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August 20, 2020

Office of Governor
State of North Dakota
Attn: Governor Doug Burgum
600 East Boulevard Avenue
Bismarck, ND, 58505-0001
Phone: (701) 328-2200

RE: Fort Berthold Indian Reservation Boundary Wells | PRODUCTION ANALYSIS

Dear Governor Burgum,

MineralTracker, as a division of First International Bank & Trust, respectfully submits this Production Analysis Report for the purpose of providing meaningful analysis related to oil and gas reserves attributable to wells whose wellbores intersect the Fort Berthold Indian Reservation ("FBIR") boundary. MineralTracker was tasked with employing decline curve analysis to provide production forecasts of oil and gas for all wells crossing the boundary.

The North Dakota Department of Mineral Resources ("DMR") provided a list of 214 wells that cross the FBIR boundary, which are herein referred to as the "subject wells". The DMR also provided the length of the lateral section of each subject wellbore inside, and outside, the FBIR boundary. MineralTracker compiled historical production data for each of the subject wells and employed the Arp's equation to calculate a forward-looking decline curve for each well. An economic limit was estimated for each subject well using assumed commercial factors.

The results of the Production Analysis Report are detailed in the pages that follow. Information has been provided in a data format in addition to this report.

We thank you for the opportunity to offer our services for the benefit of the State of North Dakota.

Sincerely,

A handwritten signature in blue ink that reads 'Joel Brown'.

Joel Brown
Mineral Services Manager
MineralTracker | First International Bank & Trust
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PRODUCTION VOLUME SUMMARY

The subject wells have been categorized based on the location of the wellhead and the date on which the well was spud. Summaries of the volumetric analysis are included in the following tables.

All Wells Crossing Boundary

Count of Wells Crossing Boundary	214	
Lateral Footage Inside FBIR	913,301	
Lateral Footage Outside FBIR	1,220,271	
Total Production Volumes	Oil (bbl)	Gas (Mcf)
Cumulative Production (thru 6/30/2020)	58,932,457	83,420,133
Forecasted Production (from 7/1/2020)	52,122,068	105,200,693
Forecasted Production (6/30/2021 thru 7/1/2023)	7,969,175	16,431,205
Proportional to Footage Inside FBIR		
Cumulative Production (thru 6/30/2020)	25,226,743	35,708,985
Forecasted Production (from 7/1/2020)	22,311,474	45,032,414
Forecasted Production (6/30/2021 thru 7/1/2023)	3,411,300	7,033,574
Proportional to Footage Outside FBIR		
Cumulative Production (thru 6/30/2020)	33,705,714	47,711,148
Forecasted Production (from 7/1/2020)	29,810,594	60,168,279
Forecasted Production (6/30/2021 thru 7/1/2023)	4,557,874	9,397,631

Table 1: Production Analysis Results for All Subject Wells

Wellhead Outside FBIR, Spud Before June 30, 2019

Count of Wells Crossing Boundary	132	
Lateral Footage Inside FBIR	525,513	
Lateral Footage Outside FBIR	724,933	
Total Production Volumes	Oil (bbl)	Gas (Mcf)
Cumulative Production (thru 6/30/2020)	34,594,679	52,179,052
Forecasted Production (from 7/1/2020)	30,622,747	63,118,239
Forecasted Production (6/30/2021 thru 7/1/2023)	4,581,274	9,879,655
Proportional to Footage Inside FBIR		
Cumulative Production (thru 6/30/2020)	14,538,775	21,928,792
Forecasted Production (from 7/1/2020)	12,869,530	26,526,100
Forecasted Production (6/30/2021 thru 7/1/2023)	1,925,328	4,152,028
Proportional to Footage Outside FBIR		
Cumulative Production (thru 6/30/2020)	20,055,904	30,250,260
Forecasted Production (from 7/1/2020)	17,753,218	36,592,139
Forecasted Production (6/30/2021 thru 7/1/2023)	2,655,946	5,727,627

Table 2: Production Analysis Results for Wellheads Outside FBIR, Spud Before June 30, 2019

Wellhead Inside FBIR, Spud Before June 30, 2019

Count of Wells Crossing Boundary	74	
Lateral Footage Inside FBIR	387,788	
Lateral Footage Outside FBIR	399,085	
Total Production Volumes	Oil (bbl)	Gas (Mcf)
Cumulative Production (thru 6/30/2020)	23,900,348	30,731,483
Forecasted Production (from 7/1/2020)	15,867,149	33,660,035
Forecasted Production (6/30/2021 thru 7/1/2023)	2,267,433	4,894,754
Proportional to Footage Inside FBIR		
Cumulative Production (thru 6/30/2020)	11,778,607	15,145,138
Forecasted Production (from 7/1/2020)	7,819,674	16,588,392
Forecasted Production (6/30/2021 thru 7/1/2023)	1,117,440	2,412,240
Proportional to Footage Outside FBIR		
Cumulative Production (thru 6/30/2020)	12,121,741	15,586,345
Forecasted Production (from 7/1/2020)	8,047,476	17,071,643
Forecasted Production (6/30/2021 thru 7/1/2023)	1,149,993	2,482,513

Table 3: Production Analysis Results for Wellheads Inside FBIR, Spud Before June 30, 2019

Wellhead Inside FBIR, Spud After June 30, 2019

Count of Wells Crossing Boundary	8	
Lateral Footage Inside FBIR	0	
Lateral Footage Outside FBIR	96,253	
Total Production Volumes	Oil (bbl)	Gas (Mcf)
Cumulative Production (thru 6/30/2020)	437,430	509,598
Forecasted Production (from 7/1/2020)	5,632,171	8,422,420
Forecasted Production (6/30/2021 thru 7/1/2023)	1,120,467	1,656,796
Proportional to Footage Inside FBIR		
Cumulative Production (thru 6/30/2020)	0	0
Forecasted Production (from 7/1/2020)	0	0
Forecasted Production (6/30/2021 thru 7/1/2023)	0	0
Proportional to Footage Outside FBIR		
Cumulative Production (thru 6/30/2020)	437,430	509,598
Forecasted Production (from 7/1/2020)	5,632,171	8,422,420
Forecasted Production (6/30/2021 thru 7/1/2023)	1,120,467	1,656,796

Table 4: Production Analysis Results for Wellheads Inside FBIR, Spud Before After 30, 2019



PRODUCTION PROFILE

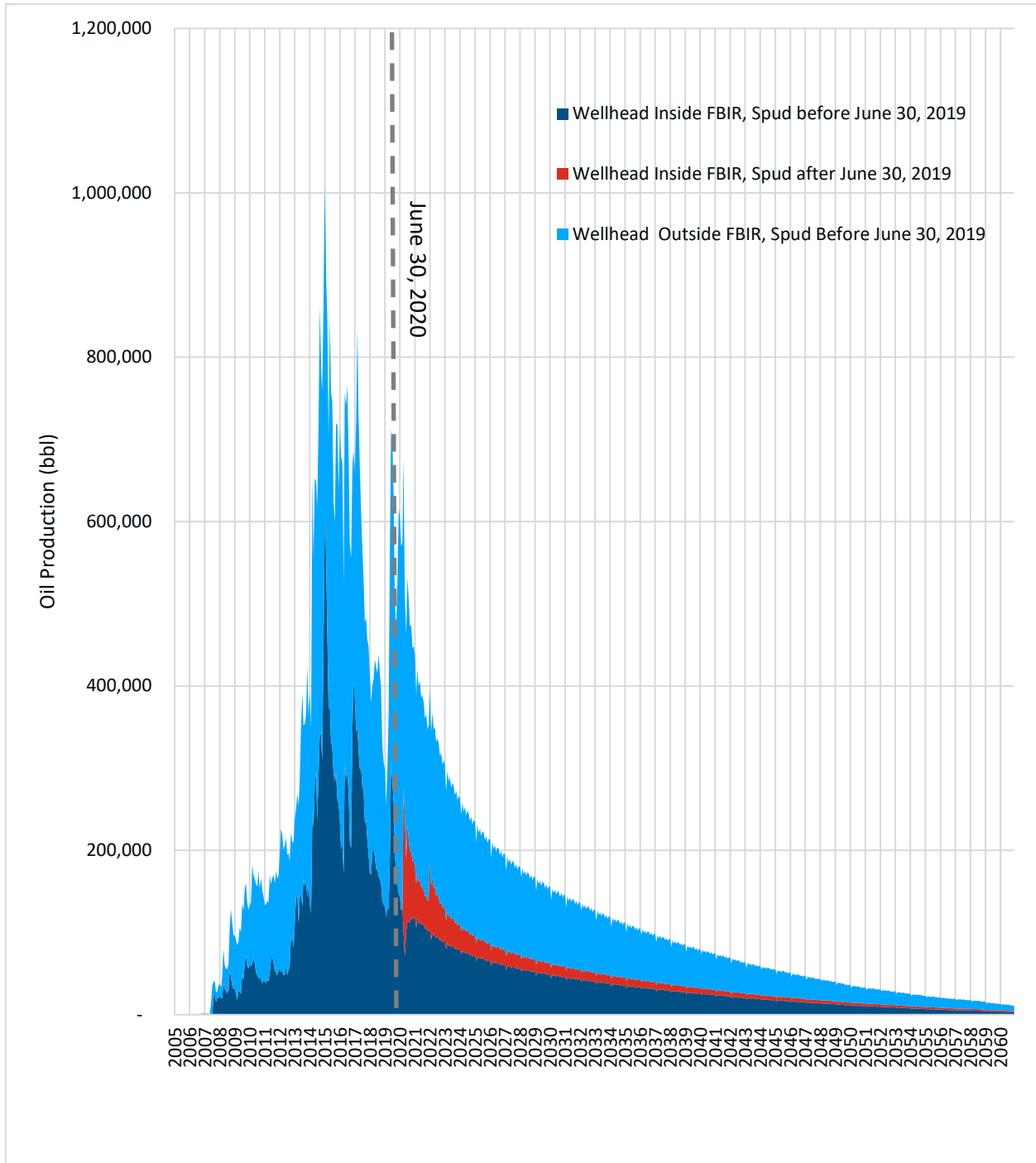


Figure 2: Oil Production Profile



FBIR BOUNDARY WELLS MAP

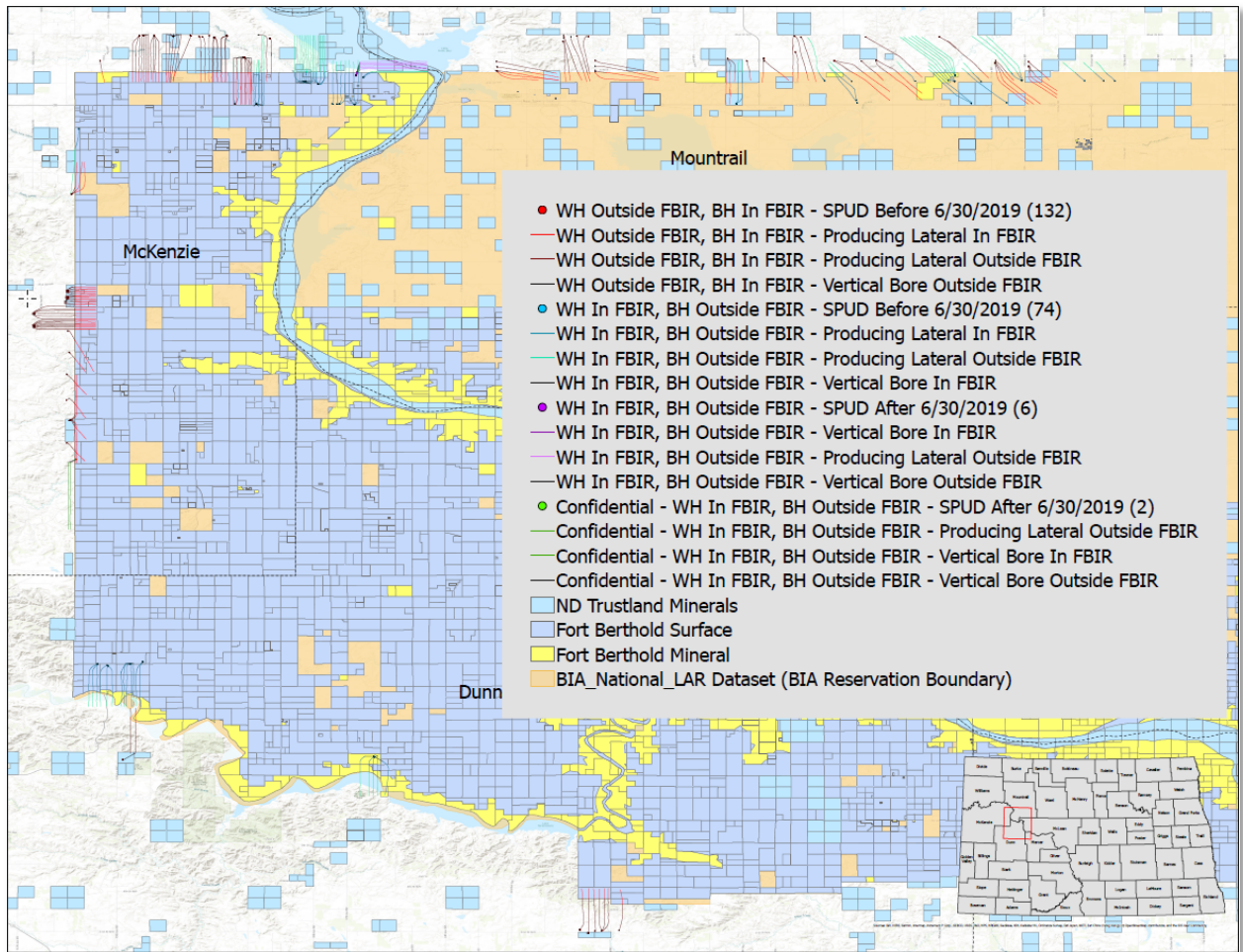


Figure 2: FBIR Boundary Wells Map

Provided by the North Dakota Department of Mineral Resources



SUBJECT WELL LIST

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
BARN 147-94-13A-24H	ENERPLUS	6/30/2015	A	5/4/2016	Inside	5,152	4,289
BURROWING 147-94-13B-24H	ENERPLUS	7/5/2015	A	2/15/2019	Inside	3,957	5,533
DETIENNE 1-07H	EOG RESOURCES	1/19/2008	IA	4/15/2020	Inside	2,300	3,096
FB BONITA 152-93-9B-10-10B	BRUIN E&P	10/2/2019	A	10/2/2019	Inside	-	10,640
FB BONITA 152-93-9B-10-12T	BRUIN E&P	10/1/2019	A	10/1/2019	Inside	-	10,720
FB BONITA 152-93-9B-10-13B	BRUIN E&P	9/30/2019	A	9/30/2019	Inside	-	10,628
FB BONITA 152-93-9B-10-14T	BRUIN E&P	9/28/2019	A	9/28/2019	Inside	-	10,654
FB BONITA 152-93-9B-10-15B	BRUIN E&P	9/27/2019	A	9/27/2019	Inside	-	10,648
FB BONITA 152-93-9B-10-9T	BRUIN E&P	10/4/2019	A	10/4/2019	Inside	-	11,381
FORT BERTHOLD 148-95-26A-35-14H	BRUIN E&P	7/22/2014	IA	6/15/2020	Inside	8,133	1,922
FORT BERTHOLD 148-95-26A-35-1H	BRUIN E&P	3/18/2012	A	6/18/2012	Inside	10,188	231
FORT BERTHOLD 148-95-26B-35-3H	BRUIN E&P	6/5/2014	A	11/25/2014	Inside	9,423	1,256
FORT BERTHOLD 148-95-26B-35-4H	BRUIN E&P	6/10/2014	A	3/15/2018	Inside	9,429	736
FORT BERTHOLD 148-95-26B-35-5H	BRUIN E&P	6/16/2014	A	12/5/2014	Inside	10,038	177
FORT BERTHOLD 148-95-26B-35-8H	BRUIN E&P	6/18/2014	A	12/3/2014	Inside	9,394	635
FORT BERTHOLD 148-95-26B-35-9H	BRUIN E&P	6/20/2014	A	7/15/2020	Inside	9,004	1,094
FORT BERTHOLD 148-95-27A-34-1H	BRUIN E&P	1/13/2012	AB	7/15/2020	Inside	6,983	3,070
FORT BERTHOLD 148-95-27A-34-2H	BRUIN E&P	5/15/2012	AB	7/15/2020	Inside	6,923	2,707
FORT BERTHOLD 148-95-27A-34-3H	BRUIN E&P	7/11/2012	AB	5/15/2020	Inside	7,393	2,322
FORT BERTHOLD 148-95-27B-34-4H	BRUIN E&P	8/26/2013	A	5/13/2014	Inside	6,625	3,331
FORT BERTHOLD 148-95-27B-34-5H	BRUIN E&P	8/23/2013	A	4/12/2014	Inside	6,895	3,275
FORT BERTHOLD 148-95-27B-34-8H	BRUIN E&P	11/29/2013	A	4/26/2014	Inside	7,315	2,923
FORT BERTHOLD 152-93-17C-08-1H	BRUIN E&P	12/26/2009	A	4/5/2010	Inside	7,455	2,483
FORT BERTHOLD 152-93-17C-08-2H	BRUIN E&P	3/20/2011	IA	7/15/2020	Inside	7,415	2,789
FORT BERTHOLD 152-93-17C-08-3H	BRUIN E&P	11/23/2012	A	3/15/2018	Inside	7,419	2,776

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
FORT BERTHOLD 152-93-17C-08-4H	BRUIN E&P	10/17/2012	IA	4/15/2020	Inside	7,732	2,771
FORT BERTHOLD 152-93-17D-08-5H	BRUIN E&P	1/3/2013	A	5/15/2020	Inside	7,664	2,801
FORT BERTHOLD 152-93-17D-08-6H	BRUIN E&P	3/4/2013	A	5/15/2020	Inside	7,525	2,464
FORT BERTHOLD 152-93-17D-08-7H	BRUIN E&P	3/8/2013	IA	5/15/2020	Inside	7,580	2,795
FORT BERTHOLD 152-93-7C-6-10H	BRUIN E&P	2/15/2016	A	11/3/2016	Inside	2,520	8,731
FORT BERTHOLD 152-93-7C-6-11H	BRUIN E&P	2/16/2016	A	11/5/2016	Inside	2,502	8,732
FORT BERTHOLD 152-93-7C-6-12H	BRUIN E&P	2/17/2016	A	11/6/2016	Inside	2,384	8,734
FORT BERTHOLD 152-93-7C-6-13H	BRUIN E&P	2/18/2016	A	11/8/2016	Inside	2,309	8,734
FORT BERTHOLD 152-93-7C-6-14H	BRUIN E&P	4/22/2016	A	10/28/2016	Inside	2,242	8,725
FORT BERTHOLD 152-93-7C-6-5H	BRUIN E&P	4/24/2016	A	11/1/2016	Inside	2,749	8,727
FORT BERTHOLD 152-93-7C-6-6H	BRUIN E&P	11/28/2015	A	11/1/2016	Inside	2,429	8,693
FORT BERTHOLD 152-93-7C-6-7H	BRUIN E&P	11/29/2015	A	12/15/2019	Inside	2,558	8,730
FORT BERTHOLD 152-93-7C-6-8H	BRUIN E&P	12/1/2015	A	11/15/2017	Inside	3,124	9,447
FORT BERTHOLD 152-93-7C-6-9H	BRUIN E&P	12/2/2015	A	11/7/2016	Inside	2,512	8,730
FORT BERTHOLD 152-93-7D-6-1H	BRUIN E&P	8/3/2013	A	2/28/2014	Inside	2,954	8,672
FORT BERTHOLD 152-93-7D-6-2H	BRUIN E&P	1/23/2013	A	4/20/2013	Inside	2,731	8,729
FORT BERTHOLD 152-93-7D-6-3H	BRUIN E&P	8/6/2013	A	3/6/2014	Inside	2,765	8,687
FORT BERTHOLD 152-93-7D-6-4H	BRUIN E&P	8/8/2013	A	3/8/2014	Inside	6,151	17,396
FORT BERTHOLD 152-93-9C-10-5H	BRUIN E&P	1/25/2014	IA	4/15/2020	Inside	2,218	8,045
FORT BERTHOLD 152-93-9C-10-6H	BRUIN E&P	1/23/2014	IA	4/15/2020	Inside	1,285	9,117
FORT BERTHOLD 152-94-14C-11-1H	BRUIN E&P	1/16/2011	A	4/15/2019	Inside	7,566	2,799
FORT BERTHOLD 152-94-14C-11-2H	BRUIN E&P	10/27/2012	A	3/15/2019	Inside	7,438	2,849
FORT BERTHOLD 152-94-14D-11-16H	BRUIN E&P	11/14/2018	A	5/26/2019	Inside	7,914	2,914
FORT BERTHOLD 152-94-14D-11-19H	BRUIN E&P	11/15/2018	A	5/7/2019	Inside	7,930	2,913
FORT BERTHOLD 152-94-14D-11-3H	BRUIN E&P	1/27/2013	PA	10/17/2018	Inside	7,503	2,858
FORT BERTHOLD 152-94-14D-11-4H	BRUIN E&P	1/24/2013	IA	7/15/2020	Inside	7,510	2,862

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
FORT BERTHOLD 152-94-14D-2-13H3	BRUIN E&P	11/11/2018	A	5/15/2019	Inside	7,740	9,118
FORT BERTHOLD 152-94-14D-2-15H3	BRUIN E&P	11/13/2018	A	5/20/2019	Inside	7,730	8,773
GDR 1-07H	EOG RESOURCES	12/20/2007	TA	9/24/2018	Inside	2,424	3,007
GEVING 1-09H	EOG RESOURCES	5/24/2007	A	7/15/2020	Inside	1,591	2,790
HAWKEYE 01-2501H	EOG RESOURCES	8/2/2012	IA	6/15/2020	Inside	4,756	10,741
HOVDA 1-08H	EOG RESOURCES	6/15/2008	A	7/15/2020	Inside	2,343	3,080
MODEL 10-07H	EOG RESOURCES	5/1/2009	A	7/15/2020	Inside	2,338	3,045
NIGHTMAKER 3-17-8H	SLAWSON	6/7/2014	A	10/11/2014	Inside	7,609	2,847
NIGHTMAKER 5-17-8TFH	SLAWSON	6/10/2014	A	10/17/2014	Inside	7,287	2,848
NOKOTA 24-13-12HA	WPX ENERGY	3/6/2020	Conf.	Conf.	Inside	-	15,790
NOKOTA 24-13-12HQ	WPX ENERGY	3/7/2020	Conf.	Conf.	Inside	-	15,792
PARSHALL 146-0806H	EOG RESOURCES	6/25/2014	A	12/15/2019	Inside	573	10,876
PARSHALL 147-1608H	EOG RESOURCES	7/27/2014	TA	10/18/2019	Inside	9,162	2,020
PARSHALL 152-0806H	EOG RESOURCES	7/2/2014	A	6/15/2020	Inside	2,351	10,880
PARSHALL 36-0806H	EOG RESOURCES	6/22/2014	A	6/15/2020	Inside	702	10,969
PARSHALL 37-0806H	EOG RESOURCES	6/27/2014	A	6/15/2020	Inside	499	10,301
PARSHALL 39-1608H	EOG RESOURCES	7/25/2014	A	6/15/2020	Inside	9,552	1,026
PARSHALL 40-1509H	EOG RESOURCES	2/22/2014	A	8/5/2014	Inside	9,453	1,358
PARSHALL 44-1004H	EOG RESOURCES	2/16/2014	IA	6/15/2020	Inside	1,697	10,375
PARSHALL 45-1004H	EOG RESOURCES	2/14/2014	A	6/15/2020	Inside	1,905	10,668
PARSHALL 46-1004H	EOG RESOURCES	2/12/2014	A	6/15/2020	Inside	2,852	11,993
PARSHALL 56-0806H	EOG RESOURCES	7/12/2014	PA	8/5/2018	Inside	2,140	10,702
PARSHALL 57-0806H	EOG RESOURCES	6/29/2014	A	8/15/2019	Inside	2,703	10,828
PYGMY 147-93-18B-19H TF	ENERPLUS	8/4/2013	A	11/28/2013	Inside	8,023	203
SAMPSON 1-12H	EOG RESOURCES	7/5/2007	A	8/31/2007	Inside	2,295	3,134
SCREECH 147-94-13B-24H	ENERPLUS	7/3/2015	A	6/15/2020	Inside	3,614	5,628

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
SNOWY 147-94-13A-24H TF	ENERPLUS	7/1/2015	A	6/15/2020	Inside	4,453	5,169
TOLLEFSON 44-10H	WHITING	5/30/2009	A	7/15/2019	Inside	2,755	8,577
VAN HOOK 107-1411H	EOG RESOURCES	4/4/2012	IA	6/15/2020	Inside	7,998	2,214
VAN HOOK 5-11H	EOG RESOURCES	10/5/2008	IA	7/15/2020	Inside	2,674	3,170
VAN HOOK 71-1411HX	EOG RESOURCES	11/28/2015	A	6/10/2017	Inside	7,333	1,445
AMU H-517HR	HESS	3/14/1967	PA	12/7/2019	Outside	2,314	2,684
AN-NORBY- 152-94-0409H-2	HESS	5/16/2019	A	11/13/2019	Outside	2,186	9,005
AN-NORBY- 152-94-0409H-3	HESS	5/15/2019	A	11/14/2019	Outside	2,339	8,955
AN-NORBY- 152-94-0409H-4	HESS	5/14/2019	A	11/17/2019	Outside	2,328	8,965
AN-NORBY- 152-94-0409H-5	HESS	5/13/2019	A	11/18/2019	Outside	2,339	8,964
AN-NORBY- 152-94-0409H-6	HESS	5/13/2019	A	11/23/2019	Outside	2,914	8,969
AN-NORBY-152-94- 0409H-1	HESS	10/18/2008	A	11/15/2019	Outside	1,944	9,003
AVALANCHE 36-14-MB2	SHD OIL & GAS	11/4/2014	AB	10/15/2019	Outside	3,259	1,513
AVALANCHE 36-15-TF1	SHD OIL & GAS	11/3/2014	A	1/15/2020	Outside	3,263	1,547
AVALANCHE 36-16-MB2	SHD OIL & GAS	11/1/2014	A	7/15/2020	Outside	3,262	1,831
AVALANCHE 36-17-TF2	SHD OIL & GAS	2/11/2015	A	7/15/2020	Outside	3,248	1,750
BARBARA 1-12H	EOG RESOURCES	1/8/2009	A	7/6/2009	Outside	2,175	3,535
BREHM 11-4-2H	WHITING	3/25/2014	A	5/11/2014	Outside	2,117	7,147
BREHM 11-7H	WHITING	1/23/2009	A	5/5/2009	Outside	685	9,223
BREHM 12-7H	WHITING	9/17/2010	A	1/14/2011	Outside	7,734	2,365
BREHM 12-7TFH	WHITING	6/12/2011	A	11/15/2019	Outside	4,423	5,654
BREHM 13-7H	WHITING	5/28/2014	A	8/31/2014	Outside	6,856	417
BREHM 13-7TFH	WHITING	5/26/2014	A	4/15/2020	Outside	9,218	684
BREHM 21-4H	WHITING	10/15/2010	A	3/15/2020	Outside	2,053	8,750
BUCKY 13-36H	SHD OIL & GAS	5/25/2014	IAW	11/15/2019	Outside	3,277	1,685
BULLET 12-36H	SHD OIL & GAS	3/28/2014	A	7/15/2020	Outside	3,278	1,622

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
CANON 12-36H	SHD OIL & GAS	8/26/2014	AB	6/15/2020	Outside	3,262	2,377
CCU BADGER 1C-TFH	CONOCOPHILLIPS	9/12/2017	A	4/15/2018	Outside	215	10,377
CCU BADGER 1D-MBH	CONOCOPHILLIPS	9/11/2017	A	4/18/2018	Outside	2,376	8,269
DAILEY 4-12/13H	QEP ENERGY	1/16/2012	A	5/15/2019	Outside	7,820	2,343
FOREMAN 11-4TFH	WHITING	4/4/2010	A	6/21/2010	Outside	1,813	8,324
FOREMAN 12-11-1-2BH	QEP ENERGY	10/19/2015	A	2/24/2017	Outside	3,253	6,534
FOREMAN 12-11-1-2T2H	QEP ENERGY	10/21/2015	A	2/19/2017	Outside	3,150	6,713
FOREMAN 1-2-1BH	QEP ENERGY	10/11/2014	A	4/30/2015	Outside	3,258	6,839
FOREMAN 1-2-1T3H	QEP ENERGY	1/16/2016	A	2/18/2017	Outside	3,252	6,888
FOREMAN 1-2-1TH	QEP ENERGY	10/8/2014	A	5/3/2015	Outside	3,260	6,938
FOREMAN 21-4TFH	WHITING	11/17/2010	A	4/26/2011	Outside	2,162	8,692
FOREMAN 2-2-1BH	QEP ENERGY	10/9/2014	A	5/1/2015	Outside	3,260	6,898
FOREMAN 2-2-1THR	QEP ENERGY	1/18/2016	A	2/14/2017	Outside	3,252	7,111
FOREMAN 3-2-1BHR	QEP ENERGY	1/19/2016	A	2/11/2017	Outside	3,248	7,132
FOREMAN 3-2-1TH	QEP ENERGY	10/23/2015	A	2/11/2017	Outside	3,251	6,768
FOREMAN 36-35-1-2LL	QEP ENERGY	10/12/2014	A	4/27/2015	Outside	3,266	6,862
FOREMAN 4-2-1BHR	QEP ENERGY	1/17/2016	A	2/19/2017	Outside	3,250	9,721
FOREMAN 5-2/1H	QEP ENERGY	10/18/2011	A	1/22/2012	Outside	3,371	6,438
FOREMAN 5-2-1BH	QEP ENERGY	10/24/2015	A	2/21/2017	Outside	3,253	6,663
FOREMAN 6-2-1BH	QEP ENERGY	10/22/2015	A	2/14/2017	Outside	3,254	6,693
FOREMAN 6-2-1TH	QEP ENERGY	10/13/2014	IA	6/15/2020	Outside	3,205	7,071
FORT BERTHOLD 152-94-11B-14-10H	BRUIN E&P	8/6/2018	A	4/30/2019	Outside	7,543	3,316
FORT BERTHOLD 152-94-11B-14-11H	BRUIN E&P	8/9/2018	A	4/16/2019	Outside	8,271	3,357
FORT BERTHOLD 152-94-11B-14-12H	BRUIN E&P	8/10/2018	A	4/13/2019	Outside	7,544	3,345
FORT BERTHOLD 152-94-11B-14-18H	BRUIN E&P	8/12/2018	A	4/10/2019	Outside	7,546	3,390
FORT BERTHOLD 152-94-11B-14-5H	BRUIN E&P	9/1/2013	A	3/15/2019	Outside	7,497	3,280

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
FORT BERTHOLD 152-94-11B-14-6H	BRUIN E&P	9/3/2013	IA	6/15/2020	Outside	7,500	3,288
FORT BERTHOLD 152-94-11B-14-7H	BRUIN E&P	9/5/2013	IA	6/15/2020	Outside	7,501	3,335
FORT BERTHOLD 152-94-11B-14-8H	BRUIN E&P	8/1/2018	A	5/1/2019	Outside	8,022	5,067
FORT BERTHOLD 152-94-11B-14-9H	BRUIN E&P	8/3/2018	IA	7/15/2020	Outside	14,173	3,836
HALLIDAY 1-19-18H 1	HUNT OIL	4/25/2011	A	10/13/2011	Outside	2,379	7,595
HALLIDAY 146-92-19-18H- 3	HUNT OIL	1/23/2019	A	7/20/2019	Outside	2,370	8,090
HALLIDAY 146-92-19-18H- 4	HUNT OIL	11/22/2018	A	7/12/2019	Outside	2,246	7,608
HALLIDAY 146-92-19-18H- 5	HUNT OIL	11/24/2018	A	7/12/2019	Outside	2,372	7,445
HALLIDAY 146-92-19-18H- 6	HUNT OIL	11/27/2018	A	7/19/2019	Outside	2,375	7,648
HALLIDAY 2-19-18H	HUNT OIL	12/9/2014	A	8/15/2019	Outside	2,311	7,490
HAMMER 12-36H	SHD OIL & GAS	8/28/2014	AB	3/15/2020	Outside	3,267	1,450
HENDERSON 4-1H	QEP ENERGY	10/6/2008	PA	3/30/2015	Outside	2,765	2,343
HENDERSON 4-25H	QEP ENERGY	6/3/2010	A	5/15/2019	Outside	3,679	1,691
HOFF 1-10H	EOG RESOURCES	4/13/2007	IA	6/15/2020	Outside	2,053	3,268
JONES 4-24H	QEP ENERGY	10/25/2008	A	12/15/2019	Outside	3,318	2,302
JORDET 1-11H	EOG RESOURCES	12/11/2007	A	3/25/2008	Outside	2,143	3,328
LACEY 11-10H	WHITING	7/25/2008	A	2/15/2020	Outside	189	10,018
LACEY 12-10H	WHITING	7/21/2010	A	10/9/2010	Outside	8,528	1,843
LACEY 12-10TFH	WHITING	5/13/2011	A	6/15/2017	Outside	4,002	6,458
LACEY 13-10H	WHITING	2/19/2013	A	3/28/2013	Outside	8,112	-
LEVANG 4-13H	QEP ENERGY	7/11/2008	A	7/15/2020	Outside	3,464	1,637
LUKE 13-36H	SHD OIL & GAS	5/20/2014	AB	6/15/2020	Outside	5,450	2,158
MAGNUM 36-11-TF2	SHD OIL & GAS	1/7/2015	A	8/15/2019	Outside	3,264	1,547
MAGNUM 36-12-MB2	SHD OIL & GAS	1/16/2015	A	9/15/2019	Outside	3,272	1,417
MAGNUM 36-13-TF2	SHD OIL & GAS	1/17/2015	A	9/15/2019	Outside	3,271	1,527
MARC 13-36H	SHD OIL & GAS	5/22/2014	IA	6/15/2020	Outside	3,270	1,478

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
MATTIE 13-36H	SHD OIL & GAS	5/24/2014	IA	6/15/2020	Outside	3,273	1,773
MURRAY 13-3H	WHITING	1/0/1900	A	7/15/2019	Outside	2,134	4,870
NELSON FEDERAL 21X-5A	XTO ENERGY	1/21/2015	A	1/15/2019	Outside	2,268	8,778
NELSON FEDERAL 21X-5B	XTO ENERGY	1/26/2015	A	2/15/2020	Outside	2,263	8,591
NELSON FEDERAL 21X-5BXC	XTO ENERGY	6/26/2018	A	7/15/2020	Outside	2,267	8,914
NELSON FEDERAL 21X-5C	XTO ENERGY	6/29/2018	A	3/9/2019	Outside	2,265	8,942
NELSON FEDERAL 21X-5E	XTO ENERGY	1/24/2015	A	7/15/2020	Outside	2,273	9,061
NELSON FEDERAL 21X-5F	XTO ENERGY	6/23/2018	A	7/15/2020	Outside	2,145	8,901
NELSON FEDERAL 21X-5FXG2	XTO ENERGY	6/27/2018	A	7/15/2020	Outside	2,268	8,926
NELSON FEDERAL 41X-5C	XTO ENERGY	6/3/2015	A	12/15/2019	Outside	2,258	8,447
NELSON FEDERAL 41X-5D	XTO ENERGY	6/5/2015	A	11/15/2019	Outside	2,254	8,751
NELSON FEDERAL 41X-5G	XTO ENERGY	9/19/2010	A	3/15/2019	Outside	1,737	8,684
NELSON FEDERAL 41X-5H	XTO ENERGY	6/4/2015	A	11/15/2019	Outside	2,260	8,417
NIGHTMAKER 4-8-17TFH	SLAWSON	12/25/2013	A	3/23/2014	Outside	8,789	3,389
PARSHALL 35-0509H	EOG RESOURCES	5/5/2013	A	10/16/2013	Outside	1,419	13,154
PARSHALL 50-1114H	EOG RESOURCES	3/27/2014	A	7/15/2020	Outside	5,671	1,782
PARSHALL 51-1114H	EOG RESOURCES	2/3/2014	AB	6/15/2020	Outside	6,822	1,353
PARSHALL 52-1114H	EOG RESOURCES	2/1/2014	IA	7/15/2020	Outside	7,661	1,469
PARSHALL 53-1014H	EOG RESOURCES	1/29/2014	IA	8/15/2019	Outside	9,449	2,603
PARSHALL 54-1014H	EOG RESOURCES	1/25/2014	AB	2/15/2020	Outside	9,172	2,407
PARSHALL 55-1014H	EOG RESOURCES	1/23/2014	A	6/15/2020	Outside	9,090	2,321
PATHFINDER 1-9H	SLAWSON	3/9/2008	IA	10/15/2019	Outside	2,351	3,663
PATHFINDER 3-9H	SLAWSON	9/26/2012	A	12/17/2012	Outside	2,284	3,275
PEACEMAKER (FEDERAL) 1 SLH	SLAWSON	1/13/2015	A	3/13/2015	Outside	7,434	3,432
PEACEMAKER 1-8H	SLAWSON	10/8/2008	A	11/20/2008	Outside	1,844	2,732
PEACEMAKER 2-8H	SLAWSON	11/22/2013	A	4/13/2014	Outside	2,161	3,771

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
PENNINGTON FEDERAL 41-4TFH	WHITING	5/24/2014	A	12/15/2019	Outside	436	8,717
PETERSON 11-4H	WHITING	11/25/2008	A	2/17/2009	Outside	1,908	8,944
QUALE 1-1H	CONTINENTAL	10/13/2011	A	6/15/2019	Outside	1,911	8,783
QUALE FEDERAL 2-1H	CONTINENTAL	9/5/2014	IA	3/15/2020	Outside	2,240	9,598
ROHDE USA 14-20H	MARATHON	12/9/2009	A	9/15/2019	Outside	3,431	6,279
ROLLEFSTAD 1-3H	CONTINENTAL	7/17/2009	A	4/15/2020	Outside	1,941	8,396
ROLLEFSTAD 2-3H	CONTINENTAL	6/10/2010	A	8/5/2010	Outside	2,260	9,726
ROLLEFSTAD 3-3H	CONTINENTAL	3/1/2012	A	5/21/2012	Outside	2,246	8,726
ROLLEFSTAD FEDERAL 10-3H-2	CONTINENTAL	6/18/2013	IA	7/15/2020	Outside	2,234	8,267
ROLLEFSTAD FEDERAL 11-3H-1	CONTINENTAL	5/23/2013	IA	7/15/2020	Outside	2,246	9,034
ROLLEFSTAD FEDERAL 12-3H-3	CONTINENTAL	5/19/2013	IA	7/15/2020	Outside	2,246	9,117
ROLLEFSTAD FEDERAL 13-3H	CONTINENTAL	5/17/2013	IA	7/15/2020	Outside	2,242	9,076
ROLLEFSTAD FEDERAL 14-3H-2	CONTINENTAL	5/15/2013	IA	7/15/2020	Outside	2,245	8,675
ROLLEFSTAD FEDERAL 7-3H-1	CONTINENTAL	6/11/2013	IA	7/15/2020	Outside	2,225	8,235
ROLLEFSTAD FEDERAL 8-3H-3	CONTINENTAL	6/14/2013	IA	7/15/2020	Outside	2,234	8,266
ROLLEFSTAD FEDERAL 9-3H	CONTINENTAL	6/16/2013	IA	7/15/2020	Outside	2,125	8,185
SORENSEN 11-3H	WHITING	12/2/2009	A	7/15/2019	Outside	1,823	8,896
SORENSEN 11-3HU	WHITING	5/5/2019	A	10/9/2019	Outside	2,133	9,668
STATE 4-25-24TH	QEP ENERGY	7/28/2015	A	7/15/2017	Outside	9,215	1,459
STATE 4-36-1TH	QEP ENERGY	7/24/2015	A	3/11/2016	Outside	7,688	2,314
STATE 4-36H	QEP ENERGY	8/14/2008	A	11/15/2019	Outside	3,348	1,801
STATE 7-25-24BH	QEP ENERGY	7/27/2015	A	5/15/2018	Outside	9,896	839
STATE 7-36-1BH	QEP ENERGY	7/23/2015	A	11/15/2019	Outside	9,457	787
THUD 12-36H	SHD OIL & GAS	3/30/2014	A	12/15/2019	Outside	3,271	1,422
VAN HOOK 104-1218H	EOG RESOURCES	1/28/2013	A	9/27/2013	Outside	8,368	3,532
VAN HOOK 127-0107H	EOG RESOURCES	10/9/2012	A	4/18/2013	Outside	1,316	11,697

Well Name	Operator	Spud Date	Status	Status Date	Wellhead Location	Length (ft) Inside FBIR	Length (ft) Outside FBIR
VAN HOOK 29-1113H	EOG RESOURCES	1/22/2013	A	7/15/2017	Outside	6,042	5,622
VAN HOOK 30-1113H	EOG RESOURCES	1/25/2013	A	6/15/2017	Outside	8,720	4,073
VAN HOOK 33-1218H	EOG RESOURCES	5/9/2013	IA	7/15/2020	Outside	6,169	4,472
VIOLA PENNINGTON 11-3H	WHITING	6/15/2014	A	7/15/2019	Outside	2,147	8,504
WEST CLARK 103-0136H	EOG RESOURCES	11/9/2015	IA	6/15/2020	Outside	5,858	1,703
WEST CLARK 104-0136H	EOG RESOURCES	11/8/2015	IA	6/15/2020	Outside	6,983	825
WEST CLARK 105-0136H	EOG RESOURCES	11/6/2015	TA	1/9/2019	Outside	7,757	415

FUTURE DEVELOPMENT

It is important to note that the subject wells considered for the sake of the production analysis do not account for the possibility of further drilling development of future wells. Based on the current optimal spacing being employed by operators in the area, it is estimated that between 73 and 93 additional Bakken and Three Forks wells may be drilled across the FBIR boundary at some point in the future.



Fort Berthold Indian Reservation Boundary Wells | PRODUCTION ANALYSIS EXECUTIVE SUMMARY

For the completion of the Production Analysis, 214 wells, whose wellbores cross the FBIR boundary, were considered. Forward-looking decline curves were constructed for each well to forecast future volumes of oil, natural gas, and water to be produced. The list of subject wells, along with the wellhead location, and lateral footage inside and outside of the FBIR boundary were provided to MineralTracker by the North Dakota Department of Mineral Resources. The following results have been highlighted as pertinent to the purpose of the Production Analysis.

Wellheads Outside FBIR

Note: Volumes are denoted in million barrels of oil ("MMBO")

Well Count: 132 | Footage Inside Boundary: 525,513 (42%) | Footage Outside Boundary: 724,933 (58%)
 Forecasted Oil: 30.6 MMBO | Prorated Inside FBIR: 12.9 MMBO | Prorated Outside FBIR: 17.8 MMBO
 Prorated Oil Production Difference: 4.9 MMBO

Wellheads Inside FBIR

Well Count: 82 | Footage Inside Boundary: 387,788 (44%) | Footage Outside Boundary: 495,338 (56%)
 Forecasted Oil: 21.5 MMBO | Prorated Inside FBIR: 7.8 MMBO | Prorated Outside FBIR: 13.7 MMBO
 Prorated Oil Production Difference: 5.9 MMBO

In consideration of wells crossing the FBIR boundary, most of the total lateral footage is located outside of the boundary. By prorating the forecasted production to the lateral footage for each well, it is estimated that 10.8 MMBO more may be attributable to lateral footage outside of the FBIR boundary than inside.

