

17 July 2014
14-ED-394

Mr. Kent Wilkins, Assistant Chief
Planning and Management Division
Oklahoma Water Resources Board
3800 North Classen Boulevard
Oklahoma City, OK 73118

**RE: Water Monitoring Plan Report, 2nd Quarter 2014, for Dolese Bros. Co. Davis
Quarry, Murray County, Oklahoma**

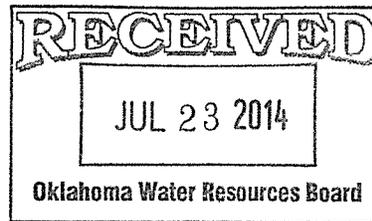
Dear Mr. Wilkins:

According to the Oklahoma Water Resources Board's Title 785, Chapter 30, Subchapter 15, Part 4, *Mines with Preexisting Exemptions*, Dolese Bros. Co. Davis Quarry qualifies as a mine with a preexisting exemption. As part of maintaining this exemption status, the regulations require us to do the following:

1. Adopt and implement a plan to monitor and report to the Board the accumulation and disposition of pit water during the previous calendar year;
 - The Davis Quarry has adopted and implemented such a plan, and the tables below serve to report to the Board the accumulation and disposition of pit water during the previous quarter. Once the year ends, we will summarize the accumulation and disposition of pit water for the calendar year.
2. Make quarterly and annual reports of the measured or reasonably estimated groundwater and surface water volumes, separately stated, entering the pit, of the water that is diverted from the pit, of the disposition of the water from the pit, and of the consumptive use of the water from the pit on or before the deadlines provided by Title 82 of Oklahoma Statutes, § 1020.2(E)(1);
 - The Davis Quarry has continued to fulfill this obligation by compiling and submitting this Second Quarterly Report for 2014, enclosed. The specific information requested in this section is outlined in the tables shown below.
3. At any time after March 31, 2015, demonstrate to the satisfaction of the Board within the pertinent report or reports that the mine has not consumptively used during the previous twelve-month period, from the mining site, an amount of groundwater which combined with any amounts used from permitted groundwater wells exceeds the MEPS¹. Such demonstration may require providing to the Board a copy of the mine's monitoring plan and all of the data collected and procedures used to support the calculations and results reported.
 - After 31 March 2015, the Davis Quarry will be willing to demonstrate to the Board that the mine site has not consumptively used during the previous twelve-month period from the mining site, an amount of groundwater which combined with any amounts used from permitted groundwater wells exceeds the MEPS. Additionally, example calculations used in the First Quarterly Monitoring Report for 2013 have already been submitted to the OWRB for review and analysis.

¹ Mine's Equal Proportionate Share

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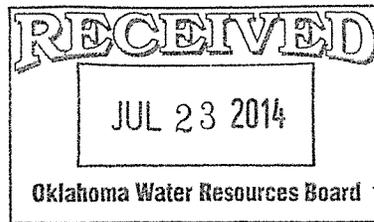


Table 1

Accumulation and Disposition of Pit Water during 2nd Quarter 2014	Acre-Feet
Water entering the Mine Pit	
Groundwater	70.50
Surface Water	181.01
Total	251.51
Water diverted from the Mine Pit into Fresh Water Lake (FWL)	
Groundwater	70.50
Surface Water	181.01
Total	251.51
Water removed from FWL	
Groundwater	204.57
Surface Water	581.34
Total	785.91
Water returned to FWL	
Groundwater	249.48
Surface Water	708.95
Total	958.43
Water returned to Land Surface overlying Arbuckle Simpson Aquifer (ASA) basin	
Groundwater	20.29
Surface Water	57.64
Total	77.93
Water consumptively used	
Groundwater (See Table 3 for calculations)	5.70

Table 2

Water Fluctuations in the FWL during 2nd Quarter 2014	
Average Size of FWL (water surface area) during Quarter	29.43 acres
Actual Gain in Water Elevation	5.14 feet
Actual Gain in Lake Volume	151.27 acre-feet

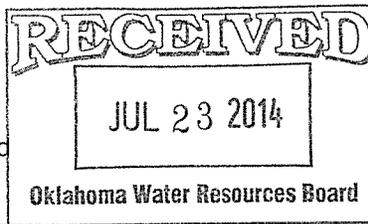


Table 3
Consumptive Use Summary for 2QTR14

Activity or Location	Amount of Pit Water Used, Acre-Feet	Percent Ground-Water	Groundwater Component, Acre-Feet
1 North Water Well	0.00	All	0.44
2 South Water Well	0.00	All	0.44
3 Material Moisture Hauled from Site	4.36	26.03% ×(0.2603)	1.13
4 Land Application for Roadway Dust Suppression	13.15	26.03% ×(0.2603)	3.42
5 Evaporation from Mine Pit	0.93	28.03% ×(0.2803)	0.26
6 Offsite Dewatering	0.00	26.03% ×(0.2603)	0.00
For 2QTR14, Total Groundwater Consumption from ASA at Davis Quarry =			5.70 Acre-Feet

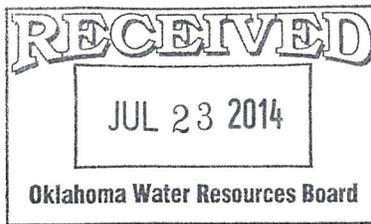
Table 4
Groundwater Rights

<p>Davis Quarry Groundwater Rights From Acreage ON the Arbuckle-Simpson Aquifer And Included in the ASA Groundwater Rights: (1,083 acres on ASA)×(0.2 ac-ft/acre) = 216.6 acre-feet ON the ASA</p> <p>From Acreage OFF the Arbuckle-Simpson Aquifer And Excluded from the ASA Groundwater Rights: (937 acres off ASA)×(2.0 ac-ft/acre) = 1,874 acre-feet OFF the ASA</p>
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Based on the plan that we have adopted and implemented to monitor and report the accumulation and disposition of pit water, based on our actual consumptive use of groundwater quantities, and based on the timely submittal of this 2nd Quarterly Report for 2014, we believe that the Davis Quarry is in full compliance with all of the regulations that allow it to maintain its preexisting exemption.

Data is still being collected to attempt to quantify the amount of "leakage" of the water storage lake (called the Fresh Water Lake) back into the mining area (called the Mine Pit). We have taken some video footage of the leakage for documentation purposes. Our findings this quarter were noteworthy:

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2nd Quarter 2014
for Dolese Bros. Co. Davis Quarry
Murray County, Oklahoma

- The Fresh Water Lake appears to be leaking more this quarter than during any previous quarter, because its water elevation is near an all-time high. This leaking is causing the calculated groundwater percentage in the FWL and Mine Pit both to appear to be higher than what we believe is the actual content, based on our calculation methods. As you will recall, the calculation methods for determining the groundwater percentage simply compare the amount of storm water entering the Mine Pit versus the amount dewatered from the Mine Pit -- and the difference should equate to the amount of groundwater seepage into the Mine Pit. This method may be skewed, however, because this formula does not account for unmeasured seepage returning to the Mine Pit from the Fresh Water Lake.
- Interestingly enough, even with the significantly increased volume of seepage that was observed, the calculated groundwater percentage in the Mine Pit during Second Quarter 2014 actually dropped a little compared to First Quarter 2014 -- but this is most likely because this area received a significant amount more rainfall during Second Quarter 2014 (over 400% increase).
- We have learned that when we receive substantial rainfall during a quarter (that is, a large in-flow of storm water), the amount of seepage is not as significant, percentage-wise.

Until we gather more data on the quantity of this seepage, we do not plan to make any adjustments to the calculated groundwater percentages.

Please contact me if you have any questions or comments concerning this submittal. Thank you.

Sincerely,

DOLESE BROS. CO.

A handwritten signature in blue ink that reads "Daniel E. Becker".

Daniel E. Becker, P.E.
Environmental Engineer

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