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October 31, 2017

Kansas Corporation Commission, Conservation Division 266 N Main Street, Suite 220 Wichita, KS 67202-1513

Re: Request for Hearing – 18-CONS-3160-CPEN, Benjamin M. Giles, License No. 5446, In re: Compliance with K.A.R. 82-3-604 at the Ralston Tank Battery

To whom it may concern:

We respectfully request a hearing in the above-captioned docket on behalf of Benjamin M. Giles ("Operator"). For the reasons set forth below, we believe the penalty order was issued in clear error, such that its enforcement would be unreasonable, arbitrary, and capricious towards Operator and cause economic waste through the assessment of improper fines.

Operator operates the Ralston oil and gas lease covering the SE/4 of Section 10-T26S-R4E, Butler County, Kansas. There are multiple active oil wells on the Ralston lease producing oil from the Arbuckle formation. The Ralston lease tank battery is located in the SE/4 NW/4 NE/4 SE/4 of said Section 10. The dike at issue surrounds the Ralston lease tank battery ("Subject Dike"). The enclosed Exhibit 1 depicts the Ralston lease, and the location of the tank battery and Subject Dike.

The Penalty Order alleges Operator committed one violation of K.A.R. 82-3-604(a) and one violation of K.A.R. 82-3-604(b), and assesses \$500 in fines against Operator. K.A.R. 82-3-604(a) requires Operator to notify District 2 within 24 hours of discovery or knowledge of an oil field-related discharge of 5 or more barrels of saltwater or oil into a dike. K.A.R. 82-3-604(b) requires Operator to remove fluid from a dike within 48 hours of discovery or knowledge. "Discovery or knowledge" means "that point when the operator knew or reasonably should have known of the discharge."

¹ Penalty Order ¶¶ A and B.

² K.A.R. 82-3-604(c) (emphasis added).

The alleged findings of fact are somewhat jumbled in the Penalty Order. Staff alleges that it identified fluid in the Subject Dike during a lease inspection on August 23, 2017.³ On an unspecified date Staff alleges it took a sample of the fluid in the Subject Dike and that the sample tested for either 16,000 or 17,500 ppm chlorides.⁴ A copy of the supposed test results is notably absent from the Penalty Order. On either August 28, 2017 or August 29, 2017 at 3:40 p.m., Staff notified Operator of an "unreported spill" at the Subject Dike, and ordered Operator to immediately remove the fluid.⁵ In any event, on August 29, 2017, Staff issued Operator a notice of violation for allegedly failing to report a "spill" in violation of K.A.R. 82-3-603(b)(2).⁶ The Penalty Order does not charge Operator with a violation for failing to notify District 2 of a "spill" per K.A.R. 82-3-603(b)(2), and there is no evidence a spill ever occurred around the Subject Dike.

Staff's findings do not support the violations of K.A.R 82-3-604(a) and (b) charged to Operator. Operator contends the fluid sitting in the Subject Dike on August 23, 2017 was rainwater. The accumulation of rainwater is not reportable as a "discharge" under K.A.R. 82-3-604(a). Commission regulations define "discharge" as 5 or more barrels or saltwater, oil or refuse. Rainwater cannot possibly be construed to be oil, saltwater or refuse. There is no requirement under K.A.R. 82-3-604(b) to remove rainwater from a dike within 48 hours of discovery or knowledge, because rainwater is not saltwater, oil or refuse. Further, such a requirement would be entirely unworkable after periods of heavy rain from both a compliance and enforcement standpoint, and cannot possibly be the policy of the Commission.

The rainfall reported at four NOAA weather stations in the vicinity of the Subject Dike support Operator's contention that the fluid in the Subject Dike was rainwater. Reported rainfall during the 19 days leading up to Staff's alleged August 23, 2017 inspection totaled 6.31", 5.84", 6.89", and 3.11" at the four NOAA weather stations, respectively. Reported rainfall at the four weather stations the night before the alleged August 23, 2017 inspection totaled 0.43", 0.39", 0.69", and 0.10". As with all oil field pits and dikes, the Subject Dike was specifically constructed to capture fluid. Logically and obviously, when it rains on the Ralston lease rainwater is captured in the Subject Dike. It cannot be denied that the significant rainfall that occurred in August of 2017 was captured in the Subject Dike.

For purposes of comparison, photographs taken of the Subject Dike by Operator on October 23, 2017 are enclosed as Exhibit 3. Reported rainfall at the four NOAA weather stations

³ Penalty Order, ¶ 8, Exs. A and B.

 $^{^4}$ See Penalty Order, ¶ 10 and Exs. A and B. Exhibit A says the fluid tested 16,000 ppm chlorides, whereas ¶ 10 and Exhibit B state the fluid tested 17,500 ppm chlorides.

⁵ Penalty Order, Exs. A and B. Exhibit A indicates the district supervisor contacted Dusty Green 8/28/17, while Exhibit B says Dusty Green was contacted at 3:40 p.m. on 8/29/17.

⁶ Penalty Order, ¶ 9, Ex. C. Per K.A.R. 82-3-101(69) a "spill" is the escape of saltwater or oil from a diked area.

⁷ K.A.R. 82-3-604(a).

⁸ K.A.R. 82-3-604(b) requires an operator to remove fluid from a dike within 48 hours of "discovery or knowledge." "Discovery or knowledge" means "that point when an operator knew or reasonably should have known of the <u>discharge</u>. K.A.R. 82-3-604(c) (emphasis added). "Discharge" means <u>more than 5 barrels of saltwater</u>, oil or <u>refuse</u>. K.A.R. 82-3-604(a) (emphasis added).

⁹ Exhibit 2.

¹⁰ See Id.

¹¹ See Id.

the night before October 23, 2017 totaled 1.53", 1.82", 1.62", and 2.12", respectively. ¹² The photographs corroborate that during periods of significant rainfall rainwater accumulates in the Subject Dike. Just as rainfall accumulated in the Subject Dike prior to Staff's August 23, 2017 inspection.

Staff's own fluid test results irrefutably demonstrates that the fluid in the Subject Dike was not saltwater, oil or refuse discharged from the Ralston tank battery. The wells on the Subject Lease produce oil and water from the Arbuckle formation. Water from the Arbuckle formation contains 30,000-50,000 ppm chlorides. The chloride level from Staff's alleged test, whatever the actual results were, does not support its allegation that more than 5 barrels of saltwater discharged from the Ralston lease battery.

What is most frustrating to Operator is that he immediately removed the rainwater from the Subject Dike after Staff ordered him to do so, and submitted a spill report to Staff **not less than one day** after he could have possibly received the improper notice of violation letter in the mail. Yet Staff still sought to punish him by issuing a penalty order at a time when the Subject Dike was indisputably in compliance with Commission regulations. This frustration is compounded by the fact that a plain reading of the Commission regulations at issue show Operator could not have committed the violations alleged by Staff.

For the foregoing reasons, Operator submits that the face of the Penalty Order when read with this letter demonstrate that Operator did not commit violations of K.A.R. 82-3-604(a) and (b). As such, Operator respectfully requests that the Commission rescind the penalty order issued in this docket. Doing so will prevent economic waste in the form of improper fines and will also prevent the further unreasonable and arbitrary enforcement of an improper order. Alternatively, Operator requests that this matter be set for hearing.

Sincerely,

Jonathan A. Schlatter

For the Firm

Attorneys for Benjamin M. Giles

JAS/cda

cc: Joshua D. Wright, KCC Litigation Counsel

¹² See Exhibit 3.

¹³ Staff ordered Operator to remove fluid from the Subject Dike on August 28 or 29, 2017. *See* n. 5, supra. Operator removed 75 barrels of rainwater from the Subject Dike on August 28, 2017. Penalty Order, ¶ 10, Ex. D; *see also*, Penalty Order, Ex. E, demonstrating fluid was removed from the Subject Dike. In response to Staff's August 29, 2017 notice of violation letter, Operator mailed Staff an "Unreported Spill Data" form on August 31, 2017. Penalty Order, Exs. C and D.

Kansas Oil and Gas

Kansas Geological Survey



Plot Lat/Long Points on **Map by Coordinates**

INSTRUCTIONS:

Enter Lat/Long Coordinates (one per line in format: lat,long [no spaces] - see example) Note: more than 2,000 points will be slow.

Coordinates (Format: lat,long in decimal form):

A. 37.8647, -96.9688 Towarda B. 37.8182, -96.8444 El Dorado (5W) C. 37.8039, -96.8601 El Dorado (Park) D. 37.6983, -96.9705 Augusta

Plot Map Points

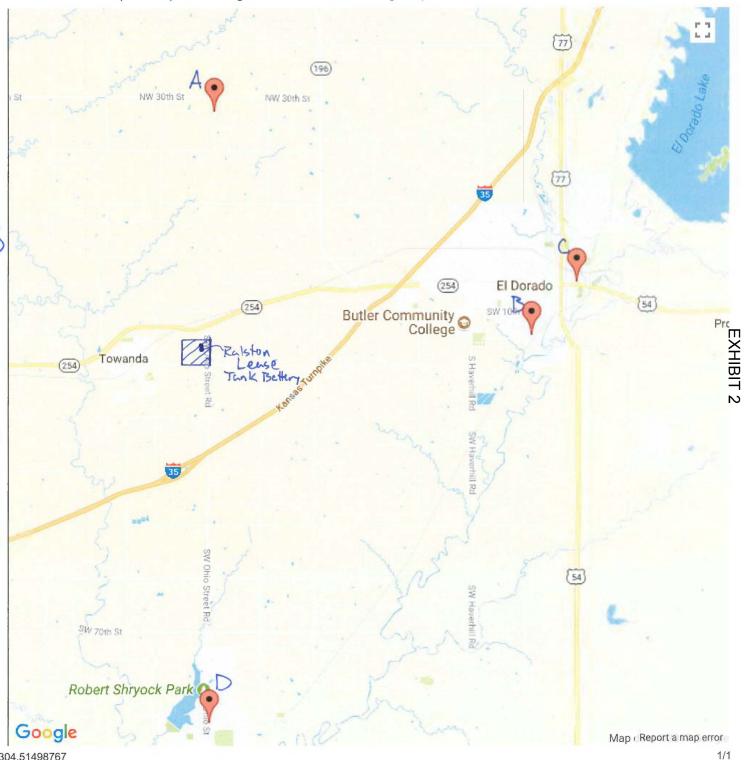
Receive Updates by Email:

Name

Email Address

Subscribe

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National Environmental Satellite, Data, and Information Service Current Location: Elev: 1388 ft. Lat: 37.8647° N Lon: -96.9688° W **Record of Climatological Observations**

These data are quality controlled and may not be identical to the original observations.

Generated on 10/24/2017

National Centers for Environmental Information 151 Patton Avenue Asheville, North Carolina 28801

			Te	mperature (F	Du 1) Mm.		Precipitation	1		Evapo					erature (F)	8 in. Depth			
				Ending at tion Time	At O	24 Ho		unts Ending tion Time		At Obs. Time	Zvapo			4 in. Depth			8 in. Depth			
Y e a r	M o n t h	D a y	Max.	Min.	b e r v a t i o n	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	(mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2017	08	01				0.07														
2017	08	02				0.00		0.0												
2017	08	03				0.00		0.0												
2017	08	04				0.00		0.0												
2017	08	05				0.10														
2017	08	06				4.40														
2017	08	07				0.00		0.0												
2017	08	08				0.02														
2017	08	09				0.00		0.0												
2017	08	10				0.49														
2017	08	11				0.09														
2017	08	12				0.00		0.0												
2017	08	13				0.00		0.0												
2017	08	14				0.00		0.0												
2017	08	15				0.00		0.0												
2017	08	16				0.01														
2017	08	17				0.80														
2017	08	18				0.00		0.0												
2017	08	19				0.00		0.0												
2017	08	20				0.00		0.0												
2017	08	21				0.00		0.0												
2017	08	22				0.43														
2017	08	23				0.00		0.0												
2017	08	24				0.00		0.0												
2017	08	25				0.00		0.0												
2017	08	26				0.00		0.0												
2017	08	27				0.00		0.0												
2017	08	28				0.04					-									
2017	08	29				0.00		0.0												
2017	08	30																		
2017	08	31				0.00		0.0												
		Summary				6.45		0.0												

Empty, or blank, cells indicate that a data observation was not reported.

^{*}Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

[&]quot;s" This data value failed one of NCDC's quality control tests.

[&]quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

[&]quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

These data are quality controlled and may not be identical

DIN E Nomi

to the original observations.

Generated on 10/24/2017

National Centers for Environmental Information 151 Patton Avenue Asheville, North Carolina 28801

Current Location: Elev: 1350 ft. Lat: 37.8039° N Lon: -96.8601° W Scale Fe Station: EL DORADO 1.2 S, KS US US1KSBU0025 Observation Time Temperature: Unknown Observation Time Precipitation: Unknown Soil Temperature (F) Temperature (F) Precipitation Evaporation 24 Hrs. Ending at At 24 Hour Amounts Ending at At Obs. 4 in. Depth 8 in. Depth **Observation Time Observation Time** Time b M S Y 0 D 24 Hour Snow, Ice n a Wind Amount of a Rain, Ground У Snow, Ice Pellets, Ground Movement Evap. (in) Melted Max. Min. Pellets, Hail, Ice Cover Max. Min. Cover Max. Min. (mi) a Snow, Etc. a a Hail (in) on Ground (see *) (see *) (in) (in) 0 n 2017 08 01 0.08 02 0.00 0.0 2017 08 0.0 2017 08 03 0.00 2017 08 04 0.00 0.0 2017 08 05 0.67 2017 08 06 2.06 0.0 2017 08 07 0.00 08 0.00 0.0 2017 08 08 09 0.0 2017 0.00 08 10 2017 0.52 2017 08 11 0.15 08 12 0.00 0.0 2017 2017 08 13 0.00 0.0 14 0.0 2017 08 0.00 08 15 0.0 2017 0.00 16 0.00 0.0 2017 08 17 2017 08 2.05 2017 08 18 0.00 0.0 19 2017 08 0.02 08 20 0.0 2017 0.00 0.0 2017 08 21 0.00 80 22 0.27 2017 08 23 X 0.12 2017 2017 80 24 0.00 0.0 2017 08 25 0.00 0.0 26 0.0 2017 08 0.00 2017 08 27 2017 08 28 0.04 2017 08 29 0.00 0.0 08 30 0.00 0.0 2017 31 0.0 2017 08 0.00 0.0

Empty, or blank, cells indicate that a data observation was not reported.

Summary

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

5.98



^{*}Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

[&]quot;s" This data value failed one of NCDC's quality control tests.

[&]quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

[&]quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used

National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

These data are quality controlled and may not be identical

DW & Nomi Normato the original observations.

Generated on 10/24/2017

National Centers for Environmental Information 151 Patton Avenue Asheville, North Carolina 28801

Current Location: Elev: 1290 ft. Lat: 37.8182° N Lon: -96.8444° W Control Pur Station: EL DOPADO KS IIS USCONIAZANI

		D a y	Т	emperature	(F)			Precipitation	1		Evapo	ration			Soil Temp	erature (F)	8 in. Depth			
			24 Hrs. Observa	Ending at ation Time	At O	24 Ho	ur Amo Observa	unts Ending tion Time	at	At Obs. Time				4 in. Depth			8 in. Depth			
Y e a r	M o n t h		Max.		b s e r v a t i o n	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2017	08	01	84	66	67	0.04		0.0		0										
2017	08	02	83	64	64	0.00		0.0		0										
2017	08	03	89	64	72	0.00		0.0		0										
2017	08	04	87	62	62	0.00		0.0		0										
2017	08	05	80	59	63	0.47		0.0		0										
2017	08	06	84	61	67	2.50		0.0		0										
2017	08	07	79	64	64	0.01		0.0		0										
2017	08	08	77	62	63	0.00		0.0		0										
2017	08	09	82	63	66	0.00		0.0		0										
2017	08	10	81	64	65	0.63		0.0		0										
2017	08	11	87	64	68	0.12		0.0		0										
2017	08	12	83	64	65	0.00		0.0		0										
2017	08	13	79	62	63	0.00		0.0		0										
2017	08	14	85	63	70	0.00	in.	0.0		0										
2017	08	15	88	69	71	0.00		0.0		0										
2017	08	16	87	71	72	0.00		0.0		0										
2017	08	17	87	64	64	2.48		0.0		0										
2017	08	18	87	64	69	0.00		0.0		0										
2017	08	19	91	69	72	0.00		0.0		0										
2017	08	20	96	72	77	0.00		0.0		0										
2017	08	21	94	77	77	0.00		0.0		0										
2017	08	22	91	75	75	0.32		0.0		0										
2017	08	23	83	59	60	0.37		0.0		0										
2017	08	24	82	58	58	0.00		0.0		0										
2017	08	25	84	58	66	0.00		0.0		0										
2017	08	26	81	64	66	0.00		0.0		0										
2017	08	27	87	66	67	0.00		0.0		0										
2017	08	28	87	64	64	0.36		0.0		0										
2017	08	29	83	57	57	0.00		0.0		0										
2017	08	30	81	57	57	0.00		0.0		0										
2017	08	31	81	56	60	0.00		0.0		0										
		Summary	85	64		7.30	2.0	0.0												

Empty, or blank, cells indicate that a data observation was not reported.

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[&]quot;s" This data value failed one of NCDC's quality control tests.

[&]quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

[&]quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 1282 ft. Lat: 37.6983° N Lon: -96.9705° W

Record of Climatological Observations

These data are quality controlled and may not be identical

DIMS 16m:

to the original observations. Generated on 10/24/2017

Station: AUGUSTA, KS US USC00140447 Police Station Observation Time Temperature: Unknown Observation Time Precipitation: 0630 Soil Temperature (F) Precipitation Evaporation Temperature (F) 24 Hour Amounts Ending at At Obs. 24 Hrs. Ending at At 8 in. Depth 4 in. Depth **Observation Time** 0 **Observation Time** Time b S D 0 24 Hour е e n a Snow, Ice Wind Amount of a Rain, Snow, Ice Pellets, Ground Ground У Movement V Evap. (in) Melted Min. Min. Max. Min. Max. Pellets, Hail, Ice Cover Max. Cover (mi) Snow, Etc. a on Ground Hail (in) (see *) (see *) (in) g g (in) 0 n 08 01 0.0 2017 0.03 2017 08 02 0.00 0.0 08 03 0.00 0.0 2017 08 04 0.0 2017 0.00 0.0 08 05 0.04 2017 2017 08 06 2.00 0.0 2017 08 07 0.00 0.0 2017 08 08 0.00 0.0 09 2017 08 0.00 0.0 2017 08 10 0.35 0.0 2017 80 11 0.46 0.0 0.0 12 2017 80 0.00 08 13 0.00 0.0 2017 0 2017 08 14 0.00 0.0 0 0.0 2017 08 15 0.00 0.0 08 16 0.00 2017 2017 08 17 0.20 0.0 0 08 18 0.0 0.00 0 2017 19 0.00 0.0 2017 08 2017 08 20 0.00 0.0 0 08 21 0.00 0.0 2017 0 08 22 0.10 0.0 2017 2017 08 23 0.00 0.0 2017 08 24 0.00 0.0 0 2017 08 25 0.00 0.0 0 08 26 0.0 2017 0.00 2017 08 27 0.00 0.0 0 08 28 0.04 0.0 0 2017 08 29 0.00 0.0 2017 08 30 0.00 0.0 0 2017 2017 08 31 0.00 0.0 0

Empty, or blank, cells indicate that a data observation was not reported.

Summary

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

3.22

0.0

National Centers for Environmental Information

151 Patton Avenue

Asheville, North Carolina 28801

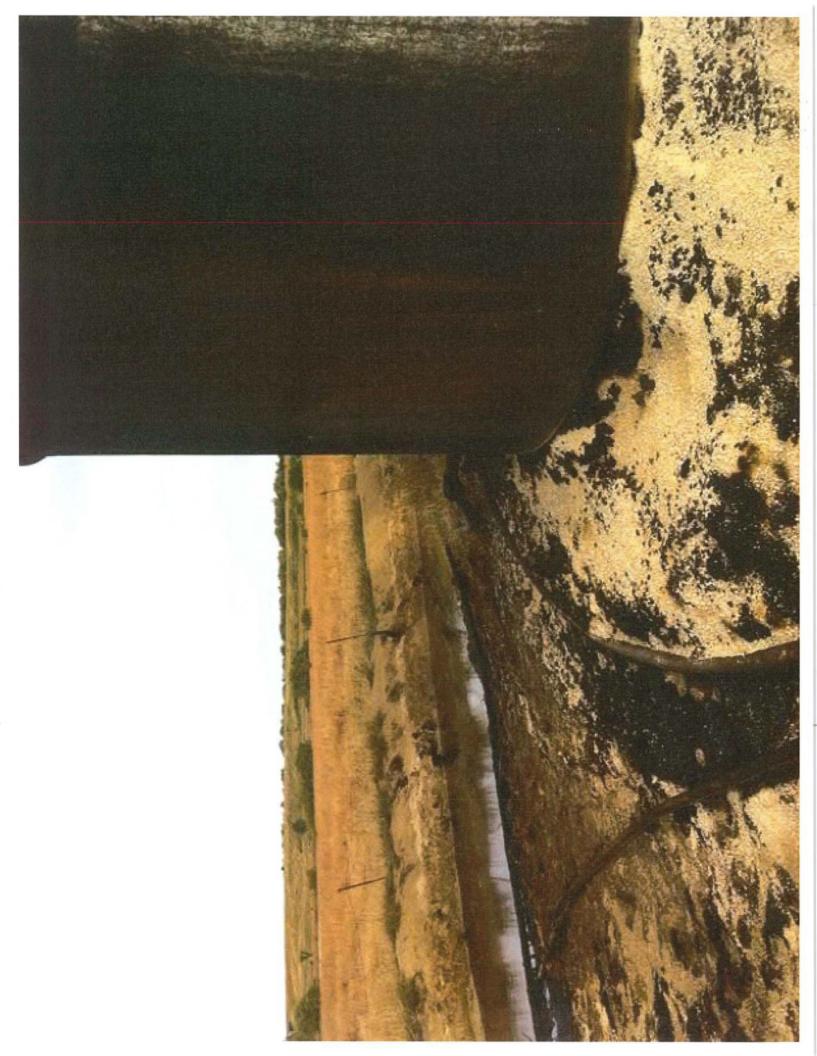
^{*}Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

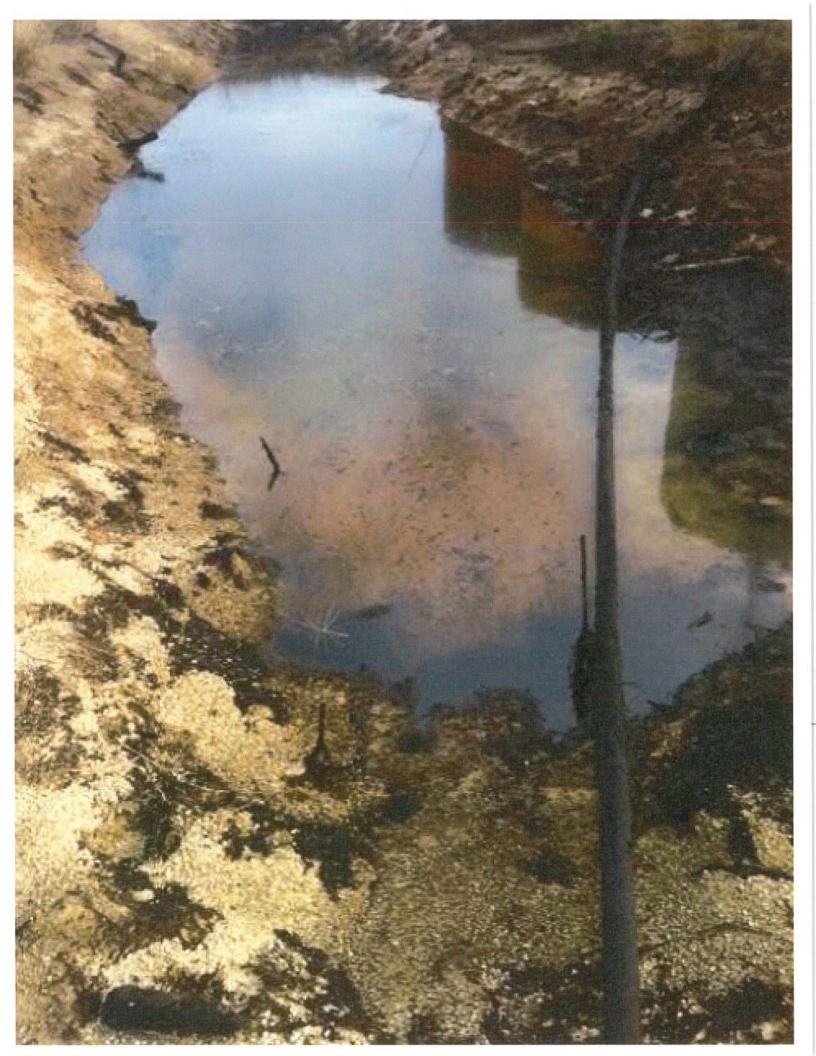
[&]quot;s" This data value failed one of NCDC's quality control tests.

[&]quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

[&]quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.







National Environmental Satellite, Data, and Information Service

Current Location: Elev: 1388 ft. Lat: 37.8647° N Lon: -96.9688° W Station: TOWANDA 4.9 NNE. KS US US1KSBU0017

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 10/31/2017

National Centers for Environmental Information 151 Patton Avenue Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Y e a	M		24 Hrs. E Observat	Ending at	At	24 Ho										1		
e a	0		24 Hrs. Ending at Observation Time		At O b	24 Hour Amounts Ending at Observation Time Time							4 in. Depth			8 in. Depth		
	o n t h	D a y	Max.	Min.	b s e r v a t i o n	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
017	10	01			- ''	0.00		0.0										
017	10	02				0.00		0.0										
2017	10	03				0.00		0.0										
2017	10	04				0.00		0.0										
2017	10	05				0.55												
2017	10	06				0.36												
2017	10	07				0.47												
2017	10	08				0.00		0.0										
2017	10	09				0.00		0.0					-					
017	10	10				0.01												
017	10	11				0.00		0.0										
017	10	12				0.00		0.0										
017	10	13				0.00		0.0										
017	10	14				0.06												
017	10	15				0.27												
017	10	16				0.00		0.0										
017	10	17				0.00		0.0										
017	10	18				0.00		0.0										
017	10	19				0.00		0.0										
017	10	20				0.00		0.0										
017	10	21				0.00		0.0										
017	10	22				1.53												
017	10	23 🗶				0.00		0.0										
017	10	24				0.00		0.0										
017	10	25				0.00		0.0										
017	10	26				0.00		0.0										
017	10	27																
017	10	28																
017	10	29																
017	10	30																
017	10	31																

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National Environmental Satellite, Data, and Information Service

Current Location: Elev: 1350 ft. Lat: 37.8039° N Lon: -96.8601° W

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 10/31/2017

National Centers for Environmental Information 151 Patton Avenue Asheville, North Carolina 28801

Station:	EL DORADO) 1.2 S, KS L	JS US1KSBL										tion Time Temperature: Unknown Observation Time Precipitation: Unkno						
			Te	mperature (F)			Precipitation			Evaporation Soil Temperature (F) 4 in. Depth 8 in. Depth 24 Hour Wind Movement (mi) Movement (mi) Ground Cover Max. Min. Cover Max.								
			24 Hrs. E Observa	Ending at tion Time	At O	24 Ho	ur Amo Observa	unts Ending tion Time	at	At Obs. Time			4 in. Depth			8 in. Depth			
Y e a r	M o n t	D a y	Max.	Min.	b s e r v a t i o n	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	Wind	Amount of Evap. (in)	Cover	Max.	Min.	Cover	Max.	Min.	
2017	10	01				0.00		0.0											
2017	10	02				0.00		0.0											
2017	10	03				0.00		0.0											
2017	10	04				0.00		0.0						***					
2017	10	05				0.54													
2017	10	06				0.19													
2017	10	07				0.45													
2017	10	08				0.00		0.0											
2017	10	09				0.00		0.0											
2017	10	10				0.00		0.0											
2017	10	11				0.02													
2017	10	12				0.00		0.0											
2017	10	13				0.00		0.0											
2017	10	14				0.00		0.0											
2017	10	15				0.15													
2017	10	16				0.00		0.0											
2017	10	17				0.00		0.0											
2017	10	18				0.00		0.0											
2017	10	19				0.00		0.0											
2017	10	20				0.00		0.0											
2017	10	21				0.00		0.0											
2017	10	22				1.82													
2017	10	23 🗶				0.00		0.0											
2017	10	24				0.00		0.0											
2017	10	25				0.00		0.0											
2017	10	26				0.00		0.0	1				lu-					lu .	
2017	10	27																N .	
2017	10	28																	
2017	10	29																	
2017	10	30																	
2017	10	31																	
		Summary				3.17		0.0								- 17			

Empty, or blank, cells indicate that a data observation was not reported.

^{*}Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

[&]quot;s" This data value failed one of NCDC's quality control tests.

[&]quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

[&]quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 1290 ft. Lat: 37.8182° N Lon: -96.8444° W

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 10/31/2017

National Centers for Environmental Information

151 Patton Avenue Asheville, North Carolina 28801

Station: E	EL DORADO	, KS US US	SC00142401	-										Observation Time Temperature: 0700 Observation Time Precipitation: 070						
				emperature	(F)			Precipitation	1		Evapo	ration			Soil Temp	erature (F)				
			24 Hrs. Observa	Ending at at a tion Time	At O b	24 Ho	our Amo Observa	unts Ending tion Time	at	At Obs. Time				4 in. Depth		8 in. Depth				
Y e a r	M o n t	D a y	Max.		s e r v a t i o	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2017	10	01	80	56	62	0.00		0.0		0										
2017	10	02	80	62	67	0.00														
2017	10	03	85	66	70	0.00														
2017	10	04	83	69	71	0.00														
2017	10	05	72	64	69	0.84					***************************************									
2017	10	06	76	68	68	0.18					-									
2017	10	07	83	58	58	0.43							-							
2017	10	08	78	52	52	0.00														
2017	10	09	82	51	59	0.00														
2017	10	10	83	44	45	0.00														
2017	10	11	49	37	37	0.01														
2017	10	12	69	37	50	0.00														
2017	10	13	80	50	65	0.00														
2017	10	14	86	62	70	0.00														
2017	10	15																		
2017	10	16	64	38	38	0.00														
2017	10	17	70	38		0.00														
2017	10	18	74	48	53	0.00														
2017	10	19	79	51	51	0.00														
2017	10	20	81	50	57	0.00		0.0		0										
2017	10	21	77	52	67	0.00														
2017	10	22	76	44	44	1.62														
2017	10	23	70	44	48	0.00														
2017	10	24	70	46	48	0.00														
2017	10	25	61	36	36	0.00														
2017	10	26	79	36	51	0.00														
2017	10	27	73	35	35	0.00														
2017	10	28																		
2017	10	29																		
2017	10	30																		
2017	10	31																		
		Summary	75	50		3.08		0.0												

Empty, or blank, cells indicate that a data observation was not reported.

^{*}Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

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National Environmental Satellite, Data, and Information Service

Current Location: Elev: 1282 ft. Lat: 37.6983° N Lon: -96.9705° W

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 10/31/2017

National Centers for Environmental Information 151 Patton Avenue Asheville, North Carolina 28801

			Te	emperature (F	•)			Precipitation	1		Evapo	ration			Soil Temp	perature (F)		
			24 Hrs. I Observa	Ending at tion Time	At O	24 Ho	ur Amo Observa	unts Ending tion Time	at	At Obs. Time				4 in. Depth			8 in. Depth	
Y e a r	M o n t	D a y	Max.	Min.	b s e r v a t i o n	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2017	10	01				0.00												
2017	10	02				0.00												
2017	10	03				0.00												
2017	10	04				0.00												
2017	10	05				0.73												
2017	10	06				0.35												
2017	10	07				0.46												
2017	10	08				0.00												
2017	10	09				0.00												
2017	10	10				0.00												
2017	10	11				0.00												
2017	10	12			2	0.00												
2017	10	13				0.00												
2017	10	14																
2017	10	15				0.34												
2017	10	16																
2017	10	17				0.00												
2017	10	18				0.00												
2017	10	19				0.00												
2017	10	20				0.00												
2017	10	21				0.00												
2017	10	22				2.12												
2017	10	23 🗶				0.00												
2017	10	24				0.00	No.											
2017	10	25				0.00								3000				
2017	10	26				0.00												
2017	10	27				0.00												
2017	10	28																
2017	10	29																
2017	10	30																
2017	10	31																
		Summary				4.00		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

^{*}Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

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