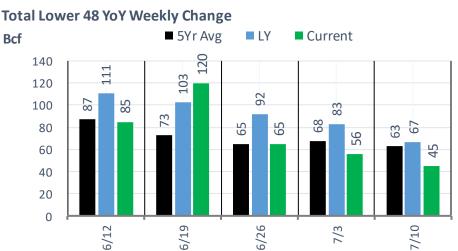
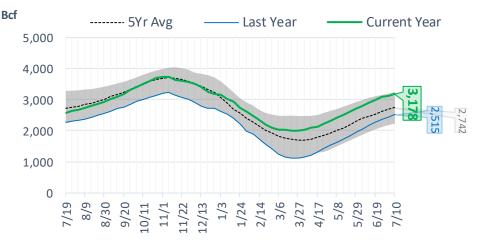
Market Report

19 July 2020

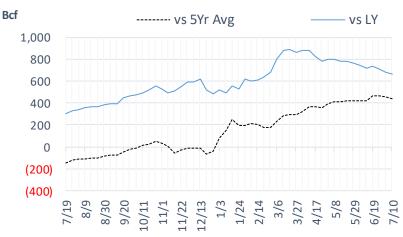


EIA Storage Report





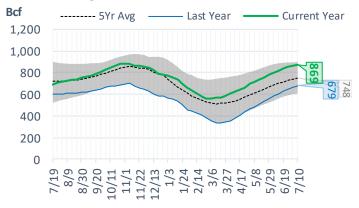




Natural Gas Storage Stats - Last 5 Weeks

	Current	Week - 1	Week - 2	Week - 3	Week - 4	Week - 5
Week Ending	10-Jul	3-Jul	26-Jun	19-Jun	12-Jun	5-Jun
Total Lower 48 Storage Level	3178	3133	3077	3012	2892	2807
Weekly Change	+45	+56	+65	+120	+85	+93
vs LY	+663	+685	+712	+739	+722	+748
vs 5Yr Avg	+436	+454	+466	+466	+419	+421
S. Central Salt Storage Level	359	364	368	372	358	357
Weekly Change	-5	-4	-4	+14	+1	+4
vs LY	+110	+106	+108	+109	+96	+101
vs 5Yr Avg	+66	+68	+69	+68	+53	+55
S. Central NonSalt Storage Level	869	862	854	840	815	797
Weekly Change	+7	+8	+14	+25	+18	+19
vs LY	+190	+199	+211	+215	+210	+217
vs 5Yr Avg	+121	+124	+128	+125	+113	+111
Midwest Storage Level	780	761	740	716	688	662
Weekly Change	+19	+21	+24	+28	+26	+28
vs LY	+162	+172	+181	+188	+195	+202
vs 5Yr Avg	+133	+138	+144	+145	+143	+144
East Storage Level	672	657	639	619	586	563
Weekly Change	+15	+18	+20	+33	+23	+27
vs LY	+116	+118	+121	+128	+123	+130
vs 5Yr Avg	+84	+91	+98	+104	+96	+102
Mountain Storage Level	186	180	173	165	156	148
Weekly Change	+6	+7	+8	+9	+8	+8
vs LY	+41	+42	+41	+41	+40	+40
vs 5Yr Avg	+15	+14	+11	+8	+4	+2
Pacific Storage Level	312	310	304	299	290	281
Weekly Change	+2	+6	+5	+9	+9	+8
vs LY	+45	+49	+52	+57	+58	+58

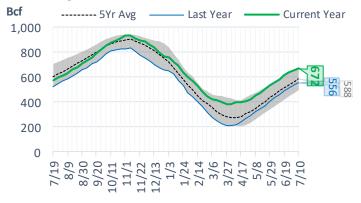
NonSalt Storage Levels



Bcf 500 400 300 200 100 0

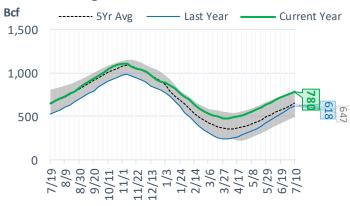
> 7/19 8/90 8/30 9/20 9/20 9/20 11/1 11/1 11/22 12/13 1/3 1/3 1/3 2/14 2/14 2/14 2/14 2/14 5/29 5/29 5/29 5/20 7/10

East Storage Levels

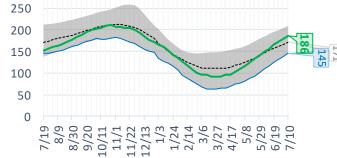


Midwest Storage Levels

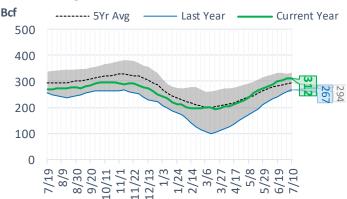
Salt Storage Levels



Mountain Storage Levels Bcf _____ 5Yr Avg ____ Last Year 300



Pacific Storage Levels

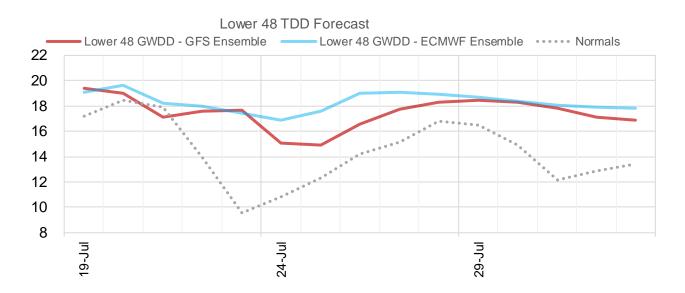


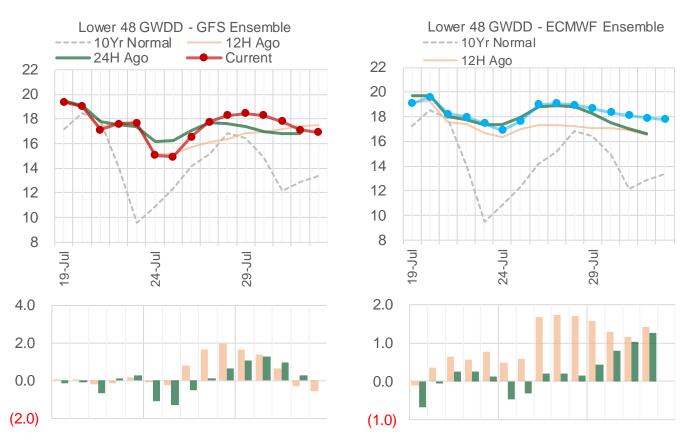
The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are 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.

Current Year



Current Short-term Weather Model Outlooks (00z)





Source: WSI , Bloomberg

EIA Storage Week Balances

	12-Jun	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	WoW	vs. 4W
Lower 48 Dry Production	84.1	84.3	84.2	84.3	84.7	84.3	▼ -0.4	▼ -0.1
Canadian Imports	3.9	3.8	4.2	4.1	4.3	4.5	A 0.2	0.4
L48 Power	33.3	30.3	37.1	38.5	41.9	43.0	A 1.1	6 .1
L48 Residential & Commercial	7.7	8.0	7.4	7.4	7.3	7.4	🔺 0.1	▼ -0.1
L48 Industrial	19.0	18.2	18.6	18.8	17.9	17.0	▼ -0.9	▼ -1.4
L48 Lease and Plant Fuel	4.7	4.7	4.7	4.7	4.7	4.7	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	2.0	1.8	2.1	2.2	2.2	2.3	A 0.1	a 0.2
L48 Regional Gas Consumption	66.8	63.0	70.0	71.7	74.0	74.4	0.4	4.7
Net LNG Exports	3.9	3.8	4.0	4.0	3.0	3.3	0.3	▼ -0.4
Total Mexican Exports	5.7	5.6	5.9	5.8	5.9	6.1	0.2	0.3
Implied Daily Storage Activity	11.6	15.6	8.5	6.9	6.0	5.0	-1.0	
EIA Reported Daily Storage Activity Daily Model Error	12.1 -0.6	17.1 -1.5	9.3 -0.8	8.0 -1.1	6.4 -0.4			

Monthly Balances

	2Yr Aqo	LY					MTD		
	Jul-18	Jul-19	Mar-20	Apr-20	May-20	Jun-20	Jul-20	МоМ	vs. LY
Lower 48 Dry Production	81.9	90.1	92.2	90.7	85.0	84.2	84.6	0.4	▼ -5.5
Canadian Imports	5.6	5.0	4.1	4.0	3.9	4.0	4.4	0.4	▼ -0.6
L48 Power	39.1	40.9	28.3	25.3	26.3	34.3	39.8	5 .6	▼ -1.1
L48 Residential & Commercial	7.8	8.1	27.5	20.9	12.3	7.7	7.0	▼ -0.7	▼ -1.1
L48 Industrial	20.7	20.1	21.8	19.6	19.4	18.8	16.7	▼ -2.1	▼ -3.4
L48 Lease and Plant Fuel	4.6	5.0	5.2	5.1	4.8	4.7	4.5	▼ -0.3	▼ -0.5
L48 Pipeline Distribution	2.2	2.2	2.5	2.1	1.9	2.0	2.1	a 0.1	▼ -0.1
L48 Regional Gas Consumption	74.3	76.4	85.3	73.1	64.6	67.6	70.1	2.6	▼ -6.3
Net LNG Exports	3.3	6.0	8.5	8.2	6.7	4.0	3.2	▼ -0.8	▼ -2.7
Total Mexican Exports	5.0	5.4	5.6	4.9	4.9	5.7	6.0	a 0.3	A 0.6
Implied Daily Storage Activity	5.0	7.3	-3.1	8.4	12.7	10.9	9.6		
EIA Reported Daily Storage Activity Daily Model Error									

Source: Bloomberg, analytix.ai

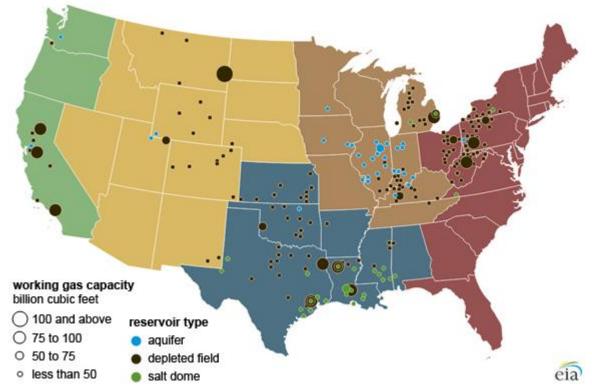


Regional S/D Models Storage Projection

Week Ending 17-Jul Daily Average Weekly Daily Storage Adjusted Daily Raw Adjustment Activity Storage (Adjusted) * Activity Storage Factor L48 5.7 40 4.7 0.9 East 0.9 1.8 2.7 19 Midwest 3.8 -0.8 3.1 21 Mountain 2.2 -1.7 0.5 3 South Central -2.4 2.1 -0.3 -2 Pacific 0.2 -0.5 -0.3 -2

*Adjustment Factor is calcuated based on historical regional deltas

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

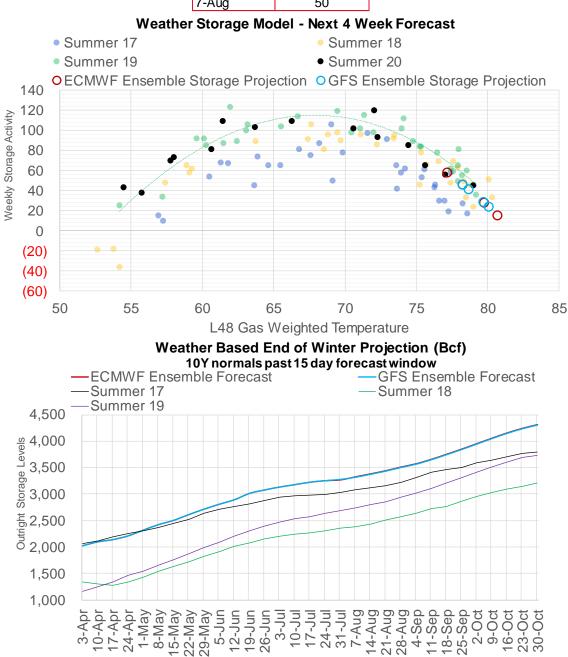




Market Report

Weather Model Storage Projection

Next repor	t and beyond
	Week Storage
Week Ending	Projection
24-Jul 31-Jul	28
31-Jul	20
7-Aug	50



ENERGY

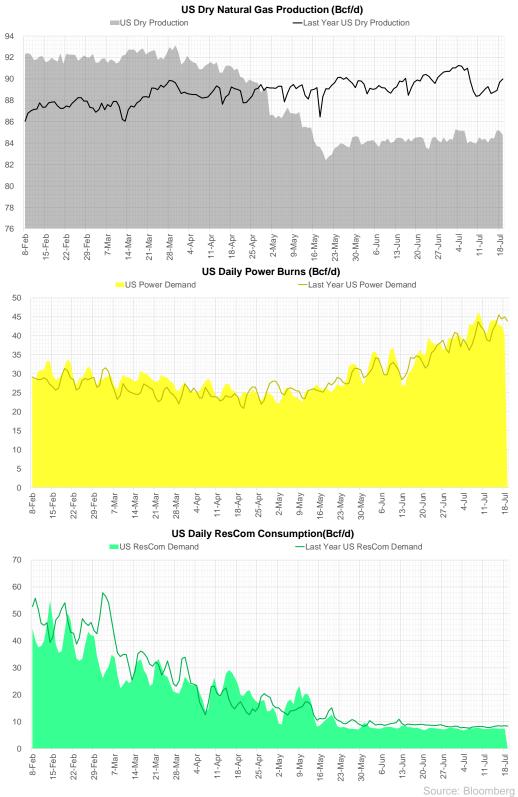
Weather Model Storage Projection to End of Season

L48 Storage Trajector	y from Weather	Model				Forecast S	Storage Lev	vels	
	Report		vs 5Yr	Reported	Estimate		-	5Yr Avg	
	Storage Level	vs. LY	Avg	Chg	Chg *	LY Chg	vs. LY	Chg	vs. 5Yr
3-Apr-20	2024	876	324	38		25	13	6	32
10-Apr-20	2097	876	370	73		73	0	27	46
17-Apr-20	2140	827	364	43		92	(49)	49	(6)
24-Apr-20	2210	783	360	70		114	(44)	74	(4)
1-May-20	2319	796	395	109		96	13	74	35
8-May-20	2422	799	413	103		100	3	85	18
15-May-20	2503	779	407	81		101	(20)	87	(6)
22-May-20	2612	778	423	109		110	(1)	93	16
29-May-20	2714	762	422	102		118	(16)	103	(1)
5-Jun-20	2807	748	421	93		107	(14)	94	(1)
12-Jun-20	2892	722	419	85		111	(26)	87	(2)
19-Jun-20	3012	739	466	120		103	17	73	47
26-Jun-20	3077	712	466	65		92	(27)	65	0
3-Jul-20	3133	685	454	56		83	(27)	68	(12)
10-Jul-20	3178	663	436	45		67	(22)	63	(18)
17-Jul-20					46	44	2	37	9
24-Jul-20					28	56	(28)	33	(5)
31-Jul-20					20	58	(38)	33	(13)
7-Aug-20					50	51	(1)	44	6
14-Aug-20					56	56	0	44	12
21-Aug-20					60	60	(0)	49	11
28-Aug-20					69	77	(8)	66	3
4-Sep-20					62	80	(18)	68	(6)
11-Sep-20					83	82	1	77	6
18-Sep-20					95	97	(2)	80	15
25-Sep-20					98	109	(11)	78	20
2-Oct-20					103	102	1	86	17
9-Oct-20					103	102	1	87	16
16-Oct-20					99	92	7	75	24
23-Oct-20					86	89	(3)	67	19
30-Oct-20					71	49	22	52	19
			2322	2596	(274)	2024	298		

* first 15D change is an average of the GFS Ensemble and ECMWF Ensemble

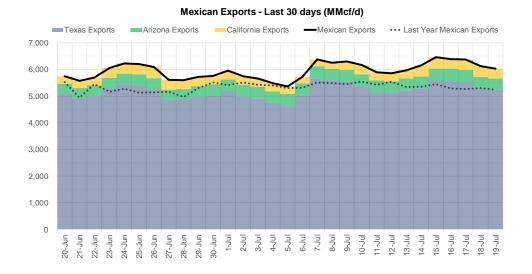


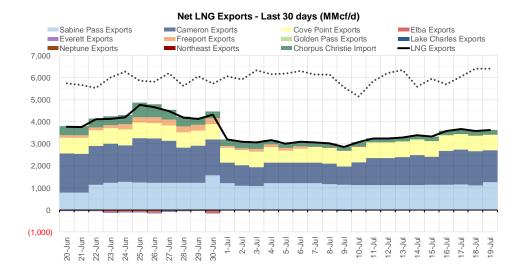




Market Report

ENERGY





Source: Bloomberg



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
8	2020	С	2.00	6256	10	2020	Р	1.50	46099
9	2020	Р	1.75	3651	8	2020	С	2.00	37307
8	2020	Р	1.70	3499	10	2020	С	2.75	35847
9	2020	Р	1.50	3292	3	2021	Р	2.00	34826
10	2020	С	2.75	3074	10	2020	С	2.50	34366
10	2020	Р	1.50	2908	8	2020	Р	1.50	34199
8	2020	Р	1.60	2822	9	2020	Р	1.50	33694
8	2020	С	1.90	2789	10	2020	Р	1.60	31319
8	2020	С	1.75	2279	10	2020	Р	2.00	30774
8	2020	Р	1.50	2004	10	2020	С	3.00	30566
10	2020	С	2.50	1791	9	2020	С	2.50	30023
10	2020	С	2.25	1597	10	2020	Р	1.75	28667
10	2020	С	3.00	1500	10	2020	Р	1.25	28001
11	2020	С	3.00	1302	9	2020	Р	1.20	24974
8	2020	Р	1.55	1106	9	2020	С	3.00	24777
10	2020	С	1.90	1029	8	2020	С	2.50	23902
11	2020	С	2.75	1000	9	2020	P	1.00	23345
4	2021	С	3.00	975	9	2020	Р	1.75	21844
9	2020	Р	1.40	971	3	2021	С	3.00	21543
10	2020	Р	1.75	950	9	2020	Р	1.25	19129
10	2020	Р	1.60	913	8	2020	С	2.25	18982
9	2020	С	2.00	887	8	2020	Р	1.30	18927
9	2020	Р	1.60	868	9	2020	С	2.75	18588
8	2020	Р	1.65	828	10	2020	С	2.10	18286
5	2021	С	3.00	775	10	2020	С	3.25	18191
6	2021	С	3.00	775	9	2020	С	2.00	18168
7	2021	С	3.00	775	10	2020	P C	2.10	18132
8	2021	С	3.00	775	1 3	2021	c	3.50	17983
9	2021	С	3.00	775	3 10	2021 2020	P	3.50 1.00	17585 17420
10	2020	Р	1.85	760	8	2020	P	1.60	17420
11	2020	Р	1.75	760	0 1	2020	Р С	3.00	17288
10	2020	Р	1.70	750	8	2021	P	3.00 1.75	17285
9	2020	С	1.75	738	8	2020	Р	1.00	16762
8	2020	P	1.75	657	8 9	2020	Р С	2.25	16487
10	2020	С	2.20	655	9 10	2020	P	1.30	15765
10	2021	С	3.00	650	8	2020	P	1.20	15641
10	2020	C	2.00	627	8	2020	P	1.25	15379
9	2020	С	1.90	582	4	2020	C	3.00	15370
9	2020	P	1.30	537	12	2020	P	1.50	15255
9	2020	С	2.20	535	10	2020	c	2.25	15195
8	2020	С	1.80	534	8	2020	c	3.00	14670
9	2020	P	1.65	529	8	2020	P	1.40	14517
10	2020	P	1.90	515	10	2020	P	1.20	14516
9	2020	P	1.10	503	10	2020	c	2.00	14441
10	2020	P	2.20	500	9	2020	P	1.30	14218
4	2021	P	2.00	500	11	2020	c	3.50	14187
5	2021	P	2.00	500	9	2020	P	2.00	13947
6	2021	P	2.00	500	8	2020	C	2.10	13707
7	2021	P	2.00	500	8	2020	C	2.75	13515

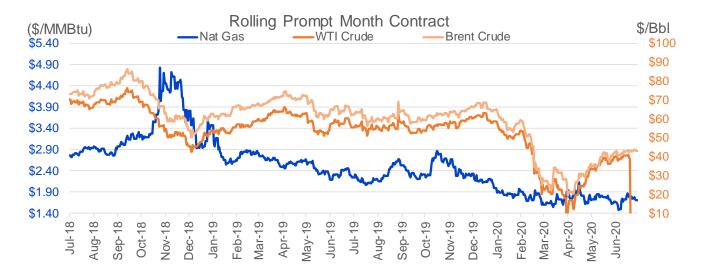
Source: CME, Nasdaq, ICE

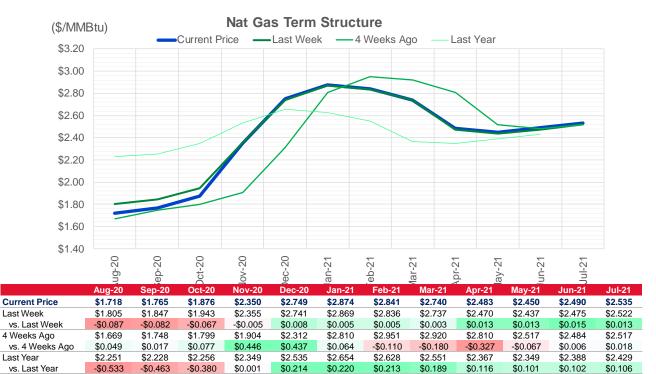


Nat Gas Futures Open Interest CME, ICE and Nasdaq Combined

CME Henry H	lub Futures (1	0,000 MMBtu)	ICE Henry Hut	o Futures Co	ntract Equiva	lent (10,000 MN
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change
AUG 20	129791	142935	-13144	AUG 20	74990	77121	-2131
SEP 20	271672	265692	5980	SEP 20	76615	76098	516.25
OCT 20	128224	126895	1329	OCT 20	87012	86484	528.5
NOV 20	93112	90564	2548	NOV 20	66976	66793	182.5
DEC 20	82865	81312	1553	DEC 20	62088	61465	622.25
JAN 21	118387	117305	1082	JAN 21	80163	79837	326.25
FEB 21	40599	40849	-250	FEB 21	48255	48192	62.5
MAR 21	80638	80395	243	MAR 21	66260	65453	807.75
APR 21	75011	75344	-333	APR 21	52105	52044	61
MAY 21	33427	33187	240	MAY 21	46379	46390	-11.5
JUN 21	19489	19497	-8	JUN 21	45155	45202	-46.75
JUL 21	16929	16745	184	JUL 21	45849	45919	-69.25
AUG 21	13516	13331	185	AUG 21	46299	46396	-96.75
SEP 21	16219	16122	97	SEP 21	44223	44073	150
OCT 21	41213	41006	207	OCT 21	65697	65868	-171
NOV 21	21685	21604	81	NOV 21	37844	37787	57.5
DEC 21	15401	15390	11	DEC 21	39317	39342	-25
JAN 22	13569	13579	-10	JAN 22	31030	30939	90.5
FEB 22	8359	8370	-11	FEB 22	27749	27674	74.75
MAR 22	13698	13772	-74	MAR 22	29359	29308	51.75
APR 22	13169	13166	3	APR 22	28695	28504	191
MAY 22	5150	5163	-13	MAY 22	22704	22753	-48.75
JUN 22	2042	2050	-8	JUN 22	22656	22673	-16.75
JUL 22	1902	1905	-3	JUL 22	22536	22553	-17.25
AUG 22	1342	1345	-3	AUG 22	22277	22294	-17.25
SEP 22	1842	1845	-3	SEP 22	21930	21946	-16.75
OCT 22	2370	2339	31	OCT 22	23289	23346	-56.5
NOV 22	1570	1573	-3	NOV 22	20743	20753	-9.5
DEC 22	1407	1416	-9	DEC 22	20978	20988	-9.75
JAN 23	2715	2715	0	JAN 23	11180	11179	0.25

Source: CME, ICE





					V	s. 4 Weeks		
	Units	Current Price	vs.	Last Week		Ago	٧	s. Last Year
NatGas Jan/Apr	\$/MMBtu	-0.39		0.008		0.043	$\mathbf{\nabla}$	-0.011
NatGas Mar/Apr	\$/MMBtu	-0.257		0.010	$\mathbf{\nabla}$	-0.550	$\mathbf{\nabla}$	-0.503
NatGas Oct/Nov	\$/MMBtu	0.47		0.062		0.066		0.408
NatGas Oct/Jan	\$/MMBtu	1.00		0.072	$\mathbf{\nabla}$	-0.049		0.659
WTICrude	\$/Bbl	0.00		0.000	\bigtriangledown	-39.750	\checkmark	-55.630
Brent Crude	\$/Bbl	43.14	$\mathbf{\nabla}$	-0.100		0.950	$\mathbf{\nabla}$	-19.330
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03		0.000		0.000		0.000
Heating Oil	cents/Gallon	121.91	\bigtriangledown	-2.210		0.770	\bigtriangledown	-67.050
Propane, Mt. Bel	cents/Gallon	0.48		0.001	\bigtriangledown	-0.023	\bigtriangledown	-0.013
Ethane, Mt. Bel	cents/Gallon	0.22	\bigtriangledown	-0.002	\bigtriangledown	-0.008		0.054
Coal, PRB	\$/MTon	12.30		0.000		0.000		0.000
Coal, ILB	\$/MTon	31.05		0.000		0.000	$\mathbf{\nabla}$	-7.500

Source: CME, Bloomberg



Baker Hughes Rig Counts

Oil rigs dropped by -1, while nat gas rigs dropped by -4. The weekly changes for the major basins are listed below.

	Rotary Rig 7/17/202			Baker	Hughes ≽
U.S. Breakout Information	This Week	+/-	Last Week	+/-	Year Ago
Oil	180	-1	181	-599	779
Gas	71	-4	75	-103	174
Miscellaneous	2	0	2	1	1
Directional	23	4	19	-46	69
Horizontal	215	-5	220	-614	829
Vertical	15	-4	19	-41	56
Canada Breakout	This Week	+/-	Last Week	+/-	Year Ago
Oil	6	0	6	-77	83
Gas	26	6	20	-9	35
Major Basin Variances	This Week	+/-	Last Week	+/-	Year Ago
	THIS WEEK				
	IIIIS WEEK				
Ardmore Woodford	1 1 1	0	1	-3	4
		0 0	1 0	-2	4 2
Ardmore Woodford Arkoma Woodford Barnett	1				4 2 1
Ardmore Woodford Arkoma Woodford	1 0	0	0	-2	4 2
Ardmore Woodford Arkoma Woodford Barnett	1 0 0	0 -1	0 1	-2 -1	4 2 1
Ardmore Woodford Arkoma Woodford Barnett Cana Woodford DJ-Niobrara Eagle Ford	1 0 0 6	0 -1 0	0 1 6	-2 -1 -43	4 2 1 49
Ardmore Woodford Arkoma Woodford Barnett Cana Woodford DJ-Niobrara	1 0 0 6 4	0 -1 0 0	0 1 6 4	-2 -1 -43 -23	4 2 1 49 27
Ardmore Woodford Arkoma Woodford Barnett Cana Woodford DJ-Niobrara Eagle Ford	1 0 6 4 11	0 -1 0 2	0 1 6 4 9	-2 -1 -43 -23 -56	4 2 1 49 27 67
Ardmore Woodford Arkoma Woodford Barnett Cana Woodford DJ-Niobrara Eagle Ford Granite Wash	1 0 6 4 11 0	0 -1 0 2 0	0 1 6 4 9 0	-2 -1 -43 -23 -56 -4	4 2 1 49 27 67 4
Ardmore Woodford Arkoma Woodford Barnett Cana Woodford DJ-Niobrara Eagle Ford Granite Wash Haynesville	1 0 6 4 11 0 32	0 -1 0 2 0 -1	0 1 6 4 9 0 33	-2 -1 -43 -23 -56 -4 -19	4 2 1 49 27 67 4 51
Ardmore Woodford Arkoma Woodford Barnett Cana Woodford DJ-Niobrara Eagle Ford Granite Wash Haynesville Marcellus	1 0 6 4 11 0 32 27	0 -1 0 2 0 -1	0 1 6 4 9 0 33 27	-2 -1 -43 -23 -56 -4 -19 -31	4 2 1 49 27 67 4 51 58
Ardmore Woodford Arkoma Woodford Barnett Cana Woodford DJ-Niobrara Eagle Ford Granite Wash Haynesville Marcellus Mississippian	1 0 6 4 11 0 32 27 0	0 -1 0 2 0 -1 0 0	0 1 6 4 9 0 33 27 0	-2 -1 -43 -23 -56 -4 -19 -31 -2	4 2 1 49 27 67 4 51 58 2