

**Progress Report: Oilfield Site Restoration using IIJA Funds**  
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**Project Overview**

Orphan Well Counts in January 2023 (A)	4,610
Orphan Wells Plugged through February 2024 (B)	770
Net Change in Orphan Well Counts Since January 2023 (other factors) (C)	970
Current Orphan Well Count (A) + (C) - (B)	4,800
<b>Total Idle Wells in Louisiana</b>	<b>18,200</b>

*Note: All numbers rounded to nearest 10 wells based on current estimates.*

Table 2 shows a more detailed breakdown of well counts by the three DENR conservation districts, Monroe, Shreveport, and Lafayette. The northwest portion of the state is within the Shreveport District, the northeast within the Monroe, and everything south of approximately Rapides Parish in the Lafayette district. Note that all wells plugged with the IJA funds have been in northern Louisiana (the Monroe and Shreveport Districts). Thus, no cost data (and very limited methane emissions data) is available in the southern part of the state.

	Monroe District	Shreveport District	Lafayette District	Total
<b>Panel A: Plugging Activity</b>				
P&Aed	180	356	-	536
In Progress	25	2	-	27
<b>Panel B: Current Well Counts by Category</b>				
Orphan	1,580	1,630	1,590	4,800
Idle	2,680	7,150	8,370	18,200
<b>Total</b>	<b>4,260</b>	<b>8,780</b>	<b>9,960</b>	<b>23,000</b>

*Note: Numbers in Panel B rounded to nearest 10 wells based on current estimates.*

As of the end of February 2024, 536 wells had been P&Aed under this program with 27 wells for which work has been done, but the P&A is not yet completed (i.e. in progress).<sup>11</sup> There are still approximately 3,210 orphan wells that remain to be plugged in these two districts, and an additional 1,590 wells in the Lafayette district. Statewide, we estimate there are approximately 18,200 “idle” wells in Louisiana that have not been designated as orphans. These are wells that are either designated by the operator as idle or have not produced hydrocarbons in five years, but also have not been P&Aed. Approximately 54 percent of these “idle” wells are located in the Monroe and Shreveport districts (northern Louisiana), with the residual in the Lafayette district (southern Louisiana).

Table 3 shows expenditures that have been incurred to date alongside an estimate of the cost to P&A all orphan and idle wells in the Monroe and Shreveport districts. Note that because no wells have been P&Aed in the Lafayette district, we do not present cost estimates, as costs could be systematically different in the northern and southern part of the state. Also note that all wells in the Monroe district have been P&Aed by Dynamic, and all in Shreveport by Lemoine (the two prior-mentioned contractors). Estimates are generated using a linear regression that predicts cost to P&A based on observable well characteristics. Results of this regression model alongside well characteristics for all unplugged wells are used to estimate the cost to P&A unplugged orphan and idle wells. To date, the total amount spent on the program associated with the 536 wells with reported cost data is \$22.5

<sup>11</sup> Only plugging activity using IJA funds under DENR ownership are included in these counts. Site inspection and some preconstruction activities are completed for in-progress wells.

million, implying costs of approximately \$42,000 per well.<sup>12</sup> Although not shown in the table, the average cost of a well in the Monroe district is approximately \$54,500 per well and the average cost in the Shreveport district approximately \$35,800 per well.

We estimate the cost to plug all *orphan* wells in the Shreveport and Monroe districts is approximately \$196.7 million. The estimated cost to plug all *idle* wells is \$658.4 million, with a total estimated cost to plug all orphan and idle wells as \$855.1

Next, Table 3 shows the measurements taken by researchers at LSU. To date, 78 wells have been measured, with methane being detected in 68 (or 87%) of the wells measured. Thus, the more detailed chamber-based measurements are finding a higher share of wells with leaks. From these 68 wells with detected emissions, a total of 5.09 mscf/day of methane is detected, or approximately 0.07 mscf/day per well. Thus, the average emissions are higher from the wells measured by LSU. We caution against drawing firm conclusions from comparisons between the contractor and LSU measurements at this point because the measurements largely come from different wells. However, we do note that the LSU measurements find a larger proportion of leakers and larger leaks (on average) relative to the contractors. The LSU team is actively engaged in research to estimate aggregate emissions from all Louisiana orphan wells utilizing both contractor and LSU measurements.

	Contractors	LSU
Wells Measured	853	78
Methane Detected	194	68
Share with Methane Detected	23%	87%
Methane Detected (mscf/day)		
Total Methane	28.5	5.09
Average Methane per Well	0.03	0.07

*Note: Methane measurements as of approximately the end of February 2024.*

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