

CROSBYS CREEK OIL & GAS, LLC

DOCKET NO. 8-1-17-02

EXHIBIT A
AFFIDAVIT OF PUBLICATION
WASHINGTON COUNTY NEWS

EXHIBIT B
AFFIDAVIT OF NOTICE

EXHIBIT C
TECHNICAL EXHIBIT NOS. 1 - 5

PREPARED BY OR AT THE
DIRECTION OF JAMES O. STEPHENS

AUGUST 3, 2017

EXHIBIT "A"

Washington County News

PO Box 510 • Chatom, AL 36518

Phone: 251-847-2599 • Fax: 257-847-3847 • email: legals@thecallnews.com
TO VIEW LEGALS ONLINE visit www.thecallnews.com or www.alabamalegals.com

AFFIDAVIT

State of Alabama - Washington County

WILLIAM T. WATSON LLC
1651 MCFARLAND BOULEVARD NORTH
TUSCALOOSA AL, 35406-2212

Before me, a notary public in and for the county and state above listed, personally appeared LINDSAY FIEDLER (AFFIANT), who, by me, duly sworn, deposes and says that: My name is LINDSAY FIEDLER, I am the Legal Advertising Coordinator of the Washington County News ("Newspaper"). The Newspaper is printed in the English language, has a general circulation and its principal editorial office in the county in which it is published, and has been mailed under a publication class mailing privilege of the United States Post Office Department for the Post Office of Chatom, AL, where it is published at least 51 consecutive weeks a year.

I further certify that the attached notice is a true and correct copy of the notice published in said Newspaper.

Public Notice LEGAL
NOTICE OF MEETING
DOCKET NO. 8-1-17-02

The Newspaper published the attached legal notice in the issues of
7/21/2017

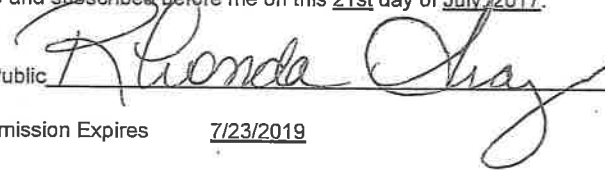
The sum charged for these publications was \$151.55 per week for 1.00 consecutive weeks, a total cost of \$151.55.

The sum charged by the newspaper for said publication does not exceed the lowest classified rate paid by commercial customers for an advertisement of similar size and frequency in the same newspaper(s) in which the public notice appeared.

There are no agreements between the newspaper and the officer or attorney charged with the duty of placing the attached legal advertising notices whereby any advantage, gain or profit accrued to said officer or attorney.

 (AFFIANT)

Sworn to and subscribed before me on this 21st day of July, 2017.

Notary Public 
My Commission Expires 7/23/2019

Ad ID 36007



STATE OIL AND GAS BOARD
Exhibit No. A
Petition By Crosby Creek
Item No. 4 Date 8-3-17
Testimony Of Watson
Received By MR

PUBLIC NOTICE

PUBLIC NOTICE

NOTICE OF MEETING

The State Oil and Gas Board of Alabama will hold its regular hearing at 10:00 a.m. on Tuesday, August 1, and Thursday, August 3, 2017, in the Board Room of the State Oil and Gas Board, Walter B. Jones Hall, University of Alabama Campus, 420 Hackberry Lane, Tuscaloosa, Alabama, to consider among other items the following petition:

DOCKET NO. 8-1-17-02
Petition by CROSBYS CREEK OIL & GAS, LLC, a foreign limited liability company, authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board of Alabama to enter an Order approving the enhanced recovery project for the Crosbys Creek Gas Unit, Washington County, Alabama, in order to qualify the project for the four percent (4%) privilege tax for the incremental oil or gas production from said Unit, in accordance with Section 40-20-1, et seq., Code of Alabama (1975), as amended.

The Board, by Order No. 2010-112 issued on December 9, 2010, effective January 1, 2011, established the Crosbys Creek Gas Unit, a field-wide Unit for the Crosbys Creek Gas Field, and the Unit Area is described as follows:

Section 34, Township 8 North, Range 4 West, and Section 3, Township 7 North, Range 4 West, Washington County, Alabama, containing approximately 1,280 acres, more or less.

The jurisdiction and authority of the Oil and Gas Board is provided in Section 9-17-1, et seq., Code of Alabama (1975) as amended. The public is further advised that, pursuant to this hearing, the applicable provisions of the Code of Alabama (1975), and the State Oil and Gas Board of Alabama Administrative Code, the Board will enter such Order or Orders as in its judgment may be necessary in accordance with the evidence submitted and accepted. Hearings of the State Oil and Gas Board are public hearings, and members of the public are invited to attend and present their position concerning petitions. Requests to continue or oppose a petition should be received by the Board at least two (2) days prior to the hearing. The public should be aware that a petition may be set for hearing on the first day or second day of the hearing or may be continued to another hearing at a later date. We suggest that prior to the hearing, interested parties contact the Board to determine the status of a particular petition. For additional information, you may contact Marvin Rogers, General Counsel for State Oil and Gas Board, P. O. Box 869999, Tuscaloosa, Alabama 35486-6999, Telephone Number 205/247-3680, Fax Number 205/349-2861, or by email at petitions@ogb.state.al.us.

Washington County News July 21, 2017

EXHIBIT "B"

STATE OF ALABAMA }

AFFIDAVIT OF NOTICE

TUSCALOOSA COUNTY }

COMES NOW William T. Watson, attorney for CROSBYS CREEK OIL & GAS, LLC, who, after being duly sworn on his oath, states the following:


That on behalf of Crosbys Creek Oil & Gas, LLC, a petition bearing Docket No. 8-1-17-02 was filed with the State Oil and Gas Board of Alabama, and in accordance with Rule 400-7-1-.11(4) of the rules and regulations of the State Oil and Gas Board of Alabama Administrative Code, notice of said petition was mailed, by ordinary first class mail, postage paid, to the Alabama Department of Revenue, the entity that oversees collection of severance tax for the State of Alabama, at least fifteen (15) days prior to the scheduled hearing of the petition.

The notice was mailed to the person listed on Exhibit "A" attached hereto and made a part hereof. Also attached hereto, labeled Exhibit "B," and made a part of this Affidavit is a true copy of the notice mailed to the aforementioned person.

Further Affiant saith not.


WILLIAM T. WATSON

Sworn to and subscribed before me this 12th day of July, 2017


Notary Public
My Commission Expires: 11-04-2017

STATE OIL AND GAS BOARD	
Exhibit No.	<u>B</u>
Petition By	<u>Crosby Creek</u>
Item No.	<u>4</u> Date <u>8-3-17</u>
Testimony Of	<u>Watson</u>
Filed By	<u>MR</u>

EXHIBIT "A"
TO AFFIDAVIT OF NOTICE

Re: Crosbys Creek Oil & Gas, LLC
Docket No. 8-1-17-02

Alabama Department of Revenue
Attn: Alisa Johnson
50 North Ripley St., Room 1210
Montgomery, AL 36132

EXHIBIT "B"
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NOTICE OF MEETING

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STATE OIL & GAS BOARD OF ALABAMA
420 Hackberry Lane
P.O. Box 869999
Tuscaloosa, Alabama 35486-6999

Berry H. (Nick) Tew, Jr.
Secretary to the Board
State Oil and Gas Supervisor

**CROSBYS CREEK GAS UNIT
SEVERANCE TAX
REDUCTION PETITION**

**EXHIBITS TO THE TESTIMONY OF:
JAMES O. STEPHENS**

**AUGUST 3, 2017
DOCKET # 8-01-17-02**

**Crosbys Creek Oil & Gas, LLC
605 Northpark Drive, Ste A
Ridgeland, Mississippi 39157**

STATE OIL AND GAS BOARD	
Exhibit No.	<u>C</u>
Petition By	<u>Crosby Creek</u>
Item No.	<u>4</u> Date <u>8-3-17</u>
Testimony Of	<u>Stephens</u>
Received By	<u>MK</u>

Crosbys Creek Gas Unit

History, Production Analysis and Economics

The Crosbys Creek Gas Unit is a three well field producing gas condensate from the Smackover formation. Discovered in 1986 with drilling of the Middleton 34-11 #1, the field produced as two 640 acre units from 1988 through 2010. Effective January 1, 2011 the fieldwide unit was established for the purpose of drilling a third horizontal well, the CCGU 34-14 #1 to more effectively drain the reservoir and provide the option for eventual enhanced production by gas or carbon dioxide injection. Through petition and hearing in September 2015 the Unit Operations Plan was revised to allow for waterflood injection to improve recovery. The Dees 3-3 #1 well was converted to an injector and surface waterflood equipment was installed at an investment of over 1 MM\$. Water injection began in January 2016 at a rate of about 2000 BPD. The first sign of waterflood response occurred in the Middleton 34-11 #1 in April 2016. Water injection is continuing and through May 2017 cumulative injection was 717 MBW. Cumulative production from the reservoir through April was 2.7 MMBC, 8.3 BCF and 253 MBW.

A plot of Unit production v. time (Exhibit 2) shows a moderately increasing gas rate but a more rapidly declining condensate rate during the period from January 2012 through March 2016. This time period establishes the primary production trend. The fact that gas was increasing while condensate was decreasing is evidence that the reservoir pressure had dropped below the dew point and thus liquids were being left in the formation. The increase in production starting in April 2016 is a clear departure from the historical primary decline.

To better illustrate the full well stream performance, a plot of full well stream production v. time was prepared (Exhibit 3). The full well stream is the sour separator gas plus condensate converted to MCFe using the commonly used ratio of 6 MMBTU or 6 MCF per barrel. The curve shows an exponential decline flattening to about 3%/yr. during the primary production period (prior to 4/16). From 4/16 forward there is a significant departure from the primary decline due to waterflood response. By May 2017 the production had increased to 55 MMCFe/mo. Until the waterflood response has levelled and begun to decline, the projected secondary decline rate is subject to adjustment. At a projected secondary decline rate of 10% per year the estimated secondary recovery from May 2017 forward is 2.39 BCFe.

A plot of net revenue and LOE v. time (Exhibit 4) was constructed to show the economic limit under primary production. The graph clearly shows the economic limit was reached in late 2015. From September 2015 through February 2016, expenses exceeded revenue for five out of six months, neglecting the extra expenses incurred in installing the waterflood. Thus with declining production, the Unit would continue to be uneconomic if it were not for the waterflood response. Therefore, all oil and gas production subsequent to the Board's order qualifies as incremental production and should be certified as such in said order.

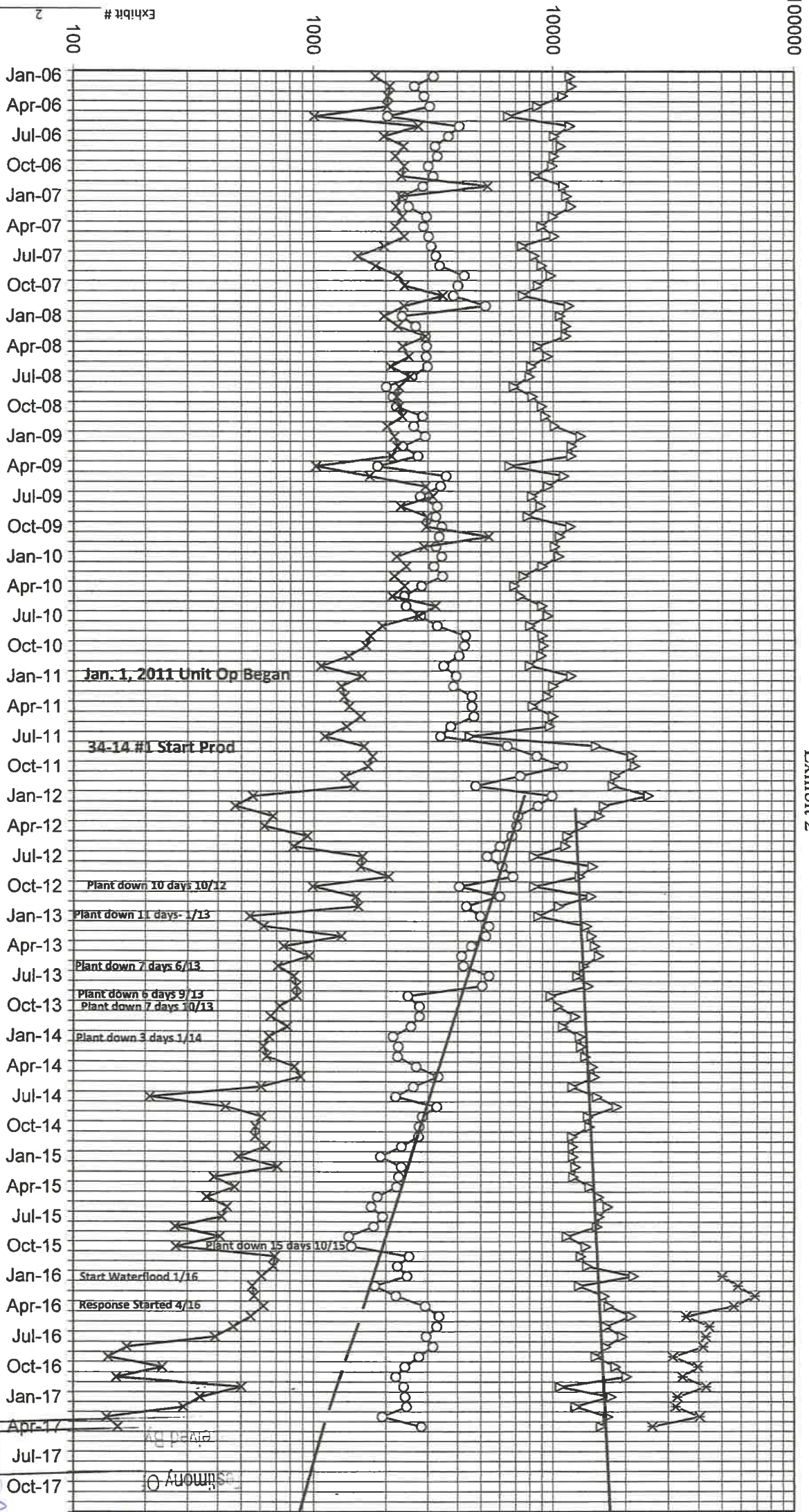
Petition By <u>Crosby Creek</u>	
Item No. <u>4</u>	Date <u>8-3-17</u>
Testimony Of <u>Stephens</u>	
Witnessed By <u>MR</u>	

Exhibit # 1
Docket # 8-1-17-02
To the Testimony of James O. Stephens
James O. Stephens

STABILIZED SALES
COND. BBL/MONTH
BEFORE PLANT FEE

SEPARATOR
MCF/MONTH

Crosbys Creek Gas Unit
Darllys Dees 3-3 #1, Sarah Middleton 34-11 #1, CCGU 34-14 #1
Production v. Time
Exhibit 2



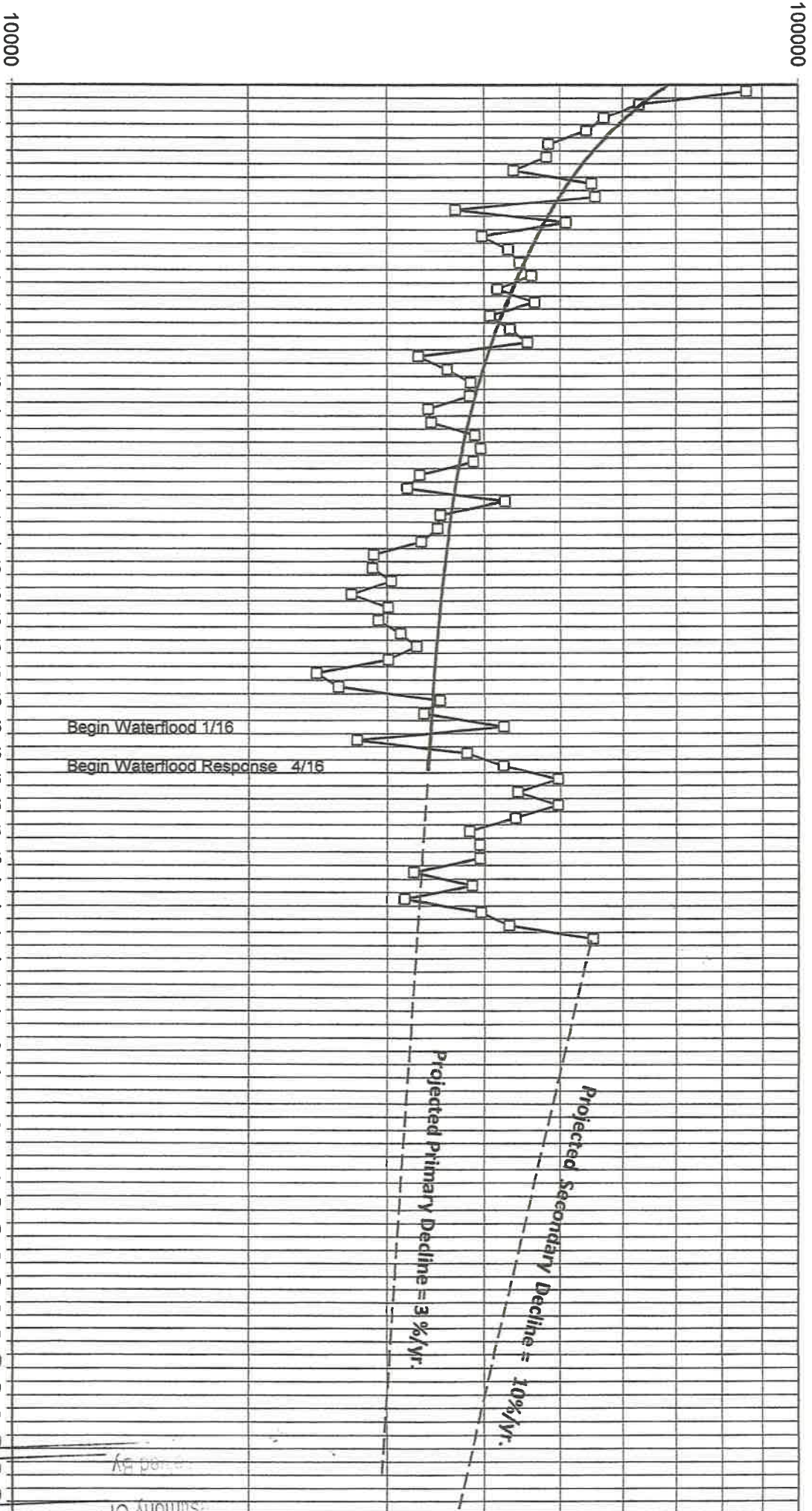
○ Oil ▲ Gas × Water * Water Injection

To the Testimony of
James O. Stephens
James O. Stephens
Docket # 8-1-17-02
Exhibit # 2

STATE OIL AND GAS BOARD
Exhibit No. 2
Petition By *Crosby Creek*
Date 8-3-17
Item No. 4
Testimony of *James O. Stephens*
Dated By *MS*

Crosbys Creek Gas Unit
Full Well Stream v Time
Exhibit 3

MCFe/mo



Projected recovery to 34 MMCFe/mo econ limit = 2.39 BCFe

MCFe = Sep MCF + Sep Bbls Cond * 6 (1 Bbl Cond ≈ 6 MM BTU)

STATE OIL AND GAS BOARD

Exhibit No. 3

Petition By: Crosbys Creek

Item No. 4 Date 8-3-17

Testimony of James O. Stephens

Prepared by James O. Stephens

Nov-20

Sep-20

Jul-20

May-20

Mar-20

Jan-20

Nov-19

Sep-19

Jul-19

May-19

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James O. Stephens

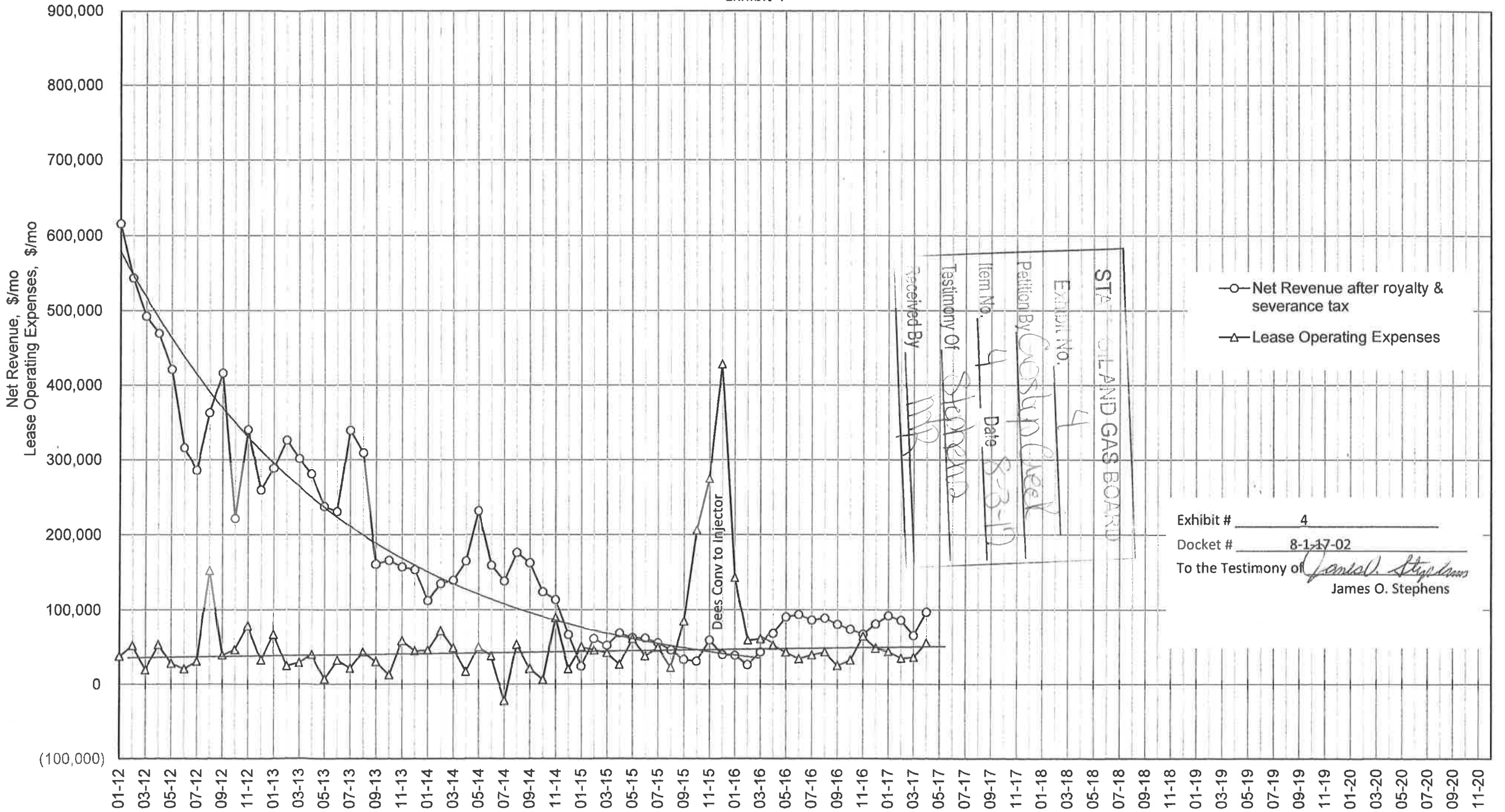
To the Testimony of

Exhibit # 3

Docket # 8-1-17-02

James O. Stephens

Crosbys Creek Gas Unit
 Net Revenue and LOE v. Time
 Exhibit 4



STATE OIL AND GAS BOARD
 Exhibit No. 4
 Petition By Crosbys Creek
 Item No. 4 Date 8-3-17
 Testimony Of Stephens
 Received By [Signature]

Exhibit # 4
 Docket # 8-1-17-02
 To the Testimony of [Signature]
 James O. Stephens

Crosbys Creek Gas Unit
Projected Incremental Recovery to Economic Limit
(Starting September 2017)

Mo/Yr	MCFe
Sep/17	53,083
Oct/17	52,619
Nov/17	52,159
Dec/17	51,703
Subtotal 2017	209,564
Jan/18	51,251
Feb/18	50,803
Mar/18	50,359
Apr/18	49,918
May/18	49,482
Jun/18	49,049
Jul/18	48,621
Aug/18	48,196
Sep/18	47,774
Oct/18	47,357
Nov/18	46,943
Dec/18	46,532
Subtotal 2018	586,285
Jan/19	46,126
Feb/19	45,722
Mar/19	45,323
Apr/19	44,926
May/19	44,534
Jun/19	44,145
Jul/19	43,759
Aug/19	43,376
Sep/19	42,997
Oct/19	42,621
Nov/19	42,248
Dec/19	41,879
Subtotal 2019	527,656
Jan/20	41,513
Feb/20	41,150
Mar/20	40,790
Apr/20	40,434
May/20	40,080
Jun/20	39,730
Jul/20	39,383
Aug/20	39,038
Sep/20	38,697
Oct/20	38,359
Nov/20	38,024
Dec/20	37,691
Subtotal 2020	474,889
Jan/21	37,362
Feb/21	37,035
Mar/21	36,711
Apr/21	36,390
May/21	36,072
Jun/21	35,757
Jul/21	35,444
Aug/21	35,135
Sep/21	34,828
Oct/21	34,523
Nov/21	34,221
Dec/21	33,922
Subtotal 2021	427,400
Grand Total	2,225,794

STATE OIL AND GAS BOARD

Exhibit No. 5

Petition By Crosby Creek

Item No. 4 Date 8-3-17

Testimony of Stephens

Filed By MR

Exhibit # 5

Docket # 8-1-17-02

To the Testimony of James O. Stephens
 James O. Stephens

CROSBYS CREEK OIL & GAS, LLC

DOCKET NO. 8-1-17-02

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EXHIBIT C
TECHNICAL EXHIBIT NOS. 1 - 5

PREPARED BY OR AT THE
DIRECTION OF JAMES O. STEPHENS

AUGUST 3, 2017

EXHIBIT "A"

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AFFIDAVIT

State of Alabama - Washington County

WILLIAM T. WATSON LLC
1651 MCFARLAND BOULEVARD NORTH
TUSCALOOSA AL, 35406-2212

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[Signature] (AFFIANT)

Sworn to and subscribed before me on this 21st day of July, 2017.

Notary Public *[Signature]*
My Commission Expires 7/23/2019

Ad ID 36007



STATE OIL AND GAS BOARD
Exhibit No. A
Petition By Crosby Creek
Item No. 4 Date 8-3-17
Testimony Of Watson
Received By MR

PUBLIC NOTICE

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Washington County News July 21, 2017

EXHIBIT "B"

STATE OF ALABAMA }

AFFIDAVIT OF NOTICE

TUSCALOOSA COUNTY }

COMES NOW William T. Watson, attorney for CROSBYS CREEK OIL & GAS, LLC, who, after being duly sworn on his oath, states the following:

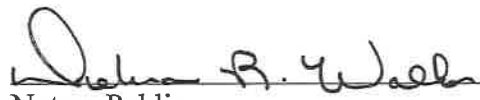
That on behalf of Crosbys Creek Oil & Gas, LLC, a petition bearing Docket No. 8-1-17-02 was filed with the State Oil and Gas Board of Alabama, and in accordance with Rule 400-7-1-.11(4) of the rules and regulations of the State Oil and Gas Board of Alabama Administrative Code, notice of said petition was mailed, by ordinary first class mail, postage paid, to the Alabama Department of Revenue, the entity that oversees collection of severance tax for the State of Alabama, at least fifteen (15) days prior to the scheduled hearing of the petition.

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Notary Public
My Commission Expires: 11-04-2017

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Item No.	<u>4</u> Date <u>8-3-17</u>
Testimony Of	<u>Watson</u>
and By	<u>MR</u>

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TO AFFIDAVIT OF NOTICE

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Docket No. 8-1-17-02

Alabama Department of Revenue
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50 North Ripley St., Room 1210
Montgomery, AL 36132

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STATE OIL & GAS BOARD OF ALABAMA
420 Hackberry Lane
P.O. Box 869999
Tuscaloosa, Alabama 35486-6999

Berry H. (Nick) Tew, Jr.
Secretary to the Board
State Oil and Gas Supervisor

JUL 12 2017

LEGAL DIVISION

CROSBYS CREEK OIL & GAS, LLC

DOCKET NO. 8-1-17-02

EXHIBIT NOS. 1 - 5

Prepared by James O. Stephens

July 11, 2017

Crosbys Creek Gas Unit

History, Production Analysis and Economics

The Crosbys Creek Gas Unit is a three well field producing gas condensate from the Smackover formation. Discovered in 1986 with drilling of the Middleton 34-11 #1, the field produced as two 640 acre units from 1988 through 2010. Effective January 1, 2011 the fieldwide unit was established for the purpose of drilling a third horizontal well, the CCGU 34-14 #1 to more effectively drain the reservoir and provide the option for eventual enhanced production by gas or carbon dioxide injection. Through petition and hearing in September 2015 the Unit Operations Plan was revised to allow for waterflood injection to improve recovery. The Dees 3-3 #1 well was converted to an injector and surface waterflood equipment was installed at an investment of over 1 MM\$. Water injection began in January 2016 at a rate of about 2000 BPD. The first sign of waterflood response occurred in the Middleton 34-11 #1 in April 2016. Water injection is continuing and through May 2017 cumulative injection was 717 MBW. Cumulative production from the reservoir through April was 2.7 MMBC, 8.3 BCF and 253 MBW.

A plot of Unit production v. time (Exhibit 2) shows a moderately increasing gas rate but a more rapidly declining condensate rate during the period from January 2012 through March 2016. This time period establishes the primary production trend. The fact that gas was increasing while condensate was decreasing is evidence that the reservoir pressure had dropped below the dew point and thus liquids were being left in the formation. The increase in production starting in April 2016 is a clear departure from the historical primary decline.

To better illustrate the full well stream performance, a plot of full well stream production v. time was prepared (Exhibit 3). The full well stream is the sour separator gas plus condensate converted to MCFe using the commonly used ratio of 6 MMBTU or 6 MCF per barrel. The curve shows an exponential decline flattening to about 3%/yr. during the primary production period (prior to 4/16). From 4/16 forward there is a significant departure from the primary decline due to waterflood response. By May 2017 the production had increased to 55 MMCFe/mo. Until the waterflood response has levelled and begun to decline, the projected secondary decline rate is subject to adjustment. At a projected secondary decline rate of 10% per year the estimated secondary recovery from May 2017 forward is 2.39 BCFe.

A plot of net revenue and LOE v. time (Exhibit 4) was constructed to show the economic limit under primary production. The graph clearly shows the economic limit was reached in late 2015. From September 2015 through February 2016, expenses exceeded revenue for five out of six months, neglecting the extra expenses incurred in installing the waterflood. Thus with declining production, the Unit would continue to be uneconomic if it were not for the waterflood response. Therefore, all production from April 2016 forward qualifies as incremental production and should be certified by the Board as such.

Exhibit # _____

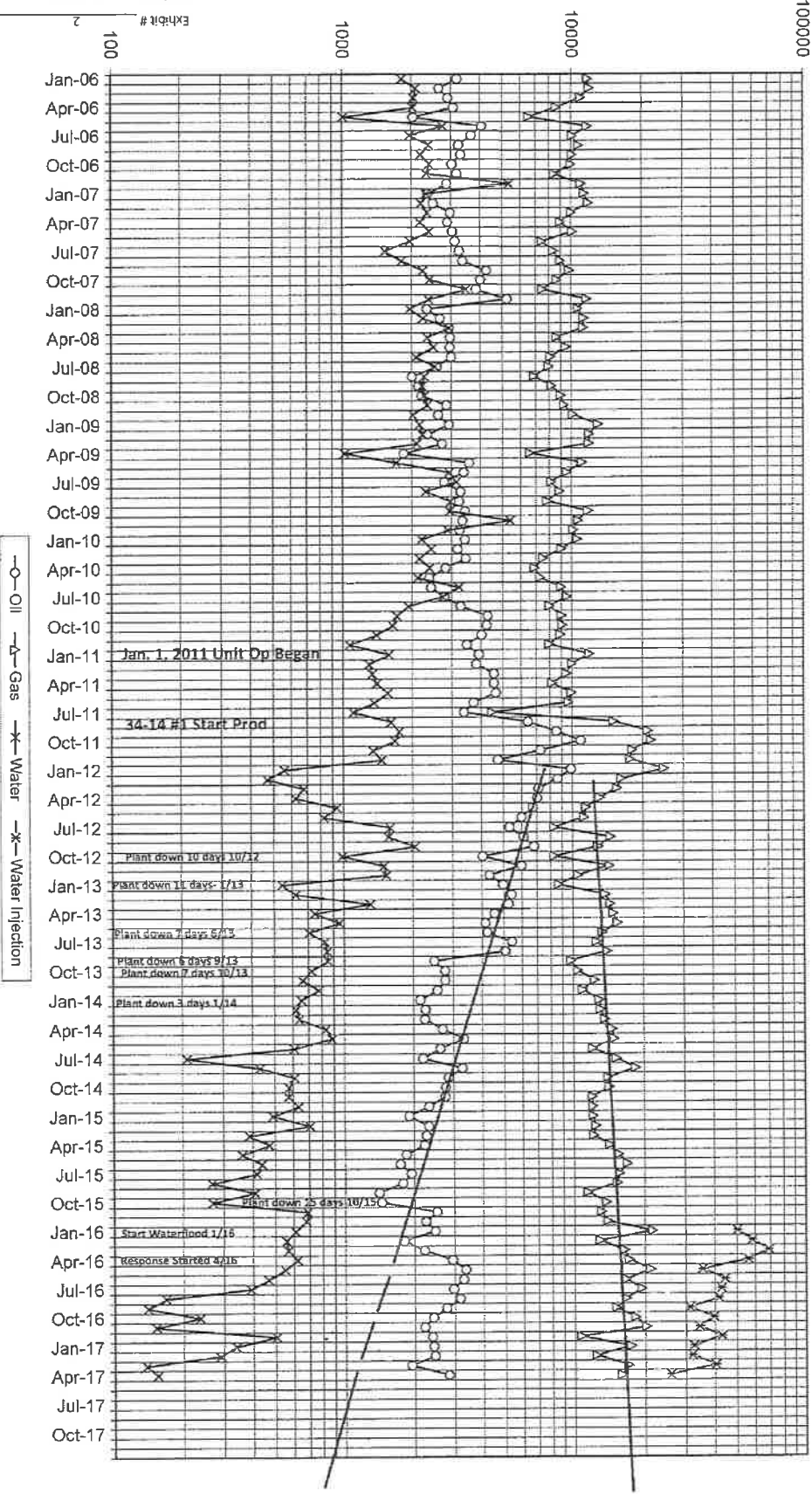
Docket # 8-1-17-02

To the Testimony of James O. Stephens

James O. Stephens

STABILIZED SALES
 COND. BBLS/MONTH
 BEFORE PLANT FEE

SEPARATOR
 MCF/MONTH



100000

10000

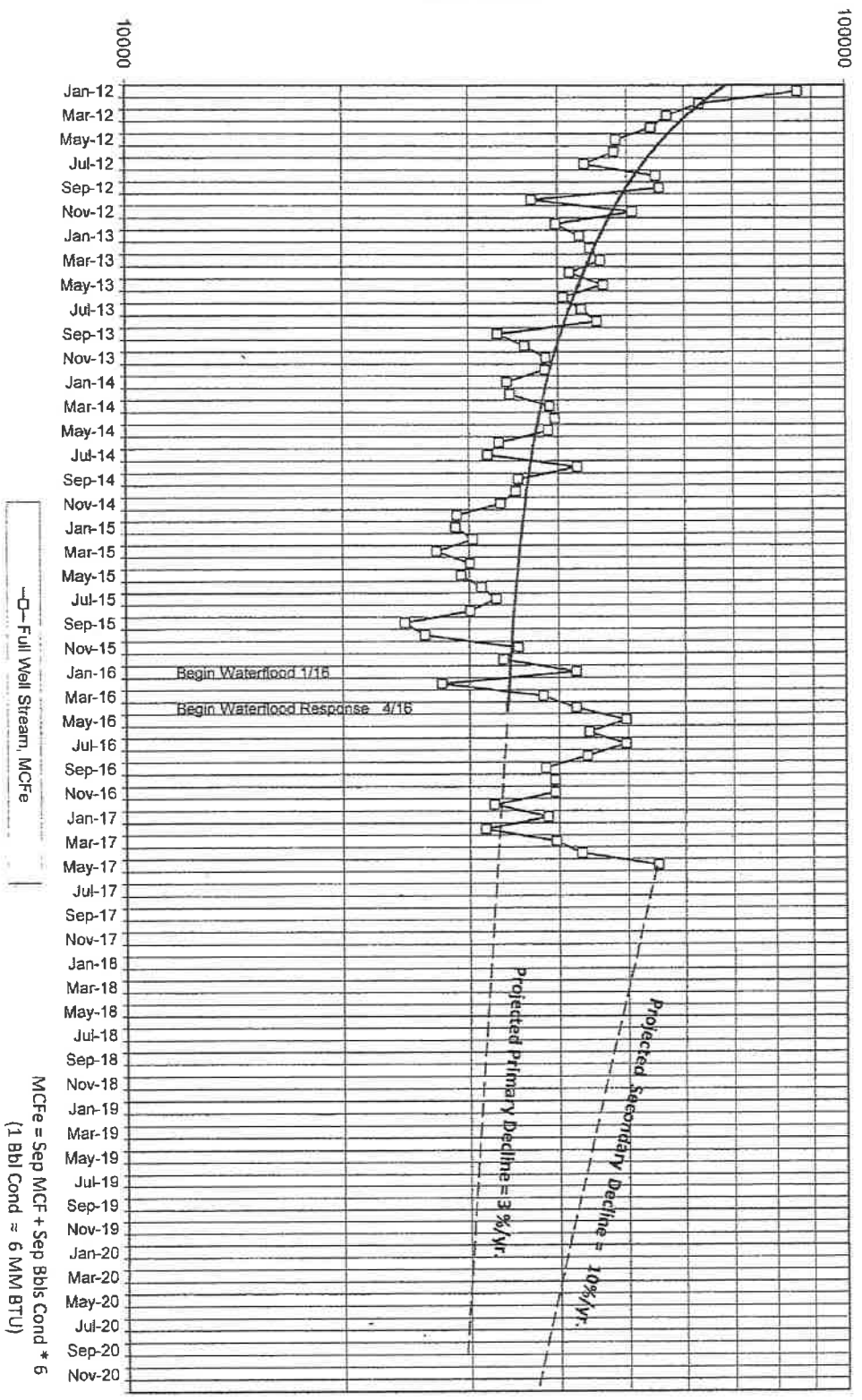
1000

100

Crosbys Creek Gas Unit
 Dardys Dees 3-3 #1, Sarah Middleton 34-1 #1, CCGU 34-14 #1
 Production v. Time
 Exhibit 2

—O— Oil —A— Gas —X— Water —*— Water Injection

Crosbys Creek Gas Unit
Full Well Stream v Time
Exhibit 3



Projected recovery to 34 MMCFe/mo econ limit = 2.39 BCFe

MCFe = Sep MCF + Sep Bbls Cond * 6
(1 Bbl Cond = 6 MM BTU)

□ Full Well Stream, MCFe

MCFe/mo

Crosbys Creek Gas Unit
 Net Revenue and LOE v. Time
 Exhibit 4

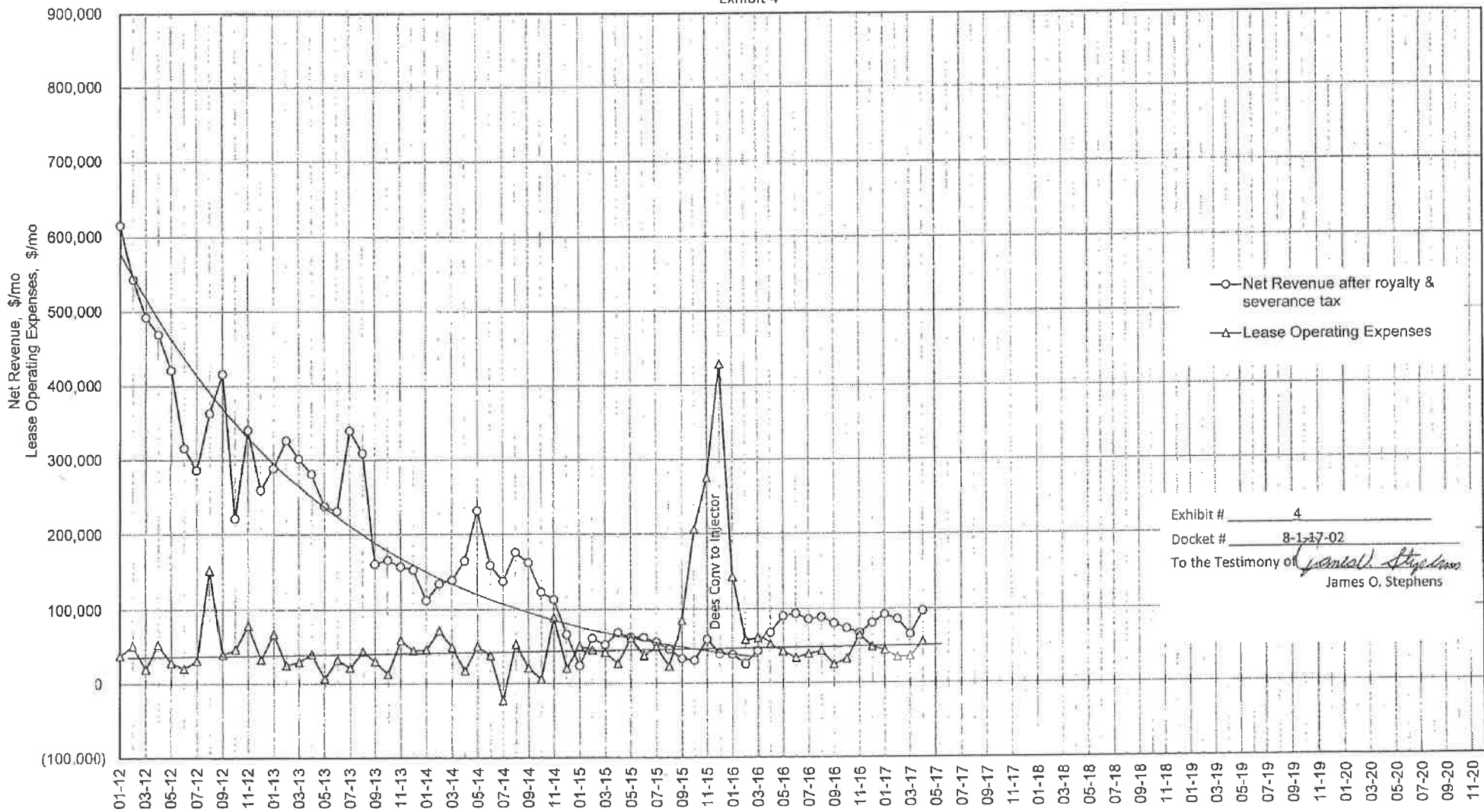


Exhibit # 4
 Docket # 8-1-17-02
 To the Testimony of James O. Stephens
 James O. Stephens

Crosbys Creek Gas Unit
Projected Incremental Recovery to Economic Limit
(Starting September 2017)

<u>Mo/Yr</u>	<u>MCFe</u>
Sep/17	53,083
Oct/17	52,619
Nov/17	52,159
Dec/17	51,703
Subtotal 2017	209,564
Jan/18	51,251
Feb/18	50,803
Mar/18	50,359
Apr/18	49,918
May/18	49,482
Jun/18	49,049
Jul/18	48,621
Aug/18	48,196
Sep/18	47,774
Oct/18	47,357
Nov/18	46,943
Dec/18	46,532
Subtotal 2018	586,285
Jan/19	46,126
Feb/19	45,722
Mar/19	45,323
Apr/19	44,926
May/19	44,534
Jun/19	44,145
Jul/19	43,759
Aug/19	43,376
Sep/19	42,997
Oct/19	42,621
Nov/19	42,248
Dec/19	41,879
Subtotal 2019	527,656
Jan/20	41,513
Feb/20	41,150
Mar/20	40,790
Apr/20	40,434
May/20	40,080
Jun/20	39,730
Jul/20	39,383
Aug/20	39,038
Sep/20	38,697
Oct/20	38,359
Nov/20	38,024
Dec/20	37,691
Subtotal 2020	474,889
Jan/21	37,362
Feb/21	37,035
Mar/21	36,711
Apr/21	36,390
May/21	36,072
Jun/21	35,757
Jul/21	35,444
Aug/21	35,135
Sep/21	34,828
Oct/21	34,523
Nov/21	34,221
Dec/21	33,922
Subtotal 2021	427,400
Grand Total	2,225,794

Exhibit # 5

Docket # 8-1-17-02

To the Testimony of James O. Stephens
 James O. Stephens

STATE OIL AND GAS BOARD OF ALABAMA

OIL AND GAS BOARD

James H. Griggs, Chairman
Charles E. (Ward) Pearson, Vice Chairman
Stephen P. French, Member
Berry H. (Nick) Tew, Jr., Secretary
S. Marvin Rogers, General Counsel



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Berry H. (Nick) Tew, Jr.
Oil and Gas Supervisor

July 19, 2017

Mr. Vernon Barnett
Commissioner of Revenue
50 North Ripley Street
Montgomery, Alabama 36132

STATE OIL AND GAS BOARD	
Exhibit No.	<u>D</u>
Petition By	<u>Crosby Creek</u>
Item No.	<u>4</u> Date <u>8-3-17</u>
Testimony Of	<u>Rogers</u>
Received By	<u>MR</u>

RE: Petition by Crosbys Creek Oil & Gas, LLC
Docket No. 8-1-17-02

Dear Mr. Barnett:

This is to notify you that Crosbys Creek Oil & Gas, LLC has filed a Petition for a reduced severance tax. I am enclosing a copy of the Petition and exhibits pre-filed by Crosbys Creek Oil & Gas.

Crosbys Creek Oil & Gas, LLC proposes under Section 40-20-1 of the *Code of Alabama* (1975) as amended, to pay a reduced severance tax for initiating an enhance recovery operation. The approval of the Petition will result in Crosbys Creek's paying a reduced severance tax on its production from Crosbys Creek Field in Washington County.

The Oil and Gas Board of Alabama would be pleased to have your comments and input on this matter. Please feel free to contact us if you wish to discuss the matter.

Sincerely yours,

A handwritten signature in cursive script that reads "S. Marvin Rogers".

S. Marvin Rogers
General Counsel
Assistant Attorney General

jfo

cc: Ms. Janet Stathopoulos
Severance Tax Division

Enclosures