



International Construction Consulting, LLC

Production Volume Forecast

Production Volume Forecasts based on Drilling Program and Type Curves - Single Area, Multiple Zones

DOCUMENT APPROVAL / REVISION RECORD

Rev #	Comment	Prepared by:	Reviewed / Date	Endorsement / Date

Version: 1.0 (4/18)

International Construction Consulting, LLC Use Only

Assumptions

Model Start Date	Jan-19	
Model End Date	Dec-28	
Company	Prod A	
Company Rely on Data	<i>Drilling Plan (2.20.19)</i>	
Company Rely on Data - Date Issued	20-Feb-19	
Type Curve Used in this Model	Prod A	← <i>Type Curves Available - Legend & Description</i>
Acreage	31,438	
Wells per Section	23.4	Iterated Based on Total Wells Available-Normalized
Total Wells Available-Optimized (from Prod A)	1,002	Based on normalized 10,000' laterals
Total Wells Available-Normalized (from Prod A)	953	Based on normalized 10,000' laterals
Total Wells Drilled Based on Prod A Plan	780	
Drilling to Completion Time Delay (Months)	-	"Sales delay" in months from well drilled until completion & turned in line.
Total Well Pads	223	Assumes 3-4 wells/pad
Total Battery's Installed	37	Assumes an Average of 6 well pads per battery
Wells Drilled in 1st 3 Years	186	23.83% of total available wells
Wells Remaining	594	76.17% of total available wells
Well Pads in 1st 3 Years	53	Assumes 3-4 wells/pad
Battery's Installed in 1st 3 Years	9	Assumes an Average of 6 well pads per battery
Wells Drilled in 1st 5 Years	356	45.66% of total available wells
Wells Remaining	424	54.34% of total available wells
Well Pads in 1st 5 Years	102	Assumes 3-4 wells/pad
Battery's Installed in 1st 5 Years	17	Assumes an Average of 6 well pads per battery
Current Production	5,959	
Drilling Rigs Deployed:		
2019	3	
2020E	7	
2021E	7	
2022E	7	
2023E	7	
2024E	7	
2025E	7	
2026E	7	
2027E	7	
2028E	7	

<i>Type Curves Available - Legend & Description</i>	
Prod B =	Prod B provided type curves, from 2018 to present
Prod A =	Prod A provided type curves

Drilling Plan

Scenarios: 1 = Prod A 1.4 (2.20.19) Volume Model-Based on Completed & Producing Wells (186 - 2019-2021);

2 = Prod A 3.8 (2.17.19) Well Connect Plan - Less 1 Rig-Based on Completed & Producing Wells (144 - 2019-2021);

3 = Prod A 1.3 Volume Model (Revised)_Updated 20190215 - Original Model Data Used (207 - 2019-2021)

Sales Delay (months)

Prod A 1.4 (2.20.19) Volume Model-Based on Completed & Producing Wells (186 - 2019-2021)

Scenario	1		M. Spra		Jo Mill		L. Spra		WCA		WCB		WCD	
	Drilled	Online	Drilled	Online	Drilled	Online	Drilled	Online	Drilled	Online	Drilled	Online	Drilled	Online
POP Dates														
1-Jan-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28-Feb-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Mar-19	2.1	2.1	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	2.1	2.1	0.0	0.0
30-Apr-19	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0
31-May-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Jun-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Jul-19	1.0	1.0	2.0	2.0	4.6	4.6	2.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0
31-Aug-19	3.0	3.0	1.0	1.0	3.5	3.5	1.0	1.0	2.0	2.0	2.0	2.0	0.0	0.0
30-Sep-19	2.0	2.0	0.0	0.0	1.6	1.6	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0
31-Oct-19	0.0	0.0	0.0	0.0	5.8	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Nov-19	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Dec-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0
31-Jan-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.0	0.0
29-Feb-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Mar-20	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0
30-Apr-20	0.0	0.0	1.0	1.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-May-20	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0
30-Jun-20	1.0	1.0	0.0	0.0	1.3	1.3	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Jul-20	0.0	0.0	0.0	0.0	7.3	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Aug-20	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0
30-Sep-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0
31-Oct-20	1.0	1.0	0.0	0.0	5.6	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Nov-20	2.3	2.3	0.0	0.0	6.8	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Dec-20	4.5	4.5	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0
31-Jan-21	2.3	2.3	0.0	0.0	1.3	1.3	1.1	1.1	4.5	4.5	0.0	0.0	0.0	0.0
28-Feb-21	0.0	0.0	0.0	0.0	1.6	1.6	5.6	5.6	2.6	2.6	0.0	0.0	0.0	0.0
31-Mar-21	2.0	2.0	0.0	0.0	4.8	4.8	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Apr-21	0.0	0.0	0.0	0.0	3.5	3.5	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0
31-May-21	0.0	0.0	0.0	0.0	1.0	1.0	3.0	3.0	2.0	2.0	2.0	2.0	0.0	0.0
30-Jun-21	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0
31-Jul-21	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Aug-21	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Sep-21	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Oct-21	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Nov-21	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Dec-21	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jan-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
28-Feb-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Mar-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Apr-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-May-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Jun-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jul-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Aug-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Sep-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Oct-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Nov-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Dec-22	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jan-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
28-Feb-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Mar-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Apr-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-May-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Jun-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jul-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Aug-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Sep-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Oct-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Nov-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Dec-23	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jan-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
29-Feb-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Mar-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Apr-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-May-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Jun-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jul-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Aug-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Sep-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Oct-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Nov-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Dec-24	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jan-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
28-Feb-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Mar-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Apr-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-May-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Jun-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jul-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Aug-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Sep-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Oct-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Nov-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Dec-25	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Jan-26	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
28-Feb-26	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-Mar-26	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
30-Apr-26	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	0.0
31-May-26	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	1.4	1.4	0.0	

Drilling Plan

Scenarios: 1 = Prod A 1.4 (2.20.19) Volume Model-Based on Completed & Producing Wells (186 - 2019-2021);

2 = Prod A 3.8 (2.17.19) Well Connect Plan - Less 1 Rig-Based on Completed & Producing Wells (144 - 2019-2021);

3 = Prod A 1.3 Volume Model (Revised)_Updated 20190215 - Original Model Data Used (207 - 2019-2021)

Sales Delay (months)

Prod A 1.4 (2.20.19) Volume Model-Based on Completed & Producing Wells (186 - 2019-2021)

Scenario	M. Spra		Jo Mill		L. Spra		WCA		WCB		WCD	
	Drilled	Online	Drilled	Online	Drilled	Online	Drilled	Online	Drilled	Online	Drilled	Online
POP Dates												
30-Apr-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-May-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
30-Jun-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Jul-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Aug-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
30-Sep-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Oct-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
30-Nov-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Dec-27	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Jan-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
29-Feb-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Mar-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
30-Apr-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-May-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
30-Jun-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Jul-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Aug-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
30-Sep-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
31-Oct-28	1.7	1.7	0.0	0.0	2.4	2.4	1.6	1.6	1.4	1.4	0.0	0.0
30-Nov-28	1.2	1.2	0.0	0.0	1.7	1.7	1.1	1.1	1.0	1.0	0.0	0.0
31-Dec-28	0.0	0.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
TOTALS	181		5		274		159		154		0	

		Drilling Program (Based on Well Completion & HU)							Inverse							Prod A Type Curves							Gross Crude Oil Production (BBL/D)						
		Well Count by Formation and Total																											
		181	9	274	159	154	4	780																					
#	Date	M. Spra	Jo Mill	L. Spra	WCA	WCB	WCD	Total	M. Spra	Jo Mill	L. Spra	WCA	WCB	WCD	AVG	M. Spra	Jo Mill	L. Spra	WCA	WCB	WCD	AVG	M. Spra	Jo Mill	L. Spra	WCA	WCB	WCD	TOTAL
1	Jan-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	785.1	628.1	1,043.5	1,058.3	1,159.6	791.6	911.0	-	-	-	-	-	-	
2	Feb-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	657.1	525.7	809.8	819.4	875.0	588.8	712.6	-	-	-	-	-	-	
3	Mar-19	2.1	-	2.1	-	-	-	6.4	-	-	-	-	-	-	-	571.3	457.0	674.7	676.9	712.9	476.3	594.9	1,668	-	2,217	-	2,464	-	6,350
4	Apr-19	1.1	1.1	1.1	1.1	1.1	-	5.6	-	-	-	-	-	-	-	508.9	407.1	584.9	581.1	606.7	403.5	515.4	2,280	707	2,895	1,191	3,164	-	10,235
5	May-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	461.2	369.0	520.1	511.7	531.1	352.1	457.5	1,953	591	2,345	922	2,499	-	8,311
6	Jun-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	423.3	338.7	470.7	458.8	474.1	313.7	413.2	1,724	514	2,002	762	2,091	-	7,093
7	Jul-19	1.0	2.0	4.6	2.0	1.0	-	10.6	-	-	-	-	-	-	-	392.4	313.9	431.6	417.0	429.5	283.7	378.0	2,338	1,714	6,589	2,770	2,971	-	16,382
8	Aug-19	3.0	1.0	3.5	1.0	2.0	-	10.5	-	-	-	-	-	-	-	366.5	293.2	399.7	383.1	393.5	259.6	349.3	4,431	2,095	8,983	3,273	4,799	-	23,580
9	Sep-19	2.0	-	1.6	-	1.0	-	4.6	-	-	-	-	-	-	-	344.6	275.7	373.1	354.9	363.8	239.8	325.3	5,423	1,821	9,097	2,689	5,069	-	24,099
10	Oct-19	-	-	5.8	-	-	-	5.8	-	-	-	-	-	-	-	325.6	260.5	350.6	331.0	338.8	223.1	304.9	4,757	4,757	13,717	2,308	4,627	-	26,634
11	Nov-19	-	-	1.5	-	-	-	1.5	-	-	-	-	-	-	-	309.1	247.3	331.1	310.6	317.4	208.8	287.4	4,275	1,475	13,013	2,035	3,673	-	24,471
12	Dec-19	-	-	-	-	0.8	-	0.8	-	-	-	-	-	-	-	294.5	235.6	314.2	292.8	298.9	196.5	272.1	3,904	1,356	11,206	1,828	4,142	-	22,438
13	Jan-20	-	-	-	-	0.8	-	0.8	-	-	-	-	-	-	-	281.5	225.2	299.3	277.2	282.7	185.8	258.6	3,608	1,260	9,962	1,665	4,491	-	20,985
14	Feb-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	269.9	215.9	286.0	263.4	268.4	176.3	246.7	3,364	1,179	9,032	1,533	3,910	-	19,017
15	Mar-20	1.0	-	1.0	-	1.0	-	3.0	-	-	-	-	-	-	-	259.4	207.5	274.1	251.1	255.6	167.9	235.9	3,944	1,110	9,345	1,422	4,667	-	20,487
16	Apr-20	-	1.0	2.0	-	-	-	3.0	-	-	-	-	-	-	-	249.8	199.9	263.4	240.1	244.2	160.3	226.3	3,640	1,678	10,605	1,329	4,077	-	21,329
17	May-20	2.3	-	-	-	-	-	3.3	-	-	-	-	-	-	-	241.1	192.9	253.7	230.1	233.9	153.5	217.5	5,168	1,524	9,509	1,249	4,830	-	22,279
18	Jun-20	1.0	-	1.3	1.0	-	-	3.3	-	-	-	-	-	-	-	233.1	186.5	244.8	221.0	224.5	147.3	209.5	5,468	1,409	10,034	2,237	4,238	-	23,386
19	Jul-20	-	-	7.3	-	-	-	7.3	-	-	-	-	-	-	-	225.8	180.6	236.6	212.7	215.9	141.6	202.2	4,980	1,318	16,700	1,937	3,831	-	28,766
20	Aug-20	3.3	-	-	-	-	1.3	4.5	-	-	-	-	-	-	-	219.0	175.2	229.1	205.0	208.1	136.5	195.5	7,161	1,243	14,341	1,740	4,971	-	29,457
21	Sep-20	-	-	-	-	3.0	-	3.0	-	-	-	-	-	-	-	212.7	170.1	222.2	198.0	200.9	131.7	189.3	6,449	1,179	12,832	1,595	7,847	-	29,903
22	Oct-20	1.0	-	5.6	-	-	-	6.6	-	-	-	-	-	-	-	206.8	165.4	215.8	191.5	194.2	127.3	183.5	6,709	1,124	17,611	1,482	6,585	-	33,511
23	Nov-20	2.3	-	6.8	-	-	-	9.0	-	-	-	-	-	-	-	201.3	161.1	209.8	185.5	188.0	123.2	178.2	7,936	1,076	22,494	1,390	5,792	-	38,687
24	Dec-20	4.5	-	3.0	-	1.1	-	8.6	-	-	-	-	-	-	-	196.2	156.9	204.2	179.9	182.3	119.5	173.2	10,759	1,033	22,602	1,312	6,532	-	42,238
25	Jan-21	2.3	-	1.3	1.1	4.5	-	9.1	-	-	-	-	-	-	-	191.4	153.1	199.0	174.7	177.0	115.9	168.5	11,412	994	21,216	2,435	11,000	-	47,058
26	Feb-21	-	-	1.6	5.6	2.6	-	9.9	-	-	-	-	-	-	-	186.8	149.5	194.1	169.8	171.9	112.6	164.1	10,308	959	20,755	8,061	12,237	-	52,321
27	Mar-21	2.0	-	4.8	1.0	-	-	7.8	-	-	-	-	-	-	-	182.6	146.0	189.5	165.2	167.3	109.5	160.0	11,049	928	23,754	7,563	10,357	-	53,651
28	Apr-21	-	-	3.5	2.0	2.0	-	7.5	-	-	-	-	-	-	-	178.5	142.8	185.1	160.9	162.8	106.6	156.1	10,136	898	24,843	8,486	11,448	-	55,811
29	May-21	-	-	1.0	3.0	2.0	-	6.0	-	-	-	-	-	-	-	174.7	139.8	181.0	156.8	158.7	103.9	152.5	9,425	872	23,276	10,381	12,308	-	56,262
30	Jun-21	2.0	-	2.0	-	1.0	-	5.0	-	-	-	-	-	-	-	171.1	136.9	177.1	153.0	154.8	101.3	149.0	10,417	847	23,282	8,796	11,889	-	55,231
31	Jul-21	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	167.6	134.1	173.4	149.4	151.1	98.9	145.8	11,008	824	23,754	9,412	12,160	-	57,157
32	Aug-21	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	164.4	131.5	169.9	145.9	147.6	96.6	142.6	11,536	802	24,180	9,931	12,419	-	58,867
33	Sep-21	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	161.2	129.0	166.6	142.7	144.3	94.4	139.7	12,018	782	24,587	10,400	12,672	-	60,460
34	Oct-21	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	158.3	126.6	163.4	139.6	141.1	92.4	136.9	12,467	763	24,984	10,835	12,922	-	61,972
35	Nov-21	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	155.4	124.3	160.4	136.6	138.1	90.4	134.2	12,890	745	25,374	11,245	13,167	-	63,422
36	Dec-21	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	152.7	122.2	157.5	133.8	135.3	88.5	131.7	13,291	729	25,758	11,634	13,408	-	64,819
37	Jan-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	150.1	120.1	154.8	131.1	132.5	86.7	129.2	13,673	713	26,136	12,005	13,643	-	66,171
38	Feb-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	147.6	118.1	152.1	128.6	129.9	85.0	128.9	14,040	698	26,510	12,361	13,874	-	67,482
39	Mar-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	145.2	116.2	149.6	126.1	127.4	83.4	124.7	14,393	684	26,878	12,702	14,100	-	68,756
40	Apr-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	142.9	114.3	147.2	123.8	125.1	81.8	122.5	14,733	670	27,241	13,030	14,321	-	69,996
41	May-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	140.7	112.6	144.8	121.6	122.8	80.3	120.5	15,064	658	27,600	13,346	14,537	-	71,204
42	Jun-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	138.6	110.9	142.6	119.4	120.6	78.9	118.5	15,384	645	27,953	13,652	14,748	-	72,382
43	Jul-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	136.5	109.2	140.4	117.3	118.5	77.5	116.6	15,695	634	28,302	13,948	14,955	-	73,533
44	Aug-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	134.6	107.6	138.3	115.4	116.5	76.2	114.8	15,998	623	28,646	14,234	15,157	-	74,688
45	Sep-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	132.7	106.1	136.3	113.4	114.5	74.9	113.0	16,294	612	28,985	14,512	15,355	-	75,758
46	Oct-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	130.8	104.7	134.4	111.6	112.7	73.7	111.3	16,582	602	29,320	14,782	15,550	-	76,836
47	Nov-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	129.0	103.2	132.5	109.8	110.9	72.5	109.7	16,864	592	29,650	15,045	15,740	-	77,891
48	Dec-22	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	127.3	101.9	130.7	108.1	109.1	71.4	108.1	17,140	583	29,976	15,301	15,927	-	78,925
49	Jan-23	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	125.7	100.5	129.0	106.5	107.5	70.3	106.6	17,410	574	30,298	15,550	16,110	-	79,940
50	Feb-23	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	124.1	99.3	127.3	104.9	105.9	69.2	105.1	17,674	565	30,615	15,792			

		Drilling Program (Based on Well Completion & HU)							Inverse							Prod A Type Curves							Gross Crude Oil Production (BBL/D)						
		Well Count by Formation and Total																											
		181	9	274	159	154	4	780																					
#	Date	M. Spra	Jo Mill	L. Spra	WCA	WCB	WCD	Total	M. Spra	Jo Mill	L. Spra	WCA	WCB	WCD	AVG	M. Spra	Jo Mill	L. Spra	WCA	WCB	WCD	AVG	M. Spra	Jo Mill	L. Spra	WCA	WCB	WCD	TOTAL
89	May-26	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	85.6	68.5	87.3	68.0	68.5	44.8	70.4	25,493	371	40,656	22,494	21,564	-	110,578
90	Jun-26	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	85.0	68.0	86.6	67.4	68.0	44.4	69.9	25,652	368	40,870	22,623	21,669	-	111,183
91	Jul-26	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	84.3	67.5	86.0	66.9	67.4	44.0	69.4	25,811	366	41,082	22,750	21,774	-	111,783
92	Aug-26	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	83.7	67.0	85.4	66.3	66.8	43.7	68.8	25,968	363	41,293	22,877	21,878	-	112,378
93	Sep-26	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	83.2	66.5	84.8	65.8	66.3	43.3	68.3	26,124	360	41,502	23,001	21,981	-	112,968
94	Oct-26	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	82.6	66.1	84.2	65.3	65.7	43.0	67.8	26,279	357	41,709	23,125	22,083	-	113,553
95	Nov-26	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	82.0	65.6	83.6	64.7	65.2	42.6	67.3	26,432	355	41,915	23,247	22,184	-	114,134
96	Dec-26	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	81.5	65.2	83.0	64.2	64.7	42.3	66.8	26,584	352	42,120	23,369	22,284	-	114,709
97	Jan-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	80.9	64.7	82.5	63.7	64.2	41.9	66.3	26,735	349	42,323	23,489	22,383	-	115,280
98	Feb-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	80.4	64.3	81.9	63.2	63.7	41.6	65.9	26,885	347	42,525	23,607	22,482	-	115,846
99	Mar-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	79.8	63.9	81.4	62.8	63.2	41.3	65.4	27,034	344	42,725	23,725	22,579	-	116,408
100	Apr-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	79.3	63.5	80.8	62.3	62.7	41.0	64.9	27,181	342	42,924	23,842	22,676	-	116,965
101	May-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	78.8	63.0	80.3	61.8	62.3	40.7	64.5	27,328	340	43,122	23,957	22,772	-	117,518
102	Jun-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	78.3	62.6	79.8	61.4	61.8	40.4	64.0	27,473	337	43,318	24,072	22,867	-	118,067
103	Jul-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	77.8	62.2	79.3	60.9	61.3	40.1	63.6	27,617	335	43,513	24,185	22,961	-	118,611
104	Aug-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	77.3	61.9	78.8	60.5	60.9	39.8	63.2	27,760	333	43,706	24,297	23,055	-	119,152
105	Sep-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	76.8	61.5	78.3	60.0	60.4	39.5	62.8	27,903	330	43,899	24,409	23,147	-	119,688
106	Oct-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	76.4	61.1	77.8	59.6	60.0	39.2	62.3	28,044	328	44,090	24,519	23,240	-	120,221
107	Nov-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	75.9	60.7	77.3	59.2	59.6	38.9	61.9	28,184	326	44,280	24,629	23,331	-	120,750
108	Dec-27	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	75.4	60.4	76.8	58.8	59.2	38.7	61.5	28,323	324	44,469	24,737	23,421	-	121,274
109	Jan-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	75.0	60.0	76.4	58.3	58.8	38.4	61.1	28,461	322	44,656	24,845	23,511	-	121,796
110	Feb-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	74.5	59.6	75.9	57.9	58.3	38.1	60.8	28,599	320	44,843	24,951	23,601	-	122,313
111	Mar-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	74.1	59.3	75.5	57.5	57.9	37.9	60.4	28,735	318	45,028	25,057	23,689	-	122,827
112	Apr-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	73.7	58.9	75.0	57.2	57.6	37.6	60.0	28,870	316	45,212	25,162	23,777	-	123,337
113	May-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	73.2	58.6	74.6	56.8	57.2	37.3	59.6	29,005	314	45,395	25,266	23,864	-	123,844
114	Jun-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	72.8	58.3	74.2	56.4	56.8	37.1	59.3	29,139	312	45,577	25,369	23,951	-	124,348
115	Jul-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	72.4	57.9	73.7	56.0	56.4	36.8	58.9	29,271	310	45,758	25,472	24,037	-	124,848
116	Aug-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	72.0	57.6	73.3	55.7	56.0	36.6	58.5	29,403	308	45,938	25,573	24,122	-	125,345
117	Sep-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	71.6	57.3	72.9	55.3	55.7	36.4	58.2	29,535	306	46,116	25,674	24,207	-	125,838
118	Oct-28	1.7	-	2.4	1.6	1.4	-	7.1	-	-	-	-	-	-	-	71.2	57.0	72.5	54.9	55.3	36.1	57.8	29,665	305	46,294	25,774	24,291	-	126,329
119	Nov-28	1.2	-	1.7	1.1	1.0	-	5.1	-	-	-	-	-	-	-	70.8	56.6	72.1	54.6	55.0	35.9	57.5	29,414	303	45,757	25,393	23,905	-	124,771
120	Dec-28	-	3.5	-	-	-	3.6	7.1	-	-	-	-	-	-	-	70.4	56.3	71.7	54.2	54.6	35.7	57.2	28,273	2,518	43,595	23,916	22,461	2,824	123,586

Crude Volume Forecast - Based on Prod B Type Curves

