U.S. Oil and Gas Trends

Supplement to Mineral Rights Podcast

recorded with Matt Sands on 8/4/2022 www.mineralrightspodcast.com

This presentation aggregates wells up to county and Basin level to highlight trends

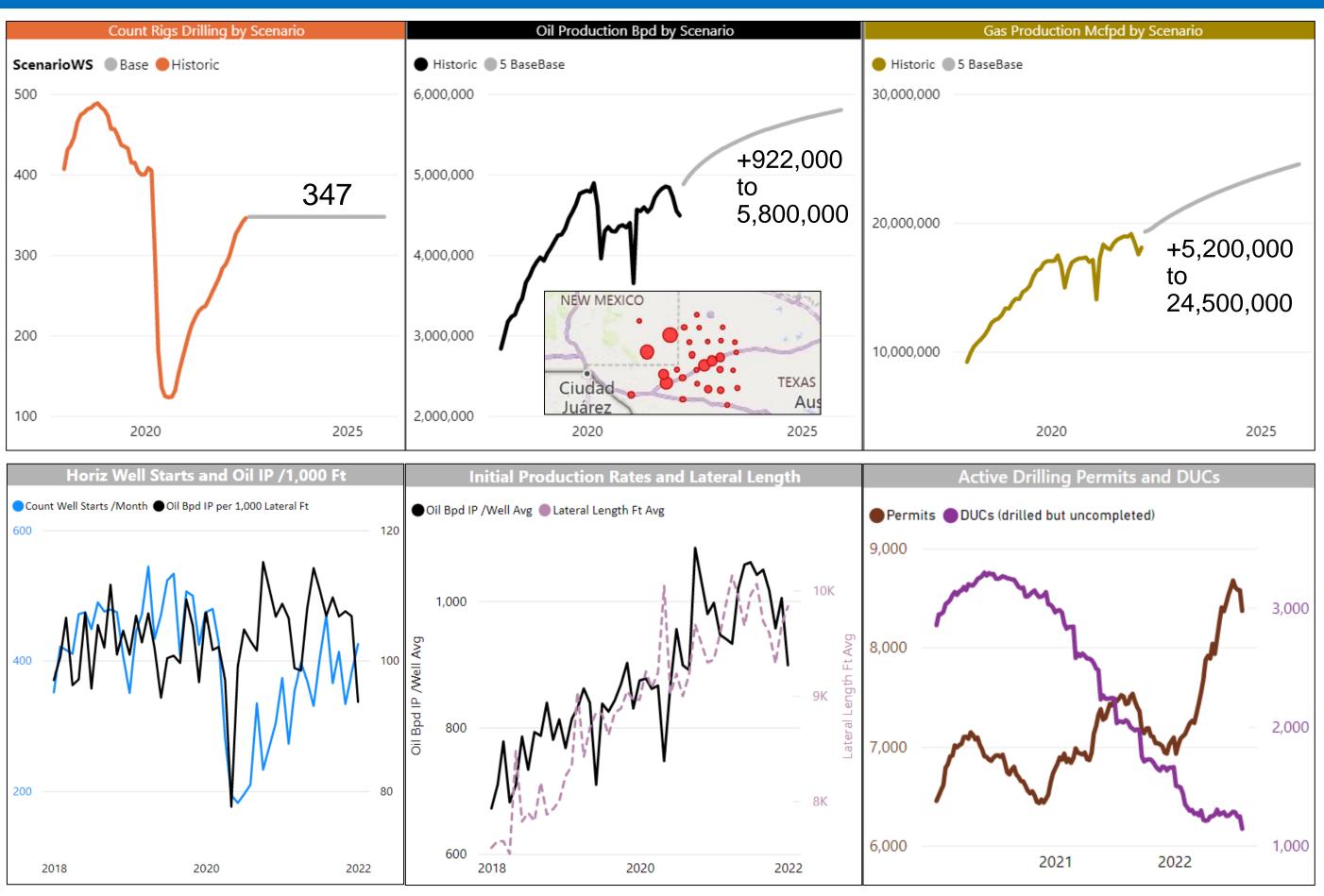
Well-level data is collected from state agencies by WellDatabase

 Blackbird BI puts this data into online Power BI data reports so subscribers can use modern Microsoft technology to analyze oil and gas data Ben MacFarlane President Blackbird BI, LLC benmac@blackbirdbi.com <u>blackbirdbi.com</u> (970) 231-9159

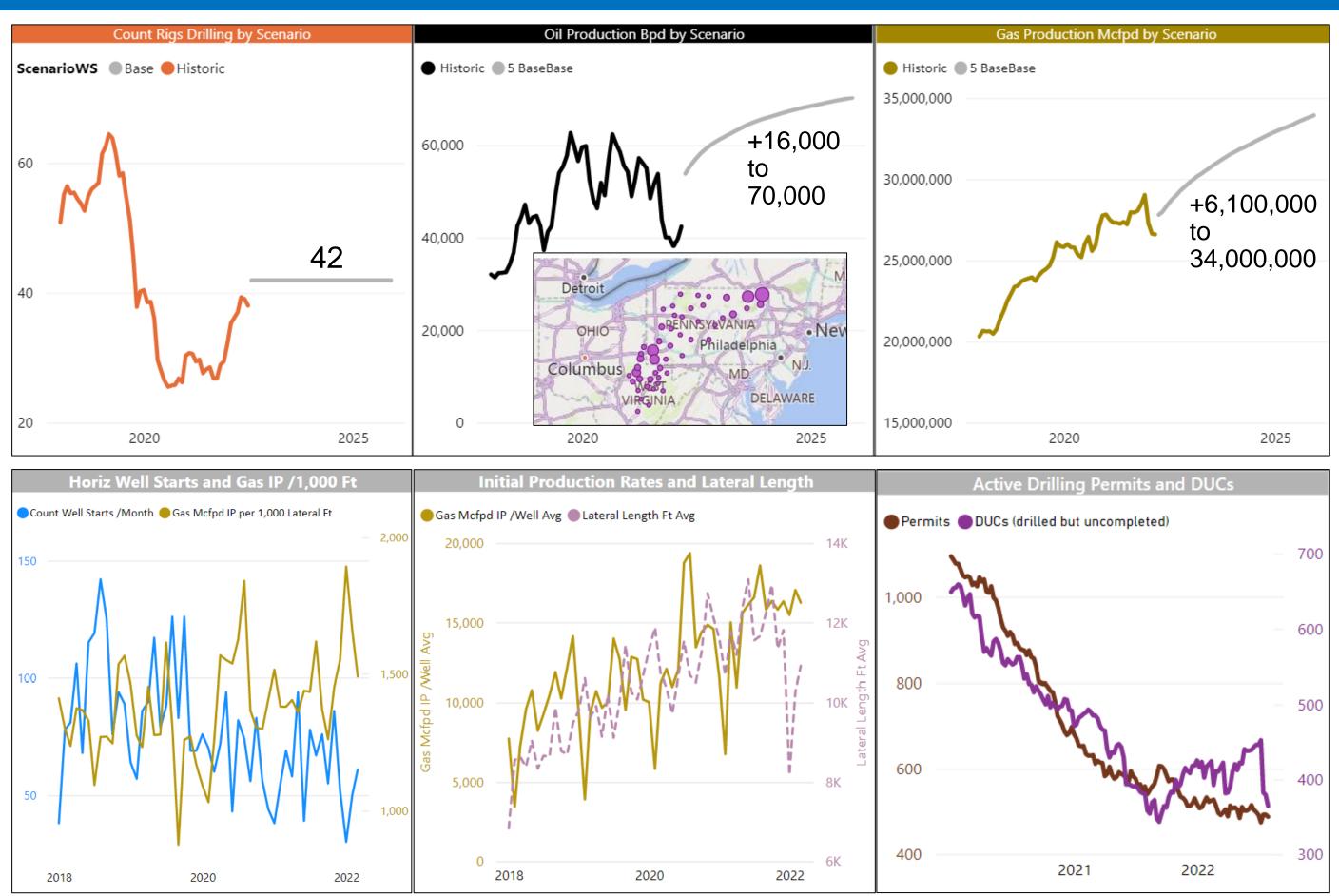
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Permian Basin





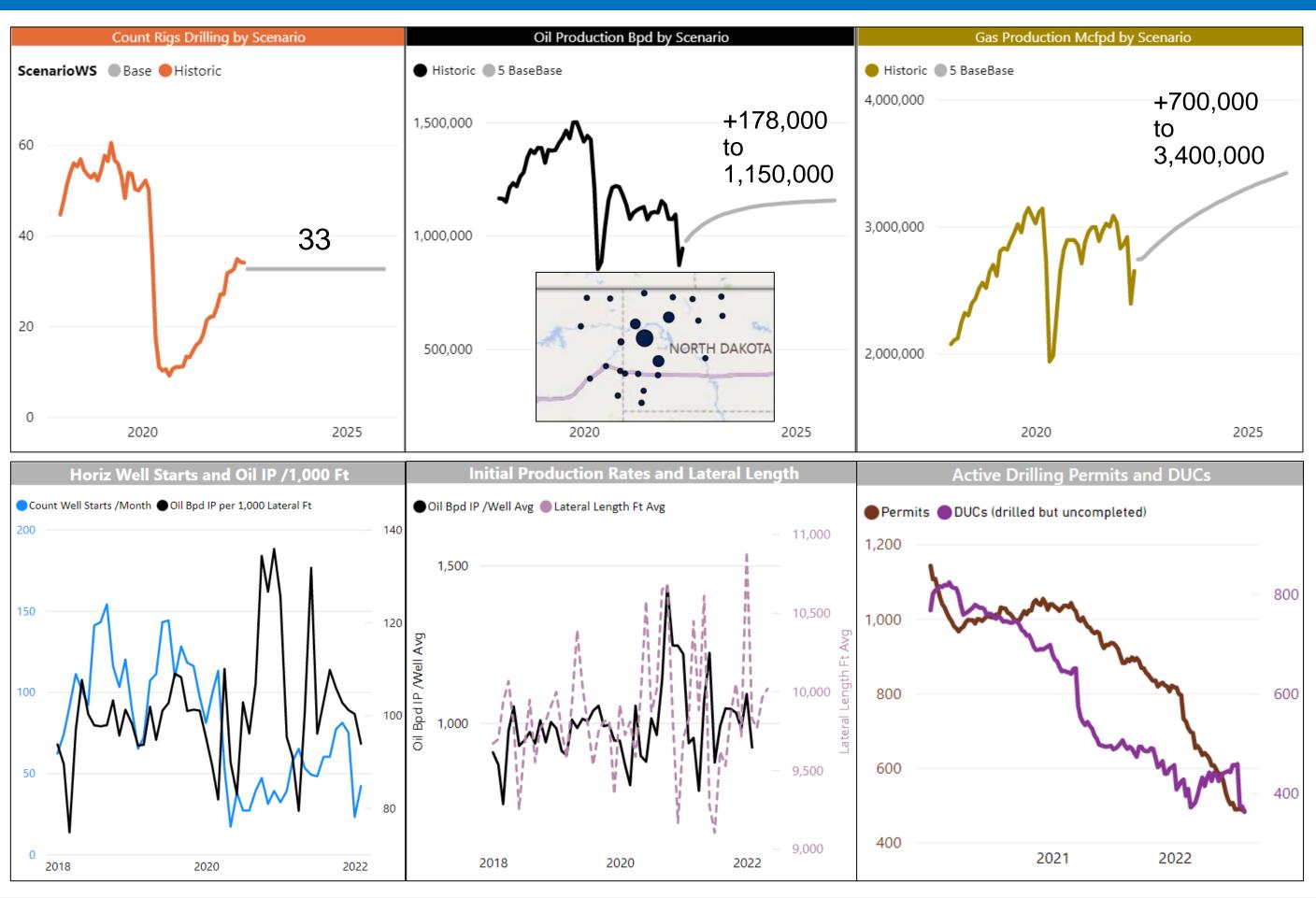
Marcellus



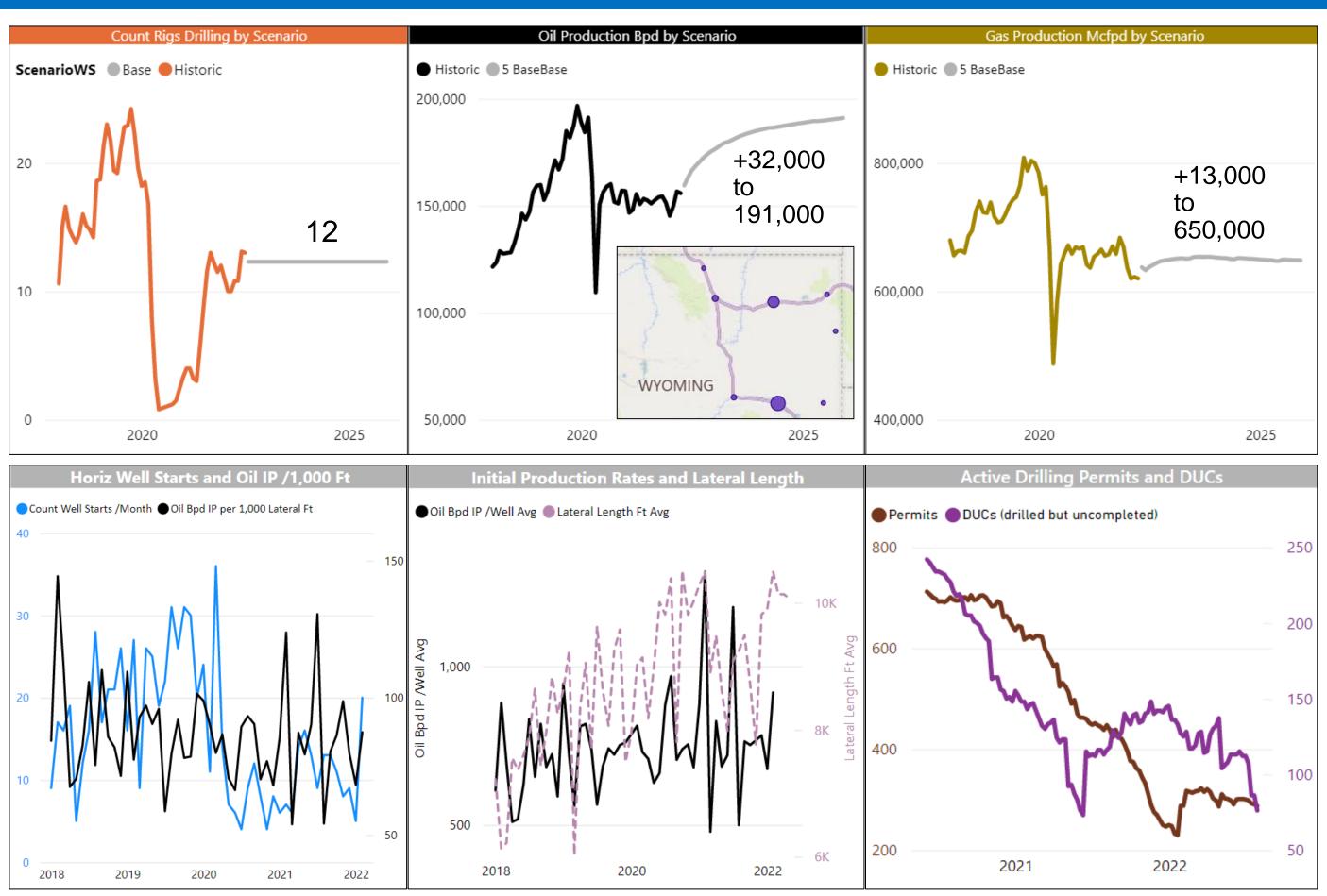
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Blackbird BI, LLC

Bakken



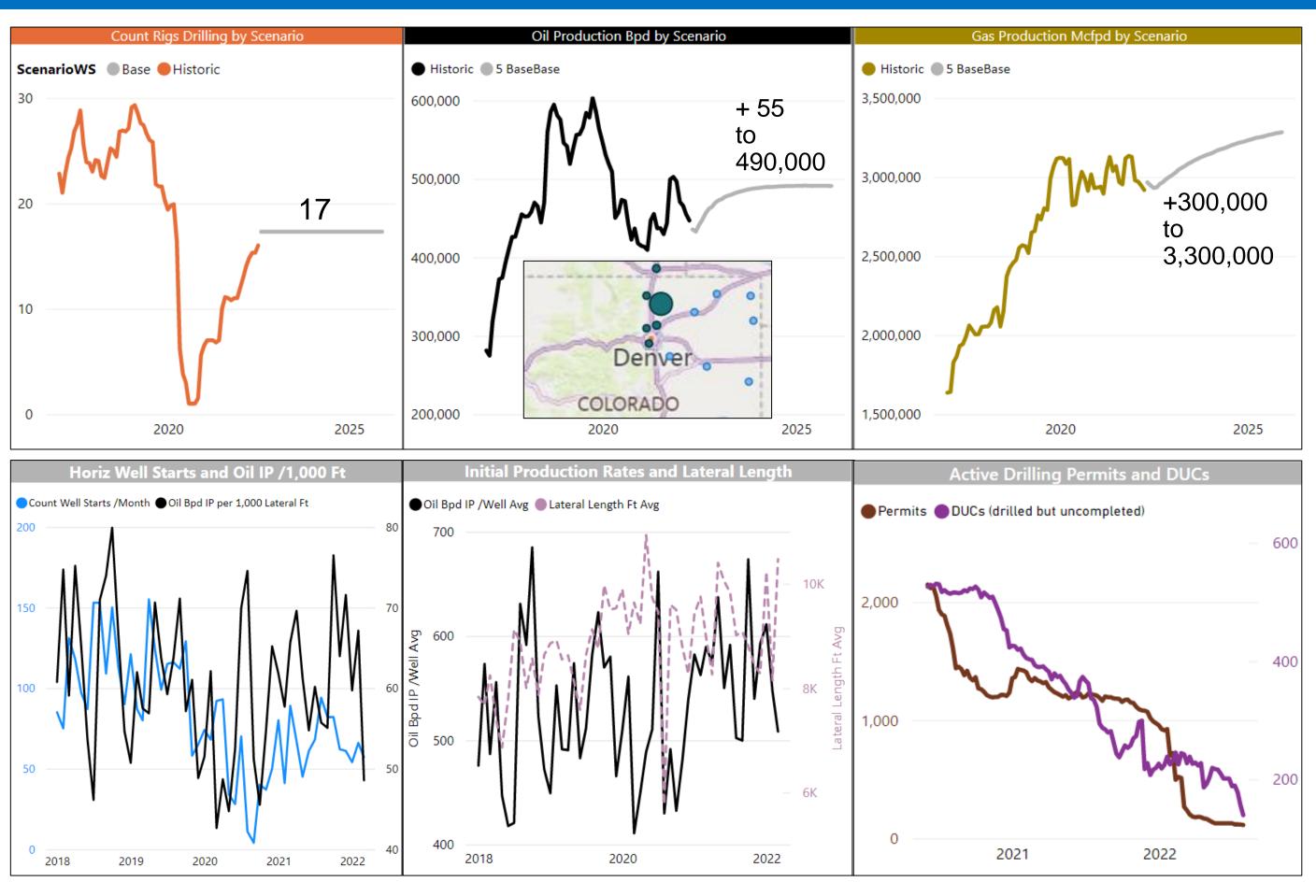
Powder River



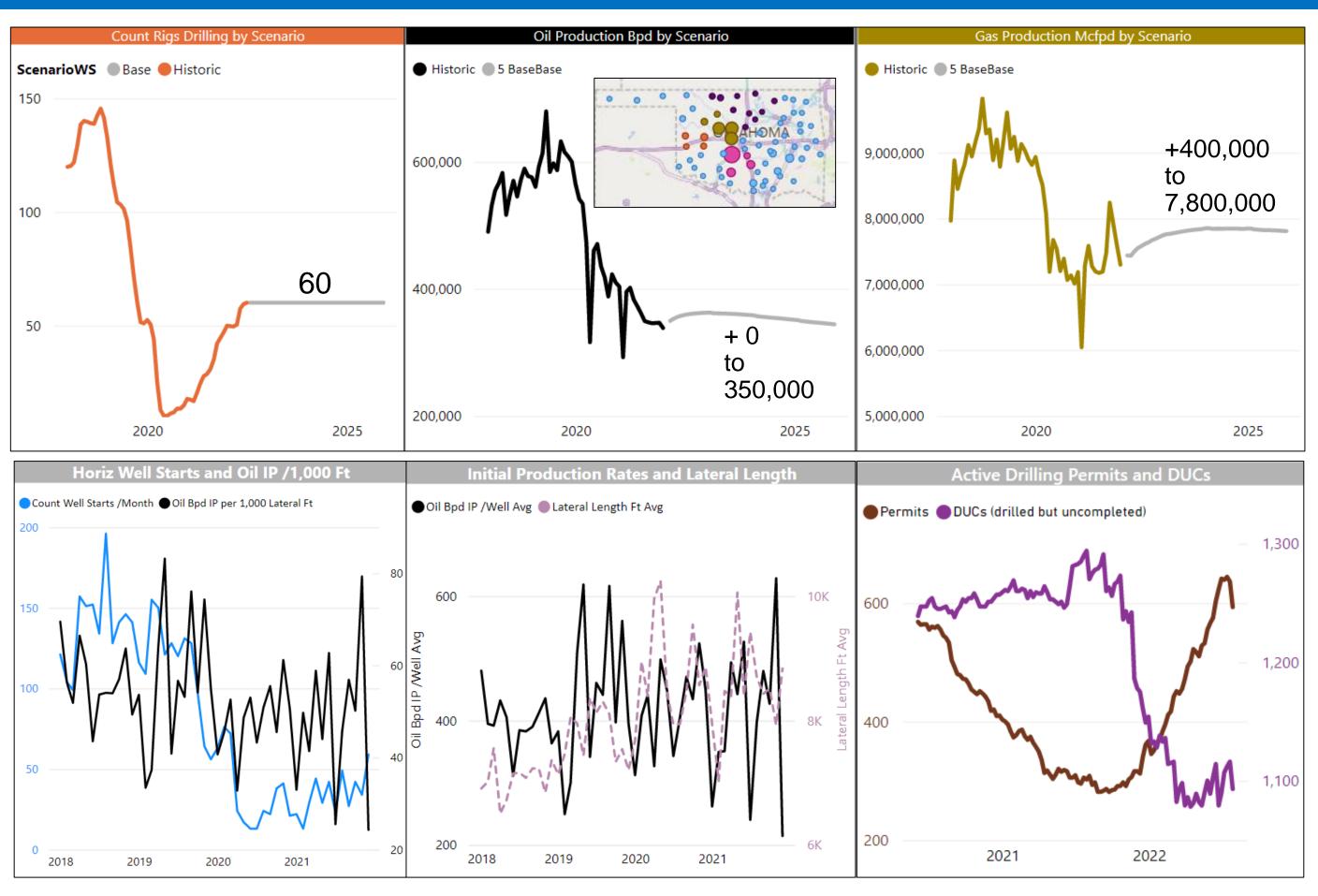
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DJ Basin



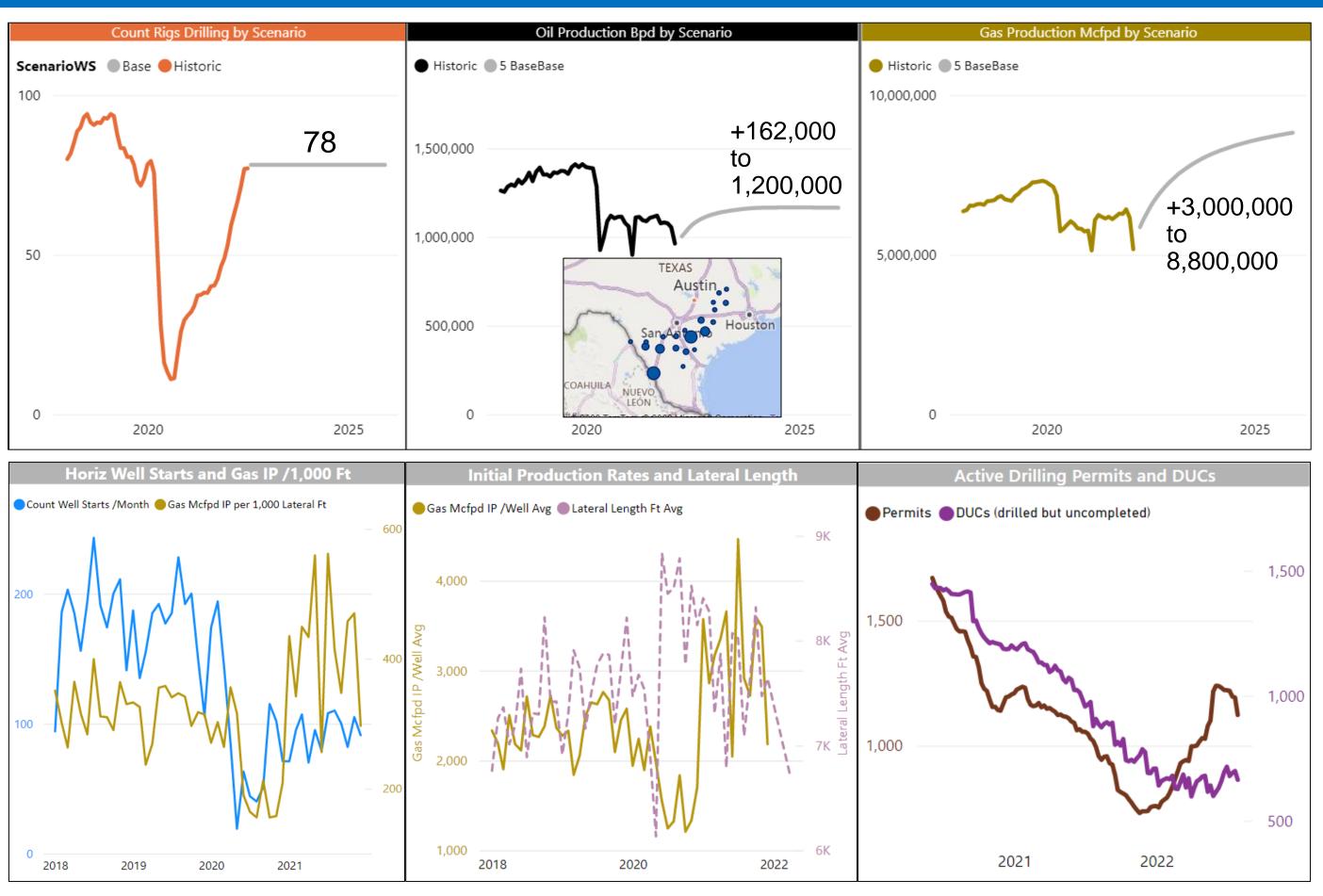


Oklahoma



Blackbird BI, LLC

Eagle Ford





Activity by County

Permian New Wells Started 2018-2022			Marcellus New Hz Wells Started 2018-2022					Bakken New Hz Wells Started 2018-2022										
ST, County	Count Well Starts	Oil Bpd IP /Well Avg	Gas Mcfpd IP /Well Avg	Lateral Length Ft Avg	Vertical Depth Ft Avg	ST, County	Count Well Starts	Oil Bpd IP /Well Avg	Gas Mcfpd IP /Well Avg	Lateral Length Ft Avg	Vertical Depth Ft Avg	^	ST, County	Count Well Starts	Oil Bpd IP /Well Avg	Gas Mcfpd IP /Well Avg	Lateral Length Ft Avg	Vertical Depth Ft Avg
TX, Midland	2,705	909	1,281	9,906	9,257	PA, Susquehanna	529	0	19,573	9,019	6,979		ND, Mckenzie	1,506	1,093	1,953	9,772	10,918
NM, Lea	2,509	1,308	2,615	7,519	13,171	PA, Washington	450	0	14,662	11,801	7,151		ND, Williams	850	809	1,166	9,937	10,583
TX, Reeves	2,415	860	3,888	8,618	10,535	PA, Greene	408	0	15,682	11,569	7,854		ND, Dunn	801	1,014	1,023	9,787	10,888
TX, Martin	2,178	883	990	10,165	8,963	WV, Tyler	329	252	14,958	10,126	6,482		ND, Mountrail	746	1,001	1,104	9,961	10,371
NM, Eddy	1,973	1,079	3,302	8,403	11,334	PA, Bradford	321	0	18,943	9,097	7,567		MT, Richland	41	913	730		10,373
TX, Howard	1,695	854	860	10,119	7,609	WV, Marshall	235	224	10,033	9,621	7,679		ND, Billings	30	403	463	9,880	10,824
TX, Loving	1,426	1,119	3,439	8,211	11,455	PA, Lycoming	169	0	11,445	8,986	8,472		ND, Burke	27	366	632	9,527	7,666
TX, Upton	1,025	847	1,422	9,955	9,137								ND, Divide	26	428	486	9,734	8,622
TX, Reagan	860	612	1,419	10,334	7,961	PA, Tioga	143	0	12,285	9,348	8,211		MT, Roosevelt	22	718	643		10,182
TX, Glasscock	717	766	1,246	10,123	8,515	PA, Butler	139	0	5,296	9,110	5,967		MT, Fallon ND, Bottineau	13	435 48	4	3,445	3,366
TX, Ward	677	684	1,576	7,994	10,562	WV, Doddridge	113	88	14,018	9,306	6,729		ND, Stark	5	530	819	9,692	11,025
TX, Andrews	629	614	717	7,910	8,638	WV, Brooke	100	554	5,899	11,097	5,894		SD, Harding	5	39	18	4,542	11,025
TX, Winkler	547	376	747	6,550	8,554	WV, Wetzel	94	75	11,057	9,018	7,140		ND, Bowman	2	108	33	7,379	8,970
TX, Pecos	504	670	969	9,399	9,617	PA, Wyoming	85	0	25,013	8,488	7,663		ND, Golden Valley	1	116	33	2,028	10,291
TX, Yoakum	429	365	415	4,814	5,700	WV, Ohio	85	514	6,739	10,810	6,231		ND, Mclean	1	1,033	724	15,753	9,998
TX, Culberson	428	829	5,870	9,333	8,914	WV, Monongalia	78	0	13,968	10,497	8,222		Total	3,980	980	1,393	9,826	10,684
TX, Ector	284	302	512	5,889	8,645	PA, Allegheny	77	0	15,115	12,806	7,212							
TX, Crane	272	84	386	2,408	6,202	PA, Elk	77	0	5,099	10,506	7,749							
TX, Gaines	253	269	547	3,439	5,969	WV, Ritchie	77	130	13,312	10,024	6,475							
TX, Irion	228	479	1,722	9,566	6,697	WV, Harrison	61	0	15,052	12,324	6,988							
TX, Scurry	211	352	979	3,560	6,874	PA, Armstrong	60	0	7,903	10,505	6,689							
TX, Hockley	106	468	1,279	2,204	5,545	PA, Cameron	38	0	6,230	9,795	10,313							
TX, Borden	94	642	373	11,479	7,174	PA, Potter	36	0	8,369	6,981	10,814							
TX, Crockett	66	298	1,437	5,623	5,651	PA, Westmoreland	33	0	11,160	11,735	8,362							
TX, Dawson	60	162	89	6,976	8,091	PA, Fayette	32	0	6,786	9,361	8,103							
Total	22,413	855	1,975	8,868	9,726	PA, Mckean	30	0	4,974	9,905	8,370							
					_	PA, Sullivan	28	0	16,322	7,842	8,390							
						r A, Sullivall	20	0	10,522	7,042	0,550	\sim						

63

3,903

Total

13,995

10,144

7,362



Activity by County

Powder	Powder River New Hz Wells Started 2018-2022										
ST, County	Count Well Starts	Oil Bpd IP /Well Avg	Gas Mcfpd IP /Well Avg	Lateral Length Ft Avg	Vertical Depth Ft Avg						
WY, Converse	515	805	1,745	9,344	10,706						
WY, Campbell	278	667	1,909	7,733	9,637						
WY, Johnson	12	309	536	6,978	11,582						
WY, Niobrara	7	208	335	7,370	4,736						
MT, Rosebud	4	148	50		5,338						
WY, Natrona	4	21	360	2,151	14,700						
WY, Crook	2	17	0	1,018							
WY, Weston	2	26	32	3,690							
Total	781	733	1,743	8,677	10,381						

DJ Basin New Hz Wells Started 2018-2022										
ST, County	Count Well Starts	Oil Bpd IP /Well Avg	Gas Mcfpd IP /Well Avg	Lateral Length Ft Avg	Vertical Depth Ft Avg					
CO, Weld	3,638	519	1,432	8,649	6,936					
CO, Adams	210	624	1,030	8,538	7,538					
WY, Laramie	210	619	386	9,685	8,451					
CO, Arapahoe	68	980	1,292	10,045	7,837					
CO, Larimer	65	781	1,708	9,852	6,824					
CO, Broomfield	40	675	1,661	12,742	7,562					
WY, Goshen	1	210	95	10,172						
Total	4,232	539	1,365	8,774	7,049					

Oklahoma New Hz Wells Started 2018-2022						
ST, County	Count Well Starts	Oil Bpd IP /Well Avg	Gas Mcfpd IP /Well Avg	Lateral Length Ft Avg	Vertical Depth Ft Avg	
OK, Kingfisher	819	536	1,492	7,001	8,045	
OK, Grady	550	476	4,312	8,539	12,487	
OK, Canadian	473	368	3,143	7,526	10,033	
OK, Blaine	370	746	5,978	8,839	10,987	
OK, Hughes	180	10	3,327	9,497	4,836	
OK, Dewey	154	306	3,135	6,673	10,209	
OK, Mcclain	153	478	786	8,656	9,623	
OK, Garvin	142	621	4,591	7,880	12,164	
OK, Ellis	125	444	1,090	7,760	9,339	
OK, Major	110	350	1,126	5,538	8,485	
OK, Alfalfa	78	179	1,005	5,106	5,828	
OK, Custer	75	194	9,928	8,074	13,245	
OK, Garfield	71	238	915	4,642	6,641	
OK, Pittsburg	67	4	6,249	9,179	7,624	
OK, Woods	66	181	954	5,162	5,805	
OK, Stephens	56	627	6,829	8,565	12,638	
OK, Carter	40	325	3,009	9,809	11,107	
OK, Oklahoma	38	248	472	8,125	6,884	
OK, Coal	35	14	4,123	7,325	7,775	
OK, Logan	34	242	689	5,237	6,202	
OK, Caddo	26	238	3,165	7,222	11,748	
OK, Woodward	26	181	2,265	6,360	9,601	
OK, Mcintosh	23	7	3,287	10,328	4,590	
OK, Love	18	1,061	2,598	9,049	15,323	
OK, Johnston	16	505	2,273	9,414	8,757	
OK, Roger Mills	15	292	4,681	6,026	10,962	
Total	3,882	422	3,104	7,659	9,520	

Eagle	Ford Nev	w Wells S	started 20	18-2022	
ST, County	Count Well Starts	Oil Bpd IP /Well Avg	Gas Mcfpd IP /Well Avg	Lateral Length Ft Avg	Vertical Depth Ft Avg
TX, Karnes	1,491	1,050	2,077	6,084	11,456
TX, La Salle	924	591	2,299	8,512	9,335
TX, Dimmit	718	531	1,346	8,358	6,989
TX, Webb	573	173	7,573	8,876	9,315
TX, De Witt	558	1,231	4,536	6,243	13,027
TX, Gonzales	527	909	956	7,778	10,800
TX, Mcmullen	343	780	1,760	8,904	10,625
TX, Atascosa	287	745	556	8,053	10,012
TX, Burleson	215	514	288	7,952	7,996
TX, Live Oak	201	766	2,769	6,738	11,641
TX, Frio	123	412	465	9,225	6,835
TX, Lavaca	123	697	1,535	7,826	11,735
TX, Zavala	120	465	359	9,278	6,485
TX, Brazos	115	486	358	7,909	8,461
TX, Washington	106	381	6,196	5,588	10,004
TX, Fayette	63	490	4,447	6,675	11,186
TX, Maverick	46	268	668	5,711	3,653
TX, Wilson	44	397	247	8,568	8,118
TX, Lee	42	459	287	7,205	8,568
TX, Duval	35	31	42	683	3,014
TX, Bee	17	23	539	3,620	5,520
Total	6,671	730	2,396	7,560	9,982