miles/bbl	123	129	130	126	123
Capex	\$209	\$62	\$43	\$69	\$58
Gross PP&E	\$1,260	\$1,301	\$1,345	\$1,413	\$1,470
Gross PP&E / EBITDA	8.1x	7.8x	8.9x	6.8x	6.9x
Page 700 Data (FERC Form 6)					
Revenue	\$211	\$230	\$211	\$256	\$297
Cost of Service	<u>\$201</u>	<u>\$287</u>	<u>\$298</u>	<u>\$297</u>	<u>\$296</u>
Over (Under) Earning	\$10	(\$57)	(\$87)	(\$41)	\$2

Sacagawea Pipeline (PSXP/Paradigm/Grey Wolf)



- The Sacagawea Pipeline is a JV between Paradigm Energy Partners (49.5%), PSXP (49.5%) and Grey Wolf Midstream (1%).
- The pipeline is a ~175 mbpd, ~95-mile system transporting oil from various points in McKenzie County, ND, to destinations with rail and pipe takeaway, including a connection with DAPL at the Johnson's Corner hub.

Sacagawea Pipeline Company LLC

(\$mm)	2015	2016	2017	2018	2019
Revenue		\$0	\$7	\$27	\$30
% Change			4617%	264%	10%
EBITDA		(\$0)	\$4	\$25	\$35
% Change			-971%	501%	41%
Throughput (mbpd)			45	81	92
% Change				78%	14%
Throughput (mmbbl-mi)			1,108	1,174	1,232
% Change				6%	5%
Rev/bbl			\$0.45	\$0.91	\$0.88
Rev/1,000 bbl-mi			\$6.68	\$22.95	\$24.07
Avg. miles/bbl			67	40	37
Capex		\$169	\$35	\$27	\$3
Gross PP&E		\$169	\$204	\$170	\$172
Gross PP&E / EBITDA		na	48.6x	6.7x	4.9x

Page 700 Data (FERC Form 6)

Revenue		\$0	\$7	\$25	\$28
Cost of Service		<u>\$14</u>	<u>\$23</u>	<u>\$24</u>	<u>\$23</u>
Over (Under) Earning		(\$14)	(\$16)	\$1	\$5



Individual Pipelines

DJ Basin/Rockies

Grand Mesa Pipeline (NGL)



- The Grand Mesa Pipeline is a 550-mile pipeline that runs from Weld County, CO (interconnections at Lucerne and Riverside) to Cushing, OK. Grand Mesa began commercial operations in Nov '16.
- In November 2015, Grand Mesa and Saddlehorn Pipeline announced plans to combine their separate pipeline projects. The two pipelines share the pipe for vast majority of the transit to Cushing. Grand Mesa's individual capacity on the line is 150 mbpd.

Grand Mesa Pipeline

(\$mm)	2015	2016	2017	2018	2019
Revenue		\$17	\$141	\$192	\$232
% Change			729%	36%	21%
EBITDA		\$17	\$97	\$139	\$171
% Change			460%	43%	23%
Throughput (mbpd)		4	79	111	126
% Change			1696%	41%	13%
Throughput (mmbbl-mi)		899	7,464	22,691	25,481
% Change			730%	204%	12%
Rev/bbl		\$10.56	\$4.87	\$4.73	\$5.04
Rev/1,000 bbl-mi		\$18.92	\$18.88	\$8.47	\$9.09
Avg. miles/bbl		558	258	558	554
Capex		\$273	\$9	(\$1)	(\$1)
Gross PP&E		\$273	\$282	\$282	\$282
Gross PP&E / EBITDA		15.7x	2.9x	2.0x	1.6x
Page 700 Data (FERC Form 6)					
Revenue		\$17	\$141	\$192	\$227
Cost of Service		<u>\$16</u>	<u>\$101</u>	<u>\$122</u>	<u>\$129</u>
Over (Under) Earning		\$1	\$40	\$70	\$98

Pony Express (Blackstone et al)

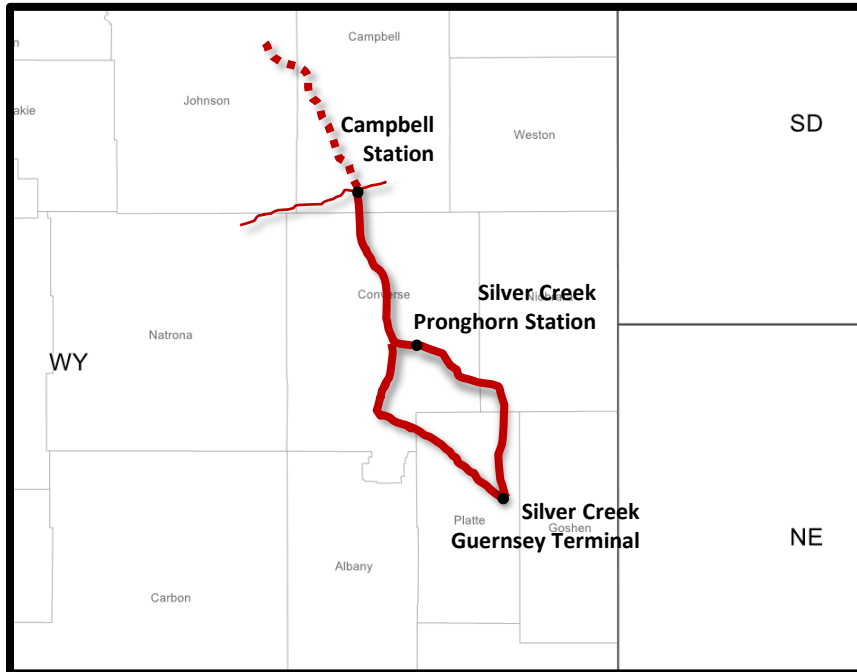


Pony Express

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$299	\$376	\$354	\$436	\$476
% Change	955%	26%	-6%	23%	9%
EBITDA	\$213	\$271	\$248	\$316	\$335
% Change	379%	27%	-9%	28%	6%
Throughput (mbpd)	237	285	269	337	359
% Change	161%	20%	-6%	25%	7%
Throughput (mmbbl-mi)	58,632	68,979	65,435	80,877	87,065
% Change	905%	18%	-5%	24%	8%
Rev/bbl	\$3.45	\$3.61	\$3.61	\$3.54	\$3.62
Rev/1,000 bbl-mi	\$5.10	\$5.45	\$5.41	\$5.40	\$5.46
Avg. miles/bbl	677	663	666	657	664
Capex	\$10	\$30	\$57	\$35	\$83
Gross PP&E	\$1,454	\$1,477	\$1,541	\$1,570	\$1,653
Gross PP&E / EBITDA	6.8x	5.5x	6.2x	5.0x	4.9x
Page 700 Data (FERC Form 6)					
Revenue	\$295	\$368	\$346	\$425	\$461
Cost of Service	<u>\$358</u>	<u>\$283</u>	<u>\$304</u>	<u>\$364</u>	<u>\$377</u>
Over (Under) Earning	(\$63)	\$85	\$42	\$61	\$84

- Pony Express is an 870-mile crude oil pipeline from Guernsey, WY and Weld County CO, with delivery points at several refineries and Cushing. The line became operational in Oct. 2014, and current capacity is ~420 mbpd.
- Tallgrass completed the 70-mile Northeast Colorado Lateral in April 2015, providing service from the production areas in Northeast CO and Southeast WY.

PRG Pipelines (Blackstone et al/Silver Creek Midstream)



- On August 12, 2019, Powder River Express LLC was merged into Iron Horse Pipeline LLC, which subsequently changed its name to PRG Pipelines LLC ("PRG").
- Silver Creek Midstream partnered with Tallgrass to form Powder River Gateway JV, which owns and operates both the Iron Horse and Powder River Express pipelines and the Guernsey Hub.
- PRG's system includes ~150 miles of 16"-20" crude trunklines and ~1.8 mmbbls of crude storage providing batch capability for up to three different crude oil specs.

PRG Pipelines LLC

(\$mm)	2015	2016	2017	2018	2019
Revenue		\$4	\$9	\$13	\$20
% Change			128%	48%	52%
EBITDA		\$2	\$7	\$11	\$9
% Change			214%	55%	-22%
Throughput (mbpd)		9	21	36	70
% Change			122%	71%	95%
Throughput (mmbbl-mi)		249	553	947	1,969
% Change			122%	71%	108%
Rev/bbl		\$1.12	\$1.15	\$0.99	\$0.77
Rev/1,000 bbl-mi		\$15.48	\$15.87	\$13.73	\$10.02
Avg. miles/bbl		72	72	72	77
Capex		\$92	\$1	\$4	\$47
Gross PP&E		\$86	\$93	\$97	\$212
Gross PP&E / EBITDA		38.1x	13.1x	8.8x	24.8x

Page 700 Data (FERC Form 6)

Revenue	\$4	\$8	\$12	\$18
Cost of Service	<u>\$4</u>	<u>\$11</u>	<u>\$16</u>	<u>\$37</u>
Over (Under) Earning	(\$0)	(\$3)	(\$4)	(\$19)

- PRG provides 325 mbpd of capacity from Silver Creek's Pronghorn Terminal to Guernsey, and the Guernsey hub provides four existing connections to pipelines providing access to the Casper, Patoka, Cushing and Gulf Coast markets.

Saddlehorn Pipeline (MMP/PAA/WES/Black Diamond)



Saddlehorn Pipeline

(\$mm)	2015	2016	2017	2018	2019
Revenue		\$23	\$80	\$111	\$170
% Change			252%	39%	53%
EBITDA		\$18	\$63	\$94	\$140
% Change			243%	49%	50%
Throughput (mbpd)		42	52	157	153
% Change			22%	203%	-2%
Throughput (mmbbl-mi)		2,793	10,244	15,385	31,390
% Change			267%	50%	104%
Rev/bbl		\$4.36	\$4.19	\$1.93	\$3.02
Rev/1,000 bbl-mi		\$8.09	\$7.77	\$7.20	\$5.41
Avg. miles/bbl		539	540	268	559
Capex		\$230	\$25	\$1	\$36
Gross PP&E		\$449	\$521	\$471	\$491
Gross PP&E / EBITDA		24.4x	8.3x	5.0x	3.5x
Page 700 Data (FERC Form 6)					
Revenue		\$22	\$77	\$106	\$161
Cost of Service		<u>\$26</u>	<u>\$70</u>	<u>\$75</u>	<u>\$77</u>
Over (Under) Earning		(\$4)	\$7	\$31	\$84

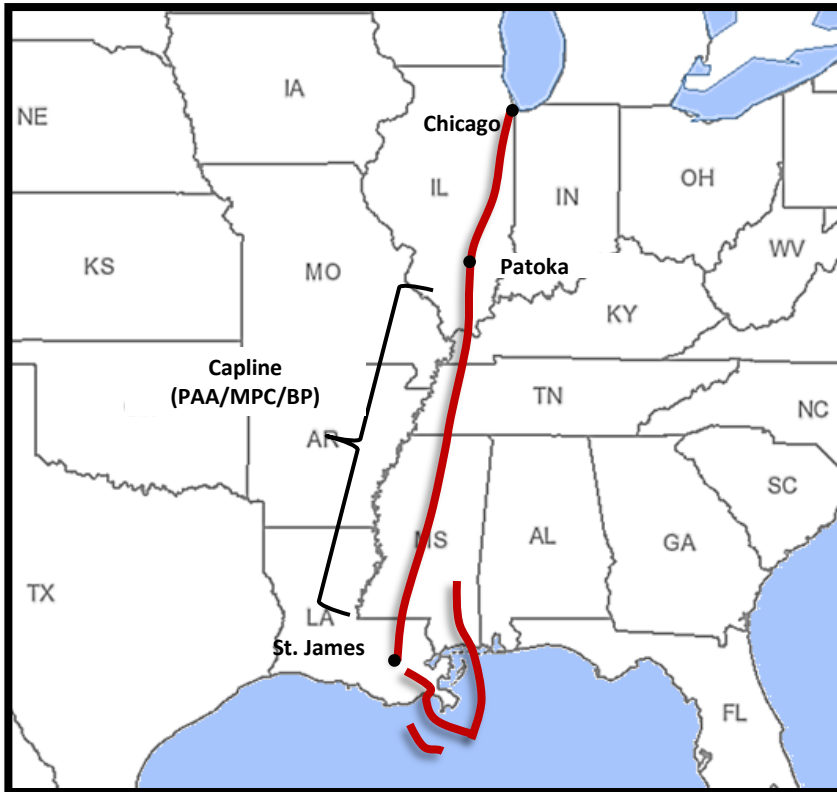
- Saddlehorn Pipeline is a ~600-mile line that runs from Weld County, CO (interconnections at Carr and Platteville) to Cushing, OK. Saddlehorn began commercial operations in September 2016.
- In November 2015, Saddlehorn and Grand Mesa agreed to combine their separate pipelines. The two share pipe for the vast majority of transit to Cushing. Saddlehorn's individual capacity on the line is 190 mbpd.
- In August '19, Saddlehorn announced they are moving forward with a 100 mbpd expansion as a result of additional commitments from a recent open season and NBL. With NBL's additional commitment, an NBL affiliate (Black Diamond) received an option to acquire a 20% interest. On Feb. 1, 2020, Black Diamond exercised the option and now owns a 20% interest in the pipe. Expansion expected in-service in Q4'20.



Individual Pipelines

Other Regional

BP Pipelines North America (BP)



BP Pipelines North America

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$181	\$186	\$189	\$152	\$192
% Change	28%	3%	2%	-19%	26%
EBITDA	\$16	\$28	\$68	\$44	\$97
% Change	-123%	81%	141%	-36%	124%
Throughput (mbpd)	739	732	707	393	412
% Change	40%	-1%	-3%	-44%	5%
Throughput (mmbbl-mi)	36,100	31,896	36,633	32,096	31,710
% Change	86%	-12%	15%	-12%	-1%
Rev/bbl	\$0.67	\$0.69	\$0.73	\$1.06	\$1.28
Rev/1,000 bbl-mi	\$5.01	\$5.82	\$5.15	\$4.74	\$6.06
Avg. miles/bbl	134	119	142	224	211
Capex	\$12	\$17	\$19	\$33	\$34
Gross PP&E	\$456	\$480	\$380	\$519	\$539
Gross PP&E / EBITDA	29.3x	17.0x	5.6x	11.9x	5.5x
Page 700 Data (FERC Form 6)					
Revenue	\$169	\$175	\$174	\$152	\$180
Cost of Service	<u>\$249</u>	<u>\$258</u>	<u>\$196</u>	<u>\$181</u>	<u>\$161</u>
Over (Under) Earning	(\$81)	(\$82)	(\$22)	(\$29)	\$18

- BP Pipelines North America consists of ~1,750 miles of 6"-24" pipe transporting primarily crude oil through various onshore and offshore systems.
- Roughly 51% of 2019 revenue was from crude pipelines, while 49% was from products.
- BP Pipelines North America also owns ~13% of Capline Pipeline (St. James to Patoka) along with PAA and MPC.

Chicap Pipe Line Co (BP/ENB)



- Chicap is a 200-mile, 26" pipeline that transports crude to refineries in the Midwest. The pipe originates near the crude hub of Patoka, IL. Chicap terminates near Mokena, a suburb of Chicago. Chicap line also has connections at Manhattan, IL to lines operated by ENB and BP, and spurs to refineries at Lemont and Joliet.

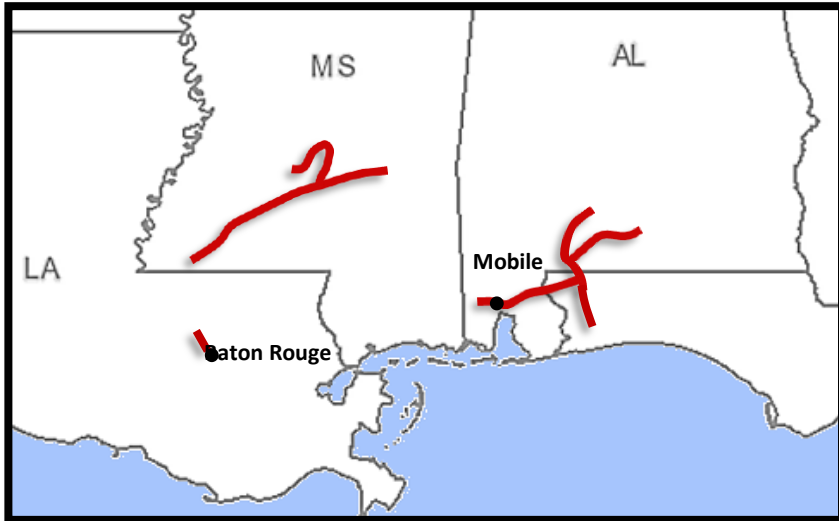
Chicap Pipe Line Co

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$26	\$24	\$16	\$24	\$28
% Change	62%	-6%	-35%	55%	15%
EBITDA	\$20	\$17	\$8	\$17	\$16
% Change	197%	-16%	-51%	105%	-5%
Throughput (mbpd)	121	127	99	142	154
% Change	10%	6%	-22%	43%	8%
Throughput (mmbbl-mi)	1,793	3,307	2,021	3,344	2,833
% Change	1%	84%	-39%	65%	-15%
Rev/bbl	\$0.58	\$0.52	\$0.43	\$0.47	\$0.50
Rev/1,000 bbl-mi	\$14.27	\$7.31	\$7.77	\$7.28	\$9.86
Avg. miles/bbl	41	71	56	64	50
Capex	\$5	\$5	\$2	\$1	\$3
Gross PP&E	\$88	\$92	\$94	\$95	\$98
Gross PP&E / EBITDA	4.3x	5.4x	11.2x	5.5x	6.0x

Page 700 Data (FERC Form 6)

Revenue	\$22	\$21	\$16	\$24	\$25
Cost of Service	<u>\$12</u>	<u>\$16</u>	<u>\$17</u>	<u>\$17</u>	<u>\$20</u>
Over (Under) Earning	\$10	\$5	(\$1)	\$7	\$5

Genesis Pipeline USA (GEL)



Genesis Pipeline consists of three onshore crude oil systems:

- **Jay Pipeline:** ~100 miles of pipe delivering crude oil into Shell's Mobile, AL refinery as well as other terminals.
- **Mississippi Pipeline:** ~230 miles of pipe in southern Mississippi.
- **Louisiana Pipeline:** ~25 miles of pipe delivering crude oil received by barge on the Mississippi River near Baton Rouge to facilities near Anchorage, LA.

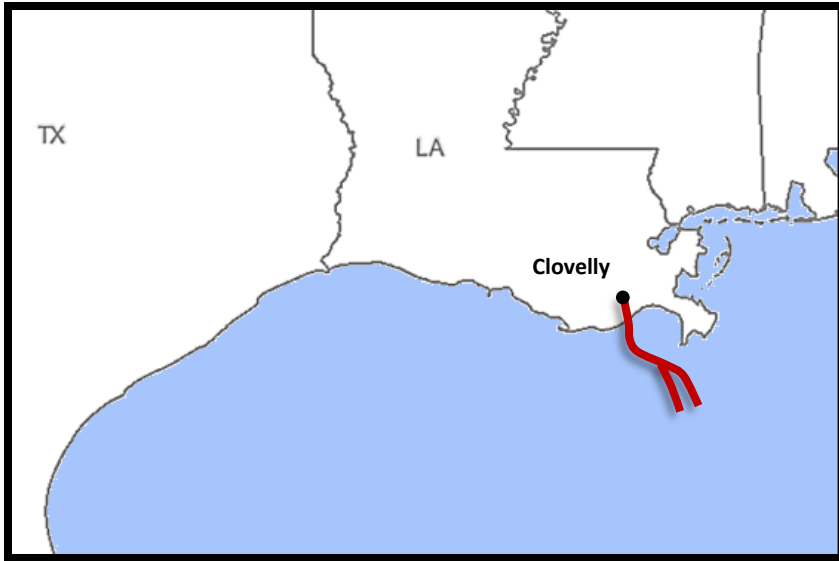
Genesis Pipeline USA

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$24	\$22	\$27	\$31	\$30
% Change	-13%	-8%	27%	15%	-4%
EBITDA	\$12	\$10	\$17	\$21	\$19
% Change	-18%	-16%	72%	22%	-10%
Throughput (mbpd)	59	65	133	154	158
% Change	11%	11%	104%	16%	3%
Throughput (mmbbl-mi)	823	806	852	870	797
% Change	-19%	-2%	6%	2%	-8%
Rev/bbl	\$1.10	\$0.90	\$0.56	\$0.56	\$0.52
Rev/1,000 bbl-mi	\$28.64	\$26.78	\$32.09	\$36.06	\$37.79
Avg. miles/bbl	38	34	18	15	14
Capex	\$39	\$39	\$61	\$1	\$3
Gross PP&E	\$193	\$231	\$178	\$180	\$198
Gross PP&E / EBITDA	16.0x	22.8x	10.2x	8.4x	10.4x

Page 700 Data (FERC Form 6)

Revenue	\$21	\$19	\$25	\$28	\$28
Cost of Service	<u>\$23</u>	<u>\$20</u>	<u>\$25</u>	<u>\$28</u>	<u>\$28</u>
Over (Under) Earning	(\$2)	(\$1)	\$0	\$0	\$0

Mars Oil Pipeline (SHLX/BPMP)



- Mars Oil Pipeline is a ~165-mile, 600 mbpd pipeline which transports oil via 18"-24" pipes, from Mississippi Canyon Block 807 in the Gulf of Mexico to storage facilities in Clovelly, LA.
- Historically, Mars has not provided Page 700 data or throughput as all movements are non-FERC jurisdictional. Mars began reporting throughput data in 2015.

Mars Oil Pipeline

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$207	\$231	\$258	\$243	\$278
% Change	28%	12%	12%	-6%	14%
EBITDA	\$129	\$156	\$185	\$167	\$199
% Change	29%	21%	19%	-10%	19%
Throughput (mbpd)	593	421	469	832	907
% Change		-29%	11%	77%	9%
Throughput (mmbbl-mi)	11,118	2,069	13,612	12,125	13,073
% Change		-81%	558%	-11%	8%
Rev/bbl	\$0.95	\$1.50	\$1.51	\$0.80	\$0.84
Rev/1,000 bbl-mi	\$18.58	\$111.62	\$18.98	\$20.03	\$21.26
Avg. miles/bbl	51	13	80	40	39
Capex	(\$2)	\$0	\$1	\$1	\$1
Gross PP&E	\$299	\$299	\$300	\$301	\$302
Gross PP&E / EBITDA	2.3x	1.9x	1.6x	1.8x	1.5x

Page 700 Data (FERC Form 6)

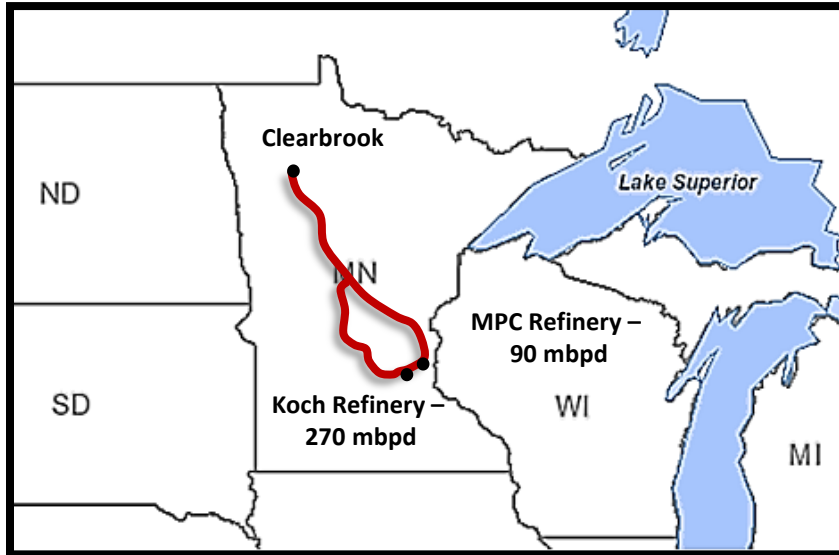
Revenue

Cost of Service

Over (Under) Earning

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Minnesota Pipeline Co. (Koch/MPC/Trof Inc.)



- Minnesota Pipeline is a four-line, 16"-24", 465 mbpd crude oil system which receives oil from other pipelines at a terminal in Clearbrook, MN, and transports it to the two Twin Cities refineries (MPC and Koch). The crude oil is sourced from Canada and North Dakota.

Minnesota Pipe Line Company

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$212	\$217	\$221	\$195	\$168
% Change	10%	2%	2%	-12%	-14%
EBITDA	\$113	\$155	\$147	\$132	\$107
% Change	186%	36%	-5%	-10%	-19%
Throughput (mbpd)	278	369	400	410	414
% Change	-21%	33%	8%	2%	1%
Throughput (mmbbl-mi)	36,574	36,972	40,234	41,927	42,464
% Change	2%	1%	9%	4%	1%
Rev/bbl	\$2.09	\$1.61	\$1.51	\$1.31	\$1.11
Rev/1,000 bbl-mi	\$5.81	\$5.86	\$5.49	\$4.66	\$3.95
Avg. miles/bbl	360	274	276	280	281
Capex	\$8	\$59	\$50	\$2	\$1
Gross PP&E	\$650	\$717	\$759	\$761	\$761
Gross PP&E / EBITDA	5.7x	4.6x	5.2x	5.8x	7.1x

Page 700 Data (FERC Form 6)

Revenue	\$207	\$212	\$215	\$188	\$156
Cost of Service	<u>\$227</u>	<u>\$189</u>	<u>\$203</u>	<u>\$189</u>	<u>\$187</u>
Over (Under) Earning	(\$20)	\$23	\$11	(\$0)	(\$31)

Mustang Pipeline (XOM/ENB)



- Mustang is a 215-mile, 100 mbpd, 18" crude oil pipeline originating at Shell's Lockport Terminal near Chicago, IL and terminating at Mobil Illinois Pipeline Company's terminal at Patoka, IL.

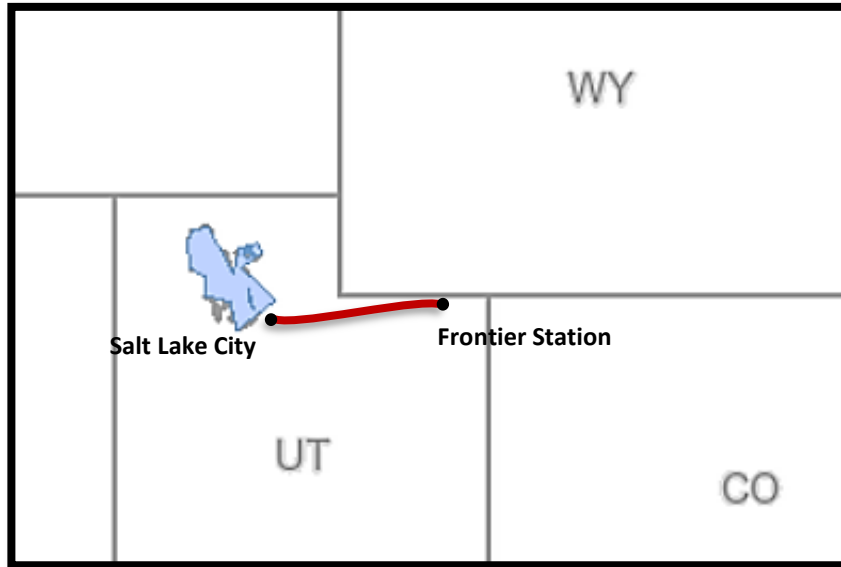
Mustang Pipeline

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$42	\$16	\$16	\$43	\$44
% Change	-9%	-61%	-4%	175%	2%
EBITDA	\$27	\$3	\$4	\$9	\$26
% Change	-17%	-90%	38%	139%	201%
Throughput (mbpd)	94	57	65	101	100
% Change	6%	-40%	14%	55%	-1%
Throughput (mmbbl-mi)	6,497	2,010	3,133	5,083	5,219
% Change	-3%	-69%	56%	62%	3%
Rev/bbl	\$1.21	\$0.78	\$0.66	\$1.17	\$1.20
Rev/1,000 bbl-mi	\$6.41	\$8.10	\$4.98	\$8.45	\$8.36
Avg. miles/bbl	189	97	133	138	143
Capex	\$0	\$1	\$2	\$1	\$16
Gross PP&E	\$58	\$59	\$60	\$62	\$78
Gross PP&E / EBITDA	2.2x	22.7x	16.7x	7.2x	3.0x

Page 700 Data (FERC Form 6)

Revenue	\$41	\$16	\$16	\$43	\$44
Cost of Service	<u>\$23</u>	<u>\$22</u>	<u>\$21</u>	<u>\$44</u>	<u>\$28</u>
Over (Under) Earning	\$18	(\$6)	(\$6)	(\$1)	\$16

SLC Pipeline (HEP)



- SLC is a 95-mile, 16" crude line serving Salt Lake City area refineries (aggregate refining capacity of ~200 mbpd) from the Utah terminus of Frontier Pipeline. The Frontier Pipeline begins in Casper, WY, where it has interconnects with several pipelines.
- The pipeline became operational in Feb '09 with capacity of ~120 mbpd.
- In Q4'17, HEP acquired the 75% of SLC that it did not already own from PAA.

SLC Pipeline LLC

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$19	\$25	\$4	\$22	\$28
% Change	6%	30%	-83%	426%	26%
EBITDA	\$15	\$20	\$4	\$18	\$23
% Change	4%	33%	-82%	400%	26%
Throughput (mbpd)	74	91	16	82	94
% Change	0%	22%	-82%	411%	16%
Throughput (mmbbl-mi)	2,363	2,917	513	2,601	3,029
% Change	0%	23%	-82%	407%	16%
Rev/bbl	\$0.70	\$0.74	\$0.73	\$0.75	\$0.81
Rev/1,000 bbl-mi	\$8.02	\$8.44	\$8.25	\$8.56	\$9.24
Avg. miles/bbl	87	88	88	87	88
Capex	\$0	\$2	\$0	\$1	\$0
Gross PP&E	\$254	\$256	\$165	\$166	\$166
Gross PP&E / EBITDA	17.2x	13.1x	46.1x	9.3x	7.4x

Page 700 Data (FERC Form 6)

Revenue	\$19	\$25	\$4	\$22	\$28
Cost of Service	<u>\$40</u>	<u>\$40</u>	<u>\$8</u>	<u>\$45</u>	<u>\$46</u>
Over (Under) Earning	(\$21)	(\$15)	(\$4)	(\$23)	(\$18)

Valero Partners Lucas (VLO)



- Valero Partners Lucas is a 30" pipeline with 400 mbpd of capacity.
- The pipeline transports oil from VLO's Lucas Terminal to VLO's Port Arthur Refinery.
- Valero Partners Lucas terminal has ~2 mmbbls of storage capacity and receives oil from ET's Nederland terminal, EPD's Beaumont terminal, GEL's Cameron Highway Oil pipeline and TRP's Marketlink pipeline. The terminal is not included in the FERC filings.

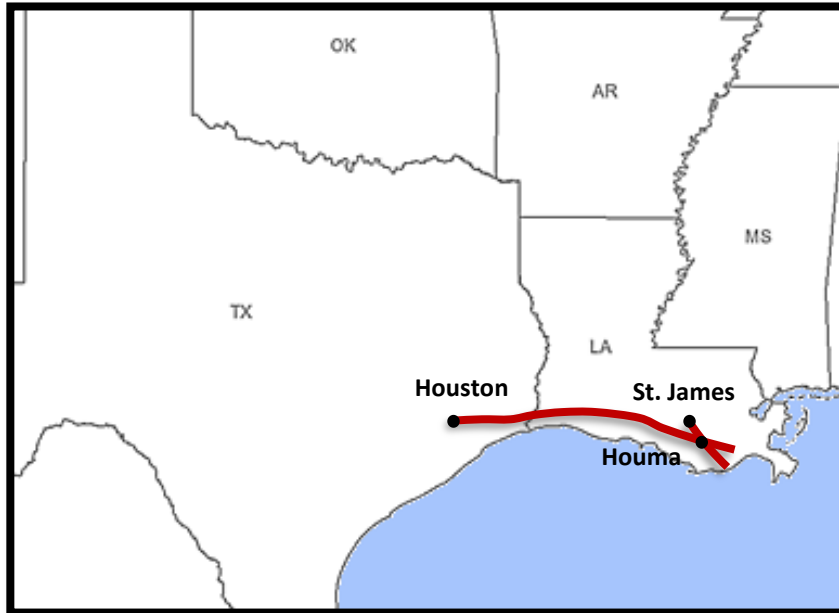
Valero Partners Lucas

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$28	\$23	\$30	\$31	\$36
% Change	-3%	-17%	28%	4%	15%
EBITDA	\$23	\$19	\$24	\$27	\$30
% Change	-1%	-20%	31%	9%	14%
Throughput (mbpd)	193	142	181	337	309
% Change	-15%	-26%	28%	86%	-8%
Throughput (mmbbl-mi)	1,196	862	989	1,145	1,043
% Change	-15%	-28%	15%	16%	-9%
Rev/bbl	\$0.40	\$0.45	\$0.45	\$0.25	\$0.32
Rev/1,000 bbl-mi	\$23.37	\$26.98	\$30.18	\$27.22	\$34.28
Avg. miles/bbl	17	17	15	9	9
Capex	\$9	\$2	\$0	\$0	\$0
Gross PP&E	\$132	\$134	\$135	\$134	\$134
Gross PP&E / EBITDA	5.7x	7.2x	5.6x	5.1x	4.4x

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Revenue	\$28	\$23	\$30	\$31	\$36
Cost of Service	<u>\$14</u>	<u>\$13</u>	<u>\$14</u>	<u>\$12</u>	<u>\$15</u>
Over (Under) Earning	\$14	\$11	\$16	\$19	\$21

Zydeco Pipeline Co. (SHLX/RDS)



- Zydeco is a ~350-mile pipeline from the Houston area to St. James and Houma, LA. The system, formerly known as the Ho-Ho Pipeline, originally moved crude oil from Houma to Houston, but was reversed and expanded in 2014.
- In Nov '14, a 43% interest in Zydeco was transferred to Shell Midstream Partners (SHLX). In May 2015 and May 2016, SHLX acquired additional interests, bringing its total ownership to 92.5%.
- In Feb '19, SHLX said they expected to see a \$15mm impact to Q1 net income following expiration of two of four contracts in late 2018.

Zydeco Pipeline Co.

(\$mm)	2015	2016	2017	2018	2019
Revenue	\$223	\$226	\$244	\$247	\$181
% Change	126%	1%	8%	1%	-27%
EBITDA	\$155	\$155	\$147	\$129	\$99
% Change	121%	0%	-5%	-12%	-23%
Throughput (mbpd)	778	1,046	1,098	857	896
% Change	118%	34%	5%	-22%	5%
Throughput (mmbbl-mi)	34,311	34,055	38,414	36,368	36,360
% Change	88%	-1%	13%	-5%	0%
Rev/bbl	\$0.79	\$0.59	\$0.61	\$0.79	\$0.55
Rev/1,000 bbl-mi	\$6.50	\$6.64	\$6.35	\$6.79	\$4.98
Avg. miles/bbl	121	89	96	116	111
Capex	\$34	\$20	\$40	\$44	\$25
Gross PP&E	\$417	\$436	\$475	\$510	\$512
Gross PP&E / EBITDA	2.7x	2.8x	3.2x	3.9x	5.1x

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Revenue	\$223	\$205	\$223	\$221	\$152
Cost of Service	<u>\$111</u>	<u>\$104</u>	<u>\$120</u>	<u>\$145</u>	<u>\$119</u>
Over (Under) Earning	\$112	\$101	\$103	\$75	\$33

Important Disclosures

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Price Target Methodology:

C-Corps

For C-Corps, our price targets are based on a sum-of-the parts analysis. In our sum of the parts analysis, we value various business segments on a multiple of forward year(s) EBITDA, with multiples ranging from 4.5 to 20x. The spectrum reflects a wide range of contract lives, commodity sensitivity, volume risk, customer risk, cash flow visibility, growth outlook, etc. LP units are valued at our LP price target. GP values are determined by allocating a proportionate share of the consolidated equity value commensurate with the percent of total distributions the GP receives. We then net out C-Corp level debt and add back in forward year GP distributions received. For companies with E&P assets, we value those assets consistent with how our E&P team models their coverage universe, blowing down PDP reserves and netting out the NPV of G&A. We then layer on development of probable reserves.

MLPs

For MLPs, our price targets are also based on a sum-of-the parts analysis. We value various business segments on a multiple of forward year(s) EBITDA, with multiples ranging from 6x to 20x. The spectrum range reflects a wide range of contract lives, commodity sensitivity, volume risk, customer risk, cash flow visibility, growth outlook, etc. We then net out forward year debt and minority interest to arrive at a consolidated equity value. From there we allocate equity value to the MLP based on the proportionate share of distributions the LP receives and add back in forward year distributions to be received.

MLP yield refers to the cash distributions paid out by the MLP, part of which may be treated as a return of capital rather than interest or capital gains.

Important Disclosures

Distribution of Ratings (as of June 17, 2020):

Recommendation	Count	Percent	Investment Banking Relationship	Count	Percent
Overweight/Buy	33	72%	Overweight/Buy	1	3%
Hold	12	26%	Hold	2	17%
Underweight/Sell	1	2%	Underweight/Sell	0	0%

Historical Ratings and Price Targets may be found by clicking the link below:

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For a hard copy of our price target/ratings history or a hard copy of any report, please call 888-601-USCA (8722), or write to U.S. Capital Advisors, 4444 Westheimer Suite G500, Houston TX 77027.

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