

**BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA**

FILED
JUL 19 2016

**COURT CLERK'S OFFICE - OKC
CORPORATION COMMISSION
OF OKLAHOMA**

APPLICANT:	COBALT ENVIRONMENTAL SOLUTIONS, LLC)	
)	
RELIEF SOUGHT:	AUTHORIZATION TO DRILL AND COMPLETE THE COBALT MADILL SWD NO. 1 AS A COMMERCIAL SALTWATER DISPOSAL WELL)	APPLICATION NO. 1600480147
)	
LEGAL DESCRIPTION:	NW/4 NE/4 NE/4 OF SECTION 11, TOWNSHIP 6 SOUTH, RANGE 4 EAST, MARSHALL COUNTY, OKLAHOMA)	CAUSE PD NO. 201500082
)	

REPORT OF THE OIL AND GAS APPELLATE REFEREE

This Cause came on for hearing before **David D. Leavitt**, Administrative Law Judge for the Corporation Commission of the State of Oklahoma, on the 21st of October, 2015, 22nd and 23rd of October, 2015, and the 12th day of November, 2015, at 8:30 a.m. in the Commission's Courtroom, Jim Thorpe Building, Oklahoma City, Oklahoma, pursuant to notice given as required by law and the rules of the Commission for the purpose of taking testimony and reporting to the Commission.

APPEARANCES: **Cheri Wheeler**, attorney, appeared on behalf of Cobalt Environmental Solutions, LLC ("Cobalt"); **Richard J. Gore**, attorney, appeared on behalf of the City of Madill; **Patricia Case**, Assistant General Counsel, appeared on behalf of the Underground Injection Department of the Oil and Gas Conservation Division of the Oklahoma Corporation Commission; and **James L. Myles**, Deputy General Counsel for Deliberations, filed notice of appearance.

Others in attendance at the initial hearing were: Robert Moore and Gary Hucks with the Marshall County Water Corporation; Tommy C. Hardin with Oklahoma House of Representatives. Those appearing Pro Se at the initial hearing included: Paula Ayers; Gary Ayers; Kevin Eppler, Mayor, City of Madill; Don Melton, Marshall County Commissioner; Josh Brecheen with Oklahoma State

Senate; Ronald Nunley; Wesley Eldridge; Megan Louis; Terry Eldridge; and Sam Goodwin. Others appearing were Kelly Goff, Magdalena DeLaPaz, Kasie Pense, Tiffany Robinson and Samantha Await, all from the Madill Public Schools. Also attached to the ALJ's Report is an Exhibit "A", which showed the names of the Protestants that filed a Notice of Protest form. Protestants Diane, Kathryn and Brent Henry wrote letters of protests.

The Administrative Law Judge ("ALJ") filed his Report of the Administrative Law Judge ("ALJ Report") on the 30th day of March, 2016, to which Exceptions were timely filed and proper notice given of the setting of the Exceptions.

The Appellate argument concerning the Oral Exceptions was referred to **Patricia D. MacGuigan**, Oil and Gas Appellate Referee ("Referee"), on the 31st day of May, 2016. After considering the arguments of counsel and the record contained within this Cause, the Referee finds as follows:

STATEMENT OF THE CASE

COBALT AND NANCY KERR ("KERR") TAKE EXCEPTIONS to several areas of the ALJ Report which granted the application of Cobalt under an Interim Order subject to certain conditions. Cobalt is seeking authorization to drill and complete the Cobalt Madill SWD #1 well as a commercial salt water disposal ("SWD") well into the Deese Formation between 4,020 to 7,800 feet TD.

On July 16, 2015, Cobalt filed a Form 1015 requesting administrative approval for the Commission to issue a permit to operate the Cobalt Madill SWD #1 well on land described as the NW/4 NE/4 NE/4 of Section 11, T6S, R4E, Marshall County, Oklahoma. The application noted that there were no offset operators in the adjacent sections.

The application also noted that the well was to be a commercial SWD well taking fluids from various formations in the surrounding area and disposing of the fluids in the Deese formation. The application was amended during the hearing to list the following parameters of the well:

Wellbore: single vertical wellbore.
Geologic name of the source of the fluids: various formations.
Geologic name of the disposal formation: Deese formation.
Perforation of injection interval: 4,020 to 7,800 feet TD.
Base of treatable water: 520 feet.
Intervening thickness: 3,500 feet.
Requested injection rate: 19,000 BPD
Requested injection pressure at surface: 2,000 psi

Surface casing setting depth: 600 feet.
Production tubing setting depth: 7,000 feet.
Production tubing size: 7 inches.
Porosity: 19%.
Permeability: 55 millidarcies (MD).

Attached to the application or to be submitted later to the Commission were the following documents or submittals:

\$100.00 filing fee.
Proof of the publication of the Application in Marshall and Oklahoma counties.
Affidavit of mailing or delivery to those respondents entitled to notice.
Signed analysis of fresh water from two or more producing wells within a one mile radius of the Cobalt Well.
Proof of surety bond.
Signed analysis of a representative sample of the water to be injected.
Plat showing the location of the proposed Cobalt Madill SWD No. 1 well ("Cobalt well"), all producing, abandoned and dry hole oil and gas wells and their depths within 1/2 mile of the proposed well.
Form 1002A.
Electric or radioactivity log of the proposed well.
Schematic drawing of the wellbore.

Sometime after the Application was submitted to the Underground Injection Control Department of the Commission ("UIC") for approval, the application was tentatively approved pending an evaluation of whether the well was located in a seismically active area. The UIC staff determined that the well was not in a seismically active "yellow" zone or "zone of interest".

The "traffic light" system was first put in place by the Commission in 2013 in response to the concerns over the possibility of earthquake activity being caused by oil and gas wastewater disposal wells in Oklahoma. The "yellow light" permitting program requires seismicity review for any disposal well and requires special permitting based on seismicity concerns to any well proposed within 3 miles of a stressed fault, even in the absence of seismicity and any disposal well within 6 miles (10 kilometers) of an earthquake "swarm" or magnitude 4.0 event. Very recently, the Commission expanded the traffic light review system to encompass areas of interest defined as: (1) areas experiencing seismic swarms consisting of at least two events with epicenters within 1/4 mile of one another, with at least one event with a magnitude 3.0 or higher; (2) a ten (10) kilometers area (approximately six miles) with the central mass of the swarm serving as the area center. The application was subsequently protested by many protestants, including parties that owned property in close proximity to the Cobalt well.

COBALT TAKES THE POSITION:

- 1) Cobalt states that portions of the ALJ Report are contrary to the evidence and contain errors.
- 2) Cobalt believes that portions of the ALJ Report do not serve a purpose; thus, unfair and unreasonable.
- 3) The ALJ Report set forth the case summary on pages one and two. Page two contains some errors and does not reflect the filed Commission Form 1015, application for a commercial SWD well (Cobalt Well) and the testimony presented. The corrections are as follows:

Starting with the tubing, it is not production tubing, but injection tubing and the setting depth is 3,990 feet, not 7,000 feet as stated in the Report. The size of the tubing is 4.5 inches, not 7 inches. The millidarcies ("MD") are 'estimated'. This information is all as set forth on the Form 1015 application submitted in this cause as Exhibit 1. The Form 1015 application should be relied upon for the proposed completion of the Cobalt well.

- 4) On page 3 of the ALJ Report under Recommendations, paragraph (e), Cobalt takes exception with the recommendation as follows:

"shut down the Cobalt well if a seismic event of a magnitude of 3.0 or greater occurs within a 10 mile radius of the well after commencement of operations".

It was clear from the testimony and evidence that the Cobalt well would be disposing into the Deese formation, not the Arbuckle, or even close to it. There was no known faulting in the Deese formation (see 10/21/15 Transcript 95:19-25; Tr.96:1-14). The evidence presented showed the proposed Cobalt well will not be located in an area of interest. This is especially true since the proposed well is not an Arbuckle disposal well, therefore the area of interest is not considered a factor. No evidence was presented by Protestants that disposal into Deese formation in the proposed Cobalt well would trigger a seismic event. As Dr. Murry's testimony summary states on page 16, paragraph 47 of the ALJ Report, he never heard of seismic activity in the Deese formation. Mr. Lord testified that most of the sparse seismic events in this area are 3.1 miles in depth, deeper than the proposed disposal well. The Cobalt well does not meet the criteria for a disposal well of concern (See 10/22/15 Tr. 103:5-18). Further, he had no concerns about the application and it would have been

administratively approved had there not been a protest (See 10/22/15 Tr. 101:11-23).

Requiring that the Cobalt well, whose disposal interval is over 15,000 feet from the Arbuckle formation and 22,000 feet from the basement rock, to literally shut down if a seismic event of 3.0 is within 10 miles, is not supported by the record.

Currently the UIC department requires its Arbuckle disposal/injection orders to contain language to the effect that the Director of the Oil and Gas Conservation Division will make the decision as to whether or not a disposal/injection well is to be shut in. Though these conditions are for Arbuckle disposal/injection wells, Cobalt offers this language for the order to provide a measure of assurances, though no language should be required.

5) Correcting the ALJ Report, page 4, under Exhibits, Exhibit 1 should Read "several type logs near the proposed Cobalt Well", instead of "from the proposed Cobalt Well." This is a proposed disposal well only, there are no logs.

6) The language used in paragraph 13, page 8 of the ALJ Report appears to be confusing the Cobalt well with the Enville well. The statement "...that the Cobalt Well would never operate at more than 5,000 barrels per day." is not testimony provided by Cobalt's witness Mr. Goode. In fact, to the contrary, Mr. Goode testified the proposed Cobalt well could dispose more than 5,000 BWPD when the Court asked if the Cobalt well would never operate at above 5,000 BWPD (See 10/21/15 Tr.83:8-14). However, the witness did testify earlier in the proceedings that the Enville well, operated by Oilfield Disposal Services, LLC, had very small tubulars and therefore has a limited capacity of 5,000 BWPD (See 10/21/15 Tr. 41:7-11).

7) The disposal wells in the area and their disposal intervals have been confused in Paragraph 17 on page 9 of the ALJ Report. The last sentence reads:

"He noted that there really were not any commercial disposal wells currently operating in Marshall County because the Enville Well is limited in capacity and the closest other commercial wells would be either the Alex Well (Tupelo Well) or the Tri-City SWD Well (Wilson Well) operated by Cobalt more than 18 miles from the Cobalt Well, and that these wells dispose into the Mississippi formation."

The Alex well is not also known as the Tupelo well. The Tupelo well is another disposal well not operated by Cobalt. However, the Alex and Tri-City wells

(Wilson) are operated by Cobalt. The Tupelo and Tri-City wells are Arbuckle disposal wells, not Mississippi disposal wells. The Alex well is a Cisco disposal well. The Enville well, some distance from the Cobalt well, is the only Mississippi disposal well (See 10/21/15 Tr.86:4-23; Tr. 87:1-9).

8) Paragraph 19, page 9, of the ALJ Report contains an error midway down, the word "Cameron" should actually be Cambrian. It is also incorrect in the transcript. The next sentence in this paragraph states in part: "He said that the Cobalt Well would dispose into the Deese formation between 2,020 and 7,800 feet.."

This appears to be a typographical error as to the top of the disposal interval. The top of the disposal interval in the proposed Cobalt well is 4,020 feet instead of 2,020 feet as set forth on the Form 1015 application and as testified throughout the hearing.

9) There is an error in paragraph 20, page 10, of the ALJ Report and in the transcript, which states the Commission rule requires "2,250 feet" of cement above the disposal zone. The rule states 250' (See 10/21/15 Tr.47:23-25).

10) Page 10, paragraph 21, of the ALJ Report states: "He noted that the Deese can be up to 1,000 feet thick in the Ardmore Basin..." This information was taken from the transcript, which is in error. The witness' testimony was that the Deese can be up to 8,000 feet thick in the Ardmore Basin. All of the witness' testimony at the hearing generally agreed the base of the Deese was around 8,000 feet.

11) There is an error at page 12, paragraph 30, of the ALJ Report where the sentence states in part:

"He said that the Tri-City Well was now permitted to dispose of 24,000 barrels per day after some improvements were made and the Alex Well was permitted to dispose of 50,000 barrels per day..."

The Alex well is permitted for 23,000 BWPD, not 50,000 BWPD. It is the Tupelo well that is permitted for 50,000 BWPD and is not operated by Cobalt. For clarification, Tri-City well is a perched Arbuckle disposal well operated by Cobalt; Alex is a Cisco disposal well also operated by Cobalt and the Tupelo well is an Arbuckle disposal well operated by another operator.

12) Paragraph 32, page 12, of the ALJ Report states:

"He contended, however, that there is sufficient shaley Deese sand to form a barrier between the base of the

Little Wellbore and the injection interval of the Cobalt Well..."

Mr. Goode's testimony was that there was sufficient shale and sand, not "shaley sand" to form a barrier to prevent fluid from traveling into the Little wellbore from the Cobalt well. He testified that the Deese formation is comprised of a large amount of shale. Also that approximately 80% of the Deese in this area was shale, silt and lime and 20% sand (See 10/21/15 Tr. 46:21-25; Tr. 68:2-8; Tr. 106:14-16. 10/22/15 Tr. 13:1 1-17).

The last sentence of this paragraph should be corrected to read 22,000 feet instead of 21,000 feet. The footage was correctly stated on page 11, paragraph 28 of the ALJ Report.

13) Paragraph 37, page 13, of the ALJ Report states about midway down:

"Upon inquiry, he said the annulus of the wellbore would be cemented from the surface to the bottom of the surface casing at around 600 feet, then the annulus of the wellbore would be filled with heavy drilling mud from about 600 feet to the top of the Deese at around 4,020 feet. The annulus of the wellbore would then be cemented from around 4,020 feet to the top of the injection zone."

This statement of testimony should be corrected to read "...filled with heavy drilling mud from about 600' to the top of the cement in the Deese at around 3,400'." The last sentence should be corrected to reflect that the wellbore would be cemented from around 7,900 feet instead of 4,020 feet to above the top of the injection zone. This correct testimony is found in paragraph 21, on page 10 of the ALJ Report (See 10/21/15 Tr.127:22-25; 128:5-25).

14) A correction should be made on page 13, paragraph 38 of the ALJ Report: Instead of "...west of Madill", it should be corrected to west of Marietta. Another correction is at page 15, paragraph 46 of the ALJ Report: The depth of the Little well was transposed from 3,614 feet to 3,416 feet.

15) In paragraph 47, page 16, of the ALJ Report it states that Murray's testimony that the Antlers aquifer is found in the Permian formation. It should be corrected to state Cretaceous. It is also wrong in the transcript (See 10/22/15 Tr. 56:25).

16) At Paragraph 70, page 20, of the ALJ Report Mr. Boyd's testimony summary states the Union Oil Woody well didn't go deep enough to penetrate the Deese. The record shows that he used the Woody well as a "type log" for

the Deese and "have a log to look at and some decent information on." "It (Woody Well) is also the closest point of control where was this saltwater disposal well is being placed." (See 10/23/15 Tr.105:18-24) He further testified that Exhibit 13 "shows that the entire Deese interval is exposed to the open wellbore (See 10/23/15 Tr. 106:13-21). Exhibit 15, a cross section, shows the Deese in the Woody well.

17) Paragraph 71, page 21, of the ALJ Report summarizes Boyd's testimony as:

"He said that the entire Deese deepens from north to south and that the base of the Deese is found at 6,063 feet in the Little Well..."

Mr. Boyd made this statement while testifying as to his Exhibit 9. He testified "It (exhibit) has nothing to do with the top of the Deese or the base of the Deese." (See 10/23/15 Tr. 100:3-10) The record reflects that the Little well, according to Mr. Boyd's Exhibit 10, a scout ticket, was only drilled to 3,614 feet. Therefore, the Little well could not possibly contain the base of the Deese. It was not drilled deep enough. Mr. Boyd's Exhibit 15 cross section illustrates that the base of the Deese is found in both the Union Oil Woody well and the A.E. Jones McIver wells much deeper.

Also on this same page 21 of the ALJ's Report, paragraph 75, the thickness of the Deese is set forth as 1,100 feet. Considering Mr. Boyd's testimony throughout the hearing and his exhibits, including his Exhibit 15 cross section, this footage appears to be an error that is also found in the transcript.

18) Cobalt respectfully requests that the Commission make the changes to the Report of the ALJ as set forth hereinabove.

KERR TAKES THE POSITION:

- 1) The protestant Kerr is a mineral owner in Section 11 and a resident of Madill, OK,
- 2) The evidence presented by Cobalt is contrary to Cobalt's application.
- 3) Much of the evidence presented by Cobalt is presented as fact when the evidence is obviously opinion.
- 4) Testimony of Cobalt's witnesses is contradictory, ambiguous and disingenuous.

- 5) In the interests of the public, the Commission has a responsibility to oversee the conservation of natural resources to avoid waste, abate pollution of the environment, and balance the rights and needs of the people. The Commission received over 500 protests from residents and other affected persons regarding this application. The location of this proposed disposal well is dangerous to the residents, their water supply and Lake Texoma. The protection of the environment and the health and safety of the residents is primary to the business or commercial endeavors of others.
- 6) This proposed disposal well is unnecessary as those services are already available in current disposal wells just a few miles away.
- 7) Cobalt has already shown bad faith by protesting the requirements set forth by the Report of the ALJ after the application was approved with requirements.
- 8) Kerr respectfully requests that the recommendation of the ALJ be reversed and the application be denied.

THE ALJ FOUND:

- 1) When presented with any application or plan that has the potential to pollute the groundwater, the Commission has a responsibility to protect human health and the environment. For this purpose the Commission has jurisdiction under 17 O.S. Section 52 (A)(i) over the handling and disposition of produced water and other deleterious substances associated with oil and gas extraction and transportation activities. The Commission is also obligated to prevent pollution and protect human health and the environment under various statutes and rules including 52 O.S. Section 139 and OCC-OAC 165:10-7-2. The Commission has promulgated rules for the location, installation and operation of injection wells that are intended to protect human health and the environment. The applicants are also obligated to prevent pollution.
- 2) See 17 O.S. Section 52(A)(i) which states that the Commission shall have jurisdiction over: "the handling, transportation, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing and operating of oil and gas wells."
- 3) See 52 O.S. Section 139 which states that "The Corporation Commission is vested with exclusive jurisdiction, power and authority, and it shall be its duty, to make and enforce such rules and orders governing and regulating the handling, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing, and operating of oil and gas wells

and brine wells within this state as are reasonable and necessary for the purpose of preventing the pollution of the surface and subsurface waters in the state, and to otherwise carry out the purpose of this act."

4) See OCC-OAC 165: 10-7-2(c)(8)(9) and (10) which state that the Commission has jurisdiction over "(8) The handling, transportation, storage and disposition of saltwater, drilling fluids, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, production, and operation of oil and gas wells at any facility or activity specifically subject to Commission jurisdiction or other oil and gas extraction facilities and activities. (9) Spills of deleterious substances associated with facilities and activities specified in O.A.C. 165:10-7-4(c)(8) or otherwise associated with oil and gas extraction and transportation activities. (10) Groundwater protection for activities subject to the jurisdictional areas of environmental responsibility of the Commission."

5) See OCC-OAC 165:10-7-5(a) which states that "Prohibition of pollution - pollution is prohibited. All operators, contractors, drillers, service companies, pit operators, transporters, pipeline companies, or other persons shall at all times conduct their operations in a manner that will not cause pollution."

6) Here Cobalt presented substantial evidence that it's proposed salt water disposal well complies with the Commission's rules to protect the waters of the state. Cobalt's application was reviewed by the UIC and would have been approved administratively but for the protest. During the review of the application, the Little well located in the NW/4 SW/4 SE/4 of Section 1, T6S, R4E in Marshall County, Oklahoma was identified as a potential problem well. The well was an old well commenced in 1944 that penetrated the Deese formation and was plugged with drilling mud instead of cement.

7) The protestants' expert noted that the Little well was more than 1/2 mile from the location of the Cobalt well, but argued that the well penetrated the Deese Sand and that the wellbore was mud plugged and in potential communication with the Deese Sand present in the injection interval of the Cobalt well. He said that the Little well was plugged with drilling mud instead of cement and could allow salt water from Cobalt's disposal well to enter into the treatable water zones in the area, thus causing pollution and contaminating the Antlers aquifer. He argued that the injection rate of 19,000 barrels per day could pressurize the Deese and force fluid up the wellbore of the improperly plugged and cemented Little well even though the well was outside the one-half mile radius of the Cobalt well.

8) He acknowledged that the rules of the Commission don't require Cobalt to identify or consider the effects of its disposal well operation upon wells located outside of the one-half mile radius, but contended that the UIC should

be concerned about all problem wells within the one mile radius of a proposed salt water disposal well, and that the issues related to the Little well should be addressed by the UIC and Cobalt before the Cobalt well begins to inject fluid into the Deese.

9) Cobalt's experts argued that the injection zone of the Cobalt well was separated from the base of the Little well by around 400 feet of Deese rock comprising 20% sand and around 80% clay and shale, and that the shale in the Deese formed an essentially impermeable barrier that would prevent any saltwater injected into the Cobalt well to travel out and up to the wellbore of the Little well. Dr. Murray said that saltwater disposed into the Deese from the Cobalt well would be highly unlikely to migrate up into the Antlers aquifer because the Deese is significantly below the Antlers and is hydraulically separated from the Antlers by a lot of shale. He said if there was a spill at the well site or subsurface, the fluid would migrate very slowly to the south and the southwest away from Hauani Lake. He said that the use of tanks to store saltwater instead of receiving pits would reduce the risk of a surface discharge of any type.

10) The protestants' expert argued that the area around the Cobalt well is highly fractured and faulted, and that the faults could extend from the basement into the Deese formation and serve as a conduit to allow water to flow from the Deese into the basement rock. He implied that the water from the well could induce a seismic event if it reached the faults or the basement rock.

11) Cobalt's experts responded that the Commission and majority of the scientific community accept that most of the earthquakes in Oklahoma originate in the basement rock which is the formation lying underneath the Arbuckle formation composed of granitic and igneous rock. The experts contended that any activity causing earthquakes is initiated many thousands of feet below the top of the granite rock. Dr. Murray testified that the base of the injection zone in the Cobalt well in the Deese formation would lie around 14,000 feet above the Arbuckle formation and about 22,000 feet above the granitic basement rock.

12) He said that there would be no way that pressure in the Deese would influence the basement 22,000 feet away and for injection of water in the Deese to influence the granite. He argued that there was no hydrological connection between the injection zones proposed for the Cobalt well and the formations where the earthquakes occur.

13) He acknowledged that some faults may extend up to the base of the Domick Hills in the Deese area from the Viola formation, but noted that such faults near the Cobalt well would be normal faults which he opined are unlikely

to induce a seismic event even if they were connected to a source of injected saltwater because they are typically sealing faults. He said that faults may be present in an area but that doesn't necessarily mean that the faults are conduits for fluid flow and in fact may be barriers to flow as is the case for faults that seal in pools of hydrocarbons in traps.

14) The UIC reviewed the status of the Cobalt well with respect to the risk of induced seismicity if the well was allowed to inject 19,000 barrels of fluid per day into the Deese formation and concluded that the well wasn't in a yellow or red zone or in an area of interest, and thus its operation posed a minimal risk with respect to induced seismicity. Mr. Lord reviewed the application for its potential to induce seismicity and determined that the Cobalt well didn't meet any of the conditions that might indicate that the well had the potential to trigger a seismic event.

15) The protestants argued that the proposed disposal would adversely affect their quality of life and reduce the value of their property because of excessive truck traffic to and from the facility and because the truck traffic would create dust that could affect their health. While these are of course legitimate concerns, such concerns are outside the jurisdiction of the Commission at this time.

16) The ALJ finds that the evidence and testimony presented in this cause support the applicant's position that the Cobalt well poses a minimal risk of inducing a seismic event when operated according to the plan presented herein. With respect to the pollution of the groundwater and surface water, the Cobalt well complies with the Commission's rules to protect the waters of the state. The remaining issue is whether the operation of the Cobalt well might sufficiently pressurize the Deese to induce saltwater in the vicinity of the Little well located around 400 feet or so above and around 0.75 miles away in the horizontal plane from the Cobalt well to purge to the surface or penetrate the Antlers aquifer. For this to happen, the pressure at the wellbore of the Little well must be sufficient to overcome the mud-plug in the Little well and the hydrostatic pressure in the wellbore to force water to the surface or into the aquifer.

17) The evidence presented by Cobalt's experts show that such an event would be highly unlikely while the testimony presented by the protestant's expert suggest that such an event might possibly occur. The Little well was acknowledged by the Commission's staff to be a problem well, although its status as a problem well is disputed by Cobalt. Mr. Lord testified that if such a mud-plugged well was located within 1/2 mile of the proposed injection well, and the mud-plugged wellbore extended into the proposed injection interval, then the UIC would require the applicant to either re-plug the well or complete a radius of endangerment calculation that showed that at a certain injection

rate and injection pressure and volume, the operation of the disposal would not raise water up in the mud plugged well to within 100 feet of the base of treatable water. The ALJ notes that it is also a practice of the UIC to be concerned about all problem wells within the one mile radius of a proposed salt water disposal well even though the rules of the Commission don't require an evaluation be made outside of the 1/2 mile radius.

18) The crux of the issue with respect to an analysis of the risk of a saltwater purge rests upon whether the shaley and clay portions of the Deese formation located above the injection interval of the Cobalt well form an impenetrable barrier precluding fluid to flow vertically into the Little wellbore. The Deese is classified by the Commission as a common source of supply which in turn is defined by the Commission's statutes and rules as strata of earth separated from and not connected with other strata of earth, implying that the rock within a common source of supply may be interconnected throughout the formation.

19) See OCC-OAC 165:10-1-2 which states that a "Common source of supply" or "pool" means "that area which is underlaid or which, from geological or other scientific data, or from drilling operations, or other evidence, appears to be underlaid by a common accumulation of oil and/or gas; provided that, if any such area is underlaid, or appears from geological or other scientific data or from drilling operations, or other evidence, to be underlaid by more than one common accumulation of oil or gas or both, separated from each other by strata of earth and not connected with each other, then such area shall, as to each said common accumulation of oil or gas or both, shall be deemed a separate common source of supply." 52. O.S.A. Section 86.1(c).

20) See 52 O.S. Section 87.1(c) which states that the term "common source of supply" shall comprise and include that area which is underlaid or which, from geological or other scientific data, or from drilling operations, or other evidence, appears to be underlaid, by a common accumulation of oil or gas or both; provided, that, if any such area is underlaid, or appears from geological or other scientific data, or from drilling operations, or other evidence, to be underlaid by more than one common accumulation of oil or gas or both, separated from each other by a strata of earth and not connected with each other, then such area, as to each said common accumulation of oil or gas or both, shall be deemed a separate common source of supply;

21) The protestant's geologic expert alleged that the Deese is interconnected both vertically and horizontally through sandy channels lying within the impermeable shale layers. He said that if there were actual separations of the sand lenses by shales in the Deese, one would find oil and gas traps in the Deese but none have been found. He said that for the most part, all of the oil

and gas in the Deese has gone through the Deese sands up into the Criner Hills and the fluid flow has not been blocked by impermeable shale layers.

22) He implied that if the Deese was separated by shale into impermeable horizontal layers, then the individual layers of the Deese should be classified as separate and distinct common sources of supply. The ALJ notes, however, that it is undisputed that the thousand-foot thick Deese formation in this area is classified as one common source of supply. Taking into account that geology is acknowledged by all to be an inexact science, the ALJ finds that a prudent operator of the Cobalt disposal well should take action to mitigate the risk of pollution of the surface and groundwater from the Little well.

23) After taking into consideration all of the facts, circumstances, evidence and testimony presented in the cause, it is the recommendation of the ALJ that Cobalt's application be granted under an Interim Order subject to the following conditions:

- a. Prior to commencement of operations, Cobalt shall complete a radius of endangerment calculation to show that operation of the Cobalt well would not raise water up in the Little well located in the NW/4 SW/4 SE/4 of Section 1, T6S, R4E in Marshall County to within 100 feet of the base of treatable water and present the study to the UIC for review upon which the UIC will either approve or revise the operating parameters of the application;
- b. If the original application is not approved by the UIC based upon the results of the radius of endangerment calculation, Cobalt shall either agree to operate the Cobalt well at the revised flow rates and pressures required by the UIC, or properly plug the Little well in compliance with the requirements of the UIC;
- c. Prior to commencement of commercial operations and after the well is drilled, Cobalt shall take an initial bottomhole pressure measurement from the Cobalt well and run a MIT test on the well;
- d. Commence commercial operations at either the injection rate and surface pressure set forth in the approved application or at the revised injection rate and pressures required by UIC;
- e. Complete an annual bottom-hole pressure measurement for the Cobalt well to identify potential problems; and
- f. Shut down the Cobalt well if a seismic event of a magnitude 3.0 or greater occurs within a 10 mile radius of the well after commencement of operations.

24) These conditions are recommended to provide a cautious and prudent path towards the operation of the disposal well and towards the protection of the surface waters and groundwater.

POSITIONS OF THE PARTIES

COBALT

1) **Cheri Wheeler**, attorney, appearing on behalf of Cobalt, requests that the Commission make certain changes to the ALJ Report and subsequently be given authorization to drill the proposed Cobalt SWD well on land described as the NW/4 NE/4 NE/4 of Section 11, T6S, R4E, Marshall County, Oklahoma.

2) Cobalt asserts that portions of the ALJ Report are contrary to the evidence and contain errors. Further, Cobalt believes that portions of the ALJ Report do not serve a purpose and subsequently are unfair and unreasonable. As such, the ALJ Report does not reflect the filed Commission Form 1015 application for a commercial SWD well and the testimony presented.

3) Cobalt also asserts that the proposed well does not meet the criteria of a disposal well of concern. The proposed well is located in the Deese formation, not the Arbuckle formation. While the Arbuckle formation has experienced seismic activity, according to the extensive geological study conducted by Dr. Kenneth Murray, the Deese formation has experienced no faulting and no seismic activity. This testimony was confirmed by the testimony of protestant's expert, Mr. Boyd, who stated that the Deese formation acts differently than the Arbuckle formation. Further, Cobalt notes that the proposed well is not located in an area of interest, outlined by the Oil and Gas Conservation Commission.

4) Cobalt also notes that Kerr performed no hydrological study and presented no exhibits showing the potential for any future negative effect on the groundwater, the drinking water of Madill, or the water contained within Lake Texoma.

5) Cobalt asserts that they were the only party to provide testimony or evidence regarding protection of groundwater. These experts also confirmed Cobalt's argument that there were no present issues with the proposed well. Moreover, protestant's expert, Mr. Boyd, also confirmed that the activity of the well would not have any effect on the groundwater in the area.

KERR

- 1) Kerr asserts that the operation of the proposed Cobalt well creates the potential for contamination to Lake Texoma and the drinking water of Madill, which would be detrimental to the area. Kerr notes that the location of the proposed well creates an increased likelihood of contamination of Lake Texoma in particular. Kerr asserts that the Commission should consider the environmental effects of the proposed well.
- 2) Kerr requests clarification on whether or not multiple wells will be drilled in the 20 acres obtained by Cobalt. Kerr asserts that the increased traffic on county roads resulting from the operation of the well or wells would lead to detrimental effects on the conditions of the roads, which were not designed for heavy traffic. As such, Kerr asserts that the Commission require Cobalt to disclose all proposed wells and their location within the area. Further, Kerr asserts that the Commission should require Cobalt to have ODOT do a study for the potential effect of increased traffic on the county roads.
- 3) Kerr asserts that Cobalt is acting in bad faith by injecting 19,000 BWPW whereas the traffic light system requires that disposing of 20,000 BWPD would require a mechanical integrity test every year, instead of five years.
- 4) Kerr also asserts that Cobalt did no research for other more favorable sites with less risk of contamination and health concerns. Kerr asks the Commission to require Cobalt to submit other sites where they could drill.
- 5) Kerr claims that the proposed Cobalt well will hinder the development of the Deese formation.
- 6) Kerr asks the Commission to strike Dr. Murray's testimony from the record, because his evaluation was based on a compilation of his work, his employees' work, and his students' work, therefore making it unreliable.

OCC STAFF

- 1) **Patricia Case**, Assistant General Counsel, appearing on behalf of the UIC department, asserts that the Commission has jurisdiction over this matter and has the authority to decide if the proposed Cobalt well can be drilled in this particular location.

2) Staff states Cobalt has complied with Commission rules and asserts the Cobalt well would have been approved if the protests had not occurred. Staff agrees with the assertions of Cobalt, that there is no evidence of seismicity and the proposed well is not in an area of interest. This assertion was affirmed by the testimony of Mr. Lloyd.

RESPONSE OF COBALT

1) Cobalt asserts that there is no possibility that the treatable water located near the well, namely the Hiyanawnee Reservoir, would be effected in any way. Treatable water goes 500 feet below the surface, while the well disposes water into the Deese Sand between 4,000 and 7,000 feet below the surface. This assertion is backed by testimony of experts, and the City of Madill provided no testimony to refute that testimony.

2) Cobalt notes that even if a spill were to occur, the design of the well would cause the spill to flow away from the Hiyanawnee Reservoir and Lake Texoma 7.5 miles away from the Cobalt well.

3) Cobalt notes that none of the protestants, mineral owners, or municipal entities asked Cobalt to have the roads treated, variances to be granted, or anything else regarding Kerr's concern regarding the condition of the roads.

4) Cobalt notes that Lake Texoma is 7.5 miles away from the proposed Cobalt well, and therefore asserts the possibility of that water getting contaminated is minimal at best. Further, no testimony was provided showing any potential that disposal from the well could end up in the lake.

5) Cobalt notes that mechanical check-ups occur yearly anyway, so the assertion by Kerr that Cobalt was acting in bad faith by operating under the Traffic Light System production threshold is unfounded.

RESPONSE OF KERR

1) Kerr asserts that although the Cobalt well is not located in an area of interest, it should be held at a higher level of scrutiny by the Commission because it is surrounded by multiple areas of interest.

2) Kerr asserts that Cobalt's application for a permit authorizing their right to drill and complete the Cobalt well as a commercial SWD well should be denied due to the contamination issues the proposed well would bring to the area.

3) Kerr requests the Commission to order Cobalt to perform a new 3-D seismic survey to replace their "out of date" and unreliable information presented to the Commission.

CONCLUSIONS

The Referee finds the Report of the Administrative Law Judge should be affirmed but modified in part.

1) Having reviewed the transcripts and the ALJ's Report concerning its Findings of Facts and testimony of witnesses during the hearings held on October 21, 22, 23 and November 12, 2015, the Referee would recommend that the factual errors asserted by Cobalt in its Exceptions and Corrections to the Report of the ALJ are correct and the Referee recommends that the factual errors be corrected as requested by Cobalt and as set forth in its Exceptions and Corrections to the Report of the ALJ.

2) 17 O.S. Section 52(A)(1)(i) provides:

A. 1. Except as otherwise provided by this section, the Corporation Commission is hereby vested with exclusive jurisdiction, power and authority with reference to:

i. The handling, transportation, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing and operating of oil and gas wells,...

3) 52 O.S. Section 139(A) provides:

A. The Corporation Commission is vested with exclusive jurisdiction, power and authority, and it shall be its duty, to make and enforce such rules and orders governing and regulating the handling, storage and disposition of saltwater, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling,

development, producing, and operating of oil and gas wells and brine wells within the state as are reasonable and necessary for the purposes of preventing the pollution of the surface and subsurface waters in the state, and to otherwise carry out the purpose of this act.

4) OCC-OAC 165:10-7-2(c)(8)(9) and (10) provides:

(c) Specific areas of Conservation Division jurisdiction to which Pollution Abatement rules apply:

* * *

(8) The handling, transportation, storage and disposition of saltwater, drilling fluids, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, production, and operation of oil and gas wells at any facility or activity specifically subject to Commission jurisdiction or other oil and gas extraction facilities and activities.

(9) Spills of deleterious substances associated with facilities and activities specified in OAC 165:10-7-4(c)(8) or otherwise associated with oil and gas extraction and transportation activities.

(10) Groundwater protection for activities subject to the jurisdictional areas of environmental responsibility of the Commission.

5) OCC-OAC 165:10-5-9(a)(b)(c)(d) provides as follows:

(a) Subject to 165:10-5-10, authorization of injection into enhanced recovery injection wells and disposal wells shall remain valid for the life of the well, unless revoked by the Commission for just cause or lapses and becomes null and void under the provisions of 165:10-5-5(g).

(b) An order granting underground injection may be modified, vacated, amended, or terminated during its term for cause. This may be at the Commission's initiative or at the request of any interested person through the prescribed complaint procedure of the Conservation Division. All requests shall be in writing and shall contain facts or reasons supporting the request.

(c) An order may be modified, vacated, amended, or terminated after notice and hearing if:

(1) There is a substantial change of conditions in the enhanced recovery injection well or the disposal well operation, or there are substantial changes in the information originally furnished.

(2) Information as to the permitted operation indicates that the cumulative effects on the environment are unacceptable.

(d) If an operator fails to complete or convert a well as approved by the Conservation Division within eighteen (18) months after the effective date of the order or permit authorizing injection into the well, then the order or permit authorizing injection into the well shall expire.

6) The Oklahoma Court of Civil Appeals in *Union Texas Petroleum Corp. v. Jackson*, 909 P.2d 131 (Okla.Civ.App. 1995) provides:

A nuisance consists in unlawfully doing an act or omitting to perform a duty, which act or omission either annoys, injures or endangers the comfort, repose, health or safety of others or in any way renders other persons insecure in life or in the use of property. 50 O.S. § 1; *Cities Service Oil Company v. Merritt*, 332 P.2d 677, 684 (Okla. 1958). In *Cities Service*, the Supreme Court determined the basis of liability for injury or damage to property by pollution of subterranean waters, from oil, gas or saltwater from oil wells, must be either negligence or nuisance. *Cities Service*, at 684. Cities or towns may seek abatement of a public nuisance, including protection of public water supplies, within their respective corporate limits in district court. 50 O.S. 1991 §§ 16, 17. A public nuisance is one which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon the individuals may be unequal. 50 O.S. 1991 § 2; *Miller v. State*, 74 Okla. Crim. 104, 123 P.2d 699 (Okla. Crim. App. 1942). The remedies for public nuisance are through indictment or information, civil action, or abatement. 50 O.S. 1991 §8. A public nuisance may

be abated by any public body or officer authorized thereto by law. 50 O.S. 1991 § 11.

7) The Referee finds the Report of the ALJ should be affirmed as to his recommendation that Cobalt's application be granted under an Interim Order subject to the following conditions:

a. Prior to commencement of operations, Cobalt shall complete a radius of endangerment calculation to show that operation of the Cobalt Well would not raise water up in the Little Well located in the NW/4 of the SW/4 of the SE/4 of Section 1, T6S, R4E in Marshall County to within 100 feet of the base of treatable water and present the study to the UIC for review upon which the UIC will either approve or revise the operating parameters of the Application;

b. If the original Application is not approved by the UIC based upon the results of the radius of endangerment calculation, Cobalt shall either agree to operate the Cobalt Well at the revised flowrates and pressures required by the UIC, or properly plug the Little Well in compliance with the requirements of the UIC;

c. Prior to commencement of commercial operations and after the well is drilled, Cobalt shall take an initial bottomhole pressure measurement from the Cobalt Well and run a MIT test on the well;

d. Commence commercial operations at either the injection rate and surface pressure set forth in the approved Application or at the revised injection rate and pressures required by UIC;

e. Complete an annual bottom-hole pressure measurement for the Cobalt Well to identify potential problems;

8) The ALJ's Report concerning his recommendations in paragraph #112(a)(b)(c)(d) and (e) on page 30 are supported by the weight of the evidence, by law and free of reversible error. The ALJ is the initial finder of fact. It is the ALJ's duty as the finder of fact to observe the demeanor of the witnesses, assess their credibility and assign the appropriate weight to their opinions. *Grison Oil Corporation v. Corporation Commission*, 99 P.2d 134 (Okl. 1940); *Palmer Oil Corporation v. Phillips Petroleum Co.*, 231 P.2d 997 (Okl. 1951).

9) The ALJ had the opportunity to observe the demeanor of the expert witnesses while they were testifying. Generally, deference is given to a judge's opportunity to view the witnesses firsthand. In *Williams v. Volkswagen Aktungesllschaft, et al.*, 226 Cal.Rpter. 306 (1986 California) the court held:

Common sense dictates the rule. It is the trial judge who is at the best vantage point to surveil the grenades, the darts, the slings and arrows of outrageous forensic conduct, rather than the reviewer who, with the delayed deliberate detachment of a coroner examiners the cold body of the record only after the warm life of trial has expired and its rattlings have ceased.

When it comes to applying weight to an expert witness, it is clear that the Commission must follow the procedure set forth in *Haymaker v. Oklahoma Corp. Com'n*, 731 P 2d 1008 (Ok1.Civ.App. 1986) where the Court stated:

Proper appraisal of the expert testimony requires observance of the following benchmark principle approved in *Downs v. Longfellow Corp.*, 351 P.2d 999 (Okl. 1960):

"The reasons given in support of the opinions [of an expert witness] rather than the abstract opinions are of importance, and the opinion is of no greater value than the reasons given in its support. If no rational basis for the opinion appears, or if the facts from which the opinion was derived do not justify it, the opinion is of no probative force, and it does not constitute evidence sufficient to...sustain a finding or verdict."

It is clear that Cobalt presented experts in geology and engineering that are held in high esteem by their colleagues, have considerable education in their respective fields, and have significant experience in their professions.

The issue concerning the assignment of weight to expert testimony in direct conflict is addressed by the Supreme Court in *Palmer Oil Corporation v. Phillips Petroleum*, supra at 1000, stating:

Under the holding of this Court and that of courts generally, *Chicago, R.I. and P. Ry. Co. v. Pruitt*, 67 Okl. 219, 170 P. 1143; 22

C.J. 728, Section 823, 32 C.J.S., Evidence, Section 567, p. 378, the weight to be given opinion evidence is, within the bounds of reason, entirely for the determination of the jury or of the court, when trying an issue of fact, it taking into consideration the intelligence and experience of the witness and the degree of attention he gave to the matter. The rule should have peculiar force herein where by the terms of the Act the Commission is recognized as having peculiar power in weighing the evidence. Since the evidence before the Commission was competent and sufficient if believed, to sustain the order we must, and do, hold that the order is sustained by the evidence and that the contention is without merit. *Ft. Smith & W.Ry Co. v. State*, 25 Okl. 866, 108 P. 407; *Bromide Crushed Rock Co. v. Dolese Bros. Co.*, 121 Okl. 40, 247 P. 74.

The Supreme Court of Oklahoma in *Application of Choctaw Express Company*, 253 P.2d 822 (Okl. 1953) stated:

Other courts have said the principle which applies in determining whether the evidence will support a jury verdict, applies to findings of the Commission. We think that every order of the Commission must be sustained by competent and material evidence, and that an order is not justified without a basis in evidence having rational probative force. This case, therefore, calls for an answer to the question, whether there is substantial evidence to support the order of the Commission....In these cases we defined "substantial evidence" as something more than a "scintilla of evidence" and said it means evidence that possesses something of substance and of relevant consequence and such that carries with it fitness to induce conviction .

In *Application of Continental Oil Company*, 376 P.2d 330 (Okla. 1962), the Supreme Court stated:

The Commission has a wide discretion in the performance of its statutory duties and this court may not substitute its judgment on disputed questions of fact for that of the Commission, unless the findings of the Commission are not supported by the law and substantial evidence.

See also *Vogel v. Corporation Commission*, 399 P.2d 474 (Okla. 1965).

In *Chenoweth v. Pan American Petroleum Corporation*, 382 P.2d 743 (Okla. 1963) the Supreme Court stated:

In *Producers Development Company v. Magna Oil Corporation*, Okla. 371 P.2d 702, we stated:

"The determination whether there is "substantial evidence" to support an order made by Corporation Commission does not require that the evidence be weighed, but only that the evidence tending to support the order be considered to determine whether it implies a quality of proof which induces the conviction that the order was proper or furnishes a substantial basis of facts from which the issue tendered could be reasonably resolved."

See also *Cameron v. Corporation Commission*, 414 P.2d 266 (Okla. 1966).

10) The Referee agrees with the ALJ that the evidence and testimony presented in this cause supports Cobalt's position that the Cobalt well poses a minimal risk of inducing a seismic event when operated according to the plan presented herein. The Referee would also agree with the conclusion by the ALJ that with respect to pollution of the ground water and surface water, the Cobalt well complies with the Commission's rules to protect the waters of the state.

11) The remaining issue presented was whether the operation of the Cobalt well might sufficiently pressurize the Deese to induce saltwater in the

vicinity of the Little well which is located around 400 feet or so above and around 0.75 miles away in the horizontal plain from the Cobalt well to purge to the surface or penetrate the Antlers Aquifer. The ALJ stated that "Taking into account that geology is acknowledged by all to be an inexact science, the ALJ finds that a prudent operator of the Cobalt disposal well should take action to mitigate the risk of pollution of the surface and ground water from the Little well." (ALJ Report, page 29, ¶111) The ALJ thus granted Cobalt's application under an Interim order subject to the conditions previously stated, paragraph #112 of the ALJ's Report, (a), (b), (c), (d), and (e), page 30.

12) The last issue presented and exception taken by Cobalt concerns the ALJ's recommendation in his Report at ¶112, (f) on page 30, which states:

f. Shut down the Cobalt well if a seismic event of a magnitude 3.0 or greater occurs within a 10 mile radius of the well after commencement of operations.

13) Cobalt states in ¶5, page 2, of its Exceptions and Corrections to the Report of the ALJ that:

It was clear from the testimony and evidence that the Cobalt Well would be disposing into the Deese formation, not the Arbuckle, or even close to it. There was no known faulting in the Deese formation. (10/21/15 Tr. 95:19-25; Tr.96:1-14) The evidence presented showed the proposed Cobalt Well will not be located in an area of interest. This is especially true since the proposed well is not an Arbuckle disposal well, therefore the area of interest is not considered a factor. No evidence was presented by protestants that disposal into Deese formation in the proposed Cobalt Well would trigger a seismic event. As Dr. Murry's testimony summary states on page 16, paragraph 47 of the Report, he never heard of seismic activity in the Deese formation. Mr. Lord testified that most of the sparse seismic events in this area are 3.1 mi. in depth, deeper [than] the proposed disposal well. The Cobalt Well does not meet the criteria for a disposal well of concern. (10/22/15 Tr.

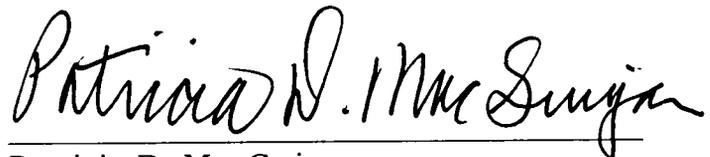
103:5-18) Further, he had no concerns about the application and it would have been administratively approved had there not been a protest. (10/22/15 Tr. 101:11-23)

Requiring that the Cobalt Well, whose disposal interval is over 15,000' from the Arbuckle formation and 22,000' from the basement rock, to literally shut down if a seismic event of 3.0 is within 10 miles, is not supported by the record.

14) Cobalt suggests and the Referee agrees that UIC requires Arbuckle disposal, injection orders to contain language where the Director of Conservation or a designee of the Director of Conservation can determine in its sole discretion whether injection/disposal operations should be shut in. OCC-OAC 165:10-5-9(a) provides that disposal well permits may be revoked for "just cause" and OCC-OAC 165:10-5-9(c) authorizes, after notice and hearing that the Commission may modify, vacate, amend or terminate any order granting underground injection upon its own initiative if information related to the operation of a well indicates evidence of substantial change or unacceptable environmental effects. Therefore, the Commission has exclusive authority to revoke disposal well permits under OCC-OAC 165-10-5-9. Cobalt has suggested in its Exceptions and Corrections to the Report of the ALJ that this alternative language be placed in the Interim order under condition (f). The Referee agrees with Cobalt's conclusion and suggestion and would therefore recommend that paragraph #112 of the ALJ Report (f) be changed to reflect the alternative language suggested by Cobalt listed under OCC-OAC 165:10-5-9 above. Thus, the Referee would recommend the modification of the Report of the ALJ as stated above.

15) Based upon the above stated reasons, rules and law, the Report of the ALJ should be affirmed but modified as to the ALJ's recommendation in his Report paragraph #112 (f).

RESPECTFULLY SUBMITTED THIS 19th day of July, 2016.



Patricia D. MacGuigan
OIL & GAS APPELLATE REFEREE

PM:ac

xc: Commissioner Anthony
Commissioner Murphy
Commissioner Hiett
James L. Myles
ALJ David Leavitt
Cheri Wheeler, Esq.
Richard J. Gore, Esq.
Patricia Case, Assistant General Counsel
Robert Moore, Marshall County Water Corp.
Gary Hucks, Marshall County Water Corp.
Tommy C. Hardin, Representative, Dist. 49
Paula Ayers
Gary Ayers
Kevin Eppler, Mayor, City of Madill
Don Melton, County Commissioner, Dist. #1, Marshall County
Josh Brecheen, Senator
Ronald Nunley, City Manager of Madill
Wesley Eldridge
Terry Eldridge
Megan Lollis
Sam Goodwin
Kelly Goff, Madill Public Schools
Magdalena DeLaPaz, Madill Public Schools
Kasie Pense, Madill Public Schools
Tiffany Robinson, Madill Public Schools
Samantha Awalt, Madill Public Schools
Nancy Kerr
Michael L. Decker, OAP Director
Oil Law Records
Court Clerks - 1
Commission Files

EXHIBIT "A"

Cause PD 201500082 - Report of the ALJ

The following names are respondents shown to have filed a Notice of Protest form in above cause:

NOTE: Frances Savage and Basil Savage Jr., Madill, OK, filed their protests on 11-24-15, after the ALJ took the case under advisement on November 12, 2015.

Lorene Ababon, Kingston, OK; Madelyn Jo Adams and Wanda Adams, Madill, OK; Carrie Adkins, Ringston, OK; Norma Aguirre, Susie Aguirre, Jimmy Aker, Rosa Aldaba, Tyler Allen, Maria C. Alvarez, Keith Anderson and Tiffany Anderson, Madill, OK; Leo E. Arnold, Kingston, OK; Jerry Arterberry, Madill, OK; Betty Avent, Kingston, OK; Marivel Avila, Ardmore, OK; David Awalt, William Ayers, Linda Ayers, David R. Ayres, Jamie Ayres, Justin Ayres, Paula L. Ayres, Gary L. Ayres, Robert E. Ayres, Michael Bagley, Fidel Barbosa, Joe Barentine, Patricia J. Barentine and Gary Barker, Madill, OK; Kasey Barker, Kingston, OK; Shannon G. Barker and Terry D. Bartee, Madill, OK; Raymond T. Barton, Brandon Bates and Shalon M. Bates, Kingston, OK; Ollie L. Beard, III and Mary Lou Beard, Madill, OK; Clarine Bearden and James A. Beaver, Kingston, OK; Mary Alice Beck, Jessica Beckner, Jackson A. Bell, Pat Bell and Obert O. Bennett, Madill, OK; Tony Biggers and R.D. Bland, Kingston, OK; Delma Blundell and Diane Kathryn Attaway Bolen, Madill, OK; Jamie Bolton, Kingston, OK; Deborah C. Bookout, Paul Bookout, Jeff Bowermaster, Rhonda Bowermaster, Rudy Bowman, Chris W. Bradshaw, Linda Bradshaw and James L. Branch, Madill, OK; John Lynn Bratcher, Kingston, OK; Billy R. Brewer, Madill, OK; Roy M. Bridgeman, Lebanon, OK; George Bridgman, Walter E. Bridgman, Beau Brown, Rebecca J. Brown, Harold D. Brown Jr., Billy E. Buck, Linda Gayle Buck, Cecil Buck and Floyce Buck, Madill, OK; Janiece Burleson, Marous Burleson, Diana Burns, Kenny Butler, Sherry L. Butler and Paula J. Butterfield, Kingston, OK; Rodney Caldwell, Lisa Caldwell, Brooke Campbell, Valeria Cardenas, Brenda Carnes, Onita Carnes, Jordan Carnes and Logan Carnes, Madill, OK; Brittini Carter, Mannsville, OK; Nancy A. Carter, Tony Chaney, Vicki Chaney, Candy Chapman, James K. Chapman, Monica R. Chapman, Weston Chapman, Zach Chapman and Lauren Chapman, Madill, OK; Elizabeth Chester, Jacklyn Chester, Tyler Chester and Sandra K. Childers, Kingston, OK; Kelley Childress, Madill, OK; Clara Chill, Kingston, OK; Bonnie Christie, Frank Christie, Shadow Christie and Eugene R. Christopher, Madill, OK; Lou Clark and Shirley A. Clark, Kingston, OK; Juanita Clement, Jace P. Cobb, Jerry Coleman, Rickey Coleman, Alden Combs, Lisa Jo Combs, Guadalupe Medina Contreras, Casey Cook and Misty Cook, Madill, OK; Nancy Cook and Bill Corbett, Kingston, OK; Leanne Corbin, Tishomingo, OK; Stephen Cordell, Dale Coulson, Jodie Coulson and Tony Crowley, Madill, OK; Johnny Cox, Kingston, OK; Linda J. Cox, Madill, OK; Charles J. Craven, Kingston, OK;

Stephanie R. Crowley, Madill, OK; Jimmy Cryer, Kingston, OK; Loyd Cryer, Madill, OK; Richard Dalrymple, Kingston, OK; Clyde Davis, Donna D. Davis, Jennifer Davis, Lynne Sue Diaz Delardo, Lila DeLozier, Brittany Diaz, Marty R. Diaz and Jessica L. Dice, Madill, OK; Debbie Dickerson, Ravia, OK; Carol Dill, Madill, OK; Kevin D. Dill, Oakland, OK; Kenny Dinse, Jessica Douglas, Jonah Douglas, Danita Carol Dowlen, Gordon Dowlen, Kenneth Duncan, Mickey Duncan, Robert L. Duncan, Kathleen Duncan, Rogers N. Duncan, David C. Dunn, Maria Duran, Miguel A. Duran H and Misael Duran, Madill, OK; Blake Dutton and Tina Dutton, Kingston, OK; Johnny Easley, Larry J. Eddy, Charlie E. Edmonds, Virginia L. Edmonds, Terry Eldridge, Wesley Eldridge, Rosalie Eldridge, Jennifer Elkins, Steve Elkins, Chad L. Eppler, Loyd D. Eppler, Barbara L. Eppler, Mitch L. Eppler, Victoria Espinosa, Francisco Espinosa and Rodrigo Esquivel, Madill, OK; Rafael Estrada., Ardmore, OK; Matthew Thomas Farrar, Rhonda K. Farrimond, Carl C. Ferrell and Benjamin Firethunder, Madill, OK; Mary Fite, Kingston, OK; Juana Flores, Priscilla Flores, Misty Forbis and Rodney Forbis, Madill, OK; Anthony Ferguson and Charlann Ferguson, Kingston, OK; Betty Fowler, James P. Fowler and Robert L. Fowler, Madill, OK; Alan Frazee and Stephanie Frazee, Kingston, OK; Kenneth Freeman, Madill, OK; Richard Freeman and Sharon Freeman, Kingston, OK; Gretchen Friedlein, Mary Friedlein, Michael S. Friedlein and Uriah Friedlein, Madill, OK; Ronald W. Frost and Suzanne L. Frost, Kingston, OK; Jaime Furister, Micheal Gable, Vickie L. Gamble, Jesus Garcia, Migoel Garcia and Nick Garcia, Madill, OK; Berlin W. Gardner and Deborah A. Gardner, Ardmore, OK; Robert Garfield, Juanell Garrett and Maurice W. Garrett, Madill, OK; Lori G. Garrett, Lebanon, OK; Patrick W. Garrett, Madill, OK; Robert J. Garrett, Lebanon, OK; Susan R. Gentis, Virginia Low Gentry, Edith Giles and William Giles, Madill, OK; Michael Giles, Mead, OK; Kenny G. Gilmore Sr., Kingston, OK; Lavern Glenn, Madill, OK; Bethany Goates, Oakland, OK; Donna C. Goates, Yvonne Goff, Felix Gomez R and Marlette Gomez, Madill, OK; Justin Gonsalves, Oakland, OK; Brent Goodwin, Stacia Goodwin, Charlotte Goodwin, Sam Goodwin, Twila Goodwin, Lori Gorrell, Braden Goss, Brandon Goss, Dorothy Gray, Jordan Gray, Madison Gray, Phillip Gray and Sherri Gray, Madill, OK; Victor Gayle Gray, Moore, OK; Mary Greer, Salvador Grimaldo, Allison Groeber and Greg Groeber, Madill, OK; Juan Guerrero Jr., Kingston, OK; Manuel Guzman, J. W. Hale, Mary Ann Hale, Taelor Hale, Leah Hallmark, Brad Hamilton, Matthew Hamilton, Shelly Hamilton, Tony Hankins, Sharon Rose Hansen, Drue Hardin, Timothy Hardin, Loyd Harkins, Shirley Harkins, Savino Harner, Marilyn Harper, James Harrington and Tommye Harris, Madill, OK; Allen Harrison and Carolyn Harrison, Kingston, OK; Hoy Harrison and Lana Harrison, Kingston, OK; Marcie Harrison, David Harwell and David Harwell Jr., Madill, OK; Don Hasselman, Kingston, OK; Michael Hawthorne Jr., Ashley Hawthorne, Samantha Hawthorne and Mason Hawthorne, Madill, OK; Jack Hendrix, Kingston, OK; Bonnie Jo Hennigan, Brent Henry, Cotton Ward Henry, Hannah Henry and Melinda Henry, Madill, OK; Clarence L. Heptinstall, Lebanon, OK; Leobardo Heredia, Hector Hernandez, Jose Hernandez, Noe

Hernandez and Tammy Hester, Madill, OK; Deborah Hewitt and Terry D. Hewitt, Lebanon, OK; Brenda D. Hix, Donald W. Hix, Gary Holmes, Edith Holmes, Maxine Horn, Bobby Howard and Joy B. Howell, Madill, OK; Gary Hucks, Kingston, OK; Clara Huebsch, George Huebsch, Fred Huebsch, Kathy Huebsch, Franklin D. Huff, Elvy R. Huff, Brenda K. Hutchins, Lorentina Ibarra, Brian K. Idleman and Robert Imgarten, Madill, OK; Dewayne Jackson, Powell, OK; Dora Jackson, Kingston, OK; Marvell Jackson, Lisa James, Tina Jaramillo, Johnna Jenkins, Eden C. Jensen, Randel Jensen and Stephen Jett, Madill, OK; Beverly Johnson and Harold Johnson, Kingston, OK; Janice Johnson, Calvin Kent Johnson, Jennifer Johnson, Wanda Johnson and Lauren Johnson, Madill, OK; Richard P. Johnson, Kingston, OK; Terra Jean Johnston, Angela Jones, James Jones, Marcia Jones, Ronnie Jones, William A. Jones and Roberto Jurado, Madill, OK; John H. Kelly, Mary Ann Kelly and Rob Kendrick, Kingston, OK; Christy Kenedy, Jennifer Kerr, Nancy Kerr and Jayson Ketchum, Madill, OK; Philip R. Key, Kingston, OK; Kelly Koning, Madill, OK; Dave Lack, Kingston, OK; Lee Lambertsen, Jeff Landgraf, Phillip Landgraf, Kathy Landgraf, Ladd Landgraf, Ronny Landgraf and Tammy Landgraf, Madill, OK; William Lansdale, Glenda Lansdale and Edward D. Lasiter, Kingston, OK; Janie Laws, Madill, OK; Erin Lemons, Kingston, OK; Michelle Lemons and Robert E. Lemons, Madill, OK; Jerry Leonard, John B. Linville, Lane Lollis and Megan Lollis, Kingston, OK; Larry K. Long and Margaret Long, Madill, OK; Carey Looney, Mannsville, OK; Gatlin Looney, Santa Monica Lopez, Rafael Lopez, Aaron Love, Darian Blake Love, Bettye Lowe, Greg Lowe, Robert Lowe and Phyllis Lowe, Madill, OK; Keith Lowery and Sherry Lowery, Lebanon, OK; Margarita Guzman Lugue and Norbert Luttmmer, Madill, OK; Johnny Macon, Kingston, OK; Angela Maldonado, Madill, OK; Linda K. Maravich, Milan Maravich and Marcy Markum, Kingston, OK; Angie Marston, Lebanon, OK; Juan Martinez, Madill, OK; William B. Massey Jr. and Billy Massingill, Kingston, OK; Arthur F. Masters, Madill, OK; Hugh Matchen, Tressa Matchen and Braden Matchen, Kingston, OK; Eldon Matthews, Carolyn Maxwell, Nancy May, Drew McAdoo, Randall E. McAdoo, Douglas R. McBeth, Glenda McBeth and Jimmie McCormick, Madill, OK; Dawnyce McCoy, Lebanon, OK; Don McCutchen, Wanda McCutchen and Gordon McDaniel, Kingston, OK; Sharon McDowall, Lebanon, OK; James McIntyre, Kingston, OK; Gary McKinney, Angela McLees and Daniel McLees, Madill, OK; John McWilliams and Willis McWilliams, Kingston, OK; Elvia Medina, Randy Meeks and Barbara Meeks, Madill, OK; Exa Melton and Pepper Melton, Lebanon, OK; Miguel Mendez, Madill, OK; Sherry Metcalf, Colbert, OK; Melissa Meza, Chris Miller and Mike Miller, Kingston, OK; Cole Minor, Michael Minor and Cletara Mitchell, Madill, OK; Connie Montgomery, Steven Montgomery and Amantha Moore, Kingston, OK; Alfreda Moore, Georgina G. Moore, Robert L. Moore, Edvardo Morales, Victor Morales, Jaime Morales and Karrie Morman, Madill, OK; Devin Muncrief, Kingston, OK; Craig Murphy and Angela Murray, Madill, OK; Ronald B. Myers and Sharon L. Myers, Lebanon, OK; George L. Nabors, Kingston, OK; Randy Nabors, Kingston, OK; Chad Nance, Madill, OK; Erik Nance, Ramona Nance

and Shayla Nance, Kingston, OK; Taylor Nance, Durant, OK; Robert D. Navarrett, Kingston, OK; Gaylan W. Neal and Garey Nelms, Madill, OK; Phyllis Kaye Newton, Kingston, OK; Charles L. Nichols, Madill, OK; Jerald Nickell and Lynda Nickell, Kingston, OK; Katie S. Niday, Jimmy Nunley, Starr Oldham, Sarah Olgvin, Gary Oliver, Louise J. Oliver, Michael Oliver, Paula Oliver and Ronny Oliver, Madill, OK; Justin Orr, Kingston, OK; Donnie Owens, Waxahachie, TX; Eunice Page, Lebanon, OK; Mary Alice Page, Kingston, OK; Peggy Page, Madill, OK; Charolett Painter and Larry Painter, Lebanon, OK; Caroline M. Park and Weldon K. Park, Kingston, OK; Austin Parker, Melissa Parris, Sarah Parris and Wendy Parrish, Madill, OK; Robert Patton, Kingston, OK; Bruce E. Payne, Charles Pearson, Harold Peery and Justin Peery, Madill, OK; Wayne Peoples, Kingston, OK; Lazaro Peralta, Madill, OK; Jim Perry, Amarillis Perry, Carl Pershica and Donna Pershica, Kingston, OK; Jimmy Phillips and Marilyn K. Phillips, Kingston, OK; Bernice Pickens, Cathy D. Pickens, Clay D. Pickens, Lina Pickens and Linda Pickens, Madill, OK; Donna S. Pierce, Kingston, OK; Jessi Pierce, Rebekah Pierce and Storm Pierce, Madill, OK; Wayne Pierce, Walter Pipkin, Hilary Pipkin and Lynsey Polster, Kingston, OK; Eli Posey and Linda Posey, Madill, OK; Edward J. Poulter and Marsha K. Poulter, Kingston, OK; Eric Wayne Powell, Kenneth Priddy, Rachael Priddy, Jackie Porter, Jean C. Pyeatt, John A. Rago, Everardo Ramirez, Tracy Ramirez, Tyler Ramirez, and Michael L. Ray, Madill, OK; Barbara Rebold, Celeste Reed and Jackie Reed, Kingston, OK; Wayne Reed, Suzan Reese, Pamela Reich, Dot Richardson, Leon Richardson, Lyndell Rigsby, and Isidro Rivera, Madill, OK; Royce Roberts, Lebanon, OK; Tara Roberts, Ernie Robertson and Larry Robinson, Madill, OK; Marshall Robinson, Leah R. Rogan and Chris Rogers, Kingston, OK; Debra Rogers, Jimmy Rogers, Niki Rogers and James H. Rollins, Madill, OK; Cecil E. Roper, Lebanon, OK; Doug Rose and Dillon Runyan, Madill, OK; Charles Rushing, Leon Rushing, Richard Rushing and Terri Rushing, Lebanon, OK; Kenneth Russell, R.L. Rutherford, LaWanda Rutherford, Antonio Salazar and Gloria Salazar, Kingston, OK; Celso Salazar, Edequid Sanchez, Jose Luis Sanchez, Josefina Sanchez and Raul Sanchez, Madill, OK; Tommy Sandefur, Kingston, OK; L.S. Sanders, Lebanon, OK; Charles Sandefur, Basil W. Savage, Steve Savage, Mary Ann Saxon, Wes Saxon, Darcy Schulke, Steven J. Schulke, Amanda Scott, Carmen J. Scott, Helen Fern Seigler, Dianne Self, Donnie Self, Lydia Shaw and Bill Shebester, Madill, OK; Bobby Shebester, Dawn Shebester and Jaret Shebester, Lebanon, OK; Clara Sheffield, Madill, OK; Brandon Shirah, Tishomingo, OK; Jesse Shrum, Madill, OK; Eddie Sikes, Kingston, OK; Antonio Herrera Simental, Robert R. Simmons, Stacy Sitz, Chris Smith, Donna S. Smith, George A. Smith, Robert E. Soltis Jr., Porfirio J. Soto, John Spiars, Charley David Sprouse and Patsy Sprouse, Madill, OK; Robin Squires and Stephen Squires, Kingston, OK; Mack Stafford, June Standridge, Josephine Stanley, and Bobby Story, Madill, OK; Cassandra Jean Stover and Melvin Stover, Kingston, OK; Guy Eva Stowers, Justin Stuckey, Alberta Stumpff, Stefanie Stumpff, Deanna K. Sullivan, James L. Sullivan, Bobby Szenasi, Tracy Szenasi, Diana Taffarello, Alvita Taylor, Wesley

Taylor, James Temple and David Thomas, Madill, OK; David Thomas, Kingston, OK; Patrick L. Tickel, Patty Tickel, Deline Tooley, Zulema Tones, Sheila Tracy, Joel A. Trammell, Tresa Trammell, Kelly Trammell, Travis Trammell, David Truitt, Joanna Dell Tuck, Bret R. Turner, Jody Turner, Wendy Turner, Alfredo Valles R., Renee Vance, Richard Votaw, Enrique Voues, Davie Waggoner, William Wagoner, Barbara Wallace, Sharon Wallace, and Jimmy R. Ward, Madill, OK; William D. Ward and LaVeta Ward, Kingston, OK; Millicent McClure Watson, Bryant Watts, Brad Watts, Macy Watts, Sarah J. Watts, Marvin B. Watts Jr., Robbie Lee Watts, Shanon Watts and David Weaver, Madill, OK; Brenda Welch, Kingston, OK; Dewayne Wellman, Karen T. Wellman, Dakota Wescott, Kyleigh Wescott, Danny Westbrook, Darrel Wheeler, Wayne Wheeler, Justin Wheeler, Cody Wheeler, Michelle Wheeler, and Reginald C. Whitaker, Madill, OK; Dawn White, Kingston, OK; Lori Muncrief-White and Jerry Dan White, Madill, OK; Nathan White, Kingston, OK; Kendall Whitehead, Janna Renae Whitley, Michael Whitley, Lonnie Whitmire, Rhonda Whitsett, Steve Whitsett, Lance Whitsett, Lukas Whitsett and Bobbie J. Whitten, Madill, OK; Robert V. Wilder and Bill H. Williams, Kingston, OK; Duane T. Williams, Cale Williams, Jace Williams, Jim Williams, Joe Williams, Sherry Williams and Tina Williams, Madill, OK; Vera L. Williams, Kingston, OK; Dink Ellis Williford, Lebanon, OK; Sue F. Willis, Kingston, OK; Dale W. Wilson, Madill, OK; Earl D. Wise, Kingston, OK; J.L. Woody, John Woody and Linda Woody, Madill, OK; Virginia Wornom, Kingston, OK; Dale Wren, Kingston, OK; Ray Yeats, Madill, OK; Tommy A. Young, Lebanon, OK; and Donald W. Yow, Madill, OK;