

Another week, another Freeport story on Friday. At least this time it didn't start as a rumor and end with a PR release near the end of the day. The latest release from Freeport gives some sort of timeline, but nothing definitive. The press release came mid-day and as expected the price moved with another Freeport headline.



Let's dive into the PR and interpret the key lines:

1) "Subject to Freeport LNG meeting its regulatory requirements, it is targeting initial production at the facility in mid-December. "

Reconstruction is still not complete (end of Nov) and the start is still subject to Freeport LNG meeting all its regulatory requirements. Let's assume this means a Dec 19th start-up, which is approximately 30 days out.

2) "Each of Freeport LNG's three liquefaction trains will be restarted and ramped up safely, in a slow and deliberate manner, with each train starting separately before restarting a subsequent train"

The nameplate capacity for each train before the July authorized FERC expansion was 0.714 Bcf/d. Let's assume one train at the old capacity level comes on every 10 days.

1st train Dec 19th, 2nd train on Dec 29th, and 3rd train on Jan 8th

3) It is expected that approximately 2 BCF per day of production will be achieved in January 2023. Full production utilizing both docks remains anticipated to commence in March 2023.

My assumptions:

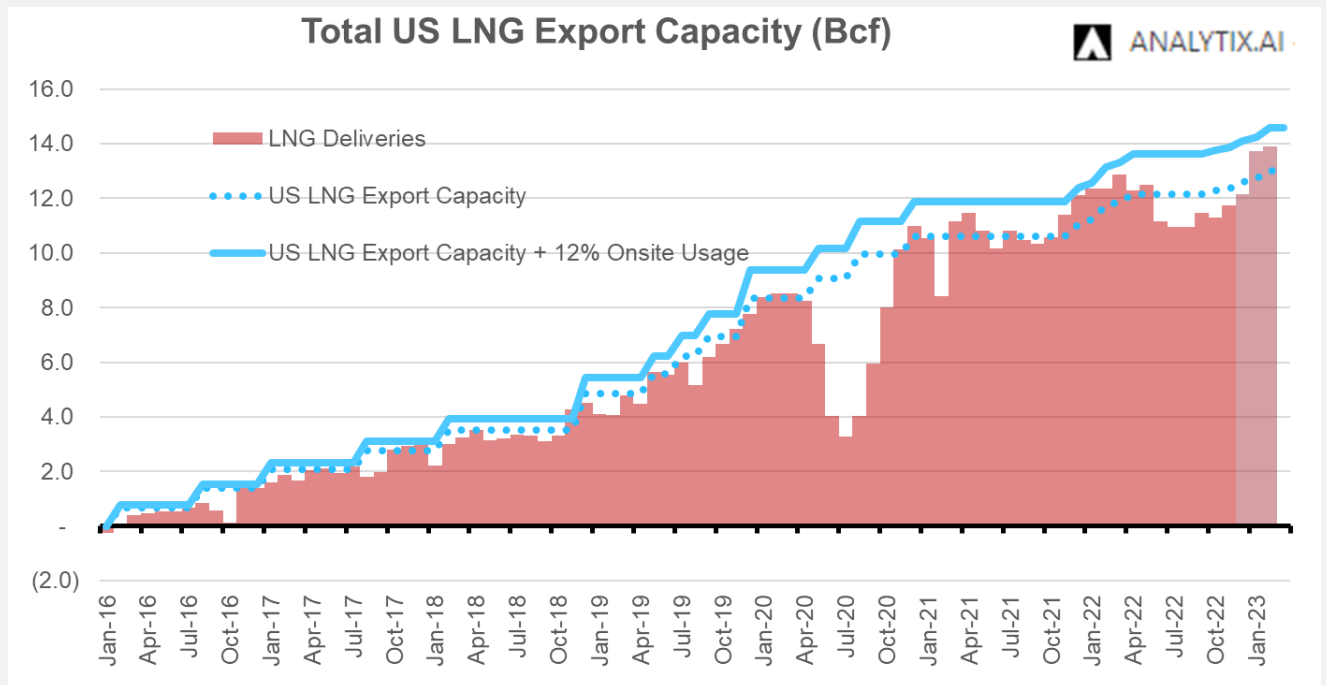
The time to load an LNG tanker is approximately 20 hours, so technically the terminal should be able to operate at ~2 Bcf/d with one dock operational. This would require tankers to be scheduled every 1-2 days which might not be logistically possible.

Also to note is that Freeport traditionally operates at 95-98% of design capacity.

Sometime in January = three trains @ 0.714 Bcf/d feedgas level w/ 95% utilization = 2.03 Bcf/d

Sometime in March = three trains at 0.795 Bcf/d feedgas level w/ 95% utilization = 2.26 Bcf/d

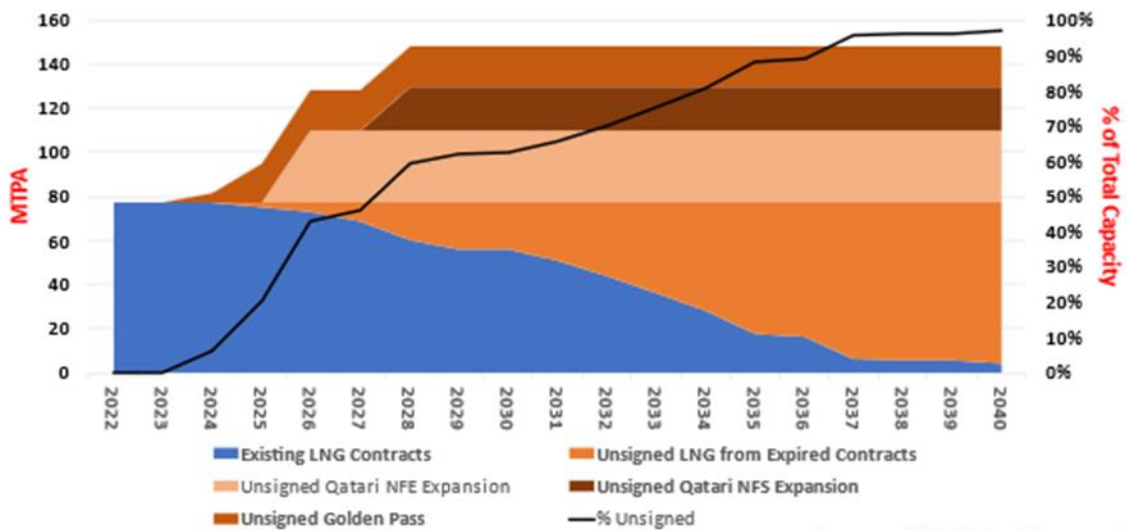
So if all goes as planned, we should see LNG feedgas levels reach 14+ Bcf by mid-Jan.



The last thing we wanted to note on LNG is from a tweet posted @ira_joseph of Platts. It's an interesting developing story, specifically for Europe as they move away from Russian natgas. Tweet Link: https://twitter.com/ira_joseph/status/1593005204018180096

For sale: tons of #LNG. Tons. Motivated sellers want long-term deals. Existing contracts are expiring & new capacity is under construction. Oil indexaton preferred, but sellers are flexible if the price is high enough. Having trouble contracting your LNG? Maybe this is why. #ONGT

Qatari LNG Contracts



Source: S&P Global Commodity Intelligence

This available capacity paired with increased LNG regas capacity coming online should get things back to steady. The surge of new LNG regasification capacity in northwest Europe could lead to a 37% increase in LNG terminal daily sendout over the coming few years, according to ICIS. Here is a table of all the potential regas capacity coming online.

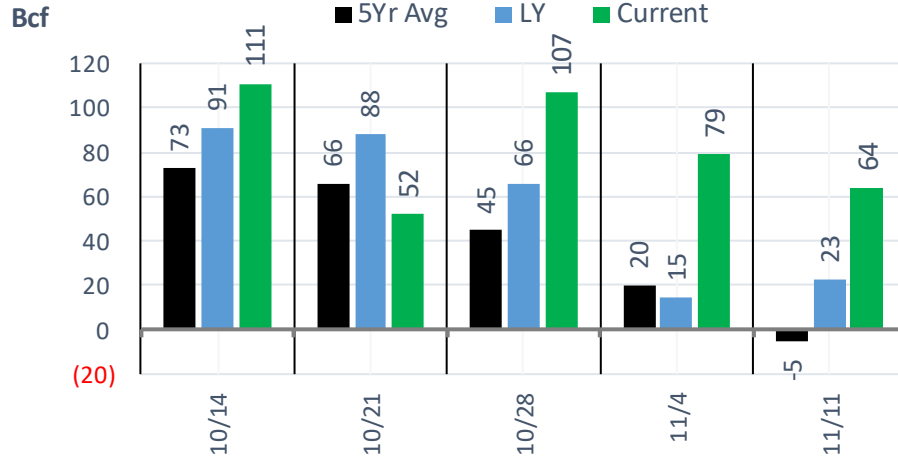
Source: ICIS

PLANNED EUROPEAN LNG PROJECTS						
Country	Type	Terminal	New/Expansion	Status	Operational start earliest	Regasification capacity (mcm/d)
Belgium	Onshore	Zeebrugge	Expansion 1	FID taken	1/1/2024	18
Belgium	Onshore	Zeebrugge	Expansion 2	FID taken	1/1/2026	5
Croatia	FSRU	Krk	Expansion	Planned	10/1/2022	1
Cyprus	FSRU	Cyprus	New	Announced	7/1/2023	2
Estonia	Onshore	Paldiski	New	Planned	1/1/2025	7
Estonia	FSRU	Alexela's Paldisk	New	Announced	10/1/2022	7
Finland	Onshore	Hamina LNG	New	FID taken	10/1/2022	1
Finland	FSRU	FSRU	New	Announced	1/1/2025	0
France	FSRU	Le Havre	New	Announced	Not specified	6
Germany	FSRU	Wilhelmshaven	New	Announced	12/22/2022	28
Germany	Onshore	Wilhelmshaven	New	Announced	1/1/2025	23
Germany	Onshore	Brunsbüttel LNG	New	Announced	1/1/2025	23
Germany	Onshore	Hanseatic Energy Hub terminal	New	Announced	1/1/2026	36
Greece	FSRU	Elpedison LNG	New	Announced	1/1/2025	20
Greece	FSRU	Alexandroupolis	New	FID taken	1/1/2023	17
Greece	FSRU	Volos	New	Announced	10/1/2023	13
Greece	FSRU	Dioriga Gas	New	Announced	1/1/2023	7
Ireland	Onshore	Shannon LNG	New	Announced	Not specified	32
Italy	Onshore	Adriatic LNG	Expansion	Announced	Not specified	3
Lithuania	FSRU	Klaipeda LNG	Expansion	Announced	Not specified	0
Latvia	Onshore	Skulte	New	Announced	10/1/2024	11
Netherlands	FSRU	Exmar	New	Announced	8/1/2022	11
Netherlands	Onshore	Gate terminal	Expansion 1	FID taken	10/1/2024	1
Netherlands	Onshore	Gate terminal	Expansion 2	FID taken	1/1/2025	1
Netherlands	Onshore	Gate terminal	Expansion 3	FID taken	1/1/2026	1
Poland	Onshore	Swinoujscie	Expansion	FID taken	12/1/2023	6
Poland	FSRU	Gdansk	New	Announced	1/1/2028	17
United Kingdom	Onshore	Isle of Grain	Expansion	Announced	1/1/2025	14

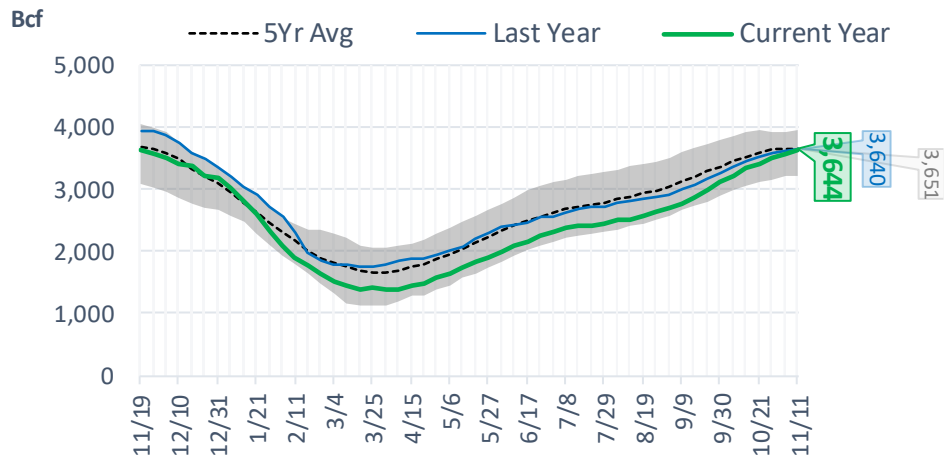
Source: ICIS

EIA Storage Report

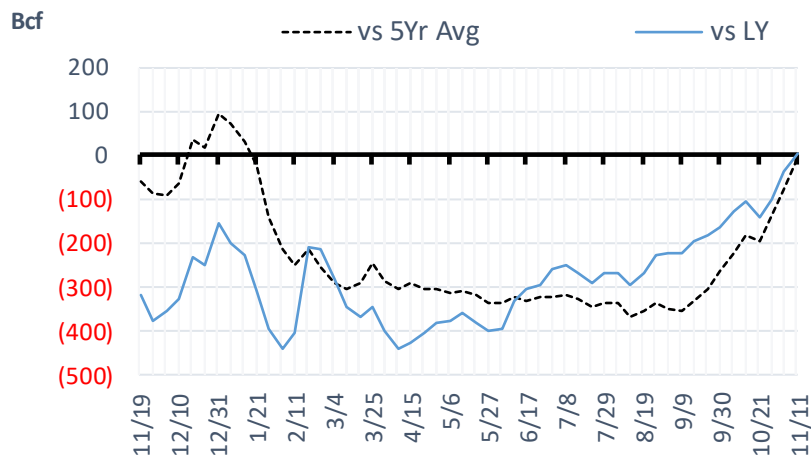
Total Lower 48 YoY Weekly Change



Total Lower 48 Storage Levels



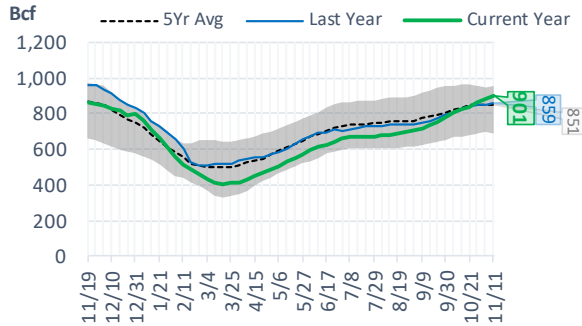
Total Lower 48 LY Surplus/Deficit



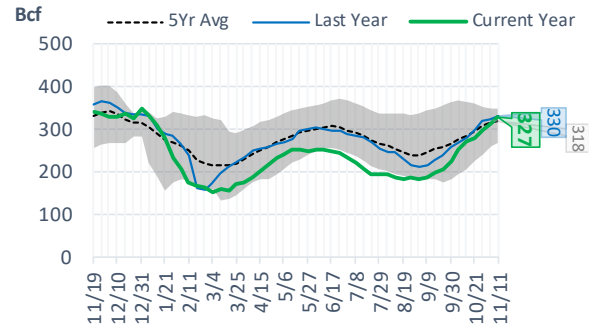
Natural Gas Storage Stats - Last 5 Weeks

Week Ending	Current 11-Nov	Week - 1 4-Nov	Week - 2 28-Oct	Week - 3 21-Oct	Week - 4 14-Oct	Week - 5 7-Oct
Total Lower 48 Storage Level	3644	3580	3501	3394	3342	3231
Weekly Change	+64	+79	+107	+52	+111	+125
vs LY	+4	-37	-101	-142	-106	-126
vs 5Yr Avg	-7	-76	-135	-197	-183	-221
S. Central Salt Storage Level	327	311	299	277	271	253
Weekly Change	+16	+12	+22	+6	+18	+28
vs LY	-3	-12	-19	-24	-10	-15
vs 5Yr Avg	+9	-3	-7	-18	-11	-22
S. Central NonSalt Storage Level	901	882	861	839	828	804
Weekly Change	+19	+21	+22	+11	+24	+26
vs LY	+42	+32	+11	+1	+5	-4
vs 5Yr Avg	+50	+31	+11	-6	-6	-17
Midwest Storage Level	1084	1068	1042	1007	987	952
Weekly Change	+16	+26	+35	+20	+35	+36
vs LY	+6	-6	-26	-41	-36	-41
vs 5Yr Avg	+6	-12	-30	-47	-43	-49
East Storage Level	882	865	848	825	812	782
Weekly Change	+17	+17	+23	+13	+30	+26
vs LY	-18	-32	-49	-57	-46	-49
vs 5Yr Avg	-20	-41	-55	-68	-65	-74
Mountain Storage Level	208	208	204	199	195	190
Weekly Change	0	+4	+5	+4	+5	+6
vs LY	-4	-5	-9	-13	-16	-19
vs 5Yr Avg	-4	-5	-10	-15	-17	-21
Pacific Storage Level	241	247	247	248	249	249
Weekly Change	-6	0	-1	-1	0	+2
vs LY	-20	-11	-9	-7	-4	-2
vs 5Yr Avg	-49	-43	-43	-42	-41	-40

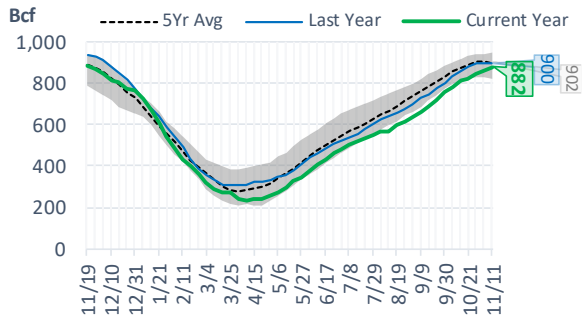
NonSalt Storage Levels



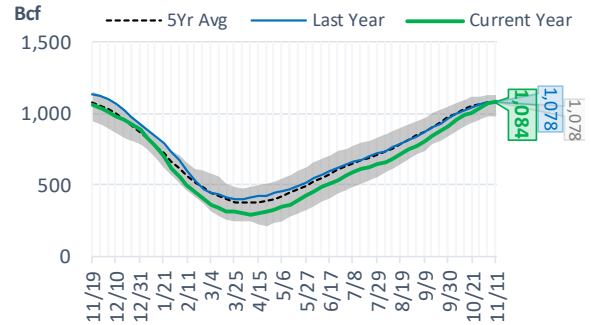
Salt Storage Levels



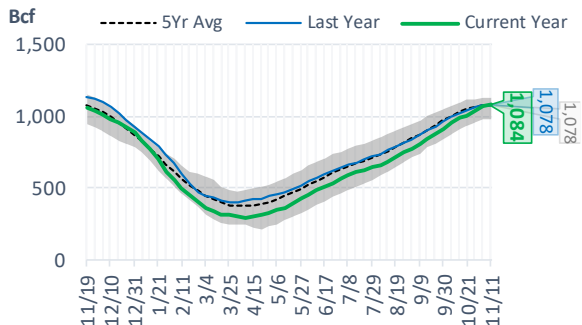
East Storage Levels



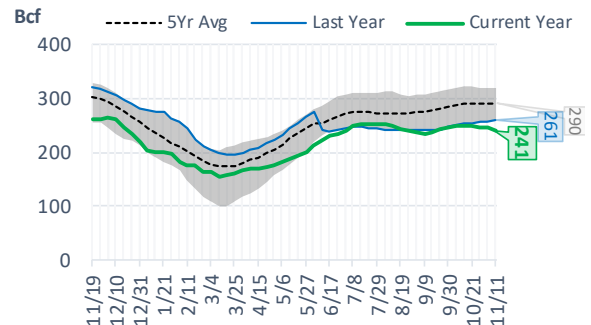
Midwest Storage Levels



Midwest Storage Levels



Pacific Storage Levels



EIA Storage Week Balances

	LY 19-Nov	21-Oct	28-Oct	4-Nov	LW 11-Nov	Current 18-Nov	WoW	vs. LY
Lower 48 Dry Production	95.7	100.3	101.0	101.0	100.4	101.0	▲ 0.7	▲ 5.3
Canadian Imports	4.9	6.1	5.3	4.9	4.2	6.6	▲ 2.4	▲ 1.7
L48 Power	28.5	30.9	28.9	29.5	29.1	31.5	▲ 2.4	3.0
L48 Residential & Commercial	26.3	20.9	15.9	17.6	17.7	35.4	▲ 17.7	9.1
L48 Industrial	24.4	20.0	21.1	21.3	22.8	24.2	▲ 1.3	-0.2
L48 Lease and Plant Fuel	5.3	5.6	5.6	5.6	5.6	5.6	▲ 0.0	0.3
L48 Pipeline Distribution	3.2	3.2	2.8	2.8	2.7	3.8	▲ 1.2	0.7
L48 Regional Gas Consumption	87.7	80.6	74.4	76.9	77.9	100.5	▲ 22.6	▲ 12.9
Net LNG Exports	11.1	11.5	11.4	11.9	11.4	12.1	▲ 0.7	▲ 1.0
Total Mexican Exports	6.0	6.7	6.4	6.3	6.3	6.5	▲ 0.2	▲ 0.5
Implied Daily Storage Activity	-4.2	7.6	14.2	10.8	8.9	-11.5	-20.4	-7.3
EIA Reported Daily Storage Activity	-3.0	7.4	15.3	11.3	9.1			
Daily Model Error	-1.2	0.2	-1.1	-0.5	-0.3			

Monthly Balances

	2Yr Ago Nov-20	LY Nov-21	Jul-22	Aug-22	Sep-22	Oct-22	MTD Nov-22	MoM	vs. LY
Lower 48 Dry Production	91.2	96.4	97.8	98.2	100.5	101.2	100.7	▼ -0.6	▲ 4.2
Canadian Imports	4.6	5.3	5.9	5.4	5.9	5.7	5.2	▼ -0.5	▼ -0.1
L48 Power	25.7	29.3	44.8	43.8	37.0	30.2	30.2	▲ 0.0	▲ 0.9
L48 Residential & Commercial	24.4	28.2	8.2	7.8	8.9	16.6	24.6	▲ 8.1	▼ -3.6
L48 Industrial	22.5	23.3	19.4	19.7	20.5	20.6	23.1	▲ 2.5	▼ -0.2
L48 Lease and Plant Fuel	5.0	5.4	5.5	5.5	5.5	5.7	5.6	▼ 0.0	▲ 0.2
L48 Pipeline Distribution	2.7	3.3	3.1	3.0	2.8	2.9	3.2	▲ 0.3	▼ -0.2
L48 Regional Gas Consumption	80.3	89.5	81.0	79.9	74.7	75.9	86.7	▲ 10.8	▼ -2.8
Net LNG Exports	10.1	11.4	10.9	11.0	11.5	11.3	11.7	▲ 0.4	▲ 0.3
Total Mexican Exports	6.1	6.1	7.0	6.9	6.7	6.6	6.4	▼ -0.2	▲ 0.3
Implied Daily Storage Activity	-0.7	-5.3	4.8	5.8	13.6	13.1	1.0		
EIA Reported Daily Storage Activity									
Daily Model Error					-0.5				

Source: Bloomberg, analytix.ai

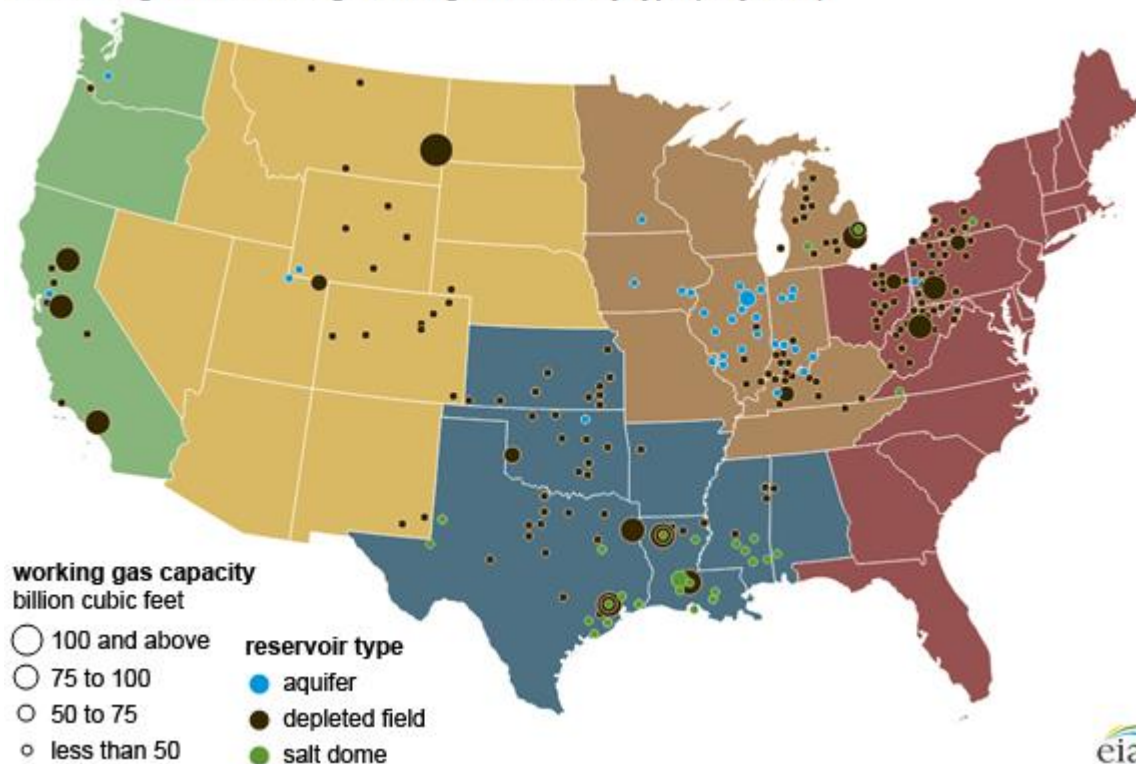
Regional S/D Models Storage Projection

Week Ending 18-Nov

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-10.6	-0.7	-11.3	-79
East	-4.6	2.2	-2.3	-16
Midwest	-2.8	0.2	-2.6	-18
Mountain	3.0	-4.1	-1.1	-8
South Central	-5.1	1.2	-3.8	-27
Pacific	-1.2	-0.2	-1.4	-10

*Adjustment Factor is calculated based on historical regional deltas

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

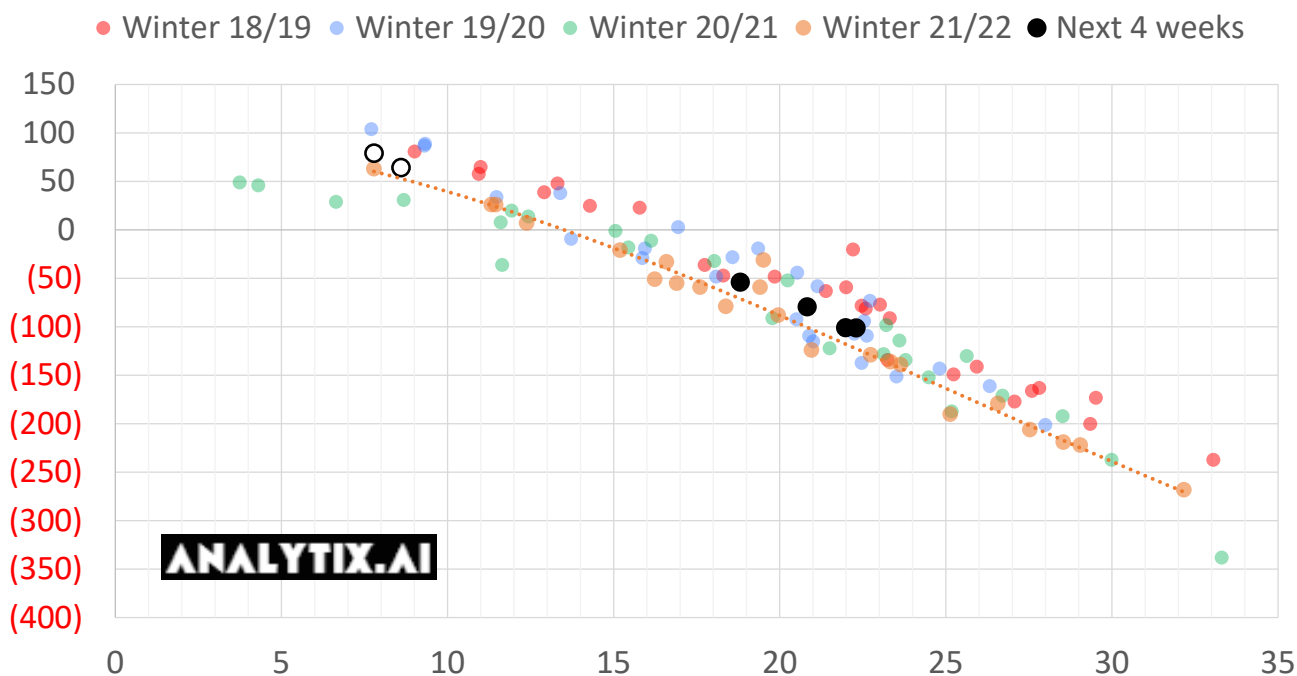


Weather Model Storage Projection

Next report
and beyond

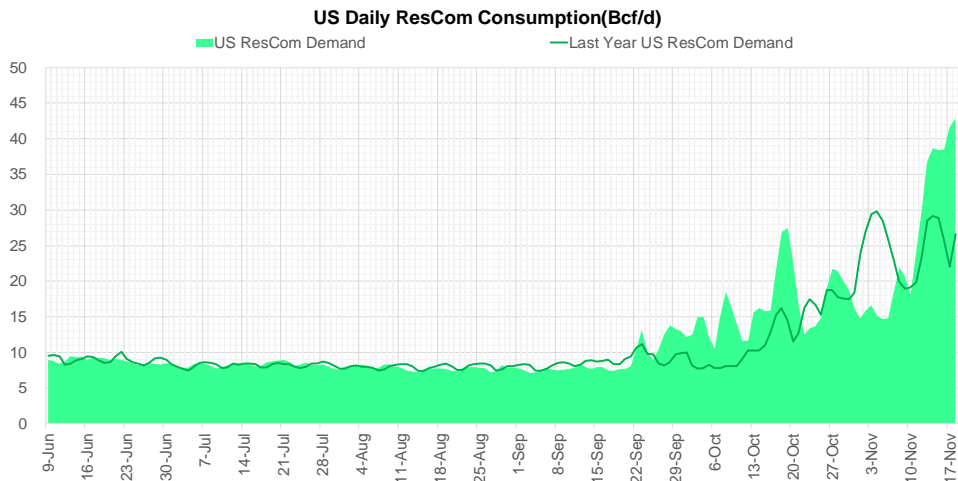
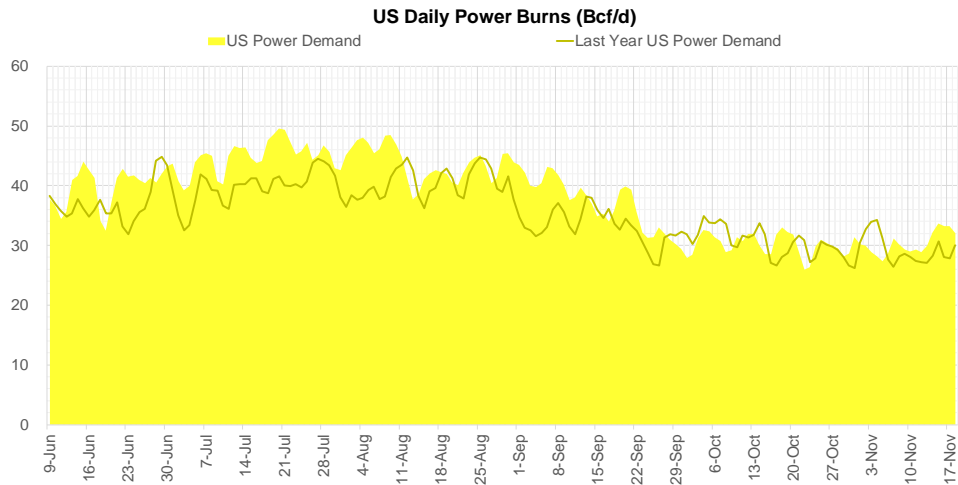
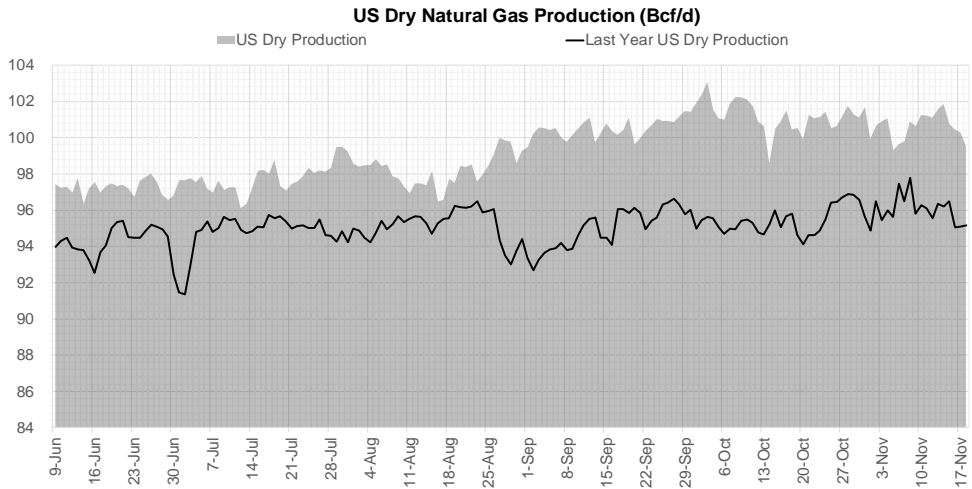
Week Ending	GWDDs	Week Storage Projection
18-Nov	20.8	-79
25-Nov	22.3	-101
02-Dec	18.8	-54
09-Dec	22.0	-101

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

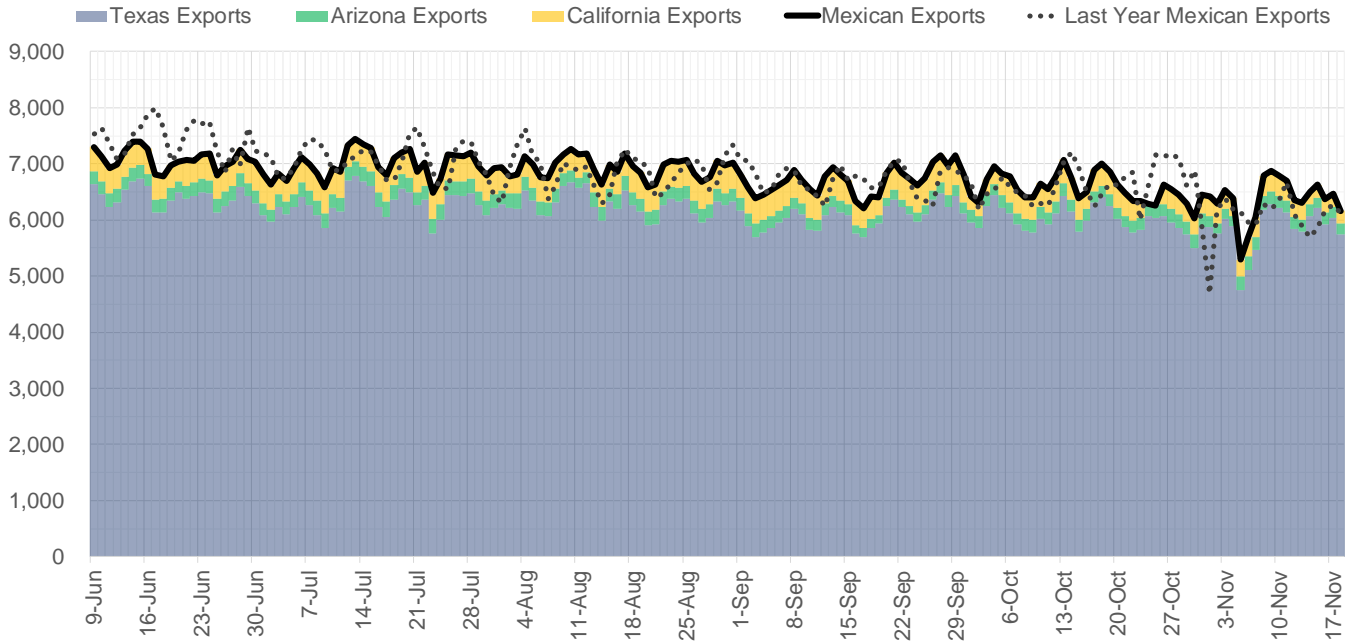
Supply – Demand Trends



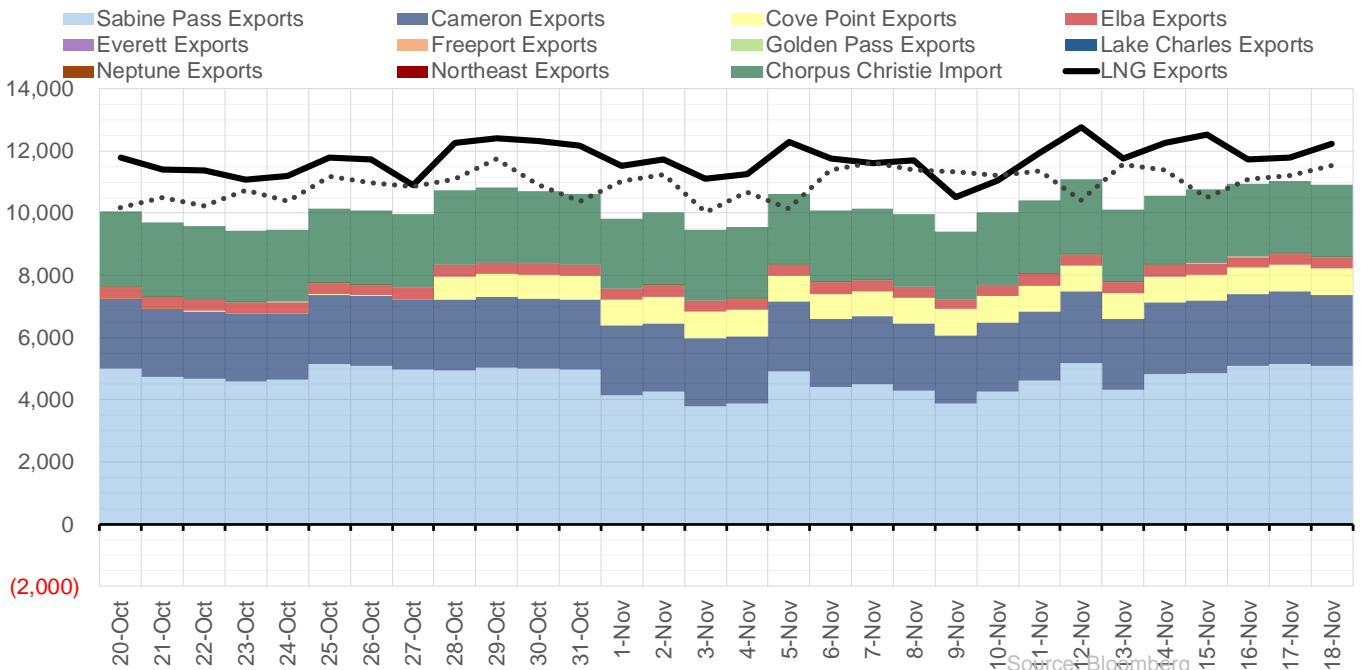
Source: Bloomberg

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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 and ICE data combined

CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
12	2022	P	5.00	6862	12	2022	P	4.00	47077
12	2022	P	4.00	6717	12	2022	P	5.00	43195
2	2023	C	20.00	4886	12	2022	P	6.00	33712
12	2022	C	8.00	4874	5	2023	P	2.00	31692
3	2023	C	20.00	4722	10	2023	P	3.00	31280
12	2022	C	7.00	4609	12	2022	P	4.50	31153
12	2022	P	4.50	4485	12	2022	C	10.00	30682
12	2022	P	3.50	3117	4	2023	P	3.00	28233
12	2022	P	5.25	3026	1	2023	C	10.00	28003
12	2022	P	6.00	2991	1	2023	P	5.00	27388
1	2023	C	10.00	2679	3	2023	C	10.00	26287
12	2022	P	5.50	2651	12	2022	P	3.50	26057
3	2023	P	2.75	2436	12	2022	P	4.75	24840
3	2023	C	10.00	2212	4	2023	P	2.00	23867
1	2023	P	4.50	2064	10	2023	P	2.50	23680
3	2023	P	3.50	1940	3	2023	P	4.00	23513
12	2022	C	6.50	1883	10	2023	P	2.00	23488
2	2023	C	12.00	1700	5	2023	P	3.00	23443
4	2023	P	2.75	1700	12	2022	C	6.00	22998
5	2023	P	2.75	1700	12	2022	C	8.00	22697
6	2023	P	2.75	1700	6	2023	P	3.00	22690
12	2022	P	4.75	1662	4	2023	P	3.50	21781
4	2023	C	5.00	1650	7	2023	P	3.00	21435
4	2023	C	10.00	1481	8	2023	P	3.00	21246
12	2022	P	5.75	1477	9	2023	P	3.00	21195
5	2023	C	10.00	1450	2	2023	C	10.00	20930
6	2023	C	10.00	1450	12	2022	C	7.00	20277
12	2022	C	7.50	1442	6	2023	P	2.00	20267
2	2023	P	4.50	1442	3	2023	P	3.00	20177
2	2023	C	10.00	1431	12	2022	P	3.00	20059
1	2023	P	5.00	1407	8	2023	P	2.00	19925
2	2023	P	5.00	1364	1	2023	P	4.00	19853
1	2023	C	8.00	1341	9	2023	P	2.00	19763
2	2023	C	11.00	1303	7	2023	P	2.00	19725
3	2023	P	5.00	1288	10	2023	P	4.00	19534
1	2023	P	2.50	1281	4	2023	P	4.00	19088
1	2023	C	20.00	1263	3	2023	C	20.00	18920
3	2023	P	5.50	1218	5	2023	P	2.50	18800
12	2022	C	11.00	1133	6	2023	P	3.50	18535
12	2022	C	10.00	1112	12	2022	C	5.00	18387
1	2023	C	7.50	1107	6	2023	P	2.50	18350
4	2023	P	3.00	1075	4	2023	P	2.50	18253
2	2023	C	19.00	1057	9	2023	P	2.50	18145
5	2023	P	3.00	1050	5	2023	P	3.50	18120
6	2023	P	3.00	1050	12	2022	P	5.50	17852
3	2023	C	18.00	1031	5	2023	P	4.00	17664
2	2023	C	10.50	1003	4	2023	P	2.75	17580
12	2022	C	11.50	1002	1	2023	P	3.00	17370
12	2022	C	8.10	1000	6	2023	P	4.00	17266
					9	2023	P	4	17244

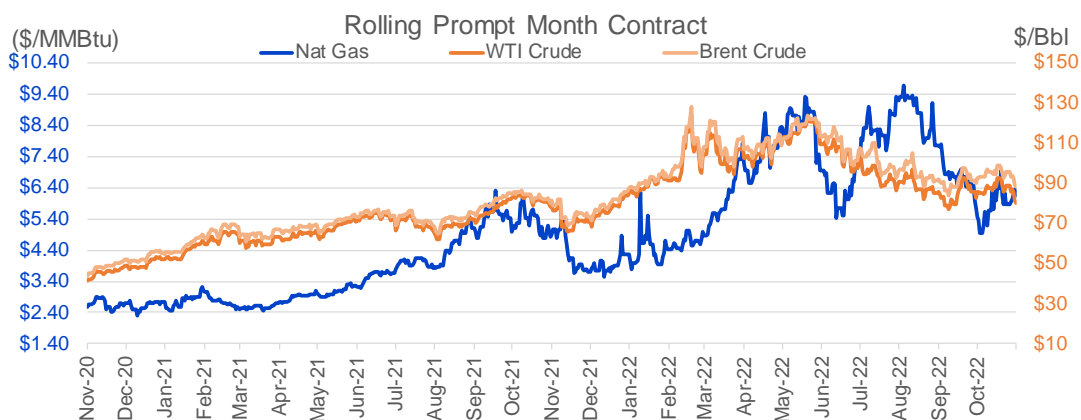
Source: CME, ICE

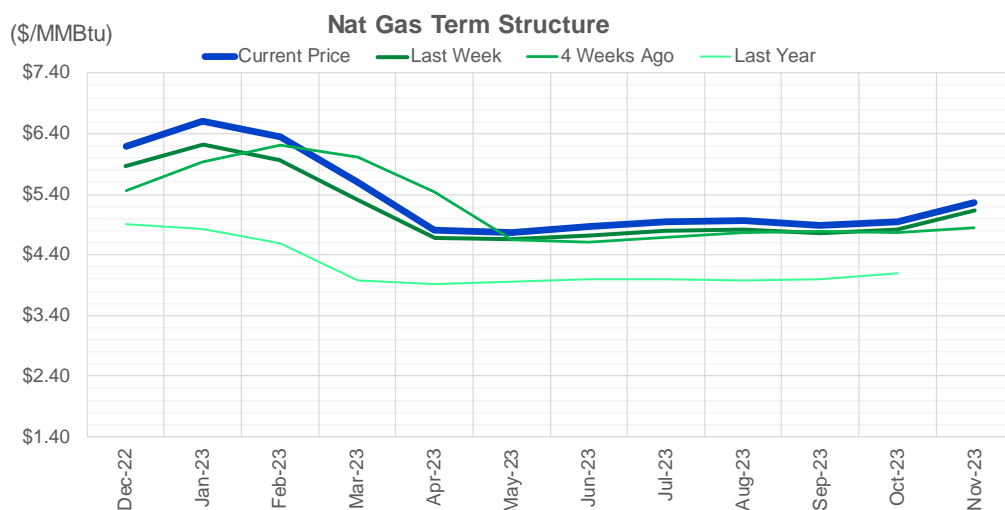
Nat Gas Futures Open Interest

CME and ICE data 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
DEC 22	41160	43531	-2371	DEC 22	87449	88225	-776
JAN 23	170178	169167	1011	JAN 23	76392	76764	-372
FEB 23	64627	63714	913	FEB 23	67276	67002	274
MAR 23	102512	99183	3329	MAR 23	62676	62096	579
APR 23	90465	87895	2570	APR 23	59523	58798	725
MAY 23	91081	91827	-746	MAY 23	60922	60248	674
JUN 23	26643	24235	2408	JUN 23	50437	50173	264
JUL 23	32433	32345	88	JUL 23	51718	51149	569
AUG 23	27287	27433	-146	AUG 23	49440	49239	201
SEP 23	33505	32441	1064	SEP 23	47543	46951	592
OCT 23	50387	49960	427	OCT 23	62141	61570	572
NOV 23	20144	20010	134	NOV 23	49512	49093	419
DEC 23	27898	27532	366	DEC 23	44333	43944	389
JAN 24	34162	34179	-17	JAN 24	47615	47333	283
FEB 24	12056	12075	-19	FEB 24	31438	31234	204
MAR 24	23897	23994	-97	MAR 24	39481	39287	194
APR 24	23063	22643	420	APR 24	32402	31844	558
MAY 24	9820	10170	-350	MAY 24	31315	31105	210
JUN 24	3597	3536	61	JUN 24	27844	27647	197
JUL 24	4909	4930	-21	JUL 24	26825	26578	247
AUG 24	4643	4630	13	AUG 24	26009	25755	254
SEP 24	3322	3311	11	SEP 24	26119	25862	257
OCT 24	9876	9914	-38	OCT 24	30646	30211	435
NOV 24	4937	4941	-4	NOV 24	26950	26874	77
DEC 24	8728	8720	8	DEC 24	31138	31076	62
JAN 25	18871	18694	177	JAN 25	26027	26258	-232
FEB 25	1853	1852	1	FEB 25	15865	15983	-118
MAR 25	6295	6273	22	MAR 25	17545	17782	-237
APR 25	6603	6595	8	APR 25	16381	16661	-280
MAY 25	2764	2746	18	MAY 25	15723	15957	-234

Source: CME, ICE





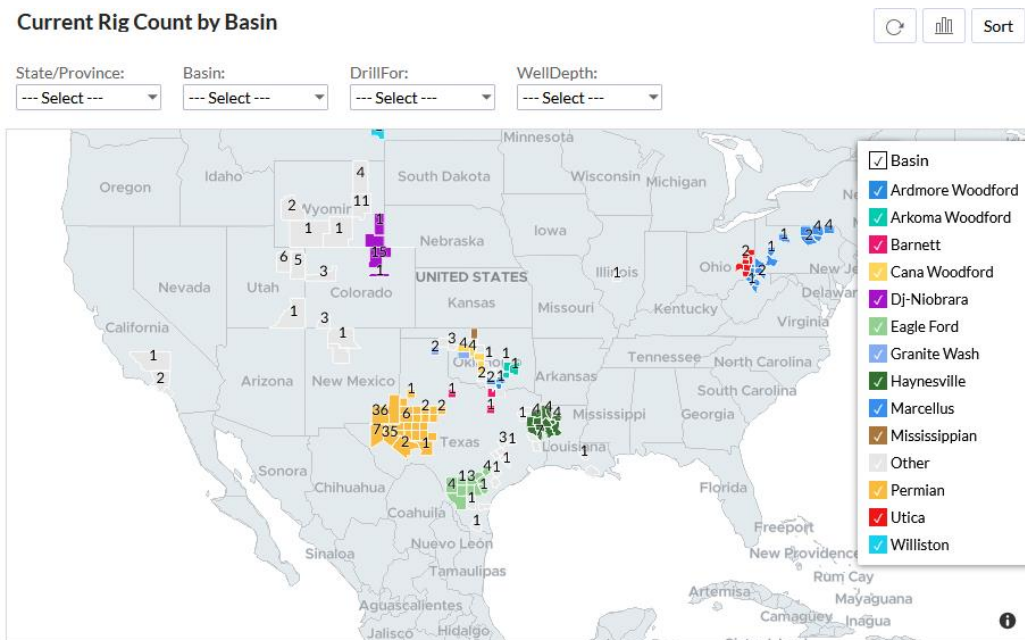
	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
Current Price	\$6.200	\$6.607	\$6.353	\$5.590	\$4.799	\$4.774	\$4.858	\$4.947	\$4.958	\$4.896	\$4.944	\$5.256
Last Week	\$5.865	\$6.225	\$5.969	\$5.311	\$4.682	\$4.654	\$4.727	\$4.805	\$4.814	\$4.757	\$4.815	\$5.128
vs. Last Week	\$0.335	\$0.382	\$0.384	\$0.279	\$0.117	\$0.120	\$0.131	\$0.142	\$0.144	\$0.139	\$0.129	\$0.128
4 Weeks Ago	\$5.462	\$5.928	\$6.212	\$6.016	\$5.444	\$4.655	\$4.604	\$4.681	\$4.765	\$4.789	\$4.762	\$4.839
vs. 4 Weeks Ago	\$0.738	\$0.679	\$0.141	-\$0.426	-\$0.645	\$0.119	\$0.254	\$0.266	\$0.193	\$0.107	\$0.182	\$0.417
Last Year	\$4.816	\$4.914	\$4.824	\$4.593	\$3.986	\$3.923	\$3.951	\$3.993	\$3.998	\$3.978	\$4.007	\$4.090
vs. Last Year	\$1.384	\$1.693	\$1.529	\$0.997	\$0.813	\$0.851	\$0.907	\$0.954	\$0.960	\$0.918	\$0.937	\$1.166

	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	2.224	▲ 0.000	▲ 0.000	▲ 0.000
NatGas Oct21/Nov21	\$/MMBtu	0.361	▲ 0.000	▲ 0.000	▲ 0.000
NatGas Oct21/Jan22	\$/MMBtu	-1.817	▲ 0.000	▲ 0.000	▼ -0.971
NatGas Apr22/Oct22	\$/MMBtu	1.532	▲ 0.000	▲ 0.000	▲ 1.515
WTI Crude	\$/Bbl	81.64	▼ -4.830	▼ -4.340	▲ 2.630
Brent Crude	\$/Bbl	89.78	▼ -3.890	▼ -2.600	▲ 8.540
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	352.48	▼ -4.460	▼ -23.200	▲ 114.080
Propane, Mt. Bel	cents/Gallon	0.87	▼ -0.004	▲ 0.021	▼ -0.393
Ethane, Mt. Bel	cents/Gallon	0.40	▼ -0.004	▲ 0.001	▲ 0.005
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.000
Coal, PRB	\$/MMBtu	0.70			

Source: CME, Bloomberg


Baker Hughes Rig Counts

Current Rig Count by Basin



<http://www.analytix.ai/baker-hughes-rig-maps.html>

Powered by **ANALYTIX.AI**

Rotary Rig Count					
11/18/2022					
Baker Hughes 					
U.S. Breakout Information	This Week	+/-	Last Week	+/-	Year Ago
Oil	623	1	622	162	461
Gas	157	2	155	55	102
Miscellaneous	2	0	2	2	0
Directional	45	-1	46	10	35
Horizontal	714	3	711	208	506
Vertical	23	1	22	1	22
Canada Breakout	This Week	+/-	Last Week	+/-	Year Ago
Oil	135	2	133	33	102
Gas	66	-1	67	1	65
Major Basin Variances	This Week	+/-	Last Week	+/-	Year Ago
Ardmore Woodford	6	0	6	6	0
Arkoma Woodford	3	-1	4	0	3
Barnett	3	0	3	2	1
Cana Woodford	28	1	27	4	24
DJ-Niobrara	20	0	20	9	11
Eagle Ford	71	0	71	29	42
Granite Wash	4	-1	5	1	3
Haynesville	70	-1	71	23	47
Marcellus	39	0	39	10	29
Mississippian	2	1	1	2	0
Permian	349	-1	350	71	278
Utica	13	0	13	3	10
Williston	42	1	41	18	24

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