

Spring Rock Natural Gas Production Forecast

as of July 29, 2022

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SPRINGROCK
PRODUCTION



Lower 48 Summary

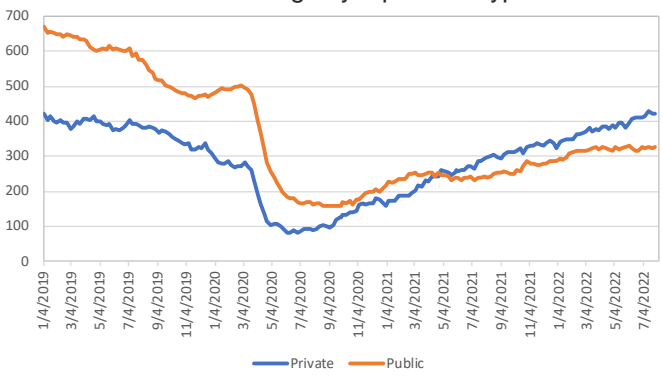
7/29/2022 Lower 48	Dry Production		Rigs		Well	NYMEX Price
	mmcf/d	Yr/Yr	Gas	Oil	Count	
Summer '22	96,773	3,694	182	586	8,474	\$ 8.22
Winter '22/'23	100,406	5,994	205	604	6,484	\$ 7.94
Summer '23	102,887	6,114	198	579	8,875	\$ 4.88
2022	96,485	3,898	181	576	14,525	\$ 8.27
2023	102,587	6,102	196	582	15,131	\$ 5.63

Gas prices have increased for 2022 since our previous main forecast release, with the balance of 2022 now at \$8.27/mcf. Gas prices for 2022 have increased +\$1.35/mcf in the last month and a half, with an increase of +\$0.05/mcf in the last week. Oil prices for the balance of 2022 have decreased since our previous forecast, decreasing by -\$6.53/bbl, with the balance of 2022 now at \$96.14/bbl. Our overall 2022 year-on-year production forecast has increased by ~0.05 bcfd, now at a +3.90 bcfd year-on-year increase (from a +3.85 bcfd yr/yr growth previously). We have increased our 2023 yr/yr production forecast by ~0.47 bcfd, now showing a +6.10 bcfd yr/yr increase (vs. a +5.63 bcfd year-on-year increase previously), mainly due to adding 13 gas rigs to our 2023 forecast compared to our previous forecast as gas prices have increased.

Oil rigs are up 5 rigs since our previous forecast. Oil rigs are currently sitting at 587 rigs, 73 rigs less than the high point in February 2020, before the low oil prices hit due to Covid. Gas rigs grew by 12 rigs over the last month and a half; they are currently at 186 rigs, only 108 rigs higher than the lowest gas rig levels seen since we've been tracking RigData's rig counts in January 2006. Overall, total rig counts are up 17 rigs since our previous report, compared to 17 total rigs added in the previous report vs. prior. The most recent overall rig count bottom was in July 2020 at 270 rigs, and we are currently at 773 rigs, with 218 rigs added in the last 12 months (a 39% year-on-year increase). Based on current oil and gas prices and our current economic models, we still have rigs increasing in the Lower 48 through October 2022, adding 45 rigs in the next 3 months, getting to 813 rigs by October 2022. Public company rigs added 6 rigs over the last month and a half, while private companies added 11 rigs. Private companies now make up ~56% of the drilling and are now at their highest levels since October 2019.

Production in the last half of July has averaged 97.1 bcfd, 1.8 bcfd above April averages, as field and pipe outages have slowed down. On 7/29, production levels hit a new all-time high of 98.1 bcfd, 435 mmcf/d higher than the previous high seen on 12/27/21 during the flush production bump seen in the northeast. We still believe that Lower 48 production should exit the year at 100 bcfd, with our assumption that the northeast will have flush production hit in the winter again for the fourth winter in a row. Downside risk exists with possible infrastructure constraints impacting the 1.2 bcfd growth we have in the Haynesville (East TX and North LA combined) between now and the end of the year, but we have yet to see any impact from them at all as it has already grown 1.2 bcfd since March 2022.

Lower 48 Rigs by Operator Type



**A few clarifications... Maintenance and weather impacts to production that occur routinely and seasonally are inherently captured in the models and correlated to the historic data but singular (and large) events are not included in the forecast. For example, we have a degree of freeze-offs in Western Canada in the forecast, but do not include a repeat of 2011 and 2014's extraordinary freeze-offs in the Lower 48. We have tried to capture the varying risks in the individual regional analysis sections of this report.

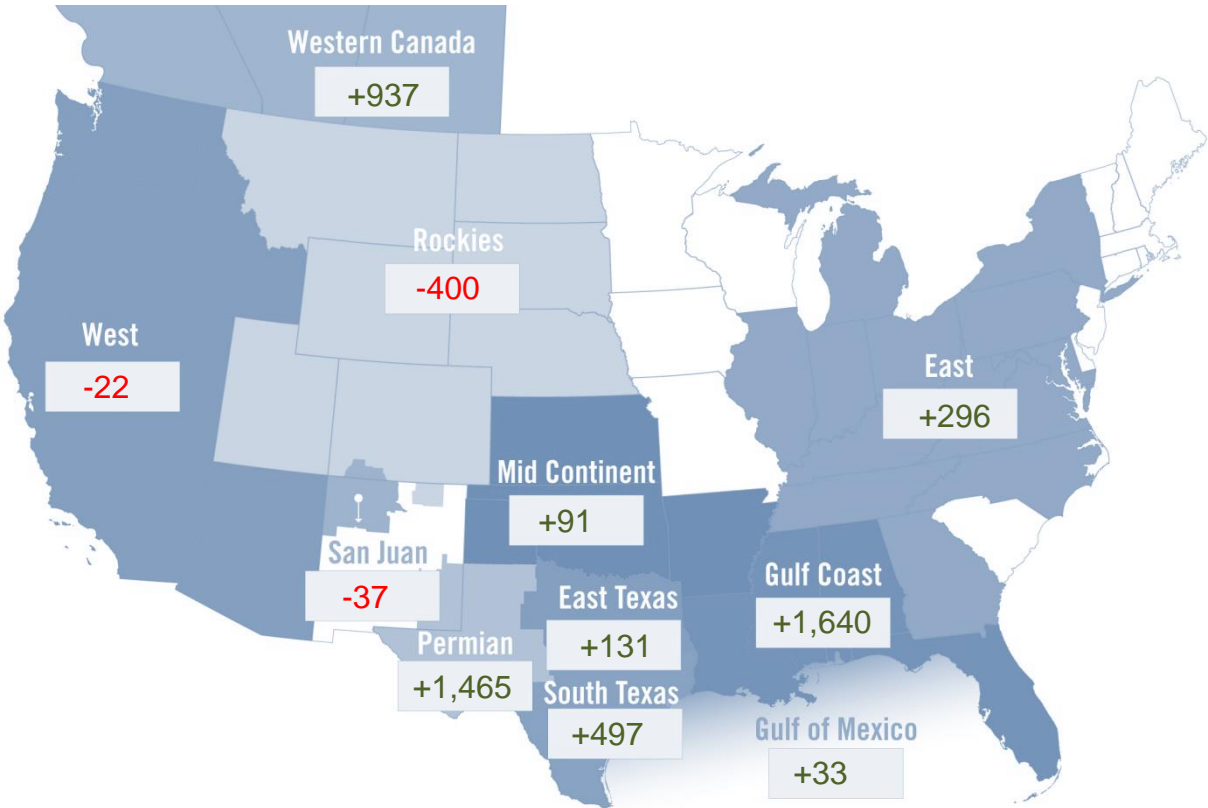
Monthly Data

Lower 48	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf/d)	95,853	96,378	96,591	97,137	97,748	98,734	99,526	100,221	100,382	100,706	101,195	101,669
Yr/Yr (mmcf/d)	3,513	3,343	3,699	3,736	4,271	4,438	4,116	4,235	6,688	7,589	7,343	6,698
Gas Rigs	175	173	183	187	189	195	198	203	207	209	210	210
Oil Rigs	563	580	582	593	605	618	616	615	605	593	592	587
Well Count	1,237	1,203	1,179	1,193	1,214	1,284	1,267	1,317	1,318	1,285	1,298	1,286

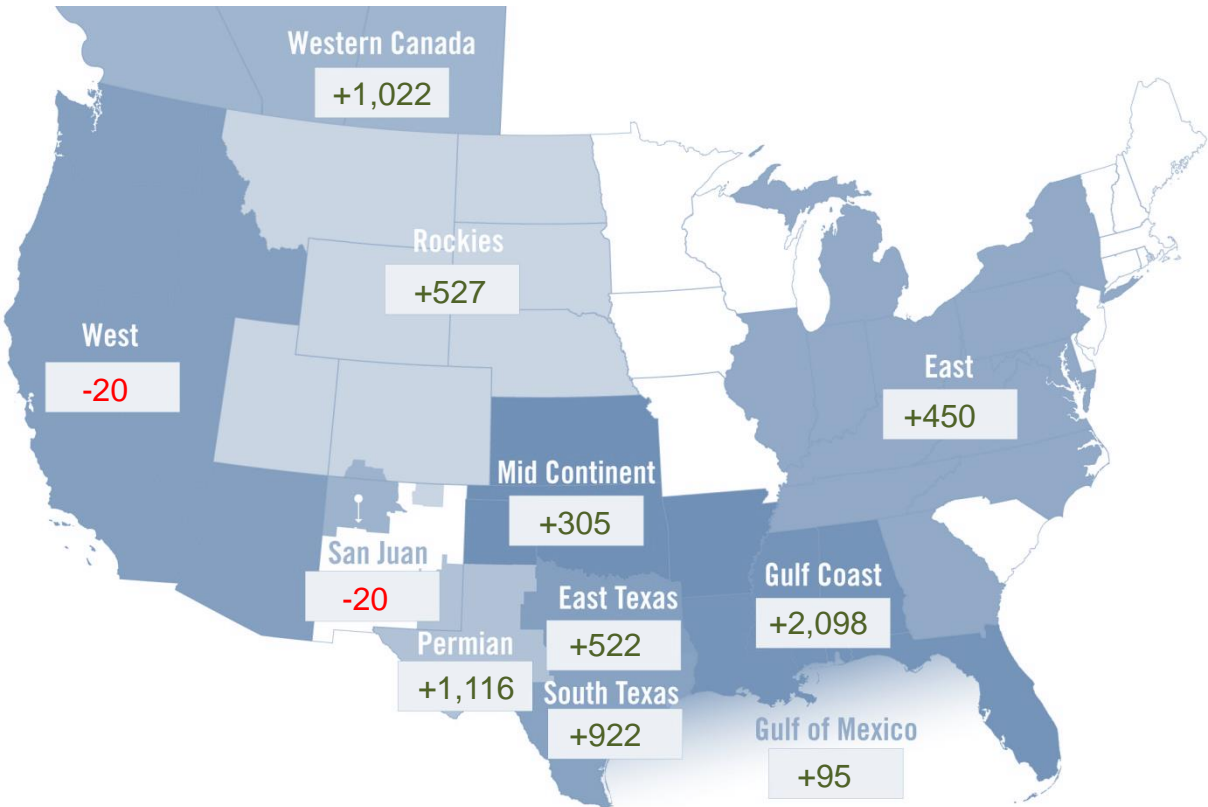
Western Canada	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf/d)	17,194	16,295	16,787	16,801	16,938	17,067	17,643	17,398	17,449	17,788	18,111	18,492
Yr/Yr (mmcf/d)	1,433	678	933	563	746	885	861	996	1,039	1,013	1,203	1,090
Gas Rigs	49	49	64	80	91	89	93	66	88	95	89	55
Oil Rigs	43	91	118	128	130	129	128	140	157	169	137	104
Well Count	261	172	476	1,043	985	950	802	488	547	746	779	192
IP (mcf/d/well)	1,475	1,242	1,437	708	698	1,001	1,033	1,115	1,047	937	1,100	1,564



Regional Production – Summer '22 Yr/Yr Change (mmcf/d)



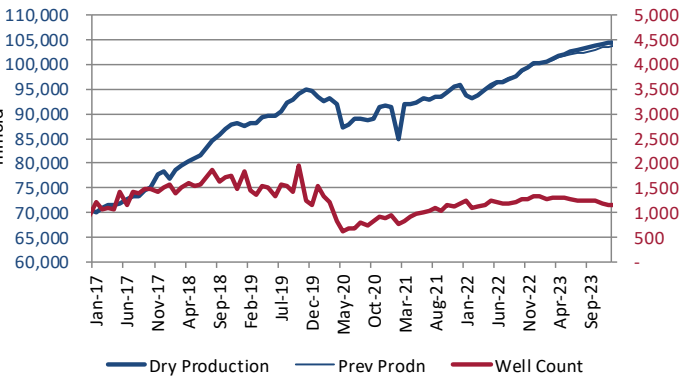
Regional Production – Winter '22/'23 Yr/Yr Change (mmcf/d)



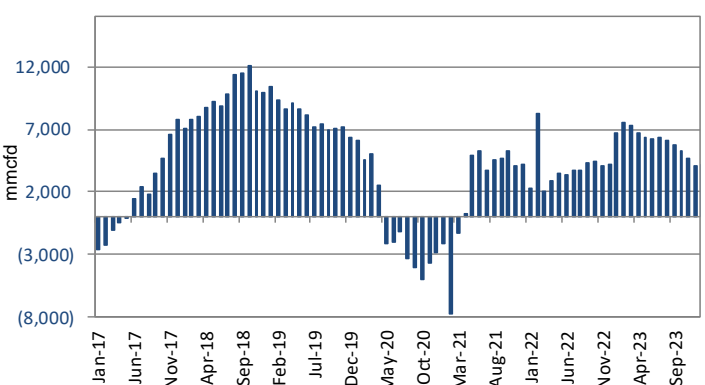


Lower 48

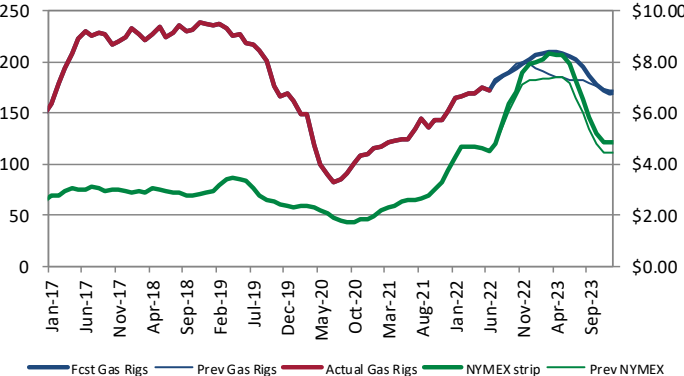
Dry Production vs. Well Count



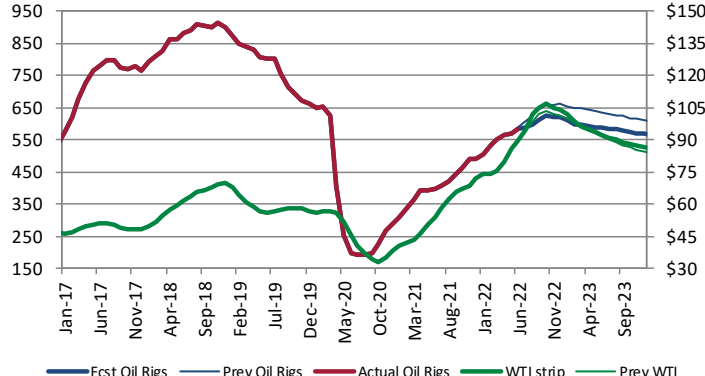
Year on Year Changes



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Bal 2022 / 2023 Strip Prices



Regional Prices are used as follows:
West = Socal, Rockies = NWPL, San Juan = EP San Juan, Permian = EP Permian, South Texas = HSC, East Texas = TexOK, Mid Continent = PEPL, Gulf Coast = NYMEX, Gulf of Mexico = NYMEX, and East = Eastern Gas South



Eastern US Regional Analysis

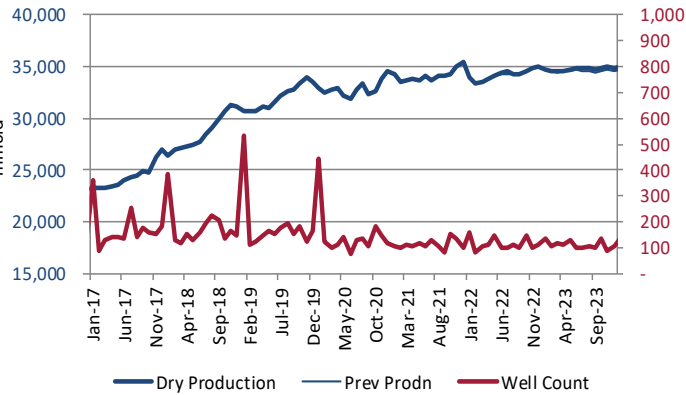
We have increased our 2022 production by ~30 mmcfd, now calling for +0.09 bcfd yr/yr growth (vs. +0.06 bcfd yr/yr growth previously), mainly due to recent actualizations. We have increased our 2023 yr/yr forecast by ~170 mmcfd, now at a +0.53 bcfd yr/yr increase (vs. a +0.36 bcfd yr/yr increase previously), as we increased our gas rig forecast for this region by 1 rig for 2022 and by 1 rig for 2023 compared to our previous forecast.



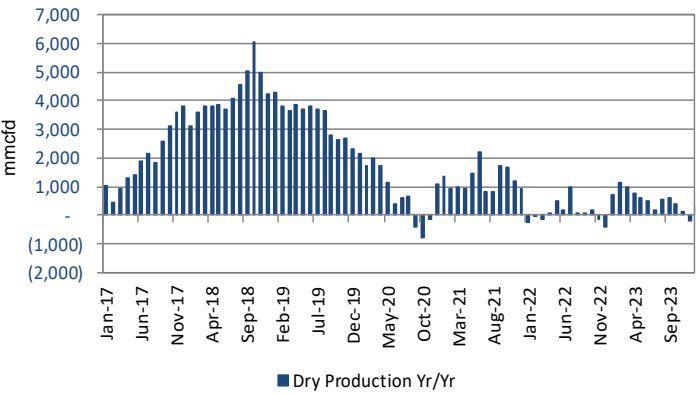
Seasonal Data

7/29/2022 East	Dry Production		Rigs		Avg IP's	Well	Dom
	mmcf	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	34,274	296	47	8	12,428	814	\$ 6.92
Winter '22/23	34,742	450	48	9	12,734	575	\$ 7.19
Summer '23	34,785	511	47	9	12,995	782	\$ 3.59
2022	34,233	89	47	8	12,517	1,384	\$ 7.20
2023	34,761	527	47	9	12,861	1,332	\$ 4.55

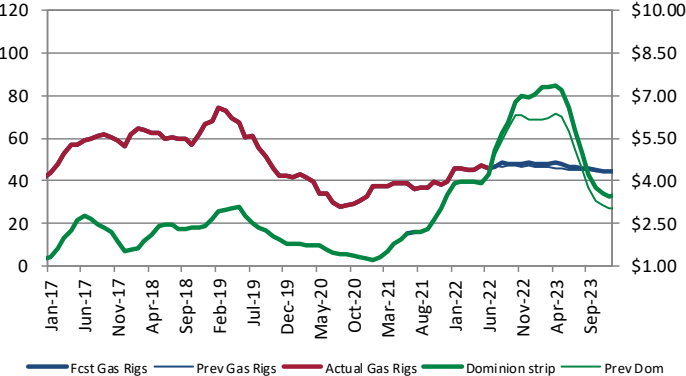
Dry Production vs. Well Count



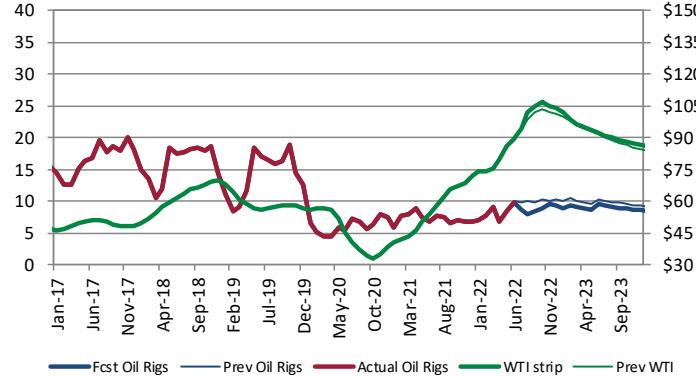
Year on Year Production Changes



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

East	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf)	34,183	34,335	34,625	34,217	34,190	34,523	34,852	35,068	34,676	34,551	34,563	34,612
Yr/Yr (mmcf)	475	160	999	63	89	203	(146)	(433)	703	1,130	996	765
Gas Rigs	47	46	47	48	48	48	48	48	48	48	48	48
Oil Rigs	8	10	9	8	8	9	9	9	9	9	9	9
Well Count	146	100	103	110	101	145	103	114	137	104	118	109
IP (mcfd/well)	11,615	11,746	12,491	12,271	12,907	12,682	13,891	13,034	11,444	13,110	12,191	13,007



Spring Rock Natural Gas Production Forecast

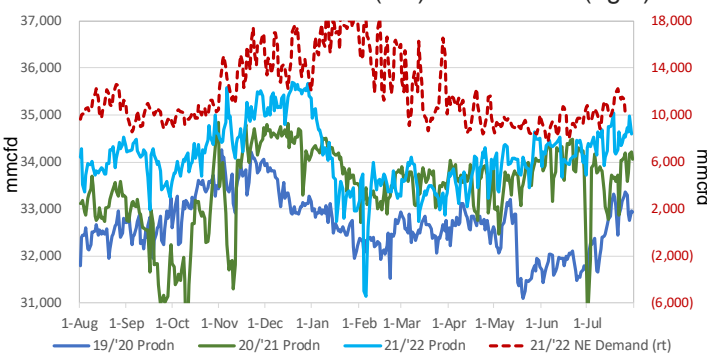
Eastern US Regional Analysis (cont.)

Biggest Impact / Risks / Assumptions

Production outperformed our previous forecast by ~360 mmcf/d for July. Daily production hit a high of 35.1 bcf/d on 7/18, the first time it hit the 35 bcf/d level since January 3rd of this year. The high daily production print reinforces the belief that there is a good chance of flush production hitting the region again this winter; we currently only have the monthly average high bouncing to 35.1 bcf/d for December 2022, which after this recent high (and the 35.5 bcf/d print for Dec '21) feels fairly conservative. We've pushed the belief of flush production in this region since the end of last year; for the first time, we saw a Producer confirm our thoughts on the subject in the Range Resources slide to the right. The rig counts continue to provide a firm base for production staying strong, limited due to export pipeline constraints, with high demand in the region allowing for intermittent times of higher production levels. Rigs in the region averaged 45 for 2021, with the most recent levels at 55 rigs (55% of rigs are now operated by private producers).

Infrastructure development in the region has been quiet, with no large projects expected in 2022. The continued suspension of MVP is bearish for SWPA basis and growth, as the area is constrained. FERC has committed to authorizing construction only after all legal challenges resolve, which will begin to affect our current forecast in late 2024 if the pipeline is not online. The next relief from constraints is then the long-delayed Northern Access 2016 on NFG. NA2016 is currently modeled for service in late 2024. NA2016 expects lead-time on pipeline steel of about 9-12 months after receipt of outstanding permits from New York State DEC and 12 months to construct the project. Risk for further delay of this project is high.

Northeast Gas Production (left) vs. Demand (right)



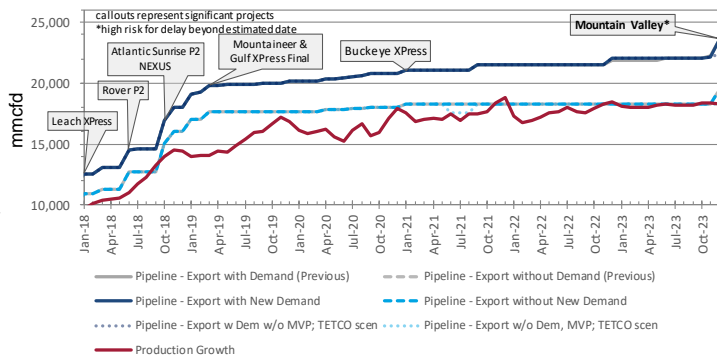
*Genscape Estimates; Quotes taken from www.seekingalpha.com

Data Breakdown by Area within Eastern US

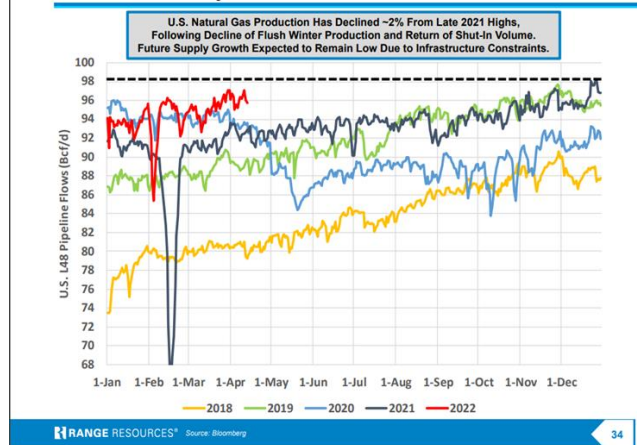
7/29/2022	Dry Production	Rigs	Avg IP's	Well	Dom
Ohio	mmcf/d	Yr/Yr	Gas	Oil	Price
Summer '22	6,142	101	6	6	14,832
Winter '22/23	6,215	109	6	6	15,055
Summer '23	6,324	183	6	6	15,283
2022	6,105	48	6	6	14,813
2023	6,315	209	6	6	15,264

7/29/2022	Dry Production	Rigs	Avg IP's	Well	Dom
Pennsylvania	mmcf/d	Yr/Yr	Gas	Oil	Price
Summer '22	20,295	233	26	0	16,000
Winter '22/23	20,902	489	27	0	16,000
Summer '23	20,908	612	26	0	16,000
2022	20,377	111	26	0	16,000
2023	20,883	506	26	0	16,000

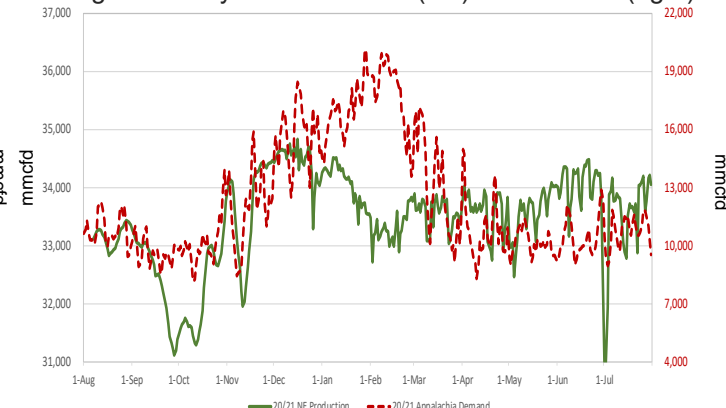
Forecasted Production vs. Pipeline Expansions*



Lower 48 Dry Gas Production



Aug '20 to July '21 Production (left) vs. Demand (right)



7/29/2022	Dry Production	Rigs	Avg IP's	Well	Dom
Michigan	mmcf/d	Yr/Yr	Gas	Oil	Price
Summer '22	183	(8)	0	2	35
Winter '22/23	179	(8)	1	2	35
Summer '23	175	(8)	1	2	35
2022	183	(9)	0	2	35
2023	175	(8)	1	2	35

7/29/2022	Dry Production	Rigs	Avg IP's	Well	Dom
W. Virginia	mmcf/d	Yr/Yr	Gas	Oil	Price
Summer '22	7,145	(17)	14	-	10,500
Winter '22/23	6,948	(128)	14	-	10,500
Summer '23	6,882	(263)	14	-	10,500
2022	7,060	(48)	14	-	10,500
2023	6,893	(167)	14	-	10,500



Gulf Coast Regional Analysis

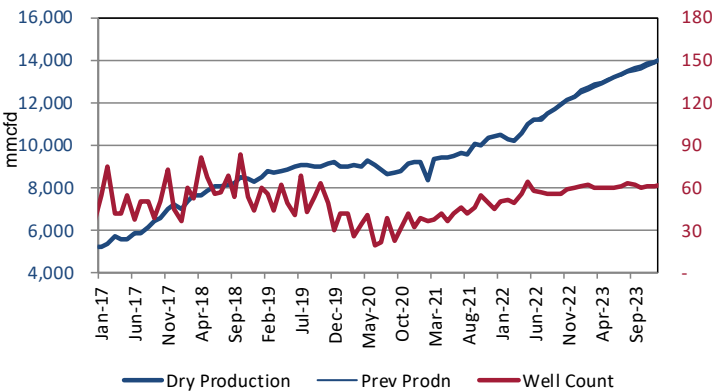
We decreased our 2022 production growth estimate by ~20 mmcf/d, now at a +1.58 bcf/d yr/yr increase (vs. +1.60 bcf/d yr/yr increase in our previous main forecast update). We are increasing our 2023 production estimate by ~30 mmcf/d, at a +2.06 bcf/d yr/yr increase (vs. a +2.03 bcf/d yr/yr increase previously), as we increased our total rig forecast for 2023 by 2 rigs compared to our previous forecast.



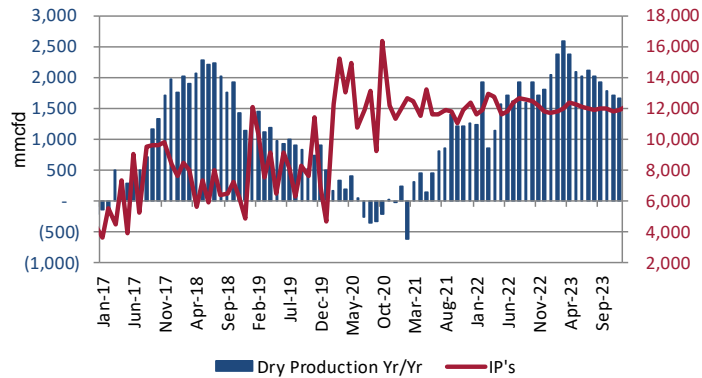
Seasonal Data

7/29/2022 Gulf Coast	Dry Production		Rigs		Avg IP's	Well	NYMEX
	mmcf/d	Yr/Yr	Gas	Oil	mc/d	Count	Price
Summer '22	11,286	1,640	45	6	12,287	401	\$ 8.22
Winter '22/23	12,449	2,098	46	7	11,891	302	\$ 7.94
Summer '23	13,333	2,046	44	7	12,065	425	\$ 4.88
2022	11,189	1,582	45	6	12,196	671	\$ 8.27
2023	13,246	2,057	45	7	11,974	729	\$ 5.63

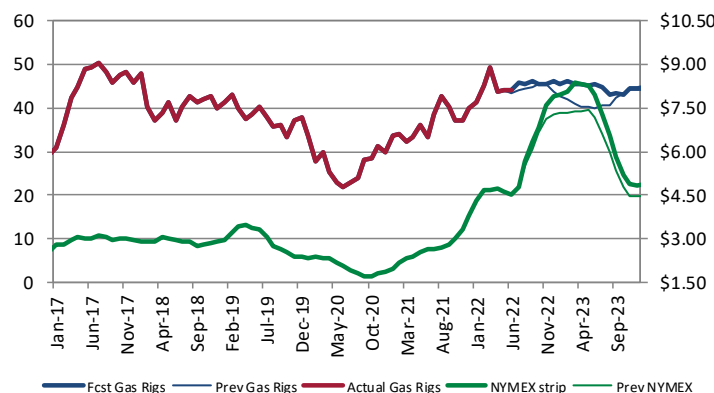
Dry Production vs. Well Count



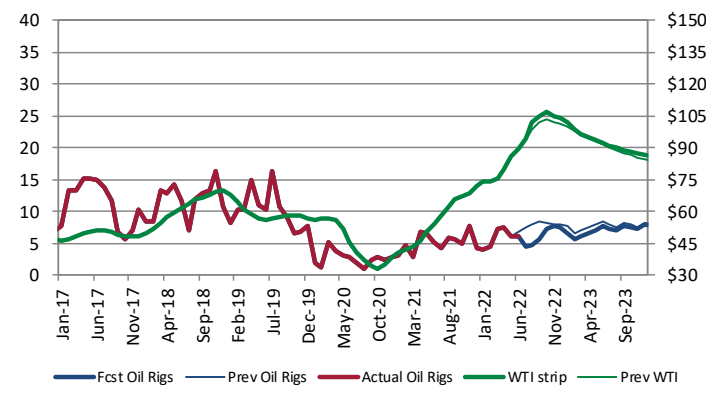
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

Gulf Coast	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf/d)	10,985	11,181	11,220	11,458	11,676	11,931	12,088	12,241	12,487	12,641	12,787	12,934
Yr/Yr (mmcf/d)	1,577	1,711	1,609	1,931	1,583	1,931	1,717	1,796	2,029	2,368	2,581	2,382
Gas Rigs	44	44	46	46	46	46	46	46	46	46	46	45
Oil Rigs	6	6	4	5	6	7	8	7	7	6	6	6
Well Count	64	58	57	56	56	56	58	60	61	62	60	59
IP (mc/d/well)	11,557	11,758	12,373	12,665	12,506	12,440	12,187	11,774	11,681	11,810	12,005	12,347



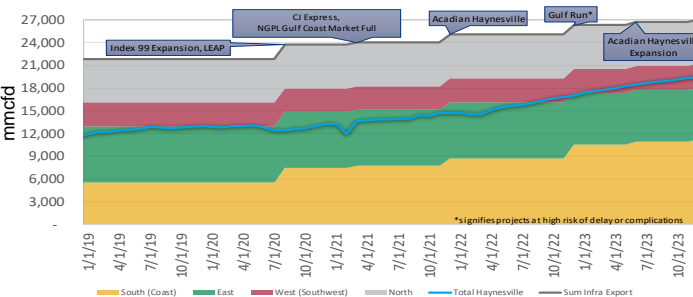
Spring Rock Natural Gas Production Forecast

Gulf Coast Regional Analysis (cont.)

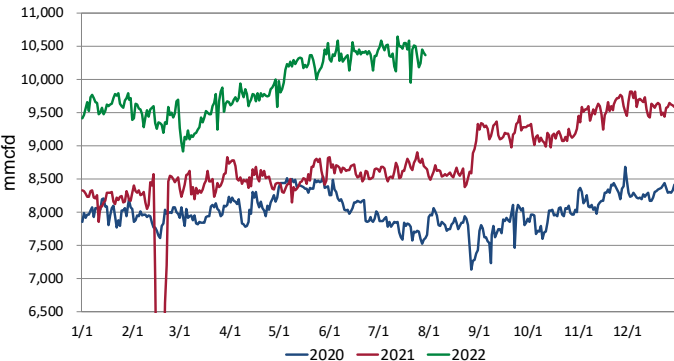
Biggest Impact / Risks / Assumptions

Our Haynesville outlook remains largely unchanged as nominations continue to show growth. December exit is projected at 11.4 bcf/d, as compared to July levels of 10.4 bcf/d, which were ~100 mmcf/d below prior forecast. While there has not been a lot of official maintenance, swings on the intras during July brought the average down. In early July, we saw restrictions on the Hall Summit compressor, mid-July temporary declines were noted on the LEAP gathering system, and late July production dipped as low as 9.95 bcf/d due to Transunion. Rigs forecasted remains conservative at 42 bal-year, the same as current levels, essentially with no rig count growth despite highly economic wells. Recall from last quarter CRK noted "the biggest production growth is going to be third quarter," while CHK and SWN also continued to indicate growth and out-performance. The risk remains, of course, of pipeline constraints in the complex of Louisiana / ETX pipelines, though our judgement for now remains that there should be pipeline space to grow through year end – but it remains a non-zero risk. In particular, with national End of Summer gas storage projected at 3.4 Tcf, there is room in storage to absorb the gas. As such, pipe corridors to the Mid-west and from or within Texas can likely adjust to allow Haynesville molecules to compete to find a home this year. Our proprietary read of large TX storage facilities continue to show room at this time.

Haynesville Export Capacity vs. Production



Haynesville Daily Production



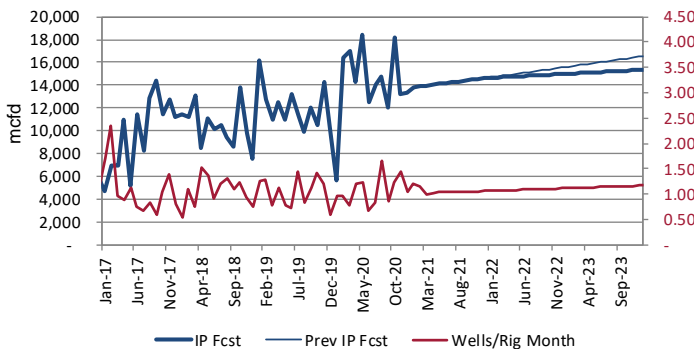
*Production estimates from state data as pulled in from DrillingInfo; quotes taken from www.seekingalpha.com

Data Breakdown by Area within Gulf Coast

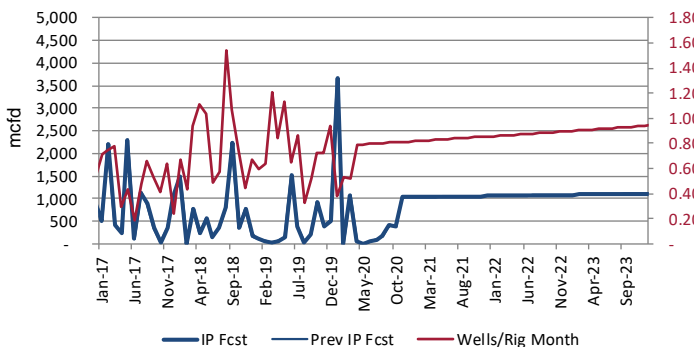
7/29/2022 North LA	Dry Production		Rigs		Avg IP's mcf/d	Well Count	NYMEX Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	10,479	1,677	42	0	14,837	328	\$ 8.22
Winter '22/23	11,652	2,127	42	-	15,016	235	\$ 7.94
Summer '23	12,542	2,063	41	-	15,197	332	\$ 4.88
2022	10,380	1,630	42	0	14,823	546	\$ 8.27
2023	12,455	2,075	41	-	15,182	567	\$ 5.63

7/29/2022 Alabama	Dry Production		Rigs		Avg IP's mcf/d	Well Count	NYMEX Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	265	(9)	-	-	869	0	\$ 8.22
Winter '22/23	257	(13)	-	-	879	-	\$ 7.94
Summer '23	251	(14)	-	-	890	-	\$ 4.88
2022	265	(11)	-	0	868	1	\$ 8.27
2023	251	(14)	-	-	889	-	\$ 5.63

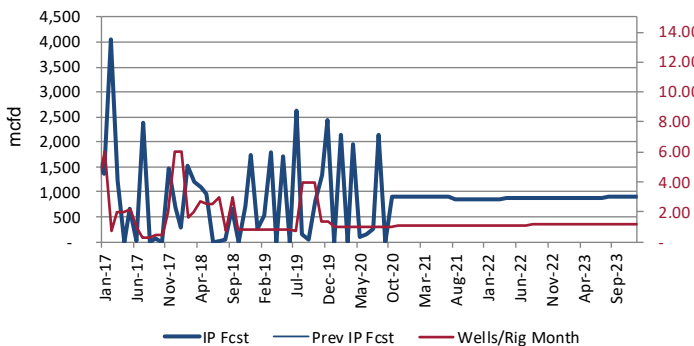
North LA Forecast IP's vs. Rig Efficiency



South LA IP's vs. Rig Efficiency



Alabama IP's vs. Rig Efficiency



7/29/2022 South LA	Dry Production		Rigs		Avg IP's mcf/d	Well Count	NYMEX Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	463	(33)	3	4	1,075	37	\$ 8.22
Winter '22/23	460	(18)	4	4	1,088	37	\$ 7.94
Summer '23	459	(4)	4	5	1,101	52	\$ 4.88
2022	465	(40)	3	4	1,074	60	\$ 8.27
2023	459	(6)	4	4	1,100	90	\$ 5.63

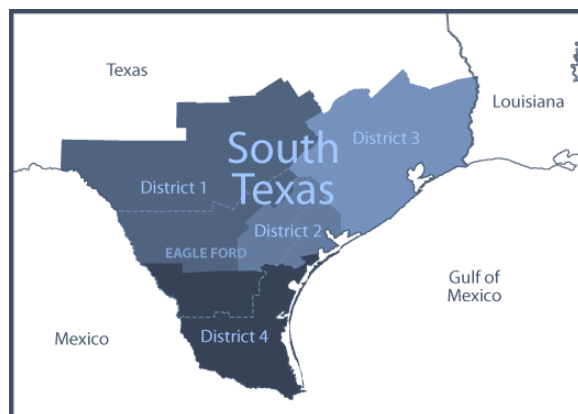
7/29/2022 Mississippi	Dry Production		Rigs		Avg IP's mcf/d	Well Count	NYMEX Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	76	3	0	2	311	35	\$ 8.22
Winter '22/23	76	1	-	2	315	29	\$ 7.94
Summer '23	77	1	-	3	319	40	\$ 4.88
2022	76	3	0	2	311	64	\$ 8.27
2023	77	1	-	3	318	72	\$ 5.63



Spring Rock Natural Gas Production Forecast

South Texas Regional Analysis

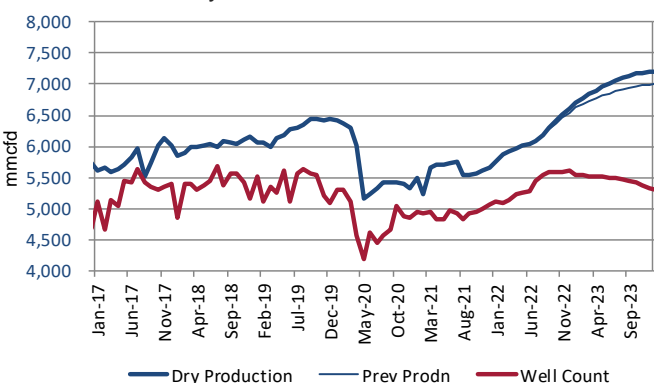
We have increased our South Texas dry gas production growth estimate for 2022 by ~20 mmcf/d, now at a +0.54 bcfd yr/yr increase (vs. a +0.52 bcfd increase in our previous update). We have increased our 2023 yr/yr outlook by ~140 mmcf/d, now at an increase of +0.86 bcfd yr/yr (vs. an increase of +0.72 bcfd yr/yr previously).



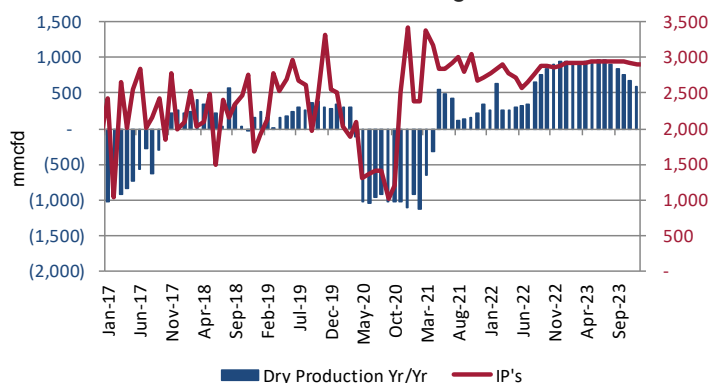
Seasonal Data

7/29/2022 South Texas	Dry Production		Rigs		Avg IP's	Well	HSC
	mmcf/d	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	6,141	497	13	79	2,748	992	\$ 7.82
Winter '22/23	6,684	922	15	81	2,903	781	\$ 7.91
Summer '23	7,046	905	14	76	2,944	1,033	\$ 4.68
2022	6,137	541	12	76	2,793	1,646	\$ 7.96
2023	7,001	864	14	76	2,932	1,763	\$ 5.52

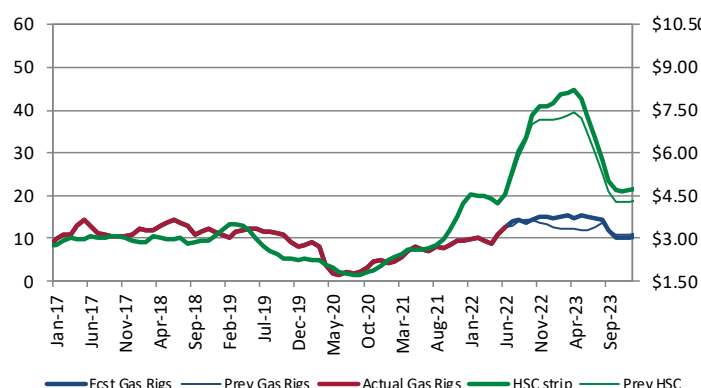
Dry Production vs. Well Count



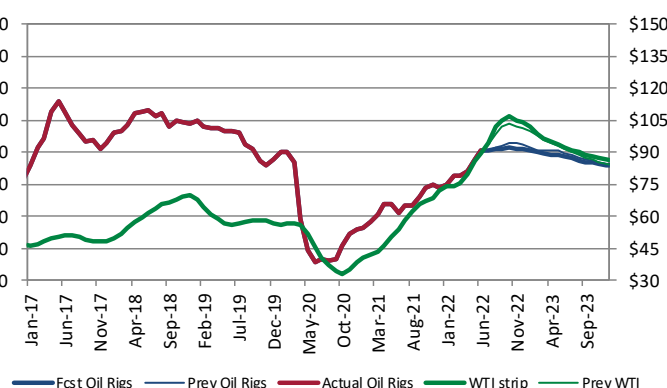
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

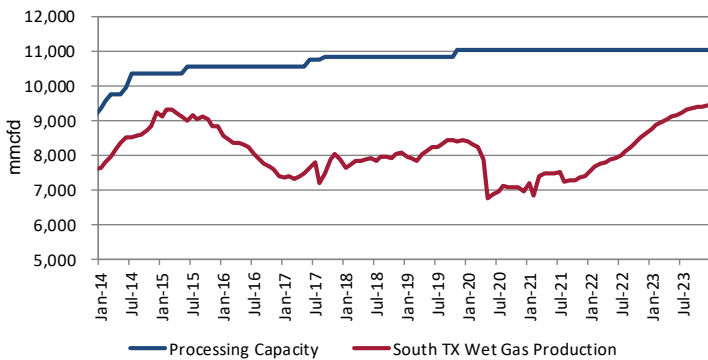
South Texas	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf/d)	6,003	6,040	6,096	6,186	6,297	6,409	6,511	6,608	6,695	6,770	6,837	6,898
Yr/Yr (mmcf/d)	296	320	351	646	756	850	901	944	939	899	926	942
Gas Rigs	11	13	14	14	14	14	15	15	15	15	15	15
Oil Rigs	76	81	81	82	82	83	82	82	81	80	79	79
Well Count	125	129	145	154	158	160	159	161	155	154	152	151
IP (mcfd/well)	2,714	2,565	2,648	2,775	2,874	2,879	2,871	2,884	2,918	2,922	2,920	2,933



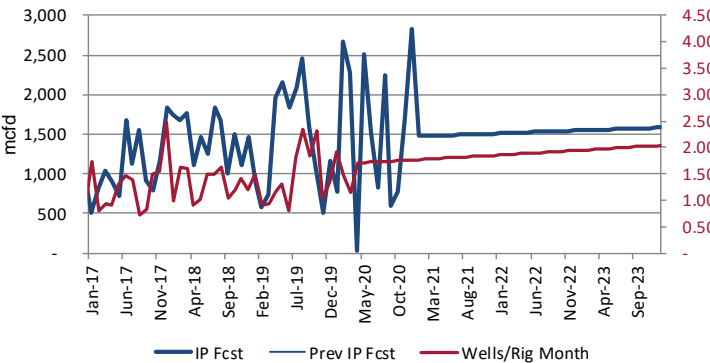
South Texas Regional Analysis (cont.)
Biggest Impact / Risks / Assumptions

Following South Texas rigs jumping over 30% from the end of April to mid-June, rigs stayed flattish over the last month and a half, going from 96 to 95 rigs. However, with rigs up almost 75% in the last year, production will continue to grow in this region. We expect production in the region to touch 7.0 bcf/d again by the middle of 2023, which will be the first time it has hit this level since 2015. Current estimates for this region are at a ~10 mmcf/d month-on-month growth average through the end of this year. Private companies are still dominating the rig counts in South Texas, with 62% of active rigs still in private hands.

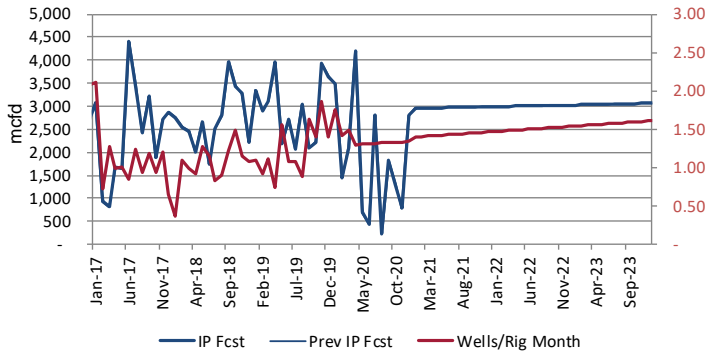
South Texas Wet Gas Production vs. Processing Capacity



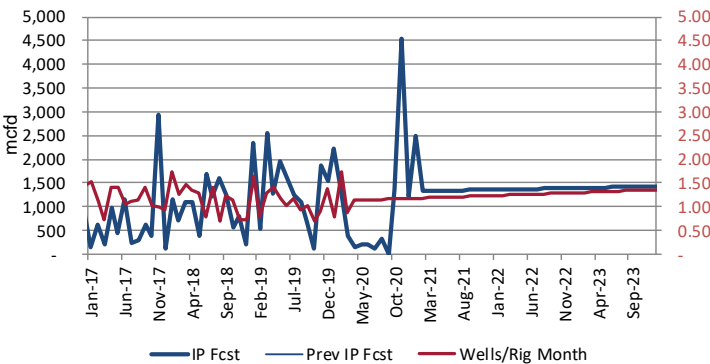
Texas District 1 IP's vs. Rig Efficiencies



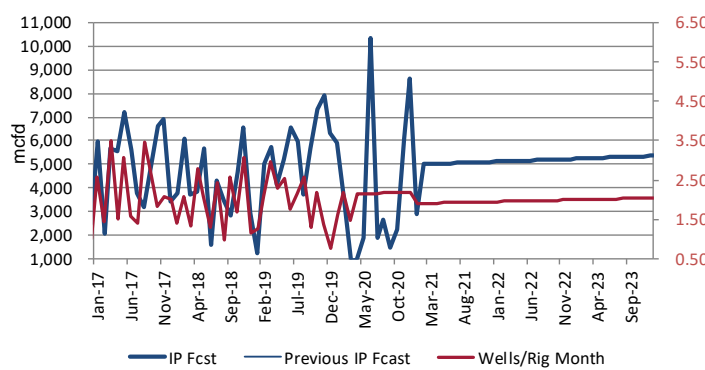
Texas District 2 IP's vs. Rig Efficiencies



Texas District 3 IP's vs. Rig Efficiencies



Texas District 4 IP's vs. Rig Efficiencies



Quotes are from www.seekingalpha.com

Data Breakdown by Area within South Texas

7/29/2022 District 1	Dry Production		Rigs		Avg IP's mcf/d	Well Count	HSC Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	1,527	30	1	30	1,531	373	\$ 7.82
Winter '22/23	1,626	154	1	28	1,550	261	\$ 7.91
Summer '23	1,670	143	1	27	1,568	338	\$ 4.68
2022	1,527	19	1	28	1,530	572	\$ 7.96
2023	1,665	138	1	27	1,567	581	\$ 5.52

7/29/2022 District 2	Dry Production		Rigs		Avg IP's mcf/d	Well Count	HSC Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	1,674	169	3	23	3,011	280	\$ 7.82
Winter '22/23	1,755	207	3	23	3,029	190	\$ 7.91
Summer '23	1,775	102	3	22	3,047	245	\$ 4.68
2022	1,659	179	3	23	3,009	474	\$ 7.96
2023	1,772	113	3	22	3,046	419	\$ 5.52

7/29/2022 District 3	Dry Production		Rigs		Avg IP's mcf/d	Well Count	HSC Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	565	(15)	1	13	1,381	114	\$ 7.82
Winter '22/23	594	30	2	15	1,398	111	\$ 7.91
Summer '23	619	54	2	14	1,415	149	\$ 4.68
2022	568	(15)	1	13	1,380	210	\$ 7.96
2023	616	48	2	15	1,413	255	\$ 5.52

7/29/2022 District 4	Dry Production		Rigs		Avg IP's mcf/d	Well Count	HSC Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	2,375	313	7	12	5,158	225	\$ 7.82
Winter '22/23	2,710	531	9	14	5,162	220	\$ 7.91
Summer '23	2,981	606	8	13	5,162	301	\$ 4.68
2022	2,383	358	7	12	5,150	390	\$ 7.96
2023	2,947	564	8	13	5,162	508	\$ 5.52

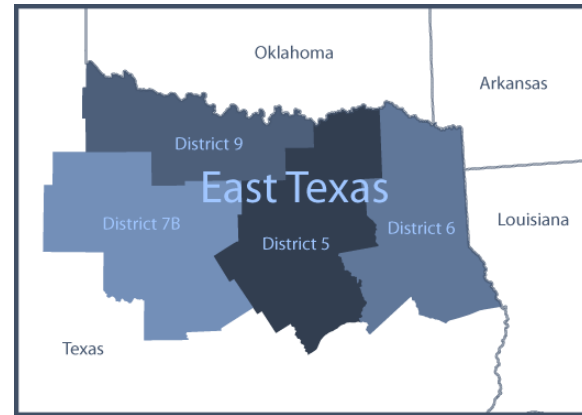


East Texas Regional Analysis

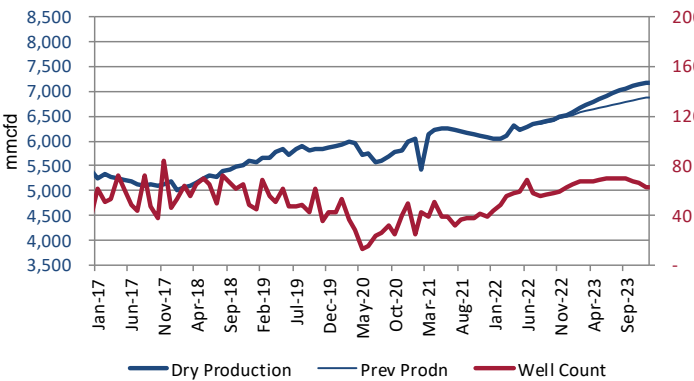
Our year-on-year production estimate for 2022 is increased by ~10 mmcf/d, now at a +0.20 bcf/d increase (vs. a +0.19 bcf/d increase previously). We have increased our 2023 forecast by ~200 mmcf/d, now at a yr/yr increase of +0.62 bcf/d (vs. an increase of +0.42 bcf/d year-on-year previously), mainly due to adding 1 rig to our previous 2022 forecast in Texas District 6 and 3 rigs to 2023 in Texas District 6 compared to our previous forecast.

Seasonal Data

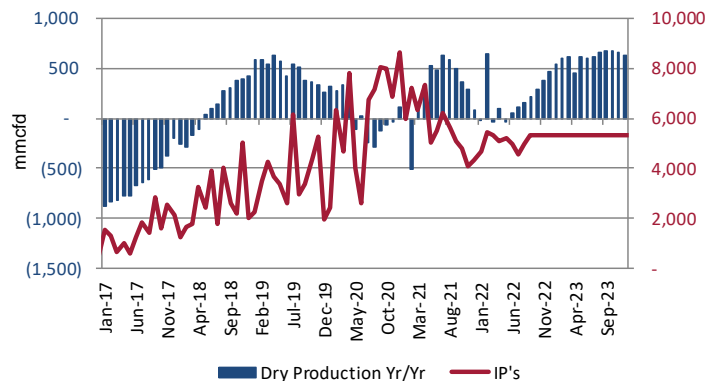
7/29/2022 East Texas	Dry Production		Rigs		Avg IP's	Well	TxOK
	mmcf/d	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	6,340	131	30	19	5,079	412	\$ 7.70
Winter '22/23	6,598	522	35	22	5,344	322	\$ 7.80
Summer '23	6,956	616	35	21	5,332	483	\$ 4.53
2022	6,301	197	30	19	5,144	682	\$ 7.87
2023	6,916	615	35	21	5,336	812	\$ 5.38



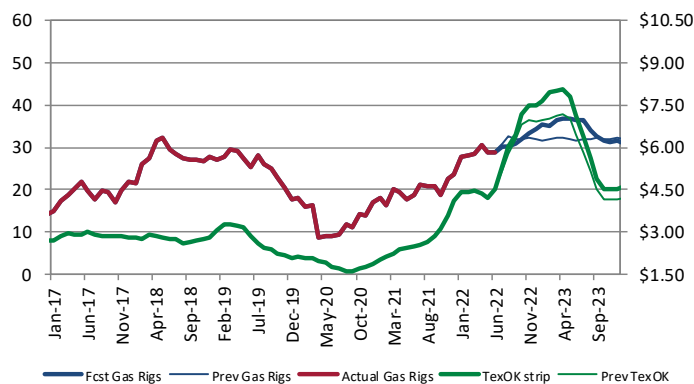
Dry Production vs. Well Count



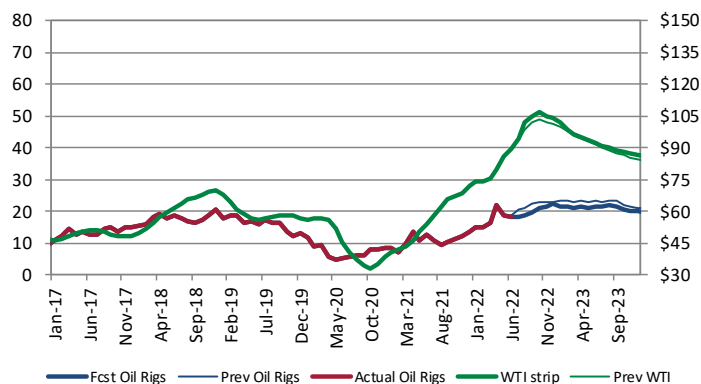
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

East Texas	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf/d)	6,227	6,297	6,342	6,360	6,394	6,437	6,481	6,533	6,593	6,659	6,725	6,786
Yr/Yr (mmcf/d)	(37)	57	121	161	219	295	379	471	551	598	612	463
Gas Rigs	29	29	30	30	31	32	33	34	35	35	36	37
Oil Rigs	19	18	18	19	20	21	22	22	22	21	21	21
Well Count	59	68	58	56	57	57	59	63	65	67	68	67
IP (mcfd/well)	5,241	4,989	4,577	4,974	5,342	5,342	5,345	5,348	5,345	5,344	5,337	5,338



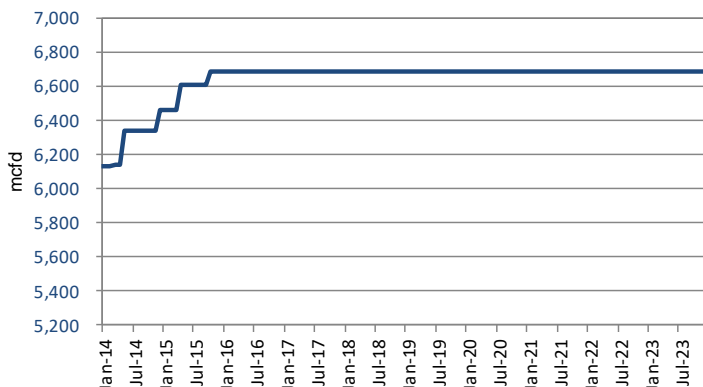
Spring Rock Natural Gas Production Forecast

East Texas Regional Analysis (cont.)

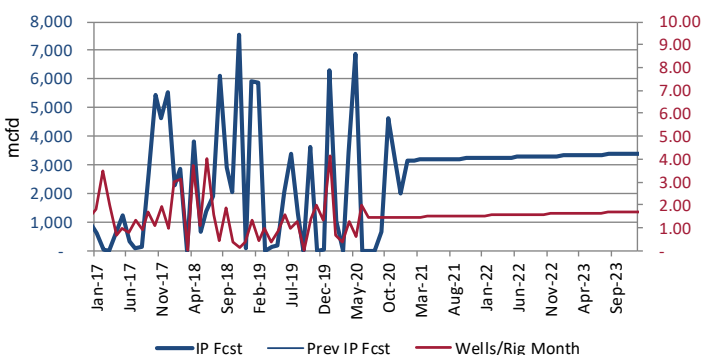
Biggest Impact / Risks / Assumptions

East Texas rigs have stayed relatively flat over the last 6 weeks, currently running 47 rigs in the region, one rig below where we were at the time of our previous forecast and off the highs of 54 rigs seen in April (rigs actualized 1 rig below our previous forecast in June and 3 rigs below July). Based on current oil and gas prices, we expect this region to exit the year at 57 rigs (1-2 rigs added per month). This region should continue to grow at a 50 mmcf/d per month pace through the end of 2023, led by the Haynesville Shale. Privately-owned Operators continue to dominate the region, running ~77% of the drilling in the region. We continue to see inherent risk in the export pipe capacity of this region when combining the gas production growth for the Haynesville in East Texas and North Louisiana, which could put a cap on the growth that we currently have in the forecast.

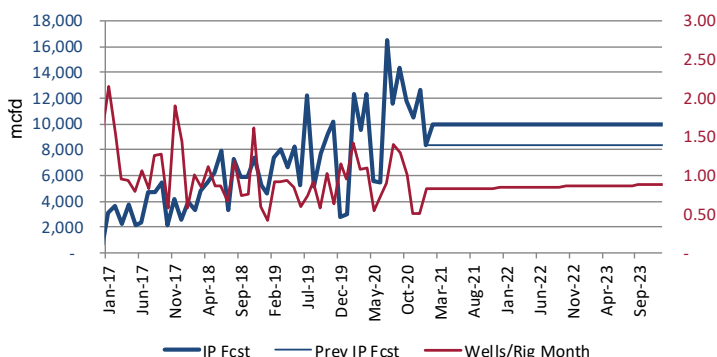
East Texas Processing Capacity



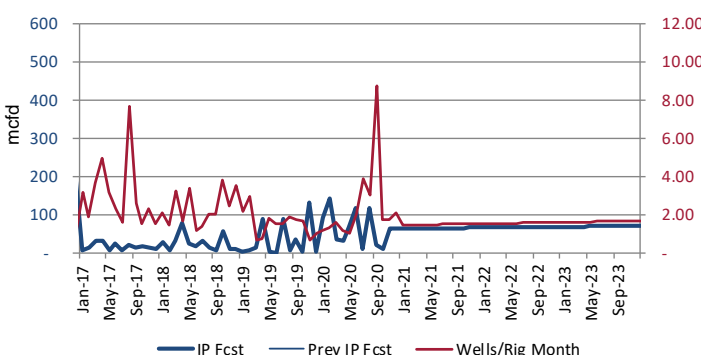
Texas District 5 IP's vs. Rig Efficiencies



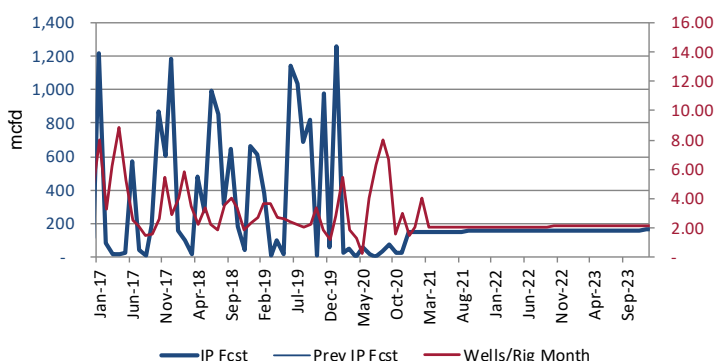
Texas District 6 IP's vs. Rig Efficiencies



Texas District 7B IP's vs. Rig Efficiencies



Texas District 9 IP's vs. Rig Efficiencies



Data Breakdown by Area within East Texas

7/29/2022 District 5	Dry Production		Rigs		Avg IP's mcf/d	Well Count	TxOK Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	1,355	(63)	3	2	3,282	39	\$ 7.70
Winter '22/23	1,372	3	4	2	3,322	49	\$ 7.80
Summer '23	1,398	43	4	2	3,362	74	\$ 4.53
2022	1,359	(46)	3	2	3,279	74	\$ 7.87
2023	1,395	36	4	2	3,358	125	\$ 5.38

7/29/2022 District 6	Dry Production		Rigs		Avg IP's mcf/d	Well Count	TxOK Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	4,048	252	19	13	10,000	194	\$ 7.70
Winter '22/23	4,314	569	22	15	10,000	154	\$ 7.80
Summer '23	4,667	619	22	15	10,000	230	\$ 4.53
2022	4,003	295	19	13	10,000	323	\$ 7.87
2023	4,628	625	22	14	10,000	387	\$ 5.38

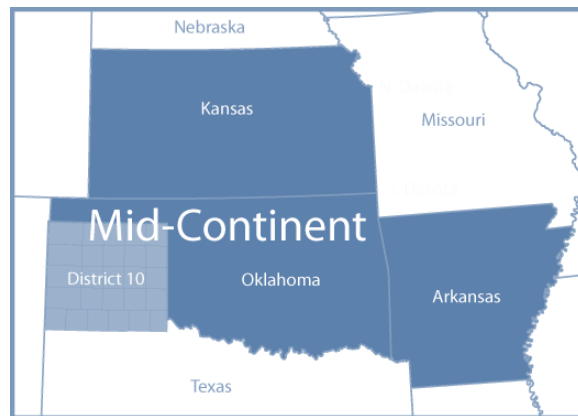
7/29/2022 District 7B	Dry Production		Rigs		Avg IP's mcf/d	Well Count	TxOK Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	213	(13)	4	2	67	64	\$ 7.70
Winter '22/23	207	(12)	4	1	68	39	\$ 7.80
Summer '23	202	(11)	4	1	69	60	\$ 4.53
2022	213	(10)	4	1	67	109	\$ 7.87
2023	202	(11)	4	1	69	100	\$ 5.38

7/29/2022 District 9	Dry Production		Rigs		Avg IP's mcf/d	Well Count	TxOK Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	724	(45)	5	3	156	115	\$ 7.70
Winter '22/23	706	(38)	5	3	158	80	\$ 7.80
Summer '23	689	(35)	5	3	160	119	\$ 4.53
2022	726	(41)	5	3	156	175	\$ 7.87
2023	691	(35)	5	3	159	200	\$ 5.38



Mid Continent Regional Analysis

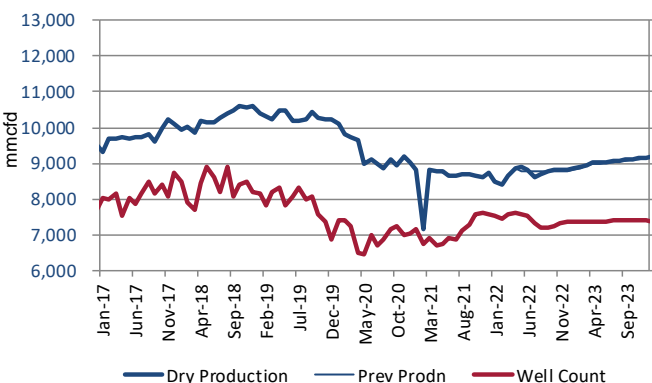
Our 2022 production estimate is relatively unchanged, with our latest expectation at an yr/yr increase of +0.14 bcfd (vs. an increase of +0.14 bcfd yr/yr previously). We are increasing our 2023 yr/yr forecast by ~20 mmcf, now at a +0.31 bcfd yr/yr increase (vs. a +0.29 bcfd year-on-year increase previously).



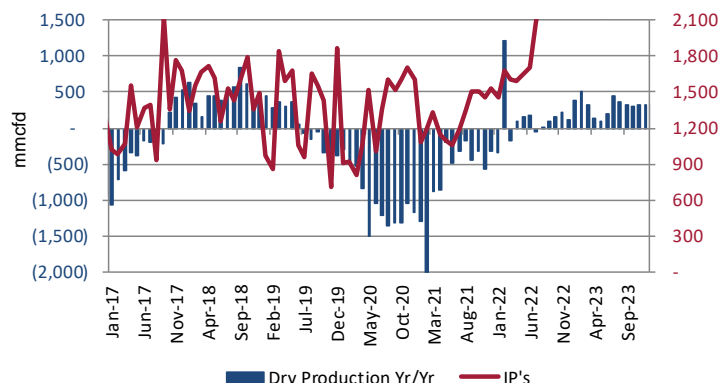
Seasonal Data

7/29/2022 Mid Continent	Dry Production		Rigs		Avg IP's	Well	PEPL
	mmcf	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	8,786	91	14	55	2,066	973	\$ 7.66
Winter '22/23	8,871	305	20	54	2,522	678	\$ 8.14
Summer '23	9,058	271	19	55	2,136	971	\$ 4.34
2022	8,722	139	14	57	2,019	1,697	\$ 7.94
2023	9,033	311	19	55	2,236	1,661	\$ 5.40

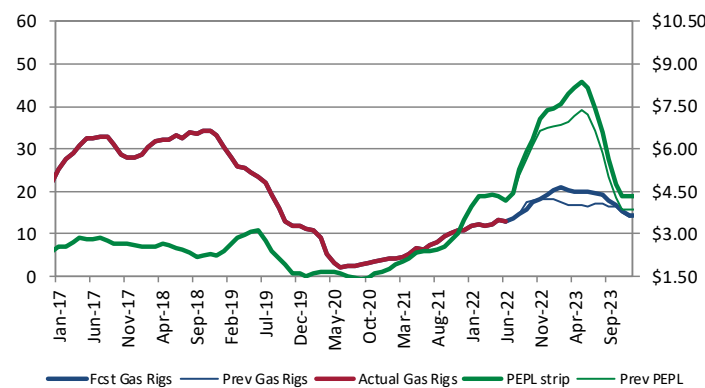
Dry Production vs. Well Count



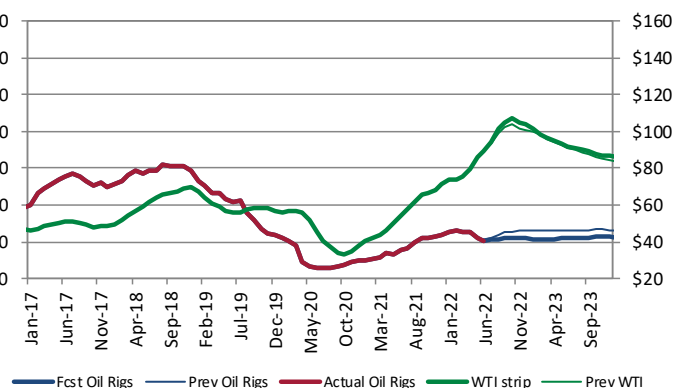
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

Mid Continent	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf)	8,921	8,828	8,603	8,703	8,765	8,808	8,820	8,835	8,850	8,885	8,962	9,005
Yr/Yr (mmcf)	153	182	(44)	8	86	162	213	117	378	502	313	128
Gas Rigs	13	13	14	15	16	17	18	19	20	21	20	20
Oil Rigs	55	51	52	54	55	56	55	55	54	53	53	53
Well Count	158	154	134	118	121	126	131	136	136	138	137	137
IP (mcfd/well)	1,654	1,706	2,074	2,434	2,497	2,503	2,509	2,516	2,522	2,528	2,535	2,125



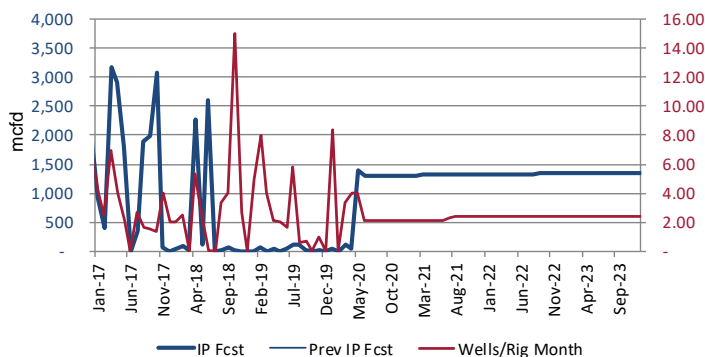
Spring Rock Natural Gas Production Forecast

Mid Continent Regional Analysis (cont.)

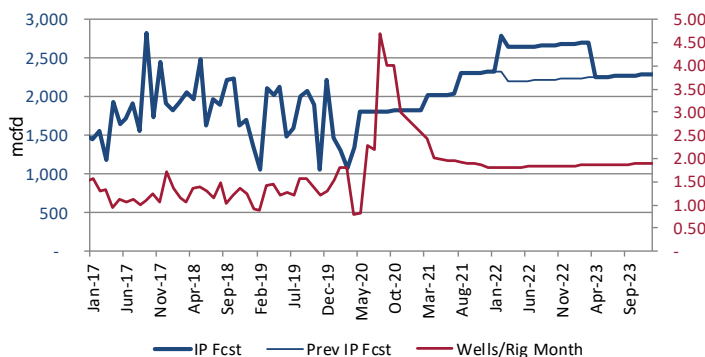
Biggest Impact / Risks / Assumptions

In Oklahoma, the large and sudden month-to-month increases we saw in March and April continues to resolve with steady declines, indicating to us that we were indeed seeing the higher initial declines in May and June after a large set of new wells were brought on in late Q1 and early Q2. Recall CLR reported strong early performance from SCOOP and STACK gas wells leading them to increase corporate gas guidance in Q1 earnings. July pipe production, however, has fallen below that trend and is coming in ~0.3 bcf/d below our prior forecast. One reason seems to be the unusual heat this summer leaving molecules within the intrastate system to meet local demand, but the impacts of maintenance have also been a significant contributor. In early July, two different events on NGPL (FM on Amarillo #4 and a one-day tool run) reduced volumes ~250 mmcf/d, while in mid-July volumes decreased on Enable, Midship, Panhandle and Southern Star related to various maintenance. As such our outlook for the remainder of the year remains largely the same as before with slight growth to ~6.8 bcf/d which is only back to the May monthly average with rig counts increasing slightly from ~61 currently to ~65 by year end. As noted in the prior quarter, Enlink had indicated producer plans calling for increasing activity "to return to meaningful growth in 2023." Broadly consistent with this, our models currently have year end 2023 up ~0.3 bcf/d vs year end 2022.

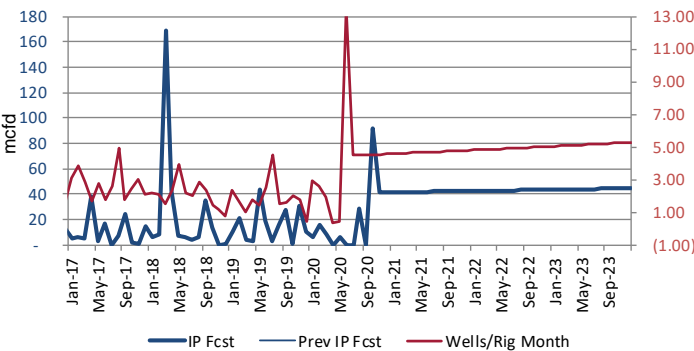
Arkansas IP's vs. Rig Efficiencies



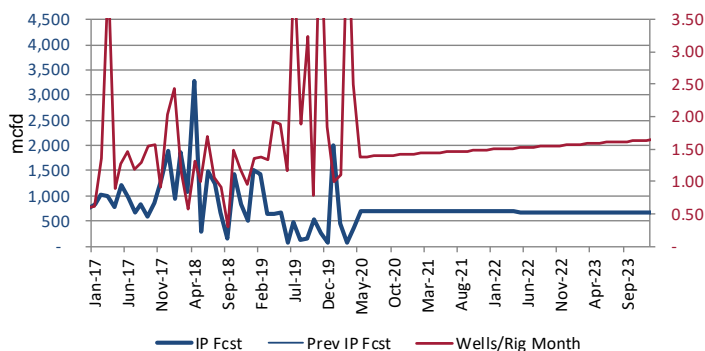
Oklahoma IP's vs. Rig Efficiencies



Kansas IP's vs. Rig Efficiencies



TX 10 IP's vs. Rig Efficiencies



Quotes from www.seekingalpha.com

Data Breakdown by Area within Mid Continent

7/29/2022 TX District 10	Dry Production		Rigs		Avg IP's mcf/d	Well Count	PEPL Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	594	(40)	0	4	680	44	\$ 7.66
Winter '22/23	575	(39)	1	4	676	34	\$ 8.14
Summer '23	558	(36)	1	4	672	48	\$ 4.34
2022	596	(25)	1	4	680	79	\$ 7.94
2023	559	(36)	1	4	672	83	\$ 5.40

7/29/2022 Kansas	Dry Production		Rigs		Avg IP's mcf/d	Well Count	PEPL Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	361	(22)	0	4	31	199	\$ 7.66
Winter '22/23	345	(27)	-	1	32	13	\$ 8.14
Summer '23	331	(30)	-	1	32	18	\$ 4.34
2022	361	(17)	0	7	31	366	\$ 7.94
2023	332	(29)	-	1	32	31	\$ 5.40

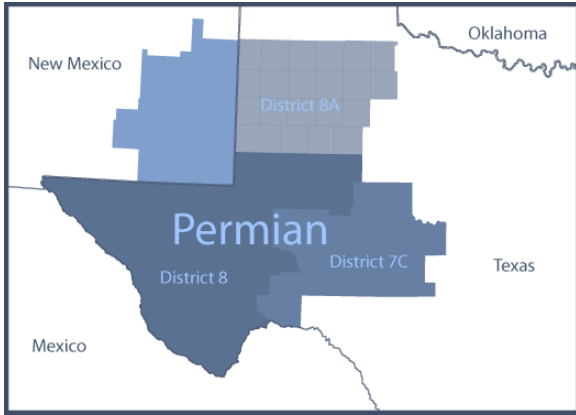
7/29/2022 Oklahoma	Dry Production		Rigs		Avg IP's mcf/d	Well Count	PEPL Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	6,692	252	14	47	2,656	722	\$ 7.66
Winter '22/23	6,856	469	19	49	2,688	624	\$ 8.14
Summer '23	7,112	421	18	50	2,267	894	\$ 4.34
2022	6,620	269	14	46	2,642	1,238	\$ 7.94
2023	7,082	462	18	50	2,377	1,529	\$ 5.40

7/29/2022 Arkansas	Dry Production		Rigs		Avg IP's mcf/d	Well Count	PEPL Price
	mmcf/d	Yr/Yr	Gas	Oil			
Summer '22	1,140	(99)	-	0	1,333	8	\$ 7.66
Winter '22/23	1,095	(98)	-	1	1,341	8	\$ 8.14
Summer '23	1,057	(83)	-	1	1,349	10	\$ 4.34
2022	1,145	(89)	-	1	1,332	14	\$ 7.94
2023	1,060	(85)	-	1	1,348	18	\$ 5.40



Permian Regional Analysis

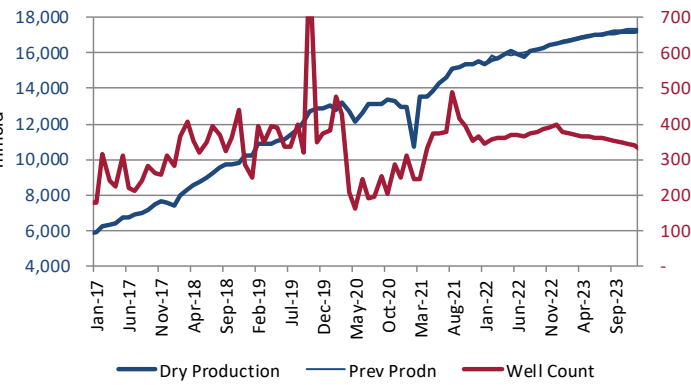
We have decreased our yr/yr production estimate for 2022 by ~35 mmcfd, now at a yr/yr growth of 1,810 mmcfd (vs. a ~1,845 mmcfd yr/yr growth previously). We have decreased our 2023 yr/yr production growth forecast by ~50 mmcfd, now at an increase of ~990 mmcfd yr/yr (vs. an increase of ~1,040 mmcfd year-on-year previously), mainly due to removing 9 rigs from our previous 2022 forecast and removing 15 rigs from our previous 2023 forecast.



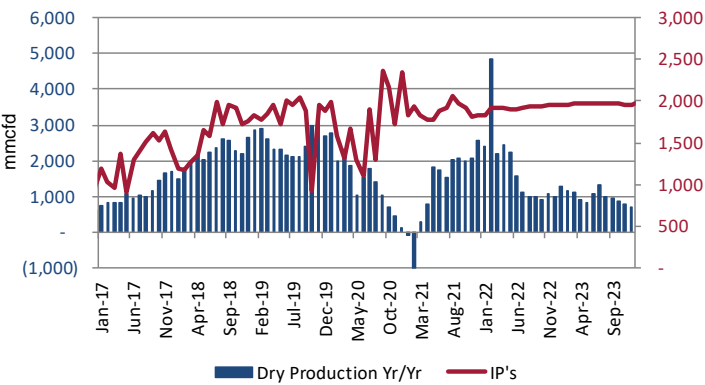
Seasonal Data

7/29/2022 Permian	Dry Production		Rigs		Avg IP's	Well	EP Per
	mmcfd	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	16,048	1,465	16	309	1,925	2,596	\$ 7.25
Winter '22/23	16,624	1,116	19	319	1,956	1,905	\$ 7.03
Summer '23	17,033	985	16	303	1,970	2,506	\$ 3.16
2022	15,993	1,810	17	305	1,920	4,443	\$ 7.33
2023	16,986	992	16	305	1,967	4,310	\$ 4.26

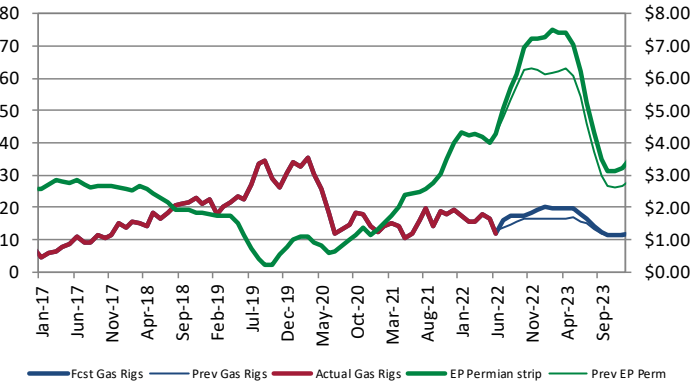
Dry Production vs. Well Count



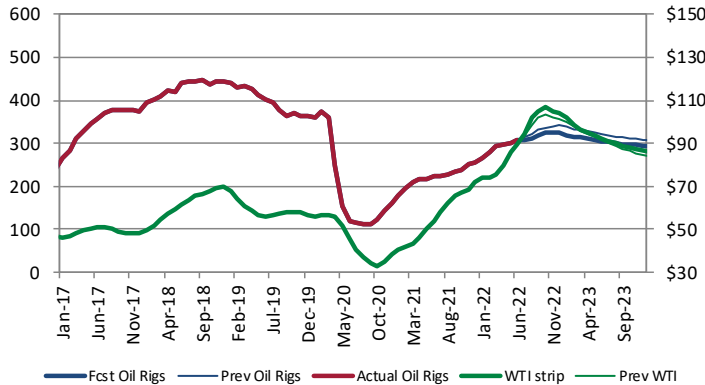
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

Permian	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcfd)	16,107	15,907	15,744	16,106	16,203	16,307	16,420	16,540	16,641	16,721	16,797	16,863
Yr/Yr (mmcfd)	2,215	1,579	1,109	1,005	1,005	918	1,055	987	1,292	1,137	1,107	903
Gas Rigs	17	12	16	17	17	17	18	19	20	20	20	20
Oil Rigs	299	307	306	313	319	326	325	325	320	313	314	311
Well Count	370	369	366	372	375	385	390	397	376	373	370	363
IP (mcfd/well)	1,901	1,907	1,922	1,938	1,940	1,946	1,949	1,951	1,955	1,961	1,967	1,968



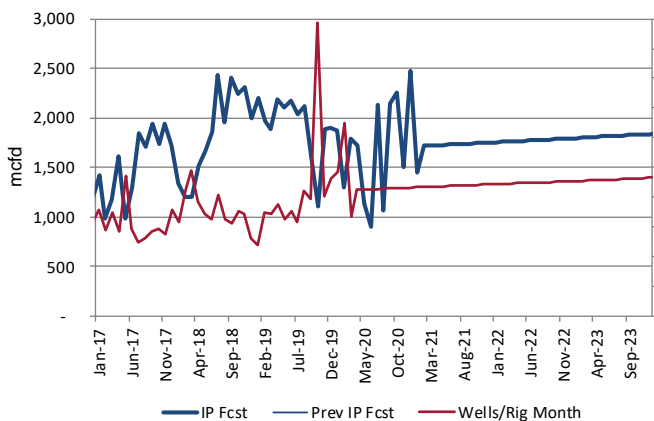
Spring Rock Natural Gas Production Forecast

Permian Regional Analysis (cont.) Biggest Impact / Risks / Assumptions

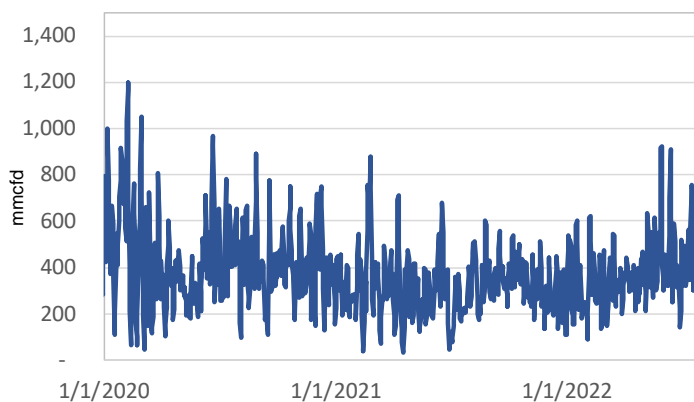
Permian rigs increased by 12 rigs since our last forecast, after increasing by 5 rigs over the previous 6 weeks, currently sitting at 326 rigs. Public companies added 8 rigs since the last forecast while private companies added 4 rigs; private companies currently make up 51% of the drilling in the Permian (167 of the 326 rigs). As more and more Permian production has grown into the intrastate pipelines, keeping track of just Permian production on a daily basis has gotten more challenging. With this update, we've reallocated some daily production showing up in other parts of Texas back into this region to get a better estimate of what's producing real-time (quite a bit of Permian production shows up through intrastate flows into East and South Texas). The estimates in the daily production file have increased by close to 600 mmcf for July, and we believe that it's still underestimating the daily production in the region. For the next year, we believe that Permian production will continue to grow at an estimated rate of around 100 mmcf per month.

After a busy May, June and July proved relatively quiet for Permian infrastructure announcements. In its July 20th call, KMI confirmed the PHP Expansion project for +0.55 bcfd targeting Nov 1, 2023. However, the +0.57 bcfd GCX Expansion was not confirmed, and KMI noted that it was in discussion with shippers for "pockets of capacity" to serve LNG facilities. This may decrease the expansion's incremental capacity, but the +0.5 bcfd Whistler Expansion along the same route will relieve some market pressures. Our dry production forecast continues to crest our Modeled Flow Constraints line, which is a simple representation of "new infrastructure since 2017 capped to 90% nameplate capacity"; however, we have previously seen dry gas production get to almost 2 bcfd over these expectations via local demand and price-driven displacement along all outbound pipelines.

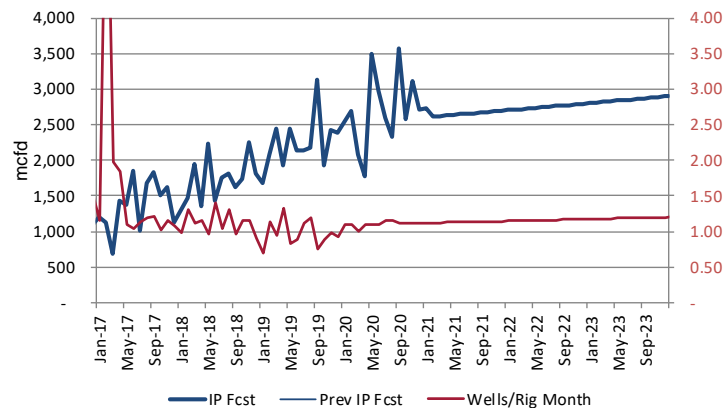
Texas District 8 IP's vs. Rig Efficiencies



Permian Flare Sum



Permian NM IP's vs. Rig Efficiencies



Data Breakdown by Area within Permian

7/29/2022	Dry Production		Rigs		Avg IP's	Well	EP Per
TX District 8	mmcf/d	Yr/Yr	Gas	Oil	mcf/d	Count	Price
Summer '22	8,846	843	-	192	1,776	1,371	\$ 7.25
Winter '22/23	9,105	443	-	201	1,798	1,024	\$ 7.03
Summer '23	9,321	475	-	190	1,819	1,352	\$ 3.16
2022	8,833	1,037	-	189	1,775	2,374	\$ 7.33
2023	9,299	466	-	192	1,818	2,335	\$ 4.26

7/29/2022	Dry Production		Rigs		Avg IP's	Well	EP Per
TX District 8A	mmcf/d	Yr/Yr	Gas	Oil	mcf/d	Count	Price
Summer '22	271	(10)	-	10	156	67	\$ 7.25
Winter '22/23	267	(7)	-	8	158	40	\$ 7.03
Summer '23	264	(7)	-	8	160	55	\$ 3.16
2022	271	(10)	-	9	156	108	\$ 7.33
2023	264	(7)	-	8	160	94	\$ 4.26

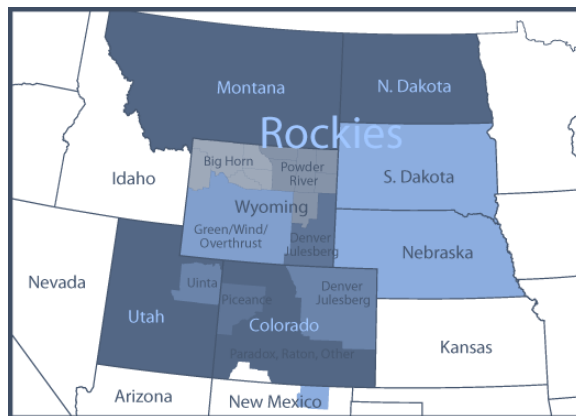
7/29/2022	Dry Production		Rigs		Avg IP's	Well	EP Per
TX District 7C	mmcf/d	Yr/Yr	Gas	Oil	mcf/d	Count	Price
Summer '22	1,898	26	-	28	878	336	\$ 7.25
Winter '22/23	1,900	(4)	-	29	894	234	\$ 7.03
Summer '23	1,889	(9)	-	28	911	302	\$ 3.16
2022	1,900	72	-	28	877	571	\$ 7.33
2023	1,890	(10)	-	28	909	519	\$ 4.26

7/29/2022	Dry Production		Rigs		Avg IP's	Well	EP Per
NM Permian	mmcf/d	Yr/Yr	Gas	Oil	mcf/d	Count	Price
Summer '22	5,033	605	16	79	2,744	822	\$ 7.25
Winter '22/23	5,352	684	19	81	2,750	608	\$ 7.03
Summer '23	5,560	527	16	77	2,750	798	\$ 3.16
2022	4,990	711	17	78	2,737	1,389	\$ 7.33
2023	5,532	542	16	77	2,750	1,362	\$ 4.26



Rockies Regional Analysis

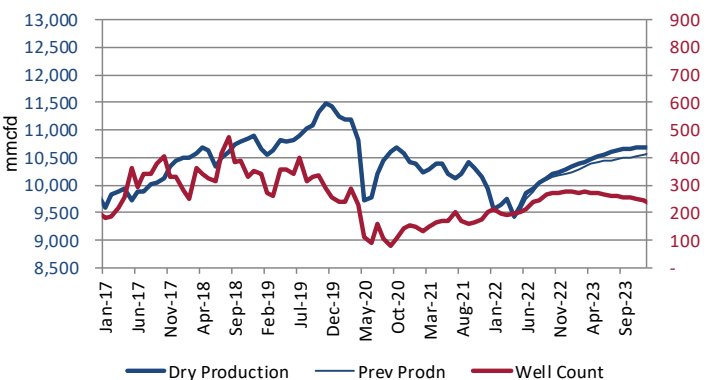
Our 2022 production yr/yr change estimate is increased by ~40 mmcf/d, as we are now calling for a year-on-year decrease of -0.36 bcfd (vs. a -0.40 bcfd yr/yr decrease previously). We are increasing our 2023 yr/yr outlook by ~80 mmcf/d, now calling for a +0.66 bcfd yr/yr decrease (vs. a +0.58 bcfd year-on-year decrease previously), mainly due to increasing our rig forecast by 4 rigs in 2022 compared to our previous forecast.



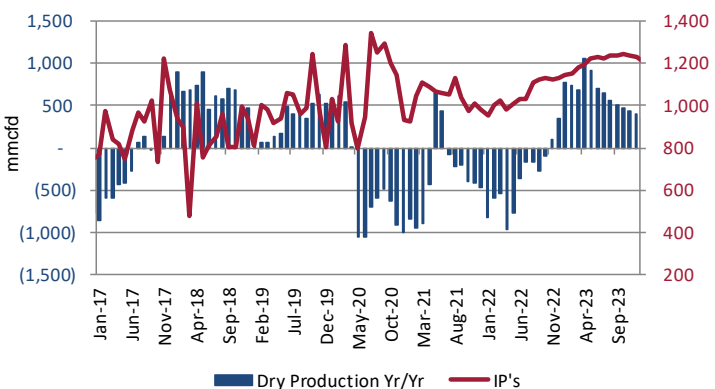
Seasonal Data

7/29/2022 Rockies	Dry Production		Rigs		Avg IP's	Well	NWPL
	mmcf/d	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	9,889	(400)	9	77	1,059	1,633	\$ 7.79
Winter '22/23	10,338	527	12	79	1,147	1,371	\$ 8.58
Summer '23	10,585	697	13	70	1,228	1,833	\$ 4.48
2022	9,893	(360)	8	73	1,054	2,786	\$ 8.30
2023	10,552	660	12	72	1,213	3,150	\$ 5.68

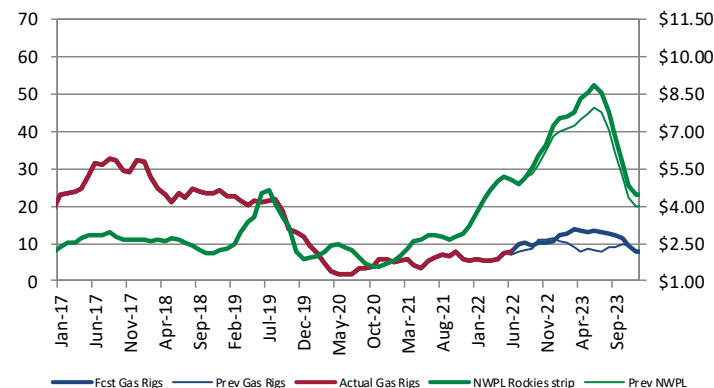
Dry Production vs. Well Count



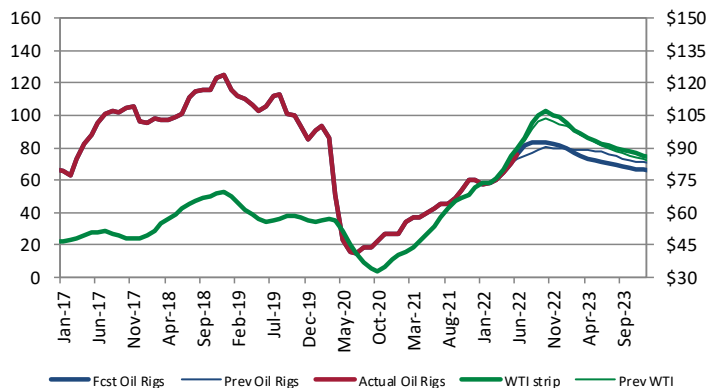
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

Rockies	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf/d)	9,605	9,854	9,946	10,056	10,136	10,201	10,244	10,292	10,339	10,383	10,431	10,478
Yr/Yr (mmcf/d)	(774)	(357)	(168)	(159)	(272)	(99)	94	342	769	738	690	1,056
Gas Rigs	8	8	10	10	10	10	10	11	12	13	14	14
Oil Rigs	70	76	82	83	83	83	82	81	80	77	75	73
Well Count	201	211	240	243	266	272	272	275	274	274	276	270
IP (mcfd/well)	1,008	1,029	1,035	1,107	1,121	1,129	1,122	1,133	1,143	1,154	1,185	1,197



Spring Rock Natural Gas Production Forecast

Rockies Regional Analysis (cont.)

Biggest Impact / Risks / Assumptions

In July, our overall Rockies pipe estimates came in ~70 mmcf higher than forecast, with relatively small differences in the various sub-basins. As such, our forecast for Rockies remains largely unchanged with slight growth forecasted through the balance of the year and into 2023, from current levels of ~10.0 bcf average for July to year end exit of 10.3 bcf. Slight growth is distributed amongst the Rockies sub-basins, as drilling economics remain strong throughout. In the Bakken, recovery from the severe weather in April and May causing widespread power outages and production shut-ins took longer than HES had originally anticipated. NDIC stats for May show grow produced volumes of ~2.79 bcf, as compared to March levels of ~3.01 bcf. Our nominations would suggest ND June production levels are essentially fully recovered to March levels. Looking forward, growth is still slated for the second half in earnings commentary. As a comparison, HES expects ~50 new wells to be brought online in H2 vs. 32 new wells in H1. HES's guidance also affirms this growth view, with Q3 pegged at 155-160 mboepd and Q4 continuing to grow to 160-165 mboepd, with the upward trajectory continuing to a 200 mboepd planned for 2024. As noted before, new gas plants continue to be built in-basin, with OneOk's Bear Creek plant expansion coming online in Q4, and their Demicks Lake III plant scheduled for completion in Q1 '23, bringing OneOk's Williston capacity to 1.9 bcf.

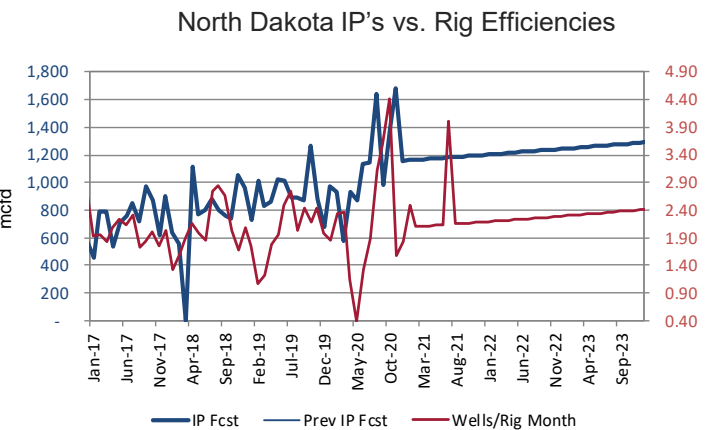
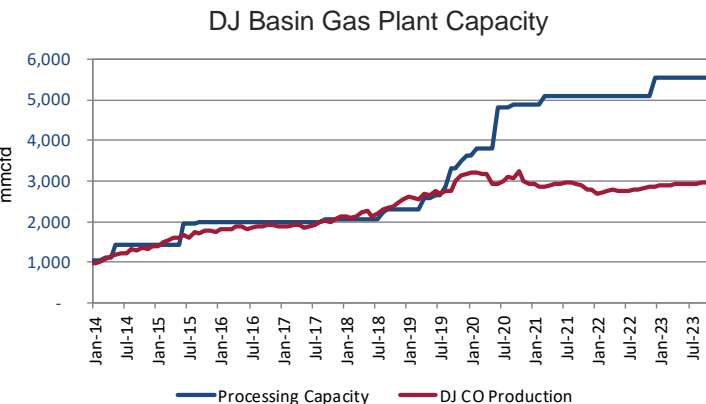
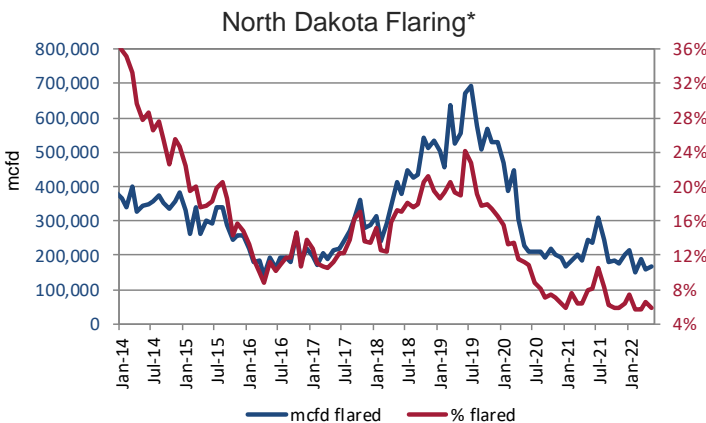
In the DJ basin, we have very slight growth projected from ~2.5 bcf in July to a projected ~2.6 bcf by year-end – essentially flat based on conservatively constructed drilling plans by the main DJ operators. Long permitting processes put in place by Colorado have led to long-dated and steady plans which in the current financial environment fit well with focus on free-cash-flow. As such we have maintained our relatively steady forecast there. Seasonally, in last two years (2020 and 2021), Rockies production has decreased in Q4 vs. Q3. However, we note this was an expression of overall secular declines rather than a true seasonal pattern. In 2017, 2018, and 2019 during secular growth periods, Rockies production in Q4 outpaced Q3. Our outlook this year would be an inflection from secular decline to secular growth and would look for Q4 to outpace Q3 as one confirmation of that change.

*From North Dakota Oil and Gas Commission; Quotes are from www.seekingalpha.com

Data Breakdown by Area within Rockies

7/29/2022 Piceance CO	Dry Production		Rigs		Avg IP's	Well	NWPL
	mmcf	Yr/Yr	Gas	Oil	mcf	Count	Price
Summer '22	1,216	(47)	3	-	2,597	103	\$ 7.79
Winter '22/23	1,224	16	4	-	2,628	95	\$ 8.58
Summer '23	1,296	80	4	-	2,660	168	\$ 4.48
2022	1,208	(49)	3	-	2,594	171	\$ 8.30
2023	1,286	78	4	-	2,657	272	\$ 5.68

7/29/2022 N. Dakota	Dry Production		Rigs		Avg IP's	Well	NWPL
	mmcf	Yr/Yr	Gas	Oil	mcf	Count	Price
Summer '22	2,044	(60)	-	38	1,225	537	\$ 7.79
Winter '22/23	2,363	366	-	38	1,247	454	\$ 8.58
Summer '23	2,484	440	-	34	1,270	577	\$ 4.48
2022	2,064	(32)	-	35	1,223	898	\$ 8.30
2023	2,470	406	-	34	1,268	1,004	\$ 5.68



7/29/2022 DJ CO	Dry Production		Rigs		Avg IP's	Well	NWPL
	mmcf	Yr/Yr	Gas	Oil	mcf	Count	Price
Summer '22	2,517	(146)	-	14	953	486	\$ 7.79
Winter '22/23	2,611	125	-	14	982	411	\$ 8.58
Summer '23	2,662	146	-	12	1,012	523	\$ 4.48
2022	2,514	(112)	-	13	951	850	\$ 8.30
2023	2,656	142	-	13	1,010	910	\$ 5.68

7/29/2022 Green Rvr WY	Dry Production		Rigs		Avg IP's	Well	NWPL
	mmcf	Yr/Yr	Gas	Oil	mcf	Count	Price
Summer '22	2,551	(158)	4	0	2,441	56	\$ 7.79
Winter '22/23	2,572	1	6	-	2,471	71	\$ 8.58
Summer '23	2,591	40	7	-	2,500	124	\$ 4.48
2022	2,549	(174)	4	0	2,439	97	\$ 8.30
2023	2,587	37	6	-	2,498	201	\$ 5.68



San Juan Regional Analysis

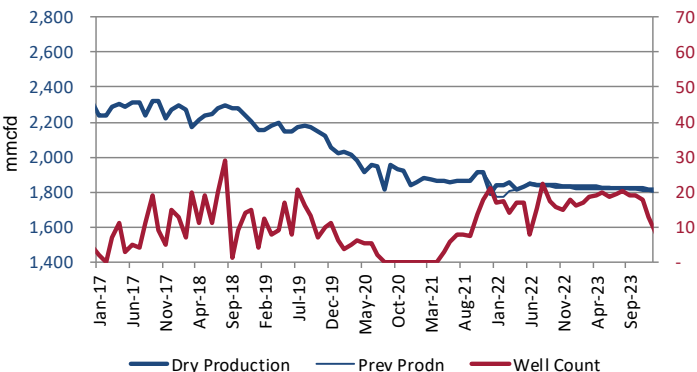
We have increased our 2022 production estimate by ~20 mmcfd, now at a -0.03 bcfd yr/yr decline (vs. a -0.05 bcfd yr/yr change previously). We have decreased our 2023 production forecast by ~20 mmcfd, now calling for a -0.02 bcfd yr/yr decrease (vs. a year-on-year decline of -0.00 bcfd previously).



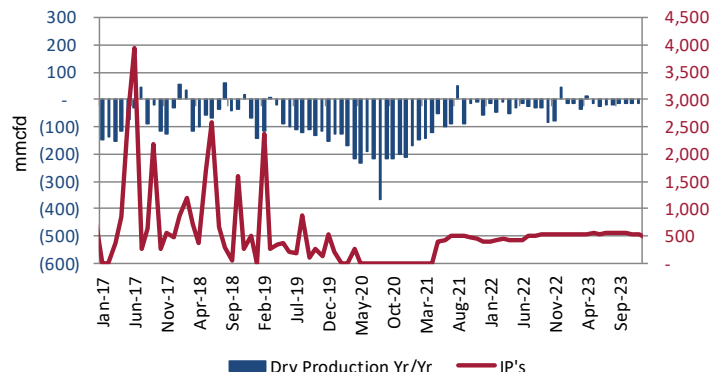
Seasonal Data

7/29/2022 San Juan	Dry Production		Rigs		Avg IP's	Well	EP SJ
	mmcfd	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	1,834	(37)	3	1	472	113	\$ 7.73
Winter '22/23	1,827	(20)	3	1	535	85	\$ 8.27
Summer '23	1,821	(13)	3	1	545	135	\$ 4.36
2022	1,836	(30)	2	2	470	193	\$ 8.11
2023	1,822	(15)	3	1	541	218	\$ 5.45

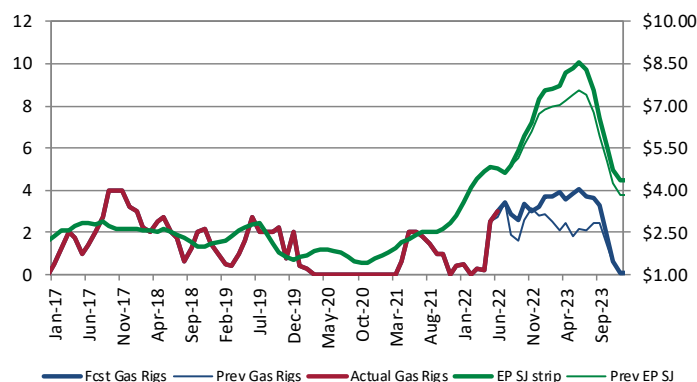
Dry Production vs. Well Count



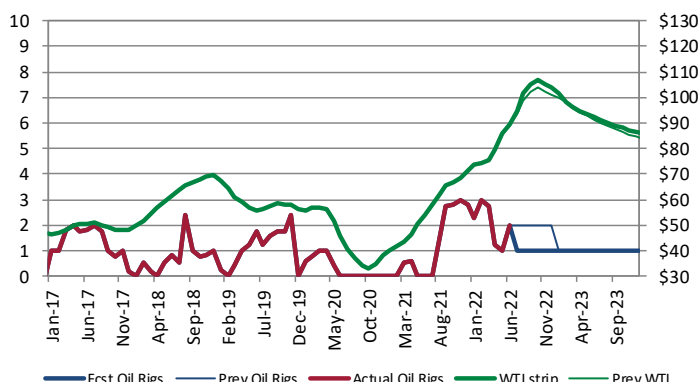
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

San Juan	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcfd)	1,833	1,846	1,840	1,838	1,836	1,834	1,831	1,828	1,826	1,824	1,823	1,823
Yr/Yr (mmcfd)	(31)	(12)	(22)	(28)	(30)	(84)	(79)	43	(16)	(16)	(35)	12
Gas Rigs	3	3	3	3	3	3	3	3	4	4	4	4
Oil Rigs	1	2	1	1	1	1	1	1	1	1	1	1
Well Count	17	8	15	22	18	16	15	18	16	17	19	19
IP (mcfd/well)	414	415	501	495	536	530	526	537	533	536	542	543



Western US Regional Analysis

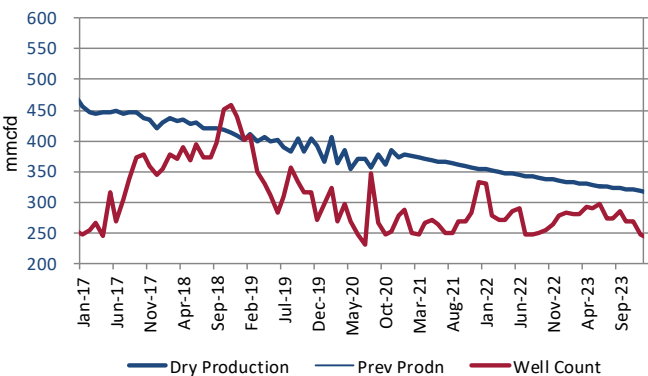
We have kept our 2022 forecast relatively unchanged, now at a -0.02 bcfd yr/yr decrease (vs. a -0.02 bcfd yr/yr change previously). We have kept our 2023 production forecast relatively unchanged, now at an annual yr/yr decrease of -0.02 bcfd (vs. an expected change of -0.02 bcfd yr/yr previously).



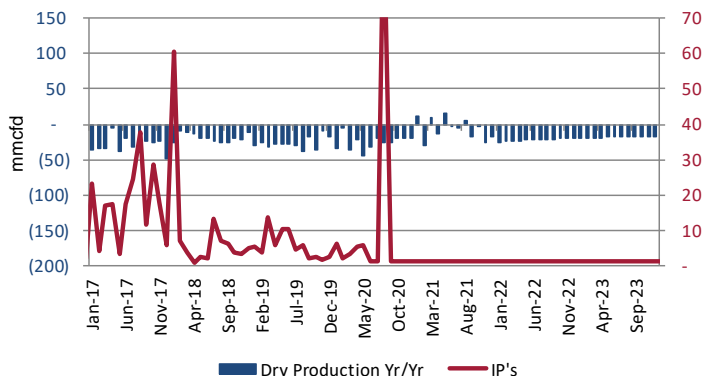
Seasonal Data

7/29/2022 West	Dry Production		Rigs		Avg IP's	Well	Socal
	mmcf	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	343	(22)	0	3	1	446	\$ 8.25
Winter '22/23	334	(20)	1	3	1	384	\$ 8.84
Summer '23	325	(18)	1	3	1	582	\$ 4.95
2022	344	(22)	0	3	1	865	\$ 8.72
2023	326	(18)	1	3	1	939	\$ 6.04

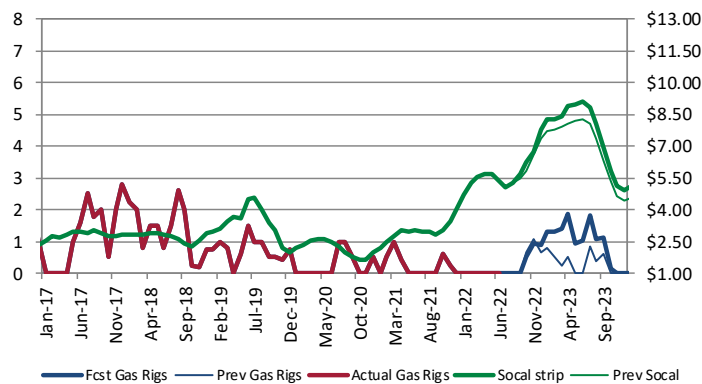
Dry Production vs. Well Count



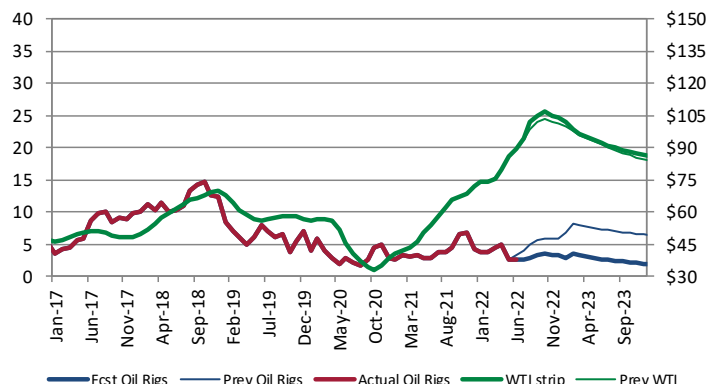
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

West	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf)	346	345	343	341	340	338	337	335	334	332	331	329
Yr/Yr (mmcf)	(23)	(22)	(22)	(21)	(21)	(21)	(20)	(20)	(20)	(19)	(19)	(19)
Gas Rigs	-	-	-	-	0	0	1	1	1	1	1	2
Oil Rigs	3	3	3	3	3	4	3	3	3	3	3	3
Well Count	85	91	47	48	50	55	64	78	82	79	81	93
IP (mcfd/well)	1	1	1	1	1	1	1	1	1	1	1	1



Gulf of Mexico Regional Analysis

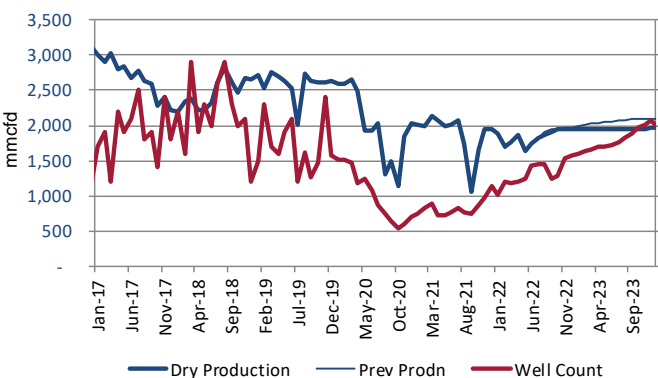
We have decreased our 2022 yr/yr production estimate by ~20 mmcf/d, now at a decrease of -0.05 bcf/d yr/yr (vs. a decrease of -0.03 bcf/d yr/yr previously), mainly to account for recent outages. We have decreased our 2023 yr/yr outlook by ~100 mmcf/d, now at an increase of +0.11 bcf/d yr/yr (vs. +0.21 bcf/d increase year-on-year previously), mainly due to decreasing our rig forecast in 2022 by 6 rigs and decreasing our 2023 rig forecast by 6 rigs.



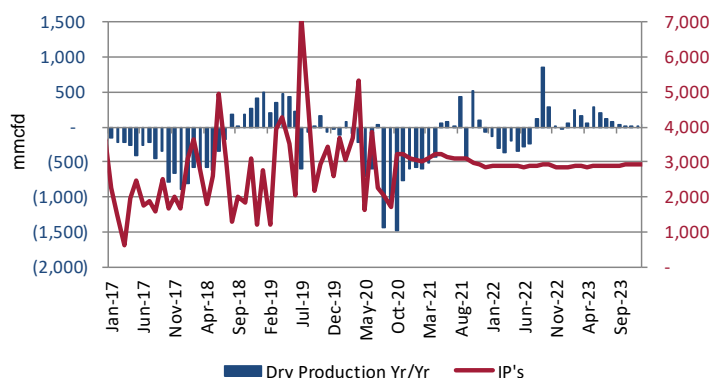
Seasonal Data

7/29/2022	Dry Production		Rigs		Avg IP's	Well	NYMEX
Gulf of Mexico	mmcf/d	Yr/Yr	Gas	Oil	mcfd	Count	Price
Summer '22	11,286	1,640	45	6	12,287	401	\$ 8.22
Winter '22/23	12,449	2,098	46	7	11,891	302	\$ 7.94
Summer '23	13,333	2,046	44	7	12,065	425	\$ 4.88
2022	1,837	(48)	5	26	2,888	158	\$ 8.27
2023	1,946	109	6	33	2,897	216	\$ 5.63

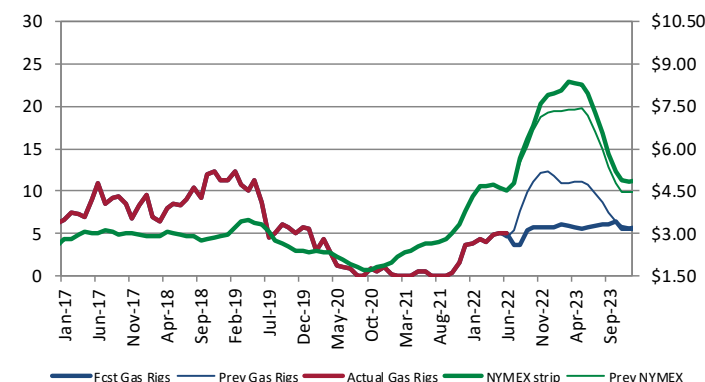
Dry Production vs. Well Count



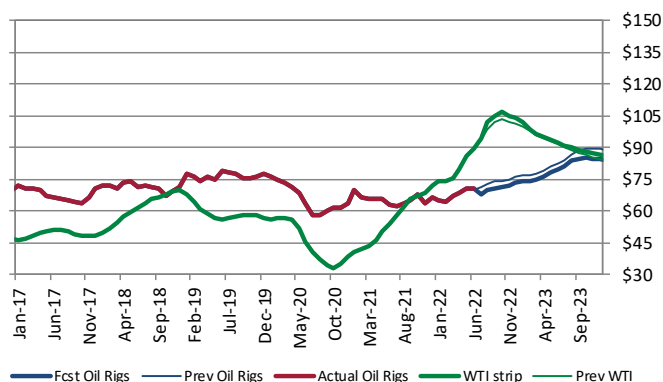
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

Gulf of Mexico	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf/d)	1,644	1,745	1,831	1,872	1,910	1,947	1,942	1,941	1,941	1,940	1,940	1,941
Yr/Yr (mmcf/d)	(338)	(274)	(235)	130	856	282	2	(12)	63	251	172	66
Gas Rigs	5	5	4	4	5	6	6	6	6	6	6	6
Oil Rigs	27	27	25	26	27	28	28	29	29	29	30	31
Well Count	12	14	15	14	12	13	15	16	16	16	17	17
IP (mcfd/well)	2,907	2,843	2,872	2,886	2,925	2,934	2,867	2,863	2,867	2,876	2,878	2,871



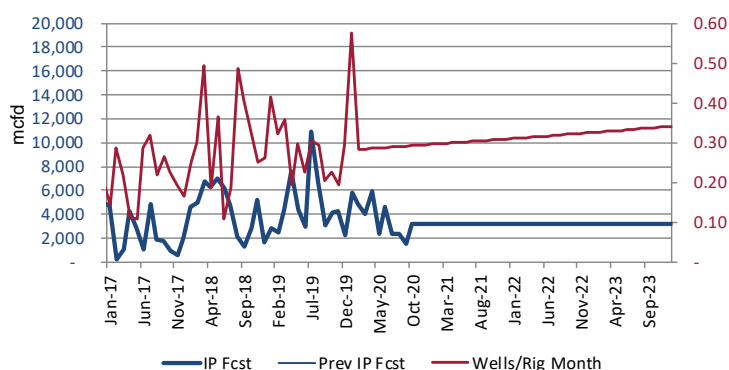
Spring Rock Natural Gas Production Forecast

Gulf of Mexico Regional Analysis (cont.)

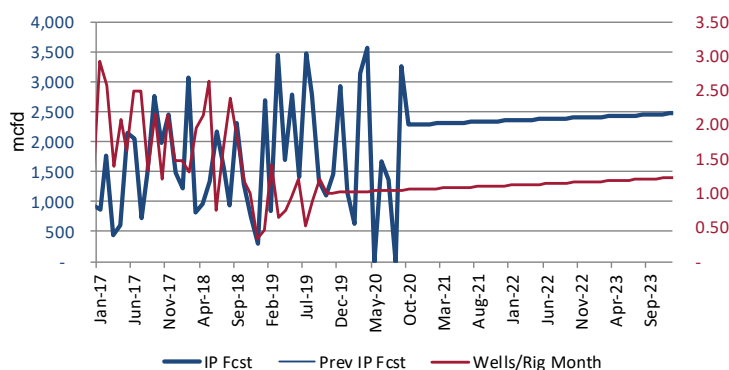
Biggest Impact / Risks / Assumptions

After the month-long outage at the Mars and Ursa platforms concluded in early June, production began ramping up throughout the month, ending up ~80 mmcfd above forecast. However, due to maintenance in early July, production is coming in ~20 mmcfd below forecast for the month. Beginning July 5th, production dropped off, reaching lows of ~1.5 bcfd between July 6-8th and did not rebound to previous levels of ~1.8 bcfd until July 12th. Declines were concentrated along Nautilus at the Ship Shoal platform due to maintenance on offshore oil pipelines that was not officially posted but later confirmed by a Nautilus representative. This overlapped with planned work at the Sea Robin West processing plant and repair work on Kinetica that let up by July 13th. Overall, with normal maintenance expected, our forecast remains largely unchanged. Despite projections for a busy season by Colorado State, the Atlantic hurricane season thus far has been relatively quiet with no storms impacting GOM production to date, but this is not too unusual. In the past 10 years there has only been three impactful Gulf storms, TS Debby (6/2012), TS Barry (7/2019), and Hurricane Cristobal (6/2020), prior to mid-August with significant activity ramping up in late-August until the end of October.

GoM Deepwater IP's vs. Rig Efficiencies



GoM Shelf IP's vs. Rig Efficiencies



*Data from Genscape Analyst pipe data; Quotes are from www.seekingalpha.com

Data Breakdown by Area within Gulf of Mexico

7/29/2022 Shelf	Dry Production		Rigs		Avg IP's	Well	NYMEX
	mmcfd	Yr/Yr	Gas	Oil	mcf/d	Count	Price
Summer '22	399	(54)	5	0	2,387	36	\$ 8.22
Winter '22/'23	394	(17)	6	0	2,415	34	\$ 7.94
Summer '23	399	1	6	0	2,445	51	\$ 4.88
2022	400	(56)	5	0	2,384	62	\$ 8.27
2023	399	(1)	6	0	2,442	88	\$ 5.63

7/29/2022 Deepwater	Dry Production		Rigs		Avg IP's	Well	NYMEX
	mmcfd	Yr/Yr	Gas	Oil	mcf/d	Count	Price
Summer '22	1,433	87	-	26	3,211	57	\$ 8.22
Winter '22/'23	1,547	112	-	29	3,211	46	\$ 7.94
Summer '23	1,545	112	-	34	3,211	75	\$ 4.88
2022	1,437	8	-	26	3,211	96	\$ 8.27
2023	1,547	111	-	33	3,211	128	\$ 5.63



Western Canada Regional Analysis

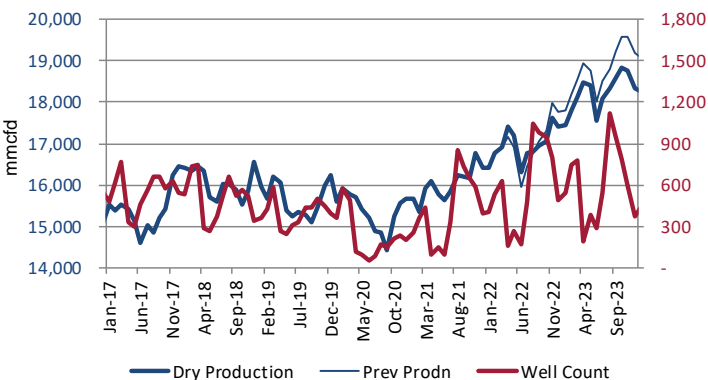
We have increased our 2022 yr/yr estimate by ~20 mmcf/d, now at an increase of +0.97 bcf/d yr/yr (vs. our previous forecasted increase of +0.95 bcf/d yr/yr). We have decreased our 2023 yr/yr production forecast by ~500 mmcf/d, now calling for an increase of +1.26 bcf/d yr/yr (vs. our previous forecasted increase of +1.76 bcf/d yr/yr), mainly due to decreasing our rig forecast in 2022 by 11 rigs and decreasing our 2023 rig forecast by 17 rigs.



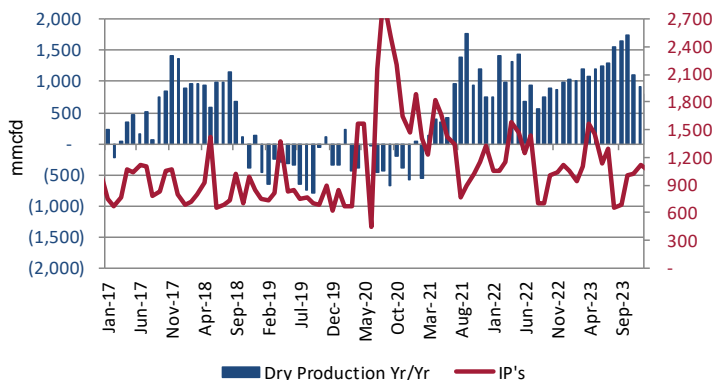
Seasonal Data

7/29/2022 W. Canada	Dry Production		Rigs		Avg IP's	Well	AECO Price
	mmcf/d	Yr/Yr	Gas	Oil	mcfd	Count	
Summer '22	16,926	937	68	98	1,164	4,047	\$ 4.83
Winter '22/23	17,678	1,022	86	146	1,046	3,362	\$ 5.30
Summer '23	18,325	1,399	64	102	1,115	4,261	\$ 3.52
2022	16,968	965	72	109	1,129	6,897	\$ 5.08
2023	18,225	1,257	72	115	1,085	7,302	\$ 4.04

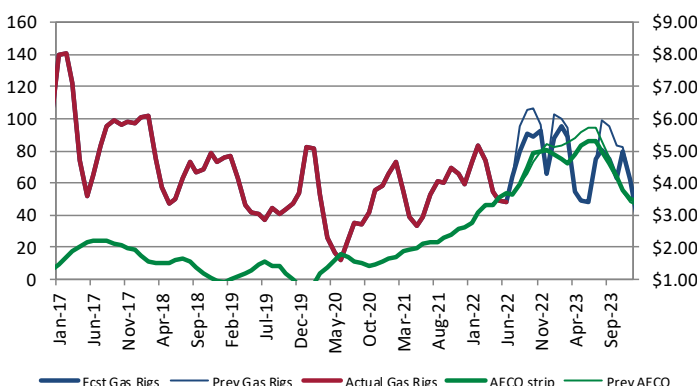
Dry Production vs. Well Count



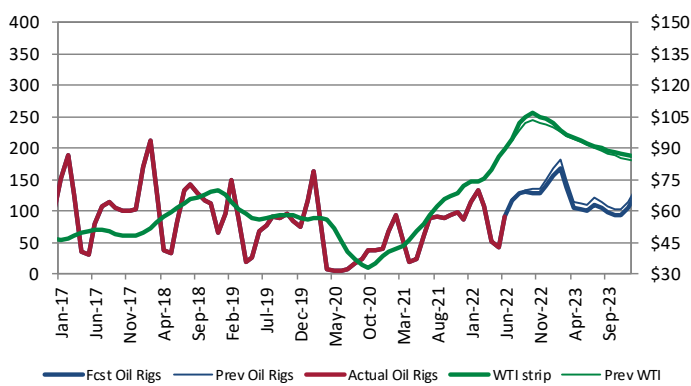
Year on Year Production Changes vs. IP Rates



Gas Rigs vs. Gas Price



Oil Rigs vs. Oil Price



Monthly Data

Western Canada	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Dry Prod (mmcf/d)	17,097	16,295	16,787	16,788	17,014	17,266	17,906	17,681	17,719	18,036	18,331	18,699
Yr/Yr (mmcf/d)	1,336	678	933	550	822	1,083	1,124	1,279	1,307	1,260	1,423	1,297
Gas Rigs	49	49	63	95	106	104	92	66	85	95	88	55
Oil Rigs	43	91	119	128	131	130	127	137	153	163	130	96
Well Count	261	172	476	1,022	1,022	1,001	846	491	541	731	761	185
IP (mcfd/well)	1,475	1,242	1,437	694	859	1,048	1,076	1,127	1,047	936	1,100	1,570



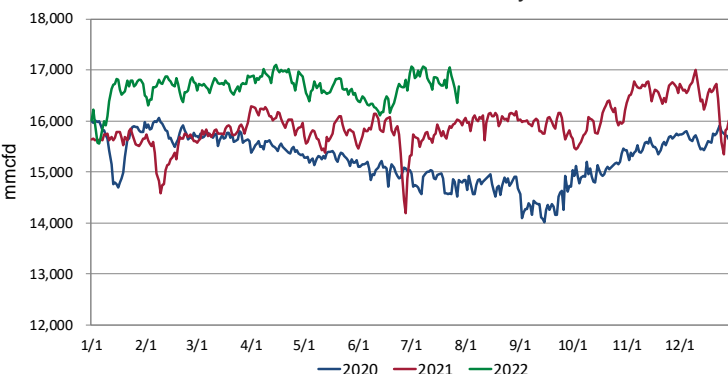
Spring Rock Natural Gas Production Forecast

Western Canada Regional Analysis (cont.)

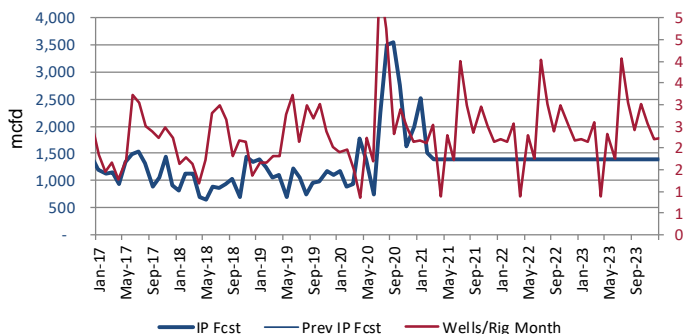
Biggest Impact / Risks / Assumptions

Based on pipe data, Western Canada came in ~355 mmcf above our previous forecast for June and came in ~350 mmcf above for July (as we had assumed outages would be higher than what actualized). Due to Province-reported production actualizing higher than our pipe models have been suggesting, we adjusted our pipe models higher by an average of 200 mmcf back to April 2021. With our updated pipe models, we saw a 17.1 bcf/d in April and a 17.1 bcf/d last week (the last time we saw daily production that high in Western Canada was in April 2007); we currently have production getting to 17.6 bcf/d by the end of the year. Alberta rigs are running 44% higher than they were at this time last year, the highest levels we've seen since 2018. Most of the production growth has been coming from and will continue to come from this Province. British Columbia rig count is running about 43% below 2021 levels currently. We continue to look at infrastructure capacity for the region, as 2023 exit rates are above what we currently believe are physical capacity constraints.

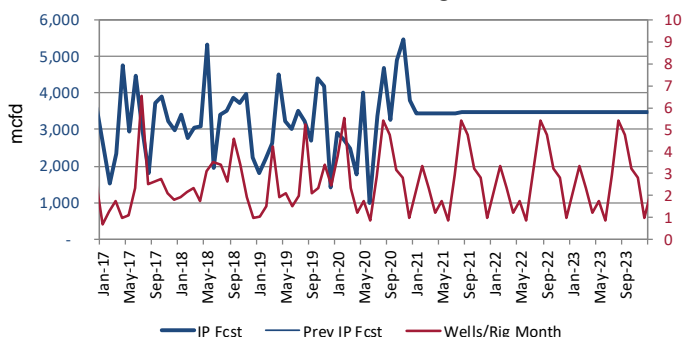
Western Canada Historical Daily Production



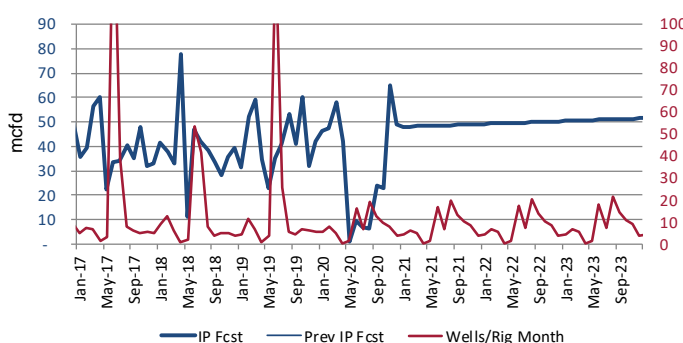
Alberta IP's vs. Rig Efficiencies



British Columbia IP's vs. Rig Efficiencies



Saskatchewan IP's vs. Rig Efficiencies



Data Breakdown by Area within Western Canada

7/29/2022 Alberta	Dry Production		Rigs		Avg IP's mmcf	Well Count	AECO Price
	mmcf	Yr/Yr	Gas	Oil			
Summer '22	10,618	632	49	73	1,400	2,044	\$ 4.83
Winter '22/23	11,448	1,208	67	109	1,400	1,919	\$ 5.30
Summer '23	11,969	1,351	46	78	1,400	2,118	\$ 3.52
2022	10,644	688	54	80	1,400	3,721	\$ 5.08
2023	11,886	1,242	54	87	1,400	3,841	\$ 4.04

7/29/2022 B. C.	Dry Production		Rigs		Avg IP's mmcf	Well Count	AECO Price
	mmcf	Yr/Yr	Gas	Oil			
Summer '22	5,973	294	17	-	3,475	278	\$ 4.83
Winter '22/23	5,871	(207)	16	-	3,475	217	\$ 5.30
Summer '23	5,998	25	16	-	3,475	292	\$ 3.52
2022	5,984	262	16	-	3,475	474	\$ 5.08
2023	5,977	(7)	16	-	3,475	488	\$ 4.04

7/29/2022 Saskatchewan	Dry Production		Rigs		Avg IP's mmcf	Well Count	AECO Price
	mmcf	Yr/Yr	Gas	Oil			
Summer '22	336	11	2	26	50	1,725	\$ 4.83
Winter '22/23	359	21	2	37	50	1,226	\$ 5.30
Summer '23	358	22	2	24	51	1,850	\$ 3.52
2022	340	15	2	29	50	2,702	\$ 5.08
2023	362	22	2	28	51	2,973	\$ 4.04

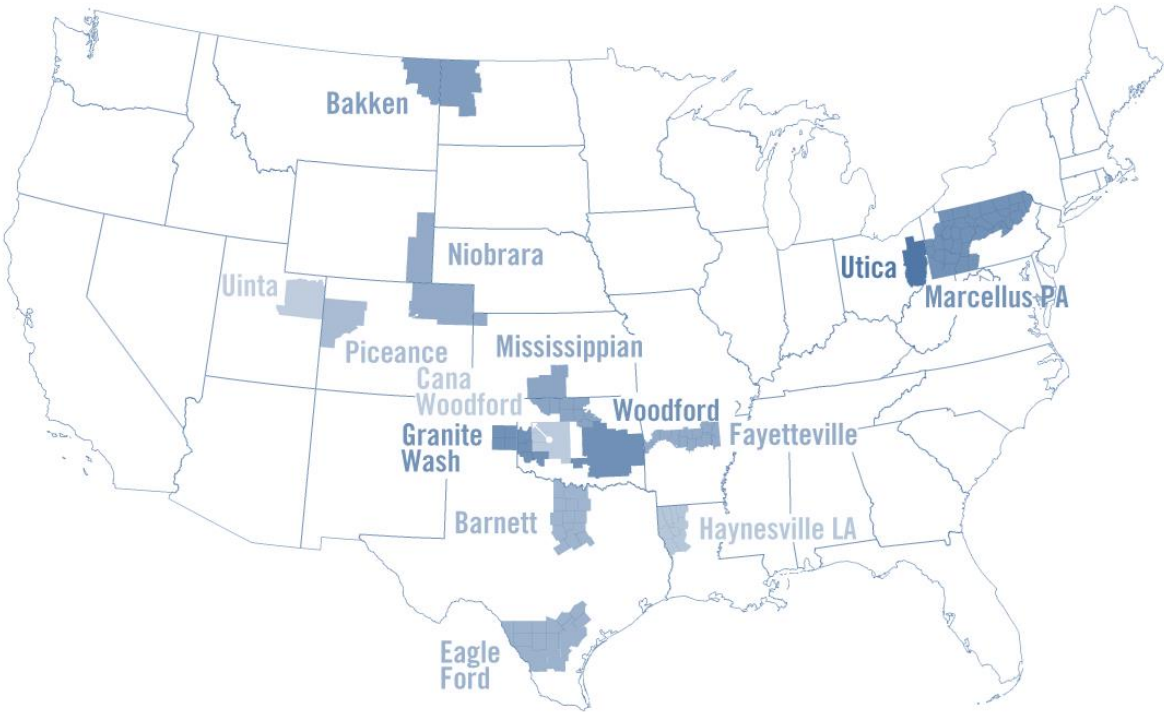
Eastern Canada

There is no gas production currently flowing in Eastern Canada.

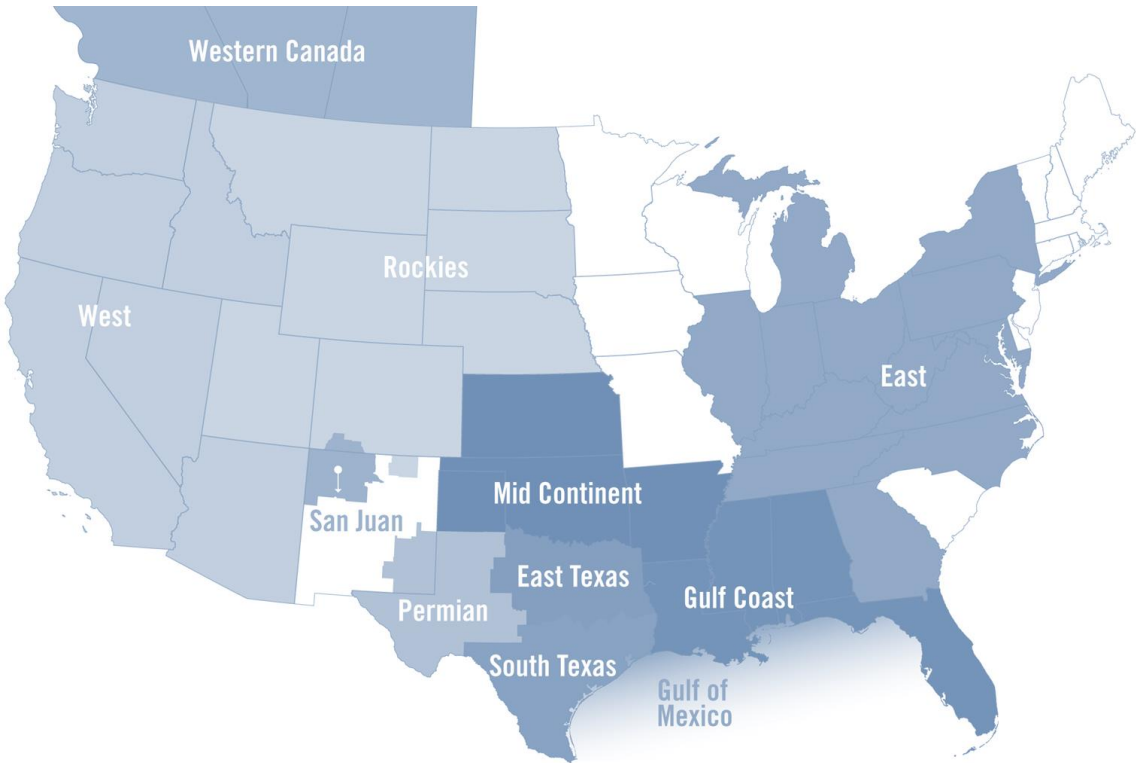
7/29/2022 Nova Scotia	Dry Production	
	mmcf	Yr/Yr
Summer '22	-	-
Winter '22/23	-	-
Summer '23	-	-
2022	-	-
2023	-	-



US Shale / New Plays Map



Regional Map





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Data sources for this report are as follows. All raw rig data is sourced from RigData for the United States and Baker Hughes for Canada. NYMEX strips are sourced from CME Group. Regional price strips are sourced from NGL. All raw production and well data is sourced from HPDI. Pipe flow production used to calibrate real time production is sourced from Genscape's NatGas Analyst tool. All EIA 914 data is sourced from the Energy Information Administration. All company transcript quotes were taken from Seeking Alpha, at www.SeekingAlpha.com.

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