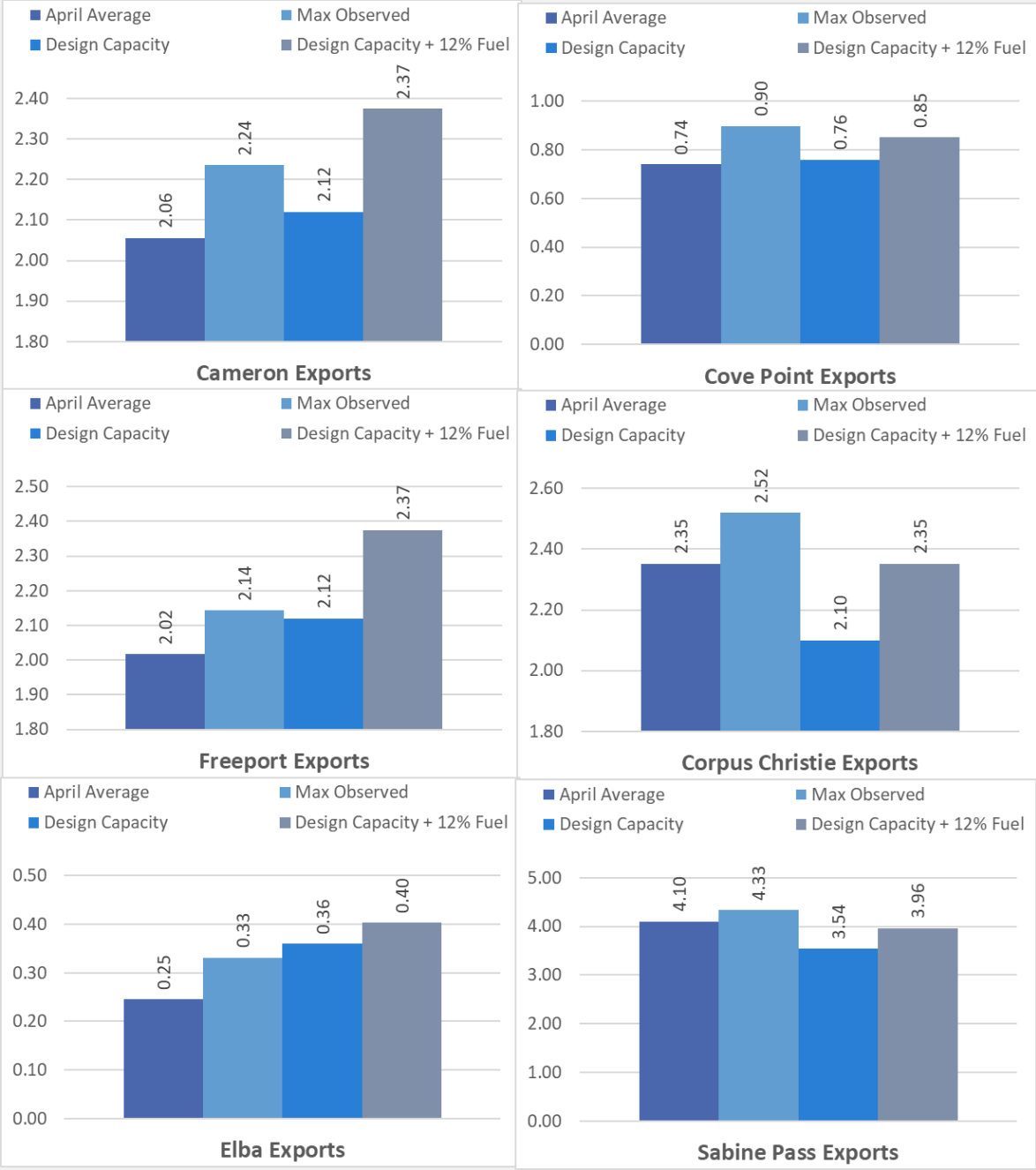


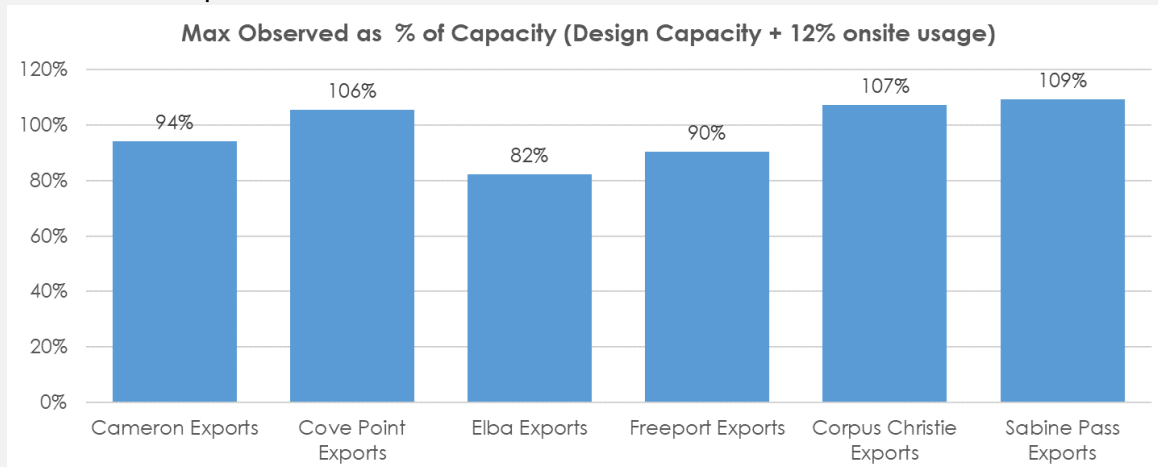
For this weekend's report, we have an update on LNG economics and forward margins.

US LNG demand has had a record-setting month in April. Feedgas deliveries to US LNG export facilities have averaged 11.5 Bcf/d. At these levels, most plants are operating above 90% of their observed peak levels. Below is a chart showing average April feedgas volumes vs observed peak levels and design capacity. As can be seen, April flows are strong but there is some upside to the flows of each plant. The coincidental peak of the observed peak level is 12.4 Bcf/d; hence it is possible to see flows at these levels this summer.



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Another thing to note is that most of the plants can ramp up above their design capacity. The chart below shows the max observed for each plant vs. their built feedgas capacity (EIA stated design capacity + 12% onsite usage). The two Cheniere-owned plants can run at 107 to 109% of its design capacity. So in the case of extended maintenance for any one plant, the collective effort of all the other plants could make up the lost volumes.

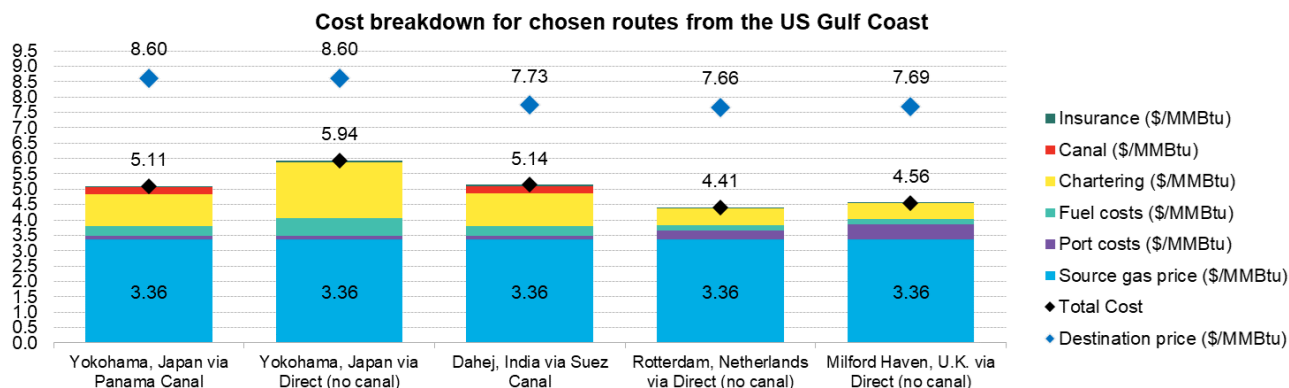


With May on the horizon, the market is expecting some strong summer LNG exports out of the US unlike last summer when we saw cargo cancellations due to a breakdown in demand and price.

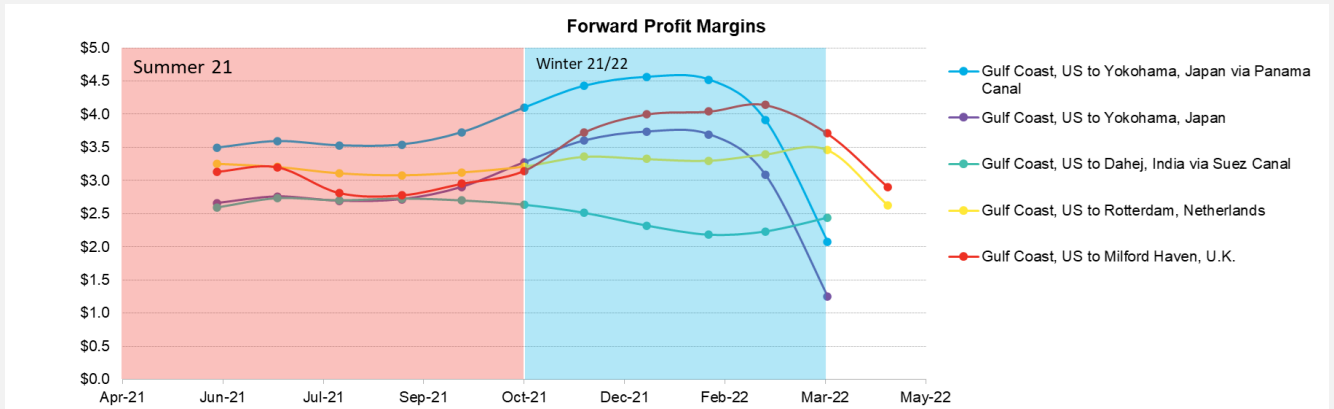
European and Asian natural gas prices are being supported by low storage inventories in Europe and strong demand growth in Asia. Natural Gas forward strip pricing for the remainder of summer (June through Oct) at TTF currently sits at \$7.60/MMBtu and JKM is slightly higher at \$8.75/MMBtu. Even with the move higher at Henry Hub to \$2.98/MMBtu this past week, spreads to both Europe and Asia are more than enough for a positive netback to any US Gulf Coast shipper.

To give some indication of how deep in the money some of the major LNG routes are, we turned to the BNEF LNG calculator and ran some numbers. The first chart below shows the total cost to ship out of the Gulf Coast versus the destination price for June. The cost of the source gas cost is HHub + 15%.

As can be seen, each route is well in the money to flow.

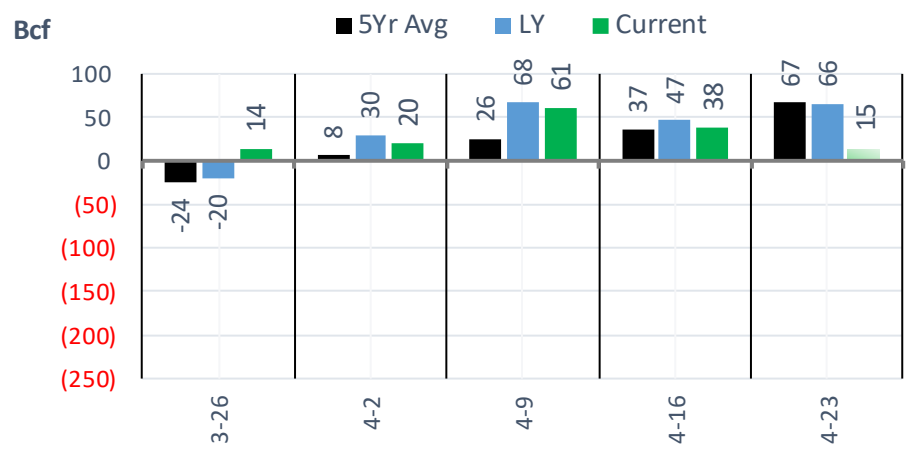


Here are the netback calculations for each route for the next 12 months. It's clear that US LNG is well in the money to flow to all these destinations for the rest of summer and next winter.

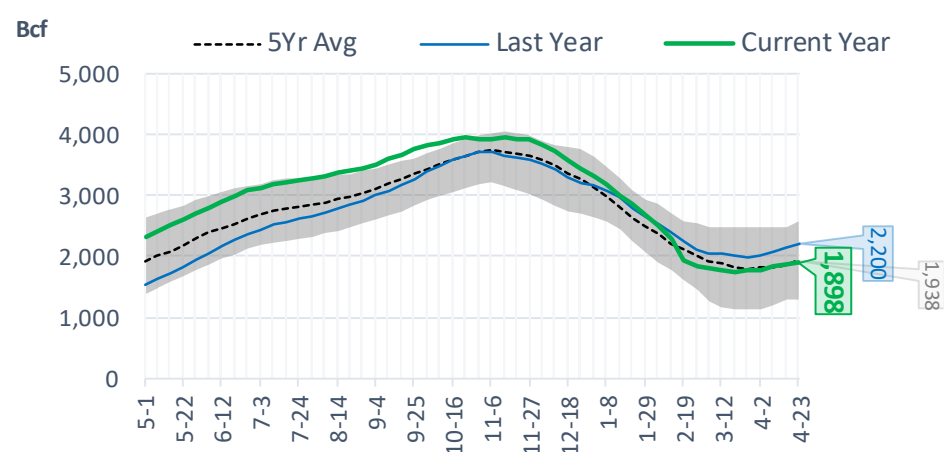


EIA Storage Report

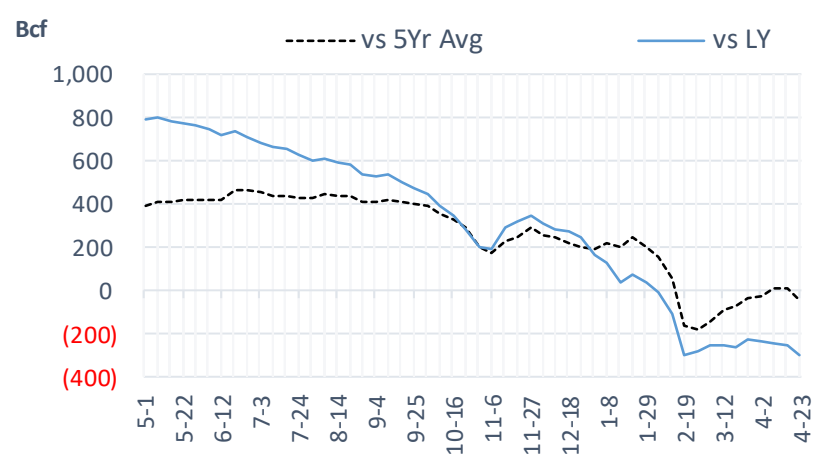
Total Lower 48 YoY Weekly Change



Total Lower 48 Storage Levels



Total Lower 48 LY Surplus/Deficit

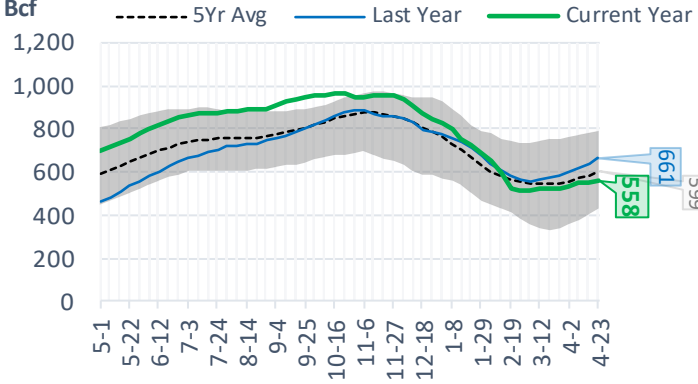


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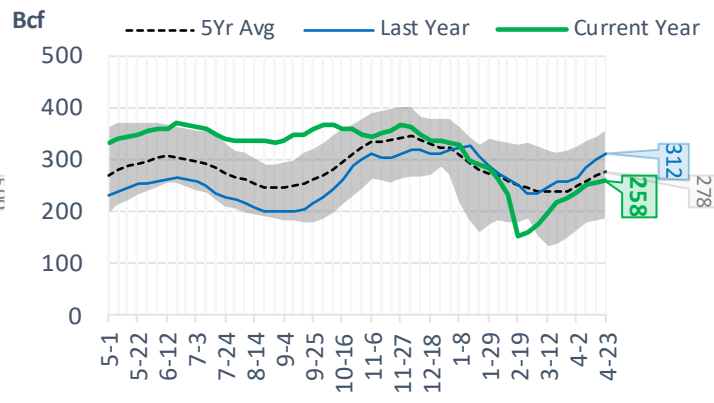
Natural Gas Storage Stats - Last 5 Weeks

Week Ending	Current 23-Apr	Week - 1 16-Apr	Week - 2 9-Apr	Week - 3 2-Apr	Week - 4 26-Mar	Week - 5 19-Mar
Total Lower 48 Storage Level	1898	1883	1845	1784	1764	1750
Weekly Change	+15	+38	+61	+20	+14	-32
vs LY	-302	-251	-242	-235	-225	-259
vs 5Yr Avg	-40	+12	+11	-24	-36	-74
S. Central Salt Storage Level	258	256	251	235	226	215
Weekly Change	+2	+5	+16	+9	+11	+18
vs LY	-54	-43	-32	-29	-30	-41
vs 5Yr Avg	-20	-12	-7	-13	-13	-21
S. Central NonSalt Storage Level	558	554	547	533	523	519
Weekly Change	+4	+7	+14	+10	+4	0
vs LY	-103	-84	-76	-71	-60	-52
vs 5Yr Avg	-41	-28	-22	-25	-25	-23
Midwest Storage Level	427	421	414	398	401	405
Weekly Change	+6	+7	+16	-3	-4	-21
vs LY	-77	-71	-71	-77	-77	-90
vs 5Yr Avg	+15	+20	+16	-2	-6	-19
East Storage Level	319	325	311	305	307	307
Weekly Change	-6	+14	+6	-2	0	-21
vs LY	-85	-75	-86	-77	-77	-93
vs 5Yr Avg	-7	+16	+8	+2	-3	-22
Mountain Storage Level	119	118	118	115	112	112
Weekly Change	+1	0	+3	+3	0	-2
vs LY	+17	+22	+23	+23	+20	+19
vs 5Yr Avg	+6	+9	+11	+9	+6	+6
Pacific Storage Level	217	210	205	198	194	193
Weekly Change	+7	+5	+7	+4	+1	-6
vs LY	0	+1	+2	-4	-3	-2
vs 5Yr Avg	+7	+7	+7	+4	+5	+7

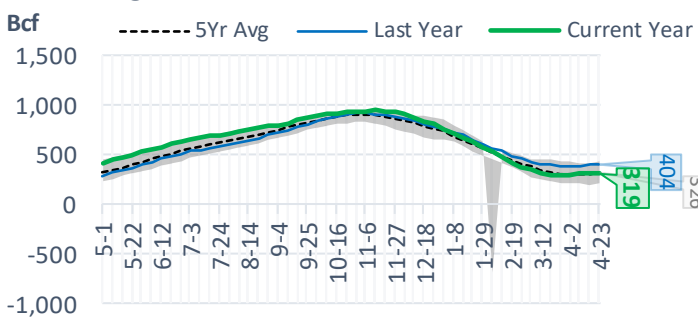
NonSalt Storage Levels



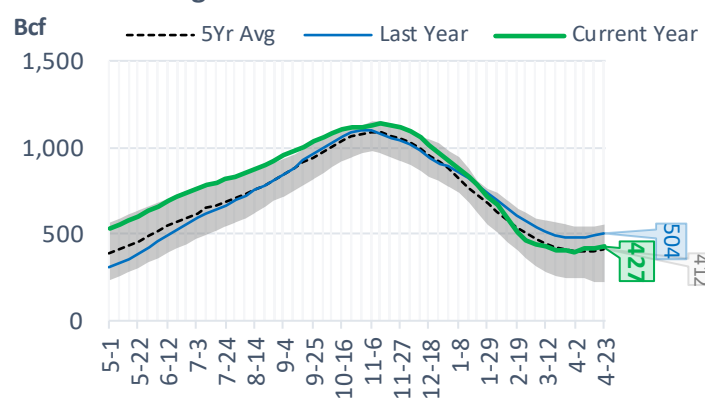
Salt Storage Levels



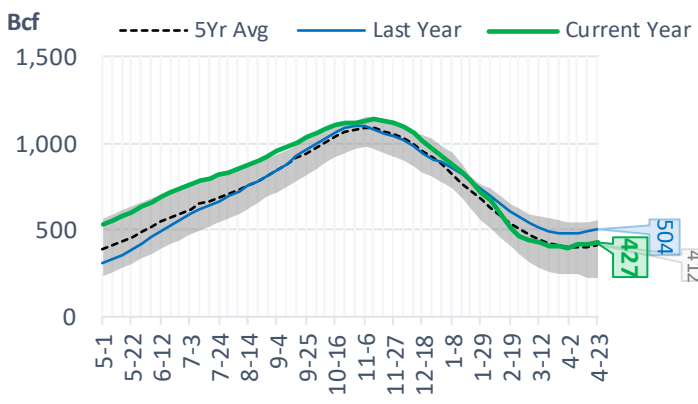
East Storage Levels



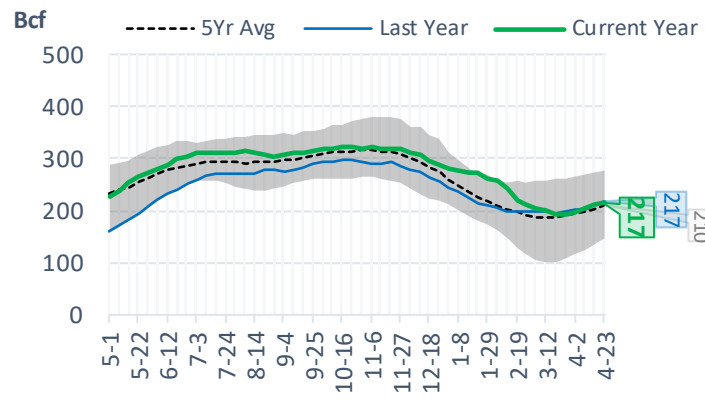
Midwest Storage Levels



Midwest Storage Levels



Pacific Storage Levels



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EIA Storage Week Balances

	26-Mar	2-Apr	9-Apr	16-Apr	23-Apr	30-Apr	WoW	vs. 4W
Lower 48 Dry Production	92.0	92.5	92.0	91.4	90.6	91.0	▲ 0.4	▼ -0.6
Canadian Imports	4.5	4.5	4.2	4.3	5.3	4.6	▼ -0.7	▲ 0.0
L48 Power	24.1	24.6	23.2	24.6	25.9	26.7	▲ 0.8	▲ 2.1
L48 Residential & Commercial	24.9	23.2	18.5	18.5	23.9	16.4	▼ -7.5	▼ -4.6
L48 Industrial	20.2	21.2	21.4	21.3	19.6	19.8	▲ 0.2	▼ -1.0
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.0	5.0	5.0	▲ 0.0	▼ 0.0
L48 Pipeline Distribution	2.3	2.3	2.1	2.1	2.5	2.1	▼ -0.3	▼ -0.1
L48 Regional Gas Consumption	76.6	76.4	70.3	71.6	76.8	70.0	▼ -6.8	▼ -3.7
Net LNG Exports	11.6	11.7	11.5	11.4	11.6	11.4	▼ -0.2	▼ -0.1
Total Mexican Exports	6.6	6.4	6.2	7.3	6.8	6.7	▼ -0.1	▲ 0.0
Implied Daily Storage Activity	1.7	2.4	8.3	5.4	0.7	7.4	6.7	
EIA Reported Daily Storage Activity	2.0	2.9	8.7	5.4	2.1			
Daily Model Error	-0.3	-0.4	-0.5	0.0	-1.5			

Monthly Balances

	2Yr Ago May-19	LY May-20	Dec-20	Jan-21	Feb-21	Mar-21	MTD Apr-21	MoM	vs. LY
Lower 48 Dry Production	90.1	86.4	91.0	90.5	85.1	92.0	92.5	▲ 0.5	▲ 2.0
Canadian Imports	4.7	3.9	5.8	6.3	6.4	4.7	5.7	▲ 1.0	▼ -0.6
L48 Power	26.9	26.9	28.0	28.1	27.8	25.0	26.7	▲ 1.7	▼ -1.4
L48 Residential & Commercial	12.8	12.7	40.0	43.8	47.7	28.3	32.6	▲ 4.4	▼ -11.1
L48 Industrial	22.7	18.9	23.3	23.5	22.1	20.1	22.6	▲ 2.5	▼ -0.8
L48 Lease and Plant Fuel	5.0	4.8	5.0	5.1	4.7	5.1	5.1	▲ 0.0	▲ 0.0
L48 Pipeline Distribution	2.1	2.0	3.1	3.2	3.4	2.5	2.9	▲ 0.4	▼ -0.3
L48 Regional Gas Consumption	69.4	65.3	99.4	103.7	105.7	81.0	90.0	▲ 9.0	▼ -13.7
Net LNG Exports	5.6	6.7	11.0	10.5	8.4	11.1	11.9	▲ 0.8	▲ 1.4
Total Mexican Exports	5.0	4.8	5.8	6.2	5.7	6.5	5.8	▼ -0.7	▼ -0.3
Implied Daily Storage Activity	14.8	13.6	-19.5	-23.5	-28.3	-1.9	-9.5		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

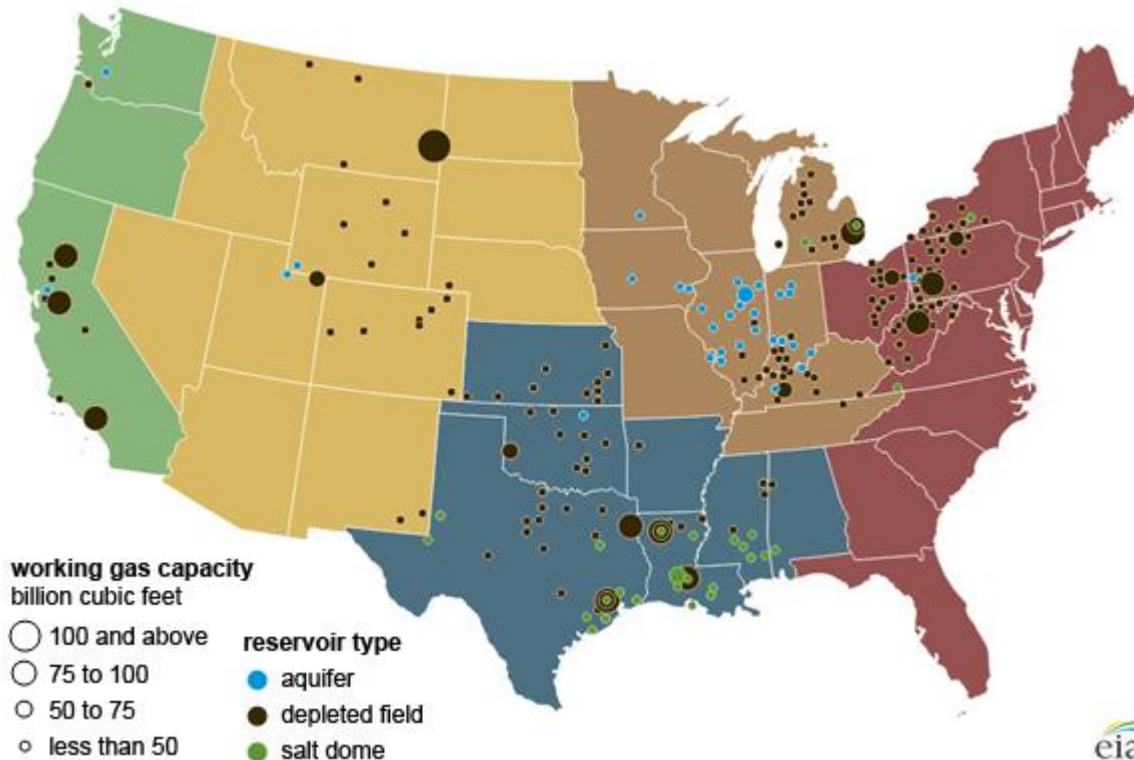
Regional S/D Models Storage Projection

Week Ending 30-Apr

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	7.1	1.2	8.3	58
East	0.4	1.7	2.1	15
Midwest	2.4	0.1	2.6	18
Mountain	3.5	-3.0	0.5	4
South Central	-0.4	2.9	2.5	17
Pacific	1.2	-0.6	0.6	4

*Adjustment Factor is calculated based on historical regional deltas

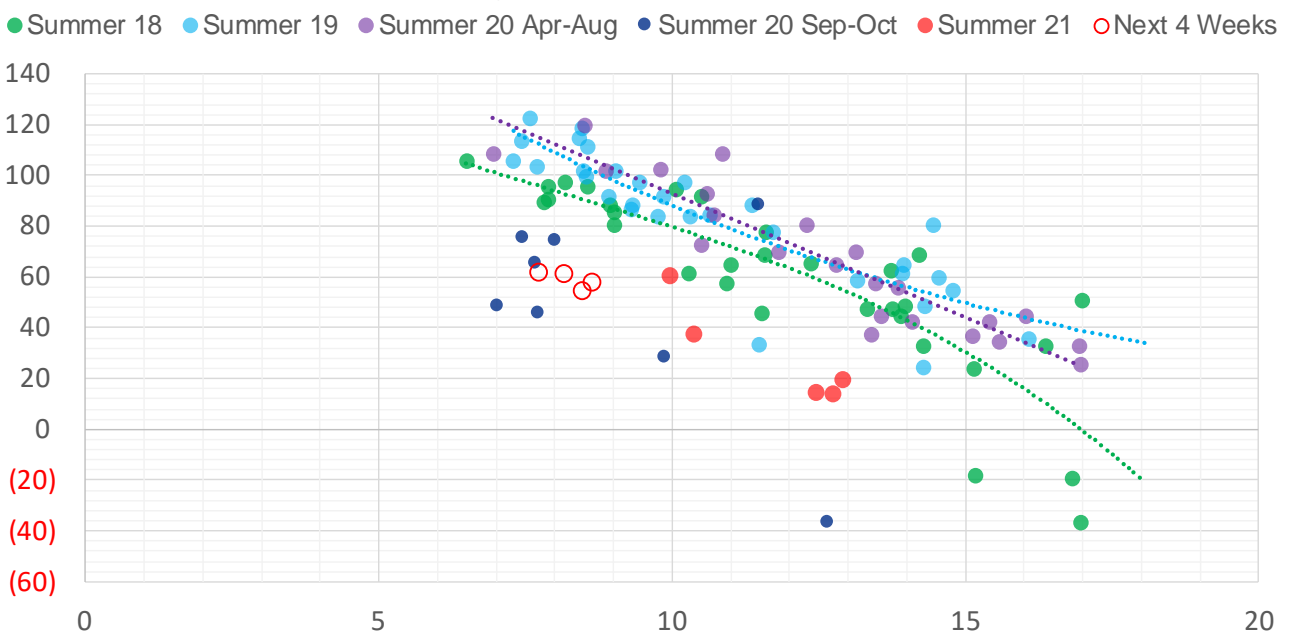
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

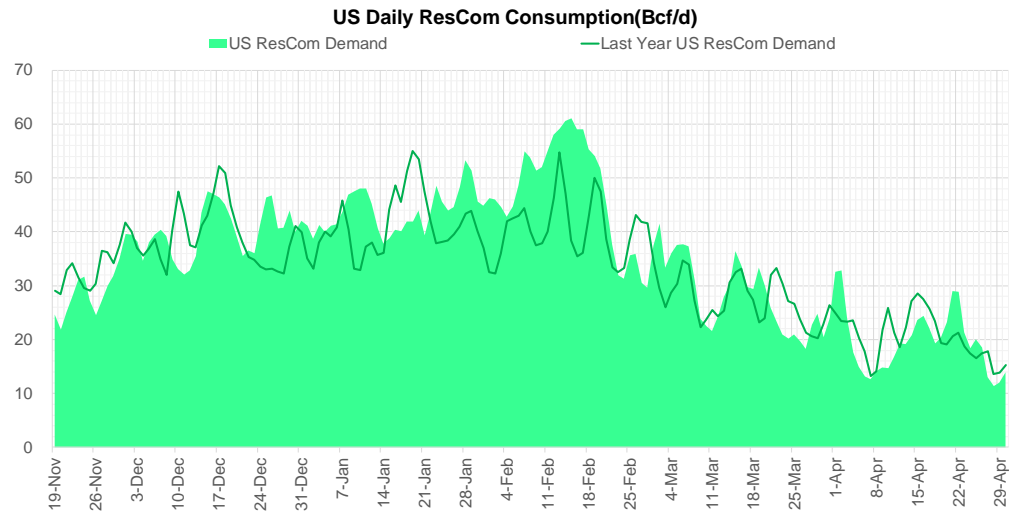
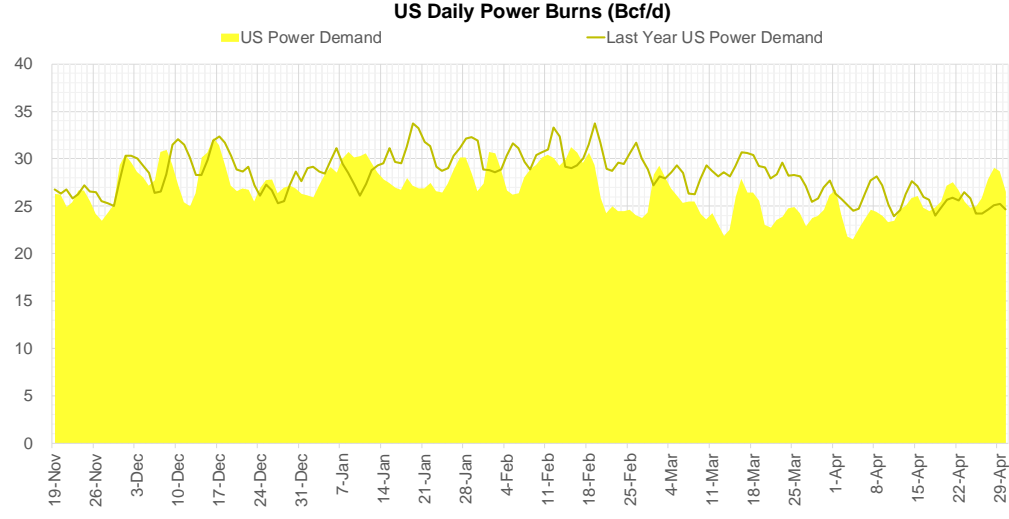
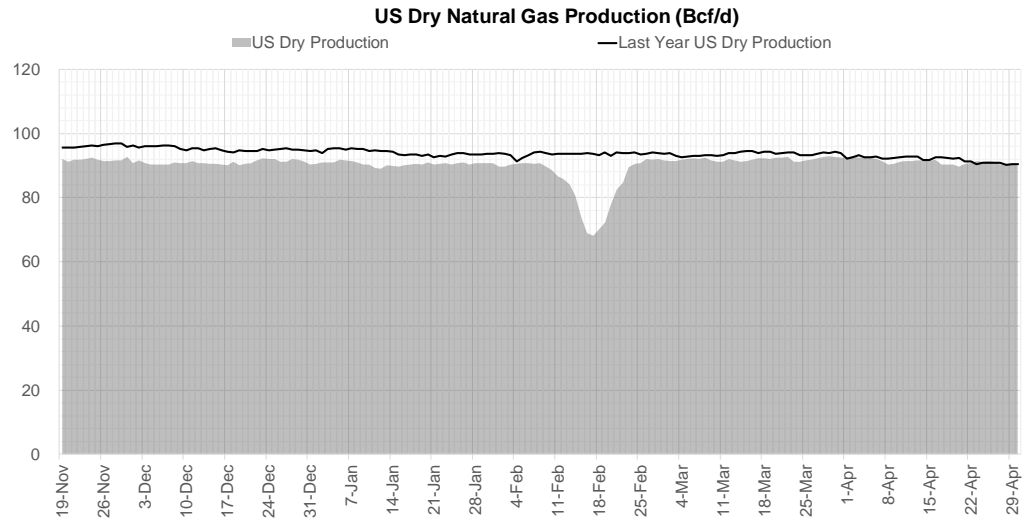
Next report and beyond		
Week Ending	Temp	Week Storage Projection
07-May	8.2	61
14-May	8.5	54
21-May	7.8	61

Weather Storage Model - Next 4 Week Forecast



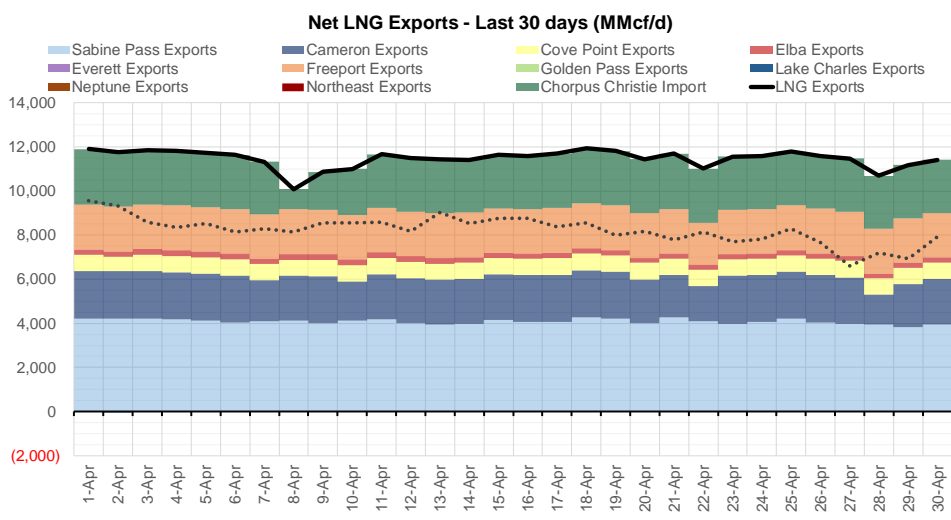
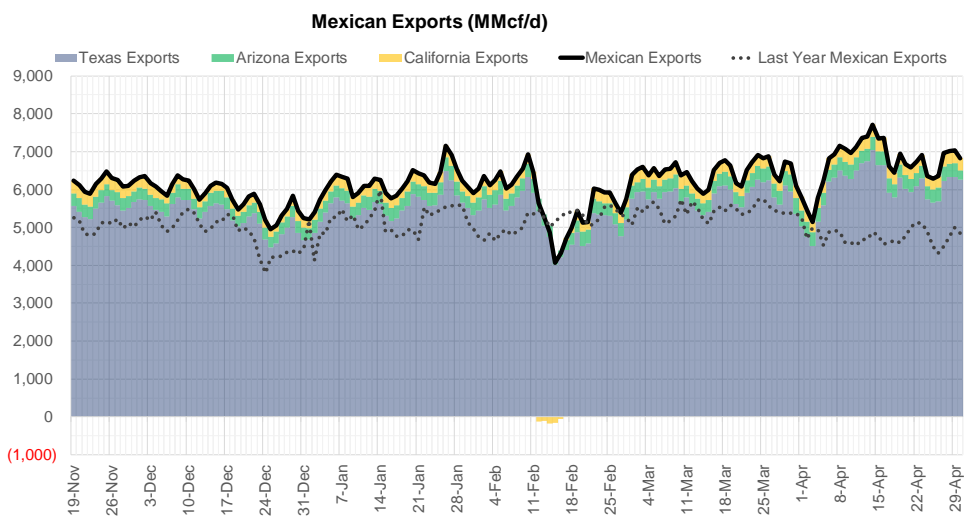
Note: this is not our official end of season forecast. This chart signifies where storage levels end with 10-year normal weather and current market tightness relative to last year

Supply – Demand Trends



Source: Bloomberg

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Source: Bloomberg

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Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

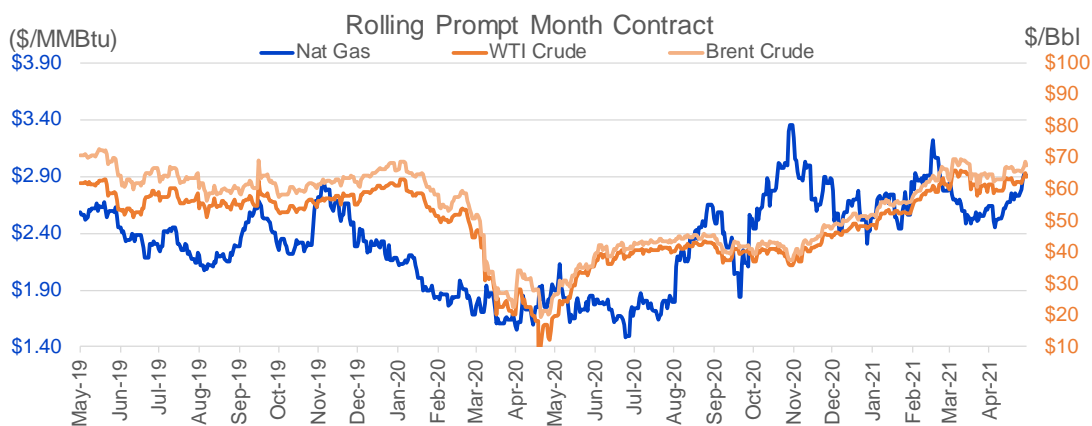
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
6	2021	C	3.25	7449	10	2021	C	4.00	39655
6	2021	C	3.05	4101	8	2021	C	4.00	32479
12	2021	C	4.00	3500	6	2021	C	3.00	32053
8	2021	C	3.25	3302	10	2021	C	3.25	31208
6	2021	P	2.60	3268	6	2021	P	2.50	29441
12	2021	P	2.75	3050	8	2021	C	3.50	28677
6	2021	C	2.90	2832	7	2021	C	4.00	28248
6	2021	P	2.75	2696	6	2021	C	4.00	27949
12	2021	C	3.30	2500	6	2021	C	3.25	27019
8	2021	C	3.50	2462	6	2021	P	2.65	26751
7	2021	C	3.25	2354	10	2021	C	5.00	26619
6	2021	C	3.00	2328	7	2021	C	3.25	25700
7	2021	P	2.75	2021	8	2021	C	3.25	24333
6	2021	P	2.50	1858	10	2021	P	2.50	23523
6	2021	C	3.30	1759	6	2021	C	3.50	22196
6	2021	P	2.80	1704	10	2021	C	3.50	21924
8	2021	C	3.00	1699	9	2021	C	3.50	20741
6	2021	P	2.40	1692	7	2021	C	3.50	20290
8	2021	C	3.75	1666	10	2021	C	3.00	20264
6	2021	C	3.10	1627	8	2021	P	2.50	19580
7	2021	C	3.00	1484	10	2021	P	2.25	19077
6	2021	P	2.65	1324	12	2021	C	4.00	19065
11	2021	P	2.25	1200	6	2021	P	2.25	19055
12	2021	P	2.25	1200	4	2022	C	3.00	18974
6	2021	C	3.15	1194	8	2021	P	2.25	18275
9	2021	C	4.00	1142	7	2021	P	2.50	17854
12	2021	C	3.50	1100	9	2021	P	2.00	17819
8	2021	P	2.75	1045	6	2021	P	2.75	17738
7	2021	P	2.60	1017	9	2021	C	4.00	17668
10	2021	C	4.00	1012	9	2021	C	3.25	17132
7	2021	P	3.00	999	6	2021	P	2.00	17060
8	2021	P	2.60	901	10	2021	P	2.00	17000
6	2021	P	2.70	899	11	2021	C	4.00	16426
10	2021	P	2.60	750	7	2021	P	2.00	16035
9	2021	C	3.25	727	7	2021	C	3.00	15660
6	2021	C	3.50	710	6	2021	C	3.75	15656
7	2021	P	2.50	689	8	2021	P	2.00	15295
11	2021	C	4.00	650	3	2022	C	4.00	15187
6	2021	P	2.85	648	8	2021	C	3.00	14955
9	2021	P	2.60	638	6	2021	C	2.75	14822
8	2021	P	2.20	625	9	2021	P	2.50	14519
6	2021	P	2.90	625	12	2021	P	2.00	14031
3	2022	C	4.00	603	10	2021	C	4.50	13934
7	2021	C	3.50	597	9	2021	P	1.90	13733
10	2021	C	3.50	554	3	2022	C	5.00	13725
7	2021	C	2.95	552	6	2021	P	2.40	13429
10	2021	P	2.75	551	10	2021	C	6.00	13182
10	2021	C	3.25	531	5	2022	C	3.00	13110
12	2021	P	2.50	525	6	2021	P	2.60	13086
					6	2021	P	2.55	12975.5

Source: CME, Nasdaq, ICE

Nat Gas Futures Open Interest CME, ICE and Nasdaq Combined

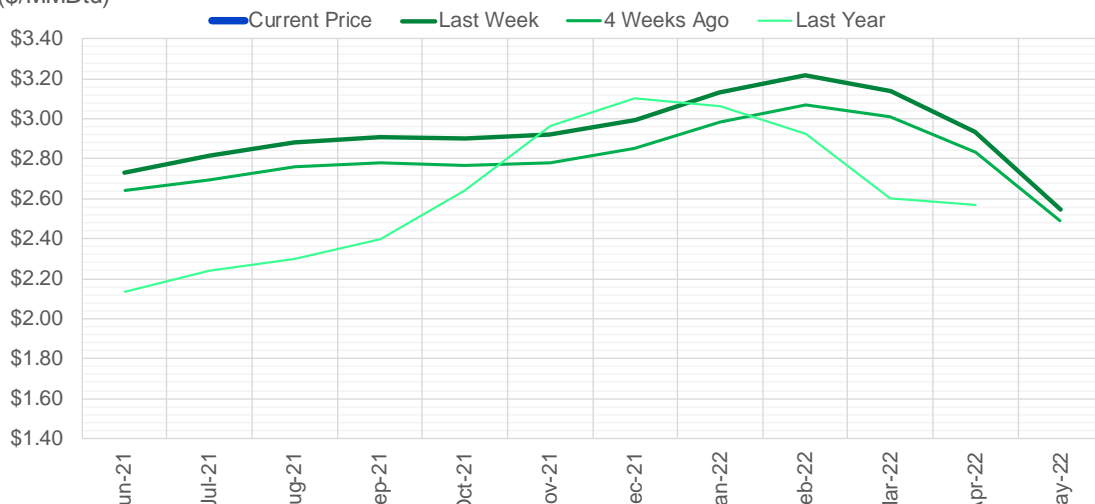
CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM			
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change
JUN 21	203572	204540	-968	JUN 21	87973	87572	402
JUL 21	193985	191903	2082	JUL 21	86995	87064	-69
AUG 21	73677	73396	281	AUG 21	79719	79259	460
SEP 21	109198	110295	-1097	SEP 21	69462	69247	215
OCT 21	127495	128826	-1331	OCT 21	86948	86275	673
NOV 21	66098	65522	576	NOV 21	61236	60798	438
DEC 21	45986	46294	-308	DEC 21	59284	59087	197
JAN 22	72544	71931	613	JAN 22	65548	65478	70
FEB 22	22954	22896	58	FEB 22	47245	47167	78
MAR 22	46702	46164	538	MAR 22	52398	52225	173
APR 22	48466	49052	-586	APR 22	47440	47417	23
MAY 22	28107	27845	262	MAY 22	41924	41877	47
JUN 22	16295	16118	177	JUN 22	40142	40069	73
JUL 22	9926	9717	209	JUL 22	40417	40329	89
AUG 22	8848	8801	47	AUG 22	38877	38822	55
SEP 22	9242	9225	17	SEP 22	39538	39439	99
OCT 22	22101	22187	-86	OCT 22	45988	45817	171
NOV 22	10769	10781	-12	NOV 22	35427	35453	-26
DEC 22	10114	10093	21	DEC 22	39723	39664	60
JAN 23	4997	4995	2	JAN 23	22467	22388	79
FEB 23	2714	2712	2	FEB 23	20897	20847	51
MAR 23	4968	4965	3	MAR 23	22584	22534	50
APR 23	5669	5670	-1	APR 23	18496	18473	24
MAY 23	4412	4412	0	MAY 23	18567	18550	17
JUN 23	957	957	0	JUN 23	16973	16950	23
JUL 23	1079	1079	0	JUL 23	17032	17011	21
AUG 23	753	753	0	AUG 23	17176	17171	4
SEP 23	762	761	1	SEP 23	16581	16558	23
OCT 23	1753	1753	0	OCT 23	17405	17234	171
NOV 23	616	1753	-1137	NOV 23	16780	17234	-454

Source: CME, ICE



(\$/MMBtu)

Nat Gas Term Structure




	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22
Current Price	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Last Week	\$2.730	\$2.818	\$2.884	\$2.910	\$2.899	\$2.919	\$2.992	\$3.131	\$3.220	\$3.142	\$2.934	\$2.545
vs. Last Week	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
4 Weeks Ago	\$2.639	\$2.697	\$2.761	\$2.782	\$2.769	\$2.783	\$2.855	\$2.982	\$3.070	\$3.011	\$2.835	\$2.489
vs. 4 Weeks Ago	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Last Year	\$1.890	\$2.134	\$2.242	\$2.302	\$2.396	\$2.643	\$2.965	\$3.104	\$3.063	\$2.925	\$2.604	\$2.569
vs. Last Year	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

	Units	Current Price	vs. Last Week	Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	#N/A	#N/A	#N/A	#N/A
NatGas Oct21/Nov21	\$/MMBtu	#N/A	#N/A	#N/A	#N/A
NatGas Oct21/Jan22	\$/MMBtu	#N/A	#N/A	#N/A	#N/A
NatGas Apr22/Oct22	\$/MMBtu	#N/A	#N/A	#N/A	#N/A
WTI Crude	\$/Bbl	#N/A	#N/A	#N/A	#N/A
Brent Crude	\$/Bbl	#N/A	#N/A	#N/A	#N/A
Fuel Oil, NY Harbour 1%	\$/Bbl	#N/A	#N/A	#N/A	#N/A
Heating Oil	cents/Gallon	#N/A	#N/A	#N/A	#N/A
Propane, Mt. Bel	cents/Gallon	#N/A	#N/A	#N/A	#N/A
Ethane, Mt. Bel	cents/Gallon	#N/A	#N/A	#N/A	#N/A
Coal, PRB	\$/MTon	#N/A	#N/A	#N/A	#N/A
Coal, PRB	\$/MMBtu	#N/A	#N/A	#N/A	#N/A

Source: CME, Bloomberg

Baker Hughes Rig Counts

Rotary Rig Count						Baker Hughes 
4/30/2021						
U.S. Breakout Information	This Week	+/-	Last Week	+/-	Year Ago	
Oil	342	-1	343	17	325	
Gas	96	2	94	15	81	
Miscellaneous	2	1	1	0	2	
Directional	23	4	19	0	23	
Horizontal	398	1	397	24	374	
Vertical	19	-3	22	8	11	
Canada Breakout	This Week	+/-	Last Week	+/-	Year Ago	
Oil	20	3	17	13	7	
Gas	31	-7	38	11	20	
Major Basin Variances	This Week	+/-	Last Week	+/-	Year Ago	
Ardmore Woodford	0	0	0	-4	4	
Barnett	1	0	1	-1	2	
Cana Woodford	12	0	12	8	4	
DJ-Niobrara	7	0	7	0	7	
Eagle Ford	34	1	33	4	30	
Granite Wash	3	0	3	1	2	
Haynesville	45	0	45	13	32	
Marcellus	29	0	29	-1	30	
Permian	224	-2	226	5	219	
Utica	10	0	10	1	9	
Williston	15	0	15	-11	26	