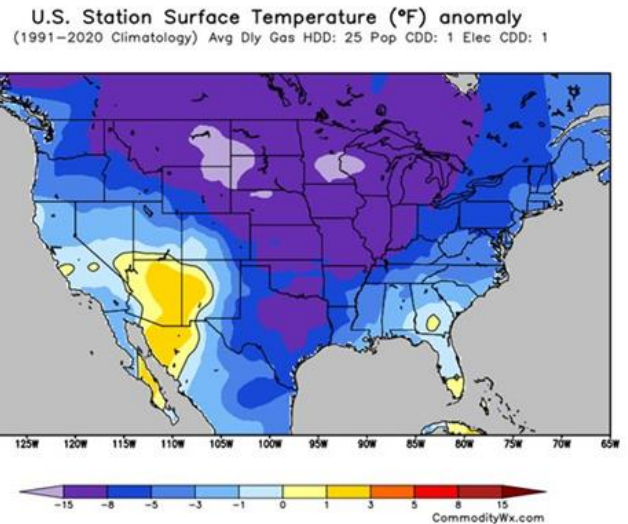
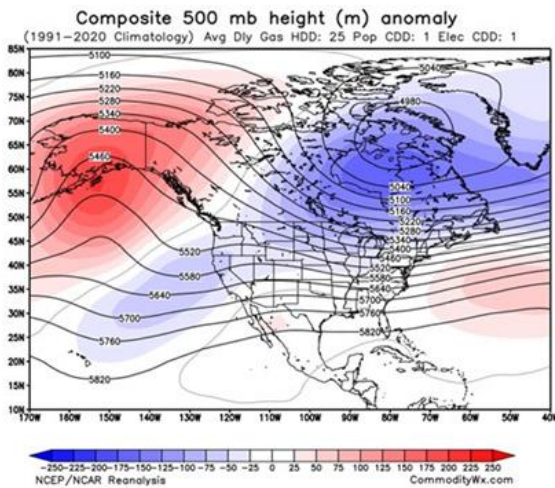


Although most vendors are sticking to an outlook for March related to the La Nina features, there are cool and warm signals.

Here is one point of view [tweeted out by CWG on Friday](#).

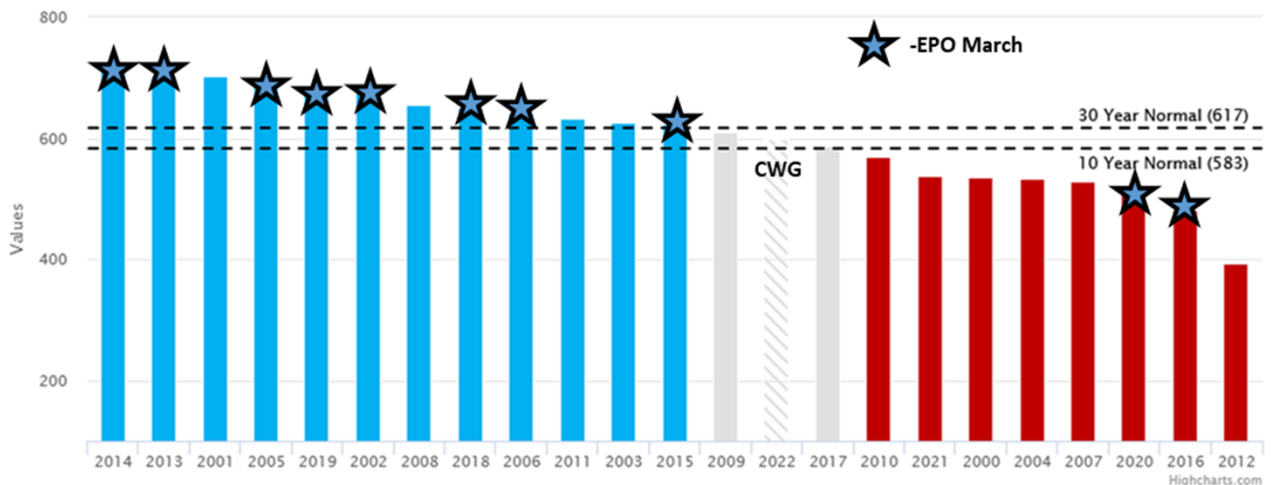
“Moderate -EPO and moderate-strong +AO combined are usually colder signals for U.S. in 1st half of March.”

March 1-15 Historical Dates with Strong -EPO (-1 to -2) and Stronger +AO (+1 to +3)

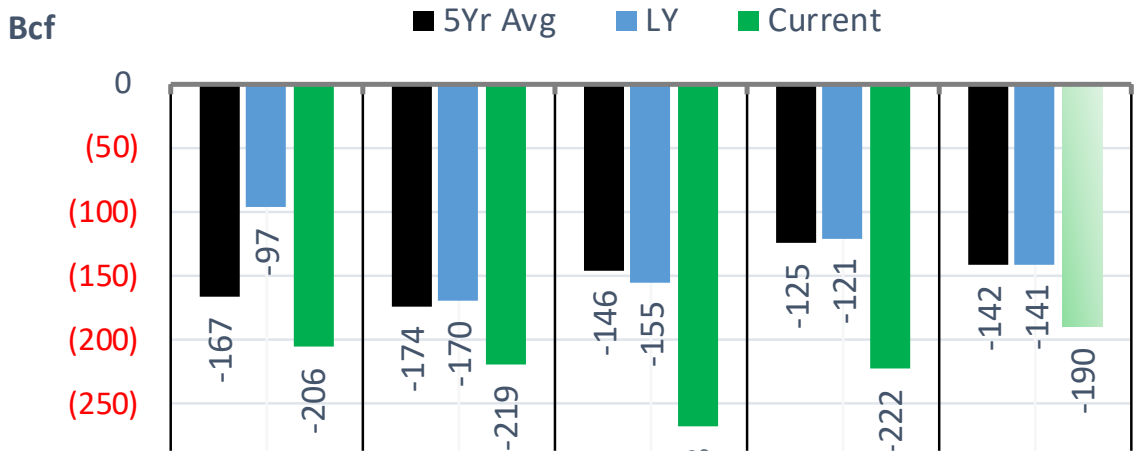


“Most -EPO March outcomes in 2000s have verified colder than CWG's current outlook. Two exceptions (2016, 2020) featured very strong global wind unlike this year's negative levels. We may need to cool down our view by next week.”

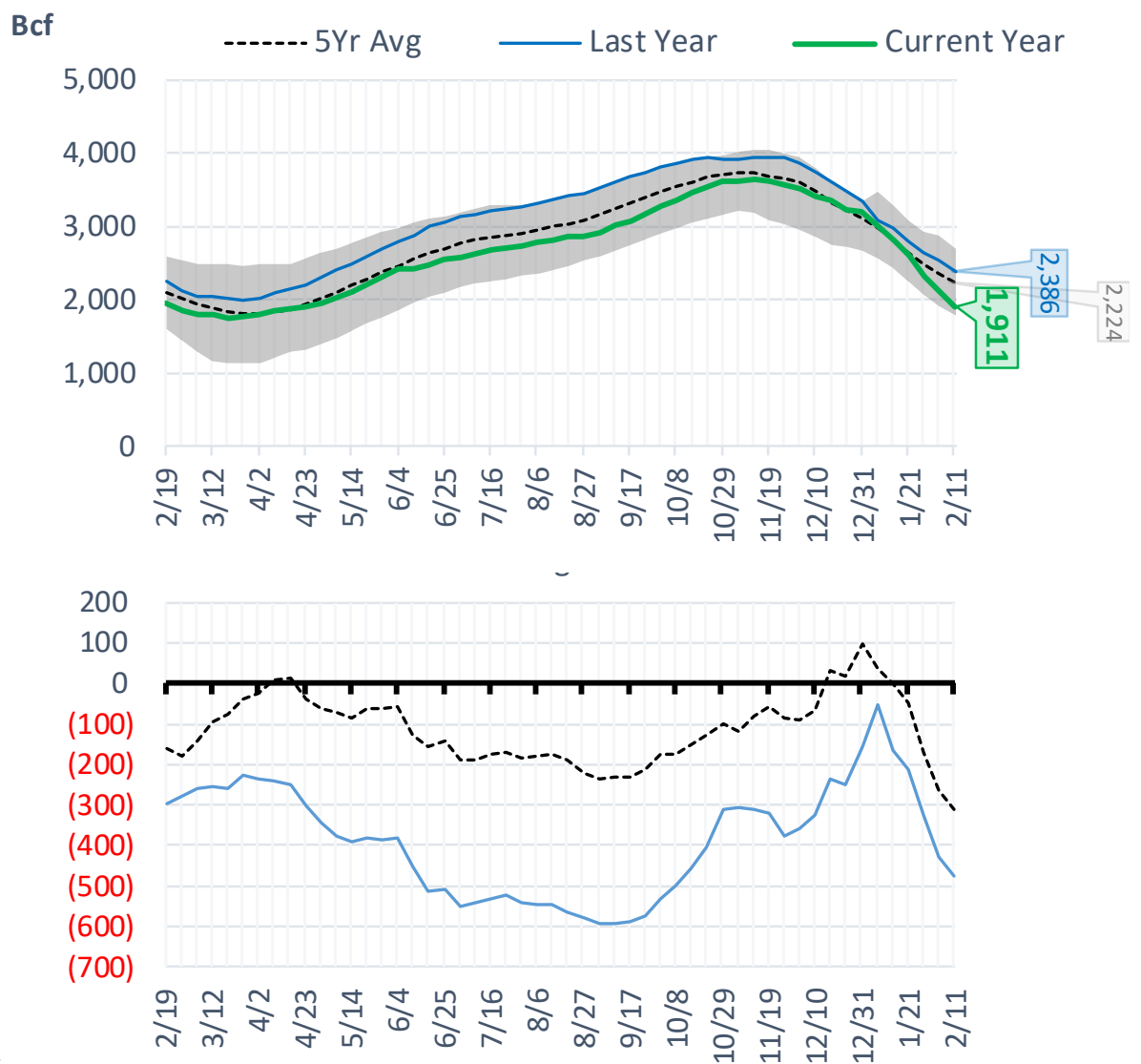
March North America (Lower-48) Natural Gas Weighted HDDs



Total Lower 48 YoY Weekly Change



Total Lower 48 Storage Levels

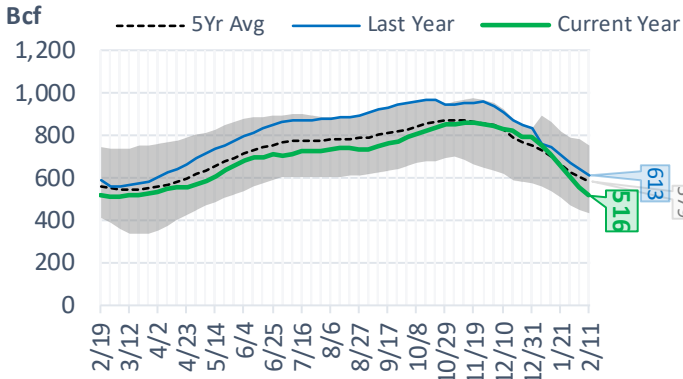


The risk person

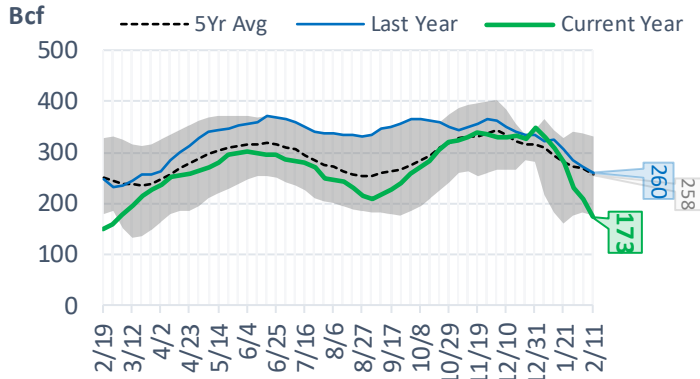
Natural Gas Storage Stats - Last 5 Weeks

Week Ending	Current 11-Feb	Week - 1 4-Feb	Week - 2 28-Jan	Week - 3 21-Jan	Week - 4 14-Jan	Week - 5 7-Jan
Total Lower 48 Storage Level	1911	2101	2323	2591	2810	3016
Weekly Change	-190	-222	-268	-219	-206	-179
vs LY	-475	-426	-325	-212	-163	-54
vs 5Yr Avg	-313	-265	-168	-46	-1	+38
S. Central Salt Storage Level	173	207	231	279	308	330
Weekly Change	-34	-24	-48	-29	-22	-17
vs LY	-87	-65	-55	-27	-18	+9
vs 5Yr Avg	-85	-62	-41	-1	+15	+22
S. Central NonSalt Storage Level	516	556	606	658	711	759
Weekly Change	-40	-50	-52	-53	-48	-37
vs LY	-97	-85	-65	-51	-31	-2
vs 5Yr Avg	-63	-48	-23	-4	+12	+27
Midwest Storage Level	496	552	616	701	770	835
Weekly Change	-56	-64	-85	-69	-65	-58
vs LY	-159	-151	-119	-75	-55	-26
vs 5Yr Avg	-82	-74	-54	-17	-3	+6
East Storage Level	435	485	541	609	669	730
Weekly Change	-50	-56	-68	-60	-61	-37
vs LY	-104	-92	-68	-46	-33	+3
vs 5Yr Avg	-47	-40	-21	+4	+16	+33
Mountain Storage Level	114	121	133	143	151	159
Weekly Change	-7	-12	-10	-8	-8	-13
vs LY	-6	-8	-5	-2	-3	-3
vs 5Yr Avg	-11	-11	-7	-5	-5	-6
Pacific Storage Level	177	181	196	201	201	204
Weekly Change	-4	-15	-5	0	-3	-15
vs LY	-22	-23	-14	-12	-23	-34
vs 5Yr Avg	-26	-28	-22	-24	-35	-44

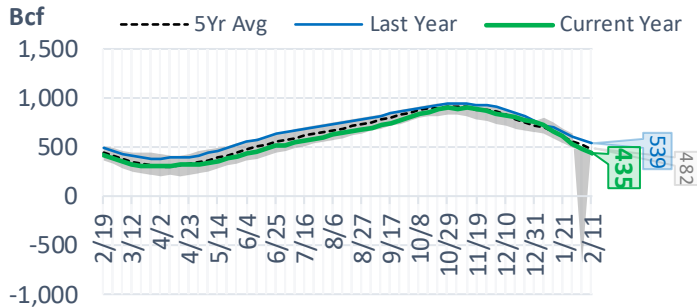
NonSalt Storage Levels



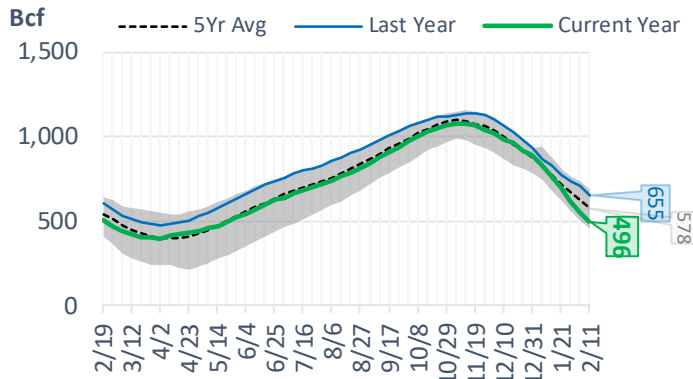
Salt Storage Levels



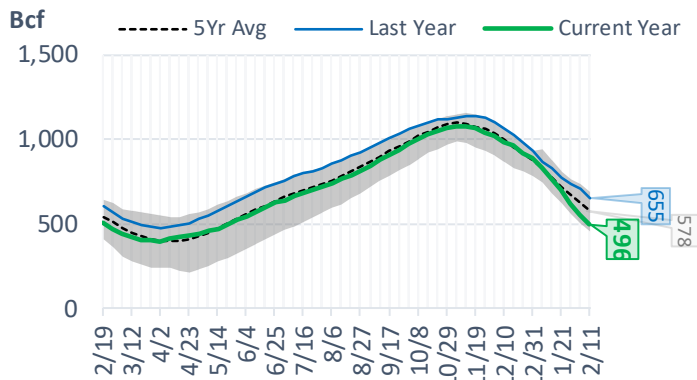
East Storage Levels



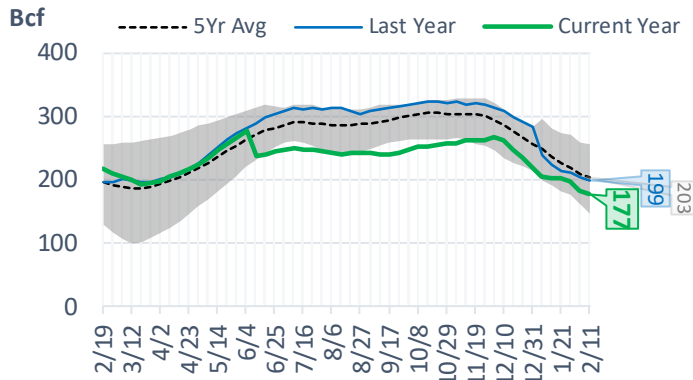
Midwest Storage Levels



Midwest Storage Levels



Pacific Storage Levels



EIA Storage Week Balances

	14-Jan	21-Jan	28-Jan	4-Feb	11-Feb	18-Feb	WoW	vs. 4W
Lower 48 Dry Production	95.0	94.7	94.5	94.4	92.0	96.0	▲ 3.9	▲ 2.1
Canadian Imports	6.5	7.0	7.1	7.1	7.1	6.2	▼ -1.0	▼ -0.9
L48 Power	30.4	30.3	32.1	29.8	29.4	26.6	▼ -2.8	▼ -3.8
L48 Residential & Commercial	46.3	47.1	52.8	48.2	45.0	39.6	▼ -5.4	▼ -8.6
L48 Industrial	26.8	28.0	27.6	28.2	25.8	26.4	▲ 0.5	▼ -1.1
L48 Lease and Plant Fuel	5.2	5.2	5.2	5.2	5.0	5.2	▲ 0.2	▲ 0.1
L48 Pipeline Distribution	3.7	3.8	4.1	3.7	3.5	3.1	▼ -0.4	▼ -0.6
L48 Regional Gas Consumption	112.4	114.3	121.7	115.1	108.8	101.0	▼ -7.8	▼ -14.0
Net LNG Exports	12.3	12.9	12.5	12.1	12.4	13.0	▲ 0.6	▲ 0.5
Total Mexican Exports	6.3	6.4	6.5	6.4	6.1	6.0	▼ -0.2	▼ -0.4
Implied Daily Storage Activity	-29.5	-32.0	-39.0	-32.1	-28.1	-17.8	10.3	
EIA Reported Daily Storage Activity	-29.4	-31.3	-38.3	-31.7	-27.1			
Daily Model Error	-0.1	-0.7	-0.7	-0.4	-1.0			

Monthly Balances

	2Yr Ago Feb-20	LY Feb-21	Oct-21	Nov-21	Dec-21	Jan-22	MTD Feb-22	MoM	vs. LY
Lower 48 Dry Production	94.2	84.3	94.3	95.6	96.9	94.9	93.8	▼ -1.1	▲ 9.5
Canadian Imports	5.3	6.4	5.4	5.3	4.8	6.7	6.7	▼ 0.0	▲ 0.3
L48 Power	30.2	27.6	30.5	29.1	28.4	30.8	28.0	▼ -2.7	▲ 0.4
L48 Residential & Commercial	40.6	48.1	12.4	27.1	32.6	48.3	42.7	▼ -5.6	▼ -5.4
L48 Industrial	25.1	21.1	21.1	24.3	25.1	27.7	26.4	▼ -1.3	▲ 5.3
L48 Lease and Plant Fuel	5.1	4.6	5.2	5.2	5.3	5.2	5.1	▼ -0.1	▲ 0.5
L48 Pipeline Distribution	3.5	3.6	2.4	2.9	3.0	3.8	3.3	▼ -0.5	▼ -0.2
L48 Regional Gas Consumption	104.5	104.9	71.6	88.7	94.4	115.8	105.6	▼ -10.2	▲ 0.6
Net LNG Exports	8.5	8.4	10.6	11.4	12.1	12.4	12.7	▲ 0.3	▲ 4.3
Total Mexican Exports	5.2	5.7	6.6	6.1	6.1	6.3	6.1	▼ -0.2	▲ 0.4
Implied Daily Storage Activity	-18.7	-28.4	10.9	-5.3	-11.0	-32.9	-23.9		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

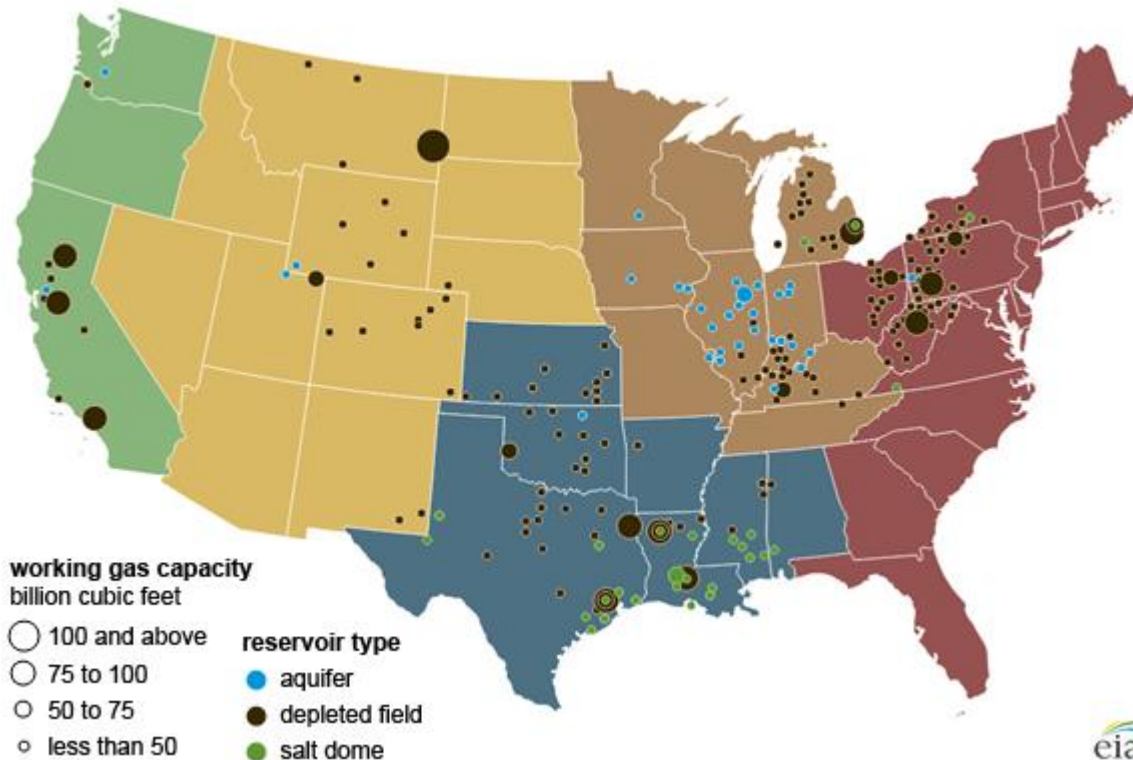
Regional S/D Models Storage Projection

Week Ending 18-Feb

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-17.7	0.8	-16.8	-118
East	-8.0	1.8	-6.1	-43
Midwest	-5.9	-0.2	-6.0	-42
Mountain	2.3	-3.3	-1.0	-7
South Central	-6.5	3.0	-3.4	-24
Pacific	0.4	-0.6	-0.2	-1

*Adjustment Factor is calculated based on historical regional deltas

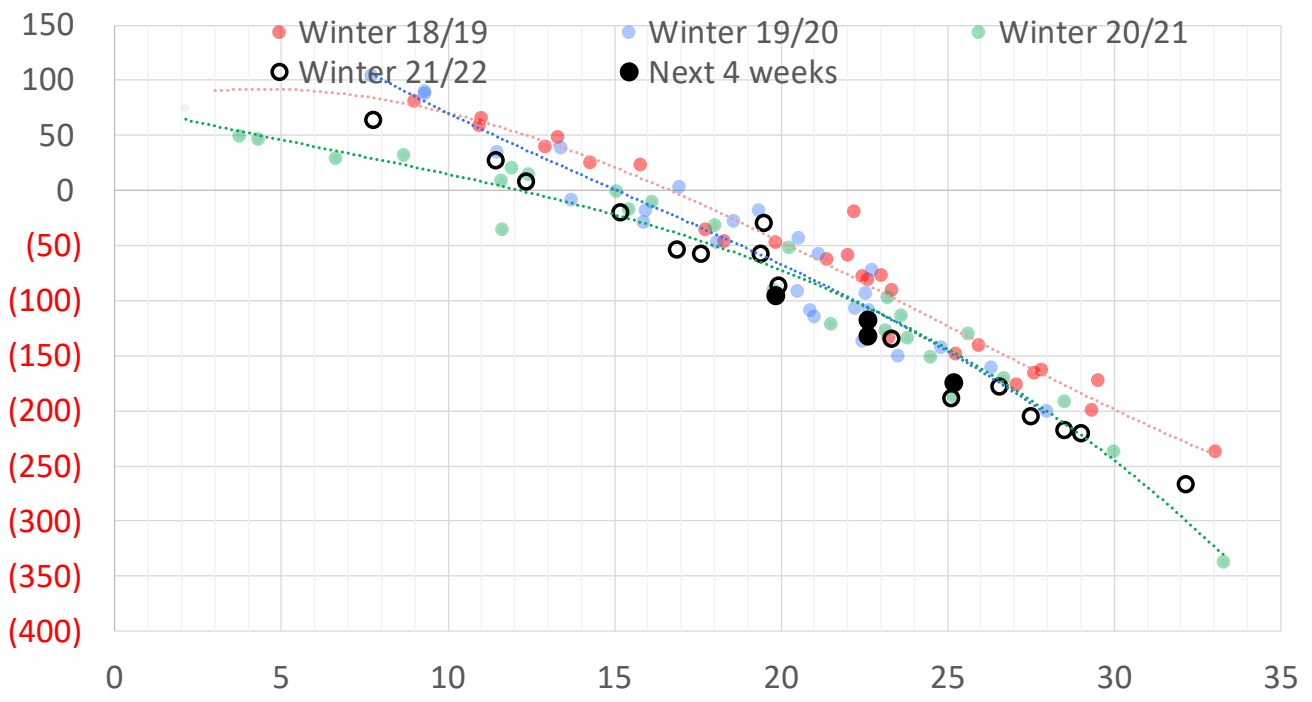
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

Next report and beyond		
Week Ending	GWDDs	Week Storage Projection
18-Feb	23	-118
25-Feb	23	-133
04-Mar	25	-175
11-Mar	20	-96

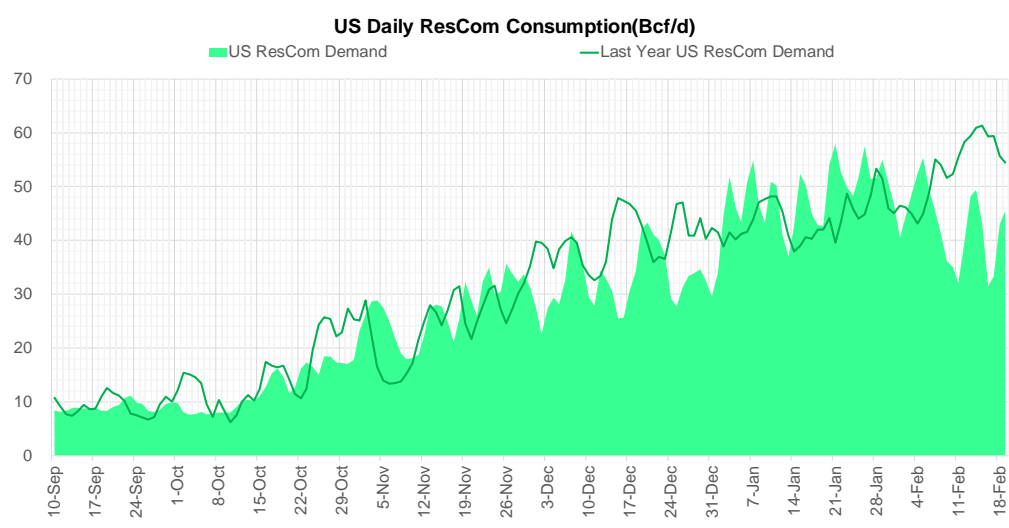
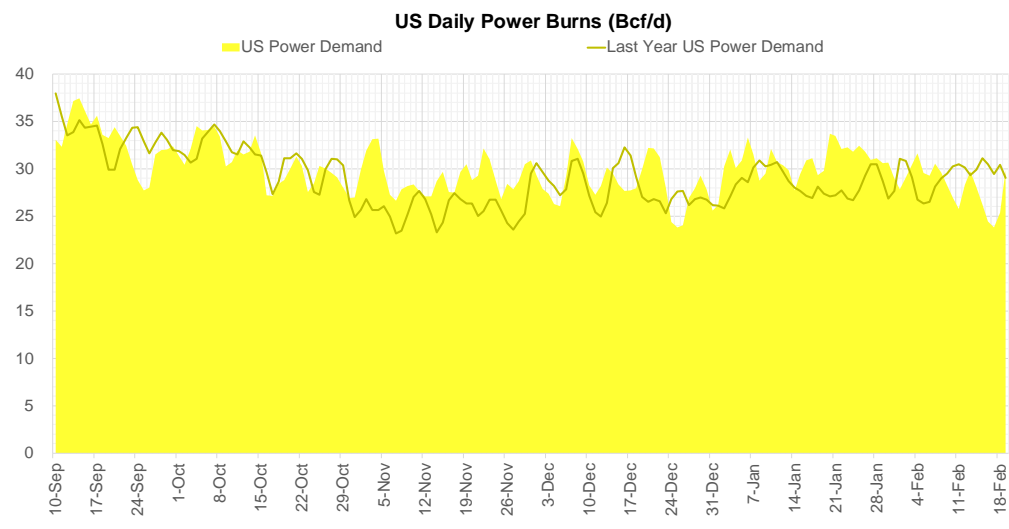
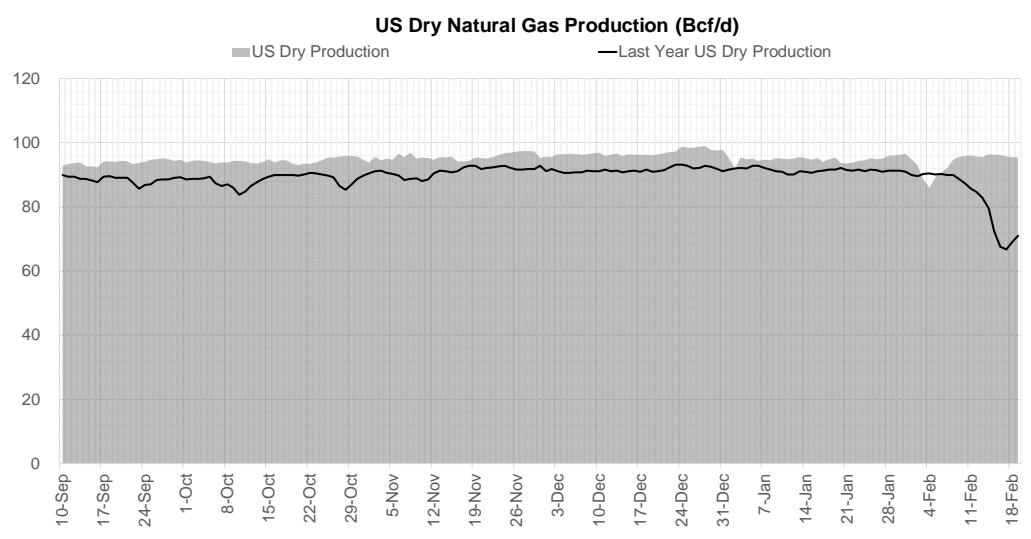
Weather Storage Model - Next 4 Week Forecast



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

The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are not necessarily indicative of future results. This communication may contain links to third party websites which are not under the control of and are not maintained by ION Energy Group, and ION Energy Group is not responsible for their content.

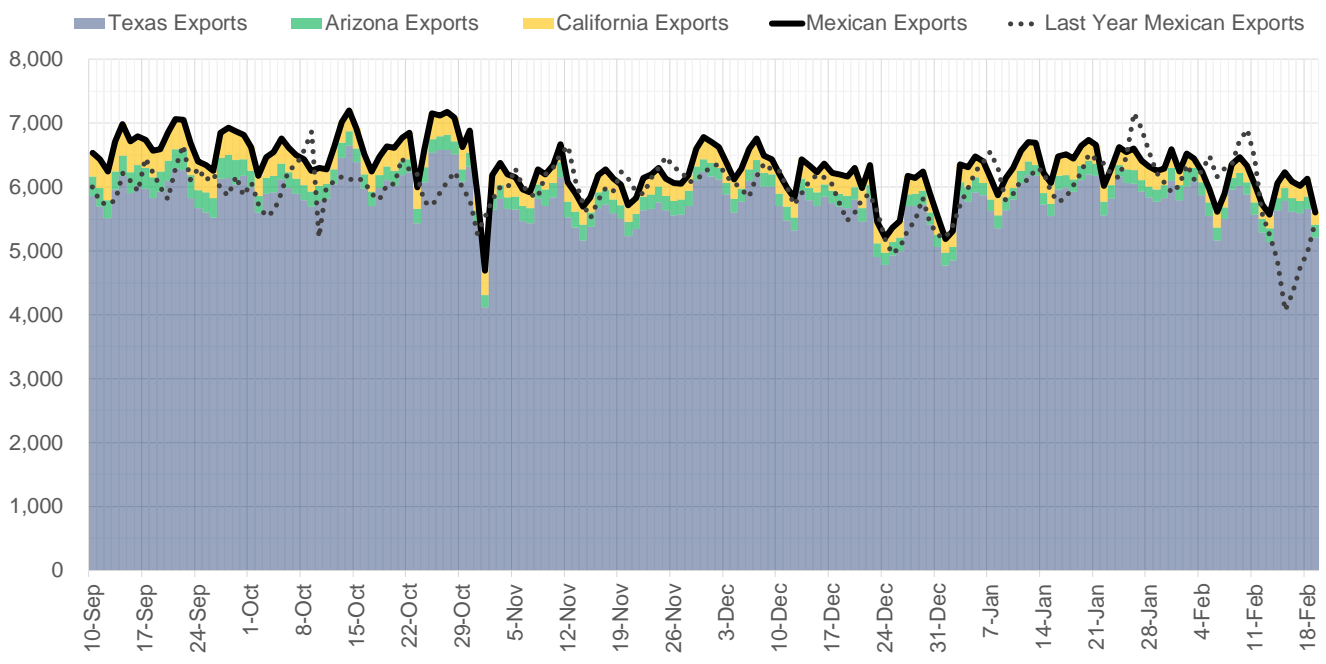
Supply – Demand Trends



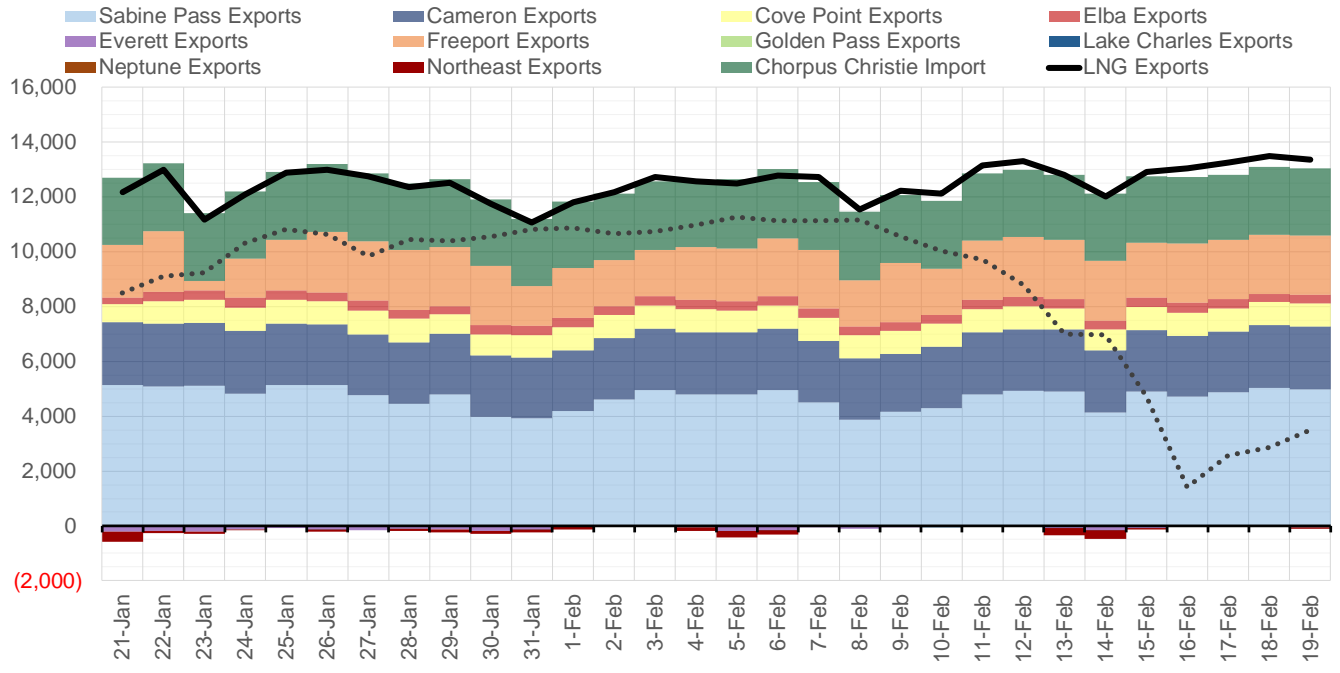
Source: Bloomberg

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Mexican Exports (MMcf/d)



Net LNG Exports - Last 30 days (MMcf/d)



Source: Bloomberg

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

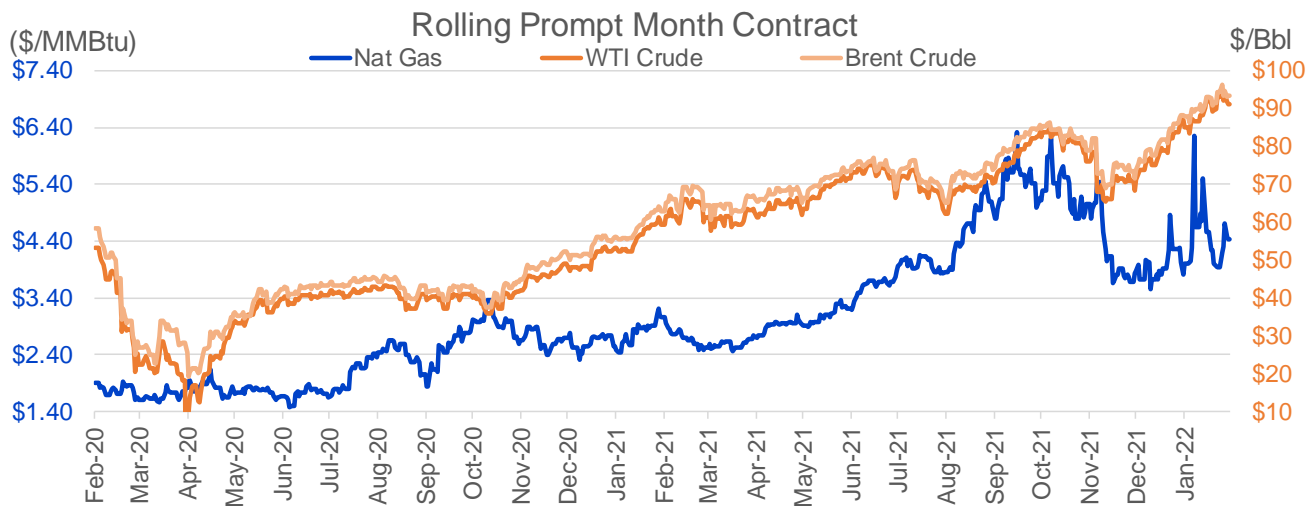
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
3	2022	C	5.00	13912	3	2022	P	3.00	45355
3	2022	C	5.50	9754	3	2022	C	10.00	41885
4	2022	C	6.00	5404	3	2022	P	4.00	39698
3	2022	P	4.00	4516	3	2022	C	5.00	37805
3	2022	C	5.25	4255	4	2022	P	3.50	33776
3	2022	P	4.25	4010	3	2022	P	3.50	32745
4	2022	P	3.50	4000	3	2022	P	3.75	30311
3	2022	C	4.75	3713	10	2022	C	6.00	27711
4	2022	P	4.00	3403	4	2022	C	5.00	26494
7	2022	C	6.00	3370	4	2022	P	3.00	26188
4	2022	P	3.75	3167	3	2022	C	8.00	25983
4	2022	C	7.00	2987	3	2022	C	6.00	25126
10	2022	C	6.00	2533	3	2022	P	2.50	24084
3	2022	C	4.80	2502	3	2022	C	4.50	24025
6	2022	C	6.00	2350	3	2022	C	4.00	23077
4	2022	C	5.00	2245	3	2022	P	4.50	22958
3	2022	C	4.50	2073	5	2022	P	3.00	22107
3	2022	P	4.30	1983	10	2022	C	5.00	21852
6	2022	C	4.50	1975	6	2022	C	6.00	21410
4	2022	P	3.65	1958	3	2022	C	7.00	20723
3	2022	C	6.00	1855	6	2022	C	5.00	20684
5	2022	P	3.50	1799	3	2022	P	3.25	20555
3	2022	C	4.85	1784	5	2022	C	5.00	20145
5	2022	C	5.00	1735	5	2022	P	2.50	19877
4	2022	C	5.50	1718	4	2022	C	6.00	19652
4	2022	C	4.50	1667	3	2022	P	3.90	19613
4	2022	C	5.25	1581	4	2022	C	4.50	18856
5	2022	P	3.25	1463	3	2022	C	5.50	17950
3	2022	P	3.75	1457	6	2022	P	3.00	17634
4	2022	P	3.25	1398	4	2022	C	3.00	17511
3	2022	P	4.50	1389	5	2022	C	6.00	17488
5	2022	P	3.75	1376	10	2022	P	3.00	17380
7	2022	C	5.00	1316	12	2022	C	5.00	17369
10	2022	C	7.00	1306	4	2022	P	2.50	17193
11	2022	P	3.00	1300	9	2022	C	6.00	17075
6	2022	C	5.00	1235	5	2022	P	2.75	17019
4	2022	P	4.25	1233	7	2022	P	3.25	16590
10	2022	C	5.00	1228	7	2022	C	6.00	15602
10	2022	P	4.00	1205	4	2022	P	4.00	15495
5	2022	P	4.00	1204	3	2022	P	5.00	15406
3	2022	C	4.60	1171	4	2022	C	4.75	15086
9	2022	C	6.00	1128	4	2022	C	8.00	15044
4	2022	C	4.75	1115	3	2022	P	2.00	14981
6	2022	P	3.50	1109	4	2022	P	3.25	14901
7	2022	P	3.25	1080	8	2022	C	6.00	14796
3	2022	P	4.35	1016	8	2022	P	3.00	14741
3	2022	C	6.50	1002	6	2022	C	4.50	14652
3	2022	P	4.20	993	10	2022	C	7.00	14600
3	2022	C	5.75	913	7	2022	P	3.00	14537
					4	2022	C	4	14247

Source: CME, Nasdaq, ICE

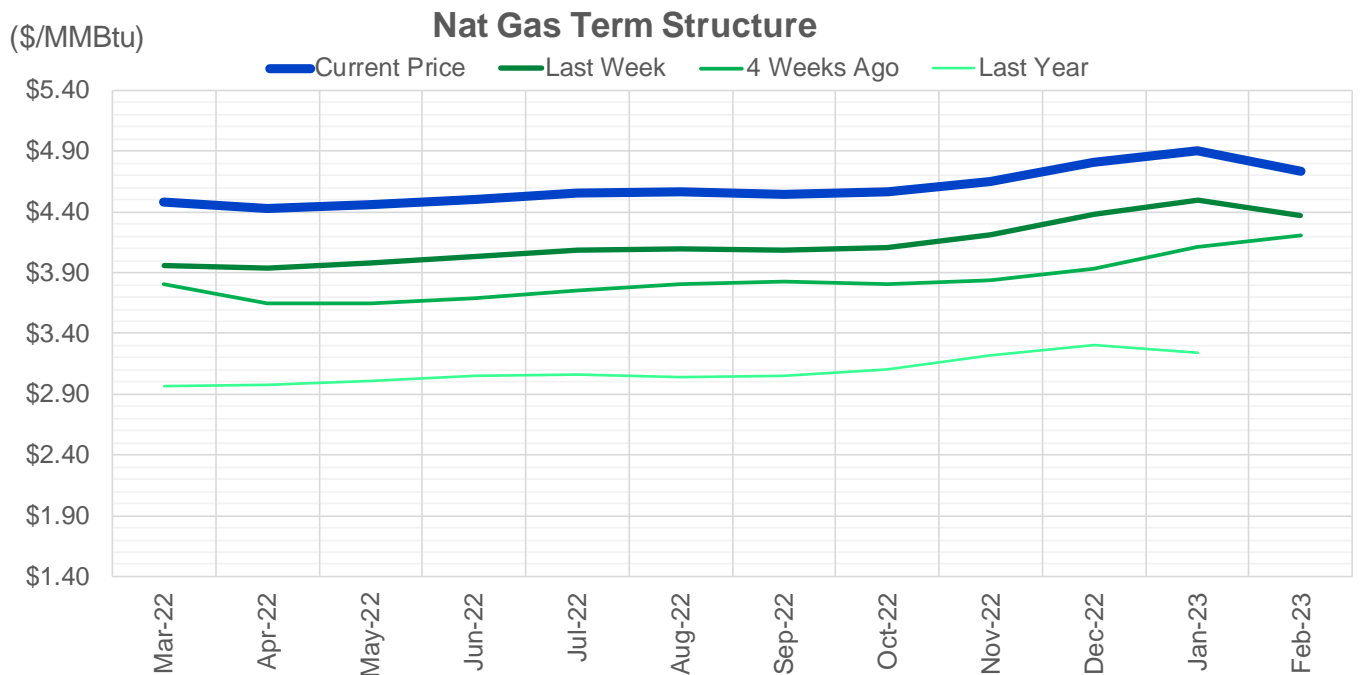
Nat Gas Futures Open Interest CME, ICE and Nasdaq Combined

CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM			
	Current	Prior	Daily Change		Current	Prior	Daily Change
MAR 22	34715	48184	-13469	MAR 22	77839	77378	461
APR 22	135446	135636	-190	APR 22	81183	81410	-228
MAY 22	179905	180131	-226	MAY 22	79994	80331	-337
JUN 22	70795	70570	225	JUN 22	72171	71493	678
JUL 22	83468	82747	721	JUL 22	66935	66992	-57
AUG 22	43270	43117	153	AUG 22	61227	61366	-140
SEP 22	67190	66612	578	SEP 22	61511	61330	181
OCT 22	78690	77995	695	OCT 22	67936	69630	-1694
NOV 22	44674	44442	232	NOV 22	55138	55036	102
DEC 22	42307	41410	897	DEC 22	65306	65056	250
JAN 23	57513	57846	-333	JAN 23	58161	57340	821
FEB 23	21721	21656	65	FEB 23	44705	44649	56
MAR 23	43160	42145	1015	MAR 23	47666	47472	194
APR 23	33896	33624	272	APR 23	47466	47477	-12
MAY 23	22269	21746	523	MAY 23	41429	41093	337
JUN 23	13178	12832	346	JUN 23	38457	38123	334
JUL 23	10357	10109	248	JUL 23	38370	38040	330
AUG 23	7681	7380	301	AUG 23	37930	37550	381
SEP 23	10847	10490	357	SEP 23	37420	37087	334
OCT 23	19667	19669	-2	OCT 23	41595	40932	663
NOV 23	9851	9837	14	NOV 23	40144	40128	16
DEC 23	13430	13083	347	DEC 23	34929	34885	44
JAN 24	12910	13022	-112	JAN 24	28154	27692	462
FEB 24	3238	3238	0	FEB 24	19575	19422	153
MAR 24	12437	12436	1	MAR 24	25417	25281	136
APR 24	6516	6490	26	APR 24	18964	18827	138
MAY 24	2283	2283	0	MAY 24	18403	18372	31
JUN 24	1109	1104	5	JUN 24	18329	18240	89
JUL 24	852	652	200	JUL 24	19009	18925	84
AUG 24	988	785	203	AUG 24	18765	18743	22

Source: CME, ICE



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	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23
Current Price	\$4.486	\$4.430	\$4.455	\$4.501	\$4.553	\$4.562	\$4.544	\$4.563	\$4.652	\$4.804	\$4.904	\$4.733
Last Week	\$3.959	\$3.943	\$3.977	\$4.029	\$4.085	\$4.098	\$4.083	\$4.108	\$4.210	\$4.386	\$4.494	\$4.373
vs. Last Week	\$0.527	\$0.487	\$0.478	\$0.472	\$0.468	\$0.464	\$0.461	\$0.455	\$0.442	\$0.418	\$0.410	\$0.360
4 Weeks Ago	\$3.802	\$3.649	\$3.648	\$3.693	\$3.748	\$3.808	\$3.823	\$3.807	\$3.834	\$3.932	\$4.112	\$4.210
vs. 4 Weeks Ago	\$0.684	\$0.781	\$0.807	\$0.808	\$0.805	\$0.754	\$0.721	\$0.756	\$0.818	\$0.872	\$0.792	\$0.523
Last Year	\$3.082	\$2.970	\$2.977	\$3.013	\$3.051	\$3.058	\$3.044	\$3.056	\$3.102	\$3.216	\$3.306	\$3.241
vs. Last Year	\$1.404	\$1.460	\$1.478	\$1.488	\$1.502	\$1.504	\$1.500	\$1.507	\$1.550	\$1.588	\$1.598	\$1.492

	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 2.219
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.310
NatGas Oct21/Jan22	\$/MMBtu	-1.817	▲ 0.000	▲ 0.000	▼ -2.076
NatGas Apr22/Oct22	\$/MMBtu	0.133	▼ -0.037	▼ -0.035	▲ 0.123
WTI Crude	\$/Bbl	91.07	▼ -2.030	▲ 5.930	▲ 31.830
Brent Crude	\$/Bbl	93.54	▼ -0.900	▲ 5.650	▲ 30.630
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	278.15	▼ -12.940	▲ 9.030	▲ 95.860
Propane, Mt. Bel	cents/Gallon	1.29	▲ 0.026	▲ 0.136	▲ 0.373
Ethane, Mt. Bel	cents/Gallon	0.39	▲ 0.012	▲ 0.026	▲ 0.124
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.000
Coal, PRB	\$/MMBtu	0.70			

Source: CME, Bloomberg

Baker Hughes Rig Counts

Rotary Rig Count						Baker Hughes 
2/18/2022						
U.S. Breakout Information	This Week	+/-	Last Week	+/-	Year Ago	
Oil	520	4	516	215	305	
Gas	124	6	118	33	91	
Miscellaneous	1	0	1	0	1	
Directional	31	-2	33	15	16	
Horizontal	589	15	574	232	357	
Vertical	25	-3	28	1	24	
Canada Breakout	This Week	+/-	Last Week	+/-	Year Ago	
Oil	135	-2	137	35	100	
Gas	85	3	82	13	72	
Major Basin Variances	This Week	+/-	Last Week	+/-	Year Ago	
Ardmore Woodford	1	0	1	1	0	
Arkoma Woodford	3	1	2	3	0	
Barnett	3	0	3	2	1	
Cana Woodford	26	1	25	17	9	
DJ-Niobrara	14	2	12	7	7	
Eagle Ford	54	0	54	25	29	
Granite Wash	5	0	5	5	0	
Haynesville	58	4	54	12	46	
Marcellus	36	1	35	6	30	
Mississippian	0	-1	1	0	0	
Permian	306	5	301	102	204	
Utica	11	-1	12	4	7	
Williston	34	0	34	20	14	