

EXHIBIT 1013 – CLAIM-BY-CLAIM PRIORITY ANALYSIS

Earliest Priority Date for Claim 1: 5/17/2021	
Claim Elements:	First Disclosure in '663 Provisional
1. A method, comprising:	
(a) permitting performance of a first hydraulic fracturing operation on a first well, which first hydraulic fracturing operation comprises	
pumping fluid into the first well via a first valve associated with the first well, and	
measuring a flow rate of the fluid being pumped into the first well;	X
(b) determining that the flow rate of the fluid being pumped into the first well is below a flow rate threshold and	X
has been below the flow rate threshold for a threshold amount of time;	X
(c) during pumping of the fluid into the first well via the first valve, opening a second valve associated with a second well;	X
(d) permitting performance of a second hydraulic fracturing operation on the second well, which second hydraulic fracturing operation comprises pumping fluid into the second well via the second valve; and	
(e) during pumping of the fluid into the second well via the second valve, closing the first valve associated with the first well;	X
wherein, during each of steps (a), (b), (c), (d), and (e), fluid is continuously pumped to the first valve, the second valve, or both the first valve and the second valve.	X

Earliest Priority Date for Claim 8: 5/17/2021	
Claim Elements:	First Disclosure in '663 Provisional
8. An apparatus, comprising:	
a non-transitory computer readable medium; and	
a plurality of instructions stored on the non-transitory computer readable medium and executable by one or more processors,	
wherein, when the instructions are executed by the one or more processors, the following steps are executed:	
(a) permitting performance of a first hydraulic fracturing operation on a first well, which first hydraulic fracturing operation comprises	
pumping fluid into the first well via a first valve associated with the first well, and	
measuring a flow rate of the fluid being pumped into the first well;	X
(b) determining that the flow rate of the fluid being pumped into the first well is below a flow rate threshold and	X
has been below the flow rate threshold for a threshold amount of time;	X
(c) during pumping of the fluid into the first well via the first valve, opening a second valve associated with a second well;	X
(d) permitting performance of a second hydraulic fracturing operation on the second well, which second hydraulic fracturing operation comprises pumping fluid into the second well via the second valve; and	
(e) during pumping of the fluid into the second well via the second valve, closing the first valve associated with the first well;	X
wherein, during each of steps (a), (b), (c), (d), and (e), fluid is continuously pumped to the first valve, the second valve, or both the first valve and the second valve.	X

Earliest Priority Date for Claim 15: 5/17/2021	
Claim Elements:	First Disclosure in '663 Provisional
15. A method of hydraulically fracturing at least first and second wells of a plurality of wells, the first and second wells being associated with first and second valves, respectively, the method comprising:	
(a) permitting hydraulic fracturing of the second well, comprising:	
opening the second valve associated with the second well to permit pumping of fluid into the second well via the second valve; and	
measuring a flow rate of the fluid being pumped into the second well;	X
(b) swapping from permitting hydraulic fracturing of the second well to permitting hydraulic fracturing of the first well, comprising:	
opening the first valve associated with the first well to permit pumping of fluid into the first well via the first valve; and	
closing the second valve associated with the second well;	
wherein, during step (b), hydraulic fracturing fluid is continuously pumped to the first and second valves via a hydraulic manifold; and	X
wherein in response to determining that the flow rate measured at step (a) has satisfied one or more flow rate conditions,	X
the first valve associated with the first well is opened at step (b) before the second valve associated with the second well is closed at step (b); OR	X
in response to determining that the flow rate measured at step (a) has not satisfied one or more flow rate conditions,	X
the first valve associated with the first well is opened at step (b) during or after the second valve associated with the second well is closed at step (b).	X

Earliest Priority Date for Claim 23: 5/17/2021	
Claim Elements:	First Disclosure in '663 Provisional
23. A method, comprising:	
(a) queuing, using a controller, a first well in a first hydraulic fracturing queue,	X
which first hydraulic fracturing queue is associated with a first plurality of wells standing by for hydraulic fracturing, including at least the first well and a second well;	X
(b) dequeuing, using the controller, the second well from the first hydraulic fracturing queue;	X
(c) permitting hydraulic fracturing of the second well, comprising:	
opening a second valve associated with the second well to permit pumping of fluid into the second well via the second valve; and	
measuring a flow rate of the fluid being pumped into the second well;	X
(d) dequeuing, using the controller, the first well from the first hydraulic fracturing queue; and	X
(e) swapping from permitting hydraulic fracturing of the second well to permitting hydraulic fracturing of the first well, comprising:	
opening a first valve associated with the first well to permit pumping of fluid into the first well via the first valve; and	
closing the second valve associated with the second well;	
wherein, in response to determining that the flow rate of the fluid being pumped into the second well is below a flow rate threshold and has been below the flow rate threshold for a threshold amount of time, the first valve associated with the first well is opened at step (e) before the second valve associated with the second well is closed at step (e).	X

Earliest Priority Date for Claim 24: 5/17/2021	
Claim Elements:	First Disclosure in '663 Provisional
24. A method, comprising:	
(a) queuing, using a controller, a first well in a first hydraulic fracturing queue,	X
which first hydraulic fracturing queue is associated with a first plurality of wells standing by for hydraulic fracturing, including at least the first well and a second well;	X
(b) dequeuing, using the controller, the second well from the first hydraulic fracturing queue;	X
(c) permitting hydraulic fracturing of the second well, comprising:	
opening a second valve associated with the second well to permit pumping of fluid into the second well via the second valve; and	
measuring a flow rate of the fluid being pumped into the second well;	X
(d) dequeuing, using the controller, the first well from the first hydraulic fracturing queue; and	X
(e) swapping from permitting hydraulic fracturing of the second well to permitting hydraulic fracturing of the first well, comprising:	
opening a first valve associated with the first well to permit pumping of fluid into the first well via the first valve; and	
closing the second valve associated with the second well;	
wherein, in response to determining that the flow rate of the fluid being pumped into the second well is above a flow rate threshold, the first valve associated with the first well is opened at step (e) after the second valve associated with the second well is closed at step (e).	X

Earliest Priority Date for Claim 25: 5/17/2021	
Claim Elements:	First Disclosure in '663 Provisional
25. An apparatus adapted to hydraulically fracture first and second wells, the first and second wells being associated with first and second valves, respectively, the apparatus comprising:	
a non-transitory computer readable medium; and	
a plurality of instructions stored on the non-transitory computer readable medium and executable by one or more processors,	
wherein, when the instructions are executed by the one or more processors, the following steps are executed:	
(a) permitting hydraulic fracturing of the second well, comprising: opening the second valve associated with the second well to permit pumping of fluid into the second well via the second valve; and	
measuring a flow rate of the fluid being pumped into the second well;	X
(b) swapping from permitting hydraulic fracturing of the second well to permitting hydraulic fracturing of the first well, comprising:	
opening the first valve associated with the first well to permit pumping of fluid into the first well via the first valve; and	
closing the second valve associated with the second well;	
wherein, during step (b), hydraulic fracturing fluid is continuously pumped to the first and second valves via a hydraulic manifold; and	X
wherein in response to determining that the flow rate measured at step (a) has satisfied one or more flow rate conditions, the first valve associated with the first well is opened at step (b) before the second valve associated with the second well is closed at step (b); or	X
in response to determining that the flow rate measured at step (a) has not satisfied one or more flow rate conditions, the first valve associated with the first well is opened at step (b) during or after the second valve associated with the second well is closed at step (b).	X

Earliest Priority Date for Claim 34: 5/17/2021	
Claim Elements:	First Disclosure in '663 Provisional
34. An apparatus, comprising:	
a non-transitory computer readable medium; and	
a plurality of instructions stored on the non-transitory computer readable medium and executable by one or more processors,	
wherein, when the instructions are executed by the one or more processors, the following steps are executed:	
(a) queuing a first well in a first hydraulic fracturing queue,	X
which first hydraulic fracturing queue includes a first plurality of wells standing by for hydraulic fracturing, including at least the first well and a second well;	X
(b) dequeuing the second well from the first hydraulic fracturing queue;	X
(c) permitting hydraulic fracturing of the second well, comprising:	
opening a second valve associated with the second well to permit pumping of fluid into the second well via the second valve; and	
measuring a flow rate of the fluid being pumped into the second well;	X
(d) dequeuing the first well from the first hydraulic fracturing queue; and	X
(e) swapping from permitting hydraulic fracturing of the second well to permitting hydraulic fracturing of the first well, comprising:	
opening a first valve associated with the first well to permit pumping of fluid into the first well via the first valve; and	
closing the second valve associated with the second well;	
wherein, in response to determining that the flow rate of the fluid being pumped into the second well is below a flow rate threshold and has been below the flow rate threshold for a threshold amount of time, the first valve associated with the first well is opened at step (e) before the second valve associated with the second well is closed at step (e).	X

Earliest Priority Date for Claim 35: 5/17/2021	
Claim Elements:	First Disclosure in '663 Provisional
35. An apparatus, comprising:	
a non-transitory computer readable medium; and	
a plurality of instructions stored on the non-transitory computer readable medium and executable by one or more processors,	
wherein, when the instructions are executed by the one or more processors, the following steps are executed:	
(a) queuing a first well in a first hydraulic fracturing queue,	X
which first hydraulic fracturing queue includes a first plurality of wells standing by for hydraulic fracturing, including at least the first well and a second well;	X
(b) dequeuing the second well from the first hydraulic fracturing queue;	X
(c) permitting hydraulic fracturing of the second well, comprising:	
opening a second valve associated with the second well to permit pumping of fluid into the second well via the second valve; and	
measuring a flow rate of the fluid being pumped into the second well;	X
(d) dequeuing the first well from the first hydraulic fracturing queue; and	X
(e) swapping from permitting hydraulic fracturing of the second well to permitting hydraulic fracturing of the first well, comprising:	
opening a first valve associated with the first well to permit pumping of fluid into the first well via the first valve; and	
closing the second valve associated with the second well;	
wherein, in response to determining that the flow rate of the fluid being pumped into the second well is above a flow rate threshold, the first valve associated with the first well is opened at step (e) after the second valve associated with the second well is closed at step (e).	X