

**THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS**

Before Commissioners:            Shari Feist Albrecht, Chair  
   Jay Scott Emler  
   Pat Apple

In the matter of the failure of Eickbush	)	Docket No. 15-CONS-072-CPEN
Production Co. LLC dba ECCO (“Operator”)	)	
to comply with K.A.R. 82-3-400 at the BDJT	)	CONSERVATION DIVISION
Unit #6, F Johnson Unit #7, Mini Johnson #1,	)	
Thomas #1W and Thomas #1-E wells in	)	License No. 5810
<u>McPherson County, Kansas.</u>	)	

**PRE-FILED TESTIMONY**

**OF TONY VAIL**

1 Q. What is your name and business address?  
2 A. Tony Vail, 266 N. Main, Suite 220, Wichita, Kansas 67202.  
3 Q. By whom are you employed and in what capacity?  
4 A. I'm employed by the Conservation Division of the Kansas Corporation Commission, as  
5 an Environmental Scientist in the Underground Injection Control ("UIC") Department.  
6 Q. How long have you been employed by the KCC?  
7 A. Since October 2008.  
8 Q. Have you previously testified before this Commission?  
9 A. Yes, several times.  
10 Q. What does your position with the Conservation Division involve?  
11 A. I review applications for injection well permits and applications to amend previously  
12 issued injection well permits.  
13 Q. Are you familiar with this KCC Docket, 15-CONS-072-CPEN?  
14 A. Yes.  
15 Q. In this docket, did Staff recommend a \$5,000 penalty against Eickbush Production  
16 ("Operator"), consisting of five violations at 5 separate wells, namely the BDJT Unit #6,  
17 F Johnson Unit #7, Mini Johnson #1, Thomas #1-W, and Thomas #1-E wells?  
18 A. Yes.  
19 Q. Is it your recommendation the penalty in this docket should be affirmed?  
20 A. Partially. After a review of the permit files regarding the subject wells, I believe the  
21 penalty should be reduced to \$3,000, for a total of three violations at the F Johnson Unit  
22 #7, BDJT Unit #6 and Thomas #1-E. Giving the Operator the benefit of the doubt, I  
23 believe the penalties regarding the other two wells should be rescinded.  
24 Q. Why did Staff recommend penalties regarding the five wells in this docket?  
25 A. Staff ran a query of its electronic databases to compare the authorized injection pressure  
26 and rate with the pressures and rates reported on the Annual Fluid Injection Reports  
27 ("U3C") for 2013 reporting period. In comparison with our electronic databases, the  
28 Operator reported significant over-injection at the five wells, so consequently Staff  
29 recommended a penalty. However, while our electronic databases are generally accurate,

1 in this case our official paper files raise enough issues that I suggest two of the over-  
2 injection penalties should be rescinded.

3 Q. Do you have a copy of the Operators' 2013 U3C reports for the five wells in question?

4 A. Yes. On the U3C forms, the Operator calls some of the wells by slightly different names,  
5 but they match the wells listed in the penalty recommendations. A copy of the 2013 U3C  
6 forms are attached as **Exhibit A**.

7 Q. What was the nature of the violation at the F Johnson Unit #7?

8 A. The F Johnson Unit #7 well is part of injection permit #E-19,156, which was granted by  
9 Commission Order in 1977 (see **Exhibit B**). The permit authorizes injection at a rate of  
10 450 barrels of fluid per day (bbls/day) and is noted as such at the top of page 2 of the  
11 Order. The same information, stating the maximum injection rate is 450 bbls/day, is also  
12 listed on various Mechanical Integrity Test ("MIT") forms (U-7's), signed by the  
13 Operator when District staff witnessed the Operator's MITs. **Exhibit C** contains copies  
14 of the MIT forms for the F Johnson Unit #7 from 1986, 1991, 1997, 2002, 2003, 2008,  
15 and 2013. All of them indicate the maximum authorized injection rate as 450 bbls/day,  
16 except the 2013 MIT, on which the information was left blank. Since the well is  
17 authorized for 450 bbls/day, a yearly calculation would come to 164,250 barrels of fluid  
18 per year. But the Operator reported on the 2013 U3C form for the F Johnson Unit #7 that  
19 it injected 637,939 barrels of fluid in 2013.

20 Q. What was the violation at the Mini Johnson #1?

21 A. After review, I feel this violation should be rescinded. The Mini Johnson #1 is authorized  
22 by injection permit #D-05,533, which was granted by a Commission Order in 1957  
23 (**Exhibit D**). The permit authorizes an injection rate of 250 bbls/day and is noted as such

1 at the bottom of page 1 of the Order. In 2003, Operator filed an amendment application  
2 seeking an injection rate of 300 bbls/day (**Exhibit E**), which was then approved, as  
3 indicated by **Exhibit F**. Since the maximum injection rate should be 300 bbls/day, not  
4 250 bbl/day, the Operator's reported yearly injection was not in violation.

5 Q. What were the violations at the BDJT Unit #6, Thomas #1-W, and Thomas #1-E?

6 A. These wells are on injection permit #E-19,021. The permit was granted by Commission  
7 Order in 1977 (**Exhibit G**) and authorizes injection at a rate of 300 bbls/day, as noted at  
8 the top of page 2 of the Order. **Exhibit H** contains copies of the MIT forms for the BDJT  
9 Unit #6 from 1991, 1997, 2002, and 2003. All of them note the maximum authorized  
10 injection rate as 300 bbls/day. The calculation for a yearly rate indicates a maximum  
11 allowable of 109,500 bbls/year. However, the Operator reported on its 2013 U3C form  
12 injection of 335,140 barrels of fluid. Consequently, I recommend the penalty regarding  
13 the BDJT Unit #6 should be affirmed.

14 In regards to the Thomas #1-W and Thomas #1-E, a file review performed by UIC  
15 Staff in 2003 indicated the Operator was injecting fluid into those wells without previous  
16 authorization. Attached as **Exhibit I** is a copy of a letter sent to the Operator in 2003  
17 explaining the process by which the Operator could get the wells authorized for injection  
18 purposes. Attached as **Exhibit J** is a letter from the Operator, in which the Operator  
19 indicates it has submitted the required information for injection authorization. Staff  
20 granted the Operator's application to get the wells authorized, as shown in my previous  
21 Exhibit F.

22 On the 2003 applications for the Thomas #1-W and Thomas #1-E, the Operator requested  
23 an injection rate of 600 bbls/day and 300 bbls/day, respectively (**Exhibit K**). However,

1 since the pilot well (BDJT Unit #6) was only authorized for 300 bbls/day, the Thomas  
2 #1-W and Thomas #1-E were amended into the project at only 300 bbls/day. The MIT  
3 forms from 2003, signed by Operator, also clearly show the wells were only allowed 300  
4 bbls/day (**Exhibit L**).

5 However, in reviewing the Operator's previous U3C forms for the Thomas #1-W, it  
6 appears the Operator genuinely believed the authorized rate for the Thomas #1 was 600  
7 bbls/day. Given the Operator's 2003 application, the apparent confusion seems  
8 reasonable. I recommend the penalty regarding the Thomas #1-W be rescinded, but the  
9 Operator should be ordered to bring the Thomas #1-W down to 300 bbls/day unless and  
10 until a higher injection rate is applied for and approved.

11 Finally, I recommend the penalty regarding the Thomas #1-E should just be affirmed.

12 Q. The Operator states in Paragraph 2 of its request for hearing that the orders and permits  
13 authorizing injection authority at the five wells erroneously limited injection volumes. Is  
14 Operator correct?

15 A. No.

16 Q. Does this conclude your testimony as of this date, December 1, 2014?

17 A. Yes.

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

**ANNUAL REPORT OF PRESSURE MONITORING,  
FLUID INJECTION AND ENHANCED RECOVERY**

COPY  
Form U3C  
August 2013  
Form must be Typed  
Form must be completed  
on a per well basis

Complete all blanks - add pages if needed. Copy to be retained for five (5) years after filing date.

OPERATOR: License # 5810  
Name: Eickbush Production Company dba ECCO  
Address 1: P.O. Box 1025  
Address 2: \_\_\_\_\_  
City: McPherson State: KS Zip: 67460 + \_\_\_\_\_  
Contact Person: Robert Eickbush  
Phone: ( 620 ) 241-6350  
Lease Name: BDJT  
Well Number: Dielman 6

Permit Number: (E) (D) - E - 19.021  
API No.: 15- 113-01906-00-00-02  
Reporting Period: 1-1-2013 thru 12-31-2013  
January 1, 20 13 to December 31, 20 13  
NE - NE - NE - SW Sec. 35 Twp. 19 S. R. 2 ☐ E ☒ W  
(or 0000) 2310 feet from ☐ N / ☒ S Line of Section  
2970 feet from ☒ E / ☐ W Line of Section  
Legal Description of Lease or Unit: NE, NE, NE, SW 35-19-2  
County: McPherson

If new operator, list previous operator: \_\_\_\_\_

**I. Injection Fluid:**

Type: ☐ Fresh Water ☐ Treated Brine ☐ Untreated Brine ☒ Water/Brine  
Source: ☒ Produced Water ☐ Other (Attach List)  
Quality: Total Dissolved Solids: \_\_\_\_\_ mg/l Specific Gravity: \_\_\_\_\_ Additives: \_\_\_\_\_  
(Attach water analysis, if available)

**II. Well Data:**

Type Completion: ☒ Tubing & packer, packer setting depth: 2867 feet; ☐ Packerless (tubing, but no packer); ☐ Tubingless  
Maximum Authorized Injection Pressure: 10 psi Injection Zone: \_\_\_\_\_  
Maximum Authorized Injection Rate: 300 barrels per day  
Total Number of Enhanced Recovery Injection Wells Covered by This Permit: 8 (Include TA's)

III. Month	Total Volume Injected		# Days of Injection	Maximum Injection Pressure	Average Pressure Tubing/Casing Annulus
	BBL	MCF			
January	<u>16,368</u>	<u>0</u>	<u>31</u>	<u>0</u>	
February	<u>14,784</u>	<u>0</u>	<u>28</u>	<u>0</u>	
March	<u>16,366</u>	<u>0</u>	<u>31</u>	<u>0</u>	
April	<u>15,840</u>	<u>0</u>	<u>30</u>	<u>0</u>	
May	<u>16,363</u>	<u>0</u>	<u>31</u>	<u>0</u>	
June	<u>15,838</u>	<u>0</u>	<u>30</u>	<u>0</u>	
July	<u>16,360</u>	<u>0</u>	<u>31</u>	<u>0</u>	
August	<u>16,355</u>	<u>0</u>	<u>31</u>	<u>0</u>	
September	<u>15,833</u>	<u>0</u>	<u>30</u>	<u>0</u>	
October	<u>16,365</u>	<u>0</u>	<u>31</u>	<u>0</u>	
November	<u>15,830</u>	<u>0</u>	<u>30</u>	<u>0</u>	
December	<u>16,359</u>	<u>0</u>	<u>31</u>	<u>0</u>	
TOTAL	<u>335,140</u>	<u>0</u>			

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Exhibit A  
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Copy

Form U3C

August 2013

Form must be Typed  
Form must be completed  
on a per well basis

**ANNUAL REPORT OF PRESSURE MONITORING,  
FLUID INJECTION AND ENHANCED RECOVERY**

Complete all blanks - add pages if needed. Copy to be retained for five (5) years after filing date.

OPERATOR: License # 5810  
Name: Eickbush Production Company dba ECCO  
Address 1: P.O. Box 1025  
Address 2: \_\_\_\_\_  
City: McPherson State: KS Zip: 67460 + \_\_\_\_\_  
Contact Person: Robert Eickbush  
Phone: ( 620 ) 241-6350  
Lease Name: BDJT  
Well Number: Johnson 7

Permit Number: (E) (D) - E-19.156  
API No.: 15- 113-02362  
Reporting Period: 1-1-2013 thru 12-31-2013  
January 1, 20 13 to December 31, 20 13  
SW SE NW NW Sec. 2 Twp. 20 S. R. 3 ☐ E ☒ W  
(or area) 1031 feet from ☒ N / ☐ S Line of Section  
1265 feet from ☐ E / ☒ W Line of Section  
Legal Description of Lease or Unit: SW, SE, NW, NW 2-20-3  
County: McPherson

If new operator, list previous operator: \_\_\_\_\_

**I. Injection Fluid:**

Type: ☐ Fresh Water ☐ Treated Brine ☐ Untreated Brine ☒ Water/Brine  
Source: ☒ Produced Water ☐ Other (Attach List)  
Quality: Total Dissolved Solids: \_\_\_\_\_ mg/l Specific Gravity: \_\_\_\_\_ Additives: \_\_\_\_\_  
(Attach water analysis, if available)

**II. Well Data:**

Type Completion: ☐ Tubing & packer, packer setting depth: \_\_\_\_\_ feet; ☒ Packerless (tubing, but no packer); ☐ Tubingless  
Maximum Authorized Injection Pressure: 10 psi Injection Zone: \_\_\_\_\_  
Maximum Authorized Injection Rate: 450 barrels per day  
Total Number of Enhanced Recovery Injection Wells Covered by This Permit: 2 (Include TA's)

III. Month	Total Volume Injected		# Days of Injection	Maximum Injection Pressure	Average Pressure Tubing/Casing Annulus
	BBL	MCF			
January	<u>53,182</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
February	<u>52,005</u>	<u>0</u>	<u>28</u>	<u>0</u>	<u>0</u>
March	<u>53,993</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
April	<u>53,414</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
May	<u>52,637</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
June	<u>53,411</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
July	<u>52,902</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
August	<u>52,745</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
September	<u>53,848</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
October	<u>52,970</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
November	<u>53,857</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
December	<u>52,975</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
<b>TOTAL</b>	<u>637,939</u>	<u>0</u>			

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OPERATOR: License # 5810  
Name: Eickbush Production Company dba ECCO  
Address 1: P.O. Box 1025  
Address 2: \_\_\_\_\_  
City: McPherson State: KS Zip: 67460 + \_\_\_\_\_  
Contact Person: Robert Eickbush  
Phone: ( 620 ) 241-6350  
Lease Name: BDJT  
Well Number: HMP Johnson 1

Permit Number: (E) (D) - E-19-021 105533  
API No.: 15- 113-01887  
Reporting Period: 1-1-2013 thru 12-31-2013  
January 1, 20 13 to December 31, 20 13  
SE - SE - NV - NW Sec. 3 Twp. 20 S. R. 2 ☐ E ☒ W  
(or or or)  
4465 feet from ☐ N / ☒ S Line of Section  
4228 feet from ☒ E / ☐ W Line of Section  
Legal Description of Lease or Unit: SE, SE, NW, NW 3-20-2  
County: McPherson

If new operator, list previous operator: \_\_\_\_\_

I. Injection Fluid:

Type: ☐ Fresh Water ☐ Treated Brine ☐ Untreated Brine ☒ Water/Brine  
Source: ☒ Produced Water ☐ Other (Attach List)  
Quality: Total Dissolved Solids: \_\_\_\_\_ mg/l Specific Gravity: \_\_\_\_\_ Additives: \_\_\_\_\_  
(Attach water analysis, if available)

II. Well Data:

Type Completion: ☐ Tubing & packer, packer setting depth: \_\_\_\_\_ feet; ☒ Packerless (tubing, but no packer); ☐ Tubingless  
Maximum Authorized Injection Pressure: 10 psi Injection Zone: \_\_\_\_\_  
Maximum Authorized Injection Rate: 300 barrels per day  
Total Number of Enhanced Recovery Injection Wells Covered by This Permit: 1 (Include TA's)

III. Month	Total Volume Injected		# Days of Injection	Maximum Injection Pressure	Average Pressure Tubing/Casing Annulus
	BBL	MCF			
January	<u>9,296</u>	<u>0</u>	<u>31</u>	<u>0</u>	
February	<u>8,398</u>	<u>0</u>	<u>28</u>	<u>0</u>	
March	<u>9,305</u>	<u>0</u>	<u>31</u>	<u>0</u>	
April	<u>8,991</u>	<u>0</u>	<u>30</u>	<u>0</u>	
May	<u>9,286</u>	<u>0</u>	<u>31</u>	<u>0</u>	
June	<u>9,005</u>	<u>0</u>	<u>30</u>	<u>0</u>	
July	<u>9,290</u>	<u>0</u>	<u>31</u>	<u>0</u>	
August	<u>9,283</u>	<u>0</u>	<u>31</u>	<u>0</u>	
September	<u>8,995</u>	<u>0</u>	<u>30</u>	<u>0</u>	
October	<u>9,260</u>	<u>0</u>	<u>31</u>	<u>0</u>	
November	<u>8,992</u>	<u>0</u>	<u>30</u>	<u>0</u>	
December	<u>9,259</u>	<u>0</u>	<u>31</u>	<u>0</u>	
TOTAL	<u>109,360</u>	<u>0</u>			

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OPERATOR: License # 5810  
Name: Eickbush Production Company dba ECCO  
Address 1: P.O. Box 1025  
Address 2: \_\_\_\_\_  
City: McPherson State: KS Zip: 67460 + \_\_\_\_\_  
Contact Person: Robert Eickbush  
Phone: ( 620 ) 241-6350  
Lease Name: BDJT  
Well Number: Thomas 1 W

Permit Number: (E) (D) - E-19,021  
API No.: 15- 113-01231  
Reporting Period: 1-1-2013 thru 12-31-2013  
January 1, 20 13 to December 31, 20 13  
SE - NE - NE - SW Sec. 26 Twp. 19 S. R. 2 ☐ E ☒ W  
(aaaa) 2230 feet from ☐ N / ☒ S Line of Section  
2110 feet from ☐ E / ☒ W Line of Section  
Legal Description of Lease or Unit: SE, NE, NE, NW 26-19-2  
County: McPherson

If new operator, list previous operator: \_\_\_\_\_

**I. Injection Fluid:**

Type: ☐ Fresh Water ☐ Treated Brine ☐ Untreated Brine ☒ Water/Brine  
Source: ☒ Produced Water ☐ Other (Attach List)  
Quality: Total Dissolved Solids: \_\_\_\_\_ mg/l Specific Gravity: \_\_\_\_\_ Additives: \_\_\_\_\_  
(Attach water analysis, if available)

**II. Well Data:**

Type Completion: ☐ Tubing & packer, packer setting depth: \_\_\_\_\_ feet; ☒ Packerless (tubing, but no packer); ☐ Tubingless  
Maximum Authorized Injection Pressure: VAC psi Injection Zone: \_\_\_\_\_  
Maximum Authorized Injection Rate: 600 barrels per day  
Total Number of Enhanced Recovery Injection Wells Covered by This Permit: 1 (Include TA's)

III.	Month	Total Volume Injected		# Days of Injection	Maximum Injection Pressure	Average Pressure Tubing/Casing Annulus
		BBL	MCF			
	January	<u>25,451</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
	February	<u>22,988</u>	<u>0</u>	<u>28</u>	<u>0</u>	<u>0</u>
	March	<u>25,449</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
	April	<u>24,630</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
	May	<u>25,445</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
	June	<u>24,626</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
	July	<u>25,448</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
	August	<u>25,439</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
	September	<u>24,622</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
	October	<u>25,444</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
	November	<u>24,625</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
	December	<u>25,441</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
	<b>TOTAL</b>	<u>299,608</u>	<u>0</u>			

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*Complete all blanks - add pages if needed. Copy to be retained for five (5) years after filing date.*

OPERATOR: License # 5810  
Name: Eickbush Production Company dba ECCO  
Address 1: P.O. Box 1025  
Address 2: \_\_\_\_\_  
City: McPherson State: KS Zip: 67460 + \_\_\_\_\_  
Contact Person: Robert Eickbush  
Phone: ( 620 ) 241-6350  
Lease Name: BDJT  
Well Number: Thomas 1 E

Permit Number: (E) (D) - E-19,021  
API No.: 15- 113-02355-0002  
Reporting Period: 1-1-2013 thru 12-31-2013  
January 1, 20 13 to December 31, 20 13  
N SW W NW Sec. 26 Twp. 19 S. R. 2 ☐ E ☒ W  
(or 1000) 1800 feet from ☐ N / ☒ S Line of Section  
2970 feet from ☒ E / ☐ W Line of Section  
Legal Description of Lease or Unit: N, SW, W, NW 26-19-2  
County: McPherson

If new operator, list previous operator: \_\_\_\_\_

**I. Injection Fluid:**

Type: ☐ Fresh Water ☐ Treated Brine ☐ Untreated Brine ☒ Water/Brine  
Source: ☒ Produced Water ☐ Other (Attach List)  
Quality: Total Dissolved Solids: \_\_\_\_\_ mg/l Specific Gravity: \_\_\_\_\_ Additives: \_\_\_\_\_  
(Attach water analysis, if available)

**II. Well Data:**

Type Completion: ☒ Tubing & packer, packer setting depth: 2855 feet; ☐ Packerless (tubing, but no packer); ☐ Tubingless  
Maximum Authorized Injection Pressure: 25 psi Injection Zone: \_\_\_\_\_  
Maximum Authorized Injection Rate: 300 barrels per day  
Total Number of Enhanced Recovery Injection Wells Covered by This Permit: 1 (Include TA's)

III. Month	Total Volume Injected		# Days of Injection	Maximum Injection Pressure	Average Pressure Tubing/Casing Annulus
	BBL	MCF			
January	<u>19,964</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
February	<u>18,032</u>	<u>0</u>	<u>28</u>	<u>0</u>	<u>0</u>
March	<u>19,960</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
April	<u>19,320</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
May	<u>19,957</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
June	<u>19,318</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
July	<u>19,963</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
August	<u>19,955</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
September	<u>19,315</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
October	<u>19,950</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
November	<u>19,316</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>0</u>
December	<u>19,959</u>	<u>0</u>	<u>31</u>	<u>0</u>	<u>0</u>
<b>TOTAL</b>	<u>235,009</u>	<u>0</u>			

**KCC WICHITA**

Print and Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

**JAN 23 2014**

Exhibit A  
Page 5 of 5

**RECEIVED**

BEFORE THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS

In the matter of the application of	)	DOCKET NO. CR-9775
ECCO for an order permitting the	)	
repressuring with salt water into	)	
their Well No. 7 which is on their	)	E-19,156
FJ7 UNIT, covering the NW/4 of Sec-	)	
tion 2, Township 20 South, Range 3	)	
West and SW/4 (less approximately 15	)	
acres) Section 35, Township 19 South,	)	CONSERVATION DIVISION
Range 3 West,	)	
in the	)	PERMITTING:
	)	
JOHNSON FIELD	)	
	)	
in	)	
	)	
McPHERSON COUNTY, KANSAS	)	REPRESSURING WITH SALT WATER

O R D E R

Now on this 25th day of October, 1977, the above-entitled matter comes before the Commission for further consideration and disposition. The Commission, having examined the application and recommendations thereon, and being advised of field conditions, finds:

THE COMMISSION FINDS: (1) That the production map shows the proposed repressuring well is located in the Johnson Field;

(2) That it is desired to repressure the Mississippian formation with open hole from a depth of approximately 2958 feet, to a bottom depth of approximately 3024 feet;

(3) That it is desired to repressure Well No. 7, located 1013 feet from the West line and 1031 feet from the North line of the NW/4 of Section 2, Township 20 South, Range 3 West, McPherson County, Kansas; and any well or wells on or that may be drilled on the Unit described in the caption of this order;

(4) That elevations in this area are shown on the statement attached to the application;

(5) That a complete log of the repressuring well is attached to the application;

(6) That complete casing information as required under Rule 82-2-501 is as follows:

<u>SIZE</u>	<u>LENGTH</u>	<u>SEAT DEPTH</u>	<u>CONDITION</u>	<u>CEMENTED OR MUDDIED</u>	<u>EST. FT. ENCASED IN CEMENT</u>	<u>SACKS CEMENT USED</u>
8 5/8"	233'	233'	Used	Cemented	233'	150
4 1/2"	2963'	2958'	New	Cemented	450'	150

Tubing and packer with packer set just above the injection zone.  
Annulus between tubing and casing filled with non-corrosive fluid.

(7) That fluid desired to be used for repressuring is salt water produced from the Mississippian formation and recycled water from any well or wells on or that may be drilled on the following described leases:

<u>LEASE OWNER</u>	<u>LEASE NAME</u>	<u>LEASE DESCRIPTION</u>
ECCO	F. Johnson	NW/4 Sec. 2-20S-3W
ECCO	F. Johnson	SW/4 Sec. 35-19S-3W (less approximately 15 acres)

ECCO

CR-9775

REPRESSURING WITH SALT WATER

estimated at 100 barrels per day minimum to 450 barrels per day maximum, to be introduced at gravity pressure at the well head; or, if necessary, under pump pressure ranging from 1 pound minimum pressure to 10 pounds maximum pressure;

(8) That a copy of this application, together with a copy of regulations on HEARINGS UPON OBJECTIONS OR COMPLAINTS, has been mailed or personally delivered to all operators of producing or drilling wells within one-half mile of the Unit to be repressured as listed below:

OPERATOR'S CORRECT NAME

MAILING ADDRESS

Homer G. Krehbiel

1343 North Maple  
McPherson, Kansas 67460

David Litan

403 South Brookside  
Wichita, Kansas 67218

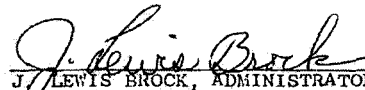
(9) That the application should be granted subject, however, to the following conditions: (a) Additional input wells should be completed in like manner as Well No. 7 described herein; (b) Before additional input wells on the described Unit are put into use, notice should be given to the Conservation Division of the Commission, and a recent plat of the Unit should be furnished showing the producing and input wells, together with complete casing information as required in paragraph (6) of the application herein as it pertains to the additional input wells; (c) That production should be subject to and limited by the applicable provisions of the Commission's monthly oil proration orders.

IT IS, THEREFORE, BY THE COMMISSION ORDERED: That ECCO be, and they are hereby permitted to repressure with salt water the Mississippian formation with open hole from a depth of approximately 2958 feet to a bottom depth of approximately 3024 feet into Well No. 7 described in paragraph (3); and into any well or wells on or that may be drilled on the Unit described in the caption of this order, provided however, that applicant complies with the terms and conditions set out in paragraph (9) hereof, salt water to be produced from the Mississippian formation, and recycled water from any well or wells on or that may be drilled on the Unit described in paragraph (7), estimated at 100 barrels per day minimum to 450 barrels per day maximum, to be introduced at gravity pressure at the well head; or, if necessary, under pump pressure ranging from 1 pound minimum pressure to 10 pounds maximum pressure, as provided for in the Rules and Regulations of the Commission.

IT IS FURTHER BY THE COMMISSION ORDERED: That if the recipient of the repressuring authority herein assigns, sells or transfers his interest in the lease or leases described in this order, the repressuring authority herein shall become null and void as of the date of assignment, sale or transfer, unless the Commission is otherwise notified.

THE COMMISSION HEREBY RETAINS JURISDICTION OF THE SUBJECT MATTER hereof and the parties hereto for the purpose of issuing from time to time such further orders, amendments, rules and regulations as may be necessary in connection with the above-entitled matter if not specifically provided for in the Rules and Regulations of the Commission applying to Repressuring and Waterflooding.

APPROVAL RECOMMENDED:

  
J. LEWIS BROCK, ADMINISTRATOR

DATE MAILED 10-25-77

ATTESTED

COPY 

## CASING MECHANICAL INTEGRITY TEST

DOCKET # E-19,156

Disposal ☐ Enhanced Recovery: SE NWNW 1/4, Sec 2, T 20 S, R 3 E/WRepressuring ☒ XXFlood ☐Tertiary ☐

4249'

Feet from South Section Line

4267'

Feet from East Section Line

Date injection started 12-28-77Lease Fred JohnsonWell # 7API #15 —County McPhersonOperator: ECCOOperator License # 5810Name & Box 1025Address McPherson, Kansas 67460 Contact Person Robert EickbushPhone 316-241-6350Max. Auth. Injection Press. 10 psi; Max. Inj. Rate 450 bbl/d;If Dual Completion - Injection above production — Injection below production —

	Conductor	Surface	Production	Liner	Tubing
Size		8 5/8"	4 1/2"		Size 2"
Set at		233'	2958'		Set at 2981'
Cement Top		0'	2508'		Type FIBERGLASS
" Bottom		233'	2958'		
DV/Perf.			TD (and plug back)		ft. depth
Packer type	None		Size		Set at
Zone of injection	2958'	ft. to ft. 3024'			or open hole open hole

Type Mit: Pressure ☒ XXX Radioactive Tracer Survey ☐ Temperature Survey ☐F Time: Start 10 Min. 20 Min. 30 Min.

I 12:18 PM	E Pressures: <u>200</u>	<u>200</u>	<u>200</u>	Set up 1	System Pres. during test <u>29</u>
L <u>200</u>				Set up 2	Annular Pres. during test <u>X</u>
D				Set up 3	Fluid loss during test <u>X</u> bbls.

T Tested: Casing ☐ or Casing - Tubing Annulus ☒ XXA The bottom of the tested zone is shut in with open holeTest Date 11-12-86 Using Schulz Welding Service Company's EquipmentThe operator hereby certifies that the zone between 0' feet and 3024' feetwas the zone tested Robert D. Eickbush Partner

Signature

Title

The results were Satisfactory ☒ X, Marginal ☐, Not Satisfactory ☐State Agent Merlan Unruh Title Dir Witness: Yes ☒ X No ☐REMARKS: RECEIVED

STATE CONSERVATION COMMISSION

☒ Origin. Conservation Div.; ☐ KDHE/T; ☐ Dist. Office;☐ Computer Update

NOV 18 1986

KCC Form U-7 6/84

## CASING MECHANICAL INTEGRITY TEST

DOCKET # E-19156Disposal ☐ Enhanced Recovery: ☐Repressuring ☒Flood ☐Tertiary ☐Date injection started 12-28-77

API #15 - -

NW, Sec 2, T 20S, R 3 E/W4249' Feet from South Section Line4267' Feet from East Section LineLease Fred Johnson Well # 7County DelphOperator: E.C.C.O.Name & Address Bl 1025Address Mph. KS. 67460Operator License # 5810Contact Person Robt. EickbushPhone 316-241-6350Max. Auth. Injection Press. 6 psi; Max. Inj. Rate 450 bbl/d;

If Dual Completion - Injection above production Injection below production

	Conductor	Surface	Production	Liner	Size	Tubing
Size		<u>8 7/8</u>	<u>4 1/2</u>			<u>2 3/8</u>
Set at		<u>233</u>	<u>2458</u>			<u>2981</u>
Cement Top		<u>0</u>	<u>2508</u>			Type <u>fringed</u>
" Bottom		<u>223</u>	<u>2458</u>			
DV/Perf.						
Packer type						
Zone of injection						

TD (and plug back)

ft. depth

Size Set at

Perf. or open hole

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐

F Time: Start Min. Min. Min.

I Pressures: monitoring system Set up 1 System Pres. during test 29"L Set up 2 Annular Pres. during test 60"D Set up 3 Fluid loss during test 0 bbls.A Tested: Casing ☐ or Casing - Tubing Annulus ☒The bottom of the tested zone is shut in with fluidTest Date 12/29/91 Using Schulz-Waltinger Company's EquipmentThe operator hereby certifies that the zone between 2900' feet and 2900' feetwas the zone tested Robert D. Eickbush Partner

Signature

Title

The results were Satisfactory ☒, Marginal ☐, Not Satisfactory ☐State Agent Ralph Tiller Title DIST. Witness: Yes ☒ No ☐REMARKS: annulus filled w/ diesel & cement☐ Origin. Conservation Div.; ☐ KDHE/T; ☐ Dist. Office;☐ Computer Update

DEC 30 1991

RCC Form U-7 6/84

# CASING MECHANICAL INTEGRITY TEST

DOCKET # E-19,156

Disposal ☐ Enhanced Recovery:

Repressuring ☒  
Flood ☐  
Tertiary ☐

Date injection started 12-28-77  
API #15 =       

SE NW NW, Sec 2, T 20S, R 3 W

4249' Feet from South Section Line  
4867' Feet from East Section Line

Lease Fred Johnson Well # 7  
County McPherson

Operator: ECCO  
Name &  
Address 306 N. Main

Operator License # 5810

Contact Person Richard Koch

P.O. Box 1025  
McPherson, KS 67460 Phone 316-241-6350

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KANSAS CORPORATION COMMISSION

JAN 07 1997

Max. Auth. Injection Press. VAC psi; Max. Inj. Rate 450 bbl/d;  
If Dual Completion - Injection above production        Injection below production       

	Conductor	Surface	Production	Liner	Size	Tubing
Size		<u>8 5/8"</u>	<u>4 1/2"</u>			<u>2 3/8"</u>
Set at		<u>293'</u>	<u>2958'</u>			<u>2981'</u>
Cement Top		<u>0'</u>	<u>2508'</u>			Type <u>fiberglass</u>
" Bottom		<u>233'</u>	<u>2958'</u>			
DV/Perf.						
Packer type	<u>Fluid</u>					
Zone of injection	<u>Mississippi</u>					

TD (and plug back) 3024' ft. depth  
Size        Set at         
Perf. or open hole Open hole

Type Mit: Pressure ☐ Radioactive Tracer Survey ☐ Temperature Survey ☐

F Time: Start 09:30 09:45 10:00  
I 10:00 Min. 10:15 Min. 10:30 Min.

E Pressures: Monitoring System Set up 1 | System Pres. during test VAC  
L Working 60 60 60 Set up 2 | Annular Pres. during test 60#  
D Shut in 60 60 60 Set up 3 | Fluid loss during test 0 bbls.

A Tested: Casing ☐ or Casing - Tubing Annulus ☐

The bottom of the tested zone is shut in with fluid packer

Test Date 1-6-97 Using Company tools Company's Equipment

The operator hereby certifies that the zone between 0' feet and 2950' feet

was the zone tested x Richard Koch x pumper  
Signature Title

The results were Satisfactory X, Marginal       , Not Satisfactory       

State Agent Michael R. Wilson Title PIRT II Witness: Yes X No       

REMARKS: Annulus filled with diesel fluid casing head gas

☐ Origin. Conservation Div.; ☐ KDHE/T; ☐ Dist. Office;

☐ Computer Update

KCC Form U-7 6/8'

## CASING MECHANICAL INTEGRITY TEST

DOCKET # E-19,156Disposal ☒ Enhanced Recovery:Repressuring ☐Flood ☐Tertiary ☐

Date injection started \_\_\_\_\_

API #15 - -

Sec 2, T 20 S, R 3 E/W4249

Feet from South Section Line

4267

Feet from East Section Line

Lease Fal JohnsonWell # 7County McPhOperator: ECCOOperator License # 5810

Name &amp;

Address PO-1025Contact Person Robert EubankRECEIVED  
KANSAS CORPORATION COMMISSIONMcPh. KS. 67460Phone 620-241-6350

FEB 22 2002

Max. Auth. Injection Press. 140 psi; Max. Inj. Rate 450 bbl/d;

If Dual Completion - Injection above production \_\_\_\_\_

Injection below production \_\_\_\_\_

CONSERVATION DIVISION  
WICHITA, KS

	Conductor	Surface	Production	Liner		Size
Size		<u>8 1/2</u>	<u>4 1/2</u>			<u>2 1/2</u>
Set at		<u>223</u>	<u>2958</u>			<u>2981</u>
Cement Top		<u>0</u>	<u>2508</u>			Type <u>phosphate</u>
" Bottom		<u>233</u>	<u>2958</u>			
DV/Perf.			TD (and plug back)	<u>3024</u>		ft. depth
Packer type			Size	Set at		
Zone of injection	<u>2958</u>	ft. to ft.	<u>3024</u>	Perf. or open hole	<u>20W</u>	

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐F Time: Start 11 Min. 20 Min. 30 Min.

	Pressures:	Set up 1	Set up 2	Set up 3	
I	<u>monitoring system</u>	System Pres. during test	<u>23'</u>		
E		Annular Pres. during test	<u>25'</u>		
L		Fluid loss during test	<u>X</u>	bbls.	

D Tested: Casing ☐ or Casing - Tubing Annulus ☒The bottom of the tested zone is shut in with fluidTest Date 2/13/02 Using ECCO Company's EquipmentThe operator hereby certifies that the zone between 0 feet and 2850 feetwas the zone tested, Richard Hoover Signature x Pumper TitleThe results were Satisfactory ☒, Marginal ☐, Not Satisfactory ☐State Agent Richard J. Tate Title Dir Witness: Yes ☒ No ☐REMARKS: Hydro Carbon in annulus
☐ Origin. Conservation Div.; ☐ KRE/T; ☐ Dist. Office;  
☐ Computer Update

KCC Form U-7 6/8



DOCKET : E-19,156

## CASING MECHANICAL INTEGRITY TEST

KANSAS COMMISSION Enhanced Recovery:

FEB 14 2003

Repressuring	<input checked="" type="checkbox"/>
Flood	<input type="checkbox"/>
Tertiary	<input type="checkbox"/>

CONSERVATION Commission started 12-28-77  
 NIGHT 155 —

SE NW NW, Sec 2, T 20 S, R 3 E (W)

4249' Feet from South Section Line  
4267' Feet from East Section Line

Lease Fred Johnson Well # 7  
County McPherson

Operator: Eichbaum Production Co. Operator License #: 5810

Name & Abu EACO

Address P.O. Box 1027

Contact Person Richard Koch

McPherson, KS 67460-1025 Phone 620-241-6350

Max. Auth. Injection Press. VAC psi; Max. Inj. Rate 450 bbl/d;

If Dual Completion - Injection above production \_\_\_\_\_ injection below production \_\_\_\_\_

Conductor		Surface	Production	Liner	Tubing	
Size		8 5/8"	4 1/2"		Size	2 3/8"
Set at		233'	2958'		Set at	2981'
Cement Top		0'	2508'		Type	Fiberglass
" Bottom		233'	2958'			
RV/Perf.			TD (and plug back)		3024'	ft. depth

Packer type FD dual Size 2 7/8" Set at 3020'  
Zone of injection marginates ft. to ft. 2958' to 3020' Perf. or open hole open hole

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐

F Time: Start  $\frac{08:10}{04:05}$  Min.  $\frac{08:40}{04:15}$  Min.  $\frac{09:05}{04:25}$  Min.

I E <sup>in Use</sup> Pressures: 32 32 32 Set up 1 | System Pres. during test 28" to 28.5"

L  
D Not in use 32 32 32 Set up 2 Annular Pres. during test 32<sup>nd</sup>

D				Set up 3	Fluid loss during test 0 bbls.
---	--	--	--	----------	--------------------------------

A  
T Tested: Casing ☐ or Casing - Tubing Annulus ☒

The bottom of the tested zone is shut in with 1 1/2 inch packer

Test Date 2-5-03 Using Company Tools Company's Equipment

The operator hereby certifies that the zone between 0 feet and 2981' feet

was the zone tested X Richard Koch X Richard Koch  
Signature Title

The results were Satisfactory X, Marginal       , Not Satisfactory       

State Agent Michael R Wilson Title PIRT II Witness: Yes ☒ No ☐

REMARKS: Ammonia filled with diesel fuel & rising head gas.

☐ Origin. Conservation Div.; ☐ KDHE/T; ☐ Dist. Office;

☐ Computer Update

SAINT MRW

KCC Form U-7 6/87

Exhibit C  
Page 5 of 7

**CASING MECHANICAL INTEGRITY TEST**

Disposal ☐ Enhanced Recovery: ☐

Repressuring ☒  
 Flood ☐  
 Tertiary ☐

Date injection started 12/28/77  
 API #15       

38.34489  
 -97.62648

DOCKET # E-19,156

SE NW NW, Sec 2, T 20S, R 3 E (W)

4249' Feet from South Section Line  
4267' Feet from East Section Line

Lease Fred Johnson Well # 7  
 County Mcpherson

Operator: Eichlebach Prod Co  
 Name & DBA EULL  
 Address Box 10205

Operator License # 5810  
 Contact Person Robert Shultis

Mcpherson, Ks 67460 Phone       

Max. Auth. Injection Press. 1025 psi; Max. Inj. Rate 450 bbl/d;  
 If Dual Completion - Injection above production        Injection below production       

Conductor	Surface	Production	Liner	Tubing
Size <u>      </u>	<u>8 5/8</u>	<u>4 1/2</u>	<u>      </u>	Size <u>2 3/8</u>
Set at <u>      </u>	<u>233'</u>	<u>2958</u>	<u>      </u>	Set at <u>2781</u>
Cement Top <u>      </u>	<u>0</u>	<u>2508</u>	<u>      </u>	Type <u>Liberty</u>
" Bottom <u>      </u>	<u>233'</u>	<u>2958</u>	<u>      </u>	
UV/Perf. <u>      </u>		TD (and plug back) <u>3024</u>		ft. depth
Packer type <u>Fluid</u>		Size <u>      </u>		Set at <u>      </u>
Zone of injection <u>Mississippi</u>	ft. to ft. <u>      </u>			Perf. or open hole <u>Open Hole</u>

Type Mit: Pressure ☐ Radioactive Tracer Survey ☐ Temperature Survey ☐

F Time: Start 9:30 Min. 9:45 Min. 10:00 Min. 10:45 Min. Monitoring system

I Pressures:        Set up 1 System Pres. during test 28" Vac

L Not In Use 34" 34" 34" Set up 2 Annular Pres. 34"

D In Use 34" 34" 34" Set up 3 Fluid loss during test 0 bbls.

A Tested: Casing ☐ or Casing - Tubing Annulus ☒

A

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 KANSAS CORPORATION COMMISSION  
 MAY 15 2008  
 CONSERVATION DIVISION  
 WICHITA, KS

The bottom of the tested zone is shut in with Fluid Packer

Test Date 5/2/08 Using Company Tools Company's Equipment       

The operator hereby certifies that the zone between 0 feet and 2981 feet  
 was the zone tested Robert Shultis  
 Signature Title

The results were Satisfactory ☒, Marginal ☐, Not Satisfactory ☐

State Agent Greg Eves Title Pist II Witness: Yes ☒ No ☐

REMARKS: Annulus full of diesel & casing head gas

☐ Origin. Conservation Div.; ☐ KDRE/T; ☐ Dist. Office; AS AMP  
☐ Computer Update

**CASING MECHANICAL INTEGRITY TEST**

Disposal ☒ Enhanced Recovery:

Repressuring ☐  
 Flood ☐  
 Tertiary ☐

Date injection started \_\_\_\_\_  
 API #15 - 113 - 02362-00-00

DOCKET # E-19.156

SE NW NW, Sec 2, T 20 S, R 3 E 10

4247' Feet from South Section Line  
4267' Feet from East Section Line

Lease Johnson Well # 7  
 County McPherson

RECEIVED  
 KANSAS CORPORATION COMMISSION

MAY 01 2013

CONSERVATION DIVISION  
 WICHITA, KS

Operator: FWD Prod Co.  
 Name &  
 Address Box 10205

Operator License # 5810

Contact Person Robert

McPherson KS 67460

Phone 620-242-4055

Max. Auth. Injection Press. \_\_\_\_\_ psi; Max. Inj. Rate \_\_\_\_\_ bbl/d;  
 If Dual Completion - Injection above production \_\_\_\_\_ Injection below production \_\_\_\_\_

Conductor	Surface	Production	Liner	Size	Tubing
Size	<u>8 5/8</u>	<u>4 1/2</u>		Size	<u>2 3/8</u>
Set at	<u>233'</u>	<u>2958</u>		Set at	<u>2781</u>
Cement Top	<u>0</u>	<u>2508</u>		Type	<u>Elastic</u>
" Bottom	<u>233'</u>	<u>2958</u>			
LV/Perf.		TD (and plug back)		<u>3024</u>	ft. depth
Packer type	<u>Fluid Packer</u>	Size		Set at	
Zone of injection	<u>Mississippian</u>	ft. to ft.		Perf. or open hole	<u>OH</u>

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐

F Time: Start 0 Min. 15 Min. 30 Min.  
 I  
 E Pressures: \_\_\_\_\_ Set up 1 System Pres. during test \_\_\_\_\_  
 L  
 D IN USE 9 9 9 Set up 2 Annular Pres. during test 9-134  
 D IN USE 13 13 13 Set up 3 Fluid loss during test 0 bbls.  
 A  
 T Tested: Casing ☐ or Casing - Tubing Annulus ☒  
 A

The bottom of the tested zone is shut in with Fluid Packer

Test Date 4/23/13 Using Company tools Company's Equipment

The operator hereby certifies that the zone between 0 feet and 2850 feet

was the zone tested Robert M. [Signature] Manager Title

Signature

Title

The results were Satisfactory ☒, Marginal \_\_\_\_\_, Not Satisfactory \_\_\_\_\_

State Agent W. N. [Signature] Title FRONT Witness: Yes \_\_\_\_\_ No \_\_\_\_\_

REMARKS: Backside filled with crud oil

☒ Origin. Conservation Div.; ☐ KDFE/T; ☐ Dist. Office;  
☐ Computer Update

SAPT

RCC FORM U-7 6/8

BEFORE THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS

In the matter of the application of  
J. S. CLING, ET AL for an order per-  
mitting the disposal of salt water  
into their Well No. 1 described in  
paragraph "C" which is on their

MINNIE E. JOHNSON LEASE, covering  
the W/2 NW/4 of Section 3, Township 20S,  
Range 2W

in the

RITZ-CANTON FIELD

in

MCPHERSON COUNTY, KANSAS

DOCKET NO. 54,657-C  
(C-5533)

CONSERVATION DIVISION

PERMITTING:

DISPOSAL OF SALT WATER

O R D E R

Now on this 17th day of April, 1957, the above entitled matter comes on  
for determination by the Commission and after a thorough investigation of the appli-  
cation, and being advised of field conditions, and being fully advised in the premises:

THE COMMISSION FINDS: (A) That the production map shows the proposed well  
to be located in the Ritz-Canton Field;

(B) That salt water is desired to be introduced into the Lower Mississippi  
lime formation, which contains water as defined in Rule 82-2-400 "B", with open hole  
from a depth of approximately 2980 feet to a bottom depth of approximately 2990 feet;

(C) That disposal is desired to be made into Well No. 1, located 990 feet  
from the North line and 330 feet from the East line of the W/2 NW/4 of Section 3,  
Township 20S, Range 2W, McPherson County, Kansas;

(D) That salt water is desired to be introduced into a salt water formation  
not known to be productive or expected to produce in this field;

(E) That a complete log of the disposal well has been filed with the  
application;

(F) That complete casing information as required under Rule 82-2-401 is as  
follows:

SIZE	LENGTH	SEAT DEPTH	CONDITION	CEMENTED OR MUDDIED	EST. FT. ENCASED IN CEMENT	SACKS CEMENT USED
8 1/4	182'	182'	Used	Cemented	Circ. to top	95
5 1/2	2980'	2980'	Used	Cemented	240'	30

(G) That salt water desired to be introduced will be produced from the  
following described wells and leases:

LEASE OWNER	LEASE NAME	LEASE DESCRIPTION	WELL NOS.
J. S. Cling, et al	U. Becker	W/2 E/2 NW/4 3-20-2W	1
J. S. Cling, et al	H. P. Varah	E/2 E/2 NW/4 & W/2 W/2 NE/4 3-20-2W	1

and from any well or wells on or that may be drilled on the above described leases,  
estimated at 75 barrels per day minimum to 250 barrels per day maximum, to be intro-  
duced at gravity pressure at the well head;

(N) That a copy of this application, together with a copy of regulations on HEARINGS UPON OBJECTIONS OR COMPLAINTS, has been mailed or personally delivered to all operators of producing or drilling wells within one-half mile from the proposed disposal well, as listed below:

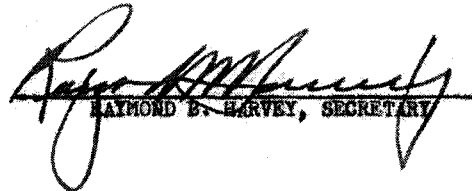
OPERATOR'S CORRECT NAME  
Geo. Hess  
Coop. Refinery Association  
Bradley-Tickel, Inc.

MAIL ADDRESS  
505 N. Charles, McPherson, Kansas  
Great Bend, Kansas  
708 Petroleum Bldg., Wichita, Kansas

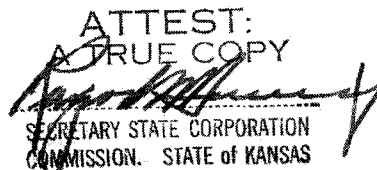
IT IS, THEREFORE, BY THE COMMISSION ORDERED: That J. S. Cling, Et al be, and they are hereby permitted to dispose of salt water produced from the wells on the leases described in paragraph (G ) into the Lower Mississippi Lime formation into Well No. 1 described in Paragraph (C) with open hole from a depth of approximately 2980 feet to a bottom depth of approximately 2990 feet, which said formation contains water as defined in Rule 82-2-400 "B"; said water estimated at 75 barrels per day minimum to 250 barrels per day maximum, to be introduced at gravity pressure at the well head; as provided for in the Rules and Regulations of the Commission.

THE COMMISSION HEREBY RETAINS JURISDICTION OF THE SUBJECT matter hereof and the parties hereto for the purpose of issuing from time to time such further orders, amendments, rules and regulations as may be necessary in connection with the above entitled matter if not specifically provided for in the Rules and Regulations of the Commission applying to the Disposal of Salt Water.

BY THE COMMISSION IT IS SO ORDERED:

  
RAYMOND E. HARVEY, SECRETARY

APPROVED BY: 

ATTEST:  
A TRUE COPY  
  
SECRETARY STATE CORPORATION  
COMMISSION. STATE OF KANSAS

ORIGINAL COPY

FORM CO-11

COPY

APPLICATION FOR FLUID REPRESSURING AND WATER FLOODING  
OF PRODUCING FORMATIONS

TO

STATE CORPORATION COMMISSION,  
CONSERVATION DIVISION,  
P. O. Box 17027  
3830 S. Meridian  
Wichita, Kansas 67217Field Name Ritz - CantonLease Owned by ECCOLease or Unit Name H. P. M. JohnsonLegal Description of lease or unit W 1/2 NW 1/4 & E 1/2E 1/2 NW 1/4 & W 1/2 W 1/2 NE 1/4of Sec. 3 Twp. 20, Rge. 2W (E) (W)County McPherson, Kansas.

RECEIVED

JUL 08 2003

KCC WICHITA

Application for a Fluid Repressuring and Water Flooding Order under Rules 82-2-500-505, of the Commission's General Rules and Regulations is herein submitted in triplicate as follows:

1. Production map showing all wells and leases within one-half mile radius of the lease boundaries as described above is attached.
2. It is desired to repressure the Lower Mississippi formation with open hole from a depth of 2,980 feet to a bottom depth of 2,995 feet.
3. Repressuring is desired to be made into well No. 1, located 330 feet from the East line and 990 feet from the North line of the W 1/2 NW 1/4 of Sec. 3, Twp. 20, Rge. 2W (E) (W), in McPherson County, Kansas, ☒ and into any well or wells on or that may be drilled on the above described leases.
4. Elevations as required under Rule 82-2-502 "B" are:
  - ☒ Shown on the production map;
  - ☐ Shown on a schedule attached;
  - ☐ Not available.
5. Repressuring well log(s) as required under Rule 82-2-502 "B":
  - ☒ Attached;
  - ☐ To be filed on completion of repressuring well (s).
6. Casing information as required under Rule 82-2-501 is as follows:

SIZE	TOTAL LENGTH	SEAT DEPTH	CONDITION	CEMENTED OR MUDDIED	ESTIMATED FEET ENCASED CEMENT	NUMBER SACKS CEMENT USED
3 5/8"	182'	182'	Good	Cemented	182'	95
5 1/2"	2,980'	2,980'	Good	Cemented	200'	30

- Liquid desired to be used for repressuring is (salt) (fresh) water produced or obtained from Mississippi Chat and recycled water from any well or wells on or that may be drilled on the following described leases:

LEASE OWNER	NAME OF LEASE	DESCRIPTION OF LEASE
ECCO	H. P. Unruh	E 1/2 E 1/2 NW 1/4 W 1/2 W 1/2 NE 1/4

estimated at 40 barrels per day, per well, minimum to 250 barrels per day, per well, maximum, to be introduced at gravity pressure at the well head:(a) or if necessary at 1 pounds minimum pressure to 10 pounds maximum pressure at the well head.



THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS  
CONSERVATION DIVISION

AMENDMENT TO ADD INJECTION WELL(S) TO AN ENHANCED OIL RECOVERY PROJECT

License #: 05810

Permit #: E19021

Operator: EICKBUSH PRODUCTION CO. LLC; DBA ECCO

Pilot Well Name: BDJT UNIT 6

Address: 306 N MAIN; PO BOX 1025

Location: 2970'FSL 3630'FEL

City: MCPHERSON

Sec.35 TWP19S RGE2 ☐E ☒W

State: KS

County: MCPHERSON

Zip Code: 67460

Field Name: RITZ-CANTON

Project Acreage: W2 SEC.35, W2 SW4 SEC.26 T19S R2W & W2 NW4, E2 E2 NW4, W2 W2 NW4 SEC.3 T20S R2W

After reviewing the operator's application dated July 8, 2003 to amend an Enhanced Oil Recovery Injection Permit#E19021 dated May 18, 1977, the Conservation Division grants an amendment to add three (3) additional well(s) to the Enhanced Oil Recovery Project. Each additionally permitted well(s) is subject to the specifications and requirements of the original permit including any attachments or amendments.

➤ Attachment or Amendment ☒ YES.

In addition to the specific permit conditions and requirements set out above or on the attachment hereto, this permit is subject to all of the provisions of K.A.R. 83-3-400 et seq. Injection authority cannot be transferred without approval of the Conservation Division.

Date Amended: July 9, 2003

A handwritten signature in cursive script, reading "Dan C. Snyder".

Director, Underground Injection Control  
Conservation Division





ECCO, CR-4774

REPRESSURING WITH SALT WATER

estimated at 50 barrels per day minimum to 300 barrels per day maximum, to be introduced at gravity pressure at the well head; or, if necessary, under pump pressure ranging from 1 pound minimum pressure to 10 pounds maximum pressure;

(8) That a copy of this application, together with a copy of regulations on HEARINGS UPON OBJECTIONS OR COMPLAINTS, has been mailed or personally delivered to all operators of producing or drilling wells within one-half mile of the unit to be repressured as listed below:

<u>OPERATOR'S CORRECT NAME</u>	<u>MAILING ADDRESS</u>
Ray Perera	100 Laurel Court McPherson, Kansas 67460
George Hess	115 East Marlin McPherson, Kansas 67460
Leonard Bruce	R. R. #1 McPherson, Kansas 67460
Maynard Anderson	Rural Route Galva, Kansas 67443
Hillenberg Oil Company	116th & South Lynn Lane Rd. Broken Arrow, Oklahoma 74012
C. H. Casebeer	310 South Park McPherson, Kansas 67460

(9) That the application should be granted subject, however, to the following conditions: (a) Additional input wells should be completed in like manner as Well No. 6 described herein; (b) Before additional input wells on the described unit are put into use, notice should be given to the Conservation Division of the Commission, and a recent plat of the unit should be furnished showing the producing and input wells, together with complete casing information as required in paragraph (6) of the application herein as it pertains to the additional input wells; (c) That production should be subject to and limited by the applicable provisions of the Commission's monthly oil proration orders.

IT IS, THEREFORE, BY THE COMMISSION ORDERED: That ECCO be, and is hereby permitted to repressure with salt water the Mississippi Chat formation with open hole from a depth of approximately 2960 feet to a bottom depth of approximately 2980 feet into Well No. 6 described in paragraph (3); and into any well or wells on or that may be drilled on the unit described in the caption of this order, provided however, that applicant complies with the terms and conditions set out in paragraph (9) hereof, salt water to be produced from the Mississippi formation, and recycled water from any well or wells on or that may be drilled on the leases described in paragraph (7), estimated at 50 barrels per day minimum to 300 barrels per day maximum, to be introduced at gravity pressure at the well head; or, if necessary, under pump pressure ranging from 1 pound minimum pressure to 10 pounds maximum pressure, as provided for in the Rules and Regulations of the Commission.

IT IS FURTHER BY THE COMMISSION ORDERED: That if the recipient of the repressuring authority herein assigns, sells or transfers his interest in the lease or leases described in this order, the repressuring authority herein shall become null and void as of the date of assignment, sale or transfer.

THE COMMISSION HEREBY RETAINS JURISDICTION OF THE SUBJECT MATTER hereof and the parties hereto for the purpose of issuing from time to time such further orders, amendments, rules and regulations as may be necessary in connection with the above-entitled matter if not specifically provided for in the Rules and Regulations of the Commission applying to Repressuring and Waterflooding.

APPROVAL RECOMMENDED:

ATTESTED  
COPY

*J. L. B.*

*J. Lewis Brock*  
J. LEWIS BROCK, ADMINISTRATOR

DATE MAILED - - - 5-8-77

## CASING MECHANICAL INTEGRITY TEST

DOCKET # E. 19021Disposal ☒ Enhanced Recovery:Repressuring ☒Flood ☐Tertiary ☐

Date injection started \_\_\_\_\_

API #15 - -

NW NE SW, Sec 35, T 19S, R 2 E/W2310 Feet from South Section Line3630 Feet from East Section LineLease Dickman Bldg. Unit Well # 6County mphOperator: E.C.C.O

Name &amp;

Address BI 1025Operator License # 5810Contact Person Bob Eickbushmeph. 15.67460Phone 316-241-6350Max. Auth. Injection Press. 12 psi; Max. Inj. Rate 300 bbl/d;

If Dual Completion - Injection above production \_\_\_\_\_ Injection below production \_\_\_\_\_

	Conductor	Surface	Production	Liner	Size	Tubing
Size		<u>8 7/8</u>	<u>5 1/2</u>		<u>2 7/8</u>	
Set at		<u>160</u>	<u>2949</u>		<u>2970</u>	
Cement Top		<u>0</u>	<u>2549</u>		Type	<u>finagled</u>
" Bottom		<u>160</u>	<u>2949</u>			
DV/Perf.			(and plug back)	<u>2980</u>		ft. depth
Packer type			Size	Set at		
Zone of injection	<u>2949</u> ft. to ft.	<u>2980</u>	Perf. or open hole	<u>0.4</u>		

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐

F Time: Start \_\_\_\_\_ Min. \_\_\_\_\_ Min. \_\_\_\_\_ Min.

	Pressures:	Set up 1	System Pres. during test
I	<u>monitoring system</u>		<u>8"</u>
E		Set up 2	Annular Pres. during test <u>26"</u>
L		Set up 3	Fluid loss during test <u>0</u> bbls.
D			
A			

T Tested: Casing ☐ or Casing - Tubing Annulus ☒The bottom of the tested zone is shut in with fluidTest Date 12/17/91 Using Schultz W. Wolf company's EquipmentThe operator hereby certifies that the zone between 0 feet and 2970 feetwas the zone tested Robert D. Eickbush Partner

Signature

Title

The results were Satisfactory ☒, Marginal ☐, Not Satisfactory ☐State Agent Ralph J. Holt Title PI RI Witness: Yes ☒ No ☐REMARKS: 30 bbls. diesel & casing leak in annulus

RECEIVED

☐ Origin. Conservation Div.; ☐ KDHE/T; ☐ Dist. Office;☐ Computer UpdateDEC 26 1991  
KCC Form U-7 6/84CONSERVATION DIVISION  
WICHITA, KS  
Exhibit H  
Page 1 of 4

## CASTING MECHANICAL INTEGRITY TEST

DOCKET # E-19,021Disposal ☐ Enhanced Recovery: ☐Repressuring ☒  
Flood ☐  
Tertiary ☐Date injection started \_\_\_\_\_  
API #15 \_\_\_\_\_NW NE SW, Sec 35, T 19 S, R 2 W2310' Feet from South Section Line  
3630' Feet from East Section LineLease B.D.J.T. Well # 6  
County McPhersonOperator: ECCO  
Name & 306 N. Main  
Address P.O. Box 1025Operator License # 5810Contact Person Richard KochMcPherson, KS 67460 Phone 316-241-6350Max. Auth. Injection Press. VAC psi; Max. Inj. Rate 300 bbl/d;

If Dual Completion - Injection above production \_\_\_\_\_ Injection below production \_\_\_\_\_

Conductor	Surface	Production	Liner	Size	Set at
Size	<u>8 5/8"</u>	<u>5 1/2"</u>		Size	<u>2 3/8"</u>
Set at	<u>160'</u>	<u>2949'</u>		Set at	<u>2970'</u>
Cement Top	<u>0'</u>	<u>2549'</u>		Type	<u>fiberglass</u>
" Bottom	<u>160'</u>	<u>2949'</u>			
DV/Perf.		TD (and plug back)		<u>2980'</u>	ft. depth
Packer type	<u>Fluid</u>	Size		Set at	
Zone of injection	<u>Mississippi</u> ft. to ft. <u>2949-2980</u>	Perf. or open hole	<u>Open hole</u>		

Type Mit: Pressure ☐ Radioactive Tracer Survey ☐ Temperature Survey ☐F Time: Start 10:10 Min. 10:40 Min. 11:10 Min.

Pressures:	Monitoring System	Set up 1	System Pres. during test
Working	<u>20</u>	<u>20</u>	Annular Pres. during test <u>10"-20"</u>
Shut-In	<u>20</u>	<u>10</u>	Fluid loss during test <u>0</u> bbls.

T Tested: Casing ☐ or Casing - Tubing Annulus ☐The bottom of the tested zone is shut in with fluid packerTest Date 1-6-97 Using Company tools Company's EquipmentThe operator hereby certifies that the zone between 0' feet and 2940' feetwas the zone tested Richard Koch Signature James TitleThe results were Satisfactory X, Marginal \_\_\_\_\_, Not Satisfactory \_\_\_\_\_State Agent Michael R Wilson Title PIRT II Witness: Yes X No \_\_\_\_\_REMARKS: Annulus filled with diesel fuel and casing head gas☐ Origin. Conservation Div.; ☐ KDHE/T; ☐ Dist. Office;☐ Computer Update

KCC Form U-7 6/8'

## CASING MECHANICAL INTEGRITY TEST

DOCKET # E-101021Disposal ☒ Enhanced Recovery:Repressuring ☐Flood ☐Tertiary ☐

Date injection started \_\_\_\_\_

API #15 \_\_\_\_\_

NW NE 1/4, Sec 35, T 19 S, R 2 E/W2310

Feet from South Section Line

3630

Feet from East Section Line

Lease Dielman BDT Unit Well # 6County McPhersonOperator: EccoOperator License # 5810

Name &amp; Address

Box 1025Contact Person Robert EickbushMcPherson, KS 67464 Phone 316-241-6350Max. Auth. Injection Press. 0 psi; Max. Inj. Rate 300 bbl/d;

If Dual Completion - Injection above production \_\_\_\_\_ Injection below production \_\_\_\_\_

	Conductor	Surface	Production	Liner		Size	Tubing
Size		<u>8 5/8</u>	<u>5 1/2</u>				<u>2 3/8</u>
Set at		<u>160</u>	<u>2949</u>				<u>2970</u>
Cement Top		<u>0</u>	<u>2549</u>				<u>fiberglass</u>
" Bottom		<u>160</u>	<u>2949</u>				
DV/Perf.					TD (and plug back)	<u>2980</u>	ft. depth
Packer type					Size		Set at <u>2970</u>
Zone of injection	<u>2949</u>	ft. to ft.	<u>2980</u>		Perf. or open hole	<u>O.H.</u>	

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐F Time: Start 10 Min. 20 Min. 30 Min.

I Pressures: Monitoring System Set up 1 System Pres. during test VAC-20'

L Set up 2 Annular Pres. during test 15'

D Set up 3 Fluid loss during test 0 bbls.

D Tested: Casing ☒ or Casing - Tubing Annulus ☒A The bottom of the tested zone is shut in with fluidT Test Date 2/22/02 Using Ecco Company's Equipment

A The operator hereby certifies that the zone between 0 feet and 2970 feet

was the zone tested Richard Koch Signature pumper Title

The results were Satisfactory ☒, Marginal ☐, Not Satisfactory ☐State Agent Ralph Tuttle Title PRT II Witness: Yes ☒ No ☐REMARKS: Hydro Carbon in annulus☐ Origin. Conservation Div.; ☐ KDHE/T; ☐ Dist. Office;☐ Computer Update

KCC Form U-7 6/84

## CASING MECHANICAL INTEGRITY TEST

DOCKET # E-19021Disposal ☒ Enhanced Recovery:Repressuring ☐Flood ☐Tertiary ☐

Date injection started \_\_\_\_\_

API #15 - -

NE NE SW, Sec 35, T 19 S, R 2 E2310 Feet from South Section Line2970 Feet from East Section LineLease Diablor B.D. JT Unit Well # 6County McPh.Operator: ECCO

Name &amp;

Address Bix 1025Operator License # 5810Contact Person Robert EickhuschPhone (620) 241-6350

RECEIVED

KANSAS CORPORATION COMMISSION

JUL 25 2003

CONSERVATION DIVISION  
WICHITA, KSMax. Auth. Injection Press. 0 psi; Max. Inj. Rate 300 bbl/d;

If Dual Completion - Injection above production \_\_\_\_\_

Injection below production \_\_\_\_\_

Conductor	Surface	Production	Liner	Size	Tubing
Size	<u>8 5/8"</u>	<u>5 1/2"</u>		<u>2 3/8"</u>	
Set at	<u>160</u>	<u>2949</u>		Set at	<u>2970</u>
Cement Top	<u>0</u>	<u>2549</u>		Type	<u>flush</u>
" Bottom	<u>160</u>	<u>2940</u>			
DV/Perf.		TD (and plug back)	<u>2980</u>		ft. depth
Packer type		Size		Set at	
Zone of injection	<u>2949</u>	ft. to ft.	<u>2980</u>	Perf. or open hole	<u>OH</u>

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐F Time: Start 10 Min. 30 Min. 30 Min.

Pressures:	<u>30"</u>	<u>30"</u>	<u>30"</u>	Set up 1	System Pres. during test
<u>Working</u>					<u>26"</u>
<u>Shut In</u>	<u>23"</u>	<u>23"</u>	<u>23"</u>	Set up 2	Annular Pres. during test <u>30"</u>
					<u>Shut In</u> <u>23"</u>
				Set up 3	Fluid loss during test <u>0</u> bbls.

T Tested: Casing ☐ or Casing - Tubing Annulus ☒The bottom of the tested zone is shut in with fluidTest Date 6/27/03 Using ECCO Company's EquipmentThe operator hereby certifies that the zone between 0 feet and 2900 feetwas the zone tested, Richard Koch Signature Pumper TitleThe results were Satisfactory ☒, Marginal ☐, Not Satisfactory ☐State Agent Ralph Galt Title RTT Witness: Yes ☒ No ☐REMARKS: (No fluid added) Zero Closures in annulus☐ Origin. Conservation Div.;☐ KDHE/T;☐ Dist. Office;☐ Computer UpdateSA MTQ

RCC Form U-7 6/8

Exhibit H

Page 4 of 4



## Kansas Corporation Commission

*Kathleen Sebelius, Governor   John Wine, Chair   Cynthia L. Claus, Commissioner   Brian J. Moline, Commissioner*

### NOTICE OF VIOLATION

May 1, 2003

RECEIVED

Robert D. Eickbush  
Eickbush Prod Co. LLC, dba ECCO  
P.O. Box 1025  
McPherson, KS 67460-1025

JUL 08 2003  
KCC WICHITA

RE: E-19,021   35-19-2W  
McPherson County, Kansas

Dear Operator.

Recent concerns regarding E-19,021 have crossed my desk seeking resolve. At issue are the injection wells with injection authorization covered by permit E-19,021. After lengthy review of the file I have made the determination that that the following wells could have injection authorization if the following conditions are met.

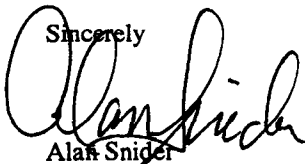
First of all the Dielman BDJT Unit #6 well is approved by order and is in good standing as far as having a recent and satisfactory Mechanical Integrity Test on file. Wells of concern include the Thomas #1-E, Thomas #1-W SWD, both in section 26-T19S-R2W; Bishop #3 in 35-T19S-R2W; and the HPM #1 Johnson, ( 3-T20S-2W). Documents indicate to me, these wells were in operation prior to December 8, 1982 and may then be grandfathered or considered rule authorized under E-19,021 only after supplying the KCC with the following documents.

- 1) A plat map of the project showing all producing, and abandoned or plugged wells.
- 2) Provide the well construction of each well mentioned above including all strings of pipe/ tubing, packer setting depths and the amount of cement used for each string.
- 3) Each well must have a satisfactory MIT on file at the KCC.

Please schedule Mechanical Integrity Tests for these wells with District #2's office (316)337-6231 immediately. Operation of injection wells without demonstrating MI may be punishable with a fine, shut-in or both. If you have documentation to the contrary of my findings, please supply me with a copy. Please file the plat map and well construction information within the next 30 days.

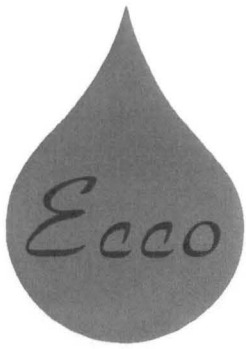
Thank you for your cooperation in this regard. If you have any questions or concerns, contact me at 316-337-6197.

Sincerely

  
Alan Snider  
UIC Director

Cc: Doug Louis  
Mike Wilson  
Jerry Knobel  
File

Conservation Division, Finney State Office Building  
130 S. Market, Room 2078, Wichita, Kansas 67202-3802   316.337.6200   [www.kcc.state.ks.us](http://www.kcc.state.ks.us)



## EICKBUSH PRODUCTION COMPANY, L.L.C.

---

306 NORTH MAIN

P.O. BOX 1025  
McPHERSON, KANSAS 67460

Phone (316) 241-6350  
Fax (316) 241-6351

July 7, 2003

Kansas Corporation Commission  
Conservation Division, Finney State Office building  
130 South Market, Room 2078  
Wichita, Kansas 67202-3802

RECEIVED

ATTN: Alan Snider, UIC Director

JUL 08 2003

RE: Injection Authorization

KCC WICHITA

Dear Alan;

In response to your letter dated May 1, 2003, we have compiled the information requested on the four wells. The wells are Thomas #1-E, Thomas #1-W, Bishop #3 and the HPM#1 Johnson.

The information is complete, including the Mechanical Integrity Tests for each well.

We appreciate your patience and assistance in this matter.

Sincerely

Robert Eickbush, Partner  
Eickbush Production Co. LLC, dba ECCO  
P. O. Box 1025  
McPherson, Kansas 67460

**APPLICATION FOR FLUID REPRESSURING AND WATER FLOODING  
OF PRODUCING FORMATIONS**

**FORM CO-11**

**RECEIVED  
JUL 08 2003  
KCC WICHITA**

TO

STATE CORPORATION COMMISSION,  
CONSERVATION DIVISION,  
P. O. Box 17027  
3830 S. Meridian  
Wichita, Kansas 67217

Field Name RITZ-CANTON

Lease Owned by ECCO

Lease or Unit Name BDJT UNIT

Legal Description of lease or unit W $\frac{1}{2}$  Sec 35-19-2 & W $\frac{1}{2}$  NW $\frac{1}{4}$  &  
SW $\frac{1}{4}$  Sec 26-19-2 & W $\frac{1}{2}$  NW $\frac{1}{4}$  & E $\frac{1}{2}$  E $\frac{1}{2}$  NW $\frac{1}{4}$  & W $\frac{1}{2}$  W $\frac{1}{2}$   
NE $\frac{1}{4}$  Sec 3-20-2

of Sec \_\_\_\_\_ Twp \_\_\_\_\_, Rge \_\_\_\_\_ (E) (W)

County MCPHERSON, Kansas.

Application for a Fluid Repressuring and Water Flooding Order under Rules 82-2-500-505, of the Commission's General Rules and Regulations is herein submitted in triplicate as follows:

1. Production map showing all wells and leases within one-half mile radius of the lease boundaries as described above is attached.
2. It is desired to repressure the MISSISSIPPI CHAT formation with open hole from a depth of 2923 feet to a bottom depth of 2968 feet.
3. Repressuring is desired to be made into well No 1 W, located 1980 feet from the South line and 660' feet from the East line of the SW $\frac{1}{4}$  of Sec 26-, Twp 19, Rge 2 (E) (W), in MCPHERSON County, Kansas, (a) and into any well or wells on or that may be drilled on the above described leases.
4. Elevations as required under Rule 82-2-502 "B" are:  
(a) Shown on the production map;  
(b) Shown on a schedule attached;  
(c) Not available.
5. Repressuring well log(s) as required under Rule 82-2-502 "B":  
(a) Attached;  
(b) To be filed on completion of repressuring well (a).
6. Casing information as required under Rule 82-2-501 is as follows:

SIZE	TOTAL LENGTH	SEAT DEPTH	CONDITION	CEMENTED OR MUDDED	ESTIMATED FEET ENCASED CEMENT	NUMBER SACKS CEMENT USED
8 5/8	156	156	Used	CEMENTED	156	80
4 1/2	2923	2923	NEW	CEMENTED	500	125

7. Liquid desired to be used for repressuring is (salt) (fresh) water produced or obtained from \_\_\_\_\_ and recycled water from any well or wells on or that may be drilled on the following described leases:

LEASE OWNER	NAME OF LEASE	DESCRIPTION OF LEASE
ECCO	DIELMAN	SW $\frac{1}{4}$ Sec 35-19-2
ECCO	RISHEL	S $\frac{1}{2}$ NW $\frac{1}{4}$ Sec 35-19-2
ECCO	BISHOP	N $\frac{1}{2}$ NW $\frac{1}{4}$ Sec 35-19-2
ECCO	LEWIS	S $\frac{1}{2}$ SW $\frac{1}{4}$ Sec 26-19-2
ECCO	THOMAS	N $\frac{1}{2}$ SW $\frac{1}{4}$ Sec 26-19-2
ECCO	WILLIAMS	W $\frac{1}{2}$ NW $\frac{1}{4}$ Sec 26-19-2
ECCO	H. P. UNRUH	E $\frac{1}{2}$ E $\frac{1}{2}$ NW $\frac{1}{4}$ W $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$ Sec 3-20-2
ECCO	MINNIE JOHNSON	W $\frac{1}{2}$ NW $\frac{1}{4}$ Sec 3-20-2

estimated at 100 barrels per day, per well, minimum to 600 barrels per day, per well, maximum, to be introduced at gravity pressure at the well head:

(a) or if necessary at Vacuum pounds minimum pressure to Vacuum pounds maximum pressure at the well head.



**APPLICATION FOR FLUID REPRESSURING AND WATER FLOODING  
OF PRODUCING FORMATIONS**

FORM CO-11

COPY

TO

STATE CORPORATION COMMISSION,  
CONSERVATION DIVISION,  
P. O. Box 17027  
3830 S. Meridian  
Wichita, Kansas 67217

Field Name RITZ-CANTON

Lease Owned by ECCO

Lease or Unit Name L. D. THOMAS UNIT

Legal Description of lease or unit N $\frac{1}{2}$  SW $\frac{1}{4}$  & W $\frac{1}{2}$  NW $\frac{1}{4}$

of Sec. 26 Twp. 19, Rge. 2 (E) (W)

County MCPHERSON, Kansas.

RECEIVED

JUL 08 2003

KCC WICHITA

Application for a Fluid Repressuring and Water Flooding Order under Rules 82-2-500-505, of the Commission's General Rules and Regulations is herein submitted in triplicate as follows:

1. Production map showing all wells and leases within one-half mile radius of the lease boundaries as described above is attached.
2. It is desired to repressure the MISSISSIPPI CHAT formation with open hole from a depth of 2920 feet to a bottom depth of 2970 feet.
3. Repressuring is desired to be made into well No. 1 E, located 330 feet from the EAST line and 330 feet from the SOUTH line of the N $\frac{1}{2}$  SW $\frac{1}{4}$  of Sec. 26, Twp. 19, Rge. 2W (E) (W), in MCPHERSON County, Kansas, ☒ and into any well or wells on or that may be drilled on the above described leases.
4. Elevations as required under Rule 82-2-502 "B" are:  
☒ (a) Shown on the production map;  
☐ (b) Shown on a schedule attached;  
☐ (c) Not available.
5. Repressuring well log(s) as required under Rule 82-2-502 "B":  
☒ (a) Attached;  
☐ (b) To be filed on completion of repressuring well (a).
6. Casing information as required under Rule 82-2-501 is as follows:

SIZE	TOTAL LENGTH	SEAT DEPTH	CONDITION	CEMENTED OR MUDDIED	ESTIMATED FEET ENCASED CEMENT	NUMBER SACKS CEMENT USED
8/5/8	144	144	NEW	CEMENTED	144	80
5 $\frac{1}{2}$	2919	2919	NEW	CEMENTED	600	100

7. Liquid desired to be used for repressuring is (salt) (fresh) water produced or obtained from \_\_\_\_\_ and recycled water from any well or wells on or that may be drilled on the following described leases:

LEASE OWNER	NAME OF LEASE	DESCRIPTION OF LEASE
ECCO	THOMAS	N $\frac{1}{2}$ SW $\frac{1}{4}$ 26-19-2W
ECCO	WILLIAMS	W $\frac{1}{2}$ NW $\frac{1}{4}$ 26-19-2W

estimated at 150 barrels per day, per well, minimum to 300 barrels per day, per well, maximum, to be introduced at gravity pressure at the well head:

(a) or if necessary at 1 pounds minimum pressure to 25 pounds maximum pressure at the well head.

JUN 2 1 2003

DOCKET # E-19621

CASING MECHANICAL INTEGRITY TEST

Disposal ☐ Enhanced Recovery: ☐

Repressuring ☒

Flood ☐

Tertiary ☐

Date injection started \_\_\_\_\_

API #15 - -

CONSERVATION DIVISION

NE SW, Sec 26, T 19 S, R 2 E/W

1800 Feet from South Section Line

1440 3440 Feet from ~~SW~~ Section Line

Lease THOMAS Well # 1-W

County McPherson

Operator: ECCO

Operator License # 5810

Name & Address

Contact Person Robert E. Bush

McPherson, KS 67460 Phone 620-241-6350

Max. Auth. Injection Press. 0 psi; Max. Inj. Rate 300 bbl/d;

If Dual Completion - Injection above production \_\_\_\_\_ Injection below production \_\_\_\_\_

Conductor	Surface	Production	Liner	Tubing
Size _____	8 3/8	4 1/2	_____	Size 2 3/8
Set at _____	150	2923	_____	Set at 2781
Cement Top _____	0	1900	_____	Type revolved
" Bottom _____	150	2923	_____	
DV/Perf. _____		TD (and plug back) _____	2968	ft. depth
Packer type arrow-set down		Size 4 1/2 x 2 3/8	Set at 2781	
Zone of injection 2923	ft. to ft. 2968	Perf. or open hole OK		

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐

F Time: Start 10 Min. 20 Min. 30 Min.

I Pressures: 140# 140# 140# Set up 1 System Pres. during test 0

D Set up 2 Annular Pres. during test 140#

D Set up 3 Fluid loss during test 0 bbls.

A Tested: Casing ☐ or Casing - Tubing Annulus ☒

The bottom of the tested zone is shut in with packer

Test Date 6/18/03 Using Schulz welling Company's Equipment

The operator hereby certifies that the zone between 0 feet and 2781 feet

was the zone tested Richard Koch Signature Pumper Title

The results were Satisfactory ☒, Marginal \_\_\_\_\_, Not Satisfactory \_\_\_\_\_

State Agent Ralph Little Title RRTA Witness: Yes ☒ No \_\_\_\_\_

REMARKS: Casing tested after 5000' heated water in annulus

☐ Origin. Conservation Div.; ☐ KDFE/T; ☐ Dist. Office;

☒ Computer Update

SAPT

mlw

COPY

CASING MECHANICAL INTEGRITY TEST

DOCKET # 5-19,021

Disposal ☐ Enhanced Recovery: ☐

Repressuring ☒

Flood ☐

Tertiary ☐

Date injection started \_\_\_\_\_

API #15 - -

Lease THOMAS

County McPherson

Well # 1-E.Sud.

Operator: ECCO

Name &

Address Box 1025

McPherson, KS. 67460

Operator License # 5810

Contact Person Robert Eick

Phone 620-241-6350

RECEIVED

JUL 08 2003

KCC WICHITA

Max. Auth. Injection Press. 6 psi; Max. Inj. Rate 300 bbl/d;

If Dual Completion - Injection above production \_\_\_\_\_ Injection below production \_\_\_\_\_

	Conductor	Surface	Production	Liner	Size	Tubing
--	-----------	---------	------------	-------	------	--------

Size		<u>8 5/8</u>	<u>5 1/2</u>		<u>2 3/8</u>	
------	--	--------------	--------------	--	--------------	--

Set at		<u>144</u>	<u>2919</u>		<u>2807</u>	
--------	--	------------	-------------	--	-------------	--

Cement Top		<u>0</u>	<u>2319</u>		Type	<u>Steel</u>
------------	--	----------	-------------	--	------	--------------

" Bottom		<u>144</u>	<u>2919</u>			
----------	--	------------	-------------	--	--	--

DV/Perf. \_\_\_\_\_ TD (and plug back) 2970 ft. depth

Packer type (H) annular set down Size 5 1/2 x 2 3/8 Set at 2807

Zone of injection 2919 ft. to ft. 2970 Perf. or open hole 0 H.

Type Mit: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐

F Time: Start 10 Min. 20 Min. 30 Min.

I Pressures: 100 100 100 Set up 1 System Pres. during test 25"

L Pressures: \_\_\_\_\_ Set up 2 Annular Pres. during test 100"

D Pressures: \_\_\_\_\_ Set up 3 Fluid loss during test 0 bbls.

A Tested: Casing ☐ or Casing - Tubing Annulus ☒

The bottom of the tested zone is shut in with Packer

Test Date 6-6-02 Using Shaly Welding Company's Equipment

The operator hereby certifies that the zone between 0 feet and 2807 feet

was the zone tested Richard Koch Pumper

Signature

Title

The results were Satisfactory ☒, Marginal ☐, Not Satisfactory ☐

State Agent Ralph Bell

Title SR12

Witness: Yes ☒ No ☐

REMARKS:

Tested Water in annulus

☐ Origin. Conservation Div.;

☐ KHE/T;

☐ Dist. Office;

☐ Computer Update

KCC Form U-7 6/8

Exhibit L

Page 2 of 2

**THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS**


Before Commissioners:            Shari Feist Albrecht, Chair  
   Jay Scott Emler  
   Pat Apple

In the matter of the failure of Eickbush	)	Docket No. 15-CONS-072-CPEN
Production Co. LLC dba ECCO ("Operator")	)	
to comply with K.A.R. 82-3-400 at the Bdjt	)	CONSERVATION DIVISION
Unit #6, F Johnson Unit #7, Mini Johnson #1,	)	
Thomas #1-W and Thomas #1-E wells in	)	License No. 5810
<u>McPherson County, Kansas.</u>	)	

**CERTIFICATE OF SERVICE**

I, Paula Murray, certify that on December 1, 2014, I did cause a true and correct copy of the Pre-Filed Testimony of Tony Vail to be served by United States mail, first class, postage prepaid to the following:

Jeff Kennedy  
Martin, Pringle, et al.  
100 North Broadway, Suite 500  
Wichita, Kansas 67202  
*Attorney for Eickbush Production Co. LLC*

  
\_\_\_\_\_  
Paula Murray  
Legal Assistant  
Kansas Corporation Commission