

## **M**EMORANDUM

To: Cyrq Energy, Inc.

Date: January 23, 2018

From: Richard Holt

Subject: Lightning Dock Numerical Model – Summary of Forecast Scenario 1 (Version 3)

## Summary

A numerical model of the Lightning Dock Geothermal (LDG) field has been developed based on all available data and an updated conceptual model. This memorandum provides a summary of the model's forecast for increasing production to 5000 gpm total utilizing wells 45-7 (existing) and well 45A-7 (new) each at 2500 gpm. Injection in this scenario is allocated to existing injection wells. The results are as follows:

- The numerical model results indicate that 5000 gpm of production in Scenario 1 is long-term sustainable, with stable pressure and very minor temperature decline.
- For 5000 gpm total production (2500 gpm for each 45-7 and 45A-7) project temperature starts at 310 °F and declines to 296 °F by year 2038
- The average total temperature decline for Scenario 1 is 0.7 °F/year

## Background

Geothermal Science (GSI) developed a comprehensive numerical model of the LDG resource based on a conceptual model developed by Innovate Geothermal Ltd., "3D Geoscience Data Compilation, Visualization, and Interpretation: Lightning Dock Geothermal, New Mexico", July 2017. The overall conceptual model is that permeability at LDG is mostly within faults hosted in volcanic rocks. Figures 1 to 3 show the model grid and the conceptual model expressed in the grid. Figure 4 to 15 show the model's match to natural state temperature profiles and production data. Figures 16 and 17 show the model's forecast for Scenario 1 (5000 gpm), the forecast is listed in tabular format in Table 1, attached at the end of the memo.

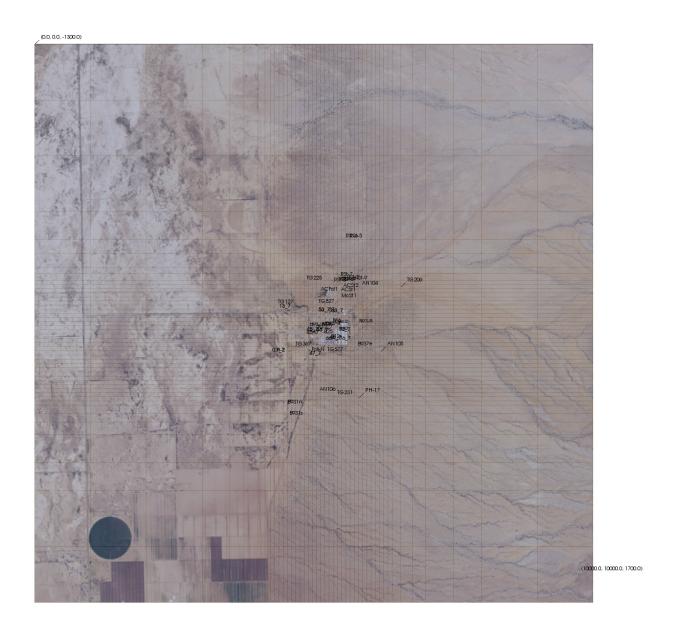


Figure 1: Numerical model grid viewed from above, area 10,000 meters by 10,000 meters, with thickness 3000 m, gridded from surface to source

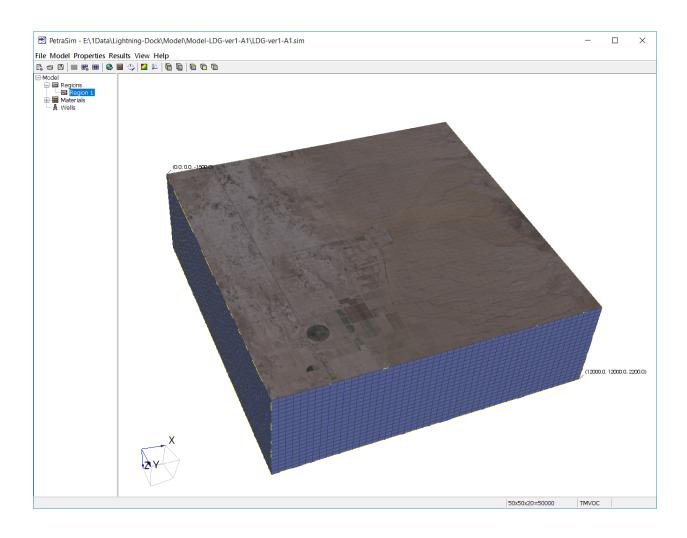
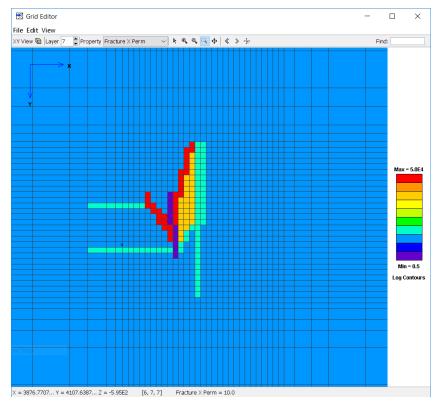


Figure 2: Numerical model grid viewed in 3-D



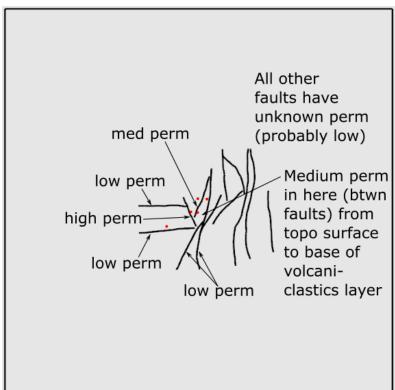


Figure 3: Permeability in model compared to conceptual model

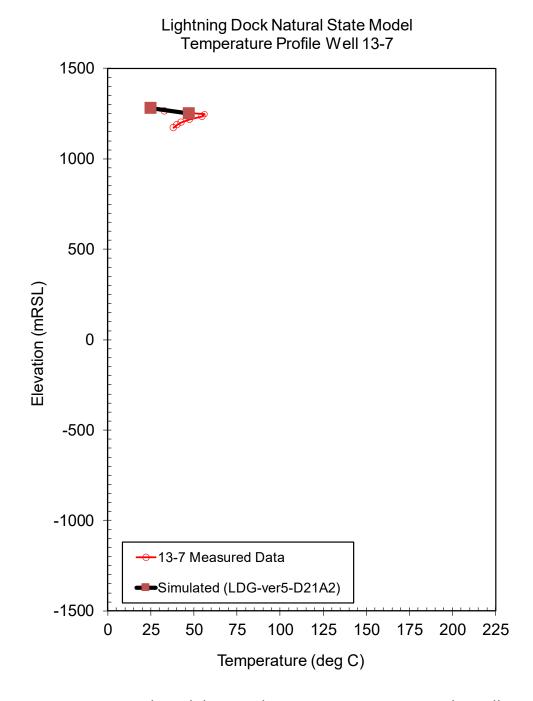


Figure 4: Numerical model natural state temperature match, well 13-7

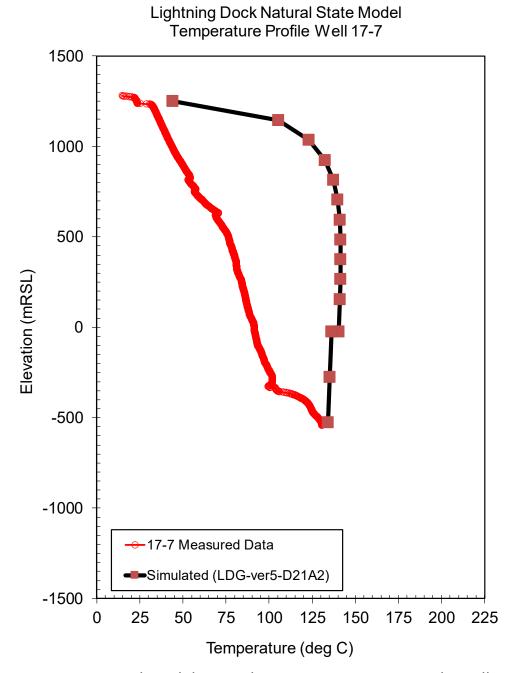


Figure 5: Numerical model natural state temperature match, well 17-7

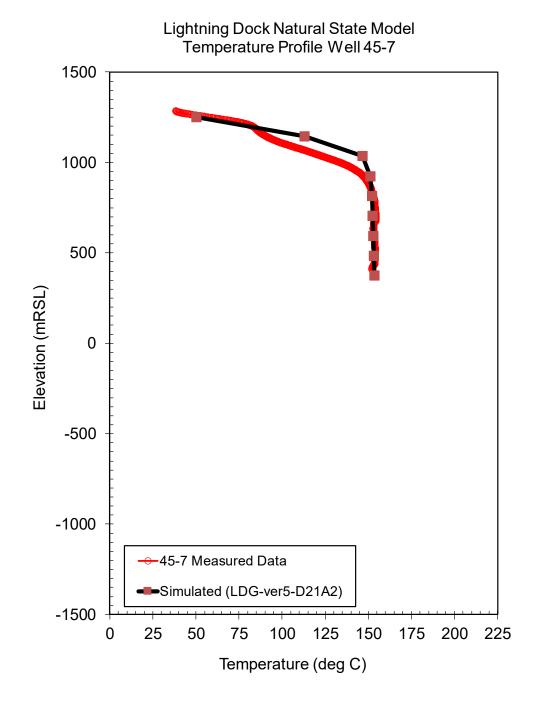


Figure 6: Numerical model natural state temperature match, well 45-7

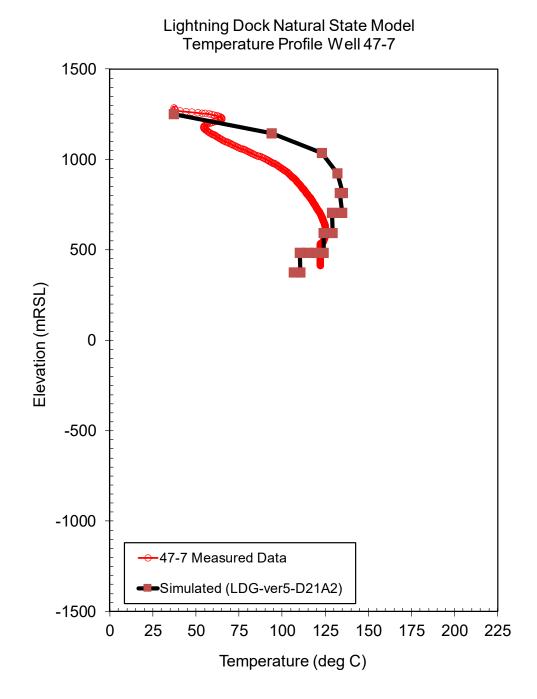


Figure 7: Numerical model natural state temperature match, well 47-7

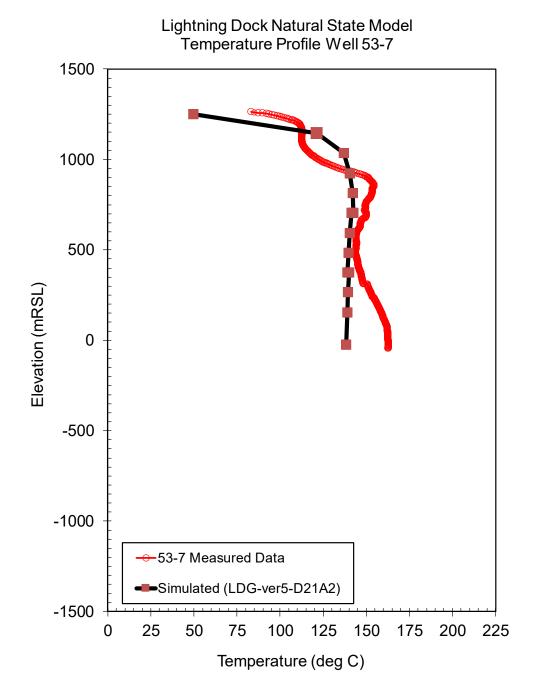


Figure 8: Numerical model natural state temperature match, well 53-7

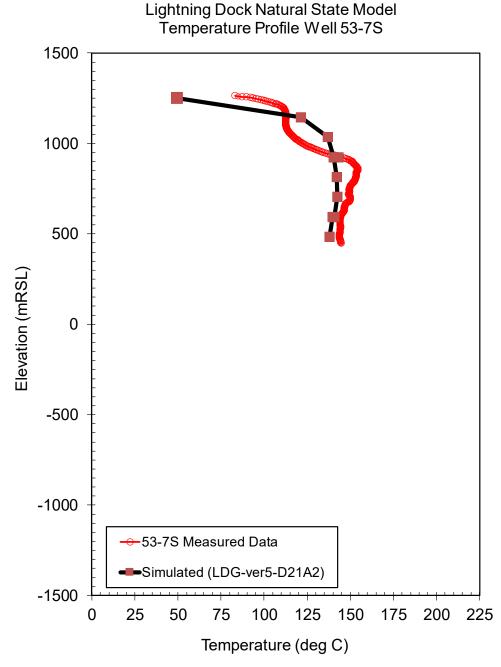


Figure 8a: Numerical model natural state temperature match, well 53-7S

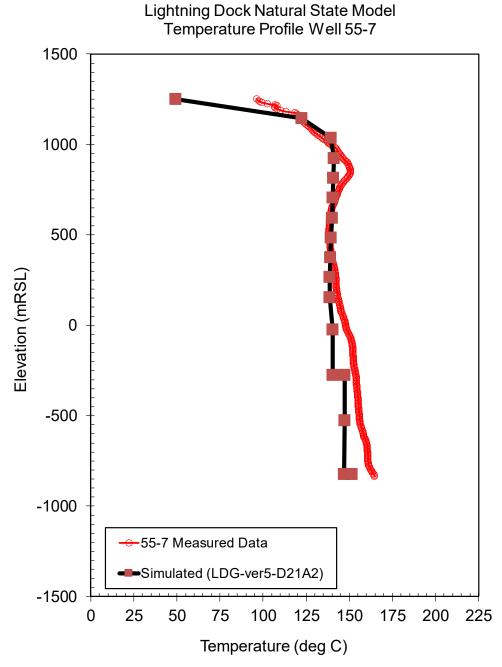


Figure 9: Numerical model natural state temperature match, well 55-7

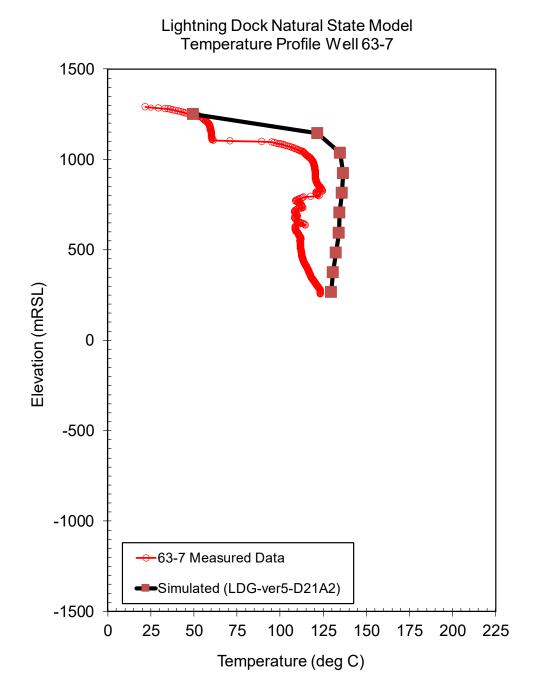


Figure 10: Numerical model natural state temperature match, well 63-7

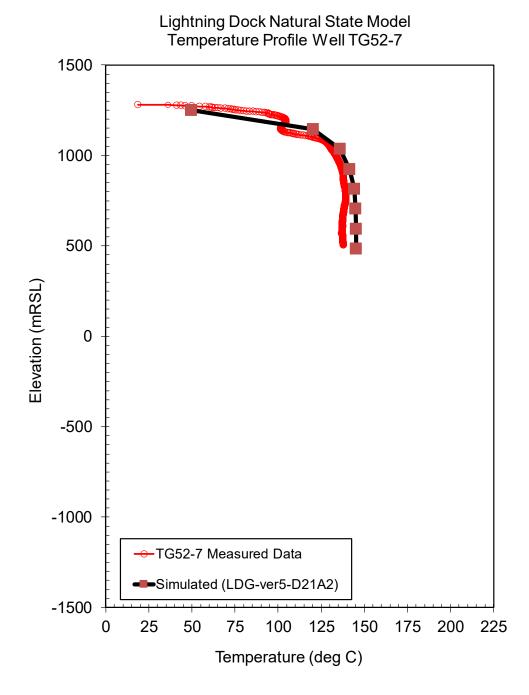


Figure 11: Numerical model natural state temperature match, well TG52-7

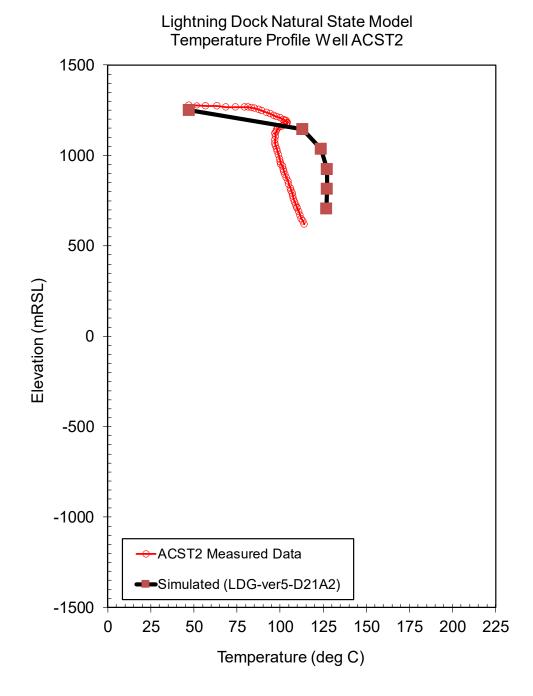


Figure 12: Numerical model natural state temperature match, well ACST-2

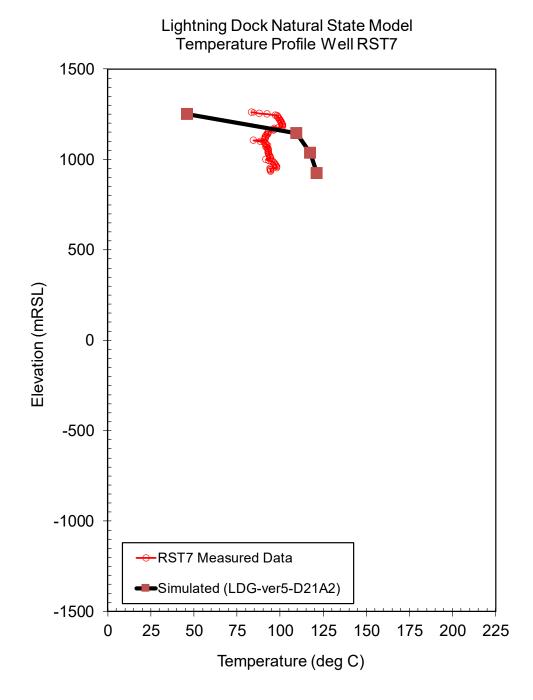
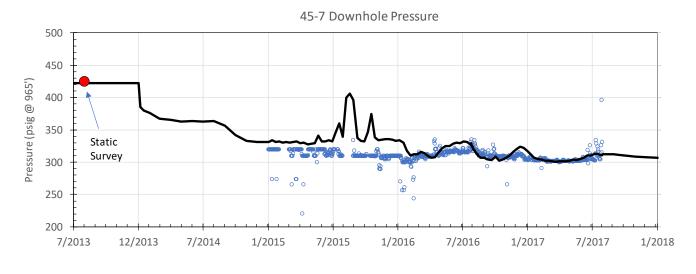


Figure 13: Numerical model natural state temperature match, well RST7



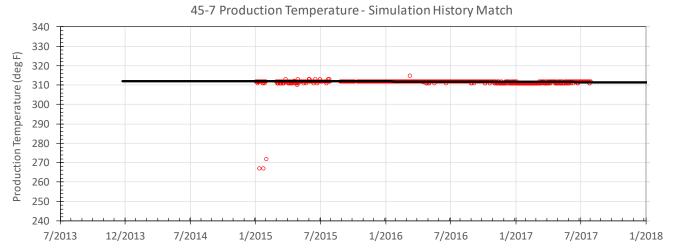
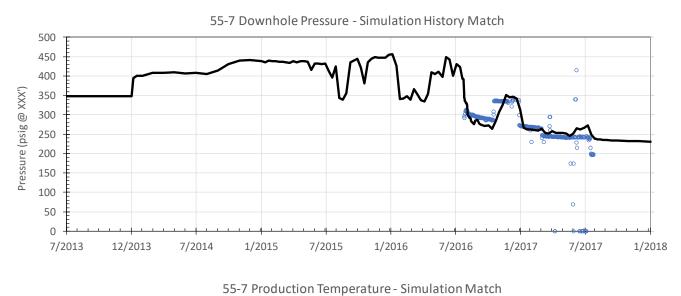


Figure 14: Numerical model production history match, well 45-7



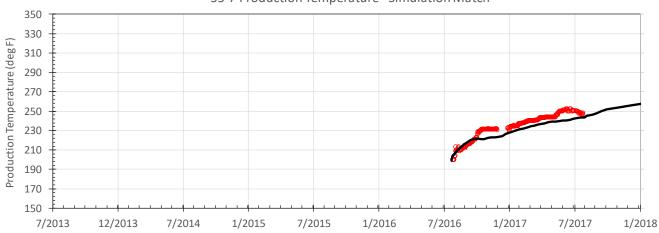


Figure 15: Numerical model production history match, well 55-7

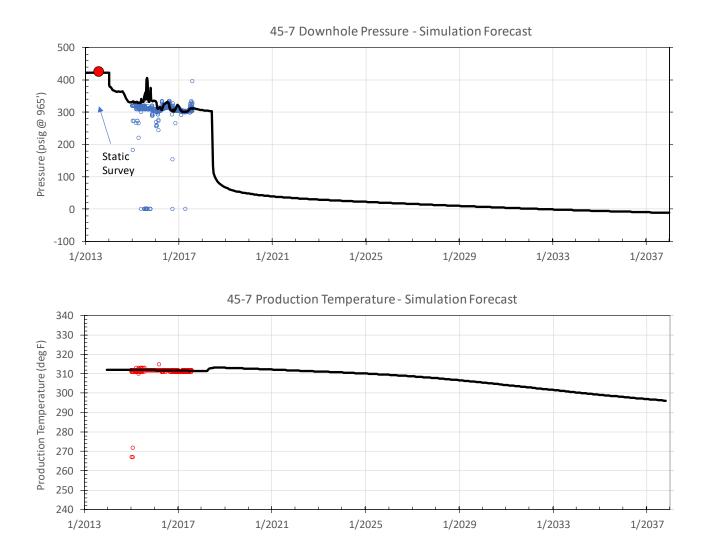
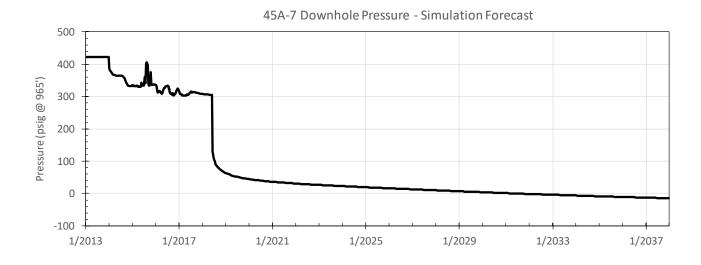


Figure 16: Well 45-7, numerical model production forecast Scenario 1, total production 5000 gpm, with 2500 gpm from 45-7, and 2500 gpm from 45A-7



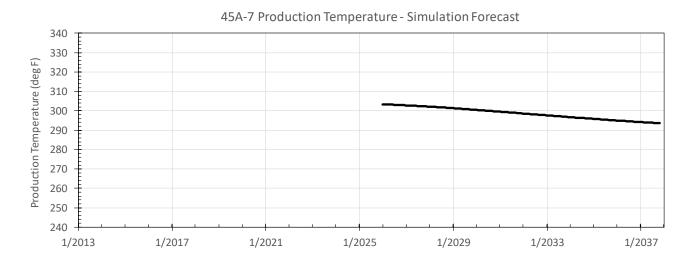
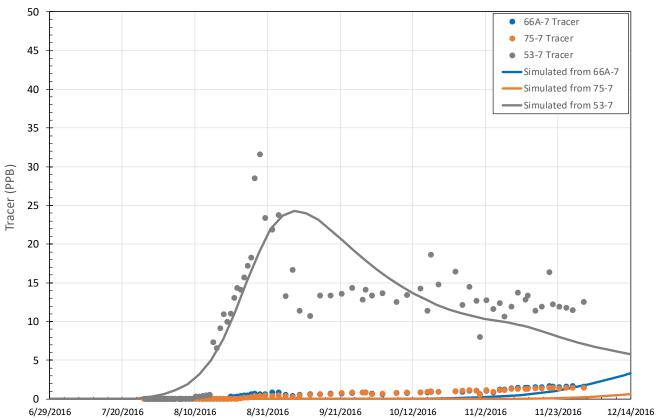
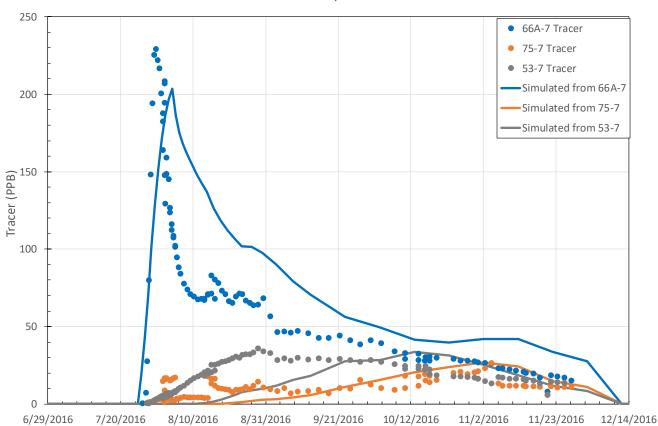


Figure 17: Well 45-7, numerical model production forecast Scenario 1, total production 5000 gpm, with 2500 gpm from 45-7, and 2500 gpm from 45A-7









## Table 1 Forecast Scenario S1

(Total 5000 gpm production, 2500 gpm from 45-7, 2500 gpm from 45A-7)

	Well 45-7	Well 45A-7		Well 45-7	Well 45A-7		Total	Total
	Production	Production		Production	Production		Production	Production
	Temperature	Temperature		Flow Rate	Flow Rate		Temperature	Flow Rate
Date	(deg F)	(deg F)	Date	(gpm)	(gpm)	Date	(deg F)	(gpm)
1/1/2018	311.5	307.2	1/1/2018	1549	0	1/1/2018	311.5	1549
2/1/2018	311.5	307.2	2/1/2018	1549	0	2/1/2018	311.5	1549
3/1/2018	311.4	307.2	3/1/2018	1549	0	3/1/2018	311.4	1549
4/1/2018	311.4	307.2	4/1/2018	1549	0	4/1/2018	311.4	1549
5/1/2018	311.4	307.1	5/1/2018	1549	0	5/1/2018	311.4	1549
6/1/2018	311.4	307.1	6/1/2018	1549	0	6/1/2018	311.4	1549
6/16/2018	312.6	308.1	6/16/2018	2500	2500	6/16/2018	310.3	5000
7/1/2018	312.8	308.3	7/1/2018	2500	2500	7/1/2018	310.6	5000
7/16/2018	312.9	308.5	7/16/2018	2500	2500	7/16/2018	310.7	5000
8/1/2018	313.0	308.6	8/1/2018	2500	2500	8/1/2018	310.8	5000
9/1/2018	313.1	308.8	9/1/2018	2500	2500	9/1/2018	310.9	5000
10/1/2018	313.1	308.9	10/1/2018	2500	2500	10/1/2018	311.0	5000
11/1/2018	313.1	308.9	11/1/2018	2500	2500	11/1/2018	311.0	5000
12/1/2018	313.1	309.0	12/1/2018	2500	2500	12/1/2018	311.0	5000
1/1/2019	313.1	309.0	1/1/2019	2500	2500	1/1/2019	311.0	5000
2/1/2019	313.1	309.0	2/1/2019	2500	2500	2/1/2019	311.0	5000
3/1/2019	313.1	309.0	3/1/2019	2500	2500	3/1/2019	311.0	5000
4/1/2019	313.1	309.0	4/1/2019	2500	2500	4/1/2019	311.0	5000
5/1/2019	313.0	309.0	5/1/2019	2500	2500	5/1/2019	311.0	5000
6/1/2019	313.0	309.0	6/1/2019	2500	2500	6/1/2019	311.0	5000
7/1/2019	313.0	308.9	7/1/2019	2500	2500	7/1/2019	311.0	5000
8/1/2019	312.9	308.9	8/1/2019	2500	2500	8/1/2019	310.9	5000
9/1/2019	312.9	308.9	9/1/2019	2500	2500	9/1/2019	310.9	5000
10/1/2019	312.9	308.9	10/1/2019	2500	2500	10/1/2019	310.9	5000
11/1/2019	312.8	308.9	11/1/2019	2500	2500	11/1/2019	310.9	5000
12/1/2019	312.8	308.9	12/1/2019	2500	2500	12/1/2019	310.8	5000
1/1/2020	312.8	308.8	1/1/2020	2500	2500	1/1/2020	310.8	5000
2/1/2020	312.7	308.8	2/1/2020	2500	2500	2/1/2020	310.8	5000
3/1/2020	312.7	308.8	3/1/2020	2500	2500	3/1/2020	310.8	5000
4/1/2020	312.6	308.8	4/1/2020	2500	2500	4/1/2020	310.7	5000
5/1/2020	312.6	308.8	5/1/2020	2500	2500	5/1/2020	310.7	5000
6/1/2020	312.6	308.8	6/1/2020	2500	2500	6/1/2020	310.7	5000
7/1/2020	312.5	308.7	7/1/2020	2500	2500	7/1/2020	310.6	5000
8/1/2020	312.5	308.7	8/1/2020	2500	2500	8/1/2020	310.6	5000
9/1/2020	312.4	308.7	9/1/2020	2500	2500	9/1/2020	310.6	5000
10/1/2020	312.4	308.7	10/1/2020	2500	2500	10/1/2020	310.5	5000
11/1/2020	312.4	308.7	11/1/2020	2500	2500	11/1/2020	310.5	5000
12/1/2020	312.3	308.6	12/1/2020		2500	12/1/2020	310.5	5000
1/1/2021	312.3	308.6	1/1/2021	2500	2500	1/1/2021	310.5	5000
2/1/2021	312.2	308.6	2/1/2021	2500	2500	2/1/2021	310.4	5000
3/1/2021	312.2	308.6	3/1/2021	2500	2500	3/1/2021	310.4	5000
4/1/2021	312.2	308.6	4/1/2021	2500	2500	4/1/2021	310.4	5000
5/1/2021	312.1	308.5	5/1/2021		2500	5/1/2021	310.3	5000
6/1/2021	312.1	308.5	6/1/2021		2500	6/1/2021	310.3	5000
7/1/2021	312.0	308.5	7/1/2021		2500	7/1/2021	310.3	5000
8/1/2021	312.0	308.5	8/1/2021		2500	8/1/2021	310.2	5000
9/1/2021	311.9	308.5	9/1/2021		2500	9/1/2021	310.2	5000
10/1/2021	311.9	308.4	10/1/2021		2500	10/1/2021	310.2	5000
11/1/2021	311.9	308.4	11/1/2021		2500	11/1/2021	310.1	5000
12/1/2021	311.8	308.4	12/1/2021		2500	12/1/2021	310.1	5000
1/1/2022	311.8	308.4	1/1/2022		2500	1/1/2022	310.1	5000
2/1/2022	311.7	308.3	2/1/2022		2500	2/1/2022	310.0	5000
3/1/2022	311.7	308.3	3/1/2022		2500	3/1/2022	310.0	5000
4/1/2022	311.6	308.3	4/1/2022	2500	2500	4/1/2022	310.0	5000

	Well 45-7	Well 45A-7		Well 45-7	Well 45A-7		Total	Tota
	Production	Production		Production	Production		Production	Produ
	Temperature	Temperature		Flow Rate	Flow Rate		Temperature	Flow
Date	(deg F)	(deg F)	Date	(gpm)	(gpm)	Date	(deg F)	(gpr
5/1/2022	311.6	308.3	5/1/2022	2500	2500	5/1/2022	309.9	500
6/1/2022	311.6	308.3	6/1/2022	2500	2500	6/1/2022	309.9	500
7/1/2022	311.5	308.2	7/1/2022	2500	2500	7/1/2022	309.9	500
8/1/2022	311.5	308.2	8/1/2022	2500	2500	8/1/2022	309.8	500
9/1/2022	311.4	308.2	9/1/2022	2500	2500	9/1/2022	309.8	500
10/1/2022	311.4	308.2	10/1/2022	2500	2500	10/1/2022	309.8	500
11/1/2022	311.3	308.1	11/1/2022	2500	2500	11/1/2022	309.7	500
12/1/2022	311.3	308.1	12/1/2022	2500	2500	12/1/2022	309.7	500
1/1/2023	311.3	308.1	1/1/2023	2500	2500	1/1/2023	309.7	500
2/1/2023	311.2	308.1	2/1/2023	2500	2500	2/1/2023	309.6	500
3/1/2023	311.2	308.0	3/1/2023	2500	2500	3/1/2023	309.6	500
4/1/2023	311.1	308.0	4/1/2023	2500	2500	4/1/2023	309.6	500
5/1/2023	311.1	308.0	5/1/2023	2500	2500	5/1/2023	309.5	500
6/1/2023	311.1	308.0	6/1/2023	2500	2500	6/1/2023	309.5	500
7/1/2023	311.0	307.9	7/1/2023	2500	2500	7/1/2023	309.5	500
8/1/2023	311.0	307.9	8/1/2023	2500	2500	8/1/2023	309.4	500
9/1/2023	310.9	307.9	9/1/2023	2500	2500	9/1/2023	309.4	500
10/1/2023	310.9	307.9	10/1/2023	2500	2500	10/1/2023	309.4	500
11/1/2023	310.8	307.8	11/1/2023	2500	2500	11/1/2023	309.3	500
12/1/2023	310.8	307.8	12/1/2023	2500	2500	12/1/2023	309.3	500
1/1/2024	310.8	307.8	1/1/2024	2500	2500	1/1/2024	309.3	500
2/1/2024	310.7	307.8	2/1/2024	2500	2500	2/1/2024	309.2	500
3/1/2024	310.7	307.7	3/1/2024	2500	2500	3/1/2024	309.2	500
4/1/2024	310.6	307.7	4/1/2024	2500	2500	4/1/2024	309.2	500
5/1/2024	310.6	307.7	5/1/2024	2500	2500	5/1/2024	309.1	500
6/1/2024	310.5	307.6	6/1/2024	2500	2500	6/1/2024	309.1	500
7/1/2024	310.5	307.6	7/1/2024	2500	2500	7/1/2024	309.0	500
8/1/2024	310.4	307.6	8/1/2024	2500	2500	8/1/2024	309.0	500
9/1/2024	310.4	307.5	9/1/2024	2500	2500	9/1/2024	309.0	500
10/1/2024	310.4	307.5	10/1/2024	2500	2500	10/1/2024	308.9	500
11/1/2024	310.3	307.5	11/1/2024	2500	2500	11/1/2024	308.9	500
12/1/2024	310.3	307.5	12/1/2024	2500	2500	12/1/2024	308.9	500
1/1/2025	310.2	307.4	1/1/2025	2500	2500	1/1/2025	308.8	500
2/1/2025	310.2	307.4	2/1/2025	2500	2500	2/1/2025	308.8	500
3/1/2025	310.1	307.4	3/1/2025	2500	2500	3/1/2025	308.7	500
4/1/2025	310.1	307.3	4/1/2025	2500	2500	4/1/2025	308.7	500
5/1/2025	310.0	307.3	5/1/2025	2500	2500	5/1/2025	308.6	500
6/1/2025	310.0	307.2	6/1/2025	2500	2500	6/1/2025	308.6	500
7/1/2025	309.9	307.2	7/1/2025	2500	2500	7/1/2025	308.6	500
8/1/2025	309.9	307.2	8/1/2025	2500	2500	8/1/2025	308.5	500
9/1/2025	309.8	307.1	9/1/2025	2500	2500	9/1/2025	308.5	500
10/1/2025	309.7	307.1	10/1/2025	2500	2500	10/1/2025	308.4	500
11/1/2025	309.7	307.1	11/1/2025	2500	2500	11/1/2025	308.4	500
12/1/2025	309.6	307.0	12/1/2025	2500	2500	12/1/2025	308.3	500
1/1/2026	309.6	307.0	1/1/2026	2500	2500	1/1/2026	308.3	500
2/1/2026	309.5	306.9	2/1/2026	2500	2500	2/1/2026	308.2	500
3/1/2026	309.5	306.9	3/1/2026	2500	2500	3/1/2026	308.2	500
4/1/2026	309.4	306.9	4/1/2026	2500	2500	4/1/2026	308.1	500
5/1/2026	309.4	306.9	5/1/2026	2500	2500	5/1/2026	308.1	500
6/1/2026			1. 1.					
7/1/2026	309.3	306.8 306.7	6/1/2026	2500	2500	6/1/2026	308.0	500
	309.2	306.7 306.7	7/1/2026	2500	2500	7/1/2026	308.0	500
	309.2	306.7	8/1/2026	2500	2500	8/1/2026	307.9	500
8/1/2026 9/1/2026	309.1	306.6	9/1/2026	2500	2500	9/1/2026	307.9	500

	Well 45-7	Well 45A-7		Well 45-7	Well 45A-7		Total	Total
	Production	Production		Production	Production		Production	Production
	Temperature	Temperature		Flow Rate	Flow Rate		Temperature	Flow Rate
Date	(deg F)	(deg F)	Date	(gpm)	(gpm)	Date	(deg F)	(gpm)
11/1/2026	309.0	306.5	11/1/2026	2500	2500	11/1/2026	307.7	5000
12/1/2026	308.9	306.5	12/1/2026	2500	2500	12/1/2026	307.7	5000
1/1/2027	308.8	306.4	1/1/2027	2500	2500	1/1/2027	307.6	5000
2/1/2027	308.7	306.4	2/1/2027	2500	2500	2/1/2027	307.6	5000
3/1/2027	308.7	306.3	3/1/2027	2500	2500	3/1/2027	307.5	5000
4/1/2027	308.6	306.3	4/1/2027	2500	2500	4/1/2027	307.4	5000
5/1/2027	308.5	306.2	5/1/2027	2500	2500	5/1/2027	307.4	5000
6/1/2027	308.5	306.2	6/1/2027	2500	2500	6/1/2027	307.3	5000
7/1/2027	308.4	306.1	7/1/2027	2500	2500	7/1/2027	307.3	5000
8/1/2027	308.3	306.1	8/1/2027	2500	2500	8/1/2027	307.2	5000
9/1/2027	308.2	306.0	9/1/2027	2500	2500	9/1/2027	307.1	5000
10/1/2027	308.1	305.9	10/1/2027	2500	2500	10/1/2027	307.0	5000
11/1/2027	308.1	305.9	11/1/2027	2500	2500	11/1/2027	307.0	5000
12/1/2027	308.0	305.8	12/1/2027	2500	2500	12/1/2027	306.9	5000
1/1/2028	307.9	305.8	1/1/2028	2500	2500	1/1/2028	306.8	5000
2/1/2028	307.8	305.7	2/1/2028	2500	2500	2/1/2028	306.8	5000
3/1/2028	307.7	305.7	3/1/2028	2500	2500	3/1/2028	306.7	5000
4/1/2028	307.7	305.6	4/1/2028	2500	2500	4/1/2028	306.6	5000
5/1/2028	307.6	305.5	5/1/2028	2500	2500	5/1/2028	306.6	5000
6/1/2028	307.5	305.5	6/1/2028	2500	2500	6/1/2028	306.5	5000
7/1/2028	307.4	305.4	7/1/2028	2500	2500	7/1/2028	306.4	5000
8/1/2028	307.3	305.3	8/1/2028	2500	2500	8/1/2028	306.3	5000
9/1/2028	307.2	305.3	9/1/2028	2500	2500	9/1/2028	306.2	5000
10/1/2028	307.1	305.2	10/1/2028	2500	2500	10/1/2028	306.2	5000
11/1/2028	307.0	305.1	11/1/2028	2500	2500	11/1/2028	306.1	5000
12/1/2028	306.9	305.1	12/1/2028	2500	2500	12/1/2028	306.0	5000
1/1/2029	306.9	305.0	1/1/2029	2500	2500	1/1/2029	305.9	5000
2/1/2029	306.8	304.9	2/1/2029	2500	2500	2/1/2029	305.8	5000
3/1/2029	306.7	304.9	3/1/2029	2500	2500	3/1/2029	305.8	5000
4/1/2029	306.6	304.8	4/1/2029	2500	2500	4/1/2029	305.7	5000
5/1/2029	306.5	304.7	5/1/2029	2500	2500	5/1/2029	305.6	5000
6/1/2029	306.4	304.7	6/1/2029	2500	2500	6/1/2029	305.5	5000
7/1/2029	306.3	304.6	7/1/2029	2500	2500	7/1/2029	305.4	5000
8/1/2029	306.2	304.5	8/1/2029	2500	2500	8/1/2029	305.4	5000
9/1/2029	306.1	304.4	9/1/2029	2500	2500	9/1/2029	305.3	5000
10/1/2029	306.0	304.4	10/1/2029	2500	2500	10/1/2029	305.2	5000
11/1/2029	305.9	304.3	11/1/2029	2500	2500	11/1/2029	305.1	5000
12/1/2029	305.8	304.2	12/1/2029		2500	12/1/2029	305.0	5000
1/1/2030	305.7	304.1	1/1/2030	2500	2500	1/1/2030	304.9	5000
2/1/2030	305.6	304.1	2/1/2030		2500	2/1/2030	304.8	5000
3/1/2030	305.5	304.0	3/1/2030	2500	2500	3/1/2030	304.7	5000
4/1/2030	305.4	303.9	4/1/2030	2500	2500	4/1/2030	304.7	5000
5/1/2030	305.3	303.9	5/1/2030		2500	5/1/2030	304.6	5000
6/1/2030	305.2	303.8	6/1/2030		2500	6/1/2030	304.5	5000
7/1/2030	305.1	303.7	7/1/2030		2500	7/1/2030	304.4	5000
8/1/2030	305.0	303.6	8/1/2030		2500	8/1/2030	304.3	5000
9/1/2030	304.9	303.5	9/1/2030		2500	9/1/2030	304.2	5000
10/1/2030	304.8	303.5	10/1/2030		2500	10/1/2030	304.1	5000
11/1/2030	304.7	303.4	11/1/2030		2500	11/1/2030	304.0	5000
12/1/2030	304.6	303.3	12/1/2030		2500	12/1/2030	303.9	5000
1/1/2031	304.5	303.2	1/1/2031		2500	1/1/2031	303.8	5000
2/1/2031	304.3	303.2	2/1/2031		2500	2/1/2031	303.7	5000
3/1/2031	304.2	303.1	3/1/2031		2500	3/1/2031	303.7	5000
4/1/2031	304.1	303.0	4/1/2031	2500	2500	4/1/2031	303.6	5000

	Well 45-7	Well 45A-7		Well 45-7	Well 45A-7		Total	Tota
	Production	Production		Production	Production		Production	Produc
	Temperature	Temperature		Flow Rate	Flow Rate		Tempe rature	Flow R
Date	(deg F)	(deg F)	Date	(gpm)	(gpm)	Date	(deg F)	(gpn
5/1/2031	304.0	302.9	5/1/2031	2500	2500	5/1/2031	303.5	500
6/1/2031	303.9	302.8	6/1/2031	2500	2500	6/1/2031	303.4	500
7/1/2031	303.8	302.8	7/1/2031	2500	2500	7/1/2031	303.3	500
8/1/2031	303.7	302.7	8/1/2031	2500	2500	8/1/2031	303.2	500
9/1/2031	303.6	302.6	9/1/2031	2500	2500	9/1/2031	303.1	500
10/1/2031	303.5	302.5	10/1/2031	2500	2500	10/1/2031	303.0	500
11/1/2031	303.4	302.4	11/1/2031	2500	2500	11/1/2031	302.9	500
12/1/2031	303.3	302.4	12/1/2031	2500	2500	12/1/2031	302.8	500
1/1/2032	303.2	302.3	1/1/2032	2500	2500	1/1/2032	302.7	500
2/1/2032	303.1	302.2	2/1/2032	2500	2500	2/1/2032	302.6	500
3/1/2032	303.0	302.1	3/1/2032	2500	2500	3/1/2032	302.5	500
4/1/2032	302.9	302.0	4/1/2032	2500	2500	4/1/2032	302.4	500
5/1/2032	302.7	302.0	5/1/2032	2500	2500	5/1/2032	302.4	500
6/1/2032	302.6	301.9	6/1/2032	2500	2500	6/1/2032	302.3	500
7/1/2032	302.5	301.8	7/1/2032	2500	2500	7/1/2032	302.2	500
8/1/2032	302.4	301.7	8/1/2032	2500	2500	8/1/2032	302.1	500
9/1/2032	302.3	301.6	9/1/2032	2500	2500	9/1/2032	302.0	500
10/1/2032	302.2	301.6	10/1/2032	2500	2500	10/1/2032	301.9	500
11/1/2032	302.1	301.5	11/1/2032	2500	2500	11/1/2032	301.8	500
12/1/2032	302.0	301.4	12/1/2032	2500	2500	12/1/2032	301.7	500
1/1/2033	301.9	301.3	1/1/2033	2500	2500	1/1/2033	301.6	500
2/1/2033	301.8	301.3	2/1/2033	2500	2500	2/1/2033	301.5	500
3/1/2033	301.7	301.2	3/1/2033	2500	2500	3/1/2033	301.4	500
4/1/2033	301.6	301.1	4/1/2033	2500	2500	4/1/2033	301.3	500
5/1/2033	301.5	301.0	5/1/2033	2500	2500	5/1/2033	301.2	500
6/1/2033	301.4	300.9	6/1/2033	2500	2500	6/1/2033	301.1	500
7/1/2033	301.3	300.9	7/1/2033	2500	2500	7/1/2033	301.1	500
8/1/2033	301.1	300.8	8/1/2033	2500	2500	8/1/2033	301.0	500
9/1/2033	301.0	300.7	9/1/2033	2500	2500	9/1/2033	300.9	500
10/1/2033	300.9	300.6	10/1/2033	2500	2500	10/1/2033	300.8	500
11/1/2033	300.8	300.6	11/1/2033	2500	2500	11/1/2033	300.7	500
12/1/2033	300.7	300.5	12/1/2033	2500	2500	12/1/2033	300.6	500
1/1/2034	300.6	300.4	1/1/2034	2500	2500	1/1/2034	300.5	500
2/1/2034	300.5	300.3	2/1/2034	2500	2500	2/1/2034	300.4	500
3/1/2034	300.4	300.3	3/1/2034	2500	2500	3/1/2034	300.3	500
4/1/2034	300.3	300.2	4/1/2034	2500	2500	4/1/2034	300.2	500
5/1/2034	300.2	300.1	5/1/2034	2500	2500	5/1/2034	300.2	500
6/1/2034	300.1	300.0	6/1/2034	2500	2500	6/1/2034	300.1	500
7/1/2034	300.0	299.9	7/1/2034	2500	2500	7/1/2034	300.0	500
8/1/2034	299.9	299.9	8/1/2034	2500	2500	8/1/2034	299.9	500
9/1/2034	299.8	299.8	9/1/2034	2500	2500	9/1/2034	299.8	500
10/1/2034	299.7	299.7	10/1/2034	2500	2500	10/1/2034	299.7	500
11/1/2034	299.6	299.6	11/1/2034	2500	2500	11/1/2034	299.6	500
12/1/2034	299.5	299.6	12/1/2034	2500	2500	12/1/2034	299.5	500
1/1/2035	299.4	299.5	1/1/2035	2500	2500	1/1/2035	299.5	500
2/1/2035	299.3	299.4	2/1/2035	2500	2500	2/1/2035	299.4	500
3/1/2035	299.2	299.4	3/1/2035	2500	2500	3/1/2035	299.3	500
4/1/2035	299.1	299.3	4/1/2035	2500	2500	4/1/2035	299.2	500
5/1/2035	299.0	299.3	5/1/2035	2500	2500	5/1/2035	299.1	500
6/1/2035	298.9	299.2	6/1/2035	2500	2500			500
					2500	6/1/2035 7/1/2035	299.0	
7/1/2035	298.8	299.1	7/1/2035	2500		7/1/2035	298.9	500
	298.7	299.0	8/1/2035	2500	2500	8/1/2035	298.9	500
8/1/2035 9/1/2035	298.6	298.9	9/1/2035	2500	2500	9/1/2035	298.8	500

	Well 45-7	Well 45A-7		Well 45-7	Well 45A-7
	Production	Production		Production	Production
	Temperature	Temperature		Flow Rate	Flow Rate
Date	(deg F)	(deg F)	Date	(gpm)	(gpm)
11/1/2035	298.4	298.8	11/1/2035	2500	2500
12/1/2035	298.3	298.7	12/1/2035	2500	2500
1/1/2036	298.2	298.6	1/1/2036	2500	2500
2/1/2036	298.2	298.6	2/1/2036	2500	2500
3/1/2036	298.1	298.5	3/1/2036	2500	2500
4/1/2036	298.0	298.4	4/1/2036	2500	2500
5/1/2036	297.9	298.4	5/1/2036	2500	2500
6/1/2036	297.8	298.3	6/1/2036	2500	2500
7/1/2036	297.7	298.2	7/1/2036	2500	2500
8/1/2036	297.6	298.2	8/1/2036	2500	2500
9/1/2036	297.5	298.1	9/1/2036	2500	2500
10/1/2036	297.4	298.0	10/1/2036	2500	2500
11/1/2036	297.3	298.0	11/1/2036	2500	2500
12/1/2036	297.2	297.9	12/1/2036	2500	2500
1/1/2037	297.1	297.8	1/1/2037	2500	2500
2/1/2037	297.1	297.8	2/1/2037	2500	2500
3/1/2037	297.0	297.7	3/1/2037	2500	2500
4/1/2037	296.9	297.6	4/1/2037	2500	2500
5/1/2037	296.8	297.6	5/1/2037	2500	2500
6/1/2037	296.7	297.5	6/1/2037	2500	2500
7/1/2037	296.6	297.5	7/1/2037	2500	2500
8/1/2037	296.5	297.4	8/1/2037	2500	2500
9/1/2037	296.5	297.3	9/1/2037	2500	2500
10/1/2037	296.4	297.3	10/1/2037	2500	2500
11/1/2037	296.3	297.2	11/1/2037	2500	2500
12/1/2037	296.2	297.1	12/1/2037	2500	2500
1/1/2038	296.1	297.1	1/1/2038	2500	2500