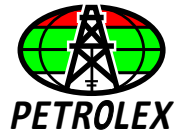


APPLICANT



PETROLEX
OPERATING VENTURES, LLC

Green Lake Field

WEST BATON ROUGE PARISH, LOUISIANA

TUSCALOOSA ZONE
TUSC GL UDS SUA

Docket No. 17-400
August 8, 2017

Witness: David Comeaux
Geological Exhibits

Witness: Bryan S. Groves
3-D Seismic Data Exhibits

Attorney: James L. Bullen

Jeanerette Minerals L.L.C. No. 1

SN: 245356
Spud: 9-19-12
Comp: 12-23-14 (WH-1)
Perfs: 28,480'-635'; 28,730'-808'
 29,044'-052'; 29,074'-150' (deepest completion in the State)
IP: 43,500 MCFD; 0 BOPD; 787 BWPD
FTP: 11,955 PSIG
CK: 23/64"
SITP: 20,790 PSIG
Cum: 17.7 BCF (11/16/16)
Recent: (04/09/2016)
 48,766 MCFD, 381 BWPD (Fresh), 0 BCPD,
 FTP 12,569 PSIG; SITP 19546 PSIG
 CK 18/64"
BHP: 24,325 PSI (highest worldwide) (1)
BHT: 440° F (highest worldwide) (1)
Net Pay: 127'
H2S: 55-60 ppm average
CO2: +/- 8%

(1) Blade Energy Partners



PETROLEX
OPERATING VENTURES, LLC

DOCKET NO. 17-400
EXHIBIT NO. 1A

Date: 8-8-17
Witness: David Comeaux

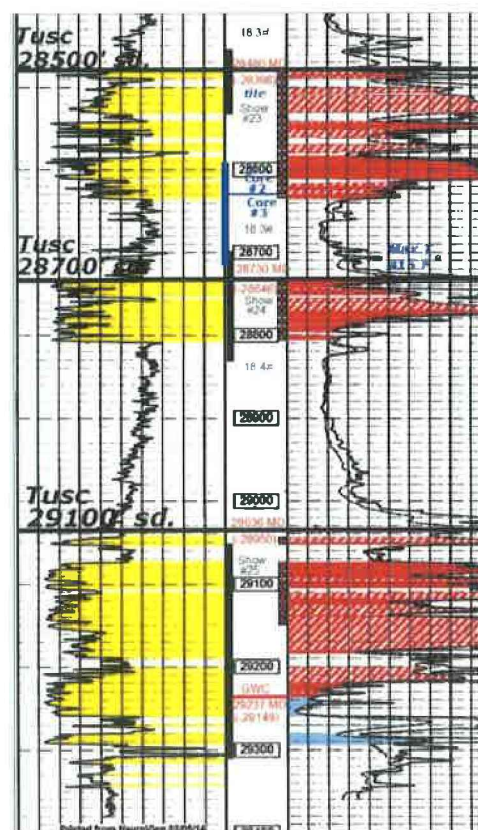
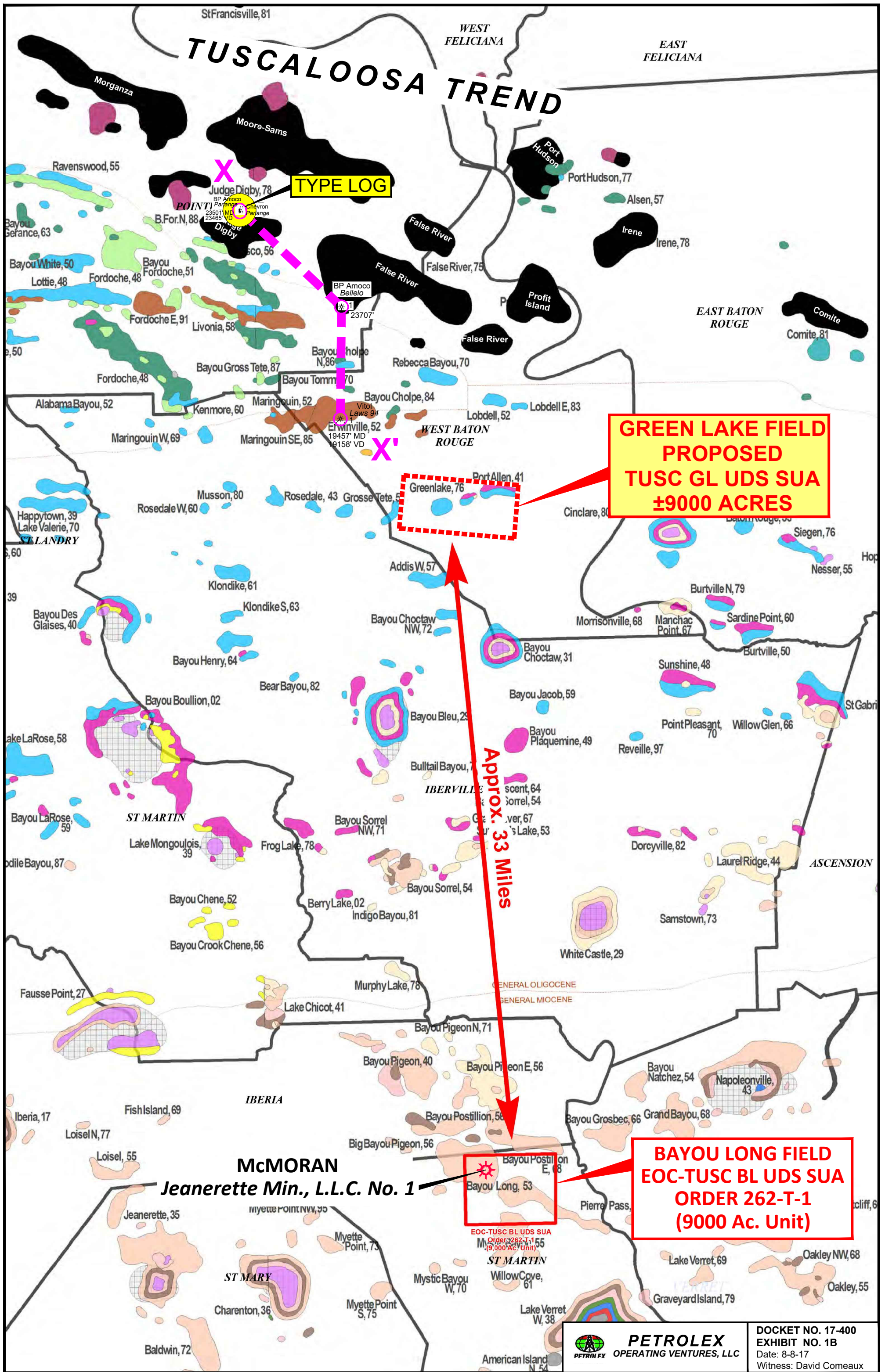
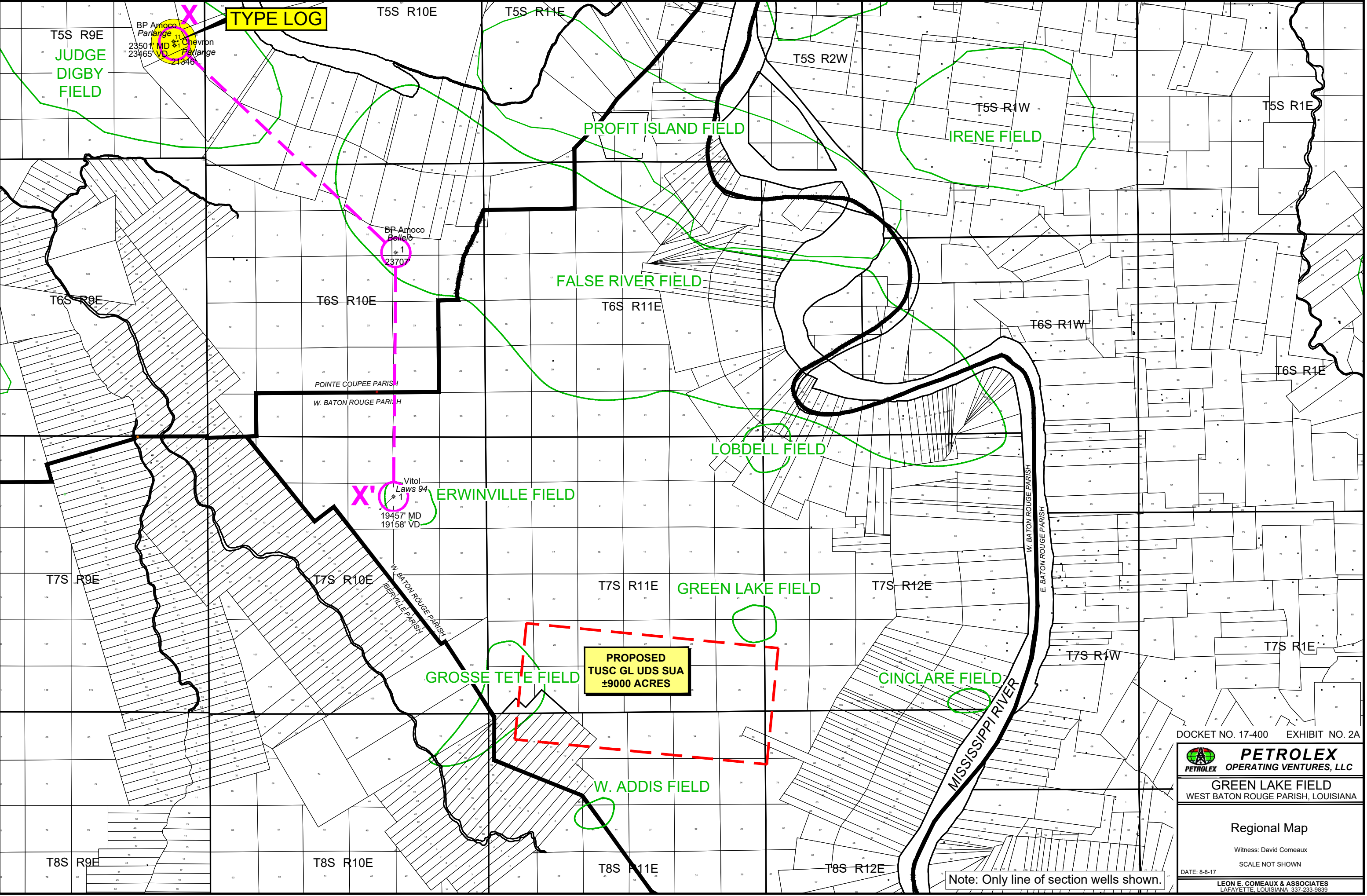


EXHIBIT No. G-

Docket No. 17-54

McMoRan Oil & Gas	
BAYOU LONG FIELD ST. MARTIN PARISH, LOUISIANA	
POD Revision Type Log	
Date: 1-16-17 Geology: LOUIS GILBERT & ASSOCIATES, INC.	





DOCKET NO. 17-400 EXHIBIT NO. 2A

PETROLEX
OPERATING VENTURES, LLC

GREEN LAKE FIELD
WEST BATON ROUGE PARISH, LOUISIANA

Regional Map

Witness: David Comeaux

SCALE NOT SHOWN

DATE: 8-8-17

LEON E. COMEAUX & ASSOCIATES
LAFAYETTE, LOUISIANA 337-233-9839

X

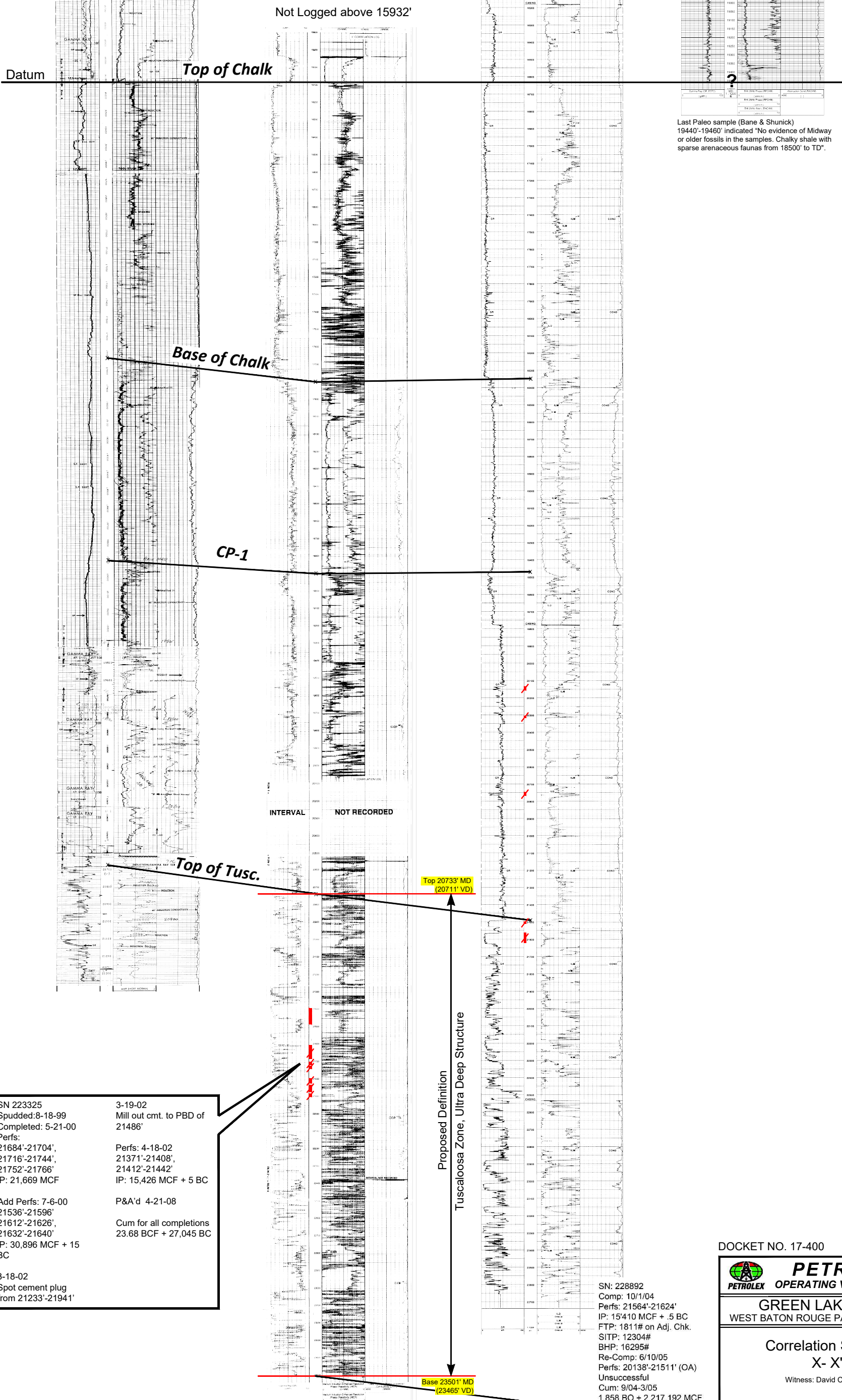
Chevron U.S.A., Inc.
W. C. Parlange, Jr., et al No. 1
Sec. 49, T5S-R9E
SN: 154126

BP America Prod. Co.
W. C. Parlange No. 11 Alt.
Sec. 49, T5S-R9E
SN: 223325

BP America Prod. Co.
Bellelo, et al No. 1
Sec. 11, T6S-R10E
SN: 228892

Vitol Resources
Laws, et al 94 No. 1
Sec. 94, T7S-R10E
SN: 248370

X'



SN 223325
Spudded: 8-18-99
Completed: 5-21-00
Perfs:
21684'-21704',
21716'-21744',
21752'-21766'
IP: 21,669 MCF

Add Perfs: 7-6-00
21536'-21596'
21612'-21626',
21632'-21640'
IP: 30,896 MCF + 15 BC

3-18-02
Spot cement plug
from 21233'-21941'

3-19-02
Mill out cmt. to PBD of
21486'

Perfs: 4-18-02
21371'-21408',
21412'-21442'
IP: 15,426 MCF + 5 BC

P&A'd 4-21-08

Cum for all completions
23.68 BCF + 27,045 BC

SN: 228892
Comp: 10/1/04
Perfs: 21564'-21624'
IP: 15'410 MCF + .5 BC
FTP: 1811# on Adj. Chk.
SITP: 12304#
BHP: 16295#
Re-Comp: 6/10/05
Perfs: 20138'-21511' (OA)
Unsuccessful
Cum: 9/04-3/05
1,858 BO + 2,217,192 MCF
P&A: 10/5/05

DOCKET NO. 17-400 EXHIBIT NO. 2B

PETROLEX
OPERATING VENTURES, LLC

GREEN LAKE FIELD
WEST BATON ROUGE PARISH, LOUISIANA

Correlation Section
X- X'
Witness: David Comeaux

DATE: 8-8-17

LEON E. COMEAUX & ASSOCIATES
LAFAYETTE, LOUISIANA 337-233-9839

LEON E. COMEAUX
& ASSOCIATES
Geological & Petroleum Consultants

P.O. Box 53922 Lafayette, LA 70505 lcomeaux@cox-internet.com

Phone 337 233-9839 Fax 337 233-2131

DAVID COMEAUX davecomeaux@cox-internet.com

WILLIAM McALISTER, JR. mcalisterb@cox-internet.com

RANDY McALISTER rmcaster@cox-internet.com

March 30, 2017

Mr. David Elfert
Department of Natural Resources
Office of Conservation
P. O. Box 94275
Baton Rouge, Louisiana 70804-9275

RE: Waiver of Production Test
Tuscaloosa Zone, UDS
GREEN LAKE FIELD
West Baton Rouge Parish, Louisiana

Dear Mr. Elfert:

On behalf of Petrolex Operating Ventures, LLC ("Petrolex"), I hereby request a production test waiver for the Tuscaloosa Zone in Green Lake Field, in accordance with the Office of Conservation Policy Memorandum dated March 16, 1998.

The Tuscaloosa Zone produced from, among numerous other wells, the BP America Production Co.- W.C. Parlange Jr. No. 11 Well (SN 223325) in Judge Digby Field and the BP America Production Co.- Bellelo, et al No. 1 Well (SN 228892) in the False River Field, located approximately fifteen (15) and seven (7) miles north-northwest, respectively, of Green Lake Field. In support of this request enclosed is a regional map depicting a) the proposed Ultra Deep Structure (UDS) unit Petrolex intends to apply for in the near future and b) a line of Section A-A' which corresponds to the correlation section, also enclosed, from Judge Digby Field to slightly north of Green Lake Field. Note that within, and immediately surrounding Green Lake Field there are no wells that have been drilled below 11,000'. Because the anticipated top of the first Tuscaloosa objective is below 22,000' TVD, no logs from Green Lake Field are included on the correlation section.

Pursuant to Act 362 of the 2015 Regular Session, enclosed is a check in the amount of \$504.00. If you require any additional information please do not hesitate to contact the undersigned.

Sincerely,

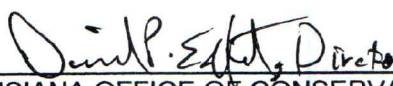
LEON E. COMEAUX & ASSOCIATES


David Comeaux

DC/af
Enclosures
cc: Mr. Michael Kenney
Mr. James Bullen

Waiver Request Granted

4th Day of April, 2017

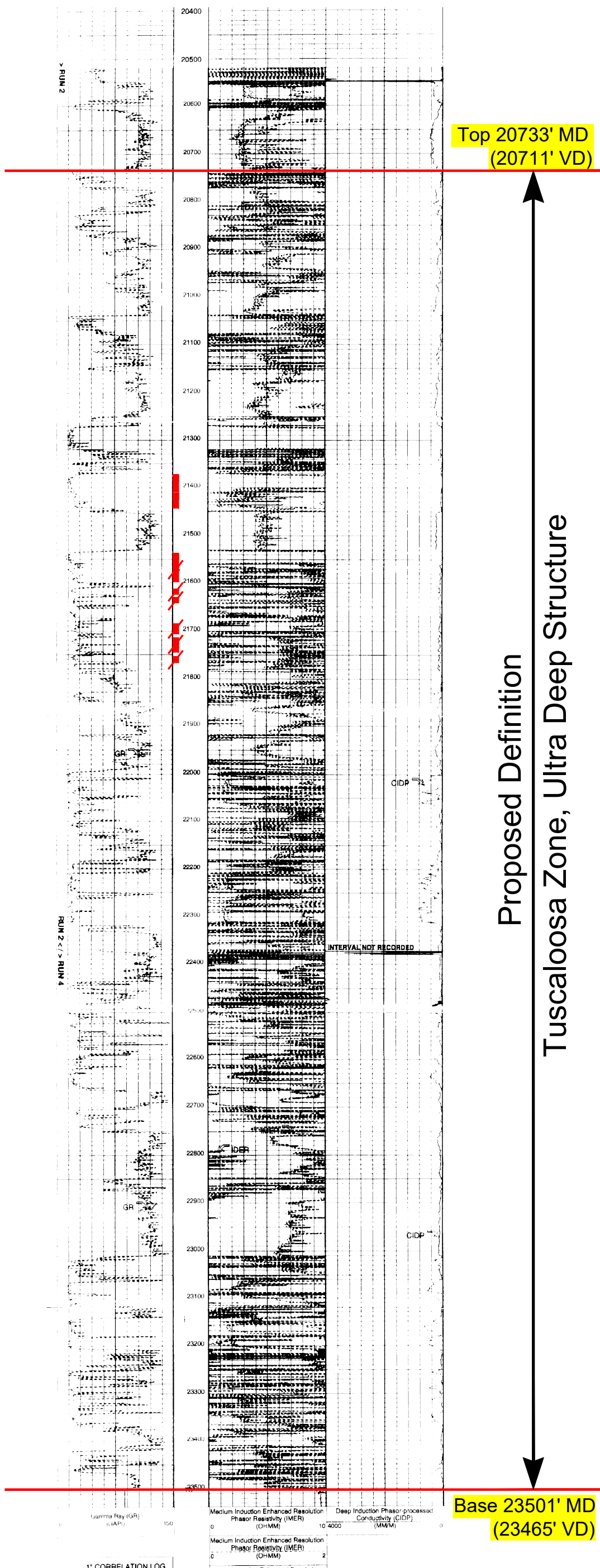
By:  Director - Coal and Gas Div.
LOUISIANA OFFICE OF CONSERVATION



PETROLEX
OPERATING VENTURES, LLC

DOCKET NO. 17-400
EXHIBIT NO. 2C
Date: 8-8-17
Witness: David Comeaux

BP America Prod. Co.
W.C. Parlange No. 11 Alt.
Sec. 49, T5S-R9E
(SN: 223325)



SN 223325
Spudded: 8-18-99
Completed: 5-21-00
Perfs:
21684'-21704',
21716'-21744',
21752'-21766'
IP: 21,669 MCF

Add Perfs: 7-6-00
21536'-21596',
21612'-21626',
21632'-21640'
IP: 30,896 MCF + 15 BC

3-18-02
Spot cement plug from
21233'-21941'

3-19-02
Mill out cmt. to PBD of
21486'

Perfs: 4-18-02
21371'-21408',
21412'-21442'
IP: 15,426 MCF + 5 BC

P&A'd 4-21-08

Cum for all completions
23.68 BCF + 27,045 BC

DOCKET NO. 17-400 EXHIBIT NO. 3

 **PETROLEX**
OPERATING VENTURES, LLC

GREEN LAKE FIELD
WEST BATON ROUGE PARISH, LOUISIANA

TYPE LOG
BP America Prod. Co. - W.C. Parlange No. 11 Alt.
Sec. 49, T5S-R9E
(SN: 223325)

TUSCALOOSA ZONE

DATE: 8-8-17 Witness: David Comeaux

LEON E. COMEAUX & ASSOCIATES
LAFAYETTE, LOUISIANA 337-233-9839

TUSC GL UDS SUA PLAN OF DEVELOPMENT

- The first unit well, A. Wilberts Sons, LLC No. 1, is planned to be spudded in May 2018. Initial gas sales are anticipated to be in February 2020.
- Unit well two is planned to be spudded within two (2) years of the initial gas sales of unit well one. Initial gas sales for unit well two are anticipated to be in August 2023.
- Unit well three is planned to be spudded within two (2) years of the initial gas sales of unit well two.
- The anticipated total depth for each well is approximately 25,000'.
- The reserve estimate for each well is 121.5BCFe.
- Location costs will total approximately \$1.5MM per well.
- Each well will cost approximately \$47MM to drill and \$36MM to complete.



PETROLEX
OPERATING VENTURES, LLC

DOCKET NO. 17-400
EXHIBIT NO. 4
Date: 8-8-17
Witness: David Comeaux

GREEN LAKE FIELD TUSC GL UDS SUA

Proposed Unit Operation Economic Feasibility Summary

MINIMUM CASE	ESTIMATED RECOVERABLE RESERVES	ESTIMATED CAPITAL INVESTMENT	RATE OF RETURN	PAYOUT (YEARS)	PRODUCTIVE LIFE (YEARS)	ESTIMATED TAX TO STATE OF LOUISIANA
	364.5 BCF	\$310,000,000	31%	7.3	13.3	\$33,500,000

Assumptions used in Economic Feasibility Analysis:

- Three wells are included in this analysis.
- Minimum gas reserves of 121.5 BCFe are developed by each well.
- 75 MMCFD initial rate for each well held flat for approximately half the reserve volume, then declining exponentially to an abandonment rate of 2.5 MMCFD {See BP America (Amoco) - R.O. Martin Lbr. Co. No. 1 well in Judge Digby Field, WSN 225269, tested 10/19/01 from TUSC. perforations 20,334'-20,400'; 79,490 MCFD: 553 BCD; 17 BWD; FTP 5525 psig on a 1" choke}.
- Average cost to drill and evaluate each well is approximately \$47MM.
- Average cost to complete each well is approximately \$36MM.
- Production facility costs of approximately \$14.6MM/ well (75MMCFD capacity for one well).
- Timing based on nine months to drill each well, with each subsequent well to be spud two years following the initial gas sales of the previous well. All drilling and completion work anticipated to be done with 2 rigs.
- Operating costs of approximately \$95,000 per month.
- Annual gas price starting at \$2.75/mmbtu (One Million British Thermal Units) in 2019 and increasing to \$3.37/mmbtu in 2032, based upon Nymex strip pricing.
- Annual condensate price starting at \$50.50/bbl in 2019 and increasing to \$63.63/bbl in 2032, based upon Nymex strip pricing.
- One hundred percent (100 %) working interest.
- Severance tax exempted pursuant to Act 2 of the 1994 Regular Session after initial production of each well, then \$0.098 per thousand cubic feet, in accordance with State of Louisiana Revenue Information Bulletin 16-031 and 12.5% of the value for condensate.



PETROLEX
OPERATING VENTURES, LLC

DOCKET NO. 17-400
EXHIBIT NO. 5
Date: 8-8-17
Witness: David Comeaux

Reserves and Economics Summary

Green Lake Field

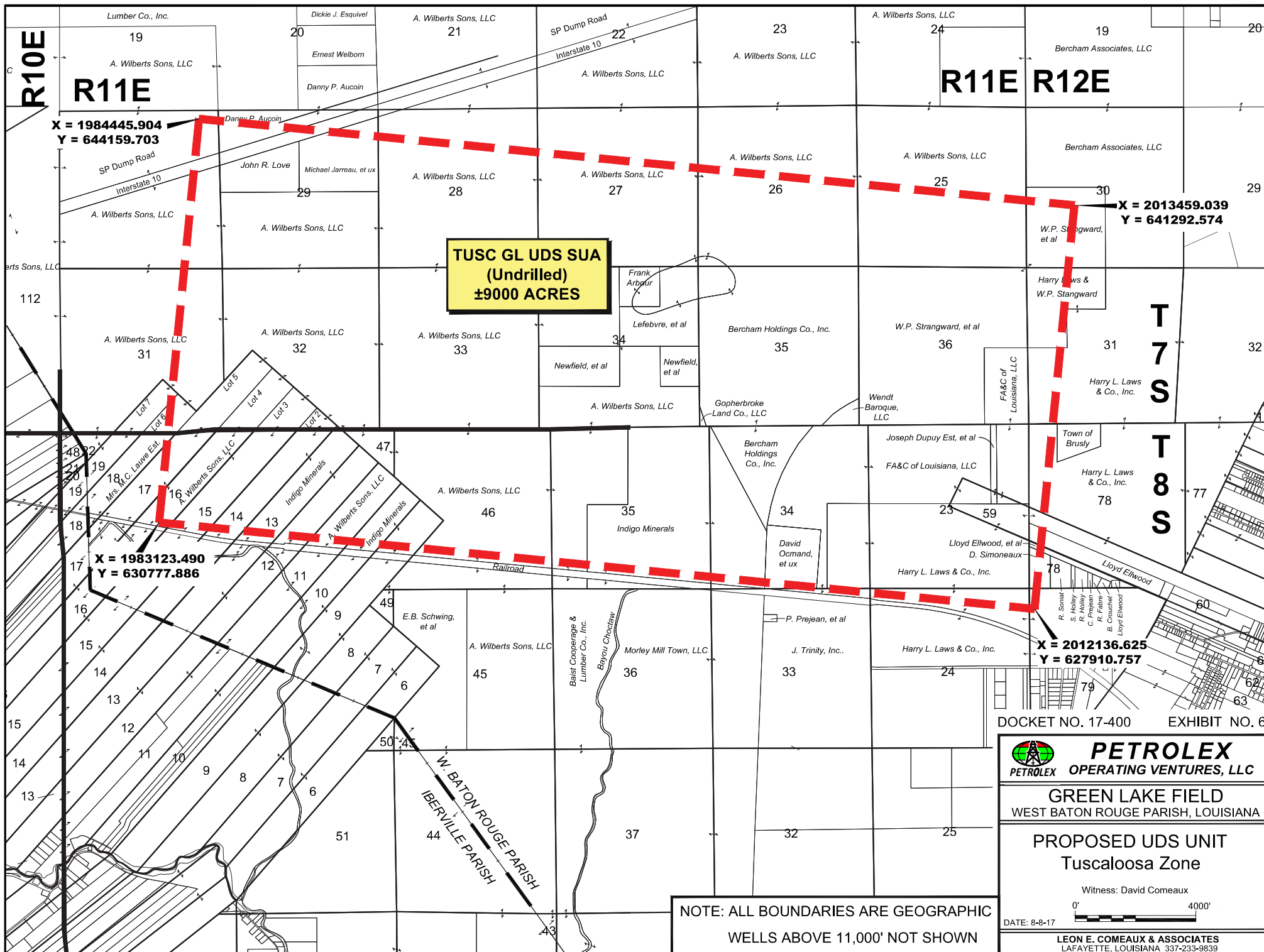
TUSC GL UDS SUA

Year	Gross Oil Production (MBBL)	Price Oil (\$/BBL)	Gross Oil Revenue (M\$)	Gross Gas Production (MMCF)	Price Gas (\$/MCF)	Gross Gas Revenue (M\$)	Gross Revenue (M\$)	Royalty, Ad Valorem, Severance Tax, LOE and Aban (M\$)	Total Investment (M\$)	Net Cash Flow (M\$)	Cumulative NCF (M\$)	Cumulative Disc NCF@15% (M\$)
2017	0	0	0	0	0	0	0	0	20,000.00	-20000.00	-20000.00	-18759.02
2018	0	0	0	0	0	0	0	0	70,000.00	-70000.00	-90000.00	-78721.17
2019 (7)	19.3	50.50	972.63	14,846.25	2.75	40,827.19	41,799.82	12,659.10	15,800.00	13340.71	-76659.29	-69986.45
2020	32.9	50.70	1,670.06	25,391.25	2.72	69,064.20	70,734.26	21,431.03	0	49303.23	-27356.06	-37568.78
2021	38.2	51.33	1,960.54	29,441.88	2.74	80,670.76	82,631.30	26,269.79	203,740.71	-147379.20	-174735.26	-121833.31
2022	90.7	52.20	4,736.31	69,940.78	2.76	193,036.56	197,772.87	62,037.80		135735.07	-39000.19	-54348.99
2023	82.4	53.24	4,388.53	63,539.10	2.80	177,909.48	182,298.01	57,590.55		124707.46	85707.27	-434.51
2024	71.3	54.31	3,874.15	54,986.60	2.84	156,161.94	160,036.09	54,793.06		105243.03	190950.30	39130.24
2025	48.4	55.40	2,682.14	37,319.14	2.92	108,971.89	111,654.03	39,775.27		71878.77	262829.06	62627.53
2026	32.4	56.50	1,827.94	24,938.73	2.98	74,317.40	76,145.34	28,789.86		47355.48	310184.55	76088.92
2027	21.6	57.63	1,245.96	16,665.44	3.04	50,662.95	51,908.91	21,298.65		30610.26	340794.81	83655.31
2028	14.5	58.79	851.27	11,161.54	3.10	34,600.76	35,452.03	16,218.35		19233.68	360028.49	87789.46
2029	9.6	59.96	578.26	7,434.00	3.17	23,565.78	24,144.04	12,732.16		11411.88	371440.37	89922.42
2030	5.7	61.16	350.40	4,416.25	3.23	14,264.50	14,614.89	10,612.43		4002.47	375442.83	90572.93
2031	3.6	62.38	227.24	2,808.07	3.30	9,266.63	9,493.87	6,507.44		2986.43	378429.27	90995.00
2032 (9)	1.9	63.63	121.22	1,468.47	3.37	4,948.74	5,069.96	8,659.67		-3589.71	374839.56	90553.84
13.33 yr	472.7	53.92	25,486.65	364,357.50	2.85	1,038,268.77	1,063,755.42	379,375.16	309,540.71	374839.56	374839.56	90553.84

Gross Wells	3
Gross Gas Resources, MMCF	364,500.00
Initial Price, \$/MCF	2.75
Gross Oil Resources, MBBL	472.8
Initial Price, \$/BBL	50.50

Life (in years)	13.33
Discount %	15.00
Undiscounted Payout, Yrs	7.30
Discount Payout, Yrs	8.01
Rate of Return, %	30.9
Initial WI, %	100.00

Present Worth Percentage	Present Worth (M\$)
0.00	374,800.00
10.00	149,800.00
15.00	90,600.00



X = 1984445.904
Y = 644159.703

X = 2013459.039
Y = 641292.574

X = 1983123.490
Y = 630777.886

X = 2012136.625
Y = 627910.757

TUSC GL UDS SUA
(Undrilled)
±9000 ACRES

DOCKET NO. 17-400 EXHIBIT NO. 6

**PETROLEX**
PETROLEX OPERATING VENTURES, LLC

GREEN LAKE FIELD
WEST BATON ROUGE PARISH, LOUISIANA

PROPOSED UDS UNIT
Tuscaloosa Zone

Witness: David Comeaux


0' 4000'

DATE: 8-8-17

LEON E. COMEAUX & ASSOCIATES
LAFAYETTE, LOUISIANA 337-233-9839

NOTE: ALL BOUNDARIES ARE GEOGRAPHIC
WELLS ABOVE 11,000' NOT SHOWN



APPLICANT

PETROLEX
OPERATING VENTURES, LLC

Green Lake Field

WEST BATON ROUGE PARISH, LOUISIANA

TUSCALOOSA ZONE
TUSC GL UDS SUA

Docket No. 17-400
August 8, 2017

3-D SEISMIC EXHIBITS & TESTIMONY

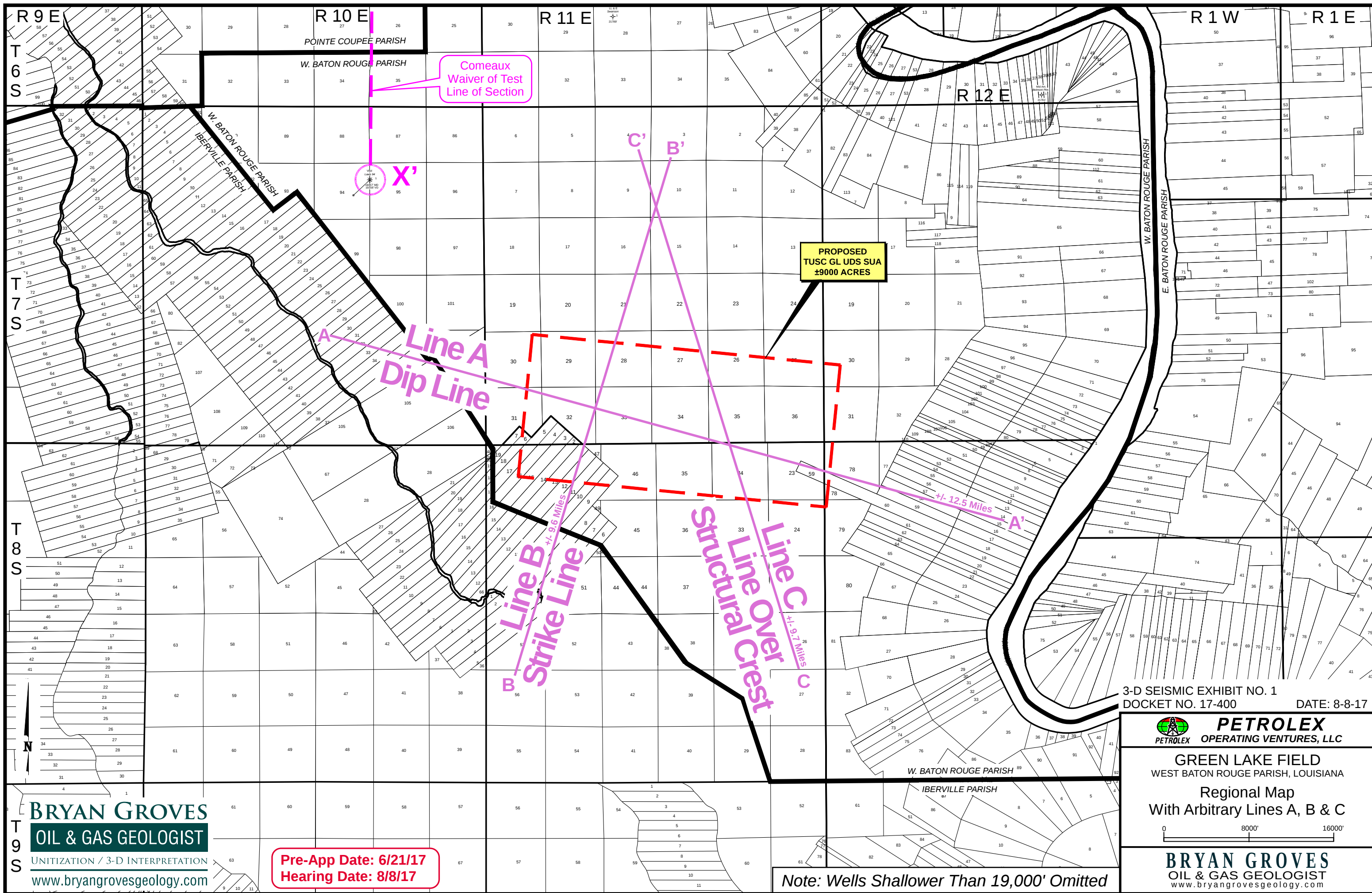
Witness: Bryan S. Groves

prepared by

BRYAN GROVES
OIL & GAS GEOLOGIST

UNITIZATION / 3-D INTERPRETATION

www.bryangrovesgeology.com



BRYAN GROVES
OIL & GAS GEOLOGIST
UNITIZATION / 3-D INTERPRETATION
www.bryangrovesgeology.com

Pre-App Date: 6/21/17
Hearing Date: 8/8/17

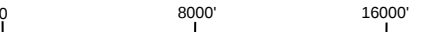
Note: Wells Shallower Than 19,000' Omitted

3-D SEISMIC EXHIBIT NO. 1
DOCKET NO. 17-400 DATE: 8-8-17

 **PETROLEX**
OPERATING VENTURES, LLC

GREEN LAKE FIELD
WEST BATON ROUGE PARISH, LOUISIANA

Regional Map
With Arbitrary Lines A, B & C



BRYAN GROVES
OIL & GAS GEOLOGIST
www.bryangrovesgeology.com

DIP LINE

Line A
Dip Line

Line B
Strike Line

Line C
Structural Crest

PROPOSED
TUSC GL UDS SUA
±9000 ACRES

±12.5 Miles

±12.5 Miles

Color Bar:
"Landmark Red-White-Black"

Generalized 3-D Seismic Wavelet

Amplitude

Negative polarity

Positive polarity

Maximum Amplitude
"PEAK"
(BLACK)

Zero Amplitude
(Zero Crossing)

Minimum Amplitude
"TROUGH"
(RED)

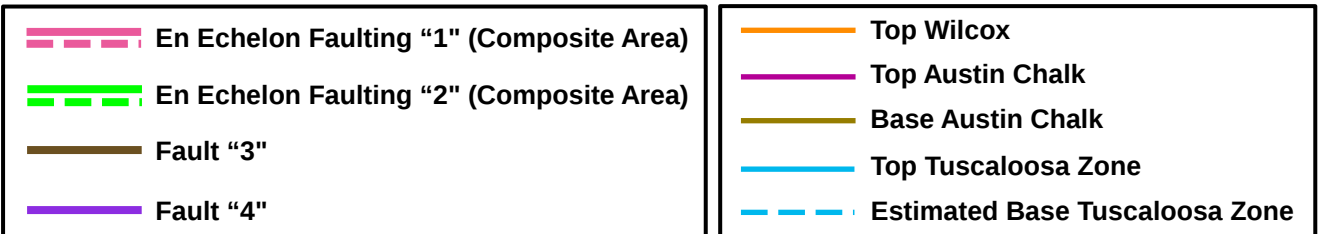
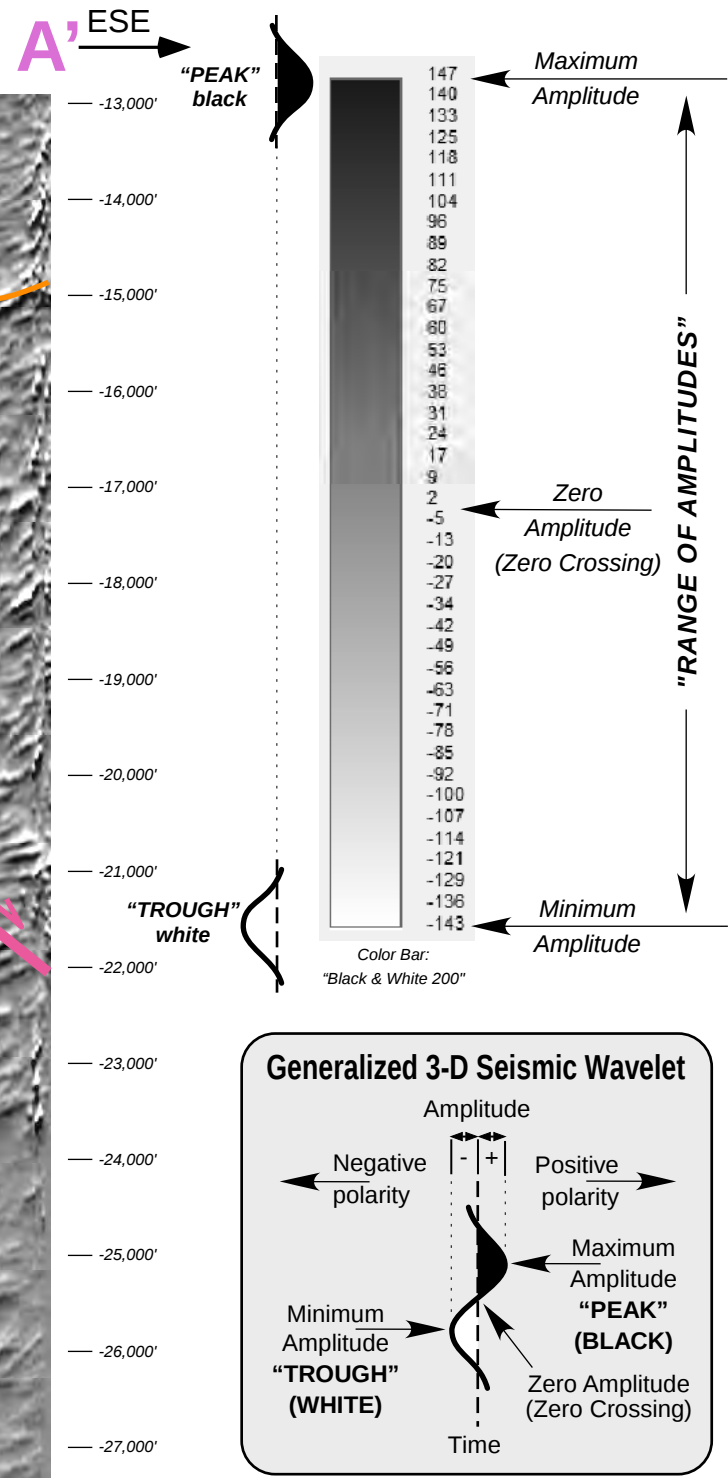
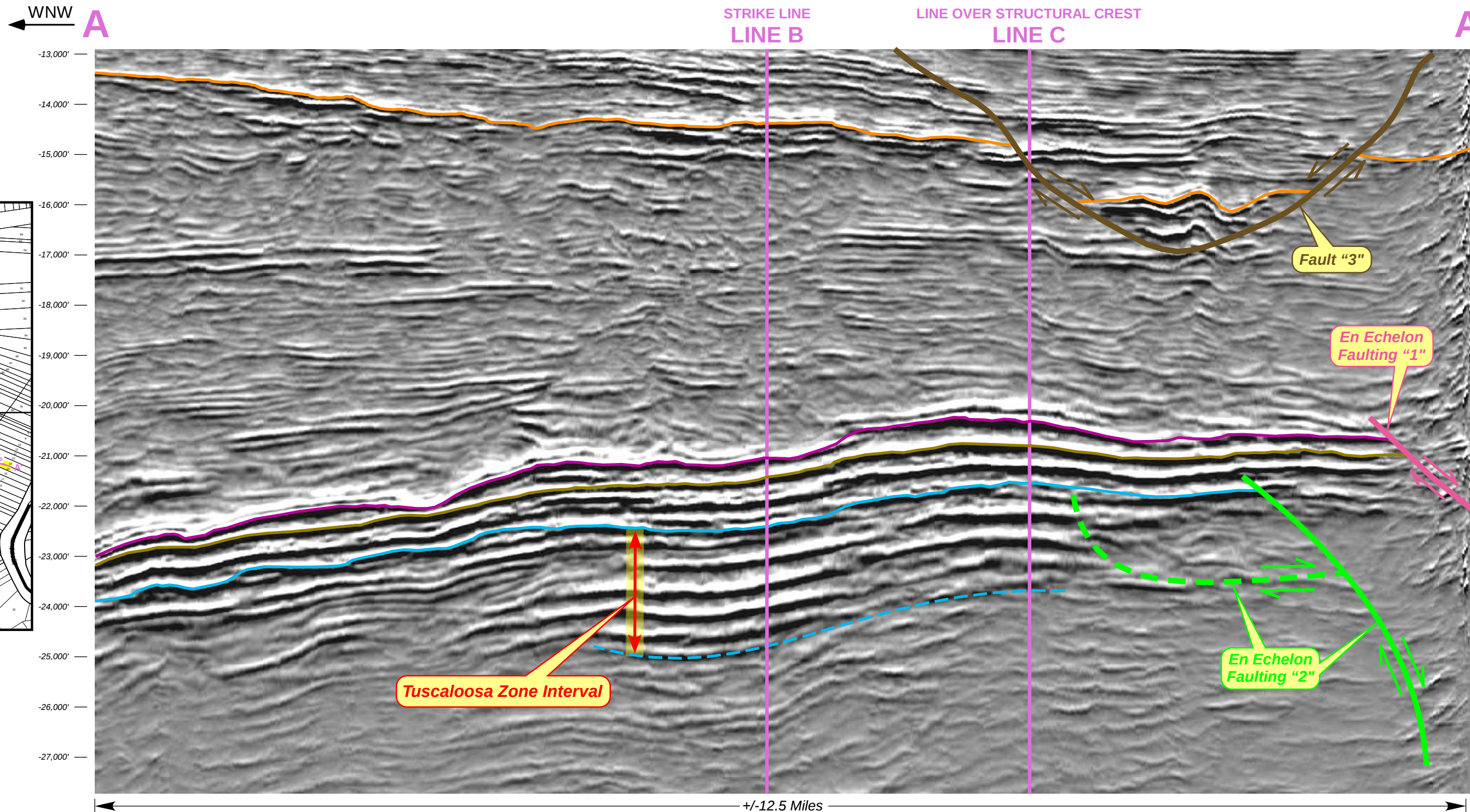
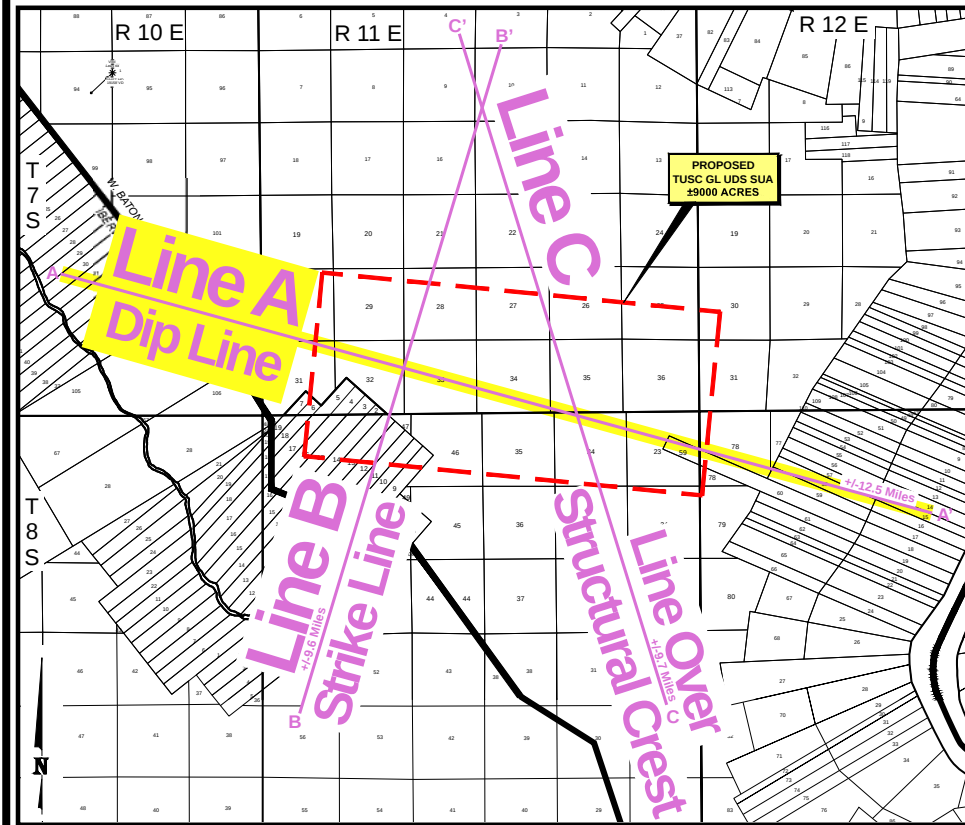
Time

BRYAN GROVES
OIL & GAS GEOLOGIST
UNITIZATION / 3-D INTERPRETATION
www.bryangrovesgeology.com

“Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of Petrolex Operating Ventures, LLC”

BRYAN GROVES
OIL & GAS GEOLOGIST
www.bryangrovesgeology.com

DIP LINE



BRYAN GROVES
OIL & GAS GEOLOGIST
UNITIZATION / 3-D INTERPRETATION
www.bryangrovesgeology.com

Pre-App Date: 6/21/17
Hearing Date: 8/8/17

Identical 3-D Seismic Data shown on 3-D Seismic Exhibit No. 3
Black & White 200 Display

"Seismic data owned or controlled by
Seismic Exchange, Inc.; interpretation is
that of Petrolex Operating Ventures, LLC"

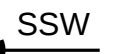
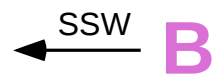
3-D SEISMIC EXHIBIT NO. 4
DOCKET NO. 17-400
DATE: 8-8-17

PETROLEX
OPERATING VENTURES, LLC

GREEN LAKE FIELD
WEST BATON ROUGE PARISH, LOUISIANA
Arbitrary Line A

BRYAN GROVES
OIL & GAS GEOLOGIST
www.bryangrovesgeology.com

SSW **B**



SSW

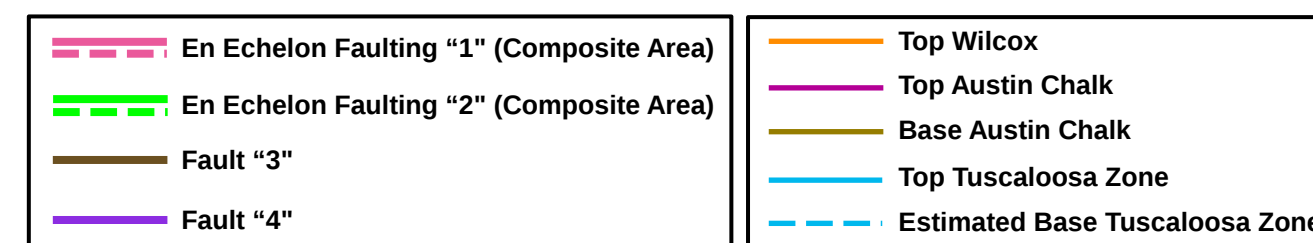
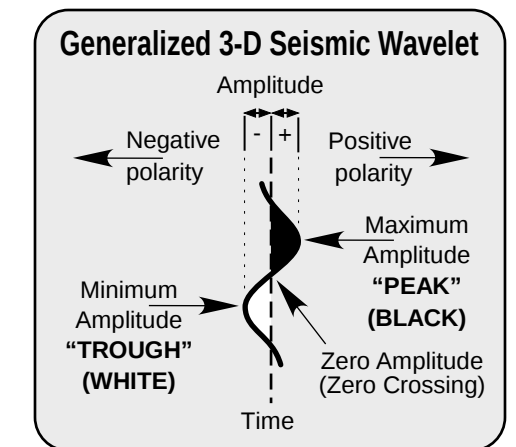
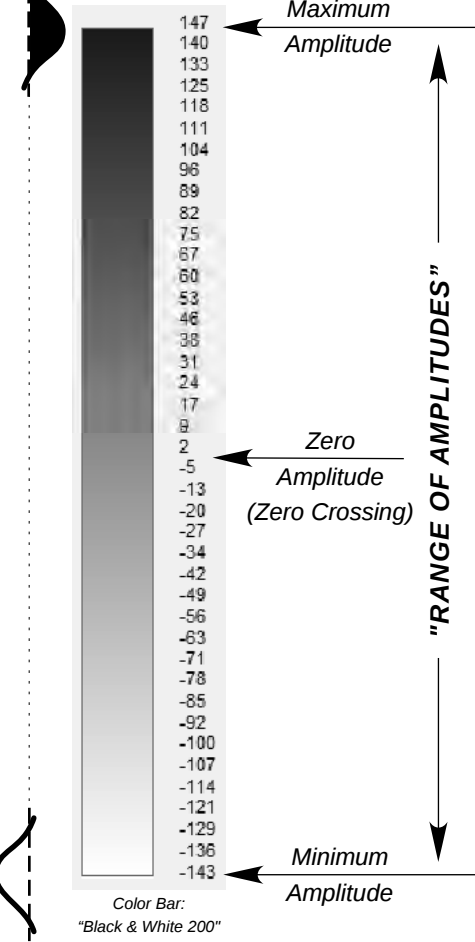
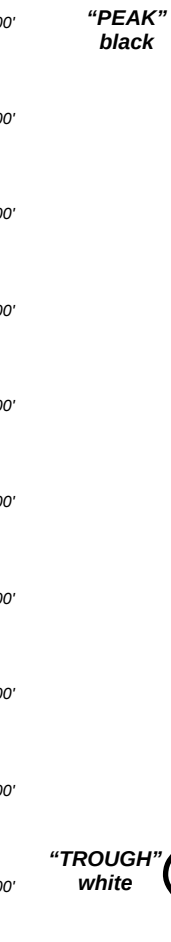
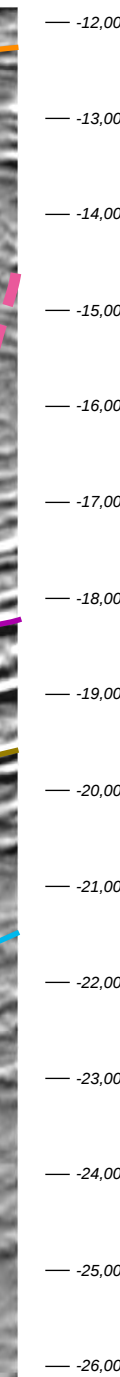
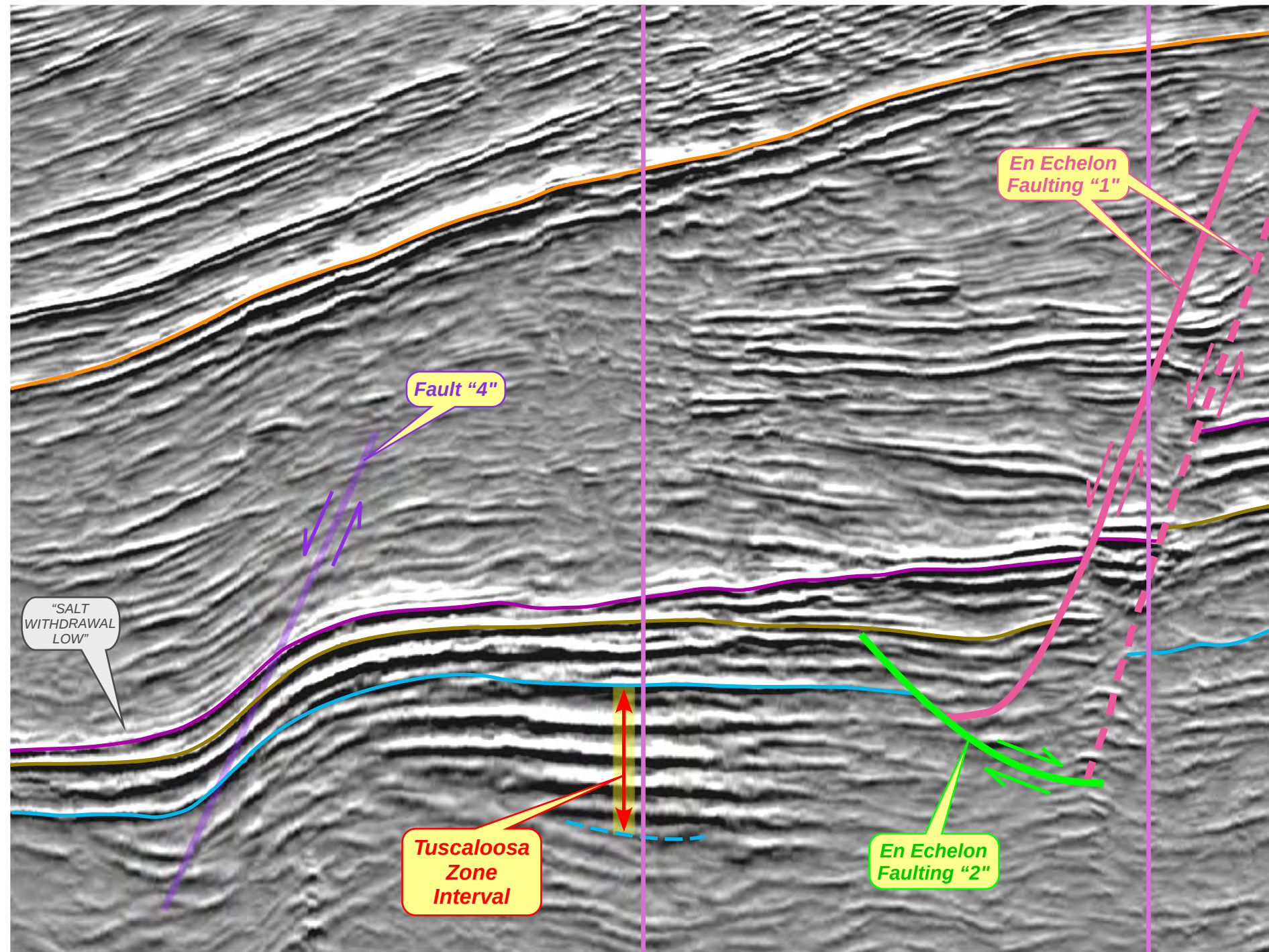
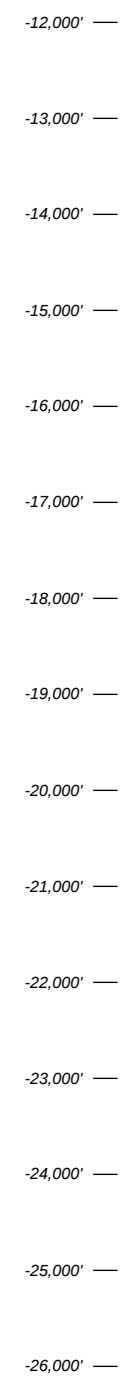
B

DIP LINE
LINE A

LINE OVER STRUCTURAL CREST
LINE C

B' NNE

B' NNE



BRYAN GROVES
OIL & GAS GEOLOGIST
UNITIZATION / 3-D INTERPRETATION
www.bryangrovesgeology.com

Pre-App Date: 6/21/17
Hearing Date: 8/8/17

Black & White 200 Display

“Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of Petrolex Operating Ventures, LLC”

3-D SEISMIC EXHIBIT NO. 5
DOCKET NO. 17-400 DATE: 8-8-17

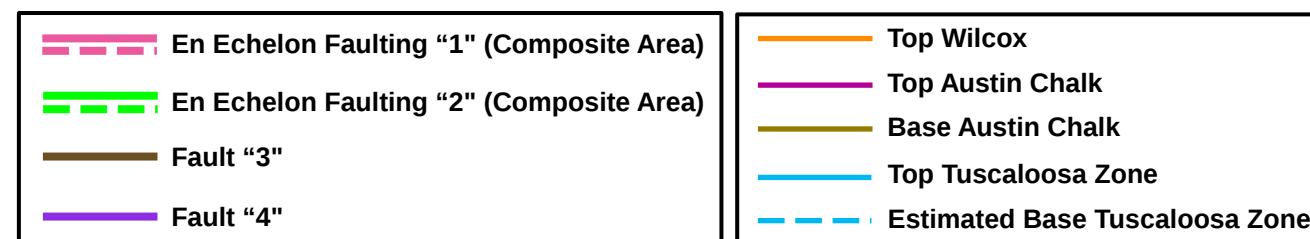
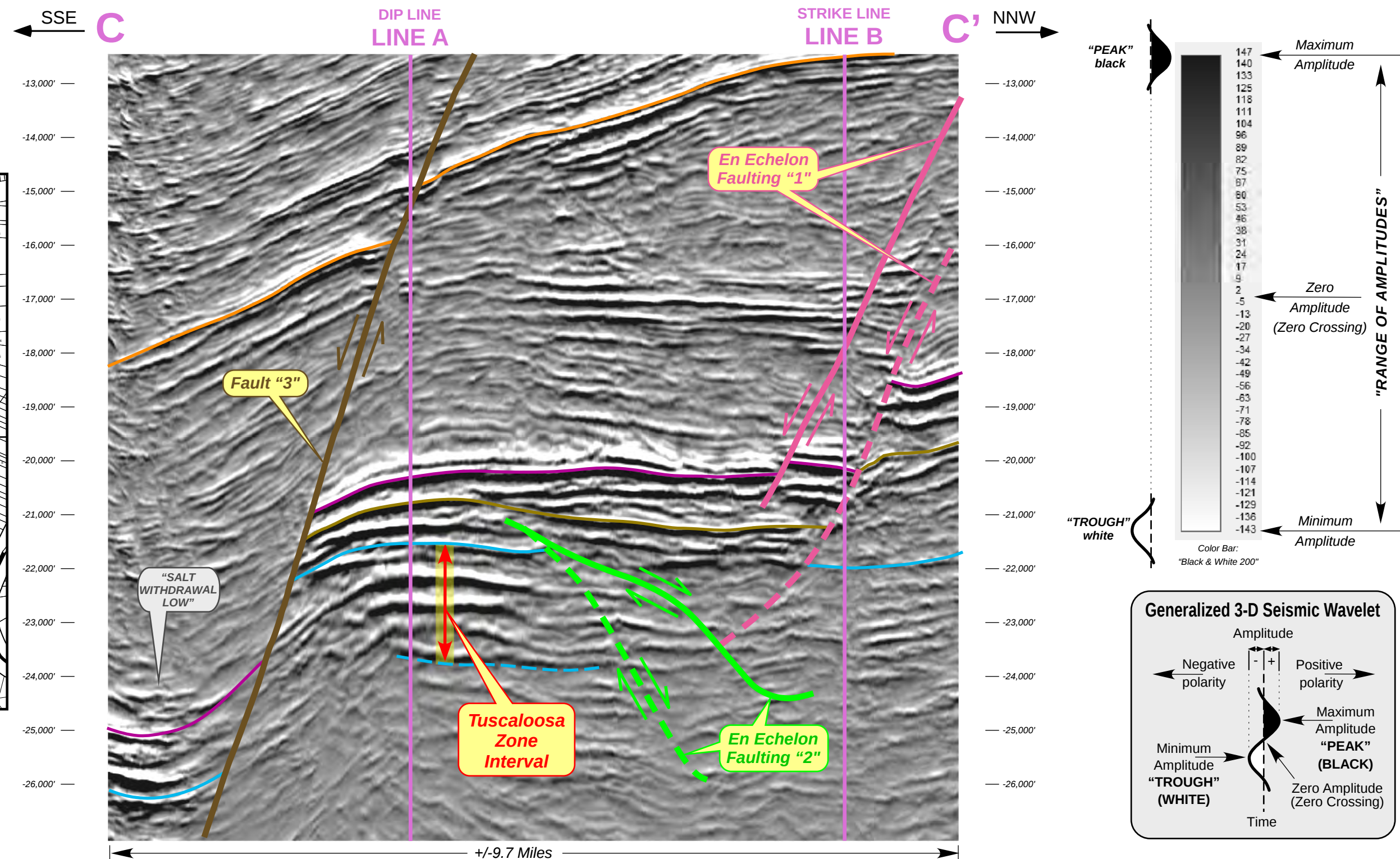
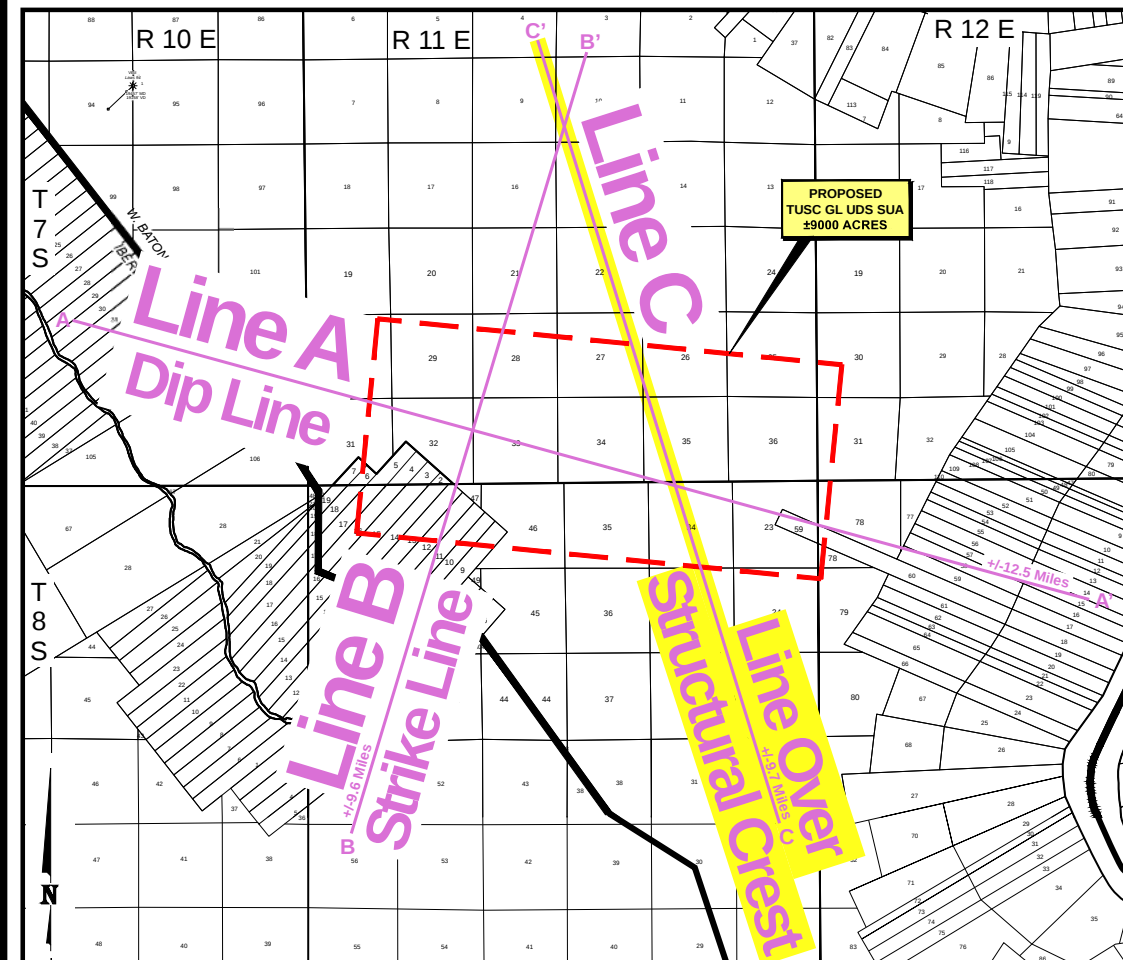


GREEN LAKE FIELD
WEST BATON ROUGE PARISH, LOUISIANA

Arbitrary Line B

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LINE OVER STRUCTURAL CREST



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Pre-App Date: 6/21/17
Hearing Date: 8/8/17

Black & White 200 Display

“Seismic data owned or controlled by Seismic Exchange, Inc.; interpretation is that of Petrolex Operating Ventures, LLC”

3-D SEISMIC EXHIBIT NO. 6
DOCKET NO. 17-400 DATE: 8-8-17



GREEN LAKE FIELD
WEST BATON ROUGE PARISH, LOUISIANA

Arbitrary Line C

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