BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of TDR Construction, Inc., to Authorize Injection of Saltwater into the Squirrel Formation at the Superior #I-1 Well, Located in Section 10, Township 16 South, Range 21 East, Franklin County, Kansas	))))))	Docket No. 19-CONS-3168-CUIC CONSERVATION DIVISION License No. 32218

PREFILED TESTIMONY OF SCOTT YEARGAIN

1. Q. Please state your name and address.
   A. My name is Scott Yeargain; I reside at 2263 Nevada Road, Ottawa, Kansas 66067.
2. Q. Summarize your education and background.
   A. My degrees are from the University of Missouri-Columbia: BA with Honors; MA, and PhD. All degrees are in philosophy. The BA minors are in chemistry and mathematics; the PhD minor is mathematics. I am retired. I am 77 years of age. I taught philosophy in a college in Kansas (Johnson County Community College) for 33 years (until retirement). I held an assistantship in philosophy at the University of Missouri-Columbia during graduate school. In addition, I was a bench-chemist, part time, in the Pathology Department at the University of Missouri-Columbia School of Medicine from 1967-1971. In my adult life I have been involved in a family farming operation in Audrain county, Missouri. In Kansas we own a small farm, 47 acres, in Franklin county. My wife is involved in a family farming operation (1,000 acres) in Ouachita Parish, Louisiana. In addition, my wife and I own rental properties in Prairie Village, Kansas, Leawood, Kansas, and Franklin county, Kansas.

3. Q. Summarize your qualifications and experience which are relevant to this testimony.

A. I was trained sufficiently in chemistry and mathematics to qualify for the part-time chemistry position in the Pathology lab at the University of Missouri-Columbia school of medicine. I did routine titrations, dilutions, determinations of concentrations of substances (bilirubin in blood serum, blood urea nitrogen in serum, and so on) in solution, and so on. I held this position while in graduate school. Also, I was appointed by the Kansas Water Office in 2014 to a position on the Governor's 50-Year Vision for Water in Kansas Committee; I was one of several people so-appointed who set long-range goals for the Marais des Cygnes watershed. Since 2016 I have been a member of the Regional Advisory Committee for the Marais des Cygnes Watershed, a committee which advises the Kansas Water Office regarding needs and goals for this watershed. My training in philosophy helps also. Formal training in philosophy teaches one to put a critical eye on complex argument structures, mostly regarding logical coherence.

4. Q. What sponsors your interest in these dockets?

A. I'll start with the Applicant's pre-filed testimony. Mr. Town says "I am a third generation oil producer and have been around the oil business my whole life." My thinking is that we cannot keep doing things our parents, grandparents, great-grand parents did. This is what our progenitors have endowed us: we must add increased amounts of fertilizer to field crops to produce paying yields. This is related to diminished organic content in field soils. The mercury content in bottom-feeding fish, like catfish, in Kansas farm ponds, like my pond, is sufficiently high for Kansas Fish and Game to advise fishermen to curtail the frequency by which they eat the fish from Kansas ponds and rivers. Algae blooms in Kansas reservoirs and ponds are a chronic health and water quality issue for KDHE because of nutrient migration into water bodies, largely nitrogen and phosphate. These chronic blooms are related to heavy fertilizer loading to compensate for diminished organic matter in soils. The fecal coliform content of the Marais des Cygnes river above Franklin County Rural Water #6 is so high that chorine is added in quantities which in turn cause violative TTHM and haloacetic acid readings in that public water supply. These high fecal coliform issues are linked to the large numbers of confined animal feeding operations in the watershed. When the EPA mandated water body monitoring following passage of

the Safe Drinking Water Act the KDHE began reporting water quality on all the major watersheds in the state. In 2000, the date of the initial assessment for the Marais des Cygnes watershed, The KDHE reported that 50.6% of the stream segments in this watershed were impaired for their designated uses. You see the narrative. Our farming practices, industrial practices are killing pollinators, extinguishing species, filling our water impoundments with silt. I am not a third-generation oil man who wants to keep doing the same thing my grandfather did. Oil production is an extractive process, not sustainable, not regenerative. The economic paradigm of oil production in my county, Franklin, is the economic paradigm of small towns in Kansas, including Ottawa, the closest town to our farm. The largest retailer in Ottawa is Wal-Mart. Wal-Mart extracts capital from the town. It is a negative balance of payments for the town. The largest number of restaurants are franchise operations: profits leave town. These are extractive businesses. Like all extractive processes, operations continue until the thing is used up. Measures of "used up" in this domestic population are drug use, domestic abuse rates, household income, retirement savings, standardized test scores, rates of teenage pregnancy. Really, a requirement for becoming a commissioner at the KCC ought be to read Donald E. Worster's Shrinking the Earth: The Rise and Decline of American Abundance, Oxford University Press, 2016. Worster was the Hall Distinguished Professor of American History at the University of Kansas and his book attributes the "greatness of America" to using up the continent's fisheries, forests, soils, waters, and grasses. Now we're like everyone else: fighting over what's left. And that is what this docket is about. Here's what I know: all the protestants in this docket live in rural areas; we believe we cannot keep doing "business as usual." My wife and I, on a small scale, the Mettenburgs, on a much larger scale, run cows and calves on pastures on which we do not put fertilizers. We've stopped using back-pours on our cattle in order to grow populations of scarab beetles, family *Scarabaeidae*, in the soil, which, in turn, increase the organic content of the soil; when tilth increases, water run-off in heavy rain diminishes; the cow shit stays put because the beetles bury it in the soil. These are not extractive processes. We still make money. I believe Kansas will become a wasteland of salted soils, spoiled rivers, if we do business as usual. If one examines the state of the aquifers, the water impoundments, the watersheds I think the evidence supports my belief. Donald Worster also thinks the evidence supports by belief.

5. Q. You make claims in your protest about the possibility of abandoned wells existing in the vicinity of both the McCoy lease and the Superior lease. On what do you base your claims?

A. The Kansas Corporation Commission, in its 2019 Abandoned Oil and Gas Well Status, Annual Report, states that there exist 21,922 records of abandoned wells in Kansas. 6,046 of these wells are designated as "Other." "Other" refers to wells which have been removed from the list of "Wells Requiring Action." I make an inference here with regard to which I cannot supply a metric and to which I think the KCC cannot supply a metric: a percentage of these 6,046 wells "not requiring action" actually require action. I make this inference because I believe that abandoned well coordinators do, at times, "spot plug" abandoned wells. I mean by this that the coordinator will cement the bottom 20 ft. of a string, the top 20 ft. of a string, and the remaining string between the cemented portions remains hollow or filled with water or debris. Affidavits from coordinators, field notes, and a statistically accurate sampling methodology of the 6,046 wells might disabuse me of such inference. If "spot plugged" does characterize a portion of these 6,046 wells then such wells are a risk to fresh and usable waters by virtue cathodic processes, increased pore pressure in surrounding geologic strata due to pressurized EOR activities, and simple oxidation-reduction processes. Of 21,922 wells in the 2019 Annual Report, 19,325 of these wells are reported to be in District 3, the district in which I live, my wife and I have a modest financial investment ($1.3-1.4 million, in two counties), and where our children and grandchildren visit. In the section in which the Superior lease is located, the 2019 Annual Report indicates 5 Priority 1, Level B wells, which are a groundwater risk, requiring action. In Miami county, section 3, township 16S, range 21E, the section contiguous with the Franklin county section 10, township 16S, range 21 E, and immediately to the east, one finds 9 abandoned wells, all groundwater threats, all Priority 1, Level C wells. Here is KCC's definition of Priority 1, Level C, groundwater-listed wells: "Wells located outside designated sensitive groundwater areas which have potential impacts to groundwater supplies or loss of water resources through downward drainage." Here is KCC's definition of Priority 1, Level B, groundwater-risk wells: "Wells creating ongoing or potential impacts to groundwater supplies through water quality degradation or loss of water supplies through downward drainage. Wells may be located within a

designated sensitive groundwater area. Includes wells with impacts to groundwater supplies outside of public water supply areas and cases of strong potential for subsidence."

5. Q. The wells referenced in section 4 above are not in the Superior lease. Hence, what is your concern?

A. My concern is this: abandoned wells exist which are not on "the list," i.e., not in the KCC's 2019 Report. Here is an instance of such: If one looks at KGS records for well API # 15-059-26584 in the Jensen lease in Franklin county it is described as "producing." The last production noted at the KGS for this well is 2016. In Docket No. 17-CONS-3633-CPEN the KCC describes this well as "abandoned." This well does not appear on any abandoned well listed reported to the legislature. Further, in a formal complaint to the KCC, 19-CONS-3204-CMSC, received by the KCC on December 6th, 2018, Judith L. Wells states that "The January 2018 Abandoned Wells Report required by K.S.A. 55-194 did not include any of the 483 wells that Butler Petroleum abandoned." (Section 3) Also, I do not find these wells in the 9019 report to the legislature.

Here is further evidence of abandoned wells which fail to appear in the KCC's annual report to the legislature regarding. On January 9, 2018 I protested an application for injection permits for Blunk I-10 and I-11 wells in Franklin county. The docket in this protest is 18-CONS-3273-CUIC. On March 15, 2018 this docket was closed due the withdrawal by JTC, Inc., the applicant, of the request for permit. Today, March 11, 2019, on the KGS interactive map, the status of Blunk I-10 and Blunk I-11 is describe as "UIC application withdrawn." The wells appear on no report to the legislature as "abandoned." My conclusion is that the KCC is in violation of its fiduciary responsibilities to declare these wells as "abandoned" since they have been idle for a year. I see no evidence of a permit request by JCT for a temporary abandonment permit or for a permit to plug these wells. My evidence is that these wells are "de facto" abandoned but not so reported.

In addition, the Interstate Oil and Gas Compact Commission's 2008 "Orphaned Well Survey Data" revised 02/19/2010 (Attachment A) indicates undocumented/unidentified orphan wells at 20,000-40,000. KCC's 2019 Annual Report identifies 21,922 such wells which is in the range of the IOGCC's survey

data but in the bottom 10% of the range. If one were to pick the midpart of IOGCC's survey data, one discovers the number of undocumented and orphaned wells in Kansas to be 30,000, which is 36.8% higher than the KCC's 2019 Report indicates. I attempted to find the provenance of IOGCC's data by a phone call to the Commission's offices in Oklahoma. I did not get the answer. It's not unreasonable to think that the provenance of such data regarding Kansas' orphaned wells is the KCC since Kansas is a member state of the IOGCC and since the KCC is the state agency authorized by statute to monitor, regulate, inventory, and supervise plugging of such wells. If one examines the age of the leases and the spudding dates of the wells in the sections in which the wells for which permit is sought in these two dockets one can reasonably conclude that undocumented/unidentified orphan wells may exit in these sections.

6. Q: Are there other concerns regarding risk to fresh and usable water in the McCoy and Superior leases?

A: Yes. In the Superior lease, I examined the plugging report of well #1 in the Dorsey lease. This well was plugged by a KCC technician on or about January 8, 2007. No spud date exists for this well. The technician washed the 1" string to 15 ft. He then moved in a drill rig and drilled to 260 ft. There he says "hit steel." He then ran 1" pipe to 260 ft and pumped Portland cement to surface; he then pulled the 1" pipe and topped off the well. (See Attachment B) Here is my conclusion. Well #1 in the Dorsey lease had concrete pumped to 260 ft. in January of 2007. Below 260 ft. the condition of the well's stringer is unknown. I'll assume a 5" drilling bit drilled out the cement hit at 15' and drilled to 260 ft. Now, these questions: did the cement hit at 15' depth indicate that the well had already been plugged? No one knows. Using some elementary math one finds that a 5" diameter column at 260 ft is 35.6 cu. ft. Assuming one 80 lb. sack of Portland cement produces 0.6 cu. ft. of concrete, one can conclude that 59.3 sacks of Portland will fill the column. So, where did the remaining 102.7 sacks go? 162 sacks will fill a 5" dia. 710 ft. in length, assuming 1 sack yields 0.6 cu. ft. Can we safely assume 102.7 sacks filled the old stringer and then poured into the old producing zone? Probably not no one knows the condition of the steel found at 260 ft. If this steel were sufficiently oxidized then a 1,000 psi concrete pump may have ripped open the old stringer at any place and the concrete have just poured into a zone adjacent to the stringer. Or, at the 260 ft. depth the old stringer may

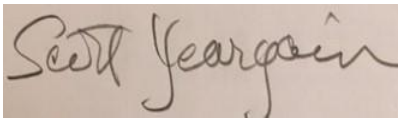
have been plugged and the 102.7 sacks of Portland simply was forced into the surrounding geologic strata. Know one knows. These are the unknows which characterize the "protection of fresh and usable water" under the current protocols in the Superior and McCoy lease. In the application for I-1 in Superior applicant indicates 200 ft. in the section "Deepest Usable Water." I conclude, based on the technician's description of the plugging experience with the Dorsey #1 well, that the old Dorsey #1 stringer may be within 60 vertical ft. of the deepest usable water. The Superior I-1 well lies 63 ft. east of the Dorsey #1 well and 219 ft. north of Dorsey #1. At 650 psig, the pressure for which applicant seeks permit, no one knows what will happen at the old Dorsey #1. Staff in the Conservation Division will make a guess. Here is a more interesting plugging report close to the Superior I-1 well. Lying 230.85 ft. to the south-south east of Superior I-1 is well 1-A in the Deitche lease. API is 15-059-01210-00-00. The plugging report was received by the KCC on July 20, 2009. The proposal was received from a Richard Hermann with C&R Well Service. The proposed action was "Fill well with cement from bottom to surface." Here is the actual plugging report: "Run 1-inch tubing into well and fill full with 10 sacks of Portland cement from 30 feet to surface. Top off well with cement and cut off casing below surface." I conclude that this well is plugged to 30 ft. below surface. This well includes no report regarding its original depth. The plugging apparently was not supervised by a KCC technician. I see no data to suggest that this well was originally a dry hole 30 ft. in depth. My conclusion is that no one knows what's below the 30 ft. concrete column into which C&R Well service placed 10 sacks of Portland cement. In this circumstance, a permit by TDR to pressure Superior I-1 at 650 psig for 500 bbls/day in perpetuity is an unacceptable risk to fresh and usable water, most especially the waters of Hickory Creek, a tributary of the Marais des Cygnes, and the intake pipe of RWD6 public water supply.

7. Q. Do you have concerns regarding the Mechanical Integrity Test required by the KCC?

A. Yes. KCC regulations mandate a MIT test of 300 psig. Applicant requests a pressure of 600 psig for the McCoy lease and a pressure of 650 psig in the Superior lease. I have never witnessed a scientific protocol in which the experimental conditions were outside the approved range of the testing protocol. Stated another way: here is are applications for permits for a procedure for

which no tests are conducted. No tests are conducted for the mechanical integrity of the pressurized string beyond 300 psig. This is bad science. Look, for instance at the State of Colorado Oil and Gas Conservation Commission Form 21. Item #4 in the protocols for the MIT test states: "New injection wells must be tested to maximum requested injection pressure." (Attachment C) Or look at Form H-5 of the Railroad Commission of Texas, Oil and Gas Division (Pressure Test Report). In the instructions section, #4 (c) one reads "The casing test pressure must be at least equal to the maximum authorized injection pressure or 500 psig, whichever is less, but no less than 200 psig." (Attachment D) I conclude that the KCC is not just out of conformity with good scientific practice, but the MIT protocol is much less rigorous than those of two other oil-producing states.

Respectfully submitted,



_____

Scott Yeargain
2263 Nevada Road
Ottawa, Kansas 66067
785-418-7615

CERTIFICATE OF SERVICE

I certify that a true copy of the above and foregoing was served to the following parties electronically on February 28th, 2019.

Jonathan R. Myers
j.myers@kcc.ks.gov

Lauren Wright
l.wright@kcc.ks.gov

Keith A. Brock
kbrock@andersonbyrd.com

Jake Eastes
j.eastes@kcc.ks.gov

Rene Stucky
r.stucky@kcc.ks.gov

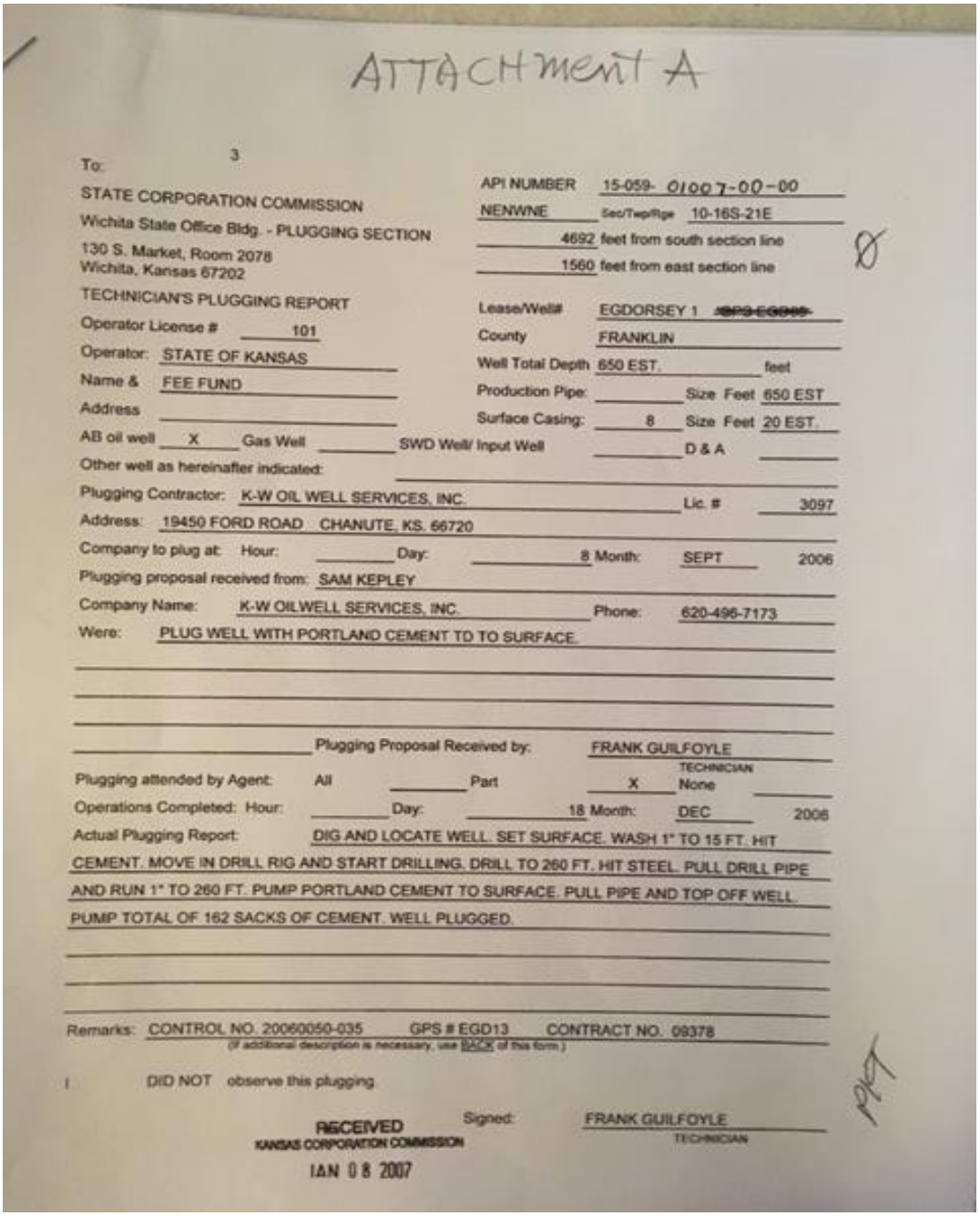
Paul Jewell
pauljewell@msn.com

Roxanne Mettenburg
citizenmett@gmail.com

Polly Shteamer
pshteamer@gmail.com

Lisa Jewell
edjewell59@hotmail.com

ATTACHMENT A



ATTACHMENT A

To: 3

STATE CORPORATION COMMISSION
Wichita State Office Bldg. - PLUGGING SECTION
130 S. Market, Room 2078
Wichita, Kansas 67202

TECHNICIAN'S PLUGGING REPORT

Operator License # 101
Operator: STATE OF KANSAS
Name & FEE FUND
Address

AB oil well X Gas Well ____ SWD Well/ Input Well ____ D & A ____
Other well as hereinafter indicated:

Plugging Contractor: K-W OIL WELL SERVICES, INC. Lic. # 3097
Address: 19450 FORD ROAD CHANUTE, KS. 66720
Company to plug at: Hour: ____ Day: 8 Month: SEPT 2006
Plugging proposal received from: SAM KEPLEY
Company Name: K-W OILWELL SERVICES, INC. Phone: 620-496-7173
Were: PLUG WELL WITH PORTLAND CEMENT TD TO SURFACE.

API NUMBER 15-059- 01007-00-00
NENWNE Sec/Twp/Rge 10-16S-21E
4692 feet from south section line
1560 feet from east section line

Lease/Well# EGDORSEY 1 ~~SPS EGD13~~
County FRANKLIN
Well Total Depth 650 EST. feet
Production Pipe: ____ Size Feet 650 EST
Surface Casing: 8 Size Feet 20 EST.

Plugging Proposal Received by: FRANK GUILFOYLE
Plugging attended by Agent: All ____ Part X TECHNICIAN None ____
Operations Completed: Hour: ____ Day: 18 Month: DEC 2006
Actual Plugging Report: DIG AND LOCATE WELL. SET SURFACE. WASH 1" TO 15 FT. HIT CEMENT. MOVE IN DRILL RIG AND START DRILLING. DRILL TO 260 FT. HIT STEEL. PULL DRILL PIPE AND RUN 1" TO 260 FT. PUMP PORTLAND CEMENT TO SURFACE. PULL PIPE AND TOP OFF WELL. PUMP TOTAL OF 162 SACKS OF CEMENT. WELL PLUGGED.

Remarks: CONTROL NO. 20060050-035 GPS # EGD13 CONTRACT NO. 09378
(If additional description is necessary, use BACK of this form.)

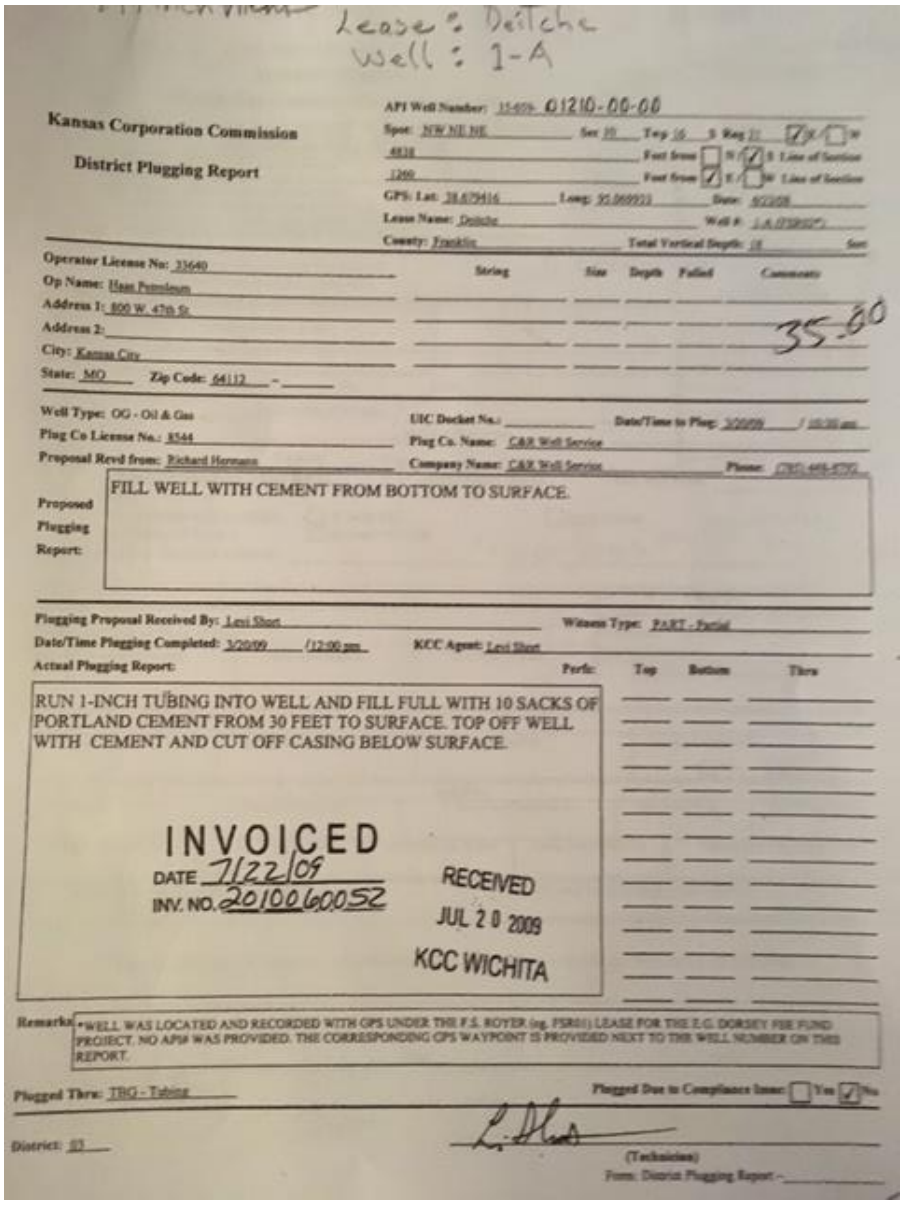
I DID NOT observe this plugging.

Signed: FRANK GUILFOYLE
TECHNICIAN

RECEIVED
KANSAS CORPORATION COMMISSION
JAN 08 2007

PAT

ATTACHMENT B



Lease: Deitche
Well: 1-A

Kansas Corporation Commission

District Plugging Report

API Well Number: 15-059-01210-00-00
Spot: NW NE NE Sec 10 Twp 16 S Rng 21 E W
4838 Feet from N / S Line of Section
1260 Feet from E / W Line of Section
GPS: Lat: 38.679416 Long: -95.069933 Date: 6/2/08
Lease Name: Deitche Well #: 1-A (7/09/07)
County: Franklin Total Vertical Depth: 18 Surf

Operator License No: 33640
Op Name: Haas Petroleum
Address 1: 800 W. 47th St
Address 2:
City: Kansas City
State: MO Zip Code: 64112 -

String	Size	Depth	Pulled	Comments

35.00

Well Type: OG - Oil & Gas
Plug Co License No.: 8544
Proposal Revd from: Richard Hormann

UIC Docket No.:
Plug Co. Name: C&R Well Service
Company Name: C&R Well Service
Date/Time to Plug: 3/20/09 / 10:30 am
Phone: (785) 448-6705

Proposed Plugging Report:
FILL WELL WITH CEMENT FROM BOTTOM TO SURFACE.

Plugging Proposal Received By: Levi Short
Witness Type: PART - Partial
Date/Time Plugging Completed: 3/20/09 / 12:00 pm
KCC Agent: Levi Short

Actual Plugging Report:
RUN 1-INCH TUBING INTO WELL AND FILL FULL WITH 10 SACKS OF PORTLAND CEMENT FROM 30 FEET TO SURFACE. TOP OFF WELL WITH CEMENT AND CUT OFF CASING BELOW SURFACE.

INVOICED
DATE 7/22/09
INV. NO. 2010060052

RECEIVED
JUL 20 2009
KCC WICHITA

Perfs:	Top	Bottom	Thru

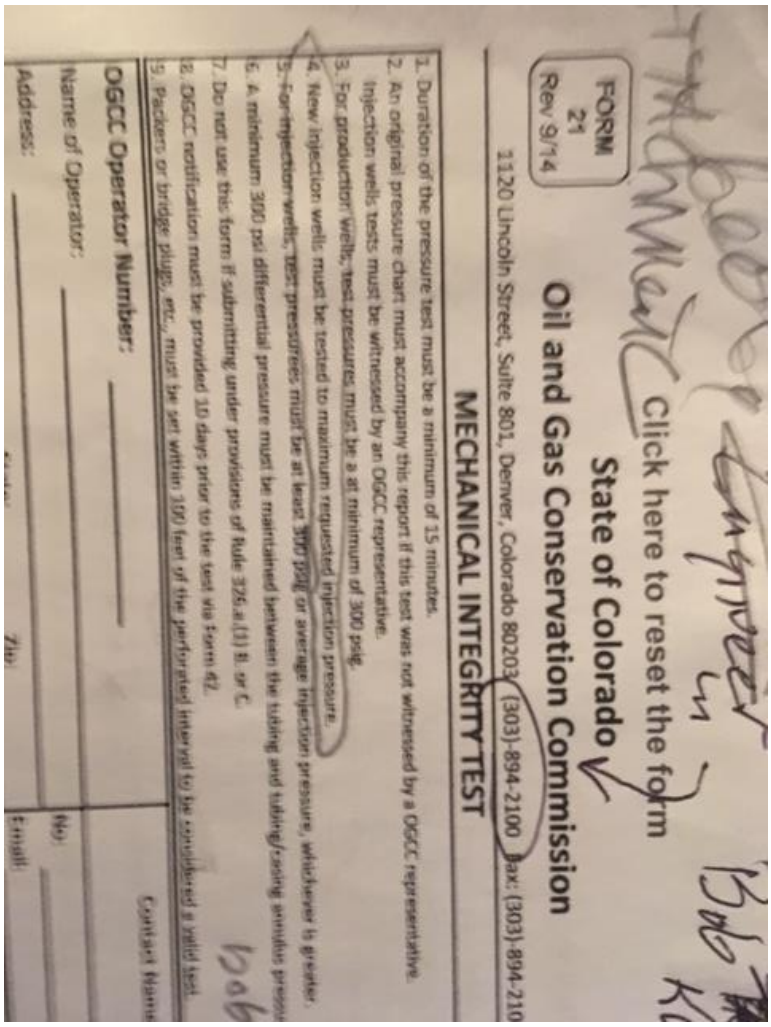
Remarks: WELL WAS LOCATED AND RECORDED WITH GPS UNDER THE F.S. ROYER (eg. FSR01) LEASE FOR THE E.G. DORSEY FEE FUND PROJECT. NO API# WAS PROVIDED. THE CORRESPONDING GPS WAYPOINT IS PROVIDED NEXT TO THE WELL NUMBER ON THIS REPORT.

Plugged Thru: TBG - Tubing
Plugged Due to Compliance Issue: Yes / No

District: 03

(Technician)
Form: District Plugging Report -

ATTACHMENT C



FORM 21 Rev 9/14

Click here to reset the form

State of Colorado

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)-894-2100 Fax: (303)-894-210

MECHANICAL INTEGRITY TEST

1. Duration of the pressure test must be a minimum of 15 minutes.
2. An original pressure chart must accompany this report if this test was not witnessed by a OGCC representative. Injection wells tests must be witnessed by an OGCC representative.
3. For production wells, test pressures must be a at minimum of 300 psig.
4. New injection wells must be tested to maximum requested injection pressure.
5. For injection wells, test pressures must be at least 300 psig or average injection pressure, whichever is greater.
6. A minimum 300 psi differential pressure must be maintained between the tubing and tubing/casing annulus pressu
7. Do not use this form if submitting under provisions of Rule 326.a.(1).B. or C.
8. OGCC notification must be provided 10 days prior to the test via Form 42.
9. Packers or bridge plugs, etc., must be set within 100 feet of the perforated interval to be considered a valid test.

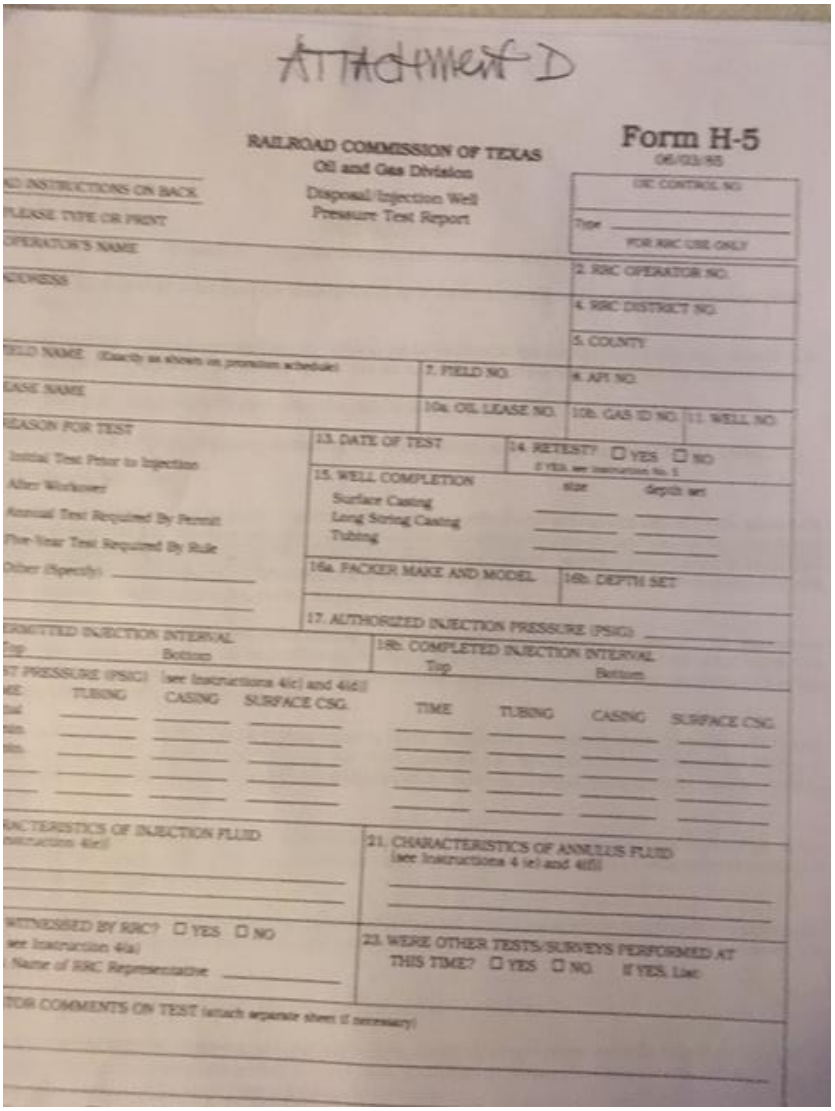
OGCC Operator Number: _____ Contact Name

Name of Operator: _____ Phone: _____

Address: _____ Email: _____

City: _____ State: _____ Zip: _____

ATTACHMENT D



ATTACHMENT D

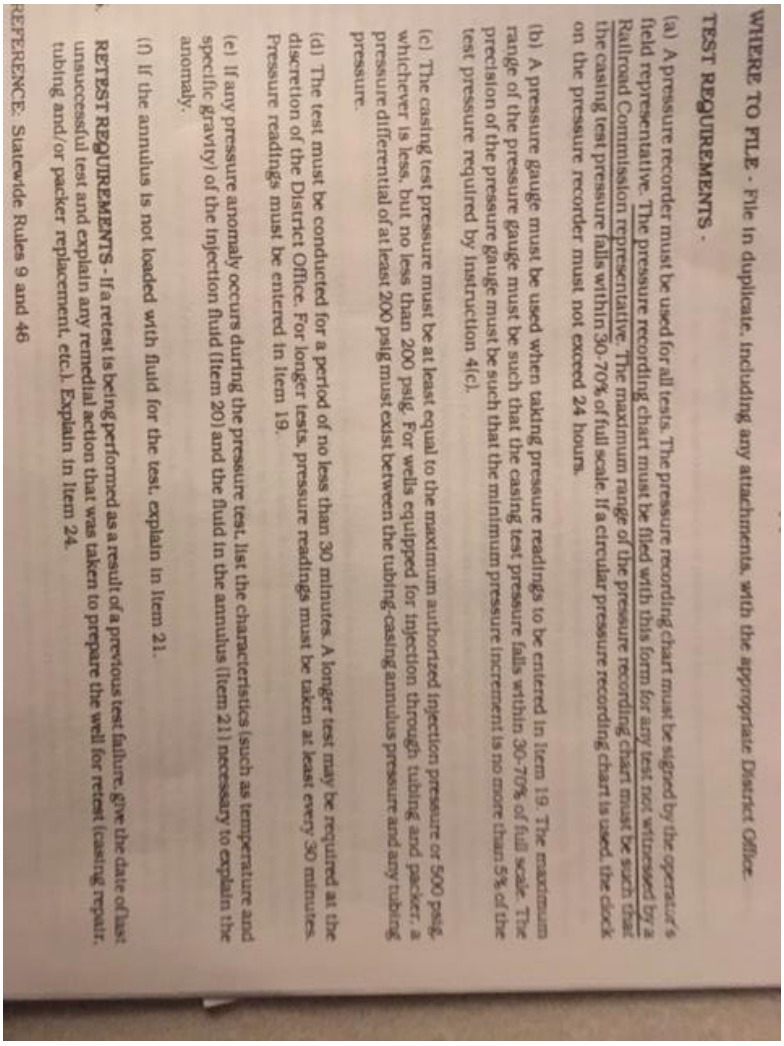
RAILROAD COMMISSION OF TEXAS
Oil and Gas Division
Disposal/Injection Well
Pressure Test Report

Form H-5
06/03/95

SEE INSTRUCTIONS ON BACK.
PLEASE TYPE OR PRINT
Type
FOR RRC USE ONLY
UIC CONTROL NO.

OPERATOR'S NAME
2. RRC OPERATOR NO.
ADDRESS
4. RRC DISTRICT NO.
5. COUNTY
FIELD NAME (Exactly as shown on proration schedule)
7. FIELD NO.
6. API NO.
LEASE NAME
10a. OIL LEASE NO.
10b. GAS ID NO.
11. WELL NO.
REASON FOR TEST
Initial Test Prior to Injection
After Workover
Annual Test Required By Permit
Five-Year Test Required By Rule
Other (Specify)
13. DATE OF TEST
14. RETEST? YES NO
If YES, see instruction No. 5
15. WELL COMPLETION
size
depth set
Surface Casing
Long String Casing
Tubing
16a. PACKER MAKE AND MODEL
16b. DEPTH SET
17. AUTHORIZED INJECTION PRESSURE (PSIG)
PERMITTED INJECTION INTERVAL
Top
Bottom
18b. COMPLETED INJECTION INTERVAL
Top
Bottom
ST PRESSURE (PSIG) (see instructions 4(c) and 4(d))
TIME
TUBING
CASING
SURFACE CSG.
TIME
TUBING
CASING
SURFACE CSG.
ACTERISTICS OF INJECTION FLUID
21. CHARACTERISTICS OF ANNULUS FLUID
(see instructions 4 (c) and 4(f))
WITNESSED BY RRC? YES NO
see instruction 4(a))
Name of RRC Representative
23. WERE OTHER TESTS/SURVEYS PERFORMED AT THIS TIME? YES NO
If YES, List:
OR COMMENTS ON TEST (attach separate sheet if necessary)

ATTACHMENT D-1



WHERE TO FILE - File in duplicate, including any attachments, with the appropriate District Office.

TEST REQUIREMENTS -

(a) A pressure recorder must be used for all tests. The pressure recording chart must be signed by the operator's field representative. The pressure recording chart must be filed with this form for any test not witnessed by a Railroad Commission representative. The maximum range of the pressure recording chart must be such that the casing test pressure falls within 30-70% of full scale. If a circular pressure recording chart is used, the clock on the pressure recorder must not exceed 24 hours.

(b) A pressure gauge must be used when taking pressure readings to be entered in Item 19. The maximum range of the pressure gauge must be such that the casing test pressure falls within 30-70% of full scale. The precision of the pressure gauge must be such that the minimum pressure increment is no more than 5% of the test pressure required by Instruction 4(c).

(c) The casing test pressure must be at least equal to the maximum authorized injection pressure or 500 psig, whichever is less, but no less than 200 psig. For wells equipped for injection through tubing and packer, a pressure differential of at least 200 psig must exist between the tubing-casing annulus pressure and any tubing pressure.

(d) The test must be conducted for a period of no less than 30 minutes. A longer test may be required at the discretion of the District Office. For longer tests, pressure readings must be taken at least every 30 minutes. Pressure readings must be entered in Item 19.

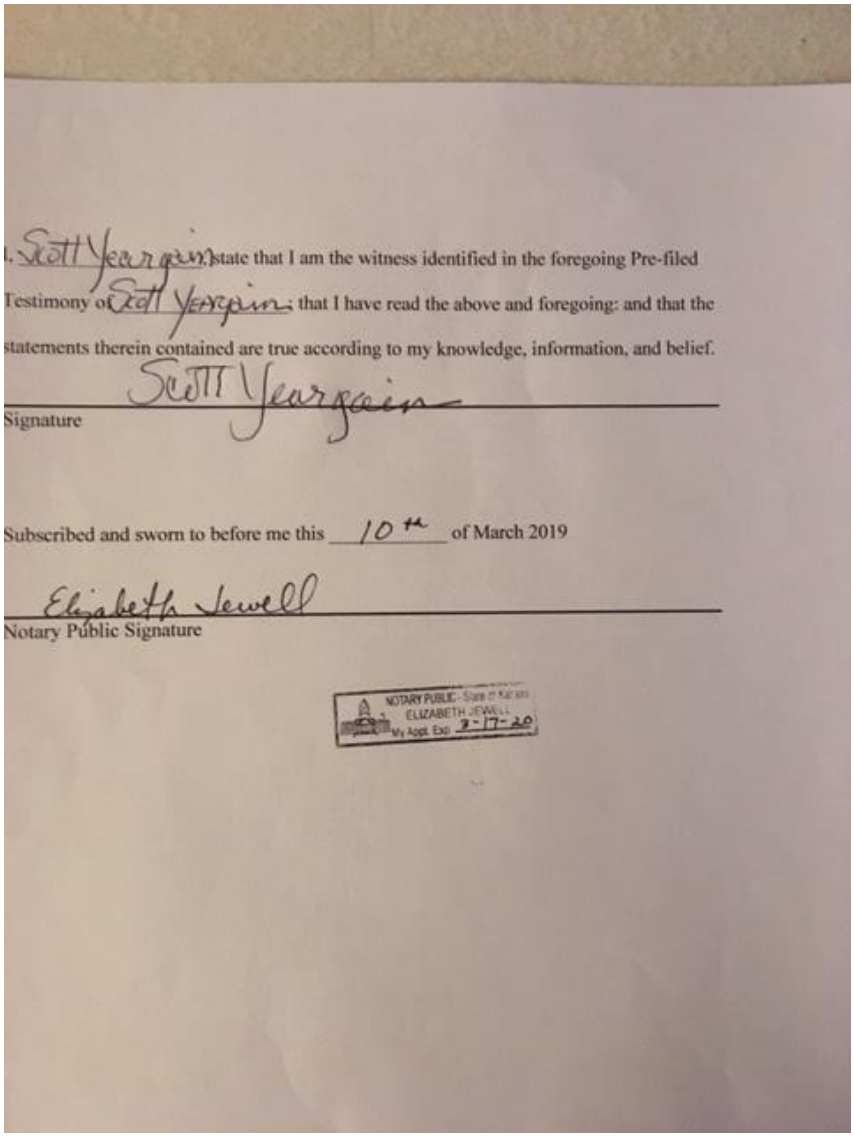
(e) If any pressure anomaly occurs during the pressure test, list the characteristics (such as temperature and specific gravity) of the injection fluid (Item 20) and the fluid in the annulus (Item 21) necessary to explain the anomaly.

(f) If the annulus is not loaded with fluid for the test, explain in Item 21.

RETEST REQUIREMENTS - If a retest is being performed as a result of a previous test failure, give the date of last unsuccessful test and explain any remedial action that was taken to prepare the well for retest (casing repair, tubing and/or packer replacement, etc.). Explain in Item 24.

REFERENCE: Statewide Rules 9 and 46

VERIFICATION



I, Scott Yeargain, state that I am the witness identified in the foregoing Pre-filed Testimony of Scott Yeargain; that I have read the above and foregoing: and that the statements therein contained are true according to my knowledge, information, and belief.

Scott Yeargain
Signature

Subscribed and sworn to before me this 10th of March 2019

Elizabeth Jewell
Notary Public Signature

NOTARY PUBLIC - State of New Mexico
ELIZABETH JEWELL
My Appt. Exp. 2-17-20