

*W. S. Ash*

INDEX

WITNESS	DIRECT	REDIRECT	CROSS- EXAM.	RECROSS- EXAM.	EXAM. BY BD/STAFF
1. William Dement	59-64 68-75	--	--	--	64-66 75-77
2. Roger Chapman	79-85 117-120 208-213	240 250-251	232-238		86-88 121-122
3. Dale Smith	91-100	106-107	--	--	103-106 107-113
4. William E. Tucker	100-103	--	--	--	--
5. Wayne Payton	126-133	--	--	--	133-146
6. Dan Thompson	155-158	--	--	--	158-159
7. W. E. Morrow	161-164 195-196 198-199	--	--	--	200
8. James B. Fleece	169-180	--	--	--	180
9. Walter Plant	191-193	--	--	--	--
10. Marcial Forester	214-219	--	238-239 245-249	--	--
11. Clay Calhoun, Sr.	219-232	--	239 249-250	--	--
12. Ken Hanby	267-280	356-365	280-312	368-371	313
13. James R. Edwin	315-322	366	--	366-367	--
14. Francis Raffalovich	323-337	--	--	--	385-393
15. Paul Bercegeay	338-349	371-372	373-374	--	--
16. Guy Ellison	350-355	--	--	--	393

INDEX  
(Contd.)

WITNESS	DIRECT	REDIRECT	CROSS- EXAM.	RECROSS- EXAM.	EXAM BY BD/STAFF
17. Keith E. Jordan	400-411	--	--	--	430-435 437-439
18. William O. Jerry	413-423	--	--	--	435-437
19. W. E. Morrow	447-451	--	--	--	456

# EXHIBITS

TITLE	DESCRIPTION	OFFERED	RECEIVED
Exhibit No. 1 (William Dement)	Watson Creek Field Extension	66	67
Exhibit No. 2 (William Dement)	Watson Creek Extension Structure Map	66	67
Exhibit No. 3 (William Dement)	Type Log, Carter Sand Watson Creek Field	66	67
Exhibit No. 4 (Terra)	Affidavit of David Rigsby	66	67
Exhibit No. 1 (William Dement)	Proposed Field Limit Changes, Musgrove Creek Field	77	78
Exhibit No. 2 (William Dement)	Type Log, Carter Sand Musgrove Creek Field	77	78
Exhibit No. 3 (William Dement)	Cross Section A-A' Musgrove Creek Field	77	78
Exhibit No. 4 (William Dement)	Structure Map, Base of Millerella Lime, Musgrove Creek Field	77	78
Exhibit No. 5 (William Dement)	Structure Map, Top of Carter Sand, Musgrove Creek Field	77	78
Exhibit No. 6 (William Dement)	Carter Sand Net Microlog Isopach, Musgrove Creek Field	77	78
Exhibit No. 7-8 (Terra)	Affidavit of David Rigsby	77	78
Exhibit No. 1 (Roger Chapman)	Base Map of Miocene Gas Trend, Baldwin County	85	85
Exhibit No. 2 (Roger Chapman)	Structure Map, Top Amos Sand, Miocene Gas Trend Baldwin County	85	85

EXHIBITS  
(Contd.)

TITLE	DESCRIPTION	OFFERED	RECEIVED
Exhibit No. 3 (Roger Chapman)	Amos Sand Isopach Miocene Gas Trend Baldwin County	85	85
Exhibit No. 4 (Roger Chapman)	Certified Plat of Well Location, Miocene Gas Trend Baldwin County	85	85
Exhibit No. 1 (Dale Smith)	Area Map of Proposed Pilot Hill Field	115	115
Exhibit No. 2 (Dale Smith)	Well Location Plat, S34, T8S, R14W, Franklin County	115	115
Exhibit No. 3 (Dale Smith)	Type Log, Boyles 34-1 No. 3	115	115
Exhibit No. 4 (Dale Smith)	Tuscumbia Structure Map	115	115
Exhibit No. 5 (Dale Smith)	Lewis Structure Map	115	115
Exhibit No. 6 (Dale Smith)	Total Lewis Isopach	115	115
Exhibit No. 7 (Dale Smith)	Lewis Isopach Sand Thickness/Net Pay	115	115
Exhibit No. 8 (Dale Smith)	Well Test Information Proposed Pilot Hill Field	115	115
Exhibit No. 9 (Dale Smith)	Form OGB-9 Boyles 34-1	115	115
Exhibit No. 10 (Dale Smith)	Gas Analysis Boyles 34-1	115	115

EXHIBITS  
(Contd.)

TITLE	DESCRIPTION	OFFERED	RECEIVED
Exhibit No. 11 (Dale Smith)	Estimated Cost for Additional Lewis Gas Wells in Proposed Pilot Hill Field	115	115
Exhibit No. 12 (William E. Tucker)	Economic Analysis of Boyles 34-1	115	115
Exhibit No. 13 (William E. Tucker)	Cash Flow Analysis	115	115
Exhibit No. 14 (William E. Tucker)	Gas Reserve Calculations	115	115
Items 28 & 30 (Universal)	Affidavit of Notice	115	115
Item 32 (EL-Oil)	Affidavit of Notice	119	119
Exhibit No. 1 (Roger Chapman)	Proposed Addition to Foley Field	119	119
Exhibit No. 2 (Roger Chapman)	Structure Map, Amos Sand Foley Field	119	119
Exhibit No. 3 (Roger Chapman)	Amos Sand Isopach, Net Gas Pay, Foley Field	119	119
Exhibit No. 4 (Roger Chapman)	Form OGB-9, Foley Dairy 6-1 Well	119	119
Exhibit No. 1 (Wayne Payton)	Field Limits & Unit Out- line Map, Pleasant View Field	151	151
Exhibit No. 2 (Wayne Payton)	Surveyor's Plat S30, T8S, R4E, Baldwin County	151	151
Exhibit No. 2-A (Wayne Payton)	Alternate Proposed Unit on Surveyor's Plat	151	151
Exhibit No. 3 (Wayne Payton)	Structure on Top of Amos Sand, Pleasant View Field	151	151

EXHIBITS  
(Contd.)

TITLE	DESCRIPTION	OFFERED	RECEIVED
Exhibit No. 4 (Wayne Payton)	Isopach of Amos Sand Hydrocarbon Bearing Interval, Pleasant View Field	151	151
Exhibit No. 5 (Wayne Payton)	Shotpoint Map Seismic Information	151	151
Item 35 (Clay Calhoun)	Affidavit of Notice	151	151
Exhibit A (Dan Thompson)	Plat of East Campus Showing No. 24-6 Location	159	159
Item 5 (Morrow Oil & Gas)	Affidavit of Notice (Covers Dockets 4-14-835, 5-26-8312, & 5-26-8331)	164	164
Item 27 (Exxon)	Affidavit of Notice	168	168
Item 27 (Exxon)	Memorandum in Support of Proposed Amendment to Oil and Gas Board Rule C-10 by Kim King	181	181
Item 27 (Exxon)	Summary of Rules from Different States	188	188
Item 19 (Anderman/Smith)	Affidavit of Notice	194	194
Item 18 (Morrow Oil & Gas)	Affidavit of Notice (Covers Dockets 4-14-835, 5-26-8312, & 5-26-8331)	199	199
Exhibit No. 1 (Roger Chapman)	Base Map of Foley and West Foley Field Area, Baldwin County	252	252

EXHIBITS  
(Contd.)

TITLE	DESCRIPTION	OFFERED	RECEIVED
Exhibit No. 2 (Roger Chapman)	Structure Map Top Amos Sand, Foley & West Foley Fields	252	252
Exhibit No. 3 (Roger Chapman)	Amos Sand Isopach of Net Gas Pay Foley and West Foley	252	252
Exhibit No. 4 (Clay Calhoun)	Amoco Isopach Map Amos Sand Foley and West Foley Fields 2-18-81	252	252
Item 34 (Clay Calhoun)	Affidavit of Notice	252	--
Item 34 (Amoco Opposition)	Motion by Amoco with Attached Exhibits	255	255
Item 24 (Dominex, Inc.)	Affidavit of Notice	265	266
Exhibit A (Ken Hanby)	Pleasant View Field Outline	276	276
Exhibit No. 1 (Ken Hanby)	Pressure & Production Data Pleasant View Field	276	276
Exhibit 1-A (Ken Hanby)	Pressure & Production Data Pleasant View Field	276	276
Exhibit No. 2 (Ken Hanby)	P/Z Plot for Pleasant View Field	276	276
Exhibit A (Item 24, Opposition)	Letters, Application, Order, Etc.	322	322
Exhibit No. 1 (Francis Raffalovich)	Map of Outline of Reservoirs Pleasant View Field	384	384
Exhibit No. 2 (Francis Raffalovich)	Seismic Record Section (Line 1)	384	384
Exhibit No. 3 (Francis Raffalovich)	Seismic Record Section (Line 2)	384	384

EXHIBITS  
(Contd.)

TITLE	DESCRIPTION	OFFERED	RECEIVED
Exhibit No. 4 (Francis Raffalovich)	Seismic Record (Line 4)	384	384
Exhibit No. 5 (Francis Raffalovich)	Seismic information (Line 6)	384	384
Exhibit No. 6 (Francis Raffalovich)	Dual Induction-SFL-Sonic Log, Wilson Morse 18-9 No. 2, Baldwin County	384	384
Exhibit No. 7 (Francis Raffalovich)	Dual Induction-SFL Log E. P. Flowers No. 1 Baldwin County	384	384
Exhibit No. 8 (Francis Raffalovich)	J. E. Flowers 18-7 Dual Induction Focused Log BGC Acoustilog	384	384
Exhibit No. 9 (Francis Raffalovich)	Dual Induction Focused Log BHC Acoustilog, Michael Moyer 20-4, Baldwin County	384	384
Item 24 (letters)	May 23, 1983 letter from Robert V. Glasgow; May 23, 1983, letter from E. P. Flowers, Wilson Morse & J. E. Flowers; May 20, 1983, letter from Rose H. McCardell & Mildred McCardell; May 20, 1983, letter from John Flowers; May 20, 1983, letter from American Petrofina Co. of Texas; May 21, 1983, letter from Anna Dressnandt; May 17, 1983 letter from Cyril L. Pate; May 20, 1983, letter from Olympia Dyas & Charles Dyas; Petition from land-owners in Section 18; May 21, 1983, letter from Angela Osborn; May 17, 1983, letter from Malone Construction; May 7, 1983 letter from Ben Hamilton;	384	384



EXHIBITS  
(Contd.)

TITLE	DESCRIPTION	OFFERED	RECEIVED
	May 8, 1983, letter from Gladys Oulliber; May 8, 1983, letter from A. L. Oulliber; May 25, 1983, letter from Mary Frances Strehle; Telegram from Anderson Petroleum; Telegram from J. R. Bono; list submitted by David Spivey	384	384
Item 24 (Norton Brooker)	Field Rules, Pleasant View Field	394	394
Exhibit No. 1 (Keith Jordan)	Map of Proposed Smackover Units for Big Escambia Creek Field	423	424
Exhibit No. 2 (Keith Jordan)	Big Escambia Creek Structure Map, Top of Smackover	423	424
Exhibit No. 3 (Keith Jordan)	Stratigraphic Cross-section A-A' Big Escambia Creek Field	423	424
Exhibit No. 4 (William Jerry)	Well Data Sheet, Fischer Unit 33-11	423	424
Exhibit No. 5 (William Jerry)	Pressure Data Comparison	423	424
Exhibit No. 6 (William Jerry)	Gas Analysis Comparison Big Escambia Creek	423	424
Items 36 & 37 (Cities Service)	Affidavit of Notice	423	424
Exhibit No. 1 (W. E. Morrow)	Structural Datum Top of Lewis Limestone, Beaver Creek Field, Lamar County	450	450
Exhibit No. 2 (W. E. Morrow)	Isopach Lewis Sandstone Beaver Creek Field	450	450

EXHIBITS

(Contd.)

TITLE	DESCRIPTION	OFFERED	RECEIVED
Exhibit No. 3 (W. E. Morrow)	Portion of Dual Induction Focused Log, No. 1 Babcock-Cole 10-13, Lamar County	450	450
Item 38 (Morrow)	Affidavit of Notice (Covers 4-14-835, 5-26-8312, & 5-26-8331)	450	450

STATE OIL AND GAS BOARD OF ALABAMA

Tuscaloosa, Alabama

May 26, 1983

Testimony and proceedings before the State Oil and Gas Board of Alabama at the Continuing Education Center, University of Alabama Campus, Tuscaloosa, Alabama, pursuant to adjournment, on this the 26th day of May, 1983.

BEFORE:

BOARD MEMBERS

Dr. Ralph Adams..... Chairman  
Mr. Gaines McCorquodale (absent)..... Associate Member  
Mr. James G. Lee..... Associate Member

BOARD STAFF

Dr. Ernest A. Mancini..... Secretary & Supervisor  
Mr. John A. Carey..... Attorney  
Mr. Gary Wilson..... Assistant Supervisor  
Mr. Jay Masingill..... Assistant Supervisor  
Mr. Bob Mink..... Assistant Supervisor  
Mr. Gene White..... Petroleum Engineer  
Mr. Doug Hall..... Geologist  
Mr. Richard Hamilton..... Petroleum Engineer  
Mr. Bennett Bearden..... Geologist  
Mr. Dave Bolin..... Production Chief  
Mr. Mark Redditt..... Legal Research Aide

(Reported by Jean W. Smith)

APPEARANCES

NAME	REPRESENTING
1. Mr. Charles L. Dyas 636 Tuthill Ln. Mobile, Alabama 36608	Self
2. Mrs. Charles L. Dyas 636 Tuthill Ln. Mobile, Alabama 36608	Self
3. Dale Smith Mobile, Alabama	L. W. Johnson
4. W. E. Sistrunk Birmingham, Alabama	W. E. Sistrunk
5. Jewell Morse Pensacola, Florida	Land Owner
6. Wilson Morse Pensacola, Florida	Land Owner
7. E. P. Flowers Foley, Alabama	Land Owner
8. David Webb New Orleans, Louisiana	Texaco
9. Bob Jorden Lafayette, Louisiana	Cities Service
10. C. E. Adams Jackson, MS.	Cities Service
11. W. O. Terry Jackson, MS.	Cities Service
12. Keith E. Jordan Jackson, MS.	Cities Service

APPEARANCES  
(Contd.)

NAME	REPRESENTING
13. Frank A. Davis Box 300 Tulsa, OK. 74102	Cities Service Oil & Gas
14. Robert S. Presto P. O. Drawer 649 Brewton, Alabama 36427	McMillian, Ltd.
15. Dave Barrett Tuscaloosa, Alabama	Dominex, Inc.
16. E. Ralph Hines Jackson, MS.	Moon & Hines
17. James R. Edwin Pensacola, Florida	Dominex, Inc.
18. Bobby G. Ziglar Monroeville, Alabama	Escambia & Monroe Co.
19. Clark D. Ziglar Atmore, Alabama	Escambia Land Owner
20. Autry Ziglar Atmore, Alabama	Escambia
21. Alfred Oulliber Foley, Alabama	Baldwin Co.
22. Sam Davison Foley, Alabama	Baldwin Co.
23. Weldon Oulliber Orange Beach, Alabama	Baldwin Co.
24. Herschell Flowers Foley, Alabama	Baldwin Co.

APPEARANCES  
(Contd.)

NAME	REPRESENTING
25. James B. Fleece New Orleans, Louisiana	Exxon
26. Kim King New Orleans, Louisiana	Exxon
27. Robert Clifton Birmingham, Alabama	Alabama By-Products
28. Steven F. Harrison Tuscaloosa, Alabama	Morrow Oil & Gas
29. Jack Wilhelm New Orleans, Louisiana	Amoco
30. Max Robards New Orleans, Louisiana	Amoco
31. Tim Ronstadt New Orleans, Louisiana	Amoco
32. Art Coddington New Orleans, Louisiana	Amoco
33. Boone Ellis Jackson, MS.	Mustang Fuel Corp.
34. Barry McKay Jackson, MS.	Union Oil Company
35. David Spivey Foley, Alabama	Self
36. Isaac P. Espy Tuscaloosa, Alabama	Gray, Espy, Nettles

APPEARANCES  
(Contd.)

NAME	REPRESENTING
37. John Stone Bessemer, Alabama	Self
38. S. Leon Bennett Tuscaloosa, Alabama	University of Alabama
39. Dan A. Thompson West Blocton, Alabama	University of Alabama
40. W. W. Beckett Bruce, MS.	Self
41. Travis O. Hulsey Haleyville, Alabama	Retired (Self)
42. John W. Grant Gulf Shores, Alabama	Land Owners
43. Eloise R. Grant Gulf Shores, Alabama	Land Owners
44. J. Wayne Payton Tuscaloosa, Alabama	Independent
45. Duan R. Chason Bay Minette, Alabama	Chason & Chason PC
46. Edward Lipscomb Foley, Alabama	Land Owner
47. Oswalt Lipscomb Foley, Alabama	Land Owner
48. Irene Newmann Elberta, Alabama	Baldwin Co.
49. Ann Johnson Foley, Alabama	Land Owner

APPEARANCES  
(Contd.)

NAME	REPRESENTING
50. Clay Calhoun New Orleans, Louisiana	Self
51. Clay Calhoun, Jr. New Orleans, Louisiana	Self
52. Stan Posey Tuscaloosa, Alabama	P.E. LaMoreaux & Assoc.
53. Edward H. Harvey, III Fayette, Alabama	Terra Resources
54. Bill Dement Oklahoma City, OK.	Terra Resources
55. Molly McKay Tuscaloosa, Alabama	Watson & Harrison
56. Claude Johnson Foley, Alabama	Land Owner
57. Chris Johnson Foley, Alabama	Land Owner
58. Johnny L. Owsley Fayette, Alabama	C. L. Cherry & Assoc.
59. Bill Morrow Jackson, MS.	Morrow Oil & Gas
60. John Tyra Jackson, MS.	McDavid Edmonson & Noblin
61. Steve Steples Tuscaloosa, Alabama	University counsel



APPEARANCES  
(Contd.)

NAME	REPRESENTING
62. Boyd D. Bailey Birmingham, Alabama	Am South Bank
63. Jim Sledge Tuscaloosa, Alabama	Not listed
64. Mrs. Robert Cale Bessemer, Alabama	Land Owner
65. Kathy Marine Tuscaloosa, Alabama	Watson & Harrison
66. Greg Pearson Denver, CO.	Not listed
67. Roger M. Chapman Jackson, MS.	Clayton W. Williams, Jr.
68. Tom Fouts Baldwin, Alabama	Self
69. Hazel M. Coleman New Orleans, Louisiana	Getty Oil Company
70. Rae M. Crowe Mobile, Alabama	Terra
71. R. A. Rowe Houston, TX.	Belco
72. Tim Gilblom Houston, TX.	Belco
73. Bill Tucker Tuscaloosa, Alabama	Self

APPEARANCES  
(Contd.)

NAME	REPRESENTING
74. Marcial Forester Jackson, MS.	C. J. Calhoun
75. Mary Alice Moje Foley, Alabama	Land Owner
76. Msty Moje Foley, Alabama	Land Owner
77. Sam Styron Foley, Alabama	Land Owner
78. Theo Styron Foley, Alabama	Land Owner
79. Gladys Oulliber Foley, Alabama	Land Owner
80. Judy M. Petersen Foley, Alabama	Land Owner
81. Phill Meadows Northport, Alabama	Michigan Oil Co.
82. Jim Breeze Denver, CO.	Anderman/Smith Oper. Co.
83. John Cox Jackson, MS.	? Production
84. John Carter Northport, Alabama	Anderman/Smith
85. Ron Hornig Denver, CO.	Anderman/Smith

APPEARANCES  
(Contd.)

NAME	REPRESENTING
86. Larry Moye Rt. 3, Box 761 Foley, Alabama	Land Owner
87. Lynn Malbrough Northport, Alabama	Sunbelt Geological Ser.
88. Jack P. Faust Northport, Alabama	Not listed
89. Jackie Cummings Tuscaloosa, Alabama	Not listed
90. Ken Hanby Tuscaloosa, Alabama	Tom Joiner & Assoc.
91. Tony Hubbard Tuscaloosa, Alabama	Hawkeye Oil & Gas, Inc.
92. Phil LaMoreaux Tuscaloosa, Alabama	P. E. LaMoreaux & Assoc.
93. Walter S. Plant Denver, CO.	Anderman/Smith
94. Charles E. Pearson Tuscaloosa, Alabama	Anderman/Smith
95. Tom Watson Tuscaloosa, Alabama	Grace, Dominex, Inc.

### PROCEEDINGS

(The hearing was convened at 8:15 a.m.  
on Thursday, May 26, 1983, at Tuscaloosa,  
Alabama)

CHMN. ADAMS: Let the record reflect that the Alabama State Oil and Gas Board is now in session. Mr. Supervisor, has this meeting been properly advertised?

DR. MANCINI: Mr. Chairman, today's meeting has been properly advertised. A copy of today's meeting has been transmitted to the recording secretary.

### NOTICE OF MEETING

"The State Oil and Gas Board of Alabama will hold its regular monthly meeting on Thursday, May 26, 1983, at 8 a.m. at the Continuing Education Center, 7th Avenue and 10th Street, University of Alabama Campus, Tuscaloosa, Alabama, to consider, among other items of business, the following petitions and applications:

"1. DOCKET NO. 3-10-836

Continued petition by Sipsey, Inc., a domestic corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order amending the field limits for the East Oyster Bay Field,

Baldwin County, Alabama, by including within said field limits the East Half of the Northeast Quarter of Section 8 and the West Half of the Northwest Quarter of Section 9, Township 9 South, Range 4 East, Baldwin County, Alabama.

"2. DOCKET NO. 3-10-8311

Continued petition by Hughes and Hughes, a partnership doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order amending Rule 1 of the Special Field Rules for the Armstrong Branch Gas Field, Lamar County, Alabama, so as to include all of Section 28, Township 13 South, Range 14 West, Lamar County, Alabama.

"3. DOCKET NO. 3-10-8317

Continued petition by Clay Calhoun, an individual, requesting the State Oil and Gas Board of Alabama to approve the well location described below as an exception to Rule B-2 of the Board's General Rules and Regulations and as an exception to the Special Field Rules for the Foley and West Foley Fields, if said Special Field Rules apply. The proposed unit would be the

Southeast Quarter of Section 36, Township 7 South, Range 3 East, Baldwin County, Alabama. The location sought by the Petitioner is 2200 feet from the East line of the unit and 2272 feet from the South line of the unit. The location is approximately 380 feet from the North line and 440 feet from the West line of the proposed unit. Interested parties are advised that Petitioner may amend its petition, asking the Board to approve a location that is more than 380 feet from the North line of the unit and/or more than 440 feet from the West line of the unit. The location will be drilled by Petitioner or a successor operator approved by the Board.

"4. DOCKET NO. 4-14-831

Continued petition by Terra Resources, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order establishing a new gas field to be known as the Palmetto Field, or such other name as the Board deems appropriate, and adopting Special Field Rules therefor. The proposed field limits include Sections 9, 10, 11, 14, 15, 16, 21, 22, and 23, all in Township 18 South, Range 14 West,

Pickens County, Alabama. Petitioner is requesting well spacing of approximately 320 acres per well. The productive zones for said field are the Carter Sand Gas Pool and the Lewis Sand Gas Pool which are productive of hydrocarbons in the intervals between 4,520 feet and 4,570 feet and 4,730 feet and 4,845 feet, respectively, as shown on the logs for the Terra-Kelly 15-16 Well, located on a unit consisting of the South 1/2 of Section 15, Township 18 South, Range 14 West, Pickens County, Alabama.

"5. DOCKET NO. 4-14-835

Continued petition by Morrow Oil and Gas Co., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order, pursuant to Section 9-17-13 Code of Alabama (1975), and Rule M-1 of the Rules and Regulations of the Board, force pooling all tracts and interests in the South Half of Section 9, Township 13 South, Range 14 West, Lamar County, Alabama.

"6. DOCKET NO. 4-14-837

Continued petition by Anderman/Smith Operating Company,

a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order force pooling all tracts and interests in a 320-acre gas drilling unit consisting of the East Half (E½) of Section 9, Township 13 South, Range 14 West, Lamar County, Alabama. This petition is in accordance with Section 9-17-13, Code of Alabama (1975) and Rule M-1 of the Rules and Regulations of the State Oil and Gas Board.

"7. DOCKET NO. 4-14-839

Continued petition by Terra Resources, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order expanding the field limits for the Watson Creek Field, Lamar County, Alabama, by including within said field limits Sections 27 through 29 and 33 and 34, Township 14 South, Range 15 West, and Sections 3 and 4, Township 15 South, Range 15 West, all in Lamar County, Alabama.

"8. DOCKET NO. 4-14-8314

Continued petition by Dominex, Inc., a foreign corpora-



tion authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order approving an exceptional location for a well to be located 330 feet FWL and 330 feet FSL of a 163.22 acre unit consisting of the following described property:

Commencing at the Northeast corner of Section 18, Township 8 South, Range 3 East, Baldwin County, Alabama; said point also being the Southwest corner of Section 8, Township 8 South, Range 3 East; run thence North  $00^{\circ} 11' 24''$  West along the West line of Section 8 a distance of 2660.87 feet to the point of beginning of the property herein described; continue thence North  $00^{\circ} 11' 24''$  West along said West line a distance of 2660.88 feet; run thence North  $89^{\circ} 49' 43''$  East a distance of 2672.41 feet; run thence South  $00^{\circ} 06' 06''$  East a distance of 2664.11 feet; run thence South  $89^{\circ} 53' 53''$  West a distance of 2668.31 feet to the point of beginning, Baldwin County, Alabama, said unit being a productive extension of the South Weeks Bay Field. Parts of irregular Sections 8, 31, and 32 of Township 8 South, Range 3 East, are included in said unit.

Said exceptional location is necessitated by the Special Field Rules for the South Weeks Bay Field and is permitted by Rule B-2(E) of the Rules and Regulations of the State Oil and Gas Board.

"9. DOCKET NO. 5-26-831

Petition by Terra Resources, Inc., a foreign corporation authorized to do and doing business in the State of Alabama with its principal place of business in Tulsa, Oklahoma, requesting the State Oil and Gas Board to enter an order amending Rule 1 of the Special Field Rules for the Bankston Field so as to reduce the limits of said Field by deleting from the limits of said Field the following described lands in Fayette County, Alabama: N/2 of Section 31, Township 15 South, Range 11 West, Fayette County, Alabama.

"10. DOCKET NO. 5-26-832

Petition by Terra Resources, Inc., a foreign corporation authorized to do and doing business in the State of Alabama with its principal place of business in Tulsa, Oklahoma, requesting the State Oil and Gas Board to enter an order amending Rule 1 of the Special Field Rules for the Musgrove Creek Field so as to enlarge the limits of said Field as to the Carter Sand Gas Pool so as to include within the limits of said field the following described lands in Fayette County,

Alabama; N/2 of Section 31, Township 15 South, Range 11 West, Fayette County, Alabama.

"11. DOCKET NO. 5-26-835

Petition by Texaco Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order establishing Special Field Rules for a new oil field to be known as the Huxford Field (or such other name as the Board deems appropriate) consisting of the following described lands: Sections 26 and 35, the Southeast Quarter of Section 27, and the West Half of Section 25, all in Township 3 North, Range 6 East, Escambia County, Alabama. The proposed Special Field Rules define the Smackover Oil Pool in said field as those strata productive of hydrocarbons in the interval between 14,642 feet and 14,750 feet in the Texaco Inc.-ATIC 35-6 Well No. 2, Permit No. 3581, as defined on the electrical log of said well, including all strata productive of hydrocarbons which can be correlated therewith. Petitioner is requesting well spacing of approximately 160 acres per well and the

assignment of a temporary allowable for each well in the field by the Supervisor of the State Oil and Gas Board.

"12. DOCKET NO. 5-26-836

Petition by Texaco, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order re-forming the drilling unit for the Texaco Inc.-ATIC 35-6 Well No. 2, Permit No. 3581, located 1980 feet South of the North line and 1980 feet East of the West line of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, from a 40-acre unit comprised of the Southeast Quarter of the Northwest Quarter of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, to a 160-acre oil unit comprised of the Northwest Quarter of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, in order to make said unit, as reformed, conform with the requirements of proposed Special Field Rules for the proposed Huxford Field.

"13. DOCKET NO. 5-26-837

Petition by Texaco, Inc., a foreign corporation authorized to do and doing business in the State of Alabama requesting the Board to enter an order granting an exceptional location for the Texaco Inc.-ATIC 35-6 Well No. 2, Permit No. 3581, located 1980 feet South of the North line and 1980 feet East of the West line of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, in the proposed Huxford Field. Said well is located 656 feet from the South line of the proposed unit boundary. Rule 3(B) of the proposed Special Field Rules for the proposed Huxford Field requires wells to be located at least 660 feet from every exterior unit boundary. This petition is brought pursuant to Section 9-17-12, Code of Alabama (1975).

"14. DOCKET NO. 5-26-838

Petition by Texaco Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order reforming the drilling unit for the Texaco Inc.-ATIC 35-2 Well No. 4, Permit No. 3719, located 340 feet South of the North line and 2309.63 feet West of the East line

of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, from a 40-acre unit comprised of the Northwest Quarter of the Northeast Quarter of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, to a 160-acre oil unit comprised of the Northeast Quarter of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, in order to make said unit, as reformed, conform with the requirements of proposed Special Field Rules for the proposed Huxford Field.

"15. DOCKET NO. 5-26-839

Petition by Texaco Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order granting an exceptional location for the Texaco Inc.-ATIC 35-2 Well No. 4, Permit No. 3719, located 340 feet South of the North line and 2309.63 feet West of the East line of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, in the proposed Huxford Field. Said well is located 340 feet from the North line and 340 feet from the West line of the

proposed unit boundary. Rule 3(B) of the proposed Special Field Rules for the proposed Huxford Field requires wells to be located at least 660 feet from every exterior unit boundary. This petition is brought pursuant to Section 9-17-12, Code of Alabama (1975).

"16. DOCKET NO. 5-26-8310

Petition by Texaco, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order re-forming the drilling unit for the Texaco Inc.-ATIC 35-10 Well No. 5, Permit No. 3751, located 2293 feet North of the South line and 2304 feet West of the East line of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, from a 40-acre unit comprised of the Northwest Quarter of the Southeast Quarter of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, to a 160-acre oil unit comprised of the Southeast Quarter of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, in order to make said unit, as reformed, conform with the requirements of proposed Special Field Rules for the proposed Huxford Field.

"17. DOCKET NO. 5-26-8311

Petition by Texaco, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order granting an exceptional location for the Texaco Inc.-ATIC 35-10 Well No. 5, Permit No. 3751, located 2293 feet North of the South line and 2304 feet West of the East line of Section 35, Township 3 North, Range 6 East, Escambia County, Alabama, in the proposed Huxford Field. Said well is located 340 feet from the North line and 340 feet from the West line of the proposed unit boundary. Rule 3(B) of the proposed Special Field Rules for the proposed Huxford Field requires wells to be located at least 660 feet from every exterior unit boundary. This petition is brought pursuant to Section 9-17-12, Code of Alabama (1975).

"18. DOCKET NO. 5-26-8312

Petition by Morrow Oil & Gas Co., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order force pooling all tracts and interests in the North Half of Section 9, Township 13 South, Range 14 West,



Lamar County, Alabama, pursuant to Section 9-17-13, Code of Alabama (1975), and Rule 400-1-13 of the State Oil and Gas Board of Alabama Administrative Code.

"19. DOCKET NO. 5-26-8314

Petition by Anderman/Smith Operating Company, a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order force pooling all tracts and interests in a 320-acre gas drilling unit consisting of the North (N½) of Section 9, Township 13 South, Range 14 West, Lamar County, Alabama. This petition is in accordance with Section 9-17-13, Code of Alabama (1975) and Rule 400-1-13-.01 of the State Oil and Gas Board of Alabama Administrative Code.

"20. DOCKET NO. 5-26-8315

Petition by Dominex, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order approving an exceptional location 330 feet FSL and 330 feet FWL of Section 4, Township 9 South, Range 4 East, Baldwin County, Alabama, the unit for

the proposed well being the Southwest Quarter of said Section 4. Said request is being made pursuant to Rule 400-1-2-.02(5) of the State Oil and Gas Board of Alabama Administrative Code.

"21. DOCKET NO. 5-26-8316

Petition by Dominex Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order approving an exceptional location for a well to be located 150 feet FWL and 280 feet FSL of a 163.22-acre unit consisting of the following described property:

Commencing at the Northeast corner of Section 18, Township 8 South, Range 3 East, Baldwin County, Alabama; said point also being the Southwest corner of Section 8, Township 8 South, Range 3 East; run thence North 00° 11' 24" West along the West line of Section 8 a distance of 2660.87 feet to the point of beginning of the property herein described; continue thence North 00° 11' 24" West along said West line a distance of 2660.88 feet; run thence North 89° 49' 43" East a distance of 2672.41 feet; run thence South 00° 06' 06" East a distance of 2664.11 feet; run thence South 89° 53' 53" West a distance of 2668.31 feet to the point

of beginning, Baldwin County, Alabama, said unit being a productive extension of the South Weeks Bay Field. Parts of irregular Sections 8, 31, and 32 of Township 8 South, Range 3 East, are included in said unit.

Said exceptional location is necessitated by the Special Field Rules for the South Weeks Bay Field and is permitted by Rule 400-1-2-.02(5) of the State Oil and Gas Board of Alabama Administrative Code.

"22. DOCKET NO. 5-26-8317

Petition by Clayton W. Williams, Jr., an individual doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order approving an exceptional location 1,528.9 feet FSL and 396.1 feet FEL of the Southwest Quarter of Section 17, Township 8 South, Range 3 East, Baldwin County, Alabama, the unit for the proposed well being the Southwest Quarter of said Section 17. This petition is brought pursuant to Section 9-17-12, Code of Alabama (1975).

"23. DOCKET NO. 5-26-833

Continued petition by Dominex, Inc., a foreign corporation authorized to do and doing business in

the State of Alabama, requesting the State Oil and Gas Board to enter an order requiring all operators in the Pleasant View Field, Baldwin County, Alabama, to produce their wells ratably so as to prevent drainage and waste and protect coequal and correlative rights.

"24. DOCKET NO. 5-26-834

Continued petition by Dominex, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order amending Rule 8 of the Special Field Rules for the Pleasant View Field, Baldwin County, Alabama, so as to decrease the maximum allowable.

"25. DOCKET NO. 5-26-8318

Petition by Charles L. Cherry and Associates, Inc., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the State Oil and Gas Board to enter an order establishing a new oil field to be known as Armstrong Branch Oil Field and to promulgate Special Field Rules for the Carter Sand Oil Pool in said field. The area comprising the proposed field is the Northwest Quarter,

and the Northwest Quarter of the Southwest Quarter, all in Section 27, Township 13 South, Range 14 West, Lamar County, Alabama, underlain by the Carter Sand Oil Pool and all productive extensions thereof. The Carter Sand Oil Pool is defined as those strata of said pool productive of hydrocarbons in the interval between 2258 feet and 2284 feet as indicated on the dual induction focused log in the Charles L. Cherry and Associates, Inc., No. 1 Sanford-Weyerhaeuser 27-12 Well (Permit No. 3653), located 1780 feet from the South line and 790 feet from the West line of Section 27, Township 13 South, Range 14 West, Lamar County, Alabama, Petitioner is requesting 40-acre spacing in said field.

"26. DOCKET NO. 5-26-8319

Petition by Exxon Corporation, a New Jersey Corporation authorized to do and doing business in Alabama whose principal place of business is New York, New York, requesting the Board to enter an order force pooling all tracts and interests in the Norphlet Formation in the Northwest 1/4 of the Southeast 1/4

of Section 29, Township 1 North, Range 9 East, Escambia County, Alabama, to create a 40-acre drilling unit to be designated T. R. Miller Mill Unit 29-10, all pursuant to Section 9-17-13, Code of Alabama (1975) and Rule 400-1-13-.01 of the State Oil and Gas Board of Alabama Administrative Code.

"27. DOCKET NO. 5-26-8320

Petition by Exxon Corporation, a New Jersey corporation authorized to do and doing business in Alabama, whose principal place of business is New York, New York, requesting the Board to amend Rule 400-1-3-.10 of the State Oil and Gas Board of Alabama Administrative Code to provide:

If the operator so requests in writing, all geological information from wildcat wells, including formation depths, coring information, including cored intervals and coring operations, testing depths, testing methods, and testing results shall be kept confidential until six (6) months after the completion of the well.

The confidential treatment resulting from an operator's written request shall extend to geological information submitted to Board personnel or obtained by Board personnel in the on-site review of well operations or records.

"28. DOCKET NO. 5-26-8321

Petition by Universal Petroleum Services, Inc., a foreign corporation qualified to do and doing business in the State of Alabama, requesting the Board to enter an order establishing a new gas field to be known as the Pilot Hill Gas Field (or such other name as the Board deems appropriate) and to promulgate Special Field Rules for the Lewis Sand Gas Pool in said field. The area comprising the proposed field is Sections 26, 27, 28, 29, 30, 31, 32, 33, 34, and 35, Township 8 South, Range 14 West, Franklin County; and Sections 25 and 36, Township 8 South, Range 15 West, Franklin County; and Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, Township 9 South, Range 14 West, Marion County; and Sections 1 and 12, Township 9 South, Range 15 West, Marion County. Interested parties are advised that the Board may establish field limits that differ from the exact area set forth above, but any acreage put in the field must be within the area described above. The proposed Special Field Rules for the proposed gas field would

define the Lewis Sand Gas Pool in said field as those strata productive of hydrocarbons in the interval between 1272 feet and 1275 feet in the Universal Petroleum Services, Inc., G. A. Boyles 34-1 No. 3 Well, Permit No. 3670, located on a 40-acre unit consisting of the W/2 of NE/4 of NE/4 and the E/2 of the NW/4 of NE/4 of Section 34, Township 8 South, Range 14 West, Franklin County, Alabama, as indicated on the Compensated Density Log of said well, including those strata productive of hydrocarbons which can be correlated therewith. Petitioner is requesting 80-acre spacing for the field, however interested persons are advised that petitioner may amend its petition to ask for 160-acre spacing. Allowables would be established for the field.

"29. DOCKET NO. 5-26-8322

Petition by Universal Petroleum Services, Inc., a foreign corporation qualified to do and doing business in the State of Alabama, requesting the Board to enter an order reforming the unit for the G. A. Boyles 34-1 No. 3 Well, Permit No. 3670, from a



forty (40) acre wildcat drilling unit consisting of the West Half of the Northeast Quarter of the Northeast Quarter and the East Half of the Northwest Quarter of the Northeast Quarter of Section 34, Township 8 South, Range 14 West, Franklin County, Alabama, to an eighty (80) acre gas unit consisting of the North Half of the Northeast Quarter of Section 34, Township 8 South, Range 14 West, Franklin County, Alabama, underlain by the Lewis Sand Gas Pool in the proposed Pilot Hill Gas Field.

"30. DOCKET NO. 5-26-8323

Petition by Universal Petroleum Services, Inc., a foreign corporation qualified to do and doing business in the State of Alabama, requesting the Board to enter an order reforming the unit for the G. A. Boyles 34-1 No. 3 Well, Permit No. 3670, from a forty (40) acre wildcat drilling unit consisting of the West Half of the Northeast Quarter of the Northeast Quarter and the East Half of the Northwest Quarter of the Northeast Quarter of Section 34, Township 8 South, Range 14 West, Franklin County, Alabama, to a

160-acre gas unit consisting of the Northeast Quarter of Section 34, Township 8 South, Range 14 West, Franklin County, Alabama, underlain by the Lewis Sand Gas Pool in the proposed Pilot Hill Gas Field.

"31. DOCKET NO. 5-26-8324

Petition by Michigan Oil Company, a foreign corporation, authorized to do and doing business in the State of Alabama, requesting the Board to enter an order force pooling all tracts and interests in the East Half of Section 7, Township 14 South, Range 13 West, Fayette County, Alabama, all pursuant to Section 9-17-13, Code of Alabama (1975) and Rule 400-1-13-.01 of the State Oil and Gas Board of Alabama Administrative Code.

"32. DOCKET NO. 5-26-8325

Petition by El-Oil, Ltd., a foreign corporation qualified to do and doing business in the State of Alabama, requesting the Board to enter an order extending the field limits for the Foley Field, Baldwin County, Alabama, so as to include the Northwest Quarter of Section 5 and the Northeast Quarter of Section 6,

Township 8 South, Range 4 East, Baldwin County, Alabama.

"33. DOCKET NO. 5-26-8326

Petition by Sipsey, Inc., a domestic corporation, requesting the Board to enter an order protecting the coequal and correlative rights of the owners of interests in the Meyer Sand Gas Pool in the East Oyster Bay Field, Baldwin County, Alabama, by doing one or more of the following:

- A. Amending Rule 8(B)(3) of the Special Field Rules for the East Oyster Bay Field to read as follows:

"8(B)(3)  
Maximum Allowable.  
No well shall be assigned  
as allowable in excess of  
175 Mcfd."

- B. By establishing and adopting a system of ratable takes allocating production ratably among all wells completed in the Meyer Sand Gas Pool in the East Oyster Bay Field, whether or not said wells are connected to a pipeline.
- C. Prescribing such other Rule or Order as the Board deems appropriate.

"34. DOCKET NO. 5-26-8327

Petition by Clay Calhoun, an individual, requesting

that the Board pursuant to Section 9-17-12, Code of Alabama (1975) and the general regulatory authority of the Board, enter an order protecting the coequal and correlative rights of the owners of interest in the Amos Sand Gas Pool in the Southeast Quarter of Section 36, Township 7 South, Range 3 East, a productive extension or offset to the West Foley Field, Baldwin County, Alabama, by doing one or more of the following:

- A. Enlarging the producing units for the Amoco J. W. Styron Unit 36-2 No. 3 Well, Permit No. 3123, and/or the Moon-Hines-Tigrett Operating Co., Inc., Styron 36-1 Well, Permit No. 3708, so as to include such portions of the Southeast Quarter of Section 36 as are productive of hydrocarbons in the Amos Sand Gas Pool.
- B. Extending the field limits for the West Foley Field so as to include those portions of the Southeast Quarter of Section 36 as are included within the units under Paragraph A above.
- C. In the alternative, if the unit for said J. W. Styron Unit 36-2 No. 3 Well and Styron 36-1 Well are not reformed, enter an order shutting in said wells until the owners of interest in the Southeast Quarter of Section 36 are

afforded an opportunity to market  
producibile hydrocarbons in the  
Amos Sand Gas Pool.

The current unit for the J. W. Styron Unit 36-2 No. 3 Well is the E/2 of E/2 of NW/4, the W/2 of NE/4, and the W/2 of E/2 of NE/4 of Section 36, Township 7 South, Range 3 East, Baldwin County.

The current unit for the Styron 36-1 Well is the E/2 of E/2 of NE/4 of Section 36, Township 7 South, Range 3 East, and the W/2 of NW/4 and the W/2 of E/2 of NW/4 of Section 31, Township 7 South, Range 4 East, Baldwin County.

"35. DOCKET NO. 5-26-8328

Petition by Clay Calhoun, an individual, requesting the Board to establish a drilling and producing unit in the Pleasant View Field, Baldwin County, Alabama. Said unit would consist of approximately 160 contiguous surface acres, described as follows:

As a point of beginning start at the Northeast Corner of Section 24, Township 8 South, Range 3 East, and run West along the North line of Section 24 a distance of 1320 feet to a point, then run South and parallel to the East line of Section 24 a distance of 2640 feet to a point, then run East and

parallel to the North line of Section 24 a distance of 1320 feet, more or less, to the East line of Section 24, then continue to run East along an extension of the same line a distance of 1320 feet to a point in Section 30, Township 8 South, Range 4 East, then run North and parallel to the West line of Section 30, which is also the East line of Section 24, a distance of 2640 feet to a point, then run West a distance of 1320 feet, more or less, to the point of beginning.

Petitioner proposes to drill a well 1190 feet from the East line and 1094 feet from the South line of said unit. Said location is 3735 feet from the North line and 130 feet from the West line of Section 30, Township 8 South, Range 4 East, Baldwin County, Alabama. Said location would be a regular location under Rule 3 of the Special Field Rules for the Pleasant View Field, provided that the unit is designated as set forth above. In the alternative, Petitioner requests that the Board enter an order authorizing the drilling of a well at the location described above, 3735 feet from the North line and 130 feet from the West line of said Section 30, as an

exception to the Special Field Rules for the Pleasant View Field, on a unit described as follows:

Commence at the Northwest corner of Section 30, Township 8 South, Range 4 East, and run thence South along the West line of Section 30 a distance of 2189 feet to the POINT OF BEGINNING, then continue to run South along the West line of said Section 30 a distance of 2640 feet, then run East and parallel to the North line of Section 30 a distance of 2640 feet, then run North and parallel to the West line of Section 30 a distance of 2640 feet, then run West and parallel to the North line of Section 30 a distance of 2640 feet to the point of beginning.

If this alternative is approved, said well would be an exception to Rule 3-B of the Special Field Rules for the Pleasant View Field because the proposed drilling site is 130 feet from the West line of the proposed unit, whereas the said Special Field Rules require that all wells shall be located at least 660 feet from every exterior boundary of a unit.

"36. DOCKET NO. 5-26-8329

Petition by Cities Service Oil and Gas Corporation, a foreign corporation authorized to do and doing business

in the State of Alabama, requesting the Board to enter an order amending Rule 1 of the Special Field Rules for the Big Escambia Creek Field, Escambia County, Alabama, by adding to the field limits all of Section 33, Township 2 North, Range 6 East, the South Half of Section 34, Township 2 North, Range 6 East, and the North Half of Section 3, Township 1 North, Range 6 East, all in Escambia County, Alabama.

"37. DOCKET NO. 5-26-8330

Petition by Cities Service Oil and Gas Corporation, a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to enter an order approving as an exception to Rule 3 (Spacing) of the Special Field Rules for the Big Escambia Creek Field, Escambia County, Alabama, a 640-acre unit consisting of the North Half of Section 3, Township 1 North, Range 6 East, and the South Half of Section 34, Township 2 North, Range 6 East, Escambia County, Alabama. Rule 3 of said Special Field Rules provides that all wells drilled as gas wells shall be drilled on a unit consisting of a governmental



section containing approximately 640 contiguous acres.

"38. DOCKET NO. 5-26-8331

Petition by Morrow Oil & Gas Co., a foreign corporation authorized to do and doing business in the State of Alabama, requesting the Board to establish all of Sections 2, 3, 4, 9, 10, 11, 14, and 15 of Township 13 South, Range 14 West, Lamar County, Alabama, as underlain by the Lewis Sand Gas Pool, and all productive extensions thereof, as the Beaver Creek Field, and to adopt Special Field Rules therefor. The proposed Special Field Rules provide for spacing of wells on 320-acre units, provide for permanent allowances, and define the Lewis Sand Gas Pool as those strata productive of hydrocarbons as encountered in the Babcock-Cole 10-13 No. 1 Well (Permit No. 3699), located in a unit consisting of the West Half of Section 10, Township 13 South, Range 14 West, Lamar County, Alabama, in the interval between 2438 feet and 2478 feet, as indicated on the Dual Induction Log of said well.

"39. DOCKET NO. 5-26-8332

Petition by the University of Alabama, Tuscaloosa, Alabama, requesting the Board to enter an order approving an exceptional location for a 40-acre wildcat well located 200 feet FNL and 650 feet FEL of the SE/4 of the NW/4 of Section 24, Township 21 South, Range 10 West, Tuscaloosa County, Alabama. Rule 400-1-2-.02(1)(6) of the State Oil and Gas Board of Alabama Administrative Code requires that all wells on 40-acre wildcat units be located at least 330 feet from every exterior boundary of the unit. This petition is brought pursuant to Section 9-17-12(c), Code of Alabama (1975). This petition was approved on an emergency basis April 11, 1983 (Board Order E-83-74).

APPLICATIONS FOR NATURAL GAS POLICY ACT  
OF 1978 (NGPA) WELL STATUS DETERMINATIONS

"40. DOCKET NO. 9-17-823PD

Continued application by Amoco Production Company for a new natural gas determination under Section 102(c)(1)(C) (new onshore reservoir) of the NGPA for the A. F. Nickel 25-11 No. 1 well (Permit No. 3018), in

the NE/4 of the SW/4 of Section 25, Township 7 South, Range 3 East, Baldwin County, Alabama, West Foley Field. Amos Sand.

"41. DOCKET NO. 9-17-824PD

Continued application by Amoco Production Company for a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the Donald Grantham "B" 36-4 No. 1 well (Permit No. 3116), in the NW/4 of the NW/4 of Section 36, Township 7 South, Range 3 East, Baldwin County, Alabama, Foley Field, Amos Sand.

"42. DOCKET NO. 9-17-825PD

Continued application by Amoco Production Company for a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the J. W. Styron Unit 36-2 #3 (Permit No. 2123) in the NW/4 of the NE/4 of Section 36, Township 7 South, Range 3 East, Baldwin County, Alabama, West Foley Field, Amos Sand.

"43. DOCKET NO. 9-17-826PD

Continued application by Amoco Production Company for

a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the Rose Weeks Unit 7-2 #1 well (Permit No. 3062), in the NW/4 of the NE/4 of Section 7, Township 8 South, Range 3 East, Baldwin County, Alabama, South Weeks Bay Field, Amos Sand.

"44. DOCKET NO. 9-17-827PD

Continued application by Amoco Production Company for a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the S. M. Styron Unit 25-15 #1 well (Permit No. 3117) in the SW/4 of the SE/4 of Section 25, Township 7 South, Range 3 East, Baldwin County, Alabama, West Foley Field, Amos Sand.

"45. DOCKET NO. 12-10-827PD

Continued application by Key Operating Company, Inc., for a new natural gas determination under Section 102 (c) (1) (C) (new onshore reservoir) of the NGPA for the W. C. Cleverdon 15-15 No. 1, Permit No. 3172, in Section 22, Township 8 South, Range 3 East, Baldwin County, Alabama, in the Skunk Bayou Field, Meyers Sand.

"46. DOCKET NO. 1-20-832PD

Continued application by Amoco Production Company for a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the H. L. Williams Unit No. 1 well (Permit No. 3595), in Section 6, Township 8 South, Range 3 East, in Baldwin County, Alabama, in the South Weeks Bay Field, Amos Sand Pool.

"47. DOCKET NO. 1-20-835PD

Continued application by Michigan Oil Company for a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the R. Perkins 33-11 (Permit No. 3561) in the NE/4 of SW/4 of Section 33, Township 13 South, Range 14 West, Lamar County, Alabama.

"48. DOCKET NO. 1-20-836PD

Continued application by Michigan Oil Company for a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the A. L. Young 33-8 well (Permit No. 3509), in the E/2 of Section 33, Township 13 South, Range 14 West, Lamar County, Alabama.

"49. DOCKET NO. 1-20-837PD

Continued application by Amoco Production Company for a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the S. C. Lipscomb Unit 7-9 No. 1 (Permit No. 3616), in the SE/4 of Section 7, Township 8 South, Range 3 East, Baldwin County, Alabama, in South Weeks Bay Field, Amos Sand Gas Pool.

"50. DOCKET NO. 4-14-832PD-A

Continued amended application by Terra Resources, Inc., for a new natural gas determination under Section 102 (c) (1) (B) (i) (2.5 mile rule) of the NGPA for the Couch 10-5 well (Permit No. 3543), in the W/2 of Section 10, Township 15 South, Range 14 West, Lamar County, Alabama, in the Little Hells Creek Field, Carter Pool.

"51. DOCKET NO. 4-14-834PD

Continued application by Terra Resources, Inc., for a new natural gas determination under Section 102(c) (1) (C) (new onshore reservoir) of the NGPA for the Cannon 31-4 well (Permit No. 3617), in the N/2 of Section 31, Township 15 South, Range 11 West, Fayette

County, Alabama, in the Musgrove Creek Field, Carter Pool.

"52. DOCKET NO. 5-26-832PD

Application by Carless Resources, Inc., for a new natural gas determination under Section 102(c)(1)(B)(i)(2.5 mile rule) of the NGPA for the Holman Lumber 10-7 well (Permit No. 3393-A), in the N/2 of Section 10, Township 18 South, Range 11 West, Tuscaloosa County, Alabama, in the Lexington Field, Millerella Sand Gas Pool.

"53. DOCKET NO. 5-26-833PD

Application by Carless Resources, Inc., for a new natural gas determination under Section 102(c)(1)(B)(i)(2.5 mile rule) of the NGPA for the Kelley 11-1 No. 1 well (Permit No. 3568), in the N/2 of Section 11, Township 18 South, Range 11 West, Tuscaloosa County, Alabama, in the Lexington Field, Millerella Sand Gas Pool.

"54. DOCKET NO. 5-26-834PD

Application by Carless Resources, Inc., for a new natural gas determination under Section 102(c)(1)(B)

(i) (2.5 mile rule) of the NGPA for the Hallman 12-11 No. 1 well (Permit No. 3557-A), in the S/2 of Section 12, Township 18 South, Range 11 West, Tuscaloosa County, Alabama, in the Lexington Field, Carter Sand Gas Pool.

"55. DOCKET NO. 5-26-835PD

Application by Grace Petroleum Corporation for a new natural gas determination under Section 108 (enhanced recovery stripper well) of the NGPA for the Anthony 3-4 well (Permit No. 1778), all of Section 3, Township 15 South, Range 11 West, Fayette County, Alabama, in the Davis Chapel Field, Carter Sand Gas Pool.

"56. DOCKET NO. 5-26-836PD

Application by Enhanced Energy Resources, Inc., for a new natural gas determination under Section 107 (high cost natural gas) of the NGPA for the Shook Lease No. 2-13-1 well (Permit No. 3672-C), in the SW/4 SW/4 of Section 2, Township 20 South, Range 8 West, Tuscaloosa County, Alabama, in the Brookwood Coal Degasification Field, Mary Lee and Blue Creek Coal Seams.



"57. DOCKET NO. 5-26-837PD

Application by Enhanced Energy Resources, Inc., for a new natural gas determination under Section 107 (high cost natural gas) of the NGPA for the Shook Lease No. 2-6-4 well (Permit No. 3675-C), in the SE/4 NW/4 of Section 2, Township 20 South, Range 8 West, Tuscaloosa County, Alabama, in the Brookwood Coal Degasification Field, Mary Lee and Blue Creek Coal Seams.

"58. DOCKET NO. 5-26-838PD

Application by Anderman/Smith Operating Company for a new natural gas determination under Section 102(c)(1)(B)(i)(2.5 mile rule) of the NGPA for the W. B. Robinson 36-1 well (Permit No. 3604), in the N/2 of Section 36, Township 16 South, Range 16 West, Lamar County, Alabama, in the McGee Lake Field, Carter Pool.

"59. DOCKET NO. 5-26-839PD

Application by Enhanced Energy Resources, Inc., for a new natural gas determination under Section 107(c)(3)(high cost natural gas) of the NGPA for the Shook Lease No. 1-2-1, drilling unit described as NW/4 of NE/4 of Section 1, Township 20 South, Range 8 West,

Tuscaloosa County, Alabama, in the Brookwood Coal  
Degasification Field, Mary Lee and Blue Creek Coal  
Seams.

Petitions before the State Oil and Gas Board of Alabama must be represented in person by the petitioner or his duly authorized agent or attorney, unless proceeding with an affidavit in accordance with Rule 400-1-12-.17.

The public is advised that the Board may promulgate an order regarding a petition which may differ from that requested by the petitioner concerning the land described in this notice, so long as this notice shall constitute due and proper notice of the action ultimately taken by the Board; therefore pursuant to this hearing, the provisions of the Code of Alabama (1975) hereinafter set forth, and the rules and regulations promulgated thereunder, the Board will enter such order or orders as in its judgment may be necessary in keeping with the evidence submitted. Further, the Board invites the submission of legal briefs regarding any petition on behalf of any interested person.

The June meeting of the Board will be held on Thursday, June 30, 1983, at 8 a.m. at the Continuing Education Center, 7th Avenue and 10th Street, University of Alabama Campus, Tuscaloosa, Alabama.

Proposed notices for the June meeting must be filed on or before June 9, 1983. Petitions, exhibits, and affidavits for the June meeting must be filed on or before June 16, 1983.

The Board was originally established by Act No. 1 of the Legislature of Alabama in the Regular Session of 1945. The applicable law pertaining to the establishment of the Board now appears in Section 9-17-1 et seq. Code of Alabama (1975), as last amended. The applicable rules pertaining to the conduct of hearings by the Board are found in the General Rules and Regulations of the State Oil and Gas Board of Alabama (as promulgated by Order No. 76-100 of the Board as amended) and in particular Rule 400-1-12-.01, et seq. Petitioners are advised to closely review the rules of practice and procedure of the Board. NGPA price determination applicants should also closely review Rules 400-2-X-.01 through 400-2-X-.09.

The continued petitions by Getty Oil Company bearing Docket Nos. 8-19-821 and 11-8-821 concerning unitization of a portion of Hatter's Pond Field, Mobile County, Alabama, will be heard on Monday, May 9, 1983, at 9:30 a.m. at the Passport Inn, Gulf Shores, Alabama.

The public is invited to attend these meetings.

Dr. Ernest A. Mancini  
Secretary to the Board  
State Oil and Gas Supervisor "

DR. MANCINI: In accordance with the procedures of the Board, we will sound the docket. Those items unopposed requiring 15 minutes or less will be heard first. Unopposed items requiring more than 15 minutes will be heard next. All opposed items will be heard last. Applications for Natural Gas Policy Act Well Status Determinations will be heard at the end of the docket. Item 1, Docket No. 3-10-836, continued petition by Sipse, Inc.

MR. SLEDGE: I ask that that matter be continued.

CHMN. ADAMS: Is there any objection to continuance? (No response) Your request is granted.

DR. MANCINI: Item 2, Docket No. 3-10-8311, continued petition by Hughes and Hughes.

MR. WATSON: I ask that that item be continued.

CHMN. ADAMS: Is there any objection to continuance? Hearing none, your request is granted.

DR. MANCINI: Item 3, Docket No. 3-10-8317, continued petition by Clay Calhoun.

MR. SLEDGE: Mr. Chairman, we've previously filed a motion to dismiss that item.

CHMN. ADAMS: Is there any objection to dismissal? Hearing

none, the item is dismissed.

DR. MANCINI: Item 4, Docket No. 4-14-831, continued petition by Terra Resources, Inc.

MR. CROWE: Mr. Chairman, we previously filed a motion to dismiss that item.

CHMN. ADAMS: Is there any objection to dismissal? Hearing none, the item is dismissed.

DR. MANCINI: Item 5, Docket No. 4-14-835, continued petition by Morrow Oil & Gas Company.

MR. HARRISON: Less than 15 minutes.

DR. MANCINI: Item 6, Docket No. 4-14-837, continued petition by Anderman/Smith Operating Company.

MR. PEARSON: Mr. Chairman, we ask that that item be dismissed.

CHMN. ADAMS: Is there any objection to dismissal? Hearing none, the item is dismissed.

DR. MANCINI: Item 7, Docket No. 4-14-839, continued petition by Terra Resources, Inc.

MR. CROWE: Fifteen minutes or less.

DR. MANCINI: Item 8, Docket No. 4-14-8314, continued petition by Dominex, Inc.

MR. WATSON: Mr. Chairman, this item is opposed and I may dismiss it when it's called.

DR. MANCINI: Item 9, Docket No. 5-26-831, petition by Terra Resources, Inc.

MR. CROWE: Mr. Chairman, we ask that Item 9 be consolidated for hearing with Item 10 and the two items will take 15 minutes or less.

DR. ADAMS: Your request for consolidation is granted, is approved.

DR. MANCINI: Item 11, Docket No. 5-26-835, petition by Texaco, Inc.

UNIDENTIFIED: Mr. Chairman, we ask that Items 11 through 17 be dismissed without prejudice.

CHMN. ADAMS: Is there any objection to the dismissal of Items 11 through 17? Hearing none, the request is granted.

DR. MANCINI: Item 18, Docket No. 5-26-8312, petition by Morrow Oil & Gas Co.

MR. HARRISON: Mr. Chairman, I think that Item 18 is an opposed item and we would like, for hearing purposes, to consolidate that matter with Item 19 which deals with the same property.

CHMN. ADAMS: Is there any objection to the consolidation of Items 18 and 19? Hearing none, those items are consolidated.

DR. MANCINI: Item 20, Docket No. 5-26-8315, petition by Dominex, Inc.

MR. WATSON: We would ask that that matter be continued.

CHMN. ADAMS: Would you come up--the attorneys come up to the mike when you speak? Otherwise we can't get it on record.

MR. WATSON: We would ask that that item be continued, Mr. Chairman.

CHMN. ADAMS: Would you state your--what did you say?

MR. WATSON: I would ask that that item be continued, Item 20.

CHMN. ADAMS: Your request is granted.

DR. MANCINI: Item 21, Docket No. 5-26-8316, petition by Dominex, Inc.

MR. WATSON: I would ask that that item be dismissed.

CHMN. ADAMS: Is there an objection to the dismissal of this item? Hearing none, it is dismissed.

DR. MANCINI: Item 22, Docket No. 5-26-8317, petition by Clayton W. Williams, Jr.

MR. WATSON: That item will take less than 15 minutes.

DR. MANCINI: Item 23, Docket No. 5-26-833, continued petition by Dominex, Inc.

MR. WATSON: I would ask that that item be continued.

DR. MANCINI: Item 24, Docket No. ...

MR. BROOKER: Wait a minute, Tom. Twenty-three you asked be continued?

MR. WATSON: Yes. We're gonna hear Item 24.

CHMN. ADAMS: Is there an objection to continuation of Item 23?

MR. BROOKER: Dr. Adams, I'm Norton Brooker. I represent EL-Oil. We may have an objection to the continuance of this matter as far as No. 23 is concerned.

MR. WATSON: Then, Mr. Chairman, we can consolidate those for hearing purposes and ask the Board to act on whichever one you choose.

CHMN. ADAMS: Your request for consolidation is granted.

DR. MANCINI: Those items are opposed, is that correct?

MR. WATSON: That is correct.

MR. BROOKER: That's correct.



DR. MANCINI: Item 25, Docket No. 5-26-8318, petition by Charles L. Cherry and Associates, Inc.

MR. ESPY: Mr. Chairman, we ask that that item be continued.

CHMN. ADAMS: Is there an objection to continuance of this item? Hearing none, it is continued.

DR. MANCINI: Item 26, Docket No. 5-26-8319, petition by Exxon Corporation.

MS. KING: Mr. Chairman, we ask that this item be dismissed.

CHMN. ADAMS: Is there an objection to the dismissal of this item? Hearing none, it is dismissed.

DR. MANCINI: Item 27, Docket No. 5-26-8320, petition by Exxon Corporation.

MS. KING: We understand that this item is unopposed but it will take slightly longer than 15 minutes.

DR. MANCINI: Item 28, Docket No. 5-26-8321, petition by Universal Petroleum Services, Inc.

MR. SLEDGE: Mr. Chairman, this item can be consolidated with Item No. 30 and together the hearing of these will take less than 15 minutes. We have previously moved to dismiss Item 29.

CHMN. ADAMS: Is there an objection to dismissal of Item 29? Hearing none, Item 29 is dismissed. And your request for consolidation of 28 and 30 is granted.

DR. MANCINI: Item 31, Docket No. 5-26-8324, petition by Michigan Oil Company.

MR. SLEDGE: Fifteen minutes or less.

DR. MANCINI: Item 32, Docket No. 5-26-8325, petition by EL-Oil, Ltd.

MR. SLEDGE: Fifteen minutes or less.

DR. MANCINI: Item 33, Docket No. 5-26-8326, petition by Sipsev, Inc.

MR. SLEDGE: We would ask that that item be continued.

CHMN. ADAMS: Is there an objection to the continuance of this item? Hearing none, it is continued.

DR. MANCINI: Item 34, Docket No. 5-26-8327, petition by Clay Calhoun.

MR. SLEDGE: Fifteen minutes or less.

UNIDENTIFIED: That's opposed.

MR. SLEDGE: Are you sure, Jack, that that's the right item?

UNIDENTIFIED: Yeah.

MR. SLEDGE: Oh, excuse me--excuse me--that one is opposed.  
I apologize, Dr. Adams.

DR. MANCINI: Item 35, Docket No. 5-26-8328, petition by  
Clay Calhoun.

MR. SLEDGE: This one would be 15 minutes or less.

DR. MANCINI: Item 36, Docket No. 5-26-8329, petition by  
Cities Service Oil and Gas Corporation.

MR. JORDEN: Mr. Chairman, I'm Bob Jorden representing Cities  
Service. We would ask that Items 36 and 37 be consolidated for  
the reception of evidence. It's gonna take slightly more than  
15 minutes and we understand that it is gonna be opposed.

CHMN. ADAMS: Your request is granted.

DR. MANCINI: Item 38, Docket No. 5-26-8331, petition by  
Morrow Oil and Gas Company.

MR. HARRISON: We plan to take less than 15 minutes.

MR. PEARSON: This item will be opposed.

DR. MANCINI: Item 39, Docket No. 5-26-8332, petition by  
the University of Alabama.

MR. BENNETT: Fifteen minutes or less.

DR. MANCINI: Item 5, Docket No. 4-14-835, continued

petition by Morrow Oil & Gas Company.

MR. HARRISON: Mr. Chairman, my witness in this matter has yet to arrive. I would request that it be moved to the end of the-unopposed and less than 15 minute items.

CHMN. ADAMS: Is there an objection? Hearing none, your request is granted.

DR. MANCINI: Item 7, continued petition by Terra Resources, Inc.

MR. CROWE: Mr. Chairman, I'm Rae Crowe of Mobile representing Terra. We have one witness to be sworn, Mr. Dement.

MR. CAREY: State your name and address for the record.

WITNESS: My name is William E. Dement. I live in Oklahoma City, Oklahoma. I represent Terra Resources.

(Witness was sworn by Mr. Carey)

MR. CROWE: Mr. Dement, you are--would you state your name and employment for the record please?

MR. DEMENT: My name is William Dement. I work for Terra Resources.

MR. CROWE: Are you a geologist?

MR. DEMENT: Yes, sir, I've been a geologist with Terra

for a year and a half. Previous to that I worked for Conoco, Inc. for four and a half years as a petroleum geologist.

MR. CROWE: Have you testified previously before this Board and do you have a resume of your qualifications on file with this Board?

MR. DEMENT: Yes, sir, I do.

MR. CROWE: At this time we would tender Mr. Dement to the Board and staff for any question regarding his qualifications.

CHMN. ADAMS: The witness is accepted as an expert.

WILLIAM DEMENT

Appearing as a witness on behalf of Petitioner, Terra Resources, Inc., having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Crowe:

Q Are you familiar, Mr. Dement, with the Terra petition to expand the field limits for the Watson Creek Field by adding thereto Sections 29 through 37, 33 and 34, and Sections 3 and 4 of 14 South, 15 West, Lamar County?

A Yes, sir, I am.

Q Have you prepared a booklet of exhibits with respect to this petition?

A Yes, I have.

Q Referring now to the booklet which has been handed up to the Board, I'll show you Exhibit No. 1 and ask you if that exhibit was prepared by you and under your direct supervision and control?

A Yes, it was.

Q Can you explain the exhibit to the Board and comment on it please?

A Yes, this exhibit shows the existing field limits of Watson Creek Field, which is in blue. It is four contiguous sections, 31, 32, of 14 South, 15 West, and Sections 5 and 6 of 15 South, 15 West. What Terra proposes to do is include that area that is outlined in red as an extension to Watson Creek Field. This is after the Sanders 33-9 well was drilled in Section 33 of 14 South, 15 West, and has shown to be tested productive within the Carter zone. Other wells that produce within Watson Creek Field are the 31-14, which is a Carter well; the Norton

6-2, which is a Carter well; and the Pennington-Hollis 32-11, which is a Lewis well. What Terra proposes to do is to include the sections that surround the Sanders 33-9 and the sections that would be pending the offsets of this well. We have established that the Sanders well should be productive within the Carter. We also propose to include the Lewis in this extension so as not to sever the field limits by producing horizons, though the Lewis within the Sanders well was not productive but we do anticipate further Lewis tests in this area.

Q Turning now to Exhibit No. 2, was that exhibit prepared by you and under your direct supervision and control?

A Yes, it was.

Q Could you explain and comment on Exhibit 2 to the Board please?

A Yes, Exhibit 2 is a structure map based on a marker within the Millerella zone in there. We are not attempting to define the Millerella but only use this marker as a mappable zone independent of the Carter. It lies almost directly above the productive zone within the Sanders 33-9. It

shows a generally gently dipping structure to the southwest through there. Regionally, it's striking northwest-southeast. As you notice in Section 4 we've indicated a slight high in there. That is the way we depict it. The data indicates from up in Watson Creek Field that either a slight high exists or a very flat section within the Mill-erella there. Assuming a continuance of reservoir, it is easily seen that we can go along strike and move updip within the sections that we propose to include in the extension of Watson Creek, and possibly and likely would drill Sections 3 and 4 as an extension of the Sanders 33-9 development.

MR. CAREY: Mr. Dement.

MR. DEMENT: Yes, sir.

MR. CAREY: Would you also try to speak into the other speaker too so that the audience can also hear you?

MR. DEMENT: Excuse me, I'm sorry.

Q Turning now to Exhibit No. 3 in the booklet, was it prepared by you and under your supervision and control?

A Yes, it was.



Q Would you comment on it and explain its significance to the staff and the Board?

A Yes. This exhibit correlates the Sanders 33-9 with the well that defines the Carter section within Watson Creek. That's the Norton 6-2. It was operated by Hughes & Hughes. As defined in the Watson Creek Field Rules, the Carter is defined from 2602 to 2771 on the electric log. The Carter in that well was perfed from 2699 to 2711. This cross or-- excuse me--this reference section has a datum on the base of the Millerella marker that we used to map our structure on in the previous exhibit. Noting that, we can see the direction correlation between this marker, between the Norton 6-2 and the Sanders 33-9 and that the overall Carter section is easily correlatable across that zone. The Sanders 33-9 was perfed from 2618 to 2630, a zone which definitely is within the zone defined as the Carter in the Norton 6-2. It's for this reason that we wish to include the Sanders 33-9 and the surrounding sections as indicated on Exhibit 1 within the Watson Creek field rules.

Q In your opinion, Mr. Dement, is the same zone that is productive in the Terra-Sanders 33-9 well the same zone that is defined as productive in the Carter Sand gas pool in the Norton 6-2 well under the Special Field Rules adopted by the Board?

A Yes, it is.

Q Will the granting of the Terra petition, in your opinion, prevent waste as waste is defined by the laws of the State of Alabama?

A Yes, it will.

Q And will it protect the coequal and correlative rights of all the owners?

A Yes, it will.

MR. CROWE: At this time we tender Mr. Dement to the Board and staff for any questions they may have.

DR. MANCINI: Mr. Chairman, we do have some questions.

EXAMINATION BY BOARD OR STAFF

MR. WILSON: Mr. Dement, what conclusive data do you have to indicate that Sections 27, 28, and 29 should be included in the Watson Creek Field?

MR. DEMENT: We have no conclusive evidence at this time. However, to preserve an orderly development of this field, we would like to include them in the field rules. At the time, or after we have developed the field and defined the limits, we will come before the Board again to add and subtract any additional sections as would be required to outline this field.

DR. MANCINI: Mr. Dement, so I take it from your response that with Sections 27, 28, and 29 you don't have conclusive geologic or engineering data that would support that they be put in the field at this particular time, and that if in fact as time progresses that you find that they should be put in the field that at that appropriate time they could be added. How does that affect your development plans?

MR. DEMENT: That's certainly very possible and it's something that we have considered. We are just, as I stated earlier we intend to drill or in the near future, pending some changes in the gas market in that area, Sections 33, 34, 4 and 3, and assuming, and we may be a little magniloquent in this, but assuming that either of those wells, the offsets in 33 and 34, come in, we will see offsets in Sections 28 and 27 and likely

along with Section 29.

DR. MANCINI: Your plans now are to drill in 34, 3, and 4, and down the road perhaps in 27, 28, and 29, is that what you're saying?

MR. DEMENT: Correct. Pending, of course, pending the outcome, all of this is for contingent wells and very easily we could drill in the North Half of 23 and immediately go to 29.

DR. MANCINI: So if 27, 28, and 29 were not included at this time it wouldn't hinder the development of the field?

MR. DEMENT: No, sir, it would not.

DR. MANCINI: All right, thank you.

CHMN. ADAMS: Anything else?

MR. CROWE: Mr. Chairman, we have previously filed with Mr. Carey's office an affidavit of notice to all owners and operators, the affidavit being dated April 4, 1983, and signed by Mr. David Rigsby of Terra Resources. We would like to at this time have that affidavit included as part of the record as an exhibit to be identified as Exhibit No. 4.

MR. CAREY: Mr. Chairman, I would recommend that Exhibits

1 through 3 and Exhibit 4, which is the affidavit of notice, be admitted into the record.

CHMN. ADAMS: The exhibits that you have mentioned, named, are admitted.

(Whereupon, Exhibits 1 through 4  
were received in evidence to the  
testimony of Mr. Dement)

DR. MANCINI: Mr. Chairman, in light of Mr. Dement's response to our questions, the staff feels that the data and testimony presented today are such that Sections 33 and 34, Township 14 South, Range 15 West, and Sections 3 and 4, Township 15 South, Range 15 West, should be added to the Watson Creek Field. Sufficient geologic and engineering information is not available at this time to warrant the inclusion of Sections 27, 28, and 29, Township 14 South, Range 15 West. When sufficient information is available on these sections, then that would be the appropriate time for their addition to a field. Therefore, the staff recommends that Item 7 be granted with the stipulation that only Sections 33 and 34, Township 14 South, Range 15 West, and Sections 3 and 4, Township 15 South, Range 15 West, be added to the Watson Creek Field.

MR. LEE: I so move.

CHMN. ADAMS: I second the motion. All in favor say "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

DR. MANCINI: Item 9 and 10, Terra Resources, Inc.

MR. CROWE: Ray Crowe of Mobile representing Terra Resources with respect to Items 9 and 10. Mr. Dement, the same witness that testified in the preceding docket number will testify with respect to Items 9 and 10. We have a booklet of exhibits which we'd like at this time to hand up to the Board and staff. You are the same Mr. Dement that previously testified in this record with respect to Item 7, are you not?

MR. DEMENT: Yes, I am.

WILLIAM DEMENT

Appearing as a witness on behalf of Terra Resources, Inc., having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Crowe:

Q Are you familiar with the Terra Resources petitions in Items 9 and 10 to reduce the size of the Bankston Field and to enlarge the size of the Musgrove Creek Field by

adding to the Musgrove Creek Field the North Half of Section 31, Township 15 South, Range 11 West, Fayette County, and by deleting that 320 acres from the Bankston Field?

A Yes, I am.

Q And have you prepared the booklet of exhibits which you have handed up to the Board?

A Yes, I have.

Q Turning now to Exhibit No. 1, would you explain and comment upon Exhibit No. 1 with respect to that exhibit?

A Yes, I will. Exhibit No. 1 simply depicts the field limits as they currently exist within Musgrove Creek and Bankston Field. Musgrove Creek Field is outlined in green and Bankston is outlined in purple. Our proposed change is outlined in red, which we would like to take the North Half of Section 31 out of Bankston and put it in Musgrove Creek. There are two other adjacent fields in this area, McCracken Mountain to the southwest and Berry Junction to the southeast, that are adjacent these fields. We are not attempting to ask relief from either of those two fields and for that

reason haven't included them as a colored field on this exhibit. What Terra proposes to do is remove the North Half of Section 31 from Bankston Field and move it into Musgrove Creek.

Q Turning now to Exhibit No. 2, would you please comment on that and explain its significance to the staff and Board?

A Yes, Exhibit No. 2 is a reference section that takes the well that was drilled in the North Half of Section 31, the Terra-Cannon well, and compares it to the type log for Musgrove Creek, which is the Terra-Randolph 17-13. These wells over all the Carter section correlates fairly well though over the five and a half miles of difference between the two wells we have seen some stratigraphic changes that do occur. If you'll note in the Terra-Randolph well there appears to be one lobe of Carter Sand and in the Terra-Cannon well there are two lobes. In the subsequent exhibit I will show that the two lobes are more typical in this area than the single lobe that we see in the Terra-Randolph well. Also please note that there is



an index map in the bottom left-hand corner of this.

There are some additional wells that occur between these two wells, however, this index map is to show only the geographic relationship between where the type well is and the five and a half miles that separate it from the Terra-Cannon well.

Q Turning now to Exhibit No. 3, would you comment and interpret that exhibit for the staff and Board?

A Please excuse the large size of this exhibit, but I feel that to accurately depict what is going on out here that we need an exhibit that will go from the interior of Musgrove Creek all the way to the outside of what we feel is the productive zones within Musgrove Creek. Our cross section runs north-northwest, south-southeast coming from the interior of Musgrove Creek to the, below what we will call the gas-water contact that we feel occurs in Section 31. The first two logs, the Woodward 25-5 and the Walton 30-12, are within the productive zone defined as Carter within Musgrove Creek. Both wells have been on line for a while, and as you'll note in these wells we see the two lobes of

sand that I referred to in the preceding exhibits. The third well in the cross section is the Cannon 31-4. It also has the two lobes that exist in the Walton and the Woodward wells. In this area we feel that that is what the typical Carter looks like. Moving to the right is the Terra-Lola Dobbs well which DST'd in the Carter 970 feet of salt water. The Board has heard previously, back last year, some discussions on whether that well was wet or not and they decided that it definitely was and they also decided that there was a gas-water contact that was exhibited in Section 31. We feel that this gas-water contact occurs at the east-west center line of Section 31 and that is why we wish to include only the North Half of Section 31 in the Musgrove Creek field limits.

Q Turning now to Exhibit No. 4, entitled "Structure Map Base of Millerella Lime", would you explain and interpret that exhibit for the Board and staff?

A Yes, this is a structure map on a marker that is locally correlatable within the Millerella. Once again, we're not attempting to define the base of the Millerella but

only use this as a marker for mapping purposes independent of the Carter. As you can see within Section 31 there exhibits an east-west strike of the structure within this unit with a maximum dip of less than three degrees. This is a, there are some structural anomalies that occur in this area, however, we don't feel that they are related to faulting or any other peculiar instance of that.

Q Turning to Exhibit 5, the exhibit is entitled "Structure Map Top of Carter", and would you explain and interpret the Exhibit No. 5 for the staff and Board?

A Yes, this is a structure map of the Carter mapped on top of the sands. We see that it closely mimics the Millerella which is independent of the Carter to some degree, and we see that the gas-water contact crosses Section 31 very near the center line boundary and that gas-water contact is defined as being 2,270 feet subsea and it was found in the Steiner-Schwab 35-10. This leaves the South Half of Section 31 wet. That's why we've chose not to include that within the Musgrove Creek field limits. Also noting very

briefly, though we're not asking for relief in Section 32, there appears to be a permeability barrier that separates the main portion of Musgrove Creek with that that's seen in Section 32 as there was a gas-water contact near the top of the Hodges 32-2 and it was found at 2189. So if 32 is drilled we'll come back before the Board, assuming that the northwest portion of 32 is drilled, and petition that that be included in Musgrove Creek should that well be productive. Currently, to our knowledge, there is no intention of drilling the NW/4 of Section 32 in the near future.

Q Turning now in the booklet to Exhibit No. 6, your isopach, your Carter Sand isopach map, would you explain and comment to the Board on Exhibit No. 6?

A Yes, Exhibit No. 6 was derived from calculating the thickness of the net microlog separation within the Carter unit. The average thickness of the Carter through Section 31 is approximately 20 feet thick. This also depicts how we view the permeability barrier to exist over in Section 32. Once again, it just shows how the Carter Sand is continuous from up in Musgrove Creek and down through 31, however the

South Half of 31 is wet.

Q In your opinion will the granting of the Terra petitions to include the North Half of Section 31 in the Musgrove Creek Field and delete it from the Bankston Field prevent waste and protect the coequal and correlative rights of all the owners, Mr. Dement?

A Yes, it will.

MR. CROWE: At this time we tender Mr. Dement to the staff and to the Board for any questions they may have concerning his testimony.

EXAMINATION BY BOARD OR STAFF

MR. MASINGILL: Mr. Dement, I have one question. In the NW/4 of Section 2, on your Exhibit 5 you indicate--I'm sorry--32, excuse me, sir. On Exhibit 5 you indicate that southwest of the permeability barrier and above the gas-water contact that you have some area productive. In other words, you're interpreting this area as being, if it's productive, connected to the Musgrove Creek Field, is that correct?

MR. DEMENT: Should it be that case, it possibly could be. We are concerned about overall getting in there at a legal

location and having two problems arise. One is getting below the gas-water contact and (2) being the nonpermeable Carter. Should it be drilled and our primary concern is that and it likely will not be drilled in the near future unless we can see some other things occurring in that area that we haven't seen yet.

MR. MASINGILL: I see. I guess my question is if you do drill a well in that area will it be drilled as a Musgrove Creek well with right now the field limits for Bankston, you know, encompasses that area and your geologic exhibit seemed to indicate that if it were productive it would be a part of the Musgrove Creek Field, so prior to drilling a well do you plan on removing this area from the Bankston Field? That, I think, is my question.

MR. DEMENT: We have made no plans to do that. On the same note, we have made no plans to do the opposite.

MR. MASINGILL: Right.

MR. DEMENT: We thought about that for a while back and we had actually petitioned the Board for an exceptional location under the Bankston Field limits in there even though we're deal-

ing with Musgrove Creek, and we haven't decided at this time how we would handle that. However, if the Board has a desire either way, I am sure we would adhere to their desires.

MR. MASINGILL: Well, I guess what I'm saying is your exhibits indicate that and, you know, they're on record and file with the Board. I just wondered if you would proceed in that manner and so...

MR. DEMENT: I'm not sure how we would do that, but I imagine that we would include it in Musgrove Creek if we did decide to drill it.

MR. MASINGILL: All right, sir, thank you.

DR. MANCINI: We have no further questions, Mr. Chairman.

MR. CROWE: Mr. Chairman, at this time we would like to have made a part of this record as exhibits two affidavits filed by Mr. David Rigsby of Terra Resources and prefiled with Mr. Carey's office, affidavits, both affidavits being dated May 4, 1983, giving notice to all owners and operators in both the Bankston and the Musgrove Creek Field in the affected areas, and we would like to have those two exhibits, affidavits, marked as Exhibits 7 and 8 and attached to the record.

MR. CAREY: Mr. Chairman, I would recommend that Exhibits 1 through 6 and the affidavits of notice, Exhibits 7 and 8, be admitted into the record.

CHMN. ADAMS: The affidavits and exhibits that you have named are admitted.

(Whereupon, Exhibits 1 through 8  
to the testimony of Mr. Dement  
were received in evidence)

MR. LEE: Mr. Chairman, if there are no further questions, I move for the approval of Items 9 and 10.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

MR. DEMENT: Thank you.

MR. CROWE: Thank you, Mr. Chairman.

DR. MANCINI: Item 22, petition by Clayton Williams.

MR. WATSON: I have one witness, Mr. Chairman, and I'd like to have him sworn.

MR. CAREY: State your name and address for the record.



WITNESS: Roger Chapman, Jackson, Mississippi.

(Witness sworn by Mr. Carey)

MR. WATSON: Mr. Chapman, you have appeared before this Board and submitted an affidavit of your qualifications and have been accepted as an expert petroleum geologist, is that correct?

MR. CHAPMAN: Yes, sir.

MR. WATSON: Mr. Chairman, I tender Mr. Chapman as an expert petroleum geologist.

CHMN. ADAMS: The witness is recognized as an expert.

MR. WATSON: In this item, Mr. Chairman, we are requesting the Board to approve an exceptional location for a well to be drilled in Baldwin County, Alabama, at a location 1528.9 feet from the South line and 396.1 feet from the East line of a 160-acre wildcat gas unit consisting of the SW/4 of Section 17, Township 8 South, Range 3 East, Baldwin County, Alabama.

ROGER CHAPMAN

Appearing as a witness on behalf of Petitioner, Clayton W. Williams, Jr., testified as follows:

DIRECT EXAMINATION

Questions by Mr. Watson:

Q In connection with this petition, Mr. Chapman, have you prepared exhibits?

A Yes, sir, I have.

Q I have handed those exhibits up to the Board in booklet form. Let's first identify your exhibits and tell the Board what these exhibits are designed to portray, starting with your Exhibit No. 1.

A Exhibit No. 1 is a base map on a scale of one inch equals 2,000 feet of the Miocene gas trend. It's showing our proposed unit and our proposed exceptional location. I'll go through the explanation of the colors for you. Our proposed unit is shown as the SW/4 of 17 outlined by the red outline. Our proposed exceptional location is indicated by the red dot inside that outline. Clayton Williams existing adjoining producing, completed as a gas well unit, is the Lipscomb 20-1 shown as the green outline. The South Weeks Bay Field limits is shown as the pink outline. The Skunk Bayou Field limits are shown as the yellow outline, and the red areas on the Clayton Williams

seismic line bracketed and colored red are the amplitude anomalies or bright spots that we've found when we shot our seismic data.

Q So this map is showing two 160-acre units right now, both of which are wildcat units, and our other exhibits will show the relationship of those two, is that correct?

A Yes, sir, they will.

Q Let's turn then to your Exhibit No. 2, Mr. Chapman.

A Exhibit No. 2 is a structure map on the top of the Amos Sand. I won't go through, the colors are the same. It's showing the relationship of the recently discovered area by Clayton Williams and, as the relationship to the Amoco-Weeks Bay Field. If you'll notice the top of the Lipscomb well in Section 20 is a subsea depth of 1768, which is at least 50 feet below the top of the sand in the Amoco-South Weeks Bay Field. We believe this area is a separate reservoir located on the same huge structure but in a different stratigraphic position.

Q All right, sir. Go to your Exhibit No. 3.

A Exhibit 3 is the Amos Sand isopach, net gas pay isopach with contour interval of 10 feet. Amoco--I mean the Clayton Williams-Lipscomb 20-1 well had 14 feet of Amos gas pay, and we're expecting possibly up to ten feet at our proposed location. We're showing this as a separate reservoir. Based on seismic data, we don't believe we have any communication with any of the Amoco units to the northwest.

Q And that's further verified by your structural information that you've testified to. The difference is in the tops, is that correct, as was shown on the preceding exhibit?

A Yes, sir, that's correct.

Q These small dots that crisscross the areas outlined are seismic shotpoints, is that what those are?

A Yes, sir, there is four lines through the area of interest, Clayton Williams line 14, 15, 17, and 16, and they have pretty well covered the area down there.

Q And the seismic tool being one of the exploration tools used is being used frequently in South Baldwin County to pick drilling locations, is that correct?

A Yes, sir.

Q And that coupled with your structural information has led you to propose this exceptional location for the unit you're requesting?

A Yes, sir. I might add that this exceptional location is located on shotpoint, exactly shotpoint 149 on CWA 15 seismic line that runs through the exceptional location.

Q All right.

A We feel that this location is extremely critical and deviation off of this line in anyway could be detrimental.

Q Could be detrimental in that a well drilled at some other location on that unit would not have as good a chance of making a commercial well as that particular location, is that correct?

A Yes, sir, that's right.

Q All right, sir, let's go to your Exhibit No. 4.

A Exhibit 4 is a certified well plat of the well location showing the exact footage call of the proposed exceptional location. It also shows that the southwest half of this section is wetlands and we would be unable to feasibly

locate a well in that particular area.

Q Even if you had the structural and the bright spot in there you would have a topographical problem, but we're not presenting this location on the basis of topography are we?

A No, sir, we're not.

Q But we've noticed in looking at your other exhibits that your seismic lines and the other exploration tools or access that you have have been limited in that southwestern part of this proposed unit and that is because of the swamp lands or the wetlands, is that correct?

A Yes, sir, all our seismic lines in the area have had to be terminated before entering this wet area because the data was, we can't get in there to shoot the data because of the thick vegetation and the low elevation of the area.

Q All right, sir. And Clayton Williams, if this Board sees fit to grant this exceptional location, Clayton Williams is ready to proceed with the drilling of this well?

A Yes, sir, we are currently planning to drill the well within the first two weeks of June.

Q All right, sir. Mr. Chairman, I would ask that you receive into evidence Exhibits 1 through 4 to the testimony of Mr. Chapman.

CHMN. ADAMS: The exhibits that you have named are admitted.

(Whereupon, Exhibits 1 through 4 were received in evidence to the testimony of Mr. Chapman)

Q Mr. Chapman, you're familiar with waste as that term is defined by the Oil and Gas Laws of Alabama?

A Yes, sir, I am.

Q In your opinion will the granting of this petition prevent waste?

A Yes, sir, it would.

Q Would it also protect the coequal and correlative rights of the owners in this unit?

A Yes, sir.

MR. WATSON: Mr. Chairman, I tender my witness to the Board and staff for any questions you may have on his testimony or his exhibits.

DR. MANCINI: Mr. Chairman, we do have a question or two.

CHMN. ADAMS: Proceed.

EXAMINATION BY BOARD OR STAFF

MR. MINK: Mr. Chapman, I'd like to refer to Exhibit 3. Why have you interpreted pay beyond the outlined amplitude in Section 17?

MR. CHAPMAN: Based on our seismic coverage we feel like with less than 10 feet of pay we would not see a strong amplitude anomaly or what is commonly referred to as a bright spot on our seismic data. You can see on the other seismic lines and the other isopach in Section 20 where we encountered 14 feet of pay, and we believe that perhaps the entire NE/4 of 20 is underlain by productive sand. By interpretation of the data we believe that at least 10 feet of gas pay is needed to have a strong seismic anomaly or bright spot, and as a result I used a zero contour line to include areas on this seismic line that might not have up to 10 feet of pay.

MR. MINK: O.K. Do you have any data that would indicate a possible connection, let's say to the southwest of the anomaly in Section 17 and the proven anomaly in Section 20?

MR. CHAPMAN: Yes, sir, we have a seismic line, the long line, that is trending from southeast to northwest that ties



into the Amoco wells in South Weeks Bay. We see no bright spots between shotpoints 180 and 200 on that line and as a result we have mapped these as separate reservoirs.

MR. MINK: But you could possibly have some connection to the southwest of that line? South--southwest?

MR. CHAPMAN: Southwest of our proposed location?

MR. MINK: Right. It would have to be like a shoe string type feature.

MR. CHAPMAN: There's a way you could interpret it if it fingered in and out, you know, and crisscrossed the line in some area. We couldn't tell but...

MR. MINK: You don't feel there's anyway to determine if they're connected for sure right now?

MR. CHAPMAN: No, based on data that we have now we feel like they're not connected.

MR. WATSON: Let me respond in addition to that, Mr. Mink, to the fact that since these are both wildcat locations the drilling of this second well will give some additional information in addition to the seismic tool that brings us to this point at which time Clayton Williams would come back to

the Board to establish Special Field Rules and if there is a connection, that would be evident at that time. Yes, sir.

MR. MASINGILL: Mr. Chapman, I have one just small clarification question. In Section 20, your interpretation on your map there, the outside contour line is a zero contour and your inside, it also shows zero. I'm sure that should be 10, right? It may have been blocked out by the green line.

MR. CHAPMAN: I believe it's colored by the green there. It's--didn't quite pick it up.

MR. MASINGILL: Just for the record that should be 10 feet, right?

MR. CHAPMAN: Yes, sir, it's a 10-foot contour interval.

MR. MASINGILL: O.K. It may be there. I can't see it on the exhibit. Thank you, sir.

MR. CAREY: Mr. Watson, just for the record, was there anybody that should have been noticed under Rule 10 of the Board's rules of procedure for this item?

MR. WATSON: We have complied with the rule, the notice rule of the Board, and would ask that you take into account the Board's notice on this matter. We have notified all that

we are required to under that rule. We have nothing further, Mr. Chairman.

MR. LEE: Mr. Chairman, I move we grant the petition in Item 22 with the stipulation that the well be subject to pro-ration.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

DR. MANCINI: Items 28 and 30, petitions by Universal Petroleum Services.

MR. SLEDGE: Mr. Chairman, I'm Jim Sledge from Tuscaloosa. I'm here today representing Universal Petroleum Services. We are asking the Board today to create a new field, proposed Pilot Hill Field, in Franklin and Marion Counties, Alabama, in the Lewis Sand Gas Pool. We're also asking the Board in Item No. 30 to reform the unit for the G. A. Boyles 34-1 well from a 40-acre wildcat drilling unit to a 160-acre spacing unit. The Board should be aware that Universal Petroleum Services is in the process of turning over operations of this field and of

the Boyles well to its parent company, L. W. Johnson and Associates, Inc. That's in the works but has not yet been completed. We also would point out that when these items were originally filed we were unsure if the data would indicate whether 160-or 80-acre spacing was proper. Consequently, the petition to create the field was noticed so as to indicate that either 80 or 160-acre spacing would be sought and also a separate petition, which was Item No. 29, seeking to reform the Boyles unit to an 80-acre unit was filed. Of course, that petition has now been dismissed. The first witness is Dale Smith and I think these two gentlemen both need to be sworn.

MR. CAREY: State your name and address for the record.

MR. SMITH: Dale Smith, Mobile, Alabama.

MR. TUCKER: William E. Tucker, Tuscaloosa, Alabama.

(Witnesses were sworn by Mr. Carey)

MR. CAREY: Mr. Sledge, since we just have one loud-speaker there, when your witnesses give their testimony if you would encourage them to use that so the audience can hear.

MR. SLEDGE: Mr. Smith, have you previously testified before this Board?

MR. SMITH: No, I have not.

MR. SLEDGE: Is a resume of your qualifications on file with the Board?

MR. SMITH: Yes, it is.

MR. SLEDGE: Would you briefly review your educational and work experience for the Board?

MR. SMITH: I graduated from the University of Alabama in 1976 with a B.S. degree in Geology. After that I worked for approximately two years with oilfield service companies and then I worked approximately two years with the Alabama State Oil and Gas Board and I worked approximately one year with the Bureau of Economic Geology. Since January of '83, I've been with Universal Petroleum Services.

MR. SLEDGE: Dr. Adams, we'd ask that Mr. Smith be accepted as an expert petroleum geologist.

CHMN. ADAMS: The witness is recognized--he's recognized as an expert.

DALE SMITH

Appearing as a witness on behalf of Petitioner, Universal Petroleum Services, Inc., having first been duly sworn, testified

as follows:

DIRECT EXAMINATION

Questions by Mr. Sledge:

Q Mr. Smith, have you prepared exhibits describing the Pilot Hill, proposed Pilot Hill Field, and the work that L. W. Johnson or Universal Petroleum Services has been doing in the area?

A Yes, I have.

Q Would you briefly review them?

A O.K. Exhibit No. 1 is just an area map with the proposed Pilot Hill Field outlined in red, just giving the general location of it. Exhibit No. 2 is a well location plat showing the proposed 160-acre section, quarter section, in Section 34. Exhibit No. 3 is a type log for the discovery well, the Boyles 34-1 No. 3, with the perforated interval 1272 feet to 1275 shown in red. Exhibit No. 4 is a regional Tuscumbia structure map. This is on the top of the Tuscumbia. I have included this because the Tuscumbia is a very easily mappable unit in the Franklin and Marion Counties and it's quite easily picked on logs and on sample logs. There's a fault, proposed fault, that I've suggested here at the northeast corner of the proposed field area. It's apparently upthrown to the south

there. This, to my knowledge, this fault has not cut any wells but we have fairly good old sample log information in the area. We believe this fault is, orientation is exactly not known, but it appears to have about 20 to 30 feet displacement on the Lewis horizon there. The fault on the western side of the map there, west of the proposed field limits, is rather an extensive fault. It has probably 70 feet structural displacement on the Tuscumbia, and it's quite extensive in the area. The exact orientation is not fully known at this time but we believe that's a pretty good location there for the fault trace. It's upthrown there to the southeast. Exhibit No. 5 is a structure map on top of the Tuscumbia, excuse me, top of the Lewis. There's very limited data in this area, subsurface information, and for that reason the contour lines have been left open and dashed. I've included the fault there that we believe is on the northeast corner of the proposed field limits to show that's a very good geological boundary there

for the field limits. Exhibit No. 6 is a total Lewis isopach. This is the interval from the top of the Lewis to the top of the Tuscumbia. This includes the limey section, the sands and the shales. I've used this to show that there's rather a significant difference between the west of the proposed field area where the Lewis there is quite thick, 66 feet, for example, in the Bedford 4-10 and 68 feet in the Pierce-Webber No. 1 and it thins to the northeast there in the proposed Pilot Hill Field area to approximately 42 and 46 feet, 44 feet in the northeast corner there.

Q Now that's the gross Lewis Sand? Total Lewis Sand?

A Gross Lewis. Exhibit No. 5 (sic) is an isopach of the primary Lewis Sand. I've mapped this as showing that this is the main lobe of the sand body. This is where the productive interval was included. This is a gross figure here of that primary sand. Next to the Boyles 34-1 I have included three feet of net pay and an addition to the thickness here of the Boyles 27-16 I've included here approximately four feet of net pay. This is looking at approximately, this



is pay thickness of approximately 10 percent porosity or greater. Several wells that we've drilled in the area. I'll just go down my rundown here and tell you what the progress has been. We have attempted to complete the Lewis in the Thornberry 26-3 No. 1. It has not been productive and it very likely will be plugged. The Thornberry 26-6 had a very thick section of Lewis and is most likely not gonna be productive. We have no plans to test that zone. However, we tested gas in the 34-1 and it is productive. We plan to set pipe and perforate the Lewis interval also in the Boyles 27-16. Also shown on Exhibit 7 here are two proposed locations that have not been permitted at this time but will be shortly. There's a Busby 27-14 and a Boyles 6-16 in the southwest of the proposed field area. Those are just proposed locations. The Busby 33-16 was drilled earlier this year and encountered no real productive interval there in the Lewis. We've kept that well open to test a different zone. It's not believed to be productive in the Lewis though. The isopach here on Exhibit 7 shows a fairly linear sand body geometry running a

northwest-southeast direction from what we've mapped so far. We believe this is, although it's shown as kind of a circle, that's really because of the data points there. I dashed those in and closed the contours but it's very likely this orientation here runs in a northwest- southeast direction. We've planned further development in this area as offsets to the 34-1, another well in Section 34. As I mentioned earlier the proposed Busby 27-14 is going to be drilled and perhaps another well in Section 27. We are also evaluating the entire area here for the Lewis. We believe here the Boyles 6-16 proposed location to be a very likely prospect and there are several other sections in the area which were evaluated at this time. Exhibit No. 8 is a summary here of some well test information on the Boyles 34-1 No. 3. We perforated from 1272 to 1275 in the Lewis. This well was acidized and fraced and an initial test was run on it. It was indicated a productivity of about a quarter of a million cubic feet of gas per day. Exhibit No. 9 is a copy of the Form OGB-9 submitted to the Board. It's a first production test. Exhibit No. 10

is a copy of some gas analyses that were run on the gas produced from the Lewis in the Boyles 34-1.

Q Mr. Smith, have you reviewed the proposed Special Field Rules for the Pilot Hill Field?

A Yes, I have.

Q Will the establishment of those field rules promote the development of the Lewis Sand Gas Pool in the proposed field?

A Yes.

Q Could you please elaborate on this point, particularly with respect to the requirements of the Special Field Rules regarding spacing of wells?

A The Special Field Rules outline the further development, the Lewis Sand to be on 160-acre governmental quarter section units with wells located 330 feet from a unit line which would give a minimum of 660 feet between wells. This gives us a, referring back to Exhibit No. 7, we can see here that in the NE/4 there of Section 34 the unit would be the NE/4. There appears to be three feet of pay with approximately a gross thickness of between 20 and 18 feet of sand.

Q All right, so your Boyles well there appears to be at what is the thickest part of a relatively small reservoir?

A That's correct, approximately 19 feet.

Q All right, so that the 330 foot spacing requirement is a significant feature in your plans to develop the area?

A Yes, it is. Three hundred and thirty feet spacing will allow us to put these wells as close as possible to develop the small reservoir. We feel that we need this in order to put the wells fairly close and not only develop, put the sand, excuse me, place the wells where the gross sand is, but also to, as offsets to the Boyles 34-1.

Q And if you're required to move to a greater distance, in some cases 660, do you have an opinion as to the possible results?

A There are several things that could happen that could put us in a position of perhaps drilling a possible well which at a spacing we would not prefer to put a well. Also, it would, it may result in a dry hole or well not drilled. Also, the topography up there is extremely rough and we feel that we need this 330 feet from the unit line to give us some flexibility as to put these locations for the expense of

the location and the accessibility to the well site location.

Q Do the economics of this project enter into this decision or this factor?

A Extremely so. We've outlined a cost here of, an estimated cost of wells on Exhibit 11 which gives a pretty good run-down of some estimated costs for future wells. We believe that the well site location, if we can cut down on the cost that's very important here to development of the area.

Q All right, if you get into a situation where you're drilling at a greater distance from your discovery well and you were to drill a dry hole, would the economics dictate drilling another well in that section to try to squeeze in and get a producer?

A Perhaps they would not. A dry hole in a quarter section would probably mean that well would not be redrilled, or no replacement well would be redrilled.

Q Will the establishment of proposed Special Field Rules for the Pilot Hill Field protect the coequal and correlative rights of the owners in the Lewis Sand Gas Pool in that

proposed field?

A Yes.

Q In your opinion are the characteristics of the Lewis Sand Gas Pool in the proposed field such that a well located in accordance with the spacing requirements of the field rules on a unit consisting of 160 contiguous surface acres efficiently and economically drain the recoverable hydrocarbons from that unit?

A Yes, I do.

Q In your opinion will the G. A. Boyles 34-1 well drain the recoverable hydrocarbons from beneath the unit that's been proposed for that well?

A Yes.

MR. SLEDGE: The next witness will be Mr. Tucker. Mr. Tucker, have you previously testified before this Board?

MR. TUCKER: Yes, I have.

MR. SLEDGE: Dr. Adams, we would ask that Mr. Tucker's qualifications as an expert petroleum engineer be accepted.

CHMN. ADAMS: The witness is recognized as an expert.

WILLIAM E. TUCKER

Appearing as a witness on behalf of Petitioner, Universal Petroleum Services, Inc., having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Sledge:

- Q Mr. Tucker, have you reviewed the available data from the G. A. Boyles 34-1 well and the Lewis Sand completion?
- A Yes, I have.
- Q Have you prepared exhibits, engineering exhibits, relating to that well and the Lewis Sand?
- A Yes, I've prepared Exhibits 12, 13, and 14.
- Q Would you briefly review them?
- A Exhibit 12 is an economic analysis of the well obtained from the data available, and Exhibit 13 and 14 are the calculations supporting that exhibit, and it is estimated that on 160-acre spacing that has a net recoverable reserve of 31.8 million cubic feet of gas. This amount of gas reserve produced over a four-year period and we do not at this time know what length of time it would take to produce this gas. The four years is a sum of digits method of calculation, but it should produce a net reserve of, a future net income of \$91,000, which discounted at 15 percent would be \$73,000 vs. the investment of the well of \$39,000 would give a 2.3 return on investment. Exhibit 13 is a

cash flow analysis of that revenue interest reduced for operating cost and state taxes. Exhibit 14 is a calculation sheet estimating those reserves, information taken from electric logs and well tests for three feet of sand, a water saturation of 25 percent, a drainage area of 160 acres, and porosity of 9.5 percent, a shut-in well pressure of 375 pounds, calculated to give a bottom hole pressure of 400 pounds.

Q Mr. Tucker, are the characteristics of the Lewis Sand Gas Pool in the proposed Pilot Hill Field such that a well drilled on a unit consisting of 160 contiguous acres and located on the unit in compliance with the Special Field Rules will efficiently and economically drain the recoverable hydrocarbons from beneath that unit?

A That is correct. It is our estimation that 79 percent of the gas in place will be recovered.

Q Will the G. A. Boyles 34-1 No. 1 well drain the recoverable hydrocarbons from the Lewis Sand Gas Pool in the proposed 160-acre unit for that well?



A Yes.

Q Will the granting of these petitions protect the coequal and correlative rights of the owners of the Lewis Sand Gas Pool in the proposed Pilot Hill Field and prevent waste and avoid the drilling of unnecessary wells?

A Yes.

MR. SLEDGE: We have nothing further from these witnesses and would tender them to the Board and the staff for any questions.

DR. MANCINI: Mr. Chairman, we do have a few questions.

EXAMINATION BY BOARD OR STAFF

DALE SMITH

MR. HINKLE: Mr. Smith, would you refer to Exhibit 7 please? On Exhibit 7 what numbers are supposed to go with which contour lines? You don't have the lines labeled.

MR. SMITH: Oh, well the contour interval is two feet. The Busby 33-16 had 9 feet, so moving in a northeast direction there that first contour will be 10 and the next one 12, 14, 16, 18, 19 feet in the Boyles 34-1, and the center circle or contour there would be 20 feet.

MR. HINKLE: On this exhibit and several others you have several wells labeled as L. W. Johnson, Inc., as the operator, and I think the Oil and Gas Board shows Universal Petroleum Services as the operator.

MR. SMITH: That's true. In the preparation of the exhibits I anticipated a change of operatorship which has not been carried out yet. The operator of the wells drilled so far, the five wells, is Universal Petroleum Services, Inc.

MR. HINKLE: O.K. So a change of operatorship is imminent I take it?

MR. SMITH: It will be taking place. We've submitted an organization report for L. W. Johnson Associates and the other administrative details will be submitted.

MR. SLEDGE: Mr. Chairman, if need be, we would be glad to have Mr. Smith make a change, manual change, on the exhibits, on the original exhibits submitted to the Board.

MR. HINKLE: O.K. Mr. Smith, you said that for geologic and topographic reasons you felt that 330 feet from the unit line was better than 660. Have you made a study to determine how many wells in the area could not be drilled at a 660 location?

MR. SMITH: I have not made a study. The 660 foot requirement or a guideline that we have been permitting wells on so far has been a hinderance that has caused an operator to-- excessive expense in location preparation, and we would like to in the future be able to have a little more flexibility primarily to control the economic costs.

MR. SLEDGE: I might also say that it is my understanding that until we drill a few more wells we really can't evaluate the entire area, so we are to some extent anticipating problems here.

MR. HINKLE: You also said on the Busby 33-16 that it is, in your estimation, nonproductive in the Lewis, is that correct?

MR. SMITH: So far that's our evaluation, yes.

MR. HINKLE: In your Special Field Rules you call for an allowable of 100 percent of the absolute open flow. Why are you requesting that?

MR. SMITH: That was taken from another field in the Warrior Basin, a very low productive field. I think it was the Jasper Field in the Hartselle Sand. At this time we can't really

evaluate what the allowable might be or what these wells are capable of unless there's a pipeline situation where we can produce them. So we just have modeled it after the Jasper Field until additional tests can be run.

MR. HINKLE: O.K. My final question then, Mr. Smith, is that as you know all the Lewis pools in Lamar and Fayette Counties are on 320-acre units. Why do you think the Lewis in this area should be on a smaller unit?

MR. SMITH: Well, we believe that the amount of reserves are much less. The wells are very low volume relative to some of the wells being drilled in Lamar County at this time. They're just a fraction of the productivity. They are also much shallower. The bottom hole pressures are, we've recorded about 400 pounds pressure in the Lewis, there in the 34-1. That's maybe half of what some of the Lamar County Lewis wells are.

MR. HINKLE: Thank you. I have no further questions.

MR. SLEDGE: Mr. Chairman, if I might ask Mr. Smith a couple of more questions.

REDIRECT

DALE SMITH

Questions by Mr. Sledge:

Q In the test on the Boyles well, was there any significant

water production associated with this gas test?

A No, there was not.

Q Do you see any reason that producing the well, the G. A. Boyles well, at 100 percent of its absolute open flow could damage that well or the reservoir that it's producing from?

A We have no reason to believe that at this time. There is no data to believe that it could be harmed.

MR. SLEDGE: Mr. Chairman, we have nothing further from the witnesses. I might say in closing that the 300 foot, 330 foot spacing requirement in the Special Field Rules is fairly critical to our plans to develop the area. We think we're dealing with small reservoirs. We might find several small reservoirs throughout the area and we feel like we need the flexibility to drill on that 330 foot spacing in order to maximize the recovery from the reservoirs and reduce our risks, and that's all we have. I'm sorry, I thought you were through.

EXAMINATION BY BOARD OR STAFF

DALE SMITH

MR. MASINGILL: Mr. Smith, I have a couple of more questions

kind of in follow up to Mr. Hinkle's question related to the allowables proposed in the field of 100 percent absolute open flow. At this time it's my understanding that we only have one well that has tested three hours basically...

MR. SMITH: That's correct.

MR. MASINGILL: ...around 247 MCF, is that correct?

MR. SMITH: That's correct.

MR. MASINGILL: I think the staff kind of feels like it might just be better to hold up a little bit on the allowables until additional wells and additional tests are run in the area. Would this in anyway impact Universal Petroleum just by operating right now on temporary allowables until additional data and additional tests are run and then considering permanent allowables at the time when we really have additional engineering data available?

MR. SMITH: We don't have any problem with setting up temporary test allowables and perhaps at some later date petition the Board to set something else up on permanent.

MR. MASINGILL: All right, sir, I appreciate that. One

additional question regarding your 330-foot exception that Mr. Sledge just alluded to. You are aware that, you know, in particular cases where it is necessary to drill closer than say 660, which is normally required on a 160-acre unit, that an operator would still have the option of petitioning the Board for an exceptional location?

MR. SMITH: I'm aware of that. I believe what we'd do would we'd probably be in here every time for every well we permit. I just don't, I don't believe that that would serve any purpose. Like I say, we're having to look at the economics of a situation like this. We have very low productivity, a shallow reservoir, we need to cut the costs down as much as possible to make an exploration venture like this successful, so that's the primary reason we're looking at 330 feet from the unit line.

MR. MASINGILL: At this time with only one well having tested three hours, do you feel like you really have enough data to indicate whether or not wells say located at 330 feet from the unit line would create drainage problems to offset units?

MR. SMITH: No, we have no production at all so we can't really say....

MR. SLEDGE: But also I might point out that we're in an isolated area and in order for us to attract a market where we can give you that kind of production data we're gonna have to drill a good many wells, and that's what our concern is, that unless we can drill and show enough productivity and enough deliverability from this area to attract a market, we'll never be able to give you that kind of data.

MR. MASINGILL: Right, but you would still have the option of petitioning the Board for an exceptional location.

MR. SLEDGE: Well, I think there's another factor that enters into it, and I believe Mr. Smith can correct me if I'm wrong, but we have a relatively inexpensive drilling rig committed to us from time to time and the timing of using that rig and getting these holes drilled can be critical. Moving the rig in and out of the area is expensive. We'd like to have, to be able to go into the thing knowing that if we drill here and if we make a well we can offset it or if we drill a dry hole here we can go over somewhere else without having to wait the six to eight weeks that it sometimes takes to come before the



Board. Given the necessity to advertise the thing and everything else.

DR. MANCINI: Mr. Smith, it seems like we're faced with a very exciting event up here in North Alabama and we are looking on and hope that this really turns into something phenomenal, but at this present time, of course, as an exploration geologist I would expect you to be very optimistic, and I think the situation that you've put before us is extremely optimistic based on the data that we have at hand, the limited geologic and engineering data for the number of sections that you are asking for the field and a number of these other variations which are unusual, and I think we kind of look at it from the standpoint that when you're going to make some exceptions to what is normally standard operating procedures that we need pretty good data, engineering, geologic, or whatever, to substantiate that or we tend to like to go with what's proven to be pretty valid. Along those lines, let me ask you a few more questions. I think you mentioned about the well in 33 that in fact it was nonproductive in the Lewis, is that correct?

MR. SMITH: That's correct.

DR. MANCINI: What about the acreage in the northern part of 33? Do you have any feel on that?

MR. SMITH: Yes, we do. We're looking at that as a well in the North Half of 33. Our plans now or would be to drill the Busby 27-14 and perhaps another well in the North Half of 34 before we moved over to 33.

DR. MANCINI: So your immediate plans are concentrated around Sections 27 and 34, is that correct?

MR. SMITH: Well, in a kind of a two-part situation here. We're also gonna drill the well, the 6-16 down here in the southwest of the proposed field area.

DR. MANCINI: Of what section is that?

MR. SMITH: That's Section 6, Township 14 West, Range-- Township 9 South, Range 14 West, Marion County. That's the Boyles 6-16. It's unpermitted at this time.

DR. MANCINI: But we don't have very much data down there at this particular point in time?

MR. SMITH: The only data we have is the two plugged and abandoned wells in Section 12 there.

DR. MANCINI: And we have the one well that you drilled and tested and we have some information on that, but other than

that there's very limited data?

MR. SMITH: That's correct.

DR. MANCINI: I have no further questions.

CHMN. ADAMS: We'll take a short recess.

(The Board was recessed approximately 10 minutes)

CHMN. ADAMS: Let the record reflect that the Board is again in session.

MR. SLEDGE: Mr. Chairman, if I could make one more statement. In light of the questions from the staff and the concerns relating to the somewhat special aspects of the request by the petitioner here, we do want the Board to be aware that at this stage we would like to see a field created even if it means granting the petition on the basis of a 660 spacing and holding allowables until a later date. If the Board has concerns about the size of the field, of course we'd be willing to listen to any suggestions you might have. We would like to see the unit size pattern set up so that we can have some somewhat certainty in establishing or following our drilling and development plan.

DR. MANCINI: Mr. Chairman, the staff feels that the data

and testimony presented today are such that only Sections 26, 27, 28, 33, 34, and 35, Township 8 South, Range 14 West, should be included in the Pilot Hill Field. Sufficient geologic and engineering information is not available at this time to warrant the inclusion of any other sections. When sufficient information is available on these sections then that would be the appropriate time for their addition to a field. Therefore, the staff recommends that Item 28 be granted with the stipulation that the Pilot Hill Field include only Sections 26, 27, 28, 33, 34, and 35, Township 8 South, Range 14 West. In addition the staff recommends that the following stipulation be included in the granting of this petition. That Rule 8, paragraph 3, of the Special Field Rules should read as follows: "Upon application by the operator and completion of each new gas well or placing of an old well on production, the Board or the Supervisor will assign a temporary test allowable. Permanent allowable shall be established by the Board after notice and hearing." Mr. Chairman, the staff further recommends that Item 30 be approved.

MR. LEE: Mr. Chairman, I'm gonna move that that recommendation be approved by this Board. Before I do though, Jim, in

response to your statement about 660 and whether 660 or 330, the Board's going to go ahead and approve it as 330 with the understanding that it's going to take a lot to get an exceptional location. If you all start coming before the Board for an exceptional location of 330 you're gonna have a heavy burden to prove, but with that understanding, Mr. Chairman, I move that we grant these two petitions.

CHMN. ADAMS: I second the...

MR. LEE: Just a minute. Is there anything...

MR. CAREY: Mr. Chairman, I'd also like to put in the affidavit of notice and all of the exhibits testified to by Mr. Smith and Mr. Tucker.

CHMN. ADAMS: The items that you have named are admitted.

(Whereupon, the described exhibits and affidavit were received in evidence to the testimony of Mr. Smith and Mr. Tucker)

MR. LEE: Mr. Chairman, I move the approval and granting of these two petitions.

CHMN. ADAMS: I second the motion. All in favor let it be known as saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

DR. MANCINI: Item 31, petition by Michigan Oil Company.

MR. SLEDGE: Mr. Chairman, since the docket was sounded

this morning I have received word from my client that it is discussing this matter with another operator in the area and it may not be necessary to ask for this relief, therefore, we are going to ask that this matter be continued until the June meeting.

CHMN. ADAMS: Is there an objection to continuation of Item 31? Hearing none, it is continued.

DR. MANCINI: Item 32, petition by EL-Oil, Ltd.

(Exhibits were distributed)

MR. SLEDGE: Mr. Chairman, this is a petition by EL-Oil Ltd., to extend the field limits for the Foley Field in Baldwin County, Alabama. I've handed to Mr. Carey an affidavit of notice to the operator of the other wells in the field, Amoco Production Company, and ask that that be made a part of the record in this proceeding. At the outset, I would point out to the Board that the petition asks that the units for both the Foley Dairy 6-1 and the Foley Dairy 5-4 wells be included within the field. The basis for asking for this relief was the geology of the well which we believe supports the inclusion of both units.

However, the only well that has been completed and a production test run on is the Foley Dairy 6-1 unit which is in the NE/4 of Section 6. We are unsure at this time of the plans for the Foley Dairy 5-4 well due to a lot of uncertainties in this area and want the staff and the Board to know that if there are any concerns about including this unit in the field at this time this is not a critical matter as far as the petitioner is concerned. The witness in the matter is Roger Chapman who has previously been sworn.

ROGER CHAPMAN

Appearing as a witness on behalf of Petitioner, EL-Oil, Ltd., having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Sledge:

Q Mr. Chapman, I would ask that you review the exhibits that have been handed up to the Board.

A Exhibit 1 showing in the red outline are our proposed addition to the Foley Field. Shaded by the dashed tape is the current existing Foley Field limits as they are today. If you'll turn to Exhibit 2, Exhibit 2 is a

structure map on top of the Amos Sand on a base map with a scale one inch equals 2,000 feet. It's on a 10-foot contour interval. The tops of the Amos Sand are indicated by the subsea depths by each well. You can see the two units outlined in red have the lowest subsea tops of any of the wells in the field. Gas-water contact of the Foley Field is approximately subsea 1600 feet. These two wells are located on the southern edge of the field. As a result, they would be the first wells to give in to a water drive depletion reservoir. Again the two units we're asking to be included are outlined in red highlighted by the yellow. Exhibit 3 is a net sand isopach of the net gas pay in the Foley Field. It is on a one inch equals 2,000 foot base map. Its contour interval is 10 feet. You'll notice that by log interpretation I've given both the 5-4 well and the 6-1 gas pay, three feet in the 6-1 and four feet in the Foley Dairy 5-4. Due to completion of the 5-4 it may not be able to commercially produce at this time, and that was what Jim was referring to a little earlier. We're asking that these units outlined in red be considered



as additions to the present day Foley Field.

MR. SLEDGE: Mr. Chairman, I've also handed up and would ask that the Board admit into evidence Exhibit No. 4 which is a copy of State Form OGB-9 for the Foley Dairy 6-1 well, indicating production test on that well. There is no Form 9 filed on the 5-4 well as no test has been run.

CHMN. ADAMS: This document is admitted.

(Whereupon, Exhibit No. 4 was received in evidence)

MR. SLEDGE: I also ask that Exhibits 1 through 3 be admitted and the affidavit of notice.

CHMN. ADAMS: Exhibits 1 through 3 are admitted and the affidavit of notice.

(Whereupon, Exhibits 1 through 3 and the affidavit of notice were received in evidence to the testimony of Mr. Chapman)

Q Mr. Chapman, are you familiar with the characteristics of the Amos Sand Gas Pool in the Foley Field?

A Yes, sir, I am.

Q Is the area to be included within the field under this petition

underlain by a productive extension of the Amos Sand Gas Pool in Foley Field?

A Yes, sir, it is.

Q Are the drainage characteristics of the Amos Sand in the area to be included within the field the same as the remainder of the field?

A Yes, sir, they are.

Q Will the inclusion of the NE/4 of Section 6 and the NW/4 of Section 5 in the Foley Field protect the correlative and coequal rights of the owners in the Amos Sand Gas Pool in the Foley Field and in the area to be included?

A Yes, sir.

Q And will it also prevent waste and avoid the drilling of unnecessary wells?

A Yes, sir.

MR. SLEDGE: I have nothing further for this witness at this time. I tender him to the staff.

DR. MANCINI: Mr. Chairman, we do have a question.

EXAMINATION BY BOARD OR STAFF

DR. MANCINI: What again is the data that you have for those respective Sections 5 and 6? The data that you have to justify adding the two?

MR. CHAPMAN: We have log interpretation. We have well test on the well in Section 6, filed an OGB Form 9. Is that what you wanted? I can read to you the test of the daily gas volume on the well in Section 6. It was 250 MCF a day. The well was completed by another operator and taken over by EL-Oil Ltd. The reason the, one reason the Foley Dairy well 5-4 perhaps may not be able to produce commercially is the fact that it, the completion of that well was not exactly done as perhaps it should have, could have been done because of it's, the amount of pay in the well. It wasn't gravel packed as soon as perhaps it should have been, and as a result the sand came into the well bore and clogged up the perforations and it would take a reasonable amount of money to recomplete that well and there is some doubt that, a chance that the well could not produce commercially.

DR. MANCINI: What about the Section 5?

MR. SLEDGE: That's what he was talking about was Section 5.

DR. MANCINI: That's what he was talking about?

MR. CHAPMAN: The Section 6 well is completed and can produce.

MR. SLEDGE: And it's shut in awaiting a market.

DR. MANCINI: All right, thank you.

MR. LEE: Mr. Chairman, I move we grant the petition.

CHMN. ADAMS: Second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "Aye")

CHMN. ADAMS: "Ayes" have it.

DR. MANCINI: Item 35, petition by Clay Calhoun.

(Exhibits were distributed)

MR. LEE: Mr. Chairman, as kind of an aside here while we're passing this out, I just want to point out that where we heard a couple of petitions ago it showed a return of about 2.3 to 1, we were recently in a hearing where the projected return, and a lot of the folks that are sitting out there were there to hear this, I believe it ranged anywhere from 100 to 1 to so far that it was just out of sight was the only way that it could be

described, and so that's one reason we give some special consideration to these little marginal wells because 2.3 to 1 is a long ways from out of sight. That's almost out of sight.

(Laughter from audience)

MR. SLEDGE: Mr. Chairman, what Mr. Calhoun is presenting today is a rather unusual petition concerning a proposal to drill a well near Cooper's Landing in Baldwin County, Alabama. This area is within the current field limits for the Pleasant View Field, however, we believe that the data that we will present today as confirmed by the drilling of the well will indicate that this well is not in the pool that is currently being produced at Pleasant View and is in fact a separate reservoir. The experience in Baldwin County with the shallow Miocene gas sands has shown us that these reservoirs can be small and that the location of a well can be critical in determining the success or the failure of a venture, even to the extent that that location varies by a relatively few number of feet. Here the petitioner wants to drill a well away from the main area of activity at Pleasant View and his basis for doing or picking that location is partly based on geology and partly based on geophysical data,

seismic interpretation. The location that we want to drill is 130 feet from the West line of irregular Section 30, Township 8 South, Range 4 East. That's shown on the first location map that Mr. Payton has prepared. The petitioner is asking that this location be approved because we feel that this is the optimum geologic location for making a well in the objective which is the Amos Sand. We think this is a separate reservoir. We can't confirm it until we drill the well. Because this location is so near the West line of this Section 30, we are proposing to create a unit by taking 80 acres out of Section 30 and 80 acres out of an adjacent section, Section 24, which is immediately to the west of the section that we are dealing with. So we're going to make a 160-acre unit that straddles the line. This is gonna create a unit with a well that is approximately in the center of the unit and it would be a regular unit under the Special Field Rules for the Pleasant View Field. The rules require that any unit in the field be submitted to the operator for--I mean--excuse me--to the Supervisor for his approval. This was submitted to the Supervisor on an administrative basis and

the Supervisor indicated that he would rather we bring this before the Board for approval of this unit. We asked for alternative relief also in case the Board and staff have concerns with making the unit that we want. An alternative relief is to make a unit entirely out of Section 30, the southwestern part of Section 30, and approve the location 130 feet off the West line. I've submitted to the attorney for the Board an affidavit of notice. There is no party that is entitled to notice as far as I can tell under the Board rule regarding notice. However, we did notice the other operators in the Pleasant View Field, contacted them personally. They indicate no opposition to this petition. My witness is Wayne Payton, a geologist. Mr. Payton, you have previously testified before this Board and your qualifications as an expert petroleum geologist has been accepted?

MR. PAYTON: Yes.

MR. SLEDGE: Dr. Adams we would ask that he be recognized as an expert in this matter.

CHMN. ADAMS: The witness is recognized as an expert.

MR. CAREY: Mr. Sledge, we'd like to swear him in too.

MR. SLEDGE: Oh, excuse me.

(Mr. Payton was sworn by Mr. Carey)

WAYNE PAYTON

Appearing as a witness on behalf of Petitioner, Clay Calhoun,  
testified as follows:

DIRECT EXAMINATION

Questions by Mr. Sledge:

Q Mr. Payton, I believe you previously testified before this Board relating to the geology of the Pleasant View area, is that correct?

A Yes, it is.

Q And have you prepared geologic exhibits relating to this matter?

A I have.

Q Would you review them for the Board?

A Exhibit 1 is a base map showing the Pleasant View Field limits which are outlined in the heavy dashed line. The gray shaded areas represent, the light gray shading represents the present existing units within the Pleasant



View Field. The heavy dotted pattern partly in irregular Section 24 and irregular Section 30 is the proposed unit. The cross-hatched pattern inside irregular Section 30 represents the proposed alternate unit. The orange circle near the center of the proposed unit represents the proposed well location. Exhibit No. 2 is a surveyor's plat which better shows the proposed well location and the proposed unit which is outlined in red. Exhibit 2A is a surveyor's plat also with the proposed location with the alternate proposed unit outlined in yellow. Exhibit No. 3 is a structure map on top of the Amos Sand mapped on a 10-foot contour interval. Basically this shows the proposed location is approximately 20 feet updip of the Pope 38-1 which should give us approximately a 20-foot structural advantage. The Pope 38-1 being wet and possibly tight. We'd like to point out that two wells shown on the map, the Flowers 18-7 and the Moye 20-4, are still under the Board's confidential six-month period and so that information was not available for mapping. Generally the

map depicts the southwest regional dip of the Pleasant View Field. Exhibit No. 4 is an isopach of the hydrocarbon bearing interval of the Amos Sand. I have mapped a potential sand development in the southwest part of the field. The Polk 38-1 penetrated approximately 8 feet of what I consider to be the gas bearing equivalent and this information, or the sand development as I have drawn it, is supported by the seismic data that we've also presented. Basically, I have put a, have mapped this with dashed contour line due to the lack of subsurface control in this part of the field. The seismic data does, however, show that there should be a gas accumulation directly under the point shown as the proposed well location.

Q Mr. Payton, I guess at this point I might state to the Board that Exhibits 5 through 7, excuse me, Exhibit 5, is some seismic information that we originally planned to present through a geophysicist, Mr. Tom Clements, from Jackson, Mississippi. Mr. Clements has been unavoidably detained. He's out of the country. Therefore, we are submitting the

raw data which, Mr. Payton, I believe this was furnished to you by your client?

A Yes, it was.

Q And I believe that you have sort of cleaned up and made more readable the shotpoint map which is the first page of Exhibit 5?

A Right, I traced it directly from the map that came with the data which was somewhat barely legible. I have traced this exactly and just enhanced and darkened so that it could be seen better.

Q That map was made available to the staff earlier this week and if you want that original map we'd be happy to give it to you and make it a part of the record. It's in my car if you need it. We will ask that this be admitted. It does, Mr. Payton, it does, I guess the bright spot or anomaly that is indicated on page 3 of Exhibit 5 was picked by the geophysicist, not by you, is that correct?

A No, it was picked by the geophysicist and I, in preparing these exhibits, have gone in and highlighted the area and enhanced the location for the proposed well.

Q Do you have any other comments about this exhibit?

A Well, basically, I have, my experience in the Miocene in South Alabama, I'm aware that the, this is what is commonly known as a bright spot which is recognized typically to indicate a gas accumulation, and this has been a very successful tool in exploring for the Miocene gas in--I'm familiar with the Pleasant View Field in particular and it's been very successful there and it is my opinion also with the geophysicist that this is a bright spot and probably is a gas accumulation and should be drilled to test that.

Q Mr. Payton, in your opinion is the proposed location the optimum geologic location for drilling a well in the southwestern part of Section 30 and the immediately surrounding area?

A Yes, I believe that it is, in my opinion.

Q What represents the basis, or what is the basis for your making that determination?

A Well, when I testified before the Board concerning this field in January, at that time I testified that I suspected

a sand development separate and distinct from the known producing area in the field, primarily based on the information seen in the Polk well, and based on that plus the information provided by the seismic, it's my opinion that there is a separate and distinct reservoir in the area.

Q All right, in your opinion will a well drilled at the proposed location on the proposed unit, partly out of Section 30 and partly out of Section 24, efficiently and economically drain the recoverable hydrocarbons expected to be encountered in the Amos Sand beneath the proposed unit?

A Yes, I do.

Q And therefore would the granting of the petition and approval of the proposed unit protect the coequal and correlative rights of the owners of interests in the Miocene age gas sands beneath this proposed unit?

A Yes.

Q If the Board is reluctant to create the proposed unit and a 160-acre unit were approved entirely in the south-

western part of Section 30, is the drilling of a well at a location 130 feet from the West line of that proposed unit justified in your opinion from a geological standpoint?

A Yes, it is.

Q Will that well if it is successful efficiently and economically drain the recoverable hydrocarbons in that proposed alternate unit, Section 30 unit?

A Yes, based on my understanding of the geology of the area I believe that it would.

Q It would do the best job of any well drilled in that unit?

A Drilled in that unit.

Q Would moving the well to the east, farther from the west unit line, substantially increase the risk of drilling a nonproductive well?

A Based on the seismic data I think it would certainly threaten the potential of a commercial well if you did move it to the east.

MR. SLEDGE: Mr. Chairman, I guess I might sort of sum this up before we submit the witness to the staff for questions

by saying that we feel like this location represents the optimum place to drill the well. The reason that we asked for the unit that straddles the two sections is that we were reluctant to drill a well that close to the west unit line. We recognized that there exists the possibility that if you moved back to the east from our proposed unit, the unit that we're creating might, and the units that could be offset there, might not entirely mesh with the present Pleasant View units, but we're dealing with a unit down there with very irregular sections and we feel like the gas sands themselves are just simply not always going to fit within the governmental grid pattern, especially when it's so irregular, and that is the reason we're here today. I would, of course, submit Mr. Payton for any questions the staff might have.

DR. MANCINI: Mr. Chairman, we do have a question or two.

EXAMINATION BY BOARD OR STAFF

MR. MINK: Mr. Payton, I'd like to refer to Exhibit 5. You made the statement that based on the seismic data moving to the east would be less favorable?

MR. PAYTON: Yes.

MR. MINK: O.K. And you have the location, proposed location, at 130 plotted at shotpoint 123.

MR. PAYTON: I believe it...

MR. MINK: It's actually at, you've got it plotted at 122.5.

MR. PAYTON: 122.5 I believe is actually where it is.

MR. MINK: O.K. All right. But the actual location would be at 123, just to clear up the record. O.K. If you were to move to shotpoint 121, which I calculate to be approximately, would be a 330-foot exception, what, if you compare the 130-foot exception with the 330 exception on this line, what are the differences? What is the significant difference?

MR. PAYTON: Well, primarily, as I understand the seismic interpretation, this particular location would give us the apex of the pull-up on the seismic anomaly there, and that is the reason that we would like to, we feel that is the optimum point to drill the well.

MR. MINK: Because from a structural standpoint really?

MR. PAYTON: Actually, structural standpoint, I would say it was more the potential stratigraphic. I expect this



to be a stratigraphic trap, and based on my evaluation this location would take advantage of the greatest potential for gas accumulation.

MR. MINK: The anomaly that's seen at shotpoint 121 appears to actually be stronger than the anomaly at 123. I could see a slight structural advantage possibly but if you don't--at any rate it seems a little stronger.

MR. PAYTON: There is--may I--would you repeat the question exactly? Did you ask me if there was a structural advantage?

MR. MINK: Right, I'm trying to find out if it is a structural advantage that you would gain.

MR. PAYTON: Well, we definitely feel, based on what I have presented here as my structural interpretation, that we would also gain a structural advantage.

MR. MINK: Do you know how much structural advantage you would gain?

MR. PAYTON: It, based on the data that we have it would be very hard to say. There is just not really enough control down there to make any real strong definitive statement as to what I would gain on the structure.

MR. MINK: Looking at this line it looks like it would be rather slight.

MR. SLEDGE: Are you referring to the seismic data, Exhibit 5 or Exhibit...

MR. MINK: Exhibit 5 comparing shotpoint 123 and shotpoint 121.

MR. PAYTON: Right. O.K. I'm sorry, Mr. Mink. In answering your question I was looking at the structure map. I was not looking at the seismic exhibit.

MR. MINK: O.K. Well, you had made the statement that based on the seismic data it would be less favorable to move to the east so that's why I'm looking at this line.

MR. PAYTON: Right. Yes. I don't think, based on the seismic line, I don't believe we would have any great advantage to the structure. I believe that the optimum location would be where the greatest potential for the gas accumulation would be and that is, you know, as we have presented it.

MR. SLEDGE: Also, Mr. Mink, I would point out that Mr. Payton did not do the basic work to interpret the seismic and unfortunately that man can't be here but we did want to make the data which was available a part of the record.

DR. MANCINI: So the exception that you are requesting

today is essentially based on the geology, not the seismic?

MR. SLEDGE: It's based on geology but Mr. Payton did have this information furnished to him along with the statement by his, by my client and his client, that the geophysicist had picked the 130-foot location based on this seismic.

DR. MANCINI: But based on the data submitted to us and Mr. Payton's comments that it does not appear that there's any significant difference between 130 as opposed to 330 for the exceptional location, but that in effect he's basing his response on his geologic exhibits?

MR. PAYTON: My--the only thing I can testify in fact to are my exhibits, the geological exhibits. What I am testifying to as to the seismic is directly from the interpretation I was presented with. Am I being clear?

DR. MANCINI: Right, so really, my original question was that then for the basis of the exceptional location you're relying on your geologic interpretations and the seismic is supportive but, supportive of the exception but doesn't favor the 130 over the 330, is that kind of what you're saying? I'm not clear exactly what you're using the seismic for in

light of your responses to Mr. Mink's questions.

MR. PAYTON: The seismic line was used in determining the well location originally, then my exhibits were also prepared and the seismic, I took the seismic interpretation into account when I prepared my exhibits, and this is what we believe to be the optimum location based on both geology and the seismic interpretation.

DR. MANCINI: But the questions that Mr. Mink asked and that you responded to indicated that in your opinion there was not any significant difference based on the raw data of the seismic line between 330 and 130.

MR. PAYTON: No, that is not what I intended to convey.

DR. MANCINI: O.K. Then would you respond then again? Go ahead, Bob, if you want to ask him the question again.

MR. MINK: The question would be what is the advantage of the 130 over the 330?

MR. PAYTON: O.K. Are we talking about an exception...

MR. MINK: From the seismic line.

MR. PAYTON: An exceptional location to the--there would be no exceptional location to the proposed unit.

MR. MINK: Right. I'm talking about the alternate.

MR. PAYTON: The alternate unit? I really don't believe, based on the fact that I did not make the seismic interpretation myself, that I can really answer the question based on seismic data.

DR. MANCINI: So again, then you're going on the basis of your geologic exhibits and testimony for the exceptional location?

MR. PAYTON: Supported by the seismic, yes.

DR. MANCINI: All right.

MR. MASINGILL: Mr. Payton, on your Exhibit 4, isopach of the Amos Sand hydrocarbon bearing interval, really that's your interpretation of the net pay within the Amos Sand, is that correct?

MR. PAYTON: In essence that's what it would be, would be the net pay, but I don't feel that it's connected to the current net pay that we have shown in the field. I believe that's a separate reservoir.

MR. MASINGILL: Separate reservoir. All right, sir. And at this time the only geologic control you have for the, extending through the area where your proposed unit and alternate

units exist is the Polk 38-1 well where you have interpreted eight feet of net gas, is that correct?

MR. PAYTON: Yes.

MR. MASINGILL: Do you know the status of the Polk 38-1 well?

MR. PAYTON: Yes. It was dry and abandoned. It was--I believe I'd interpret it to be wet. Now this particular map I did not call it a net pay isopach because the well did not, was not productive, but that interval is correlative, in my opinion, to what the production from this field has been in yet it is separated because there is a water contact very evident in the wells that I have the information on in the northeast part of the field. Therefore, this would be below that water contact and would have to be a separate reservoir.

MR. MASINGILL: O.K. So in your Polk 38-1 well where you show eight feet you're not interpreting that as eight feet of pay? You're interpreting that as eight feet of sand, is that..

MR. PAYTON: It's eight feet of sand that is equivalent to the hydrocarbon bearing interval. Now hydrocarbon bearing interval does not mean that it would be commercial necessarily.

It would just mean that there would be some amount of gas possibly, too little to complete.

MR. MASINGILL: Yeah, but that was wet in that well?

MR. PAYTON: Yes, it was wet.

MR. MASINGILL: O.K. All right. Now you've just testified that you think this sand bar to the, extended through your proposed and alternate units as opposed to the other sand body to the northeast in the Pleasant View Field, you feel this is a separate reservoir, is that correct?

MR. PAYTON: Yes, I do.

MR. MASINGILL: O.K. Then at some future time as this well is drilled and should a discovery be made would your company be in a position, I mean do you think you would be looking at petitioning the Board to set up a separate field?

MR. SLEDGE: Yes, sir, I can respond to that.

MR. PAYTON: Yes, I do.

MR. MASINGILL: If it, o.k. if it turns out to be as you have it mapped?

MR. PAYTON: Yes.

MR. MASINGILL: If the Board were to proceed along the lines of your proposed unit, not your alternate unit, but your proposed unit, and you completed a well and your proposed well came in as a producer and let's say an offset were drilled to the east, immediately to the east, we would be left with an 80-acre strip of land basically which would be very difficult to develop between the two sand bodies. Do you have any comment as to how that could be, how we could in approving this type of unit allow for orderly development between the two bars?

MR. SLEDGE: If I could respond to that, Mr. Masingill. I don't think we have an easy answer to that question because it is a very difficult situation. In response, I would note that the operators of the two wells, four wells in Pleasant View, Dominex and EL-Oil, have notice of this and don't have any objection to this matter. I don't have a lease map for Section 19 which would be the potential 80-acre window under your statement there, however, I presume if they felt that there were productive sands under that unit and they were about to be put into a difficult development position, the owners of the interest in there would be here objecting. I think what we've got are two



separate reservoirs. The units may not completely mesh. If later we find that they do, the geology for the present Pleasant View pool is gonna have to change an awful lot. I think that this same geology has been presented several times to the Board in the past indicating that at least to the southwest the limits of the field are as Mr. Payton has defined them.

MR. MASINGILL: All right. I guess I can say our concern is basically, and I think the Board in the past has proven this from units that it has approved, has basically tried to look out for a situation where island acreage could be created, and at this time we don't see should that sequence of events occur that I just outlined, we don't see how we could get out of the island acreage situation, and I was wondering really if you had any recommendations on how that could be handled?

MR. SLEDGE: The only thing that seems to be available from my standpoint would be to permit a well to be drilled on an 80-acre unit in there if it looks that good. The additional drilling around the, offsetting the location that we are proposing indicates that to the east is a good prospect and there would be the opportunity to drill on an irregular unit.

MR. MASINGILL: Such a unit would not be in compliance with the field rules.

MR. SLEDGE: It would have to be approved specially by the Board, yeah.

MR. MASINGILL: Also, Mr. Payton, on your Exhibit 4, what is your interpretation at your 130-foot exception as to the net pay you would, or the, yeah, the net pay you would expect to obtain as it is interpreted?

MR. PAYTON: Well, that's obviously difficult to really put a number on due to the lack of subsurface information, but based on what I have seen productive in other wells in this same play, I felt it would probably be greater than 10 feet, somewhere between 12 and 20 feet I think would be a reasonable assumption.

MR. MASINGILL: Reasonable to assume. So really since you have such little information, drilling a well at a 130, I'm talking about the alternate unit now, drilling a well at a 130-foot distance from that unit line vs. a 330-foot distance, it would really be kind of difficult to say at this time. Accord-

ing to your map you would get over 10 feet of pay but whether it would be 10 or--I mean--you would get over 10 feet of pay, whether it would be 12, 14, 16, 18, or 20, it really might not vary that much between what you would get at a 130-foot exception and a a 330-foot exception?

MR. PAYTON: Well, I, the only thing I can say to that, I would anticipate if my interpretation is correct here, that we would at that location, but I can't, you know, give you a definite answer as to yes on that.

MR. MASINGILL: O.K. But you would, according to your map you would have at a 330-foot exception greater than, somewhat greater than 10 feet of pay, probably at least 12 feet of pay, is that correct?

MR. PAYTON: As I show it, it would possibly be 10 feet of pay. As I've drawn this I have anticipated that we would probably have another contour line inside of this 10 foot. You know this is, I guess you would have to call it idealized to some extent, as the data as I pointed out is rather scarce. It was my interpretation that the apex or the thickest point of this sand would run just about on an axis that would divide this bar as I have shown in half, and that would lie very close to the point of the proposed location. I anticipate moving to either

side of that as I, you know, have interpreted that we would be losing sand thickness.

MR. MASINGILL: What geological evidence do you have to indicate that the apex would be at exactly that point?

MR. PAYTON: That is simply my interpretation.

MR. MASINGILL: Your interpretation. But your interpretation does show that greater than 10 feet a 330-foot location on an alternate unit would have then at least 12 feet of pay?

MR. PAYTON: Very possibly.

DR. MANCINI: We have no further questions, Mr. Chairman.

FROM AUDIENCE: Mr. Chairman.

MR. MASINGILL: Would you come to the microphone, sir? And identify yourself please.

FROM AUDIENCE: Yes. No, my wife and I are here. My name is Charles Dyas. I'm representing myself and my wife. We are principal landowners in Section 30, and that's the old Augustine LaCoste grant. We are, and I'm very interested in knowing a little more details about this request as to how far south of the half section line in Section 24 he proposes to put this unit. I don't know if you have an ownership map

there or not but we own approximately, I'd say half a mile in Section 30 along Highway 65, which he is proposing to straddle there. I believe he's going to, proposing to put his location south of us on the opposite side of 65 but since he's talking about putting it in...

MR. SLEDGE: I've got a location map here if you want to look at it. This is the Northeast--excuse me--the Northwest Quarter of Section 30, the corner right up here and we are 3375 feet south of the northwest corner, and we are in Section 30.

MR. DYAS: How far are you in here?

MR. PAYTON: This, the highway runs right down through here.

MR. DYAS: Right, right.

MR. SLEDGE: This is Section 30. Here is our location. We are about halfway and we are in Section 30.

MR. DYAS: Well, this is all our property here lying west of the river, so we're directly north of his location there in the same section.

MR. SLEDGE: You're north of our location?

MR. DYAS: That's right. We own all this property right here.

MR. SLEDGE: You own up here in the northwest, what would have been the NW/4 if it was a regular...

MR. DYAS: Bordering 65. Bordering 65, that's correct. We have approximately 200 acres in Section 30. We will not be included in this particular unit. We're not here on this particular problem but it did come up and, of course, it's real close to us and naturally we may be affected by it. We're here on another matter because something of a similiar nature is happening to us all around and we've got 305 acres. At some further point in the meeting we would like to express our opinion on that.

MR. SLEDGE: Well, I'd like to know whether you're within either one of these units that we are proposing.

MR. DYAS: No, we're not in your unit because if you're below 660 feet from the mid-section point of 24, you would be south of us. Here's our property right here. We start right there. I presume you're going to put your well right here. We own...

MR. SLEDGE: We're including part of your--if that's your property we're including part of your land in our acreage. We're

putting the well about right here and we're including part of your land if that's what you show, but of course it's a very rough map.

MR. DYAS: Yeah.

MR. CAREY: Excuse me, Mr. Dyas, let me ask you a question. Do you object to the granting of either of the two proposed units by Clay Calhoun?

MR. DYAS: Not--I'd like just a little more clarification is all I'm asking. I was unaware that specific thing was coming up at this meeting. As far as the immediate location. I knew Mr. Calhoun was proposing to drill in Section 30 but for some reason I was under the impression that it was gonna be somewhat south of us and we would not be involved.

MR. CAREY: Do you have any questions that you would like to pose to either Mr. Sledge or Mr. Payton?

MR. DYAS: Well, the only thing is he's telling me now there's a possibility we might be involved in the unit.

MR. SLEDGE: I'd have to see a description of your property to know.

MR. DYAS: Well, here's our lease.

MR. SLEDGE: I don't think I can tell from this lease. It's a very vague description.

CHMN. ADAMS: We'll take a five-minute recess but matters like this should be clarified before the meeting.

MR. SLEDGE: It's the first notice, the first time we knew Mr. Dyas had a comment on it, Mr. Chairman.

(The Board was recessed 10 minutes)

CHMN. ADAMS: Let the record reflect that the Oil and Gas Board is again in session. Go ahead. Do you want to make a statement?

MR. DYAS: Yes. Mr. Chairman, after conferring with the gentleman, Mr. Calhoun's group, he has assured me, and after looking at their maps and so forth. Prior to this I was not aware that we were out of the unit...

MR. LEE: Just a minute, please. Could we have order, please?

MR. DYAS: It first appeared in their presentation since we do have acreage in Section 30 that we would be involved, and prior to this meeting I had no knowledge of exactly where they



were going to be and after conferring during the recess it is apparent that Mr. Calhoun is going to below the 660 feet south of our property. Now I withdraw my objection but I do feel, I have no assurance that that at such time as they bring in a successful well it will not ultimately drain our property, but then I have no objection to their--if they are 660 feet below our south line. Thank you.

MR. SLEDGE: Mr. Chairman, I believe that the exhibits that have been submitted need to be introduced along with the affidavit of notice that I submitted.

CHMN. ADAMS: The exhibits that you have introduced are admitted.

(Whereupon the exhibits were received in evidence to the testimony of Mr. Payton along with the affidavit)

DR. MANCINI: Mr. Chairman, the staff recommends that the alternate relief in the petition be approved with the stipulation that the exceptional location for the well be located at least 330 feet from the West line of the alternate unit boundary as described in the petition and that the well be subject to proration.

MR. SLEDGE: Mr. Chairman, before a motion is made, if I could state one thing. We did not advertise for a 330-foot location. We didn't indicate that that would be a possible, that that could be a possibility of the Board granting that relief. Additionally, my client has told me that he at this time unless additional data were submitted to him would not be interested in drilling a well at this location. If that's the recommendation of the staff then we would ask that this matter be continued until such time as we can bring the geophysicist here, perhaps answer some more questions from the staff, but in the alternative we'd ask you to dismiss it without prejudice and we will refile it if it's appropriate.

MR. LEE: Well, had you rather do that, Jim, or had you rather just continue it to the next meeting?

MR. SLEDGE: Continue it. It would be fine to continue it.

MR. LEE: Would you have time between now and June 30 to get some additional information and maybe get with the staff on this?

MR. SLEDGE: The man, the geophysicist, was just, couldn't get here today. He could have been here tomorrow but he just

couldn't get here today, so we could have him here at that meeting.

MR. LEE: Right. But do you think that what he would have might add something to what's been presented?

MR. SLEDGE: We would hope it would, but in any event we were not interested in the 330-foot relief, so it would not be-- I wouldn't want you to enter an order approving a well location there and setting up a unit that we don't intend to drill.

MR. LEE: Mr. Chairman, I move we continue this item.

CHMN. ADAMS: I second that motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

DR. MANCINI: Item 39, petition by the University of Alabama.

MR. BENNETT: May it please the Board, I have representing the University of Alabama Dan Thompson who has not been previously qualified as an expert by the Board. I have submitted an affidavit of his qualifications to Mr. Carey, and I am prepared to have Mr. Thompson testify to...

CHMN. ADAMS: Would you state your name again? I...

MR. BENNETT: I'm Leon Bennett with the University of Alabama, sir.

CHMN. ADAMS: Are you a lawyer or...

MR. BENNETT: Yes, sir, I am.

MR. LEE: Leon, if you would, turn that microphone around please so...

MR. BENNETT: Is it this one?

MR. LEE: Yes.

MR. BENNETT: I have Mr. Thompson from the University of Alabama and I have submitted his resume and educational background to Mr. Carey and it's in affidavit form. I'm prepared for Mr. Thompson to testify to his education and experience background and be qualified as an expert before the Board.

CHMN. ADAMS: The witness is recognized as an expert.

MR. BENNETT: All right, sir. Would you stand up and be...

MR. CAREY: Mr. Bennett, at this time let me get him sworn in.

(Witness was sworn by Mr. Carey)

MR. BENNETT: The petition currently before the Board is to make permanent the extraordinary location of a coalbed methane well on the University Campus, and Mr. Thompson, would you describe for the Board the facts and circumstances that led up to the location of the well and its extraordinary position?

DAN THOMPSON

Appearing as a witness on behalf of Petitioner, The University of Alabama, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Bennett:

A Yes. Mr. Chairman, this location was necessitated by a combination of factors involving the geology as we perceived it from the data which was available and from institutional constraints of the University. In 1981 a core hole was drilled on the East Campus which indicated that it was feasible to drill a production coalbed methane well in that area. On the completion of that coalbed methane well, which is listed as East Campus 24-2, it was apparent that a fault was present in between the core hole and well 24-2. This fault, based on the geophysical logs

which were taken in both holes has a vertical displacement of approximately 100 feet on the Mary Lee-Blue Creek seams. It was our view in looking at field planning in the area that any additional wells immediately to follow well 24-2 should be on the same side of this fault and should be in a southwesterly direction, generally, from well 24-2. This southwesterly direction was necessitated by the direction of the natural fractures in the coal which has been mapped in the area by the U. S. Bureau of Mines with support from the State Geological Survey. Those natural fractures insofar as it is known generally would lie between north 50 degrees and north 70 degrees for the dominant fracture directions. North 70 degrees east. With that in mind, the 40 which we propose to put the well in, which is the SE 1/4 of the NW 1/4 of Section 24, Township 21 South, Range 10 West, was the most logical way to move. In looking at the distance between well 24-2 and well 24-6, we had a number of considerations as far as the spacing in between those wells, not the least of which was the concerns of the funding agency who was providing the majority

of the funds for the project, that we be far enough away from the fault to try to avoid some of the fault related problems which were encountered in 24-2, primarily excessive water production in the well which hindered gas production. So with that in mind, we wanted to locate the well in the SE 1/4 of the NW 1/4 of Section 24. The normal setbacks in that area, the 330-foot setbacks, are almost entirely dedicated to existing streets and to proposed building of the University, and to extensions of existing streets. There is an Exhibit A. Exhibit A is a plat to the East Campus area showing the exceptional location. It shows the relationship of the exceptional well to the previously existing well, 24-2, to the existing streets of the University and to the proposed building plans of the University. As you can see, a new Continuing Education complex on the east side of Second Avenue and a Fine Arts Center on the west side of Second Avenue virtually wipe out most of the setback area. It would have been physically possible to locate that well without an exceptional location, but we felt that such a location would be so proximate to University Blvd. as to be potentially an unsecure and unsafe area for pedestrian

and traffic, so for those reasons we petitioned the Board to move that well to a location which was 200 feet south of the North line and 650 feet west of the East line of that drilling unit, and that is the unit which was approved on an emergency basis.

MR. CAREY: Mr. Thompson, you prepared Exhibit A?

MR. THOMPSON: Yes.

MR. CAREY: Sometime before we leave today could you sign and date the Board's official copy?

MR. THOMPSON: Sure.

Q In your opinion is the location of the well designed in such a way as to prevent waste and protect the correlative rights of the property owner?

A Yes.

MR. BENNETT: I submit the witness to the Board or to the staff for any questions.

EXAMINATION BY BOARD OR STAFF

DR. MANCINI: Mr. Thompson, could you give us an idea of what the status is now on that particular well?



MR. THOMPSON: Yes, the well was completed last Friday at a depth of 2,760 feet in the Black Creek horizon. Surface casing, or rather production string was set and we're now waiting on a rig to be used in support of the fracture job to be done on the coal seams. That rig has been contracted but it was previously committed to another job and it is hung up on that job at present and we're just waiting for it to be free.

DR. MANCINI: Thank you.

MR. LEE: Mr. Chairman, I move that the petition be granted with the stipulation that the well be subject to proration.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

MR. BENNETT: Thank you.

MR. THOMPSON: Thank you.

DR. MANCINI: Item 5, petition by Morrow Oil and Gas Company.

CHMN. ADAMS: Exhibit A has been admitted.

(Whereupon, Exhibit A was received in evidence to the testimony of Mr. Thompson)

DR. MANCINI: I'm sorry, Dr. Adams. Item 5.

MR. PEARSON: Mr. Chairman, members of the Board, my name is Greg Pearson. I'm an attorney representing Anderman/Smith. We do not oppose this item, however, we would request that the presentation, after the conclusion of their presentation, that we be allowed to make a brief statement if we might do that.

CHMN. ADAMS: All right.

MR. PEARSON: Thank you, sir.

MR. HARRISON: Mr. Chairman, I'm Steve Harrison of Tuscaloosa representing Morrow Oil & Gas Company. I have one witness that I'd like to have sworn please.

MR. CAREY: State your name and address please.

WITNESS: W. E. Morrow, Jackson, Mississippi.

(Witness was sworn by Mr. Carey)

MR. HARRISON: Mr. Morrow, you have previously testified before this Board and been accepted as an expert petroleum geologist, is that correct?

MR. MORROW: Yes.

MR. HARRISON: In this situation I would tender Mr. Morrow as President of Morrow Oil & Gas Company to testify in this

matter. He is not testifying as an expert but simply as the President of the company. This is a petition by Morrow to force pool all of the South Half of Section 9 of Township 13 South, Range 14 West, in Lamar County, Alabama, in the proposed Beaver Creek Field. Mr. Morrow has tested and completed the Babcock-Cole 10-13 No. 1 well in the West Half of Section 10 of Township 13 South, Range 14 West.

W. E. MORROW

Appearing as a witness on behalf of Petitioner, Morrow Oil & Gas Company, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Harrison:

Q Mr. Morrow, when you determined that the Babcock-Cole well would be a producer, you began to plan your first offset well for the South Half of Section 9, is that correct?

A That's correct.

Q So AFE's were prepared and mailed from your office at that time?

A Yes.

- Q And you have received agreement to participate from all parties involved in this matter except Anderman, is that correct?
- A That's correct.
- Q I understand that Anderman has made several representations that they would participate in the South Half unit if certain stipulations were met, is that correct?
- A That's correct.
- Q And I understand that the primary stipulation that we could not agree to was the drilling of a well prior to June 2, 1983, is that correct?
- A That's correct.
- Q Could you tell us why Morrow Oil & Gas Company is not able at this time to comply with such a stipulation?
- A Because the location is physcially such that we can't move to make an actual drilling location.
- Q And that is due primarily to the recent ...
- A Presence of water. I had Mr. McCaleb with B & M Construction Company go out there early this morning and look over the land and the land is rotten and there's flowing water

between higher ground and the location, and he stated at this time he would be unable to put a bulldozer on there to make the location.

Q Could you tell us approximately what it might cost to build a board road to this location and a bridge that would be required to cross the creek to get to the location?

A Fifty to sixty thousand dollars.

Q And in your opinion this would be committing economic waste, is that correct?

A That's correct.

Q All right. So at this time Morrow Oil & Gas Company owns, controls, or has agreement to participate from all owners in the South Half unit except the Anderman group who owns approximately 50 acres or 15.6 percent of the unit, is that correct?

A That's correct.

Q All right. Mr. Morrow, are you familiar with the term "waste" as defined by the statutes of the State of Alabama?

A I am.

Q And in your opinion will the granting of this petition prevent waste and prevent the drilling of unnecessary wells?

A Yes, it will.

Q And in your opinion will the granting of this petition protect the coequal and correlative rights of the majority of all owners in the Lewis Sand Gas Pool in the South Half of Section 9?

A Yes.

MR. HARRISON: Mr. Chairman, I would request that you accept into evidence the testimony of Mr. Morrow and the affidavit of notice that was previously submitted in this matter.

CHMN. ADAMS: Your request is granted.

(Whereupon, the testimony of Mr. Morrow and the affidavit of notice were received in evidence)

MR. HARRISON: O.K. We have nothing further at this time. I tender Mr. Morrow to the Board and staff for any questions you may have.

CHMN. ADAMS: Mr. Pearson, do you want to make a statement?

MR. PEARSON: Yes, if I might, please sir. The subject

of Mr. Anderman's correlative rights in this unit, of course, are a lease expiring on June 2. Mr. Morrow has already testified that he can't protect our correlative rights by drilling a well by June 2, however, we would request if he's appointed operator, we do not oppose him being appointed operator, that he do everything in his power to protect our rights in this unit, whatever that might be, to prepare a location and drill by June 2, and that's our statement.

MR. LEE: Mr. Chairman, I move that the petition be granted.

CHMN. ADAMS: Second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

MR. HARRISON: Thank you, gentlemen.

DR. MANCINI: Item 27, petition by Exxon Corporation.

MS. KING: Mr. Chairman, I have one witness to be sworn.

CHMN. ADAMS: Would you state your name for the record, please?

MS. KING: Kim King. I'm an attorney representing Exxon.

CHMN. ADAMS: From where?

MS. KING: From New Orleans.

CHMN. ADAMS: Thank you.

MR. CAREY: State your full name and address, please sir.

WITNESS: James B. Fleece with Exxon in New Orleans.

(Witness was sworn by Mr. Carey)

MS. KING: Mr. Chairman, I am Kim King, an attorney representing the petitioner in this matter. Petitioner comes before this Board to propose an amendment to Alabama Oil and Gas Board Rule C-10 which is now Rule 400-1-3-.10 to provide as follows: "If the operator so requests in writing, all geological information from wildcat wells, including formation depths, coring information, including cored intervals and coring operations, testing depths, testing methods, and testing results shall be kept confidential until six months after completion of the well. The confidential treatment resulting from an operator's written request shall extend to geological information submitted to Board personnel or obtained by Board personnel in the on-site review of well operations or records." The Board has authority to provide protection from premature disclosure of proprietary geological information and has done so to a limited extent with the adoption of the present Oil and



Gas Board Rule C-10. The present rule specifically provides for the confidential treatment of cores, logs, core analyses, and cuttings. The first sentence of the proposed amendment would extend the protection from premature disclosure to all proprietary geological data including formation depths, coring information, and testing data. Current Oil and Gas Board rules allow Board agents to review well records and well operations on a particular well, including wildcat wells. It is our understanding that should Board agents review those items presently protected, logs, cores, and cuttings, at the well site, they will not disclose this information. Yet the present confidentiality rule provides specific protection for those items, logs, cores, and cuttings, when filed only. The second sentence of the proposed amendment makes clear that the confidential treatment extends to logs, cores, and cuttings, however obtained. Although the petitioner has not encountered a specific instance of such disclosure of the protected information, the proposed amendment protects both the operator as well as the Board agent in this situation. At this point I'd like to submit an affidavit which states that notice has been given in accordance with Oil

and Gas Board rules.

MR. CAREY: Mr. Chairman, I recommend that the affidavit of notice be admitted into the record.

CHMN. ADAMS: The affidavit is admitted.

(Whereupon, the affidavit was  
received in evidence)

MS. KING: At this point petitioner calls its witness, Mr. James B. Fleece. Following Mr. Fleece's testimony, I will make a brief statement regarding the confidential treatment of proprietary geological information in other states. This information was not available at the time I prepared the brief which was forwarded to the Board members, so I thought I would briefly address it following Mr. Fleece's testimony. Mr. Fleece, please state your full name and business address for the record.

MR. FLEECE: I'm James B. Fleece of Exxon in New Orleans.

MS. KING: Mr. Fleece, have you testified before this Board on any occasion prior to this?

MR. FLEECE: No.

MS. KING: In what capacity are you employed by Exxon?

MR. FLEECE: I am the Geological Manager of the Exploration

Southeastern Division in New Orleans for Exxon. We are charged with hydrocarbon exploration onshore in the area generally east of the Mississippi River.

MS. KING: At this time I submit an affidavit of Mr. Fleece's qualifications as a geologist.

CHMN. ADAMS: The witness is recognized as an expert.

MS. KING: Mr. Fleece, would you please summarize the qualifications for the Board?

MR. FLEECE: I have worked as a petroleum geologist for 21 years, all of which I have been employed by Exxon. I have experience in both production and exploration geology in the Gulf Coast Basin, all basins in the Rocky Mountains, the North Slope of Alaska, and all additional basins in the U.S. onshore east of the Mississippi River. For the past five years I have been intimately involved with Exxon's exploration effort in Alabama.

JAMES B. FLEECE

Appearing as a witness on behalf of Petitioner, Exxon Corporation, testified as follows:

DIRECT EXAMINATION

Questions by Ms. King:

Q Mr. Fleece, are you familiar with the petition before the Board at this time and petitioner's position?

A Yes, I am.

Q Would you explain to the Board the events leading to the petitioner to submit the present petition before the Board?

A Our petition arose out of a situation involving a recently completed Exxon wildcat in Choctaw County, Alabama, the Exxon No. 1 Smith Lumber Company. The prospect that we drilled was unusual for several reasons. No. 1, it was an expensive venture and had an unusually high reserve potential; No. 2, the prospective rock section was located below a thick salt section and the well was termed a pre-salt or pre-Jurassic test; (3) this rock section in this particular geologic setting had not been penetrated by any well up to the point in time that we penetrated it, and therefore, the age and the exact lithologic make-up of the rocks below the salt were unknown; (4) the prospect carried with it the potential to open up an entirely new play or trend for Alabama and possibly the entire

Gulf Coast. For this reason, there was an inordinate amount of industry interest in our well and there still is. Because of the unusual nature of the well, we, Exxon, instituted different internal security provisions for the well than for our normal wildcats. These provisions included severely limiting the number of people within Exxon who had access to the data from the well. Only six people were privy to the information as the well was being drilled instead of the normally 25 or more individuals. Only the well site geologist, the drilling manager, our operations geologist, the district manager, the division manager, and myself had access to the data. People that normally would have been involved in the well and would have had access to the data included such individuals as our district geologist, our district geophysicist, our division geophysical manager, our project geologist and geophysicist, all drilling department personnel who number into the teens, as well as drilling engineers. All of these people were excluded from the circle of knowledge on the well. In addition, the well was not discussed at our morning drilling meeting. This

is a daily meeting in which all of our currently active wells are discussed with a group of 10 to 15 people. In addition, the well was not placed on numerous internal reports that are circulated daily, weekly, and monthly within the various groups within our company, and a procedure was instigated such that any new person brought into knowledge of the well was required to sign a record indicating what he had seen and why. Why did we instigate these procedures? It was because we wanted to protect our investment in this project which we deemed to have much further potential than for just this prospect alone and to be able to capitalize on the information gained from the well, primarily through lease acquisition. We were aware of our reporting obligations to the state concerning the well and were making the required oral reports to the State field agent with no problems until we got below salt and started coring operations. We considered the fact that, just the fact that we were coring and the intervals being cored to be very confidential information and was surprised

that the State field agent required that this be submitted orally to him. Upon discussing the situation further, I became alarmed that the State planned to publish this information in the bimonthly activity report published and sold by the State Oil and Gas Board of Alabama. Attempts made to stop this potentially detrimental situation were unsuccessful by us and upon digging deeper into Alabama's regulations concerning other types of proprietary data and find that they too appeared or could appear in the activity report, we decided to come forth with the petition before the Board today.

Q Mr. Fleece, as you understand it, how is the information for this report obtained?

A The information obtained from our Smith Lumber Company well, and I assume other wells, was obtained by the Board through oral reports from rig personnel to the field agent in charge of that area of the state. The information from our well was called in three times a week, Monday, Wednesday, and Friday, and generally cover current operations going on at the well site but at times involved proprietary in-

formation. For example, in our particular well case the mere fact that we were coring was not sufficient to satisfy the field agent and he further requested that we give him the cored intervals.

Q What other proprietary information in addition to cored intervals is published in this bimonthly activity report?

A Perforated intervals and all manner of test data, and I have also seen formation names in the report.

Q As you understand it, by what other means does the Board or Board personnel have access to proprietary information?

A There are two additional means that I am aware of other than this verbal report to State field agents. One involves the filing of the various State reports that are required from 15 to 30 days from the completion of a well. There are numerous reports and information required on these various reports include formations drilled, cored intervals, perforated intervals, and all manner of test data. In addition to this, Board personnel have access to the well site at all times to observe well records and operations and can thus gain any information in this manner.



Q What geological information is currently treated confidentially upon request?

A Upon written request, logs, cores, core analyses and cuttings are held confidential for six months.

Q O.K. Mr. Fleece, you're familiar with the proposed amendment to Rule C-10. Would you explain to the Board how the geological information protected by the proposed amendment can be used by an operator's competitor?

A Basic well data from wells, often coupled with geophysics, are used to make assessments involving the geologic potential of various exploration projects. These assessments in turn are used to make economic evaluations and the economic evaluations are used to determine how much money can be spent on a project to make a required rate of return. Assessments involved predictions concerning trap, reservoir source and seal, and any data that can be gained by a competitor to increase his knowledge of these four areas can significantly aid him. It can aid them by lowering their risks involved in making predictions about these critical assessment parameters and therefore make them

a more serious competitor, especially in the area of leasing. Looking at the specific items in the petition, formation depths can be tied to seismic data to construct structure maps which are one of the most fundamental aspects of any assessment. They outline the trap. The cored intervals can be used by a competitor to infer lithologic information or rock type, particularly in combination with other information such as seismic data, and can also be used to aid in the construction of structure maps. Coring operations can be used by other operators to simply infer information concerning a reservoir because most operators don't core without some encouragement. Testing depths can be used by operators to determine the formation that is being tested and can be used in the assessment of all four parameters, trap, reservoir source and seal, and specifically can be used in conjunction with structure maps to determine critical parameters involved in a potentially productive prospect. Testing methods and testing results give other operators the most crucial information of all, and that is simply that a discovery has or has not been

made. This is an extremely valuable bit of information and when given for free is an incredible bargain. Data from a test in addition to confirming a discovery can be used to gain significant information concerning reservoir parameters such as porosity and permeability, flow rates, reservoir pressures, composition of the hydrocarbon involved, gravity, size of the reservoir, and other factors.

Q Mr. Fleece, we've stated here that logs, cores, and cuttings are presently protected. How does the information that we are seeking to have protected compare with the items that are presently protected by the rule?

A Certainly test data from a successful wildcat is as important or more important than logs or cores and oftentimes, particularly in a frontier well, can be the most valuable information of any of the proprietary data that we're talking about today.

Q Mr. Fleece, what efforts does Exxon...

A Excuse me, Kim, let me go on on that. Formation depths and cored intervals while not as important as the logs or test data are still very valuable information as I

discussed in the answer to the previous question.

Q Mr. Fleece, what efforts does Exxon make to protect this information?

A Exxon goes to great lengths to protect its proprietary data base, which is generally geological and geophysical information. We have an elaborate internal security system to insure that our proprietary information is properly marked and secured at all times through the use of vaults, locked files, locked offices, and desks. Secondly, we have numerous meetings with our employees reminding them of the value of Exxon's proprietary data base and to keep their knowledge of same within the company. And thirdly, Exxon's interaction with other companies concerning proprietary data is handled only through a small number of company scouts and by following these measures we can effectively control the trading and release of our proprietary data.

Q Mr. Fleece, you've testified that you are the Geological Manager for the Southeastern Division of Exxon and as such do you play a major role in decisions regarding Exxon's exploration efforts in states?

- A The Geophysical Manager and myself are responsible for directing Exxon's technical efforts throughout our operational area and making judgments as to which plays our company pursues and how much money and manpower should be allocated to each.
- Q Does the fact that the Alabama State Oil and Gas Board released this proprietary geological information to the public act as an incentive or disincentive to future exploration efforts?
- A From an operator's standpoint, the release of proprietary information almost certainly acts as a disincentive to future exploration efforts, particularly frontier plays. He who takes the risks should expect to gain the potential reward, and if it has to be shared then the economics of the original risk taker might preclude his going ahead with the project.
- Q How is this more significant in today's economic climate?
- A In today's economic climate there are only limited funds that can be devoted to high risk frontier ventures and this causes operators such as Exxon to choose between alternatives and therefore the question of the release

of proprietary data can take on significant importance.

Q Does the proposed rule in anyway restrict the Board's access to the information in question?

A No.

Q Mr. Fleece, are you familiar with the definition of waste as set out in the Code of Alabama?

A Yes, I am.

Q In your opinion will the proposed amendment, if adopted, hinder the Board in carrying out its duty to prevent waste?

A No, it will not.

MR. KING: I have no more questions at this time. I tender the witness to the staff.

EXAMINATION BY BOARD OR STAFF

MR. MASINGILL: Mr. Chairman, I have one short question and I'll turn it over to Mr. Carey. Ms. King, I just have one kind of clarification question. In your petition you refer to some of the rules as C-10, A-6, C-2. Recently the Board has adopted a new Administrative Code and these rule numbers have changed. Rule C-10 is now Rule 400-1-3-.10 and Rule A-C--A-6 is now Rule 400-1-1-.06, and Rule C-2 is now Rule 400-1-3-.02.

Just to set the record straight, these are the rules that you are referring to, is that correct?

MS. KING: That's correct. We were aware of the changes but we have not yet received our copy of the rules with the new designations.

MR. MASINGILL: O.K.

MR. CAREY: Ms. King, the Board has received your memorandum in support of this proposed amendment and it has been reviewed, and at this time I would request the Chairman to put this memorandum into today's record.

CHMN. ADAMS: The memorandum that you have mentioned is admitted into the record.

(Whereupon, the described memorandum was received in evidence)

MR. CAREY: Also, Mr. Fleece, and Ms. King, the proposed rule change that you are recommending is a rather substantial departure from the Board's current rules and as is the long-standing practice of the Board when we have a proposed amendment to change a statewide rule, the Board likes to solicit input and comments from members of the public and from re-

representatives of industry and for this reason the staff recommends to the Board that this item be continued until the regular meeting in June and in so doing the Board encourages other representatives of industry or members of the public to comment on the proposed rule change, and if there are no members of the public or representatives of industry who have comments on this item today, then the staff would recommend that it be continued.

MS. KING: Mr. Carey...

MR. CAREY: Mr. Watson.

MR. WATSON: Mr. Chairman, as a member of the Executive Committee of the Mid-Continent Oil and Gas Association, I've been requested by Charles Williams, that Commission's Executive Vice President, to call to your attention a letter that has been submitted to Dr. Mancini wherein a technical committee of the Mid-Continent Oil and Gas Association has reviewed the subject confidential information from wildcat well rule. The Association wishes to inform the Oil and Gas Board that it endorses Exxon's proposed amendment to the Oil and Gas Board rules, would point out to you as is pointed out in the letter that Mid-Continent



represents major oil and gas companies as well as independents and others who are interested in oil and gas exploration and production. That's in the letter and I would certainly concur with Mr. Carey's comment that ample time be given for comments and I'm sure Mid-Continent would concur with that also.

MS. KING: Mr. Carey, before the Board rules on your suggestion as to continuance, I would like to pass out a handout for informational purposes. As I stated earlier, this handout contains copies of several rules from the states that do have confidentiality rules. We thought it would be helpful to the Board.

MR. CAREY: Are there any other members of the audience here today who wish to comment on the proposed rule change?  
(No response) Mr. Chairman, I guess a motion from the Board is in order.

CHMN. ADAMS: I was going to ask before we had the motion do you have an idea how many other states have the type of rule that you are asking for?

MS. KING: Yes, sir, I...

CHMN. ADAMS: And how many that doesn't.

MS. KING: Well, we don't have the exact numbers. This handout contains some of the rules and I have a few comments on what we have found. One thing we have determined for sure and that is determining exactly what is going on in other states is not an easy job and so, but we do have some information and we'd like to make this available to the Board at this time. The rules in this handout are from nine states. The states are Arizona, California, Colorado, Montana, Nevada, North Dakota, Utah, Washington, and Wyoming. All of these states provide that the Commission and its agents have access to all well sites. Thus none of these rules attempt to limit the particular Commission's access to the information, but merely provide that this information will be protected from premature disclosure. The confidentiality rules in Arizona, Colorado, and North Dakota extends the protection to all information and neither limits the duration of this confidential treatment nor limits its application to just information from wildcat wells. The Nevada rule provides for confidential treatment of well records for a period of six months upon an operator's request. In addition, the Nevada rule provides that an operator who plans to drill

a series of exploratory wells within a given region may apply to the Commission to have the records for all such wells kept confidential for six months after the receipt of the well information from the last well in the particular project. The Utah rule provides confidential treatment of well logs for four months after filing, but the filing requirement is 90 days after completion, and the well log in this case is defined as the written record progressively describing the strata, water, oil and gas encountered in drilling a well or such additional information usually included in the normal procedure of drilling, specifically including drill stem tests and also including interval tested, pressures, recoveries, and any logs such as electrical logs. The Montana, Washington, and Wyoming rules limit the confidential treatment to wildcat or exploratory or stratigraphic wells. Washington requires the filing of the well history or well record and a copy of the well log 30 days after completion.

CHMN. ADAMS: I didn't mean to get such a long answer.

(Laughter from audience)

MS. KING: It is lengthy. Because we couldn't get this

information into the brief or into any exhibits that could meet the filing requirement...

CHMN. ADAMS: I was thinking about an answer like about half and half.

(Laughter from audience)

MS. KING: Well, we discussed--I'll give you some numbers, all right? This book contains nine states. O.K. We know of four states that limit confidential treatment to logs and cores as does Alabama. In those four states though we did not discover any Commission that published a weekly or biweekly activity report that contained cored intervals, testing data, or perforated intervals.

CHMN. ADAMS: Thank you.

MR. LEE: Let me ask you one question in that regard too. Is your main objection giving the information to the State Oil and Gas Board or is it the fact that it is published in a paper?

MS. KING: The point, one strong point that we'd like to make is that we have no objection to giving it to the Board or the Board agents. Our only objection is its disclosure to the

public.

CHMN. ADAMS: Was there a breach of security on the well that you mentioned?

MS. KING: No, sir, we have no particular instance of any problem with any Board member or Board agent. We were not very happy with the circumstances surrounding the Gilbertown well but our position with regard to that well was that no Board agent violated any rule or breached any confidence.

CHMN. ADAMS: Thank you.

FROM AUDIENCE: Mr. Chairman, if I may. I'm Jack Wilhelm and I represent Amoco Production Company and you asked for supporting statements. Our company very carefully reviewed the Exxon proposal. We made some comments to the Mid-Continent Association concerning their original proposal. They've modified it to conform to what we had proposed or to our comments. We are in complete support of it. You asked if there was industry input. We did make that through Mid-Continent and we can say also on the record that our company does support it. We thought we would help Exxon this time and hope that some day they'll help us.

(Laughter from audience)

MR. CAREY: Mr. Chairman, if there are no objections from any members of the audience here, I would recommend that the Board waive its 10-day prefiling requirement for exhibits and admit this summary of rules from the different states into the record today so that the Board can review this information prior to the next hearing.

CHMN. ADAMS: There being no objections, your request is granted and that item is admitted.

(Whereupon the described exhibit  
was received in evidence)

MR. LEE: Mr. Chairman, I move this item be continued until the next meeting.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

DR. MANCINI: Item 8, continued petition by Dominex.

MR. WATSON: Mr. Chairman, I would ask that Item 8 be continued.

CHMN. ADAMS: Is there any objection to the continuance of Item 8? Hearing none, Item 8 is continued.

DR. MANCINI: Items 18 and 19, petition by Morrow Oil and Gas Corporation and petition by Anderman/Smith Operating Company.

MR. PEARSON: Mr. Chairman, we acknowledge the fact that no priority is going to be given to us simply because we're going to put our case on first. Mr. Harrison has graciously allowed us to do that. We're gonna put on one witness and that will be our case and Mr. Harrison has allowed us to do that first, but we acknowledge the fact that no priority is being given to us simply because we're being heard first on this item.

MR. GREG PEARSON: Do you have any objection to that? We're second on the docket, our petition?

MR. MASINGILL: In other words we'll hear Item 19--you'll present your case on Item 19 before Item 18?

MR. GREG PEARSON: Exactly, that's correct.

MR. WARD PEARSON: And we understand that they're consolidated...

MR. MASINGILL: And they are consolidated, right.

MR. WARD PEARSON: ...for hearing purposes.

CHMN. ADAMS: We have no objection. Counselor, will you

state your name for the record and state who you are representing?

MR. PEARSON: Yes, sir. My name is Charles E. Pearson. I am representing Anderman/Smith Operating Company in this petition. John, we're gonna need two people sworn please.

MR. CAREY: Would you state your name and address, please sir.

FIRST WITNESS: Walter Plant, Denver, Colorado.

SECOND WITNESS: Ronald Hornig, Denver, Colorado.

(Witnesses were sworn by Mr. Carey)

MR. PEARSON: Mr. Chairman, this is a petition brought by Anderman/Smith Operating Company to force pool all tracts and interests in the North Half of Section 9, Township 13 South, Range 14 West, Lamar County. I have prefilled with the Board an affidavit that we have given notice properly according to the Administrative Code of the Board and this was done in view of an emergency petition that was filed earlier and which has been continued to this regular session of the Board. For purposes of getting it into the record I testify myself at this time that all notices have been properly given. Mr. Plant, would you state



your full name for the record please?

MR. PLANT: Walter Plant, Denver, Colorado.

MR. PEARSON: Mr. Plant, you've previously testified before this Board as an expert witness, have you not?

MR. PLANT: I have.

MR. PEARSON: Mr. Chairman, we would tender Mr. Plant as an expert witness in this matter.

CHMN. ADAMS: The witness is recognized as an expert.

WALTER PLANT

Appearing as a witness on behalf of Petitioner, Anderman/Smith Operating Company, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Pearson:

Q Mr. Plant, are you familiar with the allegations in the petition of Anderman/Smith Operating Company that is presently before the Board?

A Yes, I am.

Q And what is the nature of this petition?

A The nature of the petition is to force pool those interests

in the North Half of Section 9, 13 South, 14 West, so that we may drill a Tuscumbia test in that unit.

Q And approximately how much of the interest is outstanding at this time?

A About, almost 56 percent.

Q And who is, who owns or controls this 56 percent to your knowledge?

A The majority by Bill Morrow as I understand it.

Q Or Morrow Oil and Gas Company, is that correct?

A Yes, that's correct.

Q Mr. Plant, have you made an offer to Mr. Morrow equal to or better than offers made to other interests in the proposed unit that have agreed to go with Anderman Operating Company in drilling a well on the North Half?

A Yes, sir, we have.

Q And Mr. Morrow has declined to participate at this point in time, is that correct?

A Yes, through his agents he has, yes.

Q Are you familiar with the term "waste" as defined by

the rules and regulations of this Oil and Gas Board?

A Yes, sir, I am.

Q And in your opinion will a well drilled on the North Half of Section 9 prevent waste and protect the coequal and correlative rights of owners in the unit?

A Yes, it will.

Q Do you feel that Anderman/Smith Operating Company is a competent operator?

A I absolutely do.

Q Now, Mr. Plant, there has been some assertions made as to an expiring lease in the North Half of Section 9. Do you know the expiration date of this lease?

A Yes, sir, the date is June 2, 1983.

Q If the Board were to designate Anderman as operator of the North Half unit, is it your opinion that Anderman could commence operations between now and June 2 on the proposed location in the North Half of Section 9?

A Yes, sir, they could.

MR. PEARSON: Mr. Chairman, I have no further questions of this witness at this time. I tender him to the Board for any questions.

CHMN. ADAMS: Any questions by the Board or the staff?

MR. CAREY: Mr. Chairman, I would recommend that the affidavit of proof of notice filed with the Board by Charles E. Pearson on May 3, 1983, be admitted into the record.

CHMN. ADAMS: The affidavit is admitted.

(Whereupon, the described affidavit was received in evidence)

MR. PEARSON: Mr. Chairman, we have also filed in conjunction with the emergency petition an affidavit by John Carter. We ask that that not be admitted to the record because the testimony has been by Mr. Plant and because Mr. Harrison, representing Mr. Morrow, would not have an opportunity to cross-examine Mr. Carter. I have one further request of the Board at this time that is a little bit unusual but in light of the circumstances we feel it is necessary. As the Board knows, a subpoena was issued to Mr. Morrow to appear to testify on our behalf. Mr. Morrow has appeared here today and we appreciate that fact. I would like, because of the circumstances and because we have asked Mr. Morrow to come and appear as a witness for our petition, I would like to ask Mr. Morrow just a few questions at

this time, and I will agree that I will not interfere or in anyway ask him questions that are going to interfere with his own case on this matter. We therefore call Mr. Morrow to testify as a witness at this time.

MR. CAREY: Mr. Morrow, would you please stand and be sworn?

(Witness was sworn by Mr. Carey)

WILLIAM E. MORROW

Called to appear as a witness by Anderman/Smith Operating Company, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Pearson:

Q Mr. Morrow, I'm gonna keep this brief. You're aware of the problems in the North Half of Section 9 regarding Mr. Anderman's expiring lease. Do you consider yourself a competent operator under these circumstances?

A I do.

Q Do you consider yourself as competent as Mr. Anderman to operate a well in the North Half of Section 9?

A Yes.

Q Let me ask you this question, Mr. Morrow. Do you even have a rig available at this time to drill a well in the North Half of Section 9?

MR. HARRISON: Mr. Chairman, I think that's irrelevant to the petition before the Board. I object to that.

CHMN. ADAMS: We'll let it in for what it's worth.

A I could have.

MR. PEARSON: Mr. Chairman, in light of the testimony of Mr. Morrow on this matter, Anderman/Smith Operating Company respectfully requests the Board to dismiss Anderman/Smith Operating Company's petition to force pool the North Half and designate Anderman/Smith as operator. In light of the testimony of Mr. Morrow, we have no opposition to him being designated operator of the North Half, and we ask that our own petition be dismissed at this time. Thank you.

CHMN. ADAMS: Your request is granted.

MR. HARRISON: Mr. Chairman, is the Board gonna make a ruling now on that motion for dismissal?

CHMN. ADAMS: We already did.

MR. LEE: It's dismissed.

MR. HARRISON: O.K.

MR. PEARSON: Mr. Chairman, for matters of the record, Anderman/Smith Operating Company agrees to participate with Mr. Morrow in the drilling of a well on the North Half unit if the well is spudded by June 2. Thank you.

MR. HARRISON: I take it we're now on Item 18. O.K. Mr. Morrow, I would remind you that you are still under oath and Mr. Morrow is testifying as President of Morrow Oil and Gas Company. This is a petition to force pool the North Half of Section 9 of Township 13 South, Range 14 West, Lamar County, Alabama, in the proposed Beaver Creek Field. We have filed an amended petition in this matter recognizing that we are force pooling a total of 91 acres or 28.4 percent of this unit. This includes the interest of Southland Royalty Company who has told us that depending on the results of a well in the South Half unit they will either join with us or they will farm out to Anderman/Smith because Anderman/Smith had first contacted Southland concerning a possible farm out.

WILLIAM E. MORROW

Appearing as a witness on behalf of Petitioner, Morrow Oil & Gas Company, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Harrison:

Q Mr. Morrow, you own or control directly approximately 56.25 percent of the North Half unit, is that correct?

A That's correct.

Q And the remainder of the interests that we are not force pooling today have agreed to join if you are appointed operator of this unit, is that correct?

A That's correct.

Q We have heard Anderman state that they would join in this well with the stipulation that the well be spudded prior to June 2. As a prudent operator, is it your opinion that in the development of this area that the first immediate offset to the existing Babcock-Cole well in Section 10 should be in the North Half or the South Half of Section 9?

A It should be in the South Half.



Q All right. O.K. So today we are asking that 28.4 percent of this unit be force pooled. Mr. Morrow, are you familiar with the term "waste" as defined by the statutes of the State of Alabama?

A I am.

Q And in your opinion will the granting of this petition protect, will it prevent waste?

A Yes.

Q And will it protect the coequal and correlative rights of a majority of the owners in the North Half of Section 9?

A Yes, it will.

MR. HARRISON: I would ask that the affidavit of notice that was previously filed in this matter be accepted by the Board at this time.

CHMN. ADAMS: The affidavit is accepted, admitted to the record.

(Whereupon, the affidavit was  
received in evidence)

MR. HARRISON: And we have nothing further in this matter.

EXAMINATION BY BOARD OR STAFF

MR. LEE: Let me ask you a question. Did I understand you to say, Mr. Morrow, that the well, you plan to drill a well in the South Half before drilling in the North Half?

MR. MORROW: That's right. And I wrote a letter to that effect to all the interest holders in the North Half unit.

MR. LEE: You intend to wait on the completion of the drilling in the South Half before starting it in the North Half?

MR. MORROW: Well, it's just good practice because if I went up there and drilled a dry hole, I'd still have to drill the South Half to prove it.

MR. LEE: Mr. Chairman, I move we grant the petition in Item 18.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

MR. HARRISON: Thank you.

CHMN. ADAMS: We'll take a recess until 12:30.

(The Board was recessed 55 minutes)

CHMN. ADAMS: Let the record reflect that the Oil and Gas Board is again in session.

DR. MANCINI: Mr. Chairman, we understand there are some landowners who would like to make a statement in regard to Items 36 and 37 and they need to get back, and therefore, they requested that they could do this now.

MR. ZIGLAR: My name is Bobby Ziglar and I'm from Escambia County, and I've been asked to speak for the landowners and the royalty owners in Section 3 and 34. I understand that 36 and 37 has been petitioned to have a change, and these landowners and royalty owners would like to leave it as is.

MR. CAREY: Sir?

MR. ZIGLAR: Yes.

MR. CAREY: In regards to the two petitions by Cities Service...

MR. ZIGLAR: Yes, sir.

MR. CAREY: What action, if any, would you recommend that the Board take?

MR. ZIGLAR: Well, as it was left, there's a Section 1,

Section 3, a Section 34, and what has been asked is they are trying to divide Section 3 and 34, taking the South Half of Section 34 and the North Half of Section 3. As it is in that part of the country right now, you have each section, and this way what they're doing here is taking two sections and making one, and we feel that the landowners and the other party to each one of these sections would be getting a bad deal, or getting left out.

MR. CAREY: So in summary, you're opposed to Item 37, which would create a unit which crosses section lines?

MR. ZIGLAR: Yes, sir.

MR. CAREY: Thank you.

MR. ZIGLAR: Correct.

CHMN. ADAMS: Thank you.

FROM AUDIENCE: Can I say something?

CHMN. ADAMS: Go ahead.

MR. ZIGLAR: As you all know, for Exxon, you all...

MR. LEE: Give your name first, please sir.

MR. ZIGLAR: Clark Ziglar. I'm Clark Ziglar, representing

landowners too. Exxon could only put one well per section as a gas unit and everyone in the section got paid. As it is now if it's changed, the rule is changed, see, the people in the South Half of Section 3 would be left out. They won't get anything. And then the people in the North Half of 34 won't get anything, and so if they change it up, and which Exxon has got, had to get some special permits to put wells in, and they still on, say, like that Goldsmith well in Section 12, I can't remember the township, but they had to get a special permit for that, but they paid everybody in the whole section, so if it's changed then we'll be left out and we won't be the only ones. There will be a lot of people in those sections down there that will be left out if you combine two sections this a way, and we'd ask you all to just leave it as it is where everyone can get paid.

CHMN. ADAMS: Thank you.

MR. ZIGLAR: Thank you.

DR. MANCINI: Items 23 and 24, petitions by Dominex.

MR. WATSON: Mr. Chairman, I am ready. One of my clients is not here. I could proceed but the opposition is not here either so I'd ask that you pass over these to the next contested item.

FROM AUDIENCE: The opposition is here.

MR. WATSON: Part of the rest of the opposition is not here though.

MR. LEE: Well, we'll just pass over it.

DR. MANCINI: Item 34, petition by Clay Calhoun.

MR. SLEDGE: Mr. Chairman, I have four people that may be witnesses. I think I need to have them all sworn except Mr. Chapman who has already been sworn.

MR. CAREY: Starting over here, would you state your name and address?

FIRST WITNESS: My name is Clay Calhoun, Jr.

MR. CAREY: Where are you from?

MR. CALHOUN: I'm from New Orleans, Louisiana. I work for my father in this matter.

SECOND WITNESS: Clay Calhoun, Sr., from New Orleans.

THIRD WITNESS: Marcial Forester from Jackson, Mississippi.

(Witnesses sworn by Mr. Carey)

MR. SLEDGE: Mr. Chairman, this is a petition under Section 9-17-12 of the Code of Alabama. We're asking for extraordinary relief in this matter, asking the Board to expand the units for two existing producing wells at the West Foley Field by approximately 30 percent.

CHMN. ADAMS: Mr. Sledge, would you state your name for the record and who you represent?

MR. SLEDGE: Yes, sir. I'm James Sledge and I represent Clay Calhoun, the petitioner in this matter. Section 12 of the Code of the Board's statutory authority grants the Board the authority to establish units. It was amended last in 1979 and it's the current statute. In 1980, 1981, the West Foley Field was created under the authority of Section 12, which provides in part, a separate sentence of Section 12, to insure the protection of coequal and correlative rights, the Board may, after notice and hearing, establish units for oil and gas pools by a quantum not to exceed 30 percent greater than the aforesaid limitation, and the limitation I'm referring there to is the

limitation stated earlier on acreage size, earlier in Section 12. Provided such action is justified by sufficient technical data indicating that such acreage or land in excess of the aforesaid maximum limitations is being drained or is in imminent danger of being drained and that the owners of such excess acreage or lands, the persons owning an interest or combination of interests in such excess acreage or lands, cannot otherwise receive their just and equitable share of production from the pool being so drained. By my interpretation, that provision of Section 12 establishes two elements that a petitioner must show in order to empower the Board to expand a unit. One would be that we are the owner of acreage that is being drained by an offsetting well, and second that we have no way to protect ourselves against that drainage except by expansion of the unit. There have been petitions such as this in the past to the Board which are distinguishable from our case in one important fact. We have spent a great deal of money in the SE/4 of Section 36 to confirm the presence of the Amos Sand Gas Pool in that area, and we've got witnesses here who are going to describe exactly what was done



in the way of drilling and completion activities. We have confirmed the presence of the Amos Sand. We believe we can establish communication with the main sand body at the West Foley Field. We can establish drainage. Now we've got a well drilled, the Stewart 36-9 well, which if the completion job were finished on this well could be capable of producing from the Amos. The reason that we can't protect ourselves against drainage which is occurring from West Foley is that we have no market and having no market our gas is going to be drained before we can do anything about it. Therefore, we're forced to come here and ask for this relief. I think that it will probably be better to get the witnesses to do the talking now and Roger Chapman, the geologist, has previously been accepted by this Board as an expert and I'd ask that you recognize him as an expert petroleum geologist in this matter.

CHMN. ADAMS: We again recognize him as an expert.

FROM THE AUDIENCE: May I interrupt at this point? I would like to state for the record that I am Jack Wilhelm representing Amoco Production in opposition to this. I too have an opening statement in opposition. Is it the proper procedure

for the witnesses to put on their testimony and for me to cross-examine and then I put on my opening statement?

CHMN. ADAMS: Yes.

MR. WILHELM: All right, fine. Then I'll defer at this time.

ROGER CHAPMAN

Appearing as a witness on behalf of Petitioner, Clay Calhoun, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Sledge:

Q Mr. Chapman, have you prepared exhibits relating to the West Foley Field to present today?

A Yes, sir, I have.

Q Will you briefly review those for the Board?

A Exhibit No. 1 is a base map of the Foley and West Foley Field area in Baldwin County, Alabama. The color code, the two units outlined in green are the existing adjoining units to the north of Mr. Calhoun's well in the southeast of Section 36. My proposed amended units are outlined in red. The Foley Field limits are outlined by the orange,

and the West Foley Field limits as they are today are shown by the stripped tape on the map. This first exhibit is just a kind of orientation to show you where we are. Exhibit No. 2 is a structure map on top of the Amos Sand. Contour interval of 10 feet. The scale is one inch equals 2,000 feet. The colors are exactly the same, showing that our wells are located downdip from the majority of the producing wells, all of the producing wells in West Foley Field. The subsea tops for all these wells is indicated by their respective well locations. Exhibit No. 3 is an Amos Sand isopach of the net gas pay in the Foley and West Foley Field area. The contour interval is 10 feet. Again the scale is the same, one inch equals 2,000 feet. What this map shows is that our acreage in the southeast of 36 outlined in red is underlain by reservoir of the Amos Sand that we know to contain hydrocarbons based on the well tests from the Clay Calhoun-Stewart 36-9. I have assigned this well three feet of pay based on log evaluation.

Q All right now, this Styron 36-9 well was the first well drilled by Mr. Calhoun in the SE/4 of Section 36, is this correct?

A Yes, it is.

Q And after that well was drilled I believe you came before the Board on behalf of Mr. Calhoun to request approval of the exceptional location for the Stewart well, is that right?

A Yes, we drilled at a legal location in the southeast of 36, encountered quite a bit of Amos Sand but none of it was, it was all wet sand, none of it contained any gas. Therefore, we asked to move north trying to get updip to this previously drilled dry hole and were granted an exceptional location by this Board, which Mr. Calhoun then proceeded to drill the Stewart 36-9 and encountered three feet of Amos Sand pay.

Q All right, now you presented geology exhibits in support of that request for the exceptional location which I believe was granted at the December 10, 1982, meeting of the Board, is that right?

A Yes, that's correct.

Q Those--did the Stewart well results confirm your geology as presented to the Board, substantially confirm it?

A Right. We did indeed, if you will look at the Amos Sand structure map, Exhibit 2, we did move updip. Based on the top of the Amos we gained one foot of structure to the previously drilled Styron well. We're a foot higher in the Stewart well and we did have some reservoir quality sand in the Stewart 36-9 and were able to complete the well.

Q In reviewing the data in this area, did you compare the gas-water contact in the Stewart 36-9 well to the other wells in the field, specifically the Amoco-Styron 36-2 No. 3 well?

A Yes, I did compare both of those logs and came up with a common subsea depth of 1598 for the gas-water contact in both of those wells.

Q Now turning back to Exhibit 3, the zero contour line represents the extent of the productive Amos Sand in the SE/4 of Section 36?

A Yes, it does. That line is based on the, incorporated with the structure map and the zero contour line is

comparable to approximately the subsea depth of 1598.

Q And in your opinion is the Amos Sand in the SE/4 of Section 36 in communication with and part of the Amos Sand Gas Pool for the West Foley Field?

A Yes, it is.

Q Is the gas in the Amos Sand Gas Pool in the north part of the SE/4 of Section 36 within the zero contour line being drained by the wells producing from the Amos Sand to the north, specifically the Amoco-Styron 36-2 No. 3 and the Moon-Hines-Tigrett Styron 36-1 well?

A Yes, those are the two closest wells to us to the north and as a result of water drive reservoir depletion and our structural position in the West Foley Gas Pool, we would be one of the first wells to be drained.

Q All right, now you might elaborate just a bit on the structural position of this SE/4 of 36 to the remainder of the West Foley Field.

A If you look at Exhibit No. 2, it is a structure map on top of the Amos Sand. There again, with the gas-water

contact being approximately 1600 feet and our top being 1592, that is the lowest Amos Sand top in West Foley Field. The Moon & Hines-Thompson well, the equivalent top, is at 1591, but as you know that is an Escambia well and that's an equivalent top. The well has no Amos Sand. So we are the lowest structurally producible well in West Foley Field and as a result our well would be watered out. Based on pressure and water drive depletion, we would be the first well to succumb to production in the reservoir.

Q To your knowledge, the offsetting wells, specifically the Amoco-Styron 36-2 No. 3 and the Moon-Hines-Tigrett 36-1 well are producing at this time?

A Yes, I understand they're both producing.

Q Do you have anything further relating to these exhibits?

A Not at this time.

MR. SLEDGE: The next witness will be Marcial Forester. Mr. Forester, you have not previously appeared before this Board, is that correct?

MR. FORESTER: That's correct.

MR. SLEDGE; Have you submitted a resume of your qualifications as a petroleum engineer to the Board?

MR. FORESTER: Yes, I have.

MR. SLEDGE: Would you briefly review those qualifications?

MR. FORESTER: Yes. I was graduated from the University of Texas in 1950 with a Bachelor of Science in Petroleum Engineering. Worked in South Texas and East Texas and have been in Mississippi since 1965. Mississippi and Alabama since 1968. I'm currently President of Triad Oil and Gas Company, Jackson, Mississippi, a firm which is a consulting petroleum engineering and contract oil and gas property management firm.

MR. SLEDGE: Do you have extensive experience in completing gas wells in Mississippi and Alabama?

MR. FORESTER: Yes, in 33 years of practice I've completed and recompleted and worked on hundreds of wells.

MR. SLEDGE: We ask that the Board recognize Mr. Forester as an expert petroleum engineer.

CHMN. ADAMS: The witness is recognized as an expert.

MARCIAL FORESTER

Appearing as a witness on behalf of Petitioner, Clay Calhoun, having first been duly sworn, testified as follows:



DIRECT EXAMINATION

Questions by Mr. Sledge:

- Q Mr. Forester, were you the consulting engineer responsible for completion of the Stewart 36-9 No. 2 well?
- A Yes, I was.
- Q When was that completion?
- A Total depth was reached on December 29, 1982, of 1898 feet. Electric logs were run, sidewall cores were cut, and evaluation of this data resulted in the decision to run some casing in the well and 4½-inch casing was set 1801 feet. Perforations were effected at depths of, log depths of 1673½ to 76½. The three feet of reservoir which the log and sidewall core information indicated to be productive, a very weak gas blow was obtained, perforations were redone, and with little or no increase, and then a third set of perforations, reperforations in the same interval always, were performed and a small gas flare was obtained. Then the well was acidized with 300 gallons of acid and upon cleaning up the acid the well produced a significant amount of gas.
- Q All right, do you have an estimate of the amount of gas

that was produced?

A Yes, I estimated the gas at 4 to 5 hundred MCF per day.

Q All right, now were there any problems encountered in that completion?

A Yes, sir, in addition to the gas the well produced a significant amount of water and sand, which is common I understand. The sand production is common in the field and gravel packing is required in most instances.

Q The well had not been gravel packed at the time you were conducting those tests?

A No, the well has not been gravel packed yet.

Q All right, now, based on log evaluation and the core evaluation, do you have any opinion as to the source of this water?

A Yes, the electric log indicated this three feet of pay at the very top of the sand underlain by seven or eight feet of impermeable strata, and then a massive Amos Sand that was entirely water bearing. So it's likely that the acid job did reach down into the water column of the Amos Sand.

- Q In other words, the acid job reached through that seven foot impermeable barrier and...
- A This is a strong possibility, yes.
- Q All right, now what was done with the well after this first production was obtained?
- A The well was tested to the pit overnight and then completion operations were suspended while Mr. Calhoun discussed the situation with his partners in the well.
- Q All right. Now are you aware of the possibility of a third well being proposed in that section, or were you aware at the time of the completion of that possibility?
- A Yes, I've heard the conversation about a third well.
- Q All right, assuming that there was a potentially better prospect for a third well to be drilled to the west of this Stewart location, could you give the Board an idea of the estimated cost of drilling and completing a third well relative to the cost of finishing the completion job on the Stewart well?
- A Yes, at this time I think we had approximately \$100,000 invested in the Stewart well and considering the squeeze

job and the reperforating and the gravel packing, we probably had at least another 50 or 60 thousand dollars before we could have a successfully completed well.

Q Maybe you should elaborate a little bit on what would be necessary to, in your opinion, to produce the Stewart well.

A It will be necessary to solve the sand production problem.

Q Which would involve exactly what?

A Well the sand consolidation treatment.

Q Which is commonly referred to as a gravel pack?

A Gravel packing, yes.

Q And you also referred to a squeeze job. This would be...

A This would be an effort to reduce the water production.

Q And total cost of that would have been approximately 50 to 60 thousand dollars?

A Fifty to 60 thousand dollars, yes.

Q Versus what cost for drilling a potential third well?

A Approximately \$150,000 for a completed well to 1800 feet.

Q Is there anything else that you need to tell the Board

about the Stewart well?

A No, not that I know of.

CLAY CALHOUN, SR.

Appearing as a witness on behalf of Petitioner, Clay Calhoun, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Sledge:

Q Mr. Calhoun, you could briefly describe for the Board how you first became involved in development of this area immediately south of the West Foley Field and what you have done with respect to that development.

A Well, on or about May 10, 1982, I requested, my first contact with Amoco, we had previously gotten a farm out from Shell Oil Company, about 2,000 acres, in what they call...

MR. WILHELM: I think I'm gonna raise an objection, preliminarily to discussion of contracts. This is not relative to the hearing today and most of the discussion of contracts will be based on hearsay testimony.

CHMN. ADAMS: We'll let it in for what it's worth.

A Well, we did have a farm out from Shell Oil Company of about 2,000 acres in what we call the Cooper's Landing, what they refer to as Cooper's Landing, and at the time we thought it was, this Miocene was a series of peaks but a blanket spread of Miocene Sand, so we immediately tried to close in all the windows, and the first obvious thing was a lease from Amoco which was, the Taylor lease was one and they had some in Section 30 which was in the area that we were planning for the development of Cooper's Landing, so we requested a farm out from Amoco and received a farm out from Amoco on or around June 25. We proceeded to drill that first well and in the effort, while we were drilling the first well in Cooper's Landing Mr. Ronstadt suggested that they had better opportunities in the West Foley area and we went to the office and he showed us a few bright spots just below the West Foley Field. We never saw the seismic of West Foley but we saw the bright spots that he gave us to work with, and so we, incidentally, at that time they were most anxious to get a pipeline filled with gas. They were trying to fill a 24 million capacity pipeline, so we were encouraged to drill up in the West Foley area.

MR. SLEDGE: They offered you...

MR. WILHELM: I'm going to object again. It's a continuing objection. This is just rank hearsay testimony. If they want to know about Amoco's discussions, I think they could have taken depositions, something of that sort.

CHMN.ADAMS: Overruled.

A We have the farm outs available if you want to present them.

MR. SLEDGE: It's overruled. Mr. Calhoun, you took a farm out from Amoco and a part of your discussions relating to that farm out involved the market through Amoco's pipeline?

A Yes, they were very anxious to get the gas at that time, and the first well we drilled was the Styron well which we won't go into much because Mr. Forester has just told you about that, at least the geologist did. We had about 100 feet of sand I guess. It was a lot of sand but it was all wet, and while we were drilling this Styron well we noticed a seismic truck coming by right parallel to where we were on leases. These happened to be on leases that we had gotten from Cities Service, and we later contacted Cities Service and they were, and found out that they were

run by Clayton Williams and Clayton Williams when they found out that they were on our property they sent us a bright spot and recommended, and gave us, the geologist recommended a spot to drill while we were still drilling the Styron well that they thought was a better opportunity, not more than 300 feet to the north and a little east and..

Q All right, sir, and you then moved to get the exceptional location on the Stewart well approved?

A That was the Stewart well and we applied to the Board to get permission for the Stewart well.

Q And that's already been testified that was December 10, is that--that was approved on December 10?

A That's right. And while we were doing that we also tried to get a confirmation on an east-west seismic run and ordered it but there was considerable delay in obtaining the thing. The seismic people were tied up in a marshland over here in Louisiana and they had a rainy season and they couldn't get out, so we didn't get that seismic line until the 16th of December, and, but we were proceeding. We



had to because we applied the 90-day continuous clause of our farm-out agreements. We had to spud by the 24th of December, and which would also call for an exceptional location. So we continued with our plan. In fact it was too late. We had already contracted for the drilling rig and made all other preparations to drill the Stewart well and we went ahead with the drilling of the Stewart well but it was obvious that we were, had a better location 2,000 feet to the west.

Q All right. That was based on the east-west seismic line...

A East-west, that's right, on the east-west seismic line, so when we completed this well as you heard Marcial testify to, when we completed it we got to a point where it was a question to go forward and spend the extra money in the completion of that well where it would be better to put it into drilling higher updip. However, during that same period of time we had considerable negotiations going on, communications going on with Amoco.

Q All right, now when did those occur?

A Well, on, the most jolting one was December 17 when Amoco,

two representatives from Amoco, Mr. Ronstadt and I think Mr. Hersch, told us that they, the April 1 date was out. Before that they were operating on the basis that they would take all the gas we could until April 1, but they said the April 1 date was out and they, and just before they had that meeting with us they asked me, it was surprising to me, to estimate how much money I had spent in the area and I didn't do very much on that that day but the next day we went to lunch, had a luncheon meeting, they again asked how much we had spent to it and then told us that the April 1 date was out but for me to give them the amount of money that we had expended on the Miocene production because they were not going to be able to take anymore gas. Well, when they got back to the office they, to the best of my knowledge it was when they got back the same afternoon, they said they would make an exception and take the gas from the unit that we were working, the southwest, that 36, the SW/4 of Section 36--SE/4 of Section 36.

Q All right, so this was before you drilled the Stewart well?

A This was before, so we drilled...

Q So you went on and drilled it?

A We had to drill it to keep our 90-day clause going, and

so we went ahead and drilled the--from then on we said well, what about Cooper's Landing? That was our major project. We had 2,000 acres from Shell. We'd only drilled one well on it. We had to get back there because we had to drill more, but they said they wouldn't give--there was no way that they would...

Q O.K. Now restricting your comments here to the area that we're talking about, the SE/4 of 36, you drilled the Stewart well. Mr. Forester has already testified about the results of that well. When you shut that well in what did you do at that point regarding the third well?

A Well, immediately, we shut it in on the 6th of January and on the 7th of January I got back to New Orleans and immediately wrote a letter to all of the farm-owners and told them what the situation was and I suggested that the, told them about the new seismic line that we had and received too late, and I said, because it was impossible to shift at that time because of the special permit that would be required, and I suggested that we put that money, the money, instead of finishing the completion of that that

we drill the third well and let Amoco, at that time had agreed to--that wasn't in the letter at that time--but it was our understanding and we did write that to some of the ones that, two of them that we tried to get to participate with us, that Amoco had committed to take the gas from the section, from 30, south, from that unit, and both of the ones that we wrote to were the two leading producers down there that we wanted to participate came back and said that the, it was too near the, being drained by the wells up above and they thought that it would be uneconomical to take that venture because they didn't know how hard Amoco was going to be pulling their wells.

Q So you were preparing...

MR. LEE: Jim, if I could interrupt you all just a minute. I'm not sure what all of this has got to do with the petition.

MR. SLEDGE: I'm trying to get there. We're trying to get there as fast as we can.

CHMN. ADAMS: Let's make your point as briefly as you can.

MR. CALHOUN: O.K. Well, I'll cut it short.

MR. LEE: Yeah, we're not too interested in all that history.

We just want to...

A Well, basically what it was, all along they gave us the impression that they were going to take the gas in 36, from this unit.

Q When did they not give you that impression anymore? When did they back out on that agreement?

A That was on March 9. They had, we had lunch together again with the same two gentlemen and they reconfirmed that they were gonna take the gas from that well but there was no way that they were gonna take--we were trying to still work in Cooper's Landing--and they reconfirmed that they were going to take the gas from that unit that we were working but that was the bone. They were, incidentally they were contacting all the other people. Others had made special, given them quotas, and some of them they made special backing arrangements and each one that they were trying to satisfy.

Q All right, but on March 9 at lunch they told you, they confirmed they were going to take gas from this unit?

A Yeah, until they got back...

Q What happened then?

A Well, I went back to the office and about 45 minutes later they said they're not gonna take anymore gas from it.

Q Did they call you on the phone?

A They called on the phone. They said that they just--some internal problem or something happened internally that we don't know about but they weren't gonna take any gas from that unit, so we were left high and dry and so there they were sitting up there holding and hitting...

Q All right, when they called there on the afternoon of the 9th they told you they would not take any gas from that unit unless it was delivered by April 1, is that right?

A Well, they did say that. They said April 1 and...

Q Was April 1 a practical deadline at that time for you?

A At that point it was out of...

CHMN. ADAMS: Mr. Sledge, what point are you trying to make?

MR. SLEDGE: I'm coming to that point. We don't have a

market and we were left without, we are left without the opportunity to protect ourselves against drainage.

MR. LEE: Jim, there is one thing that confuses us a little bit. Have we got a producing well at the time that you're trying to get them to buy the gas? Do we have gas to sell?

MR. CALHOUN: We had gas to sell but we needed to do more work on it. This is a picture of the flare that we flared all night...

MR. LEE: O.K. All right, you're talking about the Stewart well?

MR. CALHOUN: ...so we know we had gas but apparently we had about, we could get about 14 feet more of sand if we moved updip, and so we wanted to move up dip instead of trying to spend the money and get what we considered to be a poor well. We could get a damn good well updip and we were working under the belief and by the word of some of the people that we thought we had that they were gonna take any gas that we could get from that unit, but that's all. That's the bone that was thrown to us, and all of a sudden that was snatched away from us, and so

we had no place to sell the gas. In the meantime, the gas from our unit was being--they weren't buying the gas but they were getting the gas, and so we thought we owed it to the land-owners and to our farmoutors to, that we, there was no other market. We tried to find, to see, every which way that we could do it, but in the meantime the gas was being depleted and still being depleted and we have no market.

Q Did you try to find a market through any other sources?

A I did. I called United Gas. I called--I just wanted to find out what the market was--I called a a friend, the head of purchasing from Southern Natural, Sam Swing, and just to see what their demand was, and we talked about a possible consortium of getting another pipeline and we did everything, but by the time we could ever get that going I think we wouldn't have anything to be talking about.

Q All right. Well, if you were to finish completing that Stewart well right now or you were to drill that third well, would you be able to protect yourself against drainage?

A If I--would you repeat the question?



Q I said if you were to finish completing the Stewart well or to drill that third proposed well, would you be able to protect yourself against drainage?

A All right, now we couldn't, wouldn't do it because it would be inadvisable for the same reason these other two major companies told me that we're drained to a point that we'd be the first ones gone. They would be pulling the water in, and we had gotten a list, which I have here, that Amoco had the right to pull the well up north at three million one hundred and eighty cubic feet per day.

Q The reason that you can't protect yourself against drainage is because you don't have a market for that gas and it's gonna be drained before it could ever be produced by your wells, is that right?

A That's for sure.

Q That's basically what we're saying. We've got a well that we could be...

A It's a question of holding and hitting.

CHMN. ADAMS: It took a long time to make that point.

(Laughter from audience)

MR. SLEDGE: Well, I guess the reason I had him go through it because I don't want the Board to have the impression that we just went down here and poked a hole in the ground. We had a basis for drilling this prospect and for trying to develop the prospect. I have got a closing statement but I think that there's probably some cross-examination and Amoco or other people have some.

MR. LEE: Is that all the witnesses you have?

MR. SLEDGE: That's all of my witnesses right now.

(Mikes rearranged)

MR. WILHELM: I talk real loud anyway so maybe I can take care of it that way. Boy that was an earful. I would like to ask some questions of Mr. Roger Chapman, specifically about his Exhibit 3 which he calls his isopach.

ROGER CHAPMAN

CROSS-EXAMINATION

Questions by Mr. Wilhelm:

Q Now, Mr. Chapman, you say this is a pretty accurate map?

A Yes, sir.

Q O.K. Now I want you to direct your attention to the West Foley Field and I want you to look at the northeast unit which is, in the middle of it is the Moon and Hines-Thompson 30-13. Do you have that spotted? Take your time and find it. Do you know where it is?

A Section 30?

Q It's 30--the Moon and Hines-Thompson 30-13. It's in the NE/4.

A Right.

Q Or the northeast corner of the West Foley Field.

A Yes, sir.

Q Now you have a line through that well and it says zero feet, is that right?

A Yes, according to this map it is.

Q According to your map that's right, isn't it?

A Right.

Q Now are you aware that the Moon and Hines-Thompson 30-13 is producing gas?

A From the Amos Sand, if it's produced from the Amos Sand

I'm not aware of it.

Q It's kind of hard to have zero feet of Amos Sand and gas and yet it be producing gas isn't it?

A Yes, sir.

Q O.K. Now let's look at your map some more. Let's look at your Amoco-Styron 36-2 unit. Now that's a unit north of the acreage that you want to appendage in, is that right?

A Yes, sir.

Q O.K. Have you got that spotted?

A Yes, sir.

Q All right, now do you see on there three wells in that unit?

A I see three Styron wells.

Q O.K. Three Styron wells. Now are you aware the No. 1 blew out?

A Yes, sir.

Q All right. Are you aware the No. 2 was a dry hole?

A I believe you skidded the rig over there and drilled the No. 2.

Q Are you aware it was a dry hole?

A Yes, sir.

Q All right, now isn't it between two lines that say 20 and 30?

A Yes, sir.

Q All right, so wouldn't that suggest that it ought to have about 25 to 28 feet of pay?

A I assume it would.

Q Then your map is wrong, isn't it, if it's a dry hole?

A Well, I've mapped this area several times and the Amoco No. 2 Styron indeed is only about 20 feet from the No. 1 Styron which blew out. It seems to be a well there with no sand in it. It can be handled one or two different ways, none of which affect our acreage position. We've established the fact that Mr. Calhoun does have Amos Sand present on his acreage. If you would prefer to isopach this a different way, you could bring a zero contour line in from the northwest through the No. 2 Styron well and take it back out closer to the Amoco-Grantham well in 25 and create a hole in your isopach if you so interpreted it to do that. However, that particular form of isopaching would have no effect on

the acreage in the southeast of Section 36, so it's purely interpretive on the isopach. I've explained this procedure to the Board in previous testimony and satisfied the questions on that matter.

Q Should you when you're--I'm not a geologist--I'll have to ask the question, but when you look at dry holes and when you look at wells that are producing wells, shouldn't you try to map so that you honor those?

A Yes, sir. One reason I have taken this point in consideration is I believe if you moved north, south--I see you've moved west and east of that well and have productive sand--and I believe if you moved north or south of the No. 2 Styron you would encounter productive Amos Sand.

Q But you don't--o.k. Let me ask just one more question and I'm gonna get off this. By the fact we drilled a dry hole--now you agree with me it was a dry hole?

A It had no sand.

Q O.K. It had no sand so it was a dry hole. What does that tell you about this field? Does it tell you anything?

A Not basically. It doesn't--it tells me that the sand is

piled very steep, especially where you can skid a rig 20 feet and encounter no sand from a well that had 24 feet of gas pay. Other than that, that tells you that nature can stack sand anyway it wants to.

Q Doesn't it tell you that it's a very stratigraphic play?

A I wouldn't call it a very stratigraphic play because you've got the basic, the same gas-water contact in all wells, which in a stratigraphic play that wouldn't hardly come into...

Q You're saying it's not a stratigraphic play?

A I said I wouldn't call it a very stratigraphic play.

Q Well, what would you call it? A little stratigraphic?

A I wouldn't, no.

Q No, it's not a stratigraphic or it is a stratigraphic?

A I think it's a combination of stratigraphic and structural, a very complex sand system we've got here.

Q You can have areas where there are no sands all over the place; areas there there are lots of sands, right?

A I wouldn't call it lots of sands. I think you could have sand in one well and not have sand in another well

which there are several fields in Alabama which is very similar.

Q Have communication in some places and not have communication in other places?

A Communication is a bad choice of words.

Q O.K. I'll move on. I'm not gonna ask too many questions here. I do have a question for Mr. Forester.

MARCIAL FORESTER

CROSS-EXAMINATION

Questions by Mr. Wilhelm:

Q Mr. Forester, you completed this, you completed both of Mr. Calhoun's wells, right?

A Well, there was no completion effort made on the Styron.

Q All right, so, o.k. you P and A'd that one?

A Right.

Q And then you completed the second one, right?

A As far as we got, yes.

Q All right, you're aware that you didn't complete it in the sense that you didn't file a completion report with the Board?



A Well, we are not completed. The completion process is interrupted pending these other negotiations.

Q All right, now I just have one more question for Mr. Calhoun. I have just one more question of Mr. Calhoun.

CLAY CALHOUN, SR.

CROSS-EXAMINATION

Questions by Mr. Wilhelm:

Q Mr. Calhoun, I don't know what type of weight is being given to your testimony, but you've made some statements concerning an April 1 deadline, isn't that right?

A I did.

Q Weren't you aware in December of the April 1 deadline?

A Was I aware of the April 1 deadline?

CHMN. ADAMS: The witness needs a microphone.

(Microphones rearranged)

A The purpose of the meeting December 1 was to say that the April 1 deadline was out. December 17 they said there's no more April 1.

Q O.K. I'm not gonna direct anymore questions toward that.

I have an opening and closing statement which I think I can combine at anytime the Board is ready. I might say, perhaps Mr. Sledge would like to put on his statement and then I'll put mine on.

MR. SLEDGE: I have some rebuttal, just a minute.

ROGER CHAPMAN

REDIRECT

Questions by Mr. Sledge:

Q Mr. Chapman, your geology is based on your own interpretations...

CHMN. ADAMS: We've got an interruption here just a minute.

MR. SLEDGE: I'm sorry.

MR. WATSON: I have some cross at the appropriate time.

MR. SLEDGE: Go ahead.

MR. WATSON: Mr. Chairman, I'm Tom Watson and I represent Moon and Hines. Moon and Hines has an interest in this area and the petition that you are considering here would alter a unit which Moon and Hines operates and that's the Thompson unit. First, before I ask Mr. Chapman and Mr. Forester any questions,

I'd like some clarification on the exhibit and on the petition. This petition proposes to outline units that are to be reformed based on the allegations contained in the petition concerning drainage and the inability of the petitioner to protect himself. As I read the area to be added to the existing units I have some problem with that on page 4, Mr. Sledge, of your petition.

MR. SLEDGE: Just a minute, I'll have to get it in this stack of things here. All right.

MR. WATSON: As I tried to follow the units as they would be reformed by your petition, beginning at the northeast corner, and we're talking about the Styron 36-2 No. 3 unit, beginning at the northeast corner and following that description does not make closure or sense.

MR. SLEDGE: No, I'm not talking about, I'm not describing in my petition the entire Styron 36-1 well. I'm describing the area to be added to the existing unit for that well.

MR. WATSON: O.K. Then maybe I'm confusing. You are beginning at the northeast corner and not the northwest corner?

MR. SLEDGE: I'm beginning at the northeast corner of the SE/4 of Section 36.

(Questions of Mr. Sledge by Mr. Watson)

Q And run along the West line a distance of 792 and then run east?

A Yes.

Q My second question on that...

A Now that's relating, that's the Styron 36-2 well. That's not the well that you're interested in.

Q O.K. What about the next one? The Styron 36-1 well. Are we also beginning in our description there at the northeast corner and describe the unit to be added as the unit would be reformed? Commencing at the northeast corner...

A No, I think you're right, Mr. Watson. There may be an error in the petition with respect to...

Q Just trying to follow the...

A I think that you're right. The area to be added to the Styron 36-2 No. 3 well would begin at the northwest corner of the SE/4 of Section 36, and the petition says east and it should say west in that instance.

Q And how was it advertised?

A It wasn't advertised at all, the description. There was

no advertisement of the description to be added because what we're asking the Board to do is to add whatever acreage they feel is productive and we have presented data, we have presented some suggested descriptions but it is a very subjective judgment and we recognize that, and therefore, we merely gave notice of the fact that we were going to ask that up to 30 percent of this acreage be included in the two units to the north.

Q Moving further down on that page 4 where we are talking about the units and the percentages increase, as I take it these existing units are 160 acres thereabout and you're proposing in your exhibits prepared by Mr. Chapman to add 12 and 36 acres respectively to the two existing units.

A Approximately, yes, sir.

Q Approximately, so in order to figure the percentages, and I assume that there was reason for stating the percentages in here that you were adding, are those percentages correct? Twenty-two and a half percent to one and seven and a half percent to another unit?

A I believe they are. If I had a calculator--I sat here and did the arithmetic.

Q Well, all I did was take the 36 acres and the 12 acres and add it to the 160 and make that fraction over the total unit.

A No, I'm not doing it over the total unit. I'm saying it would be a  $22\frac{1}{2}$  percent expansion of the existing unit, and my point there was to take into account the fact that we're not interested in the SW/4 of Section 36 or in the SW/4 of Section 31, which is to the east, and that if at some point in the future some other party came in and said we want to further expand these units, I wanted the Board to know that I was not using up all of the 30 percent thing with this petition, because geologically maybe the SW/4 of Section 36 should have similar treatment.

Q All right, sir. My reason for raising these two questions is in the protection of coequal and correlative rights there are coequal and correlative rights of the owners in the units that presently exist. In order to protect those rights and the rights vested by those units, to add additional acreage without the necessary evidence, which I plan to go into in my cross, affects those coequal and correlative

rights, and I just wanted to be sure that I understood what we were talking about doing to the existing units. I first had to understand how those units were going to be reformed from the legal description, and secondly, I wanted to quantify that percentage, and the second question has been answered to my satisfaction. Mr. Forester?

MARCIAL FORESTER

CROSS-EXAMINATION

Questions by Mr. Watson:

- Q You're testifying here as an expert petroleum engineer. I would ask you how many wells you have completed in the Miocene Sand area of Baldwin County?
- A South Alabama?
- Q Yes, sir.
- A This would be my first well.
- Q All right, sir.
- A When it's finished.
- Q Have you presented any pressure information to this Board to show that your area that you're proposing to add is connected to the two units you propose to amend?

A No, sir, a static reservoir pressure is the only pressure which would have any significance and that has not been taken.

Q And you have not presented any pressure information in your testimony?

A No.

Q And you have not, because of the reasons you've stated and I'm not gonna go back through those, but you have not filed a completion report of any kind with the Board?

A That's correct.

Q You have not filed any logs of this well, this Stewart well, with the Board in this testimony today?

A Not today, no. The logs are on file aren't they?

MR. SLEDGE: The logs are on file with the Board and they're available to anybody that's interested in this matter. They've been sent to Amoco. I think they were sent to Moon and Hines but I...

Q Do you have an opinion, based on your information from the Stewart well as to any pressure communication with the wells to the north?



A If the Stewart, the sand encountered in the Stewart well is in hydraulic communication with the sands to the north, then drainage will occur. As shown in our geologic exhibit, then drainage is occurring.

Q There's a very high duty placed on this Board, Mr. Forester, to add additional acreage to existing units. Is it not your experience to add existing acreage to units when you have, if that is possible, when you have all available information to conclusively show that you are a part of the unit that you intend to join, and based on your experience, does this presentation meet that minimum requirement?

A I would think this presentation meets the requirements necessary, yes.

Q There's no doubt in your mind as to whether, from an engineering standpoint, that this area is a part of and in communication with the wells to the north?

A It's my opinion, yes, sir.

Q But you have no technical evidence to support that?

A Other than our geologiccal exhibits and testimony.

Q No engineering testimony?

A No engineering testimony.

Q All right, sir. Now, let's talk about the test results, I understand you haven't filed the report, but you estimate, or you testified, that you had several attempts to test this well and you estimated 400 to 500 MCF of production. How did you estimate that?

A By observing a flare such as these pictures predict here, or depict I mean.

Q Are you going to make those pictures a part of the record?

A If you want them to be we can.

Q I just wondered.

A We hadn't planned to but they are available if...

Q So based on size of the flare you estimated the production of that well to be 400 to 500 MCF?

A Yes, sir.

Q Do you have any estimate as to how long that flare would burn?

A I know how long it did burn.

Q How long did it burn?

A It burned from 5 o'clock one afternoon until 6 o'clock

the next morning, 13 hours.

Q And why did it stop burning?

A We shut the well in.

Q Have you tested the well again since that time?

A No.

Q Have you computed--I'll ask either you or Mr. Chapman this question. Either one of you can answer it. Have you computed, based on your geological and engineering information, the hydrocarbons in place under the area to be added?

A No, I have. not.

Q Have you, Mr. Chapman?

MR. CHAPMAN: No, sir, I haven't planimetered the area.

MR. WATSON: One question of Mr. Calhoun.

CLAY CALHOUN, SR.

CROSS-EXAMINATION

Questions by Mr. Watson:

Q Mr. Calhoun, are you representing to this Board that you own or control all of the interest in the area you propose to add to the two existing units?

A Yes.

Q And that's by virtue of your farm-out agreements?

A That's right.

Q And your testimony to this Board is that you have complied with those farm-out agreements and have 100 percent control of the area to be added?

A That's right. And recent telephone conversations. I think the ones involved are Clayton Williams and Cities Service.

Q Any recent telephone conversations with Amerada Hess or Mississippi Chemical?

A I don't think they're in that 30 acres that we are talking about increasing.

MR. WATSON: I have nothing further. I would like to make a closing statement too at the appropriate time, Mr. Chairman.

CHMN. ADAMS: Are you ready for your closing statement, Mr. Sledge?

MR. SLEDGE: Mr. Chairman, I think we would move that-- well, Mr. Chapman, in preparing your exhibits you reviewed the data that had been previously submitted to the Board on the Foley and West Foley Fields?

REDIRECT

ROGER CHAPMAN

MR. CHAPMAN: Yes, sir , I did.

MR. SLEDGE: I'm holding here what I've marked as Exhibit 4 in this matter. It was also Exhibit 4 in Docket No. 2-18-811 through 815 entitled "Foley and West Foley Field Isopach Map, Amos Sand" prepared by Amoco Production Company. Did you review this as a part of your background work for this item?

MR. CHAPMAN: Yes, that map was done at an earlier date and some well information, additional well information has changed the structural and isopach picture, but I did review that particular map.

MR. SLEDGE: Mr. Chairman, the only reason for bringing this up is to ask that this map be made a part of the record...

MR. WILHELM: Could we look at it as well, sir?

MR. SLEDGE...to, in order to indicate to the Board that there is additional data available at this time that was not available at the time that the Board created the field in the first place, and that's, we would ask that the Board make that exhibit a part of this record.

MR. CAREY: Mr. Sledge, would you identify that exhibit precisely again?

MR. SLEDGE: Certainly.

MR. WILHELM: Could I point out for the record that that map was drawn in February of 1981, over two years ago, and there's been a good deal of drilling since that time.

MR. SLEDGE: That's exactly the reason we're offering it. To show the change of circumstances, the additional data that's available to the Board at this time that was not available at the time the field was created, and the 160-acre unit for the Styron 36-2 well was created. This Exhibit is Amoco Exhibit No. 4 in Docket No. 2-18-811 through 815. It was dated February 18, 1981, and was signed by a Mr. B. R. Broekstra.

CHMN. ADAMS: The offered document is admitted.

(Whereupon, the exhibit was  
received in evidence)

MR. WILHELM: I would also like to point out on that exhibit that we honored all the data, primarily the dry hole that I pointed out in the Styron unit.

MR. SLEDGE: We would also ask that Mr. Chapman's Exhibits 1 through 3 be admitted and the affidavit of notice be admitted.

CHMN. ADAMS: The Exhibits 1 through 3 are admitted.

(Whereupon, Exhibits 1 through  
3 were received in evidence to  
the testimony of Mr. Chapman)

MR. SLEDGE: And in response to Mr. Watson's questions to me relating to the petition, although as I earlier said, the suggested areas to be included within the field, we don't consider them to be binding on the Board if the Board feels that relief should be granted. I would verbally amend my petition on page 4, subsection A, so that the legal description reads: "Begin at the northwest corner of the SE/4 of said Section 36," and then continues as it reads there.

CHMN. ADAMS: Are you ready for your closing argument?

MR. SLEDGE: Yes, sir.

CHMN. ADAMS: Proceed.

MR. SLEDGE: Mr. Chairman, in this instance there are two elements. To prove that we are being drained by the wells to the north and to prove that we are unable to protect ourselves against drainage by any method other than reformation of these units. The only evidence that's been presented here is, geology evidence, is by Mr. Chapman, which is to the point that there is drainage by the wells to the north. We have done everything that we feel like we can do within the reasonable bounds of economics to protect ourselves against drainage. It's true

that we haven't finished completing this Stewart well, but without a market in an area that's being rapidly drained by other wells, to go back in there and spend another \$60,000 to gravel pack this well and do the, finish the completion, just for the purpose of testing the well and bringing this data to the Board seems to me to be beyond any reasonable criteria. We've drilled the well. We've established we've got productive Amos Sand beneath the unit. We've established drainage by the wells to the north, and we've established that we have no way to protect ourselves. We were willing at one time to drill that third well and connect it, but without a market we have absolutely no way to protect ourselves. We could drill six wells in that unit, all of them productive, and still not keep our gas from being drained. In some undetermined period of time. It may be four months, it may be a year, and our gas would be gone and we'd have those wells setting there and they would be completely valueless. Our gas is being produced. The gas of the royalty owners within that area is being produced, and we are entitled to relief under Section 12. That's our presentation.

CHMN. ADAMS: All right. Mr. Wilhelm.



MR. WILHELM: Thank you, very much. Perhaps I ought to have...

(Mikes rearranged)

MR. WILHELM: First of all, I'd like to ask as a bookkeeping matter, that we filed a motion with some exhibits which set forth our position, and I'd like for that motion and its exhibits to be in the official record. We would like to reiterate our opposition to...

MR. LEE: Has it been admitted?

MR. WILHELM: I don't think they have but I would like...

CHMN. ADAMS: Your motion is admitted if it hasn't already been.

(Whereupon, the described motion  
with exhibits were received in  
evidence)

MR. WILHELM: Thank you very much, Dr. Adams. We would like to reiterate our opposition to the two, I guess, alternative reliefs. First of all, the odd sized units. The odd size units are going to create inequities. Now those units up to the north are up dip of this area, this acreage under control by Mr. Calhoun. It's proved commercial productive acreage. The Board has set up a rational spacing rule for the West Foley Field whereby all the owners share equally in one well per 160 acres. If this petition is granted, those owners up dip with

proved commercial productive wells are going to have their interests diluted. I think the second point of shutting in wells until he drills a well I don't...

MR. SLEDGE: We're not pressing that relief at this time.

MR. WILHELM: Then you're dropping it as...

MR. SLEDGE: We're dropping it at this time. We're not asking that any of these wells be shut in at this time.

MR. WILHELM: All right. Now, I'm not gonna dwell on a lot of testimony that came in today by Mr. Calhoun concerning dealings with Amoco. I'm sure the Board will give that testimony the information that it deserves--the attention that it deserves. I will say this much about it. If you review the docket, you will be aware that Mr. Calhoun was well advised in December that there was a deadline on our interest in purchasing gas, so he knew that he had to drill wells. Also, if you review your docket today, you'll note that Mr. Calhoun has had a petition for an exceptional well location for several times before this Board and he himself has voluntarily continued it. Also in regard to that there are courts in Louisiana. If he's got

a contract claim, that's really where he ought to be. I'm not gonna dwell on this point either, but really what we have in these Foley Field areas, units, we've got geographic spacing. Now what really Mr. Calhoun is saying today, let's go to geologic units. It's a matter of your philosophy on this regard. In Louisiana they have geologic units and this is o.k., but you go back and you look at how many feet of pay is in each well and it takes a long time and it's a pretty complicated avenue. It's a workable means. If you're going to do that though you really need to open up the unitization of that whole area, not just Mr. Calhoun. Just because he's the complaining party. There are other people that have more sand than, you know, that are getting no more gas than their neighbor that has less sand underneath. There are people updip and downdip. There may be people on other areas in these, outside some of those other units that aren't in productive areas. You're gonna have to open up the whole unitization over there and you're gonna have somebody in every month. Geographic units have been upheld in courts as being a fair and orderly development pattern. It's rational spacing. It complies with the

duties of the statutes that you all operate under. I think I'll close at that point. I imagine Mr. Watson has statements.

CHMN. ADAMS: Anything further?

MR. WATSON: My client contends that Clay Calhoun has not met the minimum standards to include additional acreage in a producing unit. The Board may establish units not to exceed 30 percent if such action is justified by sufficient technical information. You lack the sufficient engineering information that you normally have presented to you. You lack some of the geological information such as cross sections and the logs that are not a part of this record. You lack the information for the failure on petitioner's part to complete a well, to spend \$60,000 to prove conclusively to you that they have a well that is a part of this field. They are asking you to short circuit the normal procedure of completing a well, testing a well, and filing that report with this Board, then come to you and ask you to consider unit reformation based on hard concrete evidence that can be cross-examined. We do not have that basic scintilla of evidence to invoke the power of this Board to amend the unit,

and in doing anything less than that, the coequal and correlative rights of the owners in the existing units are in severe jeopardy. Finally, I asked Mr. Calhoun about the status of the acreage to be added. I submit to you that there are interests farmed out in that area by Amerada Hess and Mississippi Chemical Corporation, and Mr. Calhoun has answered the question that he owns or controls that, but there are other interests farmed out to Mr. Calhoun and require prudent operations in that area. That's all I have.

MR. LEE: Mr. Chairman, if there are no more questions, I move that we take this matter under advisement.

CHMN. ADAMS: I second the motion. All in favor say "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

DR. MANCINI: Items 23 and 24, petitions by Dominex.

MR. WILHELM: If I could raise a preliminary point, I know Mr. Watson asked to continue 833, or Docket 5-26-833. Mr. Norton Brooker had an objection at that time. I don't think he objects anymore. I know we have no objection to a continuance if Mr. Watson wants to continue along that line.

MR. BROOKER: If I might say this, we would like to resolve this matter, hopefully, today, if that's at all possible. Some other things have been going on...

CHMN. ADAMS: Would you state who you represent?

MR. BROOKER: I'm Norton Brooker. I represent EL-Oil in this matter. Dominex has filed a suit for an injunction in Baldwin County, and of course one of the admonitions of the court was that the Board should rule on this matter prior to tomorrow morning, but we feel like that we would like to get the whole thing resolved. If Dominex does not intend to move forward with their petition with respect to the ratable takes, I would, perhaps ask Mr. Watson if he intends to dismiss it or do we intend to come back at some later time and have hearings on that? Before I can say, really, whether I oppose the continuance of that.

MR. WATSON: I was going to address this at the outset. I can address it now. The question, then I'll let these gentlemen decide. I have two petitions before you. One requesting in the Pleasant View Field that the wells in the field be produced ratably. I have a petition before you requesting an allowable reduction to protect the coequal and correlative rights. The ratable take petition, and ratable takes, as I read the Special Field Rules, more appropriately apply for all wells that are connected to pipelines and where you have production that is not ratable. The Dominex wells are not on this date connected to a pipeline. They will be connected to a pipeline. I have no problem with dismissing without prejudice the petition on ratable takes. That's not to say that after the wells are hooked up I might not be back before the Board to request then the enforcement of the ratable take provision of the existing Special Field Rules. If I presented these matters, you could order ratable takes, or the enforcement of ratable takes, when the wells are hooked up, so I did not want to take that opportunity away from the Board. On the other hand, the Board could, depending on the evidence presented,

2

grant both petitions I suppose, could enforce ratable takes and reduce allowables. I simply seek a fair and equal opportunity to produce the proven hydrocarbons under two existing units in the Pleasant View Field. I seek to do that by, first, getting the allowables down to a point where we have an opportunity to get on line and compete fairly and equitably for the production of our fair share. So with that understanding and with that background, I summarize by saying I have no problem with proceeding, and my testimony will be directed to the allowable reduction. My comments will refer you to your existing Special Field Rules, the provisions contained therein concerning ratable takes, and I will also call to the Board's attention a provision in the Board order establishing allowables for fields in Baldwin County, wherein this Board in an extraordinary fashion, in my opinion, reserved the right to consider whether or not allowables might be adjusted at some future time based on circumstances at that time. I know that Amoco has filed a lengthy brief concerning the ratable take issue and I think that a great deal of the comments in there insofar as the applicability of ratable takes are correct. Ratable takes most appropriately apply



where all wells are hooked up to pipelines and that's not the case here yet. So, with both parties, Amoco and EL-Oil, clearly understanding that, my testimony and my thrust will be directed toward the allowable reduction, and to save this Board a great deal of time I would dismiss without prejudice the petition addressing the ratable take issue with the understanding that when the wells are hooked up, depending on the circumstances, we may be back before the Board on the ratable take issue. I so move.

CHMN. ADAMS: Is there an objection to the dismissal of ratable take?

MR. WATSON: That's Docket No. 5-26-833.

CHMN. ADAMS: Hearing no objection...

MR. LEE: Mr. Chairman, if I could move--I would move that that item be dismissed without prejudice.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

MR. WATSON: Mr. Chairman, in representing Dominex and in the statement by Mr. Brooker concerning the court action in Baldwin County, let me clear the air at the outset. As I understand it, and I was not present in chambers but my client was, the judge that heard the injunction request on behalf of Dominex said that he would entertain the injunctive request after this Board meeting. There was no direction from that judge to this Board. We did not seek any action from that court directed to this Board. I intend to present my testimony today from my witness or witnesses and anticipate this Board making a decision based on the facts presented to you today. The court action is another day and another matter. I have two witnesses, Mr. Chairman. I intend to use one and I may use the other one. I'd like to have both of them sworn at this time please.

MR. CAREY: State your name and address for the record.

FIRST WITNESS: James R. Edwin, Pensacola, Florida.

SECOND WITNESS: Kendall Hanby, 12 Forest Manor, Northport, Alabama.

(Witnesses were sworn by Mr. Carey)

MR. CAREY: Mr. Watson, since we have a lot of people in the audience who are interested in this item, I would admonish you to make sure that the loud-speaker mike can be heard for each of your witnesses.

MR. WATSON: I'll move it around.

CHMN. ADAMS: Furthermore counselor, I would urge you to be as brief as possible and don't belabor points unless you have to.

MR. WATSON: I always strive toward that goal, Mr. Chairman. I shall do so in this proceeding.

CHMN. ADAMS: And avoid being repetitious if you can.

MR. WATSON: I shall try that. If I can ever get started.

(Laughter from audience)

MR. WATSON: I would ask that the Board receive into evidence the affidavit of notice in this matter, the original which has been prefiled with Mr. Carey, wherein notice was given at the direction of the Supervisor in the exercise of his jurisdiction and authority requiring that we give actual notice to all owners in the units operated by EL-Oil. That list of owners affected by these matters was supplied by EL-Oil. They

have been noticed. That's in the affidavit.

MR. CAREY: Mr. Chairman, I would recommend that the affidavit be admitted. I have seen it and I have reviewed it, and it complies with the request of the Supervisor.

CHMN. ADAMS: The affidavit is admitted.

(Whereupon, the described affidavit was received in evidence)

MR. WATSON: Very briefly setting the stage before I present my testimony, the testimony of my witness, we had requested the Oil and Gas Supervisor to look into the situation as it existed in the Pleasant View Field in that we had two wells producing, operated by EL-Oil, two wells in the Pleasant View Field in the common reservoir that were not producing, we asked the Supervisor to use the powers of his office to see if our rights could be protected. He did so by holding a meeting of the parties of EL-Oil and Dominex with Amoco in attendance. We are now before you after having exhausted all reasonable means to protect ourselves insofar as producing these wells through the existing market. We choose to work no hardship on Amoco. We choose to work no hardship on EL-Oil. Our plea to you, our petition to you, is to give us the fair and equal rights to produce the

hydrocarbons, proven hydrocarbons, in the two existing Dominex units and thereby protect the interests of the royalty owners and other working interests in those two units. We have had an attempted, or we have attempted to, as has EL-Oil, to work out a sharing of production from this field. That has been impossible. So Dominex has secured a gas contract with Riveria Gas Utility District, which is the City of Foley. That contract is now in the hands of, or will be in the hands of, today, the City of Foley. Negotiations have been going on for that contract. My request to you for a reduction of allowables is based on the fact that we have a contract. We will be able to produce our wells. In this connection and with that background, I call my first witness, Ken Hanby, and ask, first of all, Mr. Chairman, that you recognize Mr. Hanby as an expert petroleum engineer having qualifications.

CHMN. ADAMS: The witness is recognized as an expert.

KEN HANBY

Appearing as a witness on behalf of Petitioner, Dominex, Inc., having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Watson:

Q Mr. Hanby, you've prepared exhibits. Those have been handed to the Board. Let's take your Exhibit A, please, which is a map of the Pleasant View Field, and would you tell the Board, please, what that map shows?

A O.K. Exhibit A is an outline of the Pleasant View Field as was described by the Board in the order creating the Pleasant View Field on April 16 of 1982. This field is outlined in yellow. Also shown to the north is the outline of the South Foley Field. The four wells that we will be discussing today and their units is also shown on this well(sic). The two producing wells operated by EL-Oil are circled in red. The two wells operated by Dominex are outlined in green. The units for each of these wells, the drainage units, are shown by the dashed patterns.

Q Those are 160-acre units?

A Yes, sir.

Q All right. Let's go to your Exhibit No. 1, Mr. Hanby.

A Exhibit No. 1 is a listing of the pressure and production data that is available from the Pleasant View Field. The

data is basically self-explanatory. I would like to point out some pertinent numbers. At the top part of the exhibit I have shown pressures and I have highlighted the two wells operated by Dominex in yellow. I have not highlighted the wells operated by EL-Oil. The shut-in tubing pressure which was recorded initially for the two EL-Oil operated wells is underlined in red, this being 730 and 740 psig, respectively, which was the original pressure in this reservoir taken prior to commencing production which began in August of 1982. The two Dominex operated wells, Michael Moye and J. E. Flowers, were drilled in February of 1983 and the initial shut-in tubing pressures on those two wells is shown on this exhibit as being 635 psig each. These pressures were recorded immediately following a short production test. At the bottom of...

Q Let me ask you this question, Mr. Hanby, before you go on. Have all of the production tests and the information required by this Board following the completion of a well been filed with the Board's staff?

A Yes, sir.

10

Q All right, go ahead.

A At the bottom of the page is the production data and I have two sets of data. One shows cumulative production for both of the wells operated by EL-Oil through December of 1982. The second set shows the latest cumulative production numbers available from the Oil and Gas Board through March of 1983, and then the total cumulative production of 335,274,000 cubic feet of gas. To discuss the possible drainage and the effect of production of the two EL-Oil wells, we can refer back to the original pressure in this reservoir shown by the shut-in pressure of greater than 700 pounds. The two Dominex wells when they were completed had initial shut-in pressure of 635, approximately 100 pounds less. To eliminate the discussion being totally based on taking surface pressures and converting those to bottom hole pressures, in the middle of May Dominex ran actual bottom hole tests by Otis on their two wells. I have shown this data on Exhibit 1-A, which if you'll turn the page, which is basically the same as Exhibit 1 except it includes now the results of the two bottom hole pressure tests. As



you'll see on the Michael Moye, the pressure was 612 psia, and on the J. E. Flowers it was 724 psia. These pressures were taken bottom hole and they do support the fact that the pressure when these two wells had been completed has been depleted from the normal pressure that would be at this depth in this reservoir.

Q Explain what you mean by the normal pressure that would be at this depth and in this reservoir, Mr. Hanby.

A Well, the normal pressure in this reservoir was initially discovered with the two EL-Oil completed wells was, initial shut-in pressure was 740 and 730 pounds. This calculates to approximately 776 psia absolute and that is the bottom hole pressure originally. If these wells had been drilled in a separate reservoir or if production had not drained the area of these two wells, we would have had an original pressure of approximately 770, 760 pounds, originally, in the two Dominex wells.

Q So the results of this bottom hole pressure taken just this month shows that that pressure has been decreased by the magnitude shown on this exhibit, correct?

A That is correct.

Q And it is your opinion that that decrease in pressure based on the base line pressure that you have just mentioned indicates that these wells and the units have been drained by the wells that are presently producing?

A That is my opinion, yes, sir.

Q Any other way that the pressure could have been reduced in these wells? The two Dominex wells?

A Not with any other producing wells in the area.

Q Any other way at all?

A No, sir.

Q All right, go ahead.

A If you'll now turn to the last exhibit, which is Exhibit 2, this is a P/Z plot versus cumulative production. If you'll look at the top of the exhibit you'll see the original bottom hole pressure, which was calculated from the original shut-in pressures of 776 psi. November, which was our next pressure data point for the two EL-Oil wells of 690 psi calculated bottom hole pressure. I then calculated the P/Z at each of those points. I used a cumulative

13

production through November of 1982 of 157,405,000 cubic feet of gas and plotted this on the curve. It is identified as the P/Z versus cumulative production, and where that straight line material balance intersects the zero P/Z point indicates the original gas in place in communication with the two producing wells of 1.32 BCF. At a assumed abandonment pressure of 100 psi, which would be at a point identified on this curve with the broken dash in the decline curve...

Q That's at the far right hand side of the page?

A At the far right. It extrapolates to a recoverable reserves of 1.15 BCF of gas. This is actually approximately 87 percent recovery of the gas in place. Cumulative production, as I have said earlier, through March was approximately 335 million cubic feet of gas. At the current rate that the wells have been produced, by the end of this month or the first of June, the total cumulative production would be approximately 419 million cubic feet of gas. This leaves remaining as of June 1 730,500,000 cubic feet of gas. And at the current rate, that of approximately 1400 MCF of gas

14

per day, this field will be depleted in 1.5 years. This is a limited reservoir and I think this P/Z curve illustrates that. There's approximately only 730 million cubic feet of gas remaining. The pressure data that is available and that has been testified to indicates that the Michael Moyer and the J. E. Flowers wells, the two wells operated by Dominex, have been pressure depleted. It is my opinion that if production continues at the current rate that significant drainage will occur and that this drainage is not compensated for by counterdrainage. It is my opinion that the allowable for this field should be reduced at this time. If the allowable as we propose it is granted then each well will have a maximum allowable of 175,000 cubic feet of gas per day. This gives a total allowable of 350 MCF for the two wells operated by EL-Oil, and the same allowable for the two wells operated by Dominex. However, the letter of intent for the contract with the Riveria Utilities calls for an average maximum daily quantity of 275, so with the allowable we're producing, EL-Oil will have an allowable of approximately 75 MCF a day greater than what Dominex will

be able to produce in accordance with our contract. However, if the allowable is granted, Dominex will be given an equal opportunity to recover their fair share of the remaining hydrocarbons in this reservoir, and at those rates, 350 MCF a day for EL-Oil Ltd. and 275 MCF a day for Dominex, at the abandonment of this field total production will have been approximately 828 million cubic feet of gas produced through the two wells operated by EL-Oil and 320 million cubic feet of gas produced by the two wells operated by Dominex. If, however, the allowable is not granted and is not reduced as we are proposing, and the field continues to produce at the rate it is now producing with the two wells operated by EL-Oil and then Dominex produces at their allowable of 275 MCF a day, then at the abandonment...

Q Their contract quantity, Mr. Hanby.

A Their contract quantity, then at the abandonment of this field the two wells operated by EL-Oil Ltd. will have recovered slightly over a billion cubic feet of gas and the two wells operated by Dominex would have only recovered

16

slightly over 100,000 MCF of gas, 1/10 of what the two wells operated by EL-Oil Ltd. will have produced.

MR. WATSON: Mr. Chairman, I would ask that these Exhibits A, 1, 1-A, and 2 to the testimony of Mr. Hanby be received into evidence.

CHMN. ADAMS: The exhibits that you've named are admitted.

(Whereupon, Exhibits A, 1, 1-A, and 2 were received in evidence to the testimony of Mr. Hanby)

Q Mr. Hanby, your testimony on the contract that Dominex is entering into with the City of Foley is the best, to your knowledge the best available contract that is available in the area, is that correct?

A Yes, sir.

Q And what we're asking this Board for then is an opportunity to produce as much as we can contractually but the allowable we're asking for is really going to be set higher than what we can actually sell, correct?

A That is correct, yes, sir.

Q You're also saying that if the allowables are not adjusted as we have requested that the continued production by EL-Oil will greatly, well, the continued production by

EL-Oil will just completely negate any opportunity, first of all, of Dominex to recover any of its gas, is that correct? Without a market on behalf of Dominex?

A The total production that EL-Oil Ltd. will have is significantly greater, ten times what would be able to be recovered by Dominex.

Q All right, sir. Now we realize, do we not, Mr. Hanby, that with the reduction in the allowable as we have requested the life of the field is going to be extended, correct?

A That is correct, yes, sir.

Q And with the extension of the field life it's very possible that the gas market situation as we have encountered it may change, is that also correct?

A Yes, sir.

Q So that we may be able, both EL-Oil and Dominex, if this allowable is reduced, we may be able to go back to a better market if that is ever present, correct?

A That would be correct, yes, sir.

Q But to leave the situation as it is would give us no

opportunity for a new market if it comes along because based on your testimony our gas reserves will have been produced by EL-Oil, is that correct?

A A great percentage of them, yes, sir.

Q A great percentage of them will have been, with no compensation to the working interest and royalty owners of Dominex?

A The only compensation would be the small amount of gas production that they would have.

Q All right, sir. Is it your understanding from the allowable order issued by this Board, Mr. Hanby, on October 26, 1982, that the Board specifically reserved the authority to adjust allowables, after notice and hearing, as necessary to prevent waste and protect correlative rights, and to insure the ultimate recovery of natural gas from the aforementioned fields?

A Yes, sir, that's contained in the order of the Board.

MR. WATSON: Mr. Chairman, I would ask that the Board take judicial notice of and incorporate by reference your Board Order No. 82-240 dated October 26, 1982.



CHMN. ADAMS: Your request is granted.

MR. WATSON: That order, Mr. Chairman, was requested by Amoco Production Company and applied to or was applicable to several fields in Baldwin County, Foley, West Foley, South Weeks Bay, Pleasant View, Skunk Bayou, and etc., and we understand that this provision could apply to all of those fields and we are simply asking that the allowables be considered insofar as the Pleasant View Field is concerned. There was no restriction as to this reservation in the Board's order. Mr. Hanby, so many times we come to this point in testimony and we ask the usual questions to round out our testimony of whether the witness is familiar with waste and protection of coequal and correlative rights. I've sat here many times and asked that question of many witnesses, but seldom have I seen a situation where these words have...

MR. BROOKER: Mr. Chairman, I don't want to interrupt this, but I don't know if he's testifying, making a closing argument, or asking a question.

MR. WATSON: I'm asking a question.

MR. BROOKER: And I would object on...

CHMN. ADAMS: Would you use the mike, Mr. Brooker, please?

MR. BROOKER: If I might just object on the basic grounds that he is leading his witness.

CHMN. ADAMS: Let's don't use two words when one will do, Mr. Watson.

Q All right, sir. Mr. Hanby, are you familiar with the term "waste" as that term is defined by the Oil and Gas Laws of Alabama?

A Yes, sir, I am.

Q In your opinion, will the granting of this petition reducing the allowable as we have requested, prevent waste and protect coequal and correlative rights of all the owners in this field?

A Yes, sir.

MR. WATSON: I'm going to tender my witness, Mr. Chairman, to the Board and staff for any questions you may have of him.

CHMN. ADAMS: Is there any cross-examination?

MR. BROOKER: Yes, sir, I have some.

CROSS-EXAMINATION

Questions by Mr. Brooker:

Q Mr. Hanby, if you will look at your P/Z curve, as I understand the way you constructed this curve you only

had two points, is that correct?

A That's correct.

Q All right, isn't it also true that you could draw a circle using those same two points?

A I could draw a circle?

Q Yes, sir. Using those same two points you could draw a circle?

A No, sir.

Q You couldn't draw a circle?

A Not in drawing a material balance. This is a equation of a line that mathematically exists. It is convenient to express it as the decline curve, and as you go from one pressure to the next pressure as this reservoir depletes and you produce gas, it's depleted in a straight-line relationship and you draw a curve through the two points which it turns out to be a straight line.

Q You draw a curve through the two points that you found, but you don't have any other points other than those two points?

A That's correct at this time.

Q And after you get to your second point, you don't know where that line could actually go do you?

A We could take the shut-in pressures that we recorded in the two Dominex wells and take the cumulative production from the reservoir at that time and average that and come up with the third point.

Q But you didn't do that for this exhibit did you?

A No, sir, because...

Q Because why?

A Because I didn't have any reason to do that, basically because the two, as you'll see on this curve...

Q Well...

MR. WATSON: Let him answer the question.

Q Go ahead.

A ...the production from these two wells, the two operated by Dominex, have not had any production, so the cumulative production of the two wells operated by Dominex, would not be able to plot on there with no cumulative production. It would be a point on this curve. The cumulative production of the two wells operated by EL-Oil could have been plotted

on there with the pressure, average pressure of the reservoir in February, and it would approximately fall on that line, but I didn't do it.

Q All right, and isn't it true that to get a good degree of accuracy in preparing a P/Z curve or P/Z data like this, you need more than two points?

A The farther the points are apart, that is the longer the period of time is, the more accurate it possibly can become, but you can have a P/Z where your data points, the first two points and the last two or three toward abandonment perfectly line up, and if a P/Z has to be done, at the time it's done with the data that is available.

Q And I note that you used shut-in tubing pressures as opposed to measured bottom hole pressures?

A I used shut-in tubing pressures, yes, sir, from the two wells and calculated bottom hole pressure because the shut-in bottom hole pressures, if run, were not filed with the Board and the only difference between shut-in tubing pressure and bottom hole pressure in a dry gas well is the weight of the gas in the tubing and that's pretty

accurate measurement from surface pressures.

Q All right, you found no evidence of any water in any of these wells?

A I found some evidence of water in the two wells that were drilled by EL-Oil--excuse me--Dominex. On the initial production test there was a slight amount of water. It was primarily KCL water. That is one of the main reasons we ran the bottom hole pressure. The Ernest P. Flowers well has not produced any water. There is no evidence of any water production, and the original, or the shut-in tubing pressure that was used for the second data point was 665. The pressure used by, my P/Z, I used 650. I discounted greatly the pressure in the Wilson-Morse of 620 because there was water production in that well and I determined that the Ernest P. Flowers with no water production, the 665 psia was an accurate representation of the bottom hole pressure since there was no water there, and I converted that to the bottom hole pressure I used of 690 psi.

Q And are you aware that the Morse well makes approximately eight barrels of water a day?

A I'm familiar that it makes water, yes, sir.

Q Have you compared the water levels that have been encountered in this field in each of these wells in doing any studies?

A I have looked at the water level, yes, sir.

Q You have? Do you have any information with you as to what those water levels are?

A Yes, sir, I looked at the water levels and I do have that information.

Q O.K. Can you tell me what the, well, let me ask it this way. If there is good communication between all of these wells in this field, wouldn't you find generally the same water level in each well?

A Let me first, on the water levels, let me say that the water levels, there is a slight discrepancy, difference in some of the water levels. I might point out that to calculate water levels you've got to know the KB elevation. This is the point at which you measure your logs. On none

of these wells was an actual surveyed kelly bushing measurement made. On both of the wells operated by EL-Oil Ltd. the elevation...

Q Excuse me, I'm sorry, Mr. Hanby, I don't want to interrupt you but...

MR. WATSON: He's answering your question.

MR. BROOKER: Well, I asked him a specific question.

MR. WATSON: He's answering it.

MR. BROOKER: He's not answering, he is not answering the question with a response. If we had a judge here I'd move to strike his answer to not being responsive but since we don't...

MR. LEE: Mr. Brooker, if you all would, you all address your remarks to the Board and not to each other.

MR. BROOKER: O.K. Well...

MR. WATSON: He's answering the question, Mr. Chairman.

Q My question simply was, Mr. Hanby, is in, if you have good communication between wells in a field, shouldn't you expect the water levels to be approximately the same level?



A You would normally have in a reservoir with good communication in the sands you would have similar water levels.

Q Thank you. Now did you consider in doing any of your studies the question as to whether there was a common aquifer in this reservoir?

A Yes, sir, I've looked at the aquifers in the area.

Q And did you pick the sand tops in each of these wells?

A I have picked the sand tops, yes, sir.

Q O.K. But you all didn't prepare an exhibit showing the sand tops or the water levels for presentation today did you?

A No, sir.

Q Now, can there be pressure communication between two wells which occurs only in the water and not in the gas?

A Yes, sir, you can have communication through a water leg.

Q All right. Do you see any evidence of any communication through a water leg in this field?

A Possibly, if the, and this was the answer that I was going

to a minute ago if I can now qualify that answer. There is possibility of a different water level. However, the data necessary to determine water levels is your kelly bushing elevation which you have to subtract from your log depth. None of these wells were actually surveyed, the kelly bushing. On the two wells operated by EL-Oil Ltd. the elevation reported to the Board on the forms was strictly off of a topo map which was read and reported on the plat as a plus or minus elevation. On the electric log of the Ernest P. Flowers the elevation was listed as not available. The KB elevation was listed as not available. On the Ernest P. Flowers wells, which is only a 2,000-foot well, there is a 40-foot discrepancy between what EL-Oil reports as the depth of casing and the total depth of the well and what the loggers report as the casing, surface casing depth, and the total depth of the well, which is very uncommon for that kind of discrepancy to exist in a 2,000-foot well. Therefore, the evidence as to the water levels could be subject to question based on not having an

accurate kelly bushing. However, if there are two separate water levels, one of the EL-Oil wells and one of the Dominex wells is located in each. The pressures support the fact that drainage has occurred. That both of the wells drilled by Dominex has had pressure depletion which supports the fact that we have been in pressure communication, either the entire reservoir or through these two small sections with different water levels. The water level differences was available and between the two wells drilled by EL-Oil Ltd., which were provided to the Board when the field was named.

Q Well, let me ask it this way, Mr. Hanby, and if you would, in the interest of saving time, if you'd try and just respond specifically to my question. You've got, your Exhibit A, I believe, has four wells in it, and I believe from one of your back exhibits your J. E. Flowers 18-7, which is a Dominex well, has a measured bottom hole pressure of 724, is that correct?

A That is correct.

Q All right, coming on now to the Wilson Morse well operated

by EL-Oil, that has a present, I believe somewhere in the near, not too near distant past, a figure calculated by you of 620 pounds, is that correct?

A No, sir, I did not calculate that number. The 620 pounds was in November of 1982 and this was the pressure, surface pressure, reported on Form OGB-22 and that pressure was reported to the Board when they ran the deliverability test.

Q Well, let me ask it this way then. You're using that 620-pound figure, are you not, to justify making the statement to the Board that that well, that the EL-Oil wells are draining the Dominex wells?

A No, sir, I didn't use specifically the 620 pounds. The numbers that I really used to determine that there had been pressure depletion were the two original shut-in pressures, that being 730 and 740, which are shown on Exhibit 1 and 1-A, which were the original pressures before any production from this reservoir, converted that to a bottom hole pressure of approximately 776 psia. Both of those

pressures were recorded on OGB-9 at a time when it was tested with no water indicated on either one of those wells versus the two measured bottom hole pressures that Dominex conducted of 612 on the Michael Moyer, which is, roughly, 150 pounds below the original, and on the J. E. Flowers of 724, which is approximately 50, well, it's almost 50 pounds, approximately 52 pounds.

Q Well, then, your entire basis for saying that drainage is occurring between these wells is based upon the assumption, is it not, that the original bottom hole pressure in the two Dominex wells should have been seven hundred and some odd pounds and when you opened them up you found it wasn't, is that correct?

A That is correct, and at this depth and with the different stratigraphy you go through, and the fluids that are contained within the pores, there would be no reason to not have, at this depth, the same pressures in both of these.

Q Have you reviewed any seismic data in this area?

A I have not looked at any seismic data on this well, this

field, no, sir.

Q O.K. Have you reviewed any of the logs in these four wells?

A Yes, sir, I've reviewed all of them.

Q Can you tell me something about the sand characteristics with respect to each of these wells?

A What are you referring to? The thickness of them?

Q Yes.

A They vary in thickness from 8 to 28 feet. Some shalier than others.

Q Some shalier than others?

A Sure.

Q Which ones are more shalier than the others? Do you remember?

A I think probably the shaliest well would be the J. E. Flowers 18-7.

Q And in wells at 17 and 1800 feet deep, when you have one accumulation or one reservoir, shouldn't you expect your sand thicknesses and type to be approximately the same in each of the wells in a pool?

A No, sir, not necessarily. As you go from the crest of the structure out on the flanks where you're losing sand, you would definitely get shaly, yes, sir. You would not expect them to be the same.

Q O.K. And the thicker sands are in what wells?

A Well, the thickest sand is in the Flowers 17-12 and the next sand is in the Michael Moyer, and I'm talking about the depth of your gas sand. You've got 28 feet, roughly, in the EL-Oil 17-12, and in the Dominex-Michael Moyer you've got 18 feet. Roughly 12 feet in the Wilson Morse and approximately 8 feet in the Flowers 18-7.

Q And do you consider variations in sand thickness and sand type to be something that should be considered before you make a determination as to whether the four wells are all in the same pool?

A Not necessarily. And the pressure data here indicates that there has been depletion and the sand type and...

Q But your pressure data assumes that there are--to get to your point you have to begin, do you not, Mr. Hanby, with

the assumption that they're all in the same reservoir?

A I have no reason to not believe that the reservoir pressure initially in the two wells operated by Dominex, if that was a separate sand, would not have been 775, 776 pounds.

Q Well, if you started with the assumption that they were in separate reservoirs, then your pressure data when you got to the end of doing your calculations would have led you to the conclusion that they're in separate reservoirs, wouldn't it?

A But I have had, seen no data...

Q Just answer my question.

A Would you repeat the question?

Q If you had started with the assumption that these four wells were in separate reservoirs and used the same data that you've used in constructing your exhibits, wouldn't you have come to the same conclusion that they were in separate reservoirs? Based on the data you've got?

A If I assumed that they were in separate reservoirs. No, I don't believe I would have.



Q What then...

A All right, I'll...

Q ...if you had begun with the proposition that these four wells are in separate reservoirs, using the same data that you've got available to you, how would you have then come to the conclusion that they're all in the same reservoir?

A O.K. If I looked at the Michael Moya with original, in February, this is on my Exhibit 1, in February we had an initial shut-in tubing pressure of 635 psig. That would mean the bottom hole pressure would be slightly greater than 635 psig, and then I ran the bottom hole pressure on the Michael Moya in May of 1983 and the bottom hole pressure was 612 psia. That tells me that between February of '83 and May of '83 we've had a depletion of some 20 or 30 or maybe even 40 pounds. So if I had started off with the idea that these were in separate reservoirs initially, and after reviewing this data, I would have to say they are not.

- Q All right. A 20-pound reduction in four months with, at least between, at least with respect to that well something would be causing the pressure to reduce, would it not?
- A Yes, sir, and that's justifications for my answering your question.
- Q O.K. And so you're gonna say it's another well? Is your answer? It's one of the EL-Oil wells that's caused that reduction in pressure?
- A I would not think it could be anything else but a producing well, which are EL-Oil's, since I would not expect it just to leak out.
- Q All right, the Moye well, if you will look on your first exhibit, the Moye well is located in Section 20, is it not?
- A That is correct.
- Q As a matter of fact, it's an exceptional location in Section 20, is it not?
- A I believe it probably is, yes, sir.
- Q And can you tell me, based on this map, where that pressure would have gone if it went to one of the EL-Oil wells? Which well?

- A Due to the rapid production that has come from this reservoir and the fact that the Flowers 17-12 has produced significantly more volume of gas than the Wilson Morse, I would say that probably it has moved toward the Flowers 17-12 more than to the Wilson Morse.
- Q All the way across that quarter section?
- A All the way across that quarter section.
- Q O.K. And also wouldn't it be true, Mr. Hanby, that because of the exceptional location for the Dominex-Michael Moyer well that if that well was turned on even at 175 a day that it would drain across that lease line into the southern part of the Flowers unit?
- A The drainage pattern of all these wells is gonna be in somewhat a radial pattern and this is true throughout the state that you're gonna have somewhat of a radial pattern of drainage, and there would be some molecules of gas probably that would pass that line just like there would be some molecules north of the Flowers 17-12 and north of the Wilson Morse 18-9 and probably west of the Flowers 18-7.

- Q All right, well, what do you propose to do about the drainage that's gonna occur from the Moye 20-4 well to the --from that well--I mean from the Flowers 17-12 to the Michael Moye 24? What proposal do you have to make on that?
- A That is drainage that is compensating for drainage that has already occurred.
- Q You're gonna have it go back and, because you--you're gonna compensate in what manner now?
- A Talk about drainage not compensated for by counterdrainage, that was what I was referring to there. If any drainage...
- Q When is the counterdrainage gonna occur if that Moye 24 is setting there 300 feet or whatever it is from that south line and the Flowers 17-12 is all the way up in the north end of that unit? How are you gonna compensate for that?
- A We have produced a total to date of 335 million cubic feet of gas through March. We have brought the pressure down and it could be calculated how much has been actually already drained out from under the unit of the Michael Moye and...
- Q And all of that production has been in accordance with and

in compliance with the allowable rules and the field rules for the Pleasant View Field in Baldwin County hasn't it?

A That's correct and the allowable that we are proposing production in the future would be in accordance with the Oil and Gas Board Rules and Regulations likewise.

Q Do you see any evidence of any physical waste in any of these wells because of the production?

A The pressure is quite--somewhat depleted.

Q Well, it's--are you saying that that's causing physical waste to the reservoir? Is that gonna reduce the amount of hydrocarbons that are recovered?

A It will reduce the amount of hydrocarbons that are recovered by the two wells operated by Dominex.

Q But as far as the reservoir is concerned, do you see any evidence that there is any physical damage occurring to the reservoir in this field?

A The continued production may show that. We've got one well that is producing a tremendous amount of water. The Wilson Morse, and that water could be coning and could lead to

the ultimate reduction of recovery from this reservoir.

Q Do you have any evidence that that is coning at this time?

A I haven't made a study in, to evaluate that.

Q Now, let me ask you something that I think Mr. Watson asked Mr. Forester the same question. You have no doubts in your mind that all four of these wells are connected in the reservoir?

A I've qualified that answer that there is a possibility that you have two different water levels if the kelly bushings as read off of the topo maps are the true, accurate reflection of what the kelly bushing elevation is, and if so, we would have two wells in each of the different zones, one each by Dominex and one each by EL-Oil in each.

Q In other words you draw what, the Flowers 17-12 and the Michael Moye in one pool and the EL-Oil-Wilson Morse and the J. E. Flowers in another pool?

A That would be the way it would be if it were like that.

Q So you, if, based on water levels then you'd find two

pools in this field?

A I'm not saying that there are two different water levels.

Q That's a possibility?

A There is a possibility if the elevations are correct off the topo and there's also, with the Flowers 17-12 there is no, on the logs that were submitted by EL-Oil, there is no identified point as the difference between the ground elevation and the kelly bushing. They didn't choose fit to put that on their log.

Q Well, do you know why they didn't choose fit?

A No, I don't.

Q You mean there's something wrong with them not choosing fit to put it on the log, Mr. Hanby?

A It's data necessary to interpret the log.

Q Do you know whether or not they have that data?

A You'll have to ask them. A prudent operator always has that. They survey their elevation.

Q Now based on your--you've done a good bit of work in the Baldwin County area haven't you?

A I've done some, yes, sir.

- Q O.K. Isn't it basically true that you can have production at point A and you move 20 feet away to point B and you don't have any production?
- A That's true, just like you can have a bright spot on seismic and have production and not have a bright spot and not have production, yes, sir.
- Q And a lot of what we're talking about today is interpretive, is it not?
- A Yes, I've interpreted the pressure and production data that is available, yes, sir.
- Q And somebody else might interpret that in a different manner mightn't they?
- A Possible.
- Q And you talked a lot about Dominex's effort to market their gas. Have you been involved in their efforts to market their gas?
- A I don't think I talked at all about Dominex's efforts to market their gas.
- Q I believe you talked about them getting the market.
- A I talked about the fact that they have a letter of intent



from the Riveria Utilities to purchase to a maximum of 275 MCF a day.

Q Who gave you that information?

A I read the letter of intent.

Q All right. And have you been involved with Dominex's efforts in any other way to obtain a gas, a market for their gas?

A I was present at some discussions pertaining to, with EL-Oil, yes, sir.

Q As a matter of fact, you were present in our office when we agreed to share our gas contract with you weren't we?

A That's correct and I think Mr. Watson brought that out in his earlier statements that EL-Oil had done all they could.

Q And are you aware of when EL-Oil first began seeking a gas market?

A When EL-Oil?

Q I mean--excuse me--Dominex. First began to look for a market for these wells?

A I'm personally not aware of that.

Q O.K. Have you ever heard when it might have been?

A I've heard that it was prior to...

Q Did you hear that it was after the wells were drilled?

A No, sir, it was before their wells were drilled. I'm not sure of the date but I have heard.

Q Did they ever have a commitment from anybody to buy any gas from them prior to the time they drilled their wells?

A I don't know.

Q Now let's talk a little bit about correlative rights. You're familiar with the statute I know. You've been around a good while, and the word I want to talk about that's in that statute is the word "opportunity." Has Dominex had an opportunity, in your mind, to obtain a market for this gas since they drilled the wells?

A Has Dominex acquired...

Q Have they had an opportunity to find a market?

A They found a market.

Q O.K. Have they--it's a small market though isn't it?

A Yes, sir.

Q And that market that they are telling this Board they want

to set the allowables in this field will not even allow their wells to pay out will it?

A I calculate a total production of 320,000 MCF of gas with the contract quantity of 275. That would be close to a million dollars and not having...

Q That's EL-Oil's though, share, isn't it?

A No, sir, if we, if the allowable is reduced and we produce this field to abandonment of 1.15 BCF of gas, the gas that is remaining under our proposed allowable, the share of that allowable to Dominex will be approximately 44 percent of the remaining gas, which will be approximately 320,000 MCF of gas and \$3.23 an MCF that's gonna be close to a million dollars, and the contract price is higher than that, so it's gonna be a million dollars and to drill these two wells, a million dollars, I would say that their wells would pay out, not knowing exactly what the wells cost, and they would pay out and yes, sir, I would say that what we're proposing would result in a payout of both of their wells and some profit.

Q All right, over a much extended period of time than is presently anticipated if the present rules are left alone?

A Yes, sir, it will be quicker than the present rules at three years.

MR. WATSON: Let me clarify that. If the present rules are left as they are...

MR. BROOKER: Do you want to testify, Mr. Watson, or do you want to make an objection?

MR. WATSON: I'm just trying to understand your questions of the witness. The present rules, what present rules, Mr. Brooker?

MR. BROOKER: The rules we have right now, today. They haven't been changed.

MR. WATSON: Special Field Rules on the allowable?

MR. BROOKER: Yes, yes.

A The Special Field Rules as they exist today or as we are proposing them?

Q As they exist today.

A As they exist today, the ultimate production from this

field for Dominex under their contract would be slightly over 100 million and they would not pay out in that case, but under what we are proposing they would.

Q They would pay out? You're sure?

A In my opinion the recovery from their two wells would be approximately 320,000 MCF of gas.

Q O.K. And that assumes, does it not, Mr. Hanby, that the off-center or the exceptional well that Dominex drilled called the Michael Moye 20-4 is not prorated by this Board by later petition does it not?

A That assumes that that well is not prorated by later order of the Board nor would be the Flowers 17-12 or the Wilson Morse.

Q The Flowers 17-12 is the discovery well. Are you gonna prorate it?

A It's still an exceptional location, sir.

Q Are you gonna prorate it? It's not subject to proration is it? Under the field rules?

A I believe if you look at the order it is subject to proration.

Q The 17-12?

A Yes, sir.

Q Well, we know that the Michael Moye 24 is don't we?

A Yes, sir, that's in the order that granted the exceptional location as was it in the order granting the exceptional location for the Flowers 17-12.

Q And so if you then prorate the Dominex-Moye well because of it being an exceptional location and prorate its allowable production, my question then is will this contract cause Dominex to receive a payout on their well?

A If the other wells are equally prorated extending the life of the field, it is possible.

Q Well, if they're not, Mr. Hanby, answer my question as I phrased it please?

A It's possible.

Q Possible. That doesn't make it sound too economic does it, if it's just a possible?

A Well, without the reduction of the allowable it's absolutely no way.

Q Now, did you participate in the hearing back in January when Dominex got the petition, the permit for an exceptional location on that well?

A No, sir.

Q O.K. Are you familiar with any testimony that was produced at that hearing by Dominex that a well at a regular location would not be productive in that part of Section 20?

A I don't remember the hearing, no, sir.

Q Now getting back to my word "opportunity" again. Has Dominex in your opinion had the opportunity to find a market as equal to or as good as the EL-Oil market from this reservoir?

A Have they had an opportunity?

Q Yes, sir.

A They have searched for a market. They haven't found one.

Q To your knowledge, has anything prevented them from going out like Mr. Ellison did and finding somebody who will buy his gas at a sufficient quantity to give him a decent rate of return? Have they had that opportunity since

February?

A Since the Amoco pipeline is the only one in the area, the opportunity of market in the area, and since they could not get a contract with Amoco, no, they haven't had the opportunity to get...

Q Well, what's prevented them from going and finding somebody else, Mr. Hanby? Does everybody have to tie onto Amoco?

A We're not advocating that anybody tie onto Amoco.

Q Well, then my question simply is have not these people that you represent had an equal opportunity to go find any kind of market they want to just the same as EL-Oil did when they found their market?

A Well, I think I answered your question that in my opinion, no.

Q Why not?

A Because the only market in the area that is capable of producing that kind of gas is the one, the pipeline operated by Amoco and...



Q Well, what's wrong with bringing in another pipeline?

A Did EL-Oil bring in another pipeline?

Q I'm not asking about EL-Oil. I'm asking what opportunity your clients have had to go out and get a market for their gas.

A Well, you asked me if they have not had the same opportunity that EL-Oil had and my comment was no because when EL-Oil was searching the Amoco line was there and they got into that.

Q Well, they were there and got it right?

A I am not arguing with that.

Q O.K. But suppose just, you're gonna drill a well, Mr. Hanby, next week in Baldwin County. Let's think about that. Are you gonna drill it today without having a market already committed for it?

A Am I?

Q Yes, sir.

A I'm not planning on drilling a well in Baldwin County.

(Laughter from audience)

- Q Let's say if you were. If you were, Mr. Hanby, would you drill a well, or recommend to a client that they drill a well in Baldwin County without having a market committed for that gas?
- A If the client asked me my opinion as to whether he should drill a well without a market or a commitment to take the gas of some degree, I would say get a commitment first.
- Q Well, would you then, and he comes back to you and says, "I can't get a commitment," would you then tell him to drill the well?
- A I would probably advise some other alternative possibly.
- Q Well, Mr. Hanby, one further little area here, are you aware that EL-Oil proposed to Dominex that Dominex join with EL-Oil and drill a well in Section 18 some time ago?
- A No, sir, I'm not privileged to those communications. I'm not aware of that.
- Q O.K. I believe that's all.

MR. WATSON: Any questions from the Board and staff for this witness?

DR. MANCINI: Is there any other opposition parties that are going to cross-examine Mr. Hanby?

FROM AUDIENCE: No, sir.

EXAMINATION BY BOARD OR STAFF

Questions by Dr. Mancini:

Q Mr. Hanby, I have one question myself. Maybe you've hit on this already, but would you again give me an idea of what the life of the wells are and the situation there as to why, you know, you're before the Board at this particular time?

A O.K. At the current rate of production, which has been approximately 1,400 MCF of gas per day, at that current rate, the field will be depleted in 1.5 years from June 1. Now that's assuming that the production just with the two wells operated by EL-Oil. If the two wells operated by Dominex are added to that at 275 and EL-Oil produces at 1400 a day, then the life of the field is slightly over 1.2 years.

MR. WATSON: That concludes my case in chief of my witness.

MR. LEE: Do you all wish to make any kind of closing statements?

MR. WATSON: Yes, sir, I do.

MR. BROOKER: I have witnesses.

MR. LEE: You have, well...

MR. BROOKER: A minimum of three and maybe Mr. Watson's...

MR. LEE: Well, we might as well just hear from the witnesses then. Mr. Watson, if you'll call yours first. Do you have a witness who wants to testify?

MR. WATSON: No, sir, that's all of my witnesses.

MR. LEE: I mean, not witnesses, but anybody who wants to make a statement on behalf of your people?

MR. WATSON: Well, I'm sorry, sir. Yes, sir, you want all the case. I do know that there's present in the audience at least one representative representing some royalty owners who has a statement and there may be other royalty owners in...

MR. LEE: Oh. O.K. I misunderstood. Mr. Brooker talked about witnesses that are gonna testify, Not just make a statement, is that right?

MR. BROOKER: Yes, sir.

MR. LEE: Oh, I'm sorry. We need to go that...

MR. WATSON: That's what I'd understood. We'll wait until the end for that.

CHMN. ADAMS: Proceed, Mr. Brooker.

MR. BROOKER: I'd like to call Mr. Ed--what's his name, Edmond?

UNIDENTIFIED: Yes.

MR. BROOKER: Just for a few questions if I might.

JAMES R. EDWIN

DIRECT EXAMINATION

Questions by Mr. Brooker:

Q Are you the person with Dominex who's been negotiating these gas contracts?

A I'm one of the two.

Q All right, who else has been doing it?

A Ronald Cole.

Q Mr. Cole isn't here today is he?

A No, he's not.

Q O.K. Mr. Duvalle, who is the president of Dominex, isn't here today either is he?

A That's correct.

Q And when did you first make any effort on behalf of Dominex to market the gas from your two wells in the Pleasant View Field?

A Myself personally?

Q Yes, sir.

A Approximately the first part of March.

Q All right.

A The reason was that I was not aboard Dominex until February 16.

Q O.K. And on the first of March the wells had already been drilled had they not?

A That's correct.

Q Prior to that time, who had handled the gas marketing for Dominex?

A I'm not sure on that.

Q O.K.

A But I know that some conversations were held in the fall

of 1982 with Amoco and also some letter correspondence was held with Riveria in January of 1983.

Q Are you familiar with some correspondence that was sent by Dominex in February to Amoco?

A Which one are you referring to?

Q I am referring to a letter from Mr. Cole to Mr. Ronstadt dated February 7, 1983. I'll give you a whole set of these if it will make it easier.

A O.K.

Q If I could, Mr. Chairman, I'd like this top package marked as Exhibit A to our testimony. I anticipated using most of this on cross-examination and they're not consecutively numbered. Are you familiar with this first letter here, February 7, '83?

A As I said before I was not hired by Dominex until February 16.

Q O.K. When you first came on board were you aware of this letter?

A The only thing I was aware of was I was contacted in

May with Amoco previously.

Q O.K. Did you know when contact had been made?

A The discussions in the office and staff meetings, verbal discussions were made in the fall, in November or December.

Q O.K. And are you aware of any earlier written correspondence with Amoco or with anyone else about the possibility of selling the Dominex gas from the Pleasant View Field?

A Yes, there was definitely a letter to Riveria Utilities approximately January 22, 1983.

Q Did Dominex to your knowledge attempt to sell this gas to anyone else other than Amoco or Riveria?

A At what point in time?

Q At any point in time?

A Yes, sir.

Q With whom? To whom?

A We have been in discussions with three pipeline companies. We have contacted Florida Gas Transmission. They indicated they would buy our gas at 80 percent of No. 6 fuel oil if it could be delivered to their gas transmission line lo-



cated in northern Baldwin County.

Q O.K. Anybody else give you any offers?

A Specific offers?

Q Uh-huh.

A No. We've been in contact with three or four people. However, they're all located outside of Baldwin County with the exception of Riveria Utilities.

Q All right. Now what is--now were you, are you aware of the proposal by EL-Oil to drill a well in Section 18 jointly with Dominex?

A I was not here but it has been discussed many times.

Q Well, did, the simple question is did EL-Oil propose to Dominex that you all jointly drill a well in Section 18?

A I do not know the details. That's what I'm trying to say.

Q I'm not going to ask you one detail. I'm gonna just ask you in generalities, o.k.? Have you heard that?

A I heard that we were trying to drill a well in Section 18, specifically the J. E. Flowers section, or quarter section.

Q All right, and were you aware, or are you aware, that

Dominex opposed Mr. Ellison's efforts before the Oil and Gas Board to drill that well?

A I believe that's correct.

Q O.K. And isn't it also true that if EL-Oil had been allowed to drill the well in Section 18 that that well would presently be connected to the Amoco pipeline and producing into that pipeline?

A I don't know that. I would presume that was possibly the case but I don't know that for sure.

Q O.K. You've had a copy of EL-Oil's contract with Amoco available...

A I understand that that quarter section is in EL-Oil's-- Amoco's contract. I'm well aware of that.

Q All right. And Dominex, as a matter of fact, had taken top leases on Mr. Ellison's acreage in Section 18, had they not?

A No top leases were taken on leases that EL-Oil took.

Q How about the Amoco leases that Amoco, that EL-Oil had a farmout on in Section 18? Did you all take top leases on that?

- A Yes, we did and it was offered to Amoco, who was the late lessee.
- Q So it was to your advantage at that time to keep EL-Oil from drilling the Flowers well, wasn't it?
- A What do you mean?
- Q It was to your advantage to keep EL-Oil from...
- A To make the top lease effective? The top lease was supposed to be effective, yes.
- Q But now that you can't sell it it hasn't turned out to be advantageous, has it?
- A We are gonna sell gas, Mr. Brooker.
- Q Did you prepare a letter or memorandum dated May 9, 1983, to concerned royalty/land owners on the Dominex stationery?
- A Is that in my package of materials?
- Q No, sir, I haven't see your package of materials.
- A You just gave it to me.
- Q Oh, that? No, I just got this today. Did you prepare that?
- A May I read it?
- Q Sure.

A No, I did not.

Q Do you know who did?

A No, I do not.

Q All right. Let me have it back. Has EL-Oil done anything that has prevented you from selling your gas?

A No, sir.

MR. BROOKER: That's all I have of this witness. I need my other witnesses to be sworn. I would ask that my Exhibit A be accepted into evidence.

CHMN. ADAMS: Your Exhibit A is admitted.

(Whereupon, Exhibit A was received in evidence)

MR. BROOKER: I'm gonna have three witnesses.

MR. CAREY: Starting on this end, would you state your name and address?

FIRST WITNESS: Paul Bercegeay, Lafayette, Louisiana.

SECOND WITNESS: Francis Raffalovich, Lafayette, Louisiana.

THIRD WITNESS: Guy Ellison, Lafayette, Louisiana.

(Witnesses were sworn by Mr. Carey)

MR. MASINGILL: Mr. Brooker, would you have your first

witness spell his name?

MR. BROOKER: You may need them all spell it.

FIRST WITNESS: Bercegeay. It's B-e-r-c-e-g-e-a-y. It's an Irish name.

(Laughter from audience)

MR. BROOKER: Did you get the second gentleman's name?

SECOND WITNESS: My name is Raffalovich. R-a-f-f-a-l-o-v-i-c-h. It's also Irish.

MR. BROOKER: Here are some additional copies of our exhibits. I have already handed one copy of the package that has been appropriately signed and numbered to Mr. Carey, which we will ask be marked and at the conclusion we will be asking that it be marked into evidence.

FRANCIS RAFFALOVICH

Appearing as a witness on behalf of EL-Oil, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Brooker:

Q Mr. Raffalovich, if you could, pull for me your Exhibit No. 1 and explain for me what it portrays.

A Exhibit 1 is the map, the only map that is in this packet, and it portrays the outline of the reservoirs as I interpret them at Pleasant View Field.

MR. BROOKER: O.K. Before we get into that, I guess I'd better qualify him.

MR. CAREY: Mr. Brooker, let me ask you something. Have these exhibits been prefiled before today?

MR. BROOKER: No.

MR. CAREY: O.K.

MR. BROOKER: There wasn't anything we could do about it. I wrote you a letter and told you there was no way I could get them up here a week before this hearing, and I filed with you that correspondence, which is all that we had, and we've done the best we could. Mr. Raffalovich, if you would, first give me some background of your education and prior experience in the oil business.

MR. RAFFALOVICH: I received my degree in geological engineering from the University of Oklahoma in 1950. I have approximately 32 years in the petroleum industry, chiefly as

a geophysicist but also as a geologist and general explorationist.

MR. BROOKER: All right, and what companies have you worked for?

MR. RAFFALOVICH: I've worked for two contract geophysical companies, Standard Oil Company of California, Sinclair Oil Company, and Atlantic Ritchfield Corporation.

MR. BROOKER: All right. And I would ask that he be qualified by this Board as an expert in geophysics and geology and we will be happy to submit a statement, a sworn statement of qualifications, at the conclusion of the hearing.

CHMN. ADAMS: The witness is recognized as an expert.

MR. BROOKER: Thank you.

Q All right, now if you'll look at your Exhibit 1.

MR. LAMOREAUX: Mr. Chairman, is it possible to have a copy of the exhibit?

(Exhibit given to Mr. LaMoreaux)

DR. MANCINI: Mr. Brooker, are these numbered in some fashion?

MR. BROOKER: Not all of them are.

DR. MANCINI: Where are the...

MR. BROOKER: You've got to remember these just, we just got these put together. The original set for Mr. Carey is numbered. He will identify each exhibit and tell you what it is so that you will be able to find it. They are all identifiable very easily.

Q Your Exhibit 1 is the map, is it not?

A Yes, that's correct.

Q And did you prepare this...

DR. MANCINI: Mr. Brooker, is there only one map? Or what...

MR. RAFFALOVICH: There is only one map, yes, Ernie.

MR. BROOKER: There is only one map.

DR. MANCINI: Thank you. Excuse me, Mr. Brooker, but you know we have a pile of exhibits here and they just showed up about two seconds ago.

MR. BROOKER: I gave John one before lunch. And I apologize for not having them numbered.

Q All right, now was Exhibit No. 1 prepared by you?

A Yes, it was.

Q All right. And I note that there are some colored areas



on this map. Would you tell us what those are?

A Yes, those are my interpretation, based on the geophysics and the geology, of the separate reservoirs in the, what's called the Pleasant View Field.

Q All right. Now I note you've used four colors, purple, pink, green, and blue. What significance do those colors have with respect to your later exhibits?

A Each of those colors represents what I believe to be a separate reservoir and they are keyed to the colors that I have put on the seismic record sections and on the logs which are in the exhibit.

Q All right, now if you would, then pull line 1, which I believe is Exhibit No. 2, and it is shown H. H. & R. Enterprises, and if you would open that and please tell me what this is to begin with, and secondly, what the blue and green markings on this chart show?

A This is a seismic record section of what I would call relatively high resolution quality in the area of the map and this line is shown on the map.

Q All right. This is line 1 and it runs approximately...

A It's north-south and it runs through the green and the blue areas on the west side of the field up through Section 18, close to the middle of Section 18.

Q And I note on the exhibit you have drawn a green area and a blue area with a red line that intersects the blue. What is the red line?

A The red line is the location of the Dominex-Flowers Well 18-7 in Section 18.

Q And the blue is the...

A The blue is a, what's called in geophysics a bright spot, which is an indicator of gas at relatively shallow depth, and it is drawn in from the trace where I believe that bright spot or that gas sand begins to the south and goes up to approximately shot point 135, which is indicated there as 0135, and then there's dashed blue above that meaning that that is a possibility.

Q All right. Now I note on going the other way you've changed your colors from green to blue at approximately between 125 and 130. Will you tell me why you did that?

- A Yes, if you'll notice the bright spot that is colored in in the blue is one set of peaks and that set of peaks, the peaks are the black areas on these seismic traces. That set of peaks overlaps with a second set of peaks coming in slightly lower than that, and where those peaks start coming in that is where the second reservoir begins and that's where the green is colored, and there's, as I say, a slight overlap of about two, three traces between the blue and the green.
- Q All right, if we could now go to your next exhibit, which I believe is Exhibit 3.
- A Yes, Exhibit 3 is line No. 2.
- Q Now line 2, Exhibit 3, shows orange and green. Does that relate to the map, your Exhibit No. 1?
- A Yes, line 2 is an east-west line going through Sections 18 and 17 from the east to the west and goes close to the Dominex--I'm sorry--the EL-Oil No. 2 well in Section 18 and the EL-Oil No. 1 well in Section 17.
- Q All right, and what does this exhibit showing line 2,

what do you, what conclusions do you reach from that with respect to the extent of the reservoir in this area?

A Again, the reservoirs are I believe defined by the peaks which are called bright spots, and there are two sets of peaks, and again an overlap. One set color coded in, it was red and smeared out to pink, and the other set of peaks is color coded green.

Q All right. Now I note on this one that there's some, a break or no colors between the EL-Oil-Flowers well in Section 17 and the Morse well in Section 18. Can you give me an explanation for that?

A Yes, that's correct. The bright spot under the EL-Oil-Flowers No. 1 in Section 17 ends at approximately shot point 0165 and there's a gap in the bright spot. There is no bright spot from there to approximately shot point 157, 157½.

Q Would this be, would this indicate a porous reservoir or...

A That's an interpretive thing. The character on the electric logs between the two EL-Oil wells, the Morse and the Flowers, were very similar in nature, and because of their similarity

I chose to interpret these two reservoirs as being one and the same. However, there is definitely a seismic interruption and it could be two separate reservoirs.

Q But you have chosen to draw them as one today?

A Yes, correct.

Q All right. If we could go now to your next exhibit. I believe it's line 4, is it not?

A Yes, that's line 4.

Q That would be line 4. All right. If you could, relate line 4 for me to your Exhibit 1.

A Line 4 on the map goes through very close to the middle of Section 18, a little north of the middle of Section 18 and on over into Section 17, and the No. 18 on this map is above the middle and that line 4 goes very close to the No. 18 in Section 18. It goes essentially through the Dominex well in Section 18.

Q All right, and what does this exhibit show to you, sir?

A This exhibit indicates to me that there is a reservoir in Section 18 on this line between approximately shot point 0120 and 0146 or 0145½, and that it is, based on the con-

tinuity from one line to another or a separate reservoir from the other colored reservoirs.

Q If we could look now at your next exhibit.

A The next exhibit is line 6. The No. 6 is not readily visible but it's the only seismic line without a number. It's Exhibit 5.

Q Exhibit 5 in Mr. Carey's book. It looks like this.

A It has single...

Q The last one in your book. All right, what does this line show you?

A This line, line 6 is a north-south line, a slightly northwest-southeast line, and it goes up through EL-Oil No. 1 well in Section 17 and down very close to and almost on the Dominex well in Section 20, and it indicates two separate reservoirs with an interruption between them or break, one reservoir being under the EL-Oil well, a break with what we call three dead traces, and then a second reservoir under the Dominex-Moye well in Section 20. The first one is colored again pinkish and the Dominex reservoir is colored purple.

- Q All right, and if--if I understand this map or this exhibit correctly, if EL-Oil--excuse me--if Dominex had drilled a well at a regular location in say the Moye well, had moved it to 1320 from the lease lines, would that well have been productive?
- A No, it would not have been productive.
- Q All right, and that's based upon the seismic data?
- A That's correct.
- Q Now have you, let's go on to your next exhibits, which I believe are the logs from the four wells in the field. Have you reviewed these logs?
- A Yes, I have.
- Q All right. Have you also color coded these logs so that they correlate with your Exhibit 1?
- A Yes, Exhibit 1 and the four seismic record section exhibits also.
- Q All right. Now, if you would, sir, tell me what these exhibits, and I believe they're numbered...
- A They're numbered, one set, 6, 7, 8, and 9.

Q All right. Exhibits 6, 7, 8, and 9, will you tell me what these logs show you insofar as it relates to the separate pools in this area?

A These logs are, first, the one-inch are small scale logs. They have only--what I've done is fold the heading over so that we only have the part of the log pertinent to this particular situation today. They show me the approximate thickness of the reservoir and by that proximity of the wells to the seismic lines I was able to correlate those reservoirs to the bright spots on the seismic lines and relate those reservoirs to these logs.

Q All right. And does the characteristics of the sands as shown in these logs mean anything to you in determining whether we have separate reservoirs or all one reservoir in this field?

A Yes, they do.

Q Can you tell me in what manner?

A I think, to answer that question, if I may, with a partner I have studied the entire trend from the



Florida-Alabama border to well into the State of Mississippi, over to the edge of Hancock County, and our effort was to determine the different types of reservoirs because we noted right off that some of these Miocene gas fields were excellent and some were very poor and we wanted to be able to tell ahead of time before drilling which were good and which were indifferent to poor, and in the study of these we determined that one type of sand was far superior to others and that that type of sand is to be found at the Foley Field, and that is a bar sand. These sands are channel sands, and channel sands are notably very short, interrupted, they have very little lateral extent, and the reserves in channel sands tend to be much smaller than they do in bar sands.

Q And does that show up on these charts...

A Yes.

Q These differences between wells with respect to the sand characteristics?

A The sand characteristics in these wells all indicate

channel sands to me but the quality of those sands, I would say definitely that the quality of the sands in the two EL-Oil wells are superior to the quality of the sands and different from the quality of the sands in the two Dominex wells and that the two EL-Oil wells could be the same sand but probably are not, and definitely that the two Dominex wells are separate sands with different characteristics, separate from each other. You can see that the one Dominex well has a very thick sand. I can't remember how many feet we gave it. I don't think I listed. The productive zone is 12 feet but the sand thickness is many more feet in the Dominex well in Section 20, whereas it's very thin, and a thin stringer of sand, in the Dominex well in Section 18.

Q All right. In your opinion, do these differences as noted on these logs furnish evidence for your drawing separate reservoirs in this area?

A Yes, they do.

Q Now have you reviewed the pressure history with respect to these wells?

A I have but I am not a petroleum engineer.

Q All right. And have you picked the water levels in these wells?

A Yes.

Q All right. And are the water levels different in these four wells as when you calculate them down to subsea?

A Yes.

Q And what does that indicate to you from a geological point of view?

A The probability of separate reservoirs.

Q If this was all one nice pool, you would expect the water levels to be about the same, would you not?

A Yes, that's correct.

Q And you have found significant variations in the water levels in these wells?

A Yes.

MR. BROOKER: I believe that's all I have of this witness.

MR. LEE: Why don't we let him put on all his witnesses?

MR. BROOKER: We gonna do it that way?

MR. LEE: Yeah, just put on all your witnesses and then

he can cross-examine who he wants.

MR. BROOKER: All right. I call Mr. Bercegeay please. If you would, please, sir, give us a little bit of your background and experience please.

MR. BERCEGEAY: I have not previously testified before the Board in Alabama but I have in Louisiana. I hold degrees in chemical and petroleum engineering, the University of Oklahoma, and worked on my Ph.D. at Texas University. I was a professor and head of the Petroleum Engineering Department at USL in Lafayette for some 25 years. I right recently retired in '73 and I've been a consulting reservoir engineer and petroleum engineer for the last 25 years.

MR. BROOKER: We would ask that he be qualified as an expert petroleum engineer.

CHMN. ADAMS: The witness is recognized as an expert.

MR. BROOKER: Thank you.

PAUL BERCEGEAY

Appearing as a witness on behalf of EL-Oil, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Brooker:

- Q Have you reviewed the exhibits prepared by Mr. Hanby and used by Dominex in connection with their testimony?
- A I only saw them today and reviewed them this morning.
- Q All right, sir.
- A I would appreciate having a copy of them so I could refresh my memory while I'm talking about them.
- Q Would you look at his exhibits and tell me if in your opinion this exhibit more justifies a finding of separate reservoirs than a finding of separate(sic) reservoirs, and if so tell me why.
- A May I comment on the exhibit?
- Q Yes.
- A After reviewing the exhibit in some detail, I find numerous glaring errors in the preparation of the exhibit, both in interpretation and also in construction.
- Q All right, and what are those, sir?
- A The first error is the preparation of the P/Z curve.
- Q And that's Exhibit 2?
- A That is Exhibit 2.

Q Can you tell me what error was done in connection with the preparation of Exhibit 2?

A Well, the conclusion of the exhibit had to be assumed before the exhibit could be prepared. In other words, the data was forced to fit the conclusion because when we, and I've taught this for 25 years to students and they should remember it, you cannot, a projection of a curve of this type is to establish a trend. You determine the trend by reviewing or plotting the past history of a performance and with the past history setting the character of the line you then are allowed technically, in engineering procedures, to extrapolate that trend into the future, assuming that it's going to behave in the future as it did in the past. Now in no way is an engineer or anyone else allowed to construct a straight line or any kind of line with only two points. The fact of the matter is with three points you can even draw an arch through it that could resemble a circle rather than a straight line. It is absolutely mandatory that we have at least four points

to establish the trend of a curve before we are allowed to extrapolate it, and this one has only two points. Now, to the points. The points themselves are in question for the simple reason that the points rely on, as I understand it, tubing pressure of producing wells, and the tubing pressures were not measured with a dead weight instrument, but were simply recorded off of the gauge on the Christmas tree.

Q Have you had any experience with the gauges on Christmas trees in general and with specificity to the Otis Engineering wells?

A Yes. For a minimum of 10 years I was a consultant for Otis Engineering and I did all of their pressure work in Lafayette and the South Louisiana district, both the calibration of the instruments and interpretation of all of the pressures run on every well in the State of Louisiana in that district.

Q All right. Is the gauge on a Christmas tree accurate enough, in your opinion, to be used in the manner in which

82

it was used in the preparation of this exhibit?

A In my opinion and in my experience, the gauge on a Christmas tree is only useful for plugging the hole in which it's screwed. It is absolutely worthless as a measurement of pressure, and in all my years of checking Christmas tree gauges against dead weight gauges, which are the master, I've probably never found more than a handful of Christmas tree gauges that were even approaching the true accurate reading, so a Christmas tree gauge is just a ready reference for the pumper to gauge what is going on with a well maybe from day to day in a relative sense and it certainly cannot be used as an absolute pressure measurement of the tubing pressure much less the reservoir pressure.

Q All right, and would it be fair to say that the comparison, even using calculations to try and account for the distance between the top of the well and the bottom of the hole in the manner in which it has been done here, would not justify the Board finding or making a finding of fact that



there is drainage that occurs from one particular well to another?

A Well, I'm not sure what the Board can justify but I can only speak about the pressures, and I say that, first of all, that the witness assumed that if you drill a well to a particular depth and you find a reservoir then that reservoir has got to have the same pressure as another reservoir drilled to that same depth. This is ridiculous. This is not true. Every reservoir has its own unique particular pressure, and just because they have to be close together doesn't mean they have to have the same pressure. Now I'm not saying they don't have the same pressure really, but that doesn't mean they have to have the same pressure. Now as to the tubing pressure reflecting the reservoir pressure, well, this is a very risky proposition because unless you know what the gradient is in the bore hole, you don't know what to use to extrapolate and calculate from the tubing down to the reservoir, and if they happen, as when you shut in a well it may be flowing

with hydrocarbons in the gas phase and the hydrocarbons are commingled and it looks like a gas well, but when you shut it in there's a possibility that a liquid level could form in a well, not necessarily water. It could be an oil liquid level, which would suppress the tubing pressure over what it should be if it was truly dry gas. So the pressures, when we do reservoir engineering work, we never use tubing pressures. We always use reservoir pressures.

Q And I note on one of these exhibits, I believe it's this Exhibit 1-A, that the J. E. Flowers well has reported pressure in February of '83 of 635 and I guess that's shut-in tubing pressure, and in May of '83 it's 724 psia, which is measured bottom hole pressure. Can you relate anything that has to do with drainage or the same reservoir to using those numbers in that manner?

A No, I cannot. First of all, let me say that in my opinion these wells are completed in different reservoirs.

Q All right. What's the basis for that opinion.

A Well, it's the water level difference, and the water level

85

may, the elevations on the kelly bushing may not be precise because I don't know whether the surveyor surveyed these elevations or whether they were found in some other manner. However, Mr. Ellison tells me that both of his wells were drilled with the same rig and that rig has a kelly bushing which doesn't change in elevation, and therefore, you can make a good comparison of these two logs without any doubt, and here the water levels are entirely different in two wells drilled with the same rig where the kelly bushing should be almost exactly the same. So, therefore, you look at the other wells, the water levels are so drastically different between wells in the field, the four wells in the field, that you couldn't allocate that to simply a difference in ground elevation because I understand it's pretty flat out there in the field. And each one of these reservoirs could have a different original pressure, but they could and I think that they are connected in an aquifer.

Q All right, and by connection in the aquifer, you mean connection in the water that is below the producing zone?

86

A Below the gas-oil contact may be connected in the water table. And this is a common experience.

Q All right, and if that occurs, you will see a reduction in pressure in a shut-in well, but that reduction in pressure occurs through the water, is that correct?

A But Mr. Brooker, we haven't seen a reduction, established a reduction in pressure you see.

Q Assuming that we have one. Assuming that their Exhibit 1-A shows that there has been a reduction in pressure in their well. Assume that.

A Well, I can't even assume that, Mr. Brooker, because it doesn't show that. You see, he's trying to take a well, let's say the Flowers well, and say it had a pressure at one time and then some other well in another reservoir had a different pressure at a different time, and therefore, the first well caused the pressure to go down in the second well. Well, this is not true because the only way he can say for sure that the pressure has gone down in Dominex's two wells is if they measure the pressure at Dominex's two

wells with a bottom hole pressure instrument that has been calibrated and then at a later date, maybe six months later, come back in the same two wells and measure it with another calibrated instrument, the reservoir pressure, and then if the pressure in the wells in question have gone down, then you have drainage. Otherwise, you do not have any drainage, any basis for allocating drainage.

Q Do you see any evidence of the material--have you reviewed the material that we have presented?

A Yes, I have.

Q All right. Do you see any evidence, based upon your experience, that has been presented that there is any indication that there is drainage occurring between these wells at the present time in the Pleasant View Field?

A No, I do not see any evidence that there is drainage. The only possibility that exists, as I said, is if there is a common aquifer and if you have one accumulation over here and another accumulation here, and they're setting on top of the same aquifer, and it's, of course, an old adage,

you'd have to be a reservoir engineer, that water will seek its level, and it will have one level in one reservoir depending upon the pressure above and below the aquifer contact, in the gas, and the other one the same way. Now if you withdraw out of this one, then the water will move into that one, and where will it come from? It will go down in the other one. It's like a U tube. So the gas could exhibit a drop in pressure in the second reservoir with production from the first, but it was due to the aquifer moving and not of gas coming from one to the other because the gas is not in contact, and that could cause a reduction in pressure but that would only be because the gas expanded in that reservoir. Not necessarily left it.

Q And do you feel that that is as probable the cause of any pressure reduction in this field as drainage?

A Well, I would say both theses are probable. I would say that. Because of the water level difference being so great in all the wells.

Q And ...

A I might point out another thing that caught my eye while I

was reviewing the data. The two wells circled in red on the Exhibit 1 of Dominex's exhibits, Exhibit A, are the two EL-Oil wells, and the well to the northwest in Section 18, the J. E. Flowers well, is the, a Dominex well. Now the two EL-Oil wells are supposed to be draining the two Dominex quarter sections, and you can look at the map and see that the two EL-Oil wells are by far closer to the J. E. Flowers well than they are to the Moye well to the south, yet the Moye well exhibits, according to their data, the lower pressure due to drainage, and if drainage would be occurring the other well should exhibit the lower pressure.

Q The EL-Oil well should have a lower pressure?

A No, I'm saying the wrong Dominex well is going down in pressure if drainage is occurring, and I'm not saying that it is.

MR. BROOKER: That's all I have of this witness. I next call Mr. Ellison. Mr. Ellison, have you testified before this Board before?

MR. ELLISON: I have.

70

GUY ELLISON

Appearing as a witness on behalf of EL-Oil, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Brooker:

Q And EL-Oil discovered the Pleasant View Field, did they not?

A That's correct.

Q And can you tell me what you did to get a market for your gas in this field?

A Well, initially we drilled the two wells and established production. We, Amoco had some wells down to the south and they were gonna lay a pipeline, which would have been very nice for us, but as luck would have it something didn't work out. We had to end up laying our own pipeline and securing our own contract with Amoco.

Q All right, and did EL-Oil actually lay a pipeline from the Amoco facility down to the two wells that you produce in this field?

A Yes, sir, we laid 20,000 feet of 4½-inch line.



Q O.K. And did you propose to Dominex that a joint well be drilled in Section 18?

A I did.

Q Did they agree with you and join with you?

A We couldn't come to any working arrangement.

Q Did you attempt to force pool that unit and drill it yourself?

A Yes, I did.

Q Did Dominex oppose you on that?

A They did.

Q And as a result of their opposition did you lose some leases in there, or lease rights?

A Yes, we lost some farm-out rights.

Q And if you had drilled that well as opposed to Dominex drilling that well, under your contract with Amoco would that well, the one that they subsequently drilled in Section 18, would it be connected to the Amoco facility now?

A Yes, it would.

Q All right. Through your pipeline?

A That is correct.

Q And it would be selling gas wouldn't it?

A That's correct.

Q And it would have been able to sell gas since it was completed?

A That's absolutely correct.

Q And that's the J. E. Flowers 18-7 well, is it not?

A That's right.

Q And because they drilled the well they couldn't get a contract with Amoco, is that correct?

A That's correct.

Q If you drilled it you had a contract?

A We had a contractual area of 1400 acres which encompassed the J. E. Flowers drilling unit.

Q Now Mr. Ellison, you are an operator in the oil and gas business in this field?

A That's correct.

Q You also operate in Louisiana do you not?

A That's correct.

Q Now you have followed Dominex's efforts to obtain a market

for their gas, have you not?

A Yes, I have.

Q When they have called on us?

A Right.

Q In your opinion, based upon your opinion as an operator, has Dominex been afforded a reasonable opportunity to acquire a decent economic market for their gas from the Pleasant View Field?

A Yes, I firmly believe that. We've bent over backwards to help them secure a market in there. Given them the opportunity to do so.

Q All right. Do you know of anything that EL-Oil has done that has prevented in any way Dominex securing a market for their gas?

A No, I do not.

Q Now, if the Board were to reduce the allowables for your wells in the Pleasant View Field to 175 MCF of gas a day, in your opinion, would that affect your ability to market your gas to Amoco?

A I don't think it would affect marketing the gas. It would pose an economic waste I believe.

Q In what manner would it pose an economic waste?

A Well, we were well within the guidelines of the field rules set up to establish allowables in there and we're maintaining them and we're producing the wells in a prudent manner.

Q O.K. Are you aware of any physical waste that has occurred as a result of your production in this field?

A No, I'm not.

Q And if your wells were cut to 175 a day, it would take a lot longer to produce these wells, would it not?

A That's correct.

Q And the waste would be not only, would be the loss of the time value of money, would it not?

A Very correct.

Q Now did Bay City Minerals put a pipeline in that parallels your pipeline?

A They have.

Q And based upon your knowledge, is that line a public utility?

A Yes, it is.

Q And that line comes right through the Pleasant View Field, does it not?

A That is correct.

Q And do you know where the other end of that line is connected?

A It goes to Oyster Bay Field.

Q And where does it go from there? To the Amoco facility?

A To the Amoco facility.

Q All right, and do you know of any prohibition that would prohibit Dominex from using the facilities of Bay City to move their gas?

A No, and in fact, I stand to be corrected, but I think they put some taps in that line in hopes of transporting their gas.

Q But they're not going through that line?

A No, they're not.

MR. BROOKER: That's all I have of this witness.

MR. LEE: Is that all your witnesses, Mr. Brooker?

MR. BROOKER: Yes.

MR. WATSON: Mr. Chairman, I'm gonna call my two witnesses back and offer rebuttal testimony to this rather than cross these witnesses if that's permissible at this time.

MR. BROOKER: Assuming I have the right to cross-examine them one more time.

KEN HANBY

REDIRECT

Questions by Mr. Watson:

Q Mr. Hanby, you've heard the petroleum engineer's testimony here concerning your P/Z curve?

A Yes, sir.

Q Let's take that P/Z curve and some of the glaring errors that the engineer pointed out, and I'm going to, recalling his testimony, I'm gonna give you an opportunity to come back now and give the Board and EL-Oil the information that you had to make this curve and explain some of these points that EL-Oil's engineer has raised.

A O.K. Basically, there was no bottom hole pressure information taken on the two wells operated by EL-Oil even

though the field rules require an annual bottom hole pressure survey. The pressure that was reported was reported on Form OGB-9, the 730 psig and 740 pounds psig, reported on the form for a first production test, and normally when someone runs a production test they have more than a Christmas tree gauge to measure their pressures with.

Q Let me stop you now. The inference made was that you just went out and took an old possibly reliable, mostly unreliable Christmas tree gauge and used these pressures, and you're saying that you took a sworn statement filed by the operator, EL-Oil, and the pressure information on that and that's the information you used in this curve?

A That is correct.

Q Go ahead.

A Furthermore, as far as relating surface shut-in pressures to bottom hole pressures, I agree that if you have fluids in the tubing or a possibility of fluids in the tubing your surface tubing pressure that you then extrapolate to

98

a bottom hole pressure are subject to error. That is the main reason that we ran the bottom hole pressure on the two Dominex wells. Any dry gas reservoir, and we have no indication in any of these Miocene sands that we're having any liquid hydrocarbons being produced, and with no indication initially of any water, then to take the surface shut-in tubing pressure and use a gas gradient, which in a dry gas reservoir will be constant as you move down the tubing, doesn't give you an absolute bottom hole pressure I acknowledge, and I don't argue with that. But within the realm of 770, 760 versus pressure just over 700 pounds there is a significant difference. The 635 psig that was mentioned, which was the initial shut-in tubing pressures on the Michael Moye and the J. E. Flowers well were not used. We used the bottom hole pressure surveys as our final data to assume or to determine that pressure depletion had occurred. True, a P/Z curve with four points, or five points, or ten points, absolutely the best P/Z curve is one that's developed after the field is totally depleted



and you have all of the data, but when you have two pieces of data then you have to use that to the best of your ability, and I recognized that this curve was not absolute and what I had was not absolute. I used a conservative approach, and I think if you'll look at the state records you'll notice that the pressure that was used for the second point, this was the November pressure which was reported on the OGB-22's of the 665 and 620, those pressures were measured at the first of November. The cumulative production that I used was the cumulative production through the month of November. In other words, I, for that pressure drop, used a greater production which gives you a higher ultimate P/Z than had I actually used the first of November production data. Therefore, I feel like this P/Z curve, if anything, is optimistic. In regard to the discussions on the reservoirs, as I said under direct testimony, there was some question as to the possibility with the water levels. I disagree that there is more than a possible two different water

levels. The water level on the Wilson Morse, which is operated by EL-Oil, is -1673. The water level on the J. E. Flowers, which is operated by Dominex, is -1673. Those two wells are in what I consider to be, if anything, the western lobe if there are separate reservoirs. Those water levels are identical. In regard to the other water levels, on the Michael Moye we have a good elevation. It was surveyed in. Ground elevation was surveyed, not read off of topo. The water level is -1701.

MR. BROOKER: Which one was that, Ken?

A Michael Moye.

MR. BROOKER: Minus 1701?

A Minus 1701. On the E. P. Flowers I calculated a water level of minus something. This well has no K.B. listed on it. If I used the same K.B. that was used on the other well, I get a water level of -1687. If you remember in my direct testimony there was a 40-foot discrepancy between the driller's T.D. and Schlumberger's T.D. That is not totally uncommon in a deep well or in any well for

101

the logger to get a little shallower depth than the driller because of fill-up. But there was also a 40-foot discrepancy between what the logger said was the casing, surface casing, and what the driller said was the surface casing. So there is something wrong in the measurements that are reported on the E. P. Flowers. Remembering that a joint of drill pipe is approximately 30 feet, that could account for 30 of those feet and if there was a 10-foot error then somewhere in measurements, that would put the top of the E. P. Flowers at -1697 or within four feet of the water level on the Michael Moye, and now we're getting down to the closeness of water levels that easily could result from reading elevations off of a topo map, particularly an elevation map that's drawn in meters rather than in feet.

MR. BROOKER: Excuse me, Mr. Hanby, since you're making a statement, who read off of a topo map? Are you saying EL-Oil read off of a topo map?

A If you'll look on the plats that were filed by EL-Oil Ltd.,

they were drawn by an engineer surveyor and if you'll notice the elevation, he's got a plus or minus. When a surveyor...

MR. BROOKER: Excuse me, what plats do you have reference to?

A These are the plats that were submitted to the Board when the permits were issued.

MR. BROOKER: Well, have you brought those with you to shown them as an exhibit?

A They're in the files of the Oil and Gas Board. I do not have copies of the plats but the plats...

MR. BROOKER: Well, Mr. Chairman, I'd move to strike all his statements. They're based on hearsay and I don't know what relevance its got to do. He wants to get into talking about whether we're reading topo maps or not. I don't see where it's relevant but he seems to be making a point that somehow we're not doing something we're supposed to be doing.

CHMN. ADAMS: The rules of evidence for an administrative board are not as strict as they are for a court so we will let it in.

MR. WATSON: You've seen the plats haven't you, Mr. Hanby, at the Board?

A Yes, sir.

Q Go ahead.

A The plats do show elevation plus or minus, which is a surveyor's method of reporting elevation when he's read it off a topo map. If he surveyed the elevation in he would have put the elevation to the hundredth of a foot.

MR. BROOKER: Are you also a surveyor, Mr. Hanby?

A No, sir, I am not a licensed surveyor but I am aware of their procedures.

MR. BROOKER: All of them?

A I have surveyed in wells, yes, sir, in the State of Alabama. And what is required by the Professional Surveyors Licensing Board on surveying.

Q Now, let's come to the Special Field Rules that were proposed by EL-Oil to this Board for the operation of the field and particularly calling attention to Rule 9, Reservoir Pressure Surveys, and you're saying to the Board that the

pressure information that you have is based on the sworn statement submitted by EL-Oil, but you've also stated that the bottom hole pressure, or the reservoir pressure surveys that are required by the Special Field Rules proposed to this Board by EL-Oil have not been complied with?

A Yes, sir, that requires that bottom hole pressures be conducted during the months of June 1 and August 31 of each year.

Q Let me ask you this, Mr. Hanby. In the order setting up the Special Field Rules proposed by EL-Oil, is the area outlined in your Exhibit A the area for the Special Field Rules as proposed by EL-Oil?

A Yes, sir, it is. It's outlined in yellow.

Q That conforms to Board Order 82-57 establishing the Pleasant View Field, correct?

A Yes, sir, that is correct.

Q And the Amos Sand Gas Pool is defined in those Special Field Rules is it not?

A Yes, sir.

Q Any mentioning in that, in those Special Field Rules, about separate pools or reservoir?

A No, sir, there's not.

Q And was it a fact that both the EL-Oil wells were drilled and completed prior to the promulgation of this order establishing Special Field Rules?

A Yes, sir, that is correct.

Q Both of the EL-Oil wells, and what about the water levels in those two wells? The two EL-Oil wells?

A As I testified to earlier, the E. P. Flowers is the one in question. However, minus 1687 is the water level in that well if you take the K.B. and assume it's the same as it was in the other well they drilled, and in the Wilson Morse it's -1673 and logs of those two wells were filed with the original field rules hearing.

Q All right, Mr. Hanby. Mr. Edwin, you have knowledge of, your question concerning the opportunity Dominex had to participate in the drilling of the Section 18 well. Would you tell this Board why Dominex refused to agree to that,

at least one of the reasons why?

JAMES EDWIN

REDIRECT

Questions by Mr. Watson:

A The major reason was that the AFE, the authority for expenditure of drilling a well, quoted a drilling and completing price of \$273,000, approximately. Our drilling and completing cost for a well is \$150,000, and we felt the difference of \$123,000 was rather large to spend.

Q So you did not then agree to participate with EL-Oil in the drilling of that well on those grounds?

A That's correct.

MR. WATSON: All right, sir. I have nothing further at this time, Mr. Chairman.

RECROSS-EXAMINATION

Questions by Mr. Brooker:

Q Mr. Edwin?

A Yes.

Q You could have gotten in there on dry hole cost for \$60,000 couldn't you? On that 18 well.



A I'd have to take a look at the AFE. I just know what the drilling and completing cost was.

Q O.K. And there was a subsequent offer made by Mr. Ellison with respect to that well after the \$260,000 AFE, wasn't it?

A Sure, but it was still quite a bit more than \$150,000 and it was the stroke of the pen...

Q Well, let me ask you this, does it cost the same thing to drill and complete every well in the world?

A You're absolutely correct, but the difference of almost 200 percent is quite a bit. Normally, it's less than 10 percent.

Q And what did it cost you all to drill the well?

A Which well?

Q The well in 18.

A Less than \$150,000.

Q Complete it?

A Correct.

Q Now I want to ask Mr. Hanby a couple of questions. Mr.

KEN HANBY  
RECROSS-EXAMINATION

Hanby, you said, I believe, on your rebuttal, that you knew that these pressure figures that you used didn't have any real degree of absolute accuracy. You weren't sure about the water levels. You're still not sure about the water levels, whether they're accurate or they're not, and yet based upon your pressure data you want to cut, you want the Board to cut EL-Oil's well back from over a million a day to 1.7--to 175 a day, based on that data. Do you think that's supportive, that your data is supportive of a reduction of that extent?

- A Your quote of comments are not exact. I think the record will reflect exactly what I said about the data and my interpretations on the pressures and water levels. In my opinion, our data does indicate that this is a very limited reservoir and that due to the large difference between the contract quantity that can be produced by the two Dominex wells and the two EL-Oil wells, that a reduction in the allowable is necessary, absolutely necessary, to provide Dominex an opportunity to recover its just and equitable

share of the hydrocarbons that are in this reservoir.

Q At the expense of EL-Oil's production, correct?

A No, sir, I do not, in my opinion, we will not be reducing EL-Oil's share of the hydrocarbons in this reservoir but only being allowed to capture the hydrocarbons that are Dominex's share and Dominex's royalty owners' share.

Q Then I take it that you are totally disregarding any evidence of there being a separate reservoir in this field by making that statement?

A No, sir, I'm not. As I testified, if there are separate water levels, if there is a difference, we've got two reservoirs. There is one EL-Oil well and one Dominex well in each reservoir.

Q All right, could there not be more than that, Mr. Hanby?  
More than two?

A After reviewing the pressure data, I have no reason to believe that there are other than two, and I think the water levels that I have interpreted support that.

Q All right, and now let me ask you something just so I can

get these numbers down real quick. What did you say the water level was in the J. E. Flowers according to your information?

A I calculate -1673.

Q 1673. All right. In the Moye, what do you get?

A -1701.

Q And is the J. E. Flowers and the Moye in one possible pool?

A If those water levels are accurate, these would be the different water levels that are possible in this field.

Q O.K. All right, so the J. E. Flowers would be in one and the Moye would be in another?

A And the Wilson Morse would be with the J. E. Flowers and the E. P. Flowers would be with the Michael Moye, as I testified to on direct on that.

Q All right, now, what's your water level in the Morse?

A -1673, identical to the J. E. Flowers.

Q And you got 1673 for the Flowers, for the J. E. Flowers as well?

A Yes, sir.

MR. BROOKER: O.K. All right. I don't have anything more of this witness.

MR. WATSON: That's all of my rebuttal.

CHMN. ADAMS: Is that all for you?

MR. BROOKER: I would, if I might, for completion of the record, I didn't know we were going to get into actual numbers, but I would like to put on one of my witnesses to testify as what his interpretation of the water levels are in these four wells.

CHMN. ADAMS: Go ahead.

PAUL BERCEGEAY

REDIRECT

Questions by Mr. Brooker:

Q If you could, have you looked at the logs and the elevations as shown on the logs, have you talked with Mr. Ellison about the possible discrepancy with respect to the elevation of the derrick floor in the Flowers well, and if so, could you tell me have you calculated the water levels in all four of these wells?

A Well, Mr. Ellison told me that the locations were surveyed in and the elevations surveyed in, so I had to assume that the ones that he gave me were correct. From those elevations and from the elevations that I got off the logs for the Dominex wells, I calculated a water level of 1681 for the Moye, for the Morse well I calculated a water level of 1658, and for the Flowers well a water level of 1687, and let me see, which one did I leave out?

Q The other Flowers.

A Oh. The J. E. Flowers, 1661. So we have no way of knowing whether the water, the reservoirs are water driven reservoirs or depletion drive reservoirs. If they are water drive reservoirs, the P/Z plot is absolutely no good, because you can't use a P/Z plot on a water drive reservoir. If they are volumetric reservoirs, then the P/Z plot is applicable if it's accurately done, you know, with, you've got to have like pressures in like wells.

MR. BROOKER: That's all I have.

MR. WATSON: One question of this witness.

CROSS-EXAMINATION

Questions by Mr. Watson:

- Q Sir, I tried to stay away from asking you a question just because I was not that familiar with your testimony having, and the exhibits that you might present, but your answer to that question compels me to ask you that the information in determining your water levels, if I understood you correctly, was based on what Mr. Ellison told you and you had assumed that these were surveyed in locations?
- A That is correct. I assumed that the location of the elevation on the logs were reasonably accurate due to a survey.
- Q In teaching your students petroleum engineering, Professor, do you tell them to rely on what somebody tells them or to have information based on hard concrete investigations of subjects before they testify?
- A Well, I would prefer to have been there and observed the surveyor do it.
- MR. WATSON: Thank you very much.

A     However, I was not there and I did not observe the surveyor do it, so therefore, I have to rely on the written record.

MR. WATSON: That's all I have, sir.

CHMN. ADAMS: Is there anything else from anybody else?

MR. WATSON: I don't think anything else at the table, Mr. Chairman, but I do think that there are some people here who would like to comment pro and con, possibly, on this.

CHMN. ADAMS: Go ahead.

MR. LAMOREAUX: Mr. Chairman, my name is Philip LaMoreaux. I guess with a name like that and as long I can perhaps qualify with these other expert witnesses here. I'm a consulting geologist in Tuscaloosa and President of P. E. LaMoreaux and Associates. I appreciate the admonishment of the Chairman of the Board for making a statement brief and I am going to make a brief statement. Since my time with the Board the agenda has gotten exceedingly longer and I notice the seats have not gotten any softer so I can appreciate the long hearings that you are having these days. I'm here today though to represent another



group that's interested in this field as designated by the Board. I'm representing Mr. David Spivey of Foley, Alabama, along with his associate interests and landowners, some 56 of them, who have interests in approximately 77 net mineral acres in the unit that is designated by or as the Dominex-Moye 20-4 well. It's Oil and Gas Permit 3687. On behalf of these landowners who are experiencing probably their first success in an oil and gas venture, I would urge the Board to approve the Dominex petition for reduced allowables so as to protect the potential equity of these landowners, these local landowners, against further excessive drainage. Now let me explain why I'm recommending that. I have now had an opportunity to listen to expert witnesses on both sides, both Dominex and EL-Oil. I've seen enough of that data and heard enough testimony on the pressure on these wells and the geology as shown on the geophysical logs and the seismic profiles to indicate that the four wells could be, and very logically could be a part or in a common reservoir. The two producing wells, the Ernest Flowers and the Wilson Morse, are now and have been producing from this common reservoir. Further excessive drainage

116

without more data on this field and as the evidence portrays, there is a substantial amount of interpretation and difference of opinion as far as this data is concerned, to wit, the fact related to elevations and water levels, to indicate that some caution is desired on the part of the Board, and the allowables reduced and waiting until additional pressure data, additional information on the field can be obtained. These adjustments in allowables will allow time to develop an equitable solution as far as equitable production from this field. I can't help but conclude from this that two companies are presenting in part very controversial or different opinions with regard to pressures, water levels, elevations, economics. My clients represent a landowner group in the Moye unit area, and of course, they're terribly important, I mean terribly interested in the results that you take. If the allowables are not reduced to a more conservative level to protect the correlative rights in a gas reservoir, if in fact it is and proves to be one reservoir in the end, then the Board could find itself very well like the man that locked the barn after the horse was stolen and you're

not going to be able to make any remedial action because of the implied size of the reservoir according to testimony by Ken Hanby. Therefore, on behalf of the royalty owners, I would urge the Board to make a substantial adjustment in the allowables to prevent waste and to give each unit the opportunity to produce its just and equitable share of the gas in this pool. This takes a substantial amount of evaluation, soul searching on the part of the Board. I can appreciate the dilemma that you're in, but I would recommend in this case caution as far as this action and recommend the permitting of the Dominex, I mean approval of the Dominex proposal for reduced allowables. Thank you.

FROM AUDIENCE: My name is Ann Johnson. I live in Foley, Alabama, Rt. 3 Box 760. I stood before this Board in January. Mr. LaMoreaux, first of all, I'd like to thank you for that fine testimony or what you had to say for us. I believe, I want to say this before, I have something to present to Mr. Mancini, but I'd like to say something before I present this. I believe at this meeting I brought it out that Mr. Ellison had talked to Mr. Clifford James and said that he was gonna do everything in

118

his power to keep us from getting this well in 20 because he could get the gas out from under us and never have to pay us anything. To me this would represent that he's pulling out of our reservoir. Also, this petition is for Mr. Hal Vance, and I'm sure Mr. Ellison remembers him because he's also talked to him. He says now he is...

MR. BROOKER: Mr. Chairman, I hate to object to a statement being made by one of the owners down there, but unless this lady is gonna get up and testify under oath to what, the statements somebody has made, especially connected with my client, and I have the right to cross-examine her, I am going to urge the Chairman to not allow her to go into any alleged statements that some participant may have made at one time or another. That's just getting too far afield.

CHMN. ADAMS: Let me--this is an unsworn statement and so it doesn't have as much weight as a sworn statement, but I would caution the witness to limit your remarks to the issue at hand.

MRS. JOHNSON: What my point was that I was trying to get at is the way we had been led to believe that we are in the same

reservoir according to the statements that we had been told. This well of ours has been ready to produce since February. We've been losing money since February. I'm not saying Mr. Ellison is solely responsible for this because he probably-- I believe that he is doing everything legally. I don't know who's responsible that we're not receiving anything. I know that we have not had a sale for it, but now that we do, I would make my plea to the Board to please hear us and let us have a chance. We don't want anything that belongs to anyone else. All we want is what belongs to us and that's not asking too much I don't believe.

FROM AUDIENCE: My name is Charles Dyas and we have property illustrated on this exhibit that was presented by EL-Oil. I'm real concerned about the fact that originally a permit had been secured by EL-Oil to drill on our property in Section 30. It was not drilled. Instead the John Flowers well was drilled. Why it wasn't drilled, I'm not privileged to that information, but this definitely reflects that of the 305 acres that we have involved we have only a participation in the Morse well, which is a marginal type producer. I have

asked Mr. Ellison if there is a possibility that that well can be worked over and made a better producer. His comment to me was that he didn't intend to do anything until after this hearing, but I'm also aware of the fact that the Roy Amos field(sic) up in the Foley Field up there had a similar situation. He appeared before this Board and in a few days that well was reworked and was made a more viable well. I'd like very much to plead with the Board to do whatever is necessary to protect our interests from being drained because it's very evident of the fact that this John Flowers well, when it does go into production as seen here by this reservoir, we are going to be drained right next door, and early in the day I made a plea, the fact there's a possibility if the well is granted down here and the Calhoun will be drilled from below, and like I say, I'd like very much to do anything we could, ask the Board to do what they can to project and extend the life of that field til all the wells, the wells that can be drilled and made producers can be done, and I ask your cooperation in that.

DR. MANCINI: Are you supporting then Dominex's petition?

121

MR. DYAS: If the Board will include any future wells that might be drilled in their decision.

DR. MANCINI: Thank you.

MR. CAREY: Mr. Chairman, if there are no further comments from the audience, the Board has received quite a few letters in the last few weeks from landowners and interested parties pertaining to this petition. I'm not gonna read all the letters in their entirety today but I want to assure Dominex and EL-Oil and any interested parties that have written us all of your letters have been read and will be considered. We've got a May 23, 1983, letter from a Robert V. Glasgow. We've got a May 20, 1983, letter from E. P. Flowers, Wilson Morse, and J. E. Flowers. We've got a May....

MR. BROOKER: Could you tell us whether they're in support or in opposition?

MR. CAREY: The May 23, 1983, letter from Mr. Glasgow is in support of EL-Oil. The May 20, 1983, letter from Mr. E. P. Flowers, Mr. Wilson Morse, and Mr. J. E. Flowers in support of EL-Oil. I have a letter May 20, 1983, from Rose McCardell and Mildred McCardell in support of EL-Oil. We have a May 20, 1983,

letter from Mr. John Flowers in support of EL-Oil. We have a May 23, 1983, letter from Mr. Rolfe Maxon who is a senior geologist with American Petrofina Company of Texas in support of EL-Oil. We have a May 21, 1983, letter--I'm having trouble reading the names--it looks like Anna Dressnandt, which is in support of EL-Oil. May 19, 1983, letter from a Mr. Cyril L. Pate from Baton Rouge, Louisiana, in support of EL-Oil. A May 20, 1983, letter from Olympia Dyas and Charles Dyas. This letter doesn't specifically state pro or con.

MR. DYAS: It simply asks to protect our interests if the Board will.

MR. CAREY: Yes, sir. And if Mr. Brooker has no objection we're gonna admit into the record a petition here from landowners in Section 18 which was just given to Dr. Mancini, which basically says that they don't feel they're being treated fairly by the lessee. That was just handed to us. We have a May 21, 1983, letter from an Angela Osburn...

MR. BROOKER: In answer to your response--I mean to your question, John, I have no objection, since I think Dominex



operates the well in Section 18.

MR. CAREY: It says, "We landowners in Section 18 of the Pleasant View Field feel that we have been treated unfairly by the lessee of the mineral rights in this particular area. We are in the section known as the Wilson Morse well." The letter from Angela Osburn is in support of EL-Oil. We have a May 17, 1983, letter from Mr. W. C. Malone of Malone Construction in Gulf Shores, Alabama. It's in support of EL-Oil. We have a letter of May 7, 1983, from Mr. Ben Hamilton in support of EL-Oil. A May 8, 1983, letter from Gladys Oulliber in support of EL-Oil. We have a May 8, 1983, letter from an A. L. Oulliber in support of EL-Oil. We have a May 25, 1983, letter from Mary Frances Strehle in support of EL-Oil. We have a telegram from a Mr. Charles Anderson of Anderson Petroleum Corporation in Lake Charles, Louisiana, in support of EL-Oil. We have a telegram from a J. R. Bono from Lake Charles in support of EL-Oil.

FROM AUDIENCE: Mr. Chairman, my name is David Spivey. I'm a property owner in the section described as the Moye section. I'd like to present a list of 54 local property owners who have

124

joined together in asking Dr. LaMoreaux to speak for us.

MR. CAREY: Mr. Chairman, I'd like to put all of these letters and petitions into the record.

CHMN. ADAMS: Your request is granted. They're admitted to the record.

(Whereupon, the described letters  
and petitions were received in  
evidence)

CHMN. ADAMS: We'll take a short recess.

(The Board was recessed 20 minutes)

CHMN. ADAMS: Let the record reflect that the Oil and Gas Board is again in session.

MR. BROOKER: Mr. Chairman, I would like to make sure that my Exhibits 1 through, I believe, 9 are also marked into evidence.

MR. CAREY: They have been.

MR. BROOKER: Thank you.

CHMN. ADAMS: Any questions from the staff.

MR. MINK: Yes,

DR. MANCINI: Yes, Mr. Chairman.

MR. BROOKER: Come on back up if you would.

MR. MINK: We'll also need the geophysicist. I'd like to direct the questions to the geophysicist first. I'll be referring to Exhibit 1 and I believe it's Exhibit 4. It's L line 4.

EXAMINATION BY BOARD OR STAFF

FRANCIS RAFFALOVICH

Questions by Mr. Mink:

Q O.K. This is the line that goes through the blue, the interpreted blue pool?

A Yes, that's correct.

Q Is there any--I'm not sure if there was any particular significance that you're trying to get at with this line. Obviously, you're just showing it as you interpret it in one pool. Was there any other real significant thing you're trying to point out with this line? It just seems to run through the one pool.

A This is the one that goes through the Dominex well and shows the extent of that reservoir. That's the only significance.

DR. MANCINI: That particular line doesn't support whether these are all one reservoir or two reservoirs or several reservoirs?

A Well, the thing that supports it is that these lines all tie, that is, they intersect. I go from one line to another. If the events are at exactly the same time then it is the same event. If they are at different time or if one leg dies out and another one comes in then it is a separate event, and by that means I was able to determine that there were at least four reservoirs, possibly five.

DR. MANCINI: That one particular line doesn't support that there's one, two, three, or four?

A This one particular line does not support or refute.

DR. MANCINI: Thank you.

Q Then to Exhibit 2. O.K. This line shows the green, interpreted green pool, and the orange pool. And at the point of...

A I'm sorry, my Exhibit 2 shows the green and the blue. Have we got a discrepancy there?

Q Right. I'm--all right, let me--line 2, is that Exhibit 2?

A No, line 2 is Exhibit 3.

Q O.K. Yeah, Exhibit 3. O.K. At the point of the seismic interruption, that's the point I want to address at approximately shot point 144, right in that general vicinity.

A Yes.

Q Would this, does this line indicate that these potential separate reservoirs are actually not in communication?

A It does not say anything as to the communication or lack of communication between the two reservoirs. It does say that the reservoirs are separate.

Q In the sense, well, in the sense that you may have it, one may be a channel, one may be a bar...

A That's correct.

Q ...but it does not, the line itself does not say that that's not necessarily not sand to sand and you could have pressure communication across the seismic interruption?

A That is correct. You can have pressure communication and/or water communication. You simply have two separate sands.

Q Then line 1, is that Exhibit 2?

A Yes, that's correct.

Q This line shows the green pool and the blue pool?

A Yes.

Q At the same point where you have the seismic interruption and I assume the same would be true here also?

A That's correct.

Q Then to Exhibit 5. O.K. On this line you show the purple pool and the red pool and you show there is a break in the seismic anomaly or bright spot?

A That's correct.

Q O.K. I notice that you have very little data to the west of this line. Do you have any data that would absolutely guarantee that the purple pool couldn't connect with the red pool, let's say to the west?

A To the west? The line did go on. It was a very long line and we have only reproduced that portion of the line which we felt was pertinent to this hearing.

Q O.K. But this is a north-south line, right?

A Oh, I'm sorry. I see your point. I'm sorry, I missed your

point. You're asking does this refute the possibility that the purple and the red are connected to the west of this line?

Q That's correct.

A O.K. No, it does not speak to that.

MR. MINK: That's all the questions I have.

Questions by Dr. Mancini:

Q I believe you also testified in regard to the dual induction logs and the four logs that you used?

A Yes.

Q And I believe, it's hard remembering what everybody said. Let me kind of paraphrase and you correct me if I didn't get it right. I believe you made the statement that the log characteristics for these were different than some of the other fields and in fact that the log characteristics for each of these were somewhat different suggesting that perhaps that the reservoirs were separate, is that kind of...

A Yes, that's correct.

Q All right. If you're dealing with a bar sequence and if

130

... you run a log on a fringe of a bar or if you run a log through the center of a bar, and then if you have a tidal channel cutting through that particular bar, would you expect to get the same log characteristics for those three wells that have been penetrated through various positions on the bar?

A As a matter of fact, we did study the Foley Field, which we believe to be a bar, with a surge channel right through the middle of it. Whereas the characteristics of the logs did change somewhat, we were able to determine that we were indeed dealing with the same sand in all of the particular wells so that the character of a bar sand is rather blocky and even though it thins up it tends to remain blocky, so to answer your question, I would expect in dealing with bar sands that yes, there would be a similarity in character even where you get to the edge, although you can have some interfacing between bar and channel and it's not a simple yes/no.

Q But would you not expect that if you looked at a channel

131



cut as opposed to a bar sand or a fringe of a bar where you'd be getting interfingering of shale and sand lithologies, you know, as a geologist I would expect that these various log characteristics, SP and whatever, would look different.

A Well, I'm not going to say they all look exactly the same. They do not, but I'll say this that in our study of Foley we felt very confident that we could distinguish the bar sand from the other sand or sands lying beneath the bar sand.

Q Yeah, I would agree with you that if you had four or five penetrating the bar that the log characteristics would look similar, but what would happen if you would have a channel cut through that bar or you would be dealing with an overwash behind a bar, would you expect those log characteristics to be the same as the bar?

A You could have some difficulty there.

Q So, well, let me ask you a further question. I believe you alluded that because these various log characteristics were different that we were dealing with different reservoirs. Could there be a possibility that what you're

looking at in addition to another interpretation rather than a different reservoir, that in fact you're looking at a situation whereby you're looking at different lithologies and different depositional environments and in fact there might be some pressure connection or there might be some connection through a water leg or whatever even though these log characteristics are somewhat different?

A I'm not sure I understand your question. I think you're asking me does my interpretation preclude--does it or does it not preclude the possibility of reservoir connection, is that what you're asking?

Q Of pressure connection or of connection in a water leg?

A O.K. I believe that it would be virtually impossible through the use of seismic to, or the limited geological control through wells, to determine whether or not there is connection between these reservoirs.

Q So you're saying both the seismic and these log characteristics are inconclusive as to trying to determine whether there is or is not pressure connection or connection through the water leg?

A That's correct.

DR. MANCINI: Thank you. We have no further questions.

Excuse me, Jay does have a question.

MR. MASINGELL: There was a lot of discussion as to whether or not the two, the Wilson Morse well and the Flowers 17-12 well, operated by EL-Oil had a surveyed elevation in it. I just wanted to ask Mr. Ellison a question. Were these elevations that the Board received on the plats surveyed elevations or were they determined in some other manner?

GUY ELLISON  
MR. ELLISON: To the best of my knowledge, the Engineering Services out of Mobile surveyed the wells. Mr. Lynn Marr can tell.

MR. MASINGELL: All right, would you look into that and please advise the Board of that?

MR. ELLISON: I sure would. Uh-huh. This well has the Kelly bushing on it. The Wilson Morse well.

MR. MASINGELL: All right, sir.

DR. MANCINI: That's all, Mr. Chairman.

MR. BROOKER: Can I ask one further thing before we conclude

this? I would ask also that the field rules be made a part of the record of this proceeding.

CHMN. ADAMS: Your request is granted. Do you want to make a closing statement?

(Whereupon, the field rules were received in evidence)

MR. LEE: Do you all want to make a closing statement or-- it's up to you all.

MR. WATSON: Mr. Chairman, I think we've presented our case both on direct and rebuttal, and I simply, since Mr. Brooker has introduced the field rules, I call those to your attention and I call to your attention the fact that you reserved the authority to look at these allowables and that's what we're asking you to do based on the evidence presented.

MR. BROOKER: Briefly to respond, this whole matter I think has been sort of a perplexing one for me. I know it's perplexing for the Board and everyone else. There are a lot of competing equities on all sides. I don't think that the Board has been presented with sufficient data to determine one way or the other, necessarily, from a geologic or engineering point of view, that

one or another thing has occurred or is occurring in these fields. The allowables were established by order of this Board based on basically the same data that we have today. Mr. Ellison has entered into a contract with Amoco which provides for takes within the allowables as established by the Board. Dominex has had ample opportunity to create a market for their gas. The reason we're here is because Dominex has been unable to obtain a satisfactory market for their gas. I assure you if they had a market for their gas that was within the allowables we wouldn't be arguing about it. The economics of the situation I think is what has brought us here. The statute that governs this entire matter speaks of correlative rights and opportunities of each owner to produce and/or sell his fair share. It's our position that to penalize EL-Oil simply because Dominex has not availed themselves fully of their opportunity would be grossly not only unfair to EL-Oil but also would be wasteful under the statute, and we therefore feel that this petition should be denied. Dominex can go ahead and hook up their wells and produce their wells to whatever market they desire. We don't believe there's sufficient

136

evidence to show or prove that our wells are draining theirs or that they are unduly draining theirs, and for that reason we feel that the petition should be denied.

MR. LEE: Anything else? (No response) Mr. Chairman, I'm going to move that we take this matter under advisement but before doing so I'd like to state, and the reason for taking it under advisement, the staff has indicated they need a little more time to review the exhibits, but that we intend to reach some resolution of this matter by 5 o'clock tomorrow, and Mr. Carey, would it be safe to say that the offices of Mr. Watson and Mr. Brooker can be notified by 5 o'clock tomorrow of the decision of this Board?

MR. CAREY: (indicated yes)

MR. LEE: And with that, I move, Mr. Chairman, to take this matter under advisement.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

DR. MANCINI: Items 36 and 37, petitions by Cities Service.

CHMN. ADAMS: Let's have order.

MR. JORDEN: Mr. Chairman, I am Bob Jorden representing Cities Service Oil and Gas Corporation. We will have two witnesses in connection with this matter. I'd like to ask that they both be sworn.

MR. CAREY: State your name and address for the record.

FIRST WITNESS: My name is Keith Jordan, and I work with Cities Service Oil and Gas Corporation in Jackson, Mississippi.

SECOND WITNESS: William Jerry. I work for Cities Service out of Jackson, Mississippi.

(Witnesses were sworn by Mr. Carey)

MR. JORDEN: Mr. Chairman, this consolidated docket relates to the Big Escambia Creek Field. Cities Service Oil and Gas Corporation recently drilled and completed a well in that field, proving what we believe to be an extension of the field limits, and today, essentially, that's what we are hoping to do is to present evidence to support our contention or our position that the Big Escambia Creek Field has been enlarged,

has been extended, by the data from this new well. In connection with that evidence, we actually have two dockets. The first is a docket asking for an amendment to Rule 1 of the Special Field Rules so as to accommodate the area, the additional area we believe that has been proven productive by the Cities Service Fischer well. The second docket relates to a proposed exception to Rule 3 of the Special Field Rules. Rule 3 provides that each unit should be comprised of a governmental section containing approximately 640 acres. With respect to that proposal, we are requesting an exception so as to permit the North Half and South Half of a particular section to serve as an appropriate unit. It is important, Mr. Chairman, that this, that if you agree with our evidence that this well is a part of the Big Escambia Creek Field that it be recognized and be made a part of that field. Two basic reasons for that. The first is that if it is a part of the common Smackover reservoir in the Big Escambia Creek Field, then this well, the Fischer well, should be subject to the allowable and the other

2



provisions of the Special Field Rules that relate to Big Escambia Creek. The second reason, as the well does produce hydrogen sulfide, it will be necessary that the production be cleansed before it's delivered to market, and if the well is concluded to be a part of and in the Big Escambia Creek Field then it will open the door for the operator of the well and for the other owners of interest in the well to negotiate with the owners of the Big Escambia Creek plant for entry of the production from this well into that plant. Just briefly, gentlemen, that's what we'll be talking about here today. I'd like to first take the testimony of Mr. Keith Jordan. Would you please state your name and your address and your position with Cities Service Oil and Gas Corporation?

MR. JORDAN: My name is Keith E. Jordan. I'm a region exploitation geologist with Cities Service Oil and Gas in Jackson, Mississippi.

MR. JORDEN: Mr. Jordan, as you've not previously testified before the Alabama Oil and Gas Board, I'd request that you briefly state your education and experience qualifications

as a petroleum geologist.

MR. JORDAN: I received a B.S. degree from Louisiana State University in Baton Rouge in 1979. Since that time I've been working with Cities Service approximately four years. My experience covers the entire region which is East Texas, North Louisiana, South Arkansas, Mississippi, Alabama, and Florida. The last year and a half I have been in the exploitation group, specifically working development of fields such as our Big Escambia Creek project.

MR. JORDEN: An affidavit concerning Mr. Jordan's qualifications is on file with the Board's attorney. Mr. Chairman, we would move that his qualifications as an expert petroleum geologist be accepted.

CHMN. ADAMS: The witness is recognized as an expert.

KEITH E. JORDAN

Appearing as a witness on behalf of Petitioner, Cities Service Oil and Gas Corporation, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Jorden:

Q Have you made detailed studies of that part of the Big Escambia Creek Field which is in the vicinity of the area that Cities Service Oil and Gas Corporation is today requesting be added to that field?

A Yes, sir, I have.

Q And have you prepared, or has there been prepared under your supervision, certain exhibits relating to the studies which you've made?

A Yes, sir.

Q And do these exhibits, all of them that you have prepared, accurately and correctly portray the matters which are shown thereon?

A Yes, sir.

Q Mr. Jordan, I ask that you turn now in the booklet of exhibits, first to Exhibit No. 1 for the consolidated docket, and I ask that you identify the western limits of the Big Escambia Creek Field as previously adopted

or established by the Alabama Oil and Gas Board and ask that you also identify for us the area which is being proposed for addition to that field by Cities Service today.

A O.K. The current westerly edge of the field is shown by the heavy dashed line. Three of the existing units are shown by these dashed lines, being Section 35 in Township 2 North, 6 East, and Section 2 of Township 1 North, 6 East. Also the surface location as well as the bottom hole location are shown and represented, the surface location in a red dot. Moving to the west, we show the, I show the proposed units in a lighter dashed line, the first one being the South Half of Section 34 of 2 North, 6 East, and the North Half of Section 3 of 1 North, 6 East, and the second proposed unit being the entire Section 33 of 2 North, 6 East, with the Cities Service-Fischer 33-11 shown, the surface location by a yellow dot.

Q As I appreciate it then, Mr. Jordan, your proposal is

to add to the Big Escambia Creek Field the two 640-acre tracts which are shown by the dashed line, and in addition to that you're asking for an exception to Rule 3 of the Big Escambia Creek Field Rules so as to accommodate a unit comprised of the South Half of Section 34, Township 2 North, Range 6 East, and the North Half of Section 3, 1 North, 6 East, is that correct?

A Yes, sir.

Q O.K. Let's now turn to and identify your next exhibit and it's the exhibit, the structure map...

A O.K. Exhibit No. 2, if you'll refer down to the title block, it's Big Escambia Creek Field structure map on top of the Smackover. What I've done, also in the right-hand corner, you see a State Oil and Gas Board title block there, Docket No. 1-20-834. This is a previous testified to exhibit by Exxon, and what I've done is just to be able to show how the Cities Service-Fischer very comfortably fits with the contour in other

fields, I've chosen to attach my interpretation on the previous exhibit, and I'll get into that in just a minute, but this exhibit does show the current field outline in the dashed black line, and once again at the westerly part, I'll direct your attention to the left part of the exhibit, shows the same dashed line testified to on Exhibit 1, the westerly extreme of the field. One other point I would just like to briefly comment on. Exxon's exhibit is the LPG lines, which is referred to as the lowest proven gas lines, as you can see existing in field, they do change as new wells were drilled, that the lowest proven gas line did change. And essentially, that's all I'd like to comment about that part of the exhibit which, Exxon's interpretation. Zeroing in on the area in question, Cities Service-Fischer is shown with a red circle. I'll be discussing that area in detail. First of all, I do show the contours. One point I'd like to make is on the Exxon exhibit previous, they did leave the westerly contours open. Essentially did not close off the field. So what I did was

splice on additional four-section area moving to the west, and contoured and closed off the field, including the Fischer. Also in this part of the field, I show a large down-to-the-north fault that goes through section, the middle of Section 26 and 27 of 2 North, 6 East, which is the continuation of the Exxon fault testified to earlier, and also the smaller down-to-the-south fault, I mean down-to-the-north fault, excuse me, cutting through the middle of Section 34, 2 North, 6 East. Also on this exhibit I show a location, part of the location of a seismic line, the north-south line that essentially runs along the section line of 27, Section 27 and 28 on down to the common section line of 15 and 16 of 1 North, 6 East. The purpose of this line is just to show where I have used the seismic interpretation of the placement of the smaller fault, the second fault I referred to, as it cuts the section line, the common section line of Section 34 and 33. Also in that general area, in Section 33 I show a porosity and permeability barrier shown by a dark wavy

line which is being confirmed by well control and it continues on to the easterly part of the field. I do continue the same format Exxon established in the field of a lowest proven gas line identified by Gas Unit 3 at 15,308, and then identified in the Cities Service-Fischer unit, in that well bore, lowest proven gas of 15,351. As I stated, this is not an uncommon practice as wells were drilled in the field, this, it is not a gas-water line, it's just the lowest proven gas.

Q All right, sir, would you mind discussing, just briefly, the wells that are in the vicinity of the Cities Service-Fischer well, and I'm speaking now of the Tomlinson Gas Unit 3 well, the Mobil Gas Unit 34-7 well, and the Exxon Gas Unit 33 well?

A O.K. The, starting in Section 33, the Exxon Gas Unit 33, was drilled in the northeasterly corner of the section. It was a dry hole and I show it confirmed in the porosity and permeability barrier in that uppermost part of the section. Moving to the east in Section 34, the Mobil



Gas Unit 34-7, which is in the northwest--northeast corner of the section, also a dry hole. The, moving further to the east, in Section 35, the Tomlinson-Merriweather, which, sort of confusing on here. You've got a surface location and moving to the south it's a bottom hole location, which is a productive well. And then moving to Section 3, the Tomlinson Gas Unit No. 3, in the northeasterly quarter of that section which is a dry hole, which I will refer to, all of these, not all of these wells, several of these wells, on a further exhibit. The point I'm making is this Tomlinson well I will show it has a very limited amount of pay at the top of the Smackover, which is why I have my LPG line at 15,308, below the top of the Smackover, which is at 15,303. And then, of course, the Cities Service-Fischer in Section 33 with a structure top of Smackover 15,321, which is a producer and which established the lowest proven gas line of 15,351 as shown on my structure map.

Q Mr. Jordan, we're requesting on behalf of Cities Service

that there be added now to Big Escambia Creek Field the South Half of Section 34, the North Half of Section 3, and all of Section 33 around the Cities Service-Fischer well. Is it your testimony, or is it your opinion, from a geological standpoint, that these properties have been proved to be a part of the Big Escambia Creek Field?

A Yes, I do. Section 3 with the Exxon--I mean the Cities Service-Fischer--I believe is a continuation of the field, as well as I feel 640 acres do exist of productive area in the South Half of 34 and the, approximately the North Half of 3, that 640 acres.

Q As I appreciate it, insofar as the South Half of Section 34 and the North Half of Section 3 are concerned, you're requesting that that be established as a unit in exception to the provisions of Rule 3 of the Special Field Rules so as to accommodate the geology in there, it being your belief that there's only approximately 640 acres in those two half sections that's productive?

A Yes, sir.

- Q Is it your opinion that a unit comprised of the South Half of Section 34 and the North Half of Section 3 would actually avoid the drilling of unnecessary wells?
- A Yes, sir.
- Q O.K. You've testified to it but I want to make sure ~~that~~ we confirm it, this geological interpretation is entirely compatible with what's already been presented by Exxon for the Smackover Formation in the Big Escambia Creek Field?
- A Yes, sir, I feel by looking--that's why I wanted to use the entire map. It shows the natural continuation of the contours without any trouble in my opinion.
- Q All right, let's turn now to your next exhibit. It's in the booklet of exhibits. It's the cross section that you earlier mentioned. I'd like for you to identify that exhibit and discuss the data which is shown on it.
- A O.K. You might want to leave your structure maps open just for a minute. It is a stratigraphic cross section labeled A-A'. I have an index map in the bottom of the map which,

of course, shows the same wells as on the structure map, going from the, starting at point A, the Cities Service-Fischer to the, in Section 33, to the Tomlinson-Merriweather in Section 3, northwest to the Tomlinson-Merriweather in Section 35, then to A', which is the Exxon-Scott Paper in Section 2. The only other comment I'd like to make about this, starting at the right-hand side of the cross section, I've got the Exxon-Scott Paper. The correlations that I've shown is the top of the Buckner and the top of the Smackover. The cross section is hung on the top of the Smackover. These are neutron density logs, all of these, and they're on five-inch scale reduced for purposes of the hearing, ease of the exhibit size. The Exxon-Paper is a productive well. I show productive porosities shown in green and the perforated interval shown in red. Moving from the Exxon-Scott Paper to the left, the Tomlinson-Merriweather, which is in Section 35, also in the current field limits of Big Escambia Creek, I show the same data, the pro-

ductive porosities in green and perforations in red. Moving to the left of the cross section, I pick up the Tomlinson-Merriweather Gas Unit 3. I show productive porosity in that well bore in green, the same correlations. Moving to the end of the cross section on the left, the Cities Service-Fischer 33-11, in Section 33, which is a productive well, the productive porosity is shown in green and the perforations shown in red.

Q Do you consider, Mr. Jordan, that from this exhibit that you have reasonably good correlations across the area that's shown on this exhibit, particularly with reference to the uppermost interval of porosity in the Smackover?

A Yes, sir.

Q And is it your testimony that this demonstrates from a geological standpoint, the continuity of the Smackover Formation across Sections 3 and 34 and into the Section 33 where the Cities Service-Fischer 33-11 No. 1 well is located?

A Yes, sir, I do.

MR. JORDEN: I'd like to next call my next witness, Mr. Chairman, if I may. It's Mr. William Jerry. Would you please state your name, your address, and your position with Cities Service?

MR. JERRY: My name is William O. Jerry. I'm with Cities Service out of Jackson, Mississippi, and I'm a region petroleum engineer.

MR. JORDEN: Mr. Jerry, as you've not previously testified before the Commissioner, before the Alabama Oil and Gas Board, I'd request that you briefly state your education and employment background as a petroleum engineer.

MR. JERRY: I graduated from Louisiana Tech University in 1977 with a B.S. degree in Petroleum Engineering. I worked for Cities Service for six years as a petroleum engineer. I have worked in Mississippi, Alabama, North Louisiana, and East Texas.

MR. JORDEN: Again, Mr. Chairman, an affidavit concerning his qualifications is on file with Mr. Carey. I would request that he, that his qualifications as a petroleum engineer be

recognized by the Board for the purpose of this hearing.

CHMN. ADAMS: The witness is recognized as an expert.

WILLIAM O. JERRY

Appearing as a witness on behalf of Petitioner, Cities Service Oil and Gas Corporation, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

Questions by Mr. Jorden:

Q And Mr. Jerry, have you made detailed studies of the Smackover Formation in the Big Escambia Creek Field?

A Yes, sir, I have.

Q And have you prepared or has there been prepared under your supervision certain exhibits relating to the studies which you've made and the petition which is under consideration today?

A Yes, sir, they have.

Q And in your opinion do these exhibits correctly and accurately portray all of the matters which are shown thereon?

A Yes, sir, they do.

- Q I ask that you now, in the booklet of exhibits turn to Exhibit No. 4 for the consolidated docket, identify that exhibit, and discuss the data which is shown on it.
- A Exhibit No. 4 is a well data sheet on the Cities Service Oil and Gas Corporation-Fischer Unit 33-11. The well was spud on November 20, 1982. The well was completed on March 13, 1983. It was drilled to a total depth of 15,977 feet, plugged back to 15,782 feet, was perforated from 15,626 feet to 15,648 feet. The casing and tubing data is shown and is self-explained. Moving down to the production test data, the well was tested on March 13, 1983. The well was on a 16/64 choke with a 2,050 pounds flowing tubing pressure, was flowing at a rate of 2664 MCF of gas a day, 85 barrels of condensate per day, 24 barrels of water per day with a gas-oil ratio of 31,522, a condensate gravity of 44.4<sup>o</sup>API, and the well had a static reservoir pressure after being shut in for 84 hours of 5627 pounds. The duration of this production test was 12 hours after the well was acidized. In about 9 hours



the well reached--excuse me--in about three hours the well unloaded most of the acid and had approximately 1800 pounds flowing tubing pressure and was flowing at a rate of about 2.3 million. At the end of the test, the well was flowing at, the flowing tubing pressure had risen to 2,050 pounds and the rate was up to 2.664 million, showing that the well's flowing rate and tubing pressure were increasing with the duration of the test but they were relatively stabilized, the rate was, in my opinion, was a relatively, a stabilized production rate.

Q In addition to the tests that occurred after the acid job, was the well also tested prior to the acid job?

A The well was perforated with the well being full of KCL water. When the well was perforated the fluid level dropped from the surface down to 1500 feet, which would indicate that the well had below, had less than a virgin reservoir pressure. Then Cities Service jetted the well with nitrogen to get the well to flow. The well was flowed for about 18½ hours previous to the acid job over about

a 38 to 40--over about a two-day period.

Q During these flow periods that you've discussed, both prior and after the acid job, was there any significant variation, either in the rate of flow or the tubing pressures or the condensate production or any of the other indicia of production?

A The condensate production or barrels of condensate per million were relatively the same before and after acidizing. Before the well was acidized, it had approximately--was flowing at a rate of approximately 1700 to 1900 MCF of gas a day with 925 to 1,000 pounds flowing tubing pressure. After the acid job the well's productivity increased and you had a higher rate, plus your flowing tubing pressure increased by over 1,000 pounds. And we did have some varying rates but the, during this, during pre-acid rates were varying, but the last 7½ hours of the test previous to acidizing the rate count stabilized between 1700 and 1930 MCF of gas a day with 925 to 1,053 pounds flowing tubing pressure.

- Q Do you have confidence in the quality then of the test that was made on this well?
- A Yes, sir, I do. We have enough confidence in this data to drill another well, which would cost approximately \$5,000,000.
- Q All right, sir, let's turn now to the next exhibit. It's Exhibit No. 5 for the consolidated docket, and in connection with this exhibit I want you to recall that we are asking today that the Alabama Oil and Gas Board recognize that the Cities Service-Fischer well is in and is a part of the Smackover Gas Pool in the Big Escambia Creek Field. With that in mind, identify Exhibit 5 and discuss the data which is shown on it.
- A Exhibit 5 is the pressure data comparison between the original reservoir pressure in Big Escambia Creek and the original reservoir pressure measured in the Cities Service-Fischer Unit 33-11. The original reservoir pressure in Big Escambia Creek was 7647 pounds. The Cities Service well encountered 5627 pounds or a differential

of 2,020 pounds. This differential is due to drainage of the Cities Service-Fischer well by offsetting production, which the nearest offsetting production would be from Big Escambia Creek Field.

Q How does this original pressure in the Cities Service-Fischer Unit 33-11 No. 1 well compare with current pressures in the other part of the Big Escambia Creek Field?

A Through some verbal conversations with Exxon, they informed us that the west end of Big Escambia Creek Field has approximately 4600 pounds bottom hole pressure, which would be, which would make our well about 1,027 pounds above that end of the field, but also, you have to remember that our well is approximately 10,000 feet from the nearest producing well in Big Escambia Creek Field, so therefore, our well would be on the edge of the drainage radius of the nearest well in Big Escambia Creek Field, which would explain a higher pressure.

Q Can there be any, in your opinion, Mr. Jerry, can there be any reasonable explanation of the low pressure en-

countered in the Cities Services-Fischer Unit 33-11 No. 1 well other than communication in connection with the Smackover Gas Pool in the Big Escambia Creek Field?

A No, sir, there cannot.

Q O.K. Let's turn now to the next exhibit, which is the final exhibit which is Exhibit 6 for this consolidated docket, and I'd ask that you advise us as to whether or not the data shown on this exhibit confirms the opinion that you've just expressed about reservoir communication between the Cities Service-Fischer well and the Big Escambia Creek Field?

A Yes, sir, this sheet does confirm the, a common reservoir, in my opinion. Exhibit No. 6 is a gas analysis comparison between four wells in Big Escambia Creek Field and the Cities Service-Fischer Unit 33-11. Four wells-- the gas analysis for the four wells in Big Escambia Creek Field was gathered from the Oil and Gas Department files in Tuscaloosa from an old exhibit. The first group of data shows the operator and the well name. The next

group is the separator conditions, which was the first stage of separation, and the pressure and temperature at which these, this gas, the first stage, separator operated at. And the last group of data shows the mol percent of each component and the first stage separator gas. The fifth column shows the average gas analysis of the separator gas from these four wells, and the last column is the Cities Service, the gas analysis on the Cities Service-Fischer well. If you look down to the second component, hydrogen sulfide, and you look over to the fifth row of the average, gives an average of 19.765 percent hydrogen sulfide for the four wells in Big Escambia Creek Field and a 20.93 percent, mol percent, hydrogen sulfide in the Cities Service-Fischer Unit 33-11. The carbon dioxide percent is 44.083 percent vs. 46.60 percent. The nitrogen, 1.75 percent and 1.30 percent. The methane, 26.133 vs. 23.11, and you can go down the column and you'll see the analyses are very similar.

Q Considering all of this evidence then, Mr. Jerry, parti-

24

cularly the pressure data shown on Exhibit 5 and the gas analysis comparison data shown on Exhibit 6, are you of the opinion that the area proposed for addition to the Big Escambia Creek Field is from an engineering standpoint properly a part of that field and of the Smackover Gas Pool?

A Yes, sir, I do.

Q It's noted that on this Exhibit No. 6 you're showing that the well will produce hydrogen sulfide. Does this mean that it will be necessary for the production from this well to be processed through a cleansing plant before it can be delivered to market?

A Yes, sir, it will have to be cleansed.

Q And in that same connection, has either Cities Service or Cities Service's partner, Belco, made any contacts with the operator of the Big Escambia Creek plant for the purpose of determining the conditions under which this well could be added to or processed through that plant?

A Belco, which is Cities Service's partner, contacted

Exxon previous to drilling the well. Belco received a letter from Exxon dated March 17, 1983, from Mr. Godsbow with Exxon. He informed Belco that for Exxon to process the gas any well would have to be formally declared by the Alabama Oil and Gas Board that the well is in Big Escambia Creek Field. Cities Service has not made any negotiations with Exxon at the time because we have Belco's letter stating what would be required to get into Exxon's plant. Once Cities Service-Fischer unit 33-11 is formally a part of Big Escambia Creek Field, Cities Service will attempt to negotiate a contract with Exxon to process the gas.

Q As I appreciate it then, the recognition of the Cities Service-Fischer 33-11 No. 1 well as being a part of the Big Escambia Creek Field will permit negotiations to commence towards entry of the production from that well into the plant?

A Yes, sir, it will.

Q And, of course, as I also appreciate it, if that re-



cognition does occur, the Cities Service well would then immediately be subject to the allowable and the other appropriate rules of the Special Field Rules now in existence in the Big Escambia Creek Field?

A Yes, sir, it would.

Q In your opinion, will the proposal presented today on behalf of Cities Service Oil and Gas Corporation in this consolidated docket avoid the drilling of unnecessary wells, prevent avoidable waste, and yet protect the coequal and correlative rights of all the parties at interest?

A Yes, sir, it will.

MR. JORDEN: Mr. Chairman, I did file in connection with this matter an affidavit of notice that has been given to Mr. Carey. I would request that it--and it was filed in strict compliance with Rule 400-1-12.10 of the State Oil and Gas Board of Alabama Administrative Code. I'd request that it be identified as Exhibit No. 7 and that it along with the Exhibits 1 through 6 previously identified by Mr. Jordan and Mr. Jerry be accepted into evidence in this matter.

CHMN. ADAMS: Is the affidavit in order?

MR. CAREY: Yes, Mr. Chairman, I've reviewed the affidavit and it is in compliance with the Board's rule on notice.

CHMN. ADAMS: The affidavit is admitted.

MR. JORDEN: And the other Exhibits 1 through 6?

CHMN. ADAMS: Yes.

(Whereupon, the affidavit and Exhibits 1 through 6 were received in evidence to the testimony of Messrs. Jordan and Jerry)

MR. JORDEN: I'll then tender both Mr. Jerry and Mr. Jordan for cross-examination.

MR. LEE: Is there opposition to this?

MS. KING: Mr. Chairman, I'm Kim King representing Exxon in this matter. I have only a statement in opposition. I have no questions of either of the witnesses. If you'd like for me to proceed with my statement, I'm ready. I represent Exxon Corporation in this matter. Exxon is a working interest owner in the units in the Big Escambia Creek Field and is also the operator of the vast majority of these units. Since October of 1982, the current owners in the Big Escambia Creek Field

have been actively engaged in efforts that may lead to field-wide unitization of the Smackover Gas Pool to encompass all the known hydrocarbon-connected Smackover Formation in the Big Escambia Creek Field. Any well unit to be considered a part of the fieldwide unit should be developed with the well shown to be hydrocarbon-communicated within the defined field. All of the 25 well units that currently comprise the Big Escambia Creek Field are developed units. We believe that under existing circumstances petitioner's data in support of its request to include its Section 33 in the Big Escambia Creek Smackover Gas Pool would warrant more extensive testing and reservoir pressure evaluation even if that section were abutting the current defined field, which it is not. Section 33 is a whole section removed from the current defined field. The unit well, Fischer 33-11 No. 1, is almost two miles to the west of the nearest productive well at Big Escambia Creek and approximately 1.6 miles from the current western boundary of the Big Escambia Creek Field. Further, petitioner is requesting the creation of an undrilled exceptional 640-acre unit between

Section 33 and Big Escambia Creek Field and proposes to have this exceptional undeveloped unit also added to the defined Big Escambia Creek Smackover Gas Field. We would like to note Exxon's experience in the drilling and completion of its Unit 28-15 dry hole in Section 28 immediately to the north of petitioner's Section 33. Exxon completed Unit 28-15 in the Smackover Formation and placed the well on extended test. The well depleted in two weeks while on test and had to be plugged and abandoned. Several other dry holes exist either within petitioner's proposed exceptional unit or in proximity with it. We believe that more extensive testing of petitioner's Unit 33-11 is needed prior to any decision that might be made with regard to whether or not that unit is communicative with the Smackover Gas Pool in the Big Escambia Creek Field. The test taken of only a few hours is not believed adequate. Further and foremost, we believe that the proposed exceptional unit should not qualify for inclusion in the Big Escambia Creek Smackover Gas Pool until such time as a well is drilled on it to either confirm or refute hydrocarbon communication

with the Big Escambia Creek Field. We know by experience at Big Escambia Creek that you can't be sure of the success of any well until you drill it regardless of what the geologic interpretation may have been prior to drilling. In order for a 640-acre unit to qualify as being in this pool, we believe it should be drilled. Granting petitioner's request could have an adverse effect on fieldwide unitization proceedings and could result in inequities if a fieldwide unit were created which included these two subject units and it were found that the units are not in hydrocarbon communication with Big Escambia Creek. If any new developed 640-acre well unit is shown to be in hydrocarbon communication, then such unit would be brought into the unitization proceedings, or if unitization has already occurred, such unit could be admitted to the fieldwide unit under the enlargement provisions of the unitization agreement. We believe that approving petitioner's request at this point in time would have the potential for significant inequity in fieldwide unitization, whereas the denial of the petition being considered here would not prevent a future, more appropriate peti-

tion when all data necessary to make a proper decision is available. Denial of petitioner's request today would have the effect of protecting equities now in Big Escambia Creek while doing no injury to petitioner and would serve the equities of all parties including the petitioner by admitting petitioner's units into the field and to the possible fieldwide unit only if the two well units of petitioner are shown to be hydrocarbon-communicated with Big Escambia Creek Field in a future hearing proceeding when the necessary data is available. Petitioner has not indicated a desire to process its gas through the existing Big Escambia Creek plant. Therefore, plant entry apparently is not a consideration, and we are referring here to Cities Service. In fact petitioner has indicated it is in the process of evaluating whether to attempt entry into the Big Escambia Creek plant or build its own plant, therefore, there appears to be no real need at this time for the Board action requested in this petition and adequate time exists for proper evaluation of both subject units prior to any such action by the Board.

MR. MASINGILL: Ms. King, let me just ask you a clarifica-

tion question. I realize you're opposed to Item 36. Are you also opposed to the configuration? Not that 7--37--whether or not it be in the field at this time, but just the configuration of the unit for Item 37?

MS. KING: No, sir, I meant to state that we are only opposed to the admission of these units to the Big Escambia Creek Field.

MR. MASINGILL: Thank you.

MR. WATSON: Mr. Chairman, I'm Tom Watson and I represent Grace Petroleum Corporation, the second largest working interest owner in the present Big Escambia Creek Field. We've had an opportunity to study Exxon's position in this matter and Grace adopts that position as its position and submits that it is in support of Exxon's opposition to the Cities petition.

MR. JORDEN: Mr. Chairman, if I might just briefly make a closing--would it be in order for me to make a closing statement?

DR. MANCINI: We have some questions but you might want to comment before we ask the questions.

MR. JORDEN: Oh, you may want some questions, sure. I'd be happy to wait, if I may.

DR. MANCINI: Mr. Chairman, we do have some questions.

MR. WILSON: Mr. Keith Jordan.

EXAMINATION BY BOARD OR STAFF

KEITH JORDAN

Questions by Mr. Wilson:

Q In regard to the Exxon structure map, what was the western limit of that structural interpretation? Where did you pick up with your own interpretation?

A O.K. As I mentioned, the field boundary, current field boundary, is the dark dashed line. Exxon did include the Tomlinson Gas Unit dash 3(sic) in their interpretation as being hydrocarbon bearing. The reason I changed that well, they interpreted the LPG, or the lowest proven gas line in that well at 153010(sic). My interpretation was 15308. They did include that well in their exhibit though. Essentially, south of that area it stopped. I do have a copy of the exhibit if it would be necessary to show the previously testified exhibit, but essentially the contours stopped just to the west of the section line



running, adjoining section line of, say, 10 and 11 and 3 and 2. In that immediate area. If you need anymore clarification of where it stopped, I can go on.

Q Does the Exxon map include the down-to-the-north fault through the southwest corner of Section 36, 2 North and 6 East?

A Of Section 36?

Q 36, yes, the down-to-the-north fault.

A Yes, it does. That is, at that point is 100 percent Exxon interpretation.

Q O.K. And does this same fault on the Exxon map continue along the same roughly east-west strike as shown on your Exhibit 2 and on through the center of Section 34?

A No, sir, it doesn't. Their interpretation--my interpretation changes about the midpoint of Section 35 of 2 North, 7 East, bringing the fault through the center of Section 34. I don't--their exact location of where the fault went, I don't know. I believe it went approximately the, just north of the Mobil Gas Unit 34-11 and died somewhere in

that vicinity north of the well.

Q Do you feel that you have seismic data to support this that Exxon did not have at the time they drew their map?

A Yes, sir, but also I feel that, in my opinion, the contouring of the map showed the Mobil Gas Unit 34-7 being a downthrown well from subsurface data, which I feel strongly enough to bring the fault where I've placed it, but also, it was discussed that a seismic line did exist which I have shown to pinpoint the fault where it crosses Section 34 and 33. Correct me if I'm wrong, but on our informal basis, we talked to you all earlier, we were informed you all might want to look at that seismic line and we were told that it was not necessary. But that seismic line shown is the only seismic interpretation used on this map and it is only used for the placement of that fault at that appropriate spot, 34 and 33, where it cuts that section line.

Q The porosity or permeability barrier you show through the area appears to parallel and almost coincide with

that particular fault in some areas. Do you think there may be some relationship between the permeability barrier and the fault?

A Quite possibly. I believe the Mobil Gas Unit 34-7, being downthrown, was in fact the reason it could have developed no porosity and permeability, being a lower well, and I don't believe the fault had influence on the Exxon Gas Unit 33 in Section 33. Core data indicates that section was just tight, but it is a little bit lower than the Mobil well also. I mean higher--I'm sorry. I'm sorry, higher than the Mobil well. And then moving to the west, the Chevron-Scott Paper, I feel the fault has no influence on that other than the fact that the permeability barrier stands on its own in that well bore. Due to core data, it was just essentially no permeability.

Q I would gather from that statement then that the east-west fault through the center of Section 34 is important in the decision of whether or not to include only the South Half of 34 in a production unit or as opposed to including

37

the entire part of Section 34, is that correct?

A Well, I would like to point out, of course, the Mobil Gas Unit well is a dry hole, and also one other small point. In Section 35, if you'll notice on the exhibit, which is part of the Exxon exhibit, the first bottom hole location shown as a dry hole, that well was tight, indicating that where I've put the permeability barrier is probably the most optimistic interpretation. That permeability barrier could be very much to the south, in fact, cutting through the middle of Section 34. I guess to answer your question it's not as important as I show it on this exhibit. The permeability barrier could conclude that same 640 acres in the South Half of 34 north of 3.

Q O.K. On your structure map it appears that the displacement on the fault through Section 34 is in the order of about a little more than, say, 50 feet, would that be correct?

A Yes, sir.

- Q O.K. Is the quality and resolution of your seismic such that you can delineate a 50-foot fault? Where are your seismic lines? Is the line along the west boundary of 34 the only line that you have to confirm the placement of that fault west from the point at which you deviate from the Exxon interpretation?
- A Yes, sir. Back in the field the fault has a throw of 175 feet due to the way I've shown the fault dying out, so to speak. The throw is decreasing as you get over toward the westwardly part of--where my interpretation picks up. As far as the resolution, I'm not a geophysicist. I've consulted with them and they talk of a 10 mill displacement, the throw on the fault, which I believe is about 75 feet, which more or less coincides with the way I've got it contoured.

MR. WILSON: That's all, thank you.

WILLIAM JERRY

Questions by Mr. White:

- Q Mr. Jerry, just a couple of very brief questions to you.

I note that you tested the well on 3-13-83. What length of time did that test run?

- A We acidized the well early on the morning of 3-13-83. We turned the well to the pit to about 11 o'clock that morning and we flowed it to about 11:30 that evening, which is about a 12-hour test, and the reasons for the test being so short was the fact that we're right close to the town of Atmore. There were a lot of complaints. Some of them were even, were called in to the state man, and so we--even during the pre-acidizing rate there were also some complaints from Atmore. We even moved our flare stacks to try to see if that would help and it helped a little bit but not for very long, so really it was due to residential complaints that we terminated our test.
- Q You didn't, in other words, you didn't get a very sustained test, not a very long period?
- A The well cleaned up in about three hours and the pressure and rate was around, at about three hours, about 1900

pounds and about 2.4 million, and by nine hours later the pressure had only come up 100 pounds and the rate had only come up two or three hundred MCF a day. So it...

Q How much did you produce? How much hydrocarbons did you produce or did you estimate to produce prior to putting it on actual test?

A Prior to putting it on test we probably produced probably around a million cubic feet of gas and probably during the test, the after acid test, we produced about 1.3 million.

MR. WHITE: O.K. That's all, Mr. Chairman.

KEITH JORDAN

Questions by Mr. Masingill:

Q Mr. Jordan, let me ask you, what is your timetable for drilling a well in Section, in the split unit that you're proposing in Section 34 and Section 3?

A We do have, of course, a partner in there, Belco, as mentioned earlier, Mr. Jordan might want to clarify this, I believe we have July commitments, explorations, some

farm-in commitments. We are shooting additional seismic in the area and we have a meeting planned in the very near future with Belco in Houston to discuss that very thing, the next offset well, so to answer your question, in the imminent future, depending, of course, on how the plans go here.

DR. MANCINI: I just have one question, Mr. Jordan. When you're looking at this split unit, again just briefly summarize why you believe you should put in the acreage that we find the Tomlinson G.U. 3 on in the northern part of Section 3 and not the acreage that we find on the Mobil G.U. 34-7 in the north part of 34?

MR. JORDAN: O.K. Going to the north of Section 3 first, it is my interpretation, as well as Exxon's, which I referred to earlier, that this well does have somewhere, depending on the interpretation, five to seven feet of productive porosity, looking at neutron density as well as dual induction logs. In other words, I do feel there is recoverable hydrocarbons, not in the entire part of the North Half of Section 3 but a good

42



part of it, and the reason I say that is that the lowest proven gas line is not a hundred percent saying that that's the gas-water line. In other words, that's just where the porosity development stopped at five feet. To the north of, half of Section 34, Mobil drilled this well I believe, it was-- I know it was in 1981--I don't know the exact month. The well was cored. It was tight. The well was tested. It was proven to be noncommercial. The fault information in the area, the permeability information, I feel like it has been proven to be noncommercial and productive porosity does not exist in that half of the section, whereas in the North Half of Section 3 a well bore does show that there is productive porosity.

DR. MANCINI: Thank you. Mr. Jorden, are you gonna address the comments by the opposition on the timetable? I would ask you that question. If you're gonna address it, I won't.

MR. JORDEN: On the timetable of...

DR. MANCINI: Yeah, there seems to be some discussion about the timeliness of you entering or becoming part of the

field. I think that was brought out by the opposition. We'd be curious to hear you elaborate on that.

MR. JORDEN: Yes, sir, I was planning on, if I could, in a closing statement, simply point out...

DR. MANCINI: Well, we have no further questions.

MR. JORDEN: I simply wanted to say first that you know really we have uncontradicted geological and engineering testimony that the Fischer well in Section 33 is a part of this, of the Smackover Pool in the Big Escambia Creek Field. There's no testimony, there's no evidence to the contrary. That's all you really have to look at is uncontradicted testimony and exhibits. Now we are proposing that the connection be made between the South Half of Section 34 and the North Half of Section 3 because it seemed to us at least that you ought to connect Section 33 with the balance of the Big Escambia Creek Field, and it seemed to us that that was the best connection because of the geological constraints that Mr. Jordan has discussed about. Our main concern is, however, recognition that the Cities Service-Fischer 33-11 well is in

the Big Escambia Creek Field. It's, as I have been advised, it is necessary from a contractual standpoint, first to get the well into the Big Escambia Creek plant, it's necessary even before we can negotiate in any meaningful way with the operator of that plant, it's necessary that this well be recognized to be a part of the field. Beyond that, I've also been advised that contractual difficulties that Cities Service has in Section 33 requires that this well be, that field rules be adopted for this well, that it be made a part of the field, or be made a part of some field, and this has got to be done right away, otherwise there will be contractual difficulties. When I say right away, I'm talking about before July of 1983. Now you could put Section 33 in some other field. You could say well, maybe it doesn't belong in Big Escambia Creek, but what field are you gonna put it in unless you're gonna establish a field of its own? I'm reminded of this matter and I'm not sure that you all will recall it, but this is the exact reverse situation, almost reverse situation, of what happened in the Hatter's Pond Field when Exxon requested that the

Section 28 well around the Wilkie well, Section 28 around the Wilkie well be made a part of the Hatter's Pond Field for the purpose of negotiating a con--an agreement with Getty to permit their gas to come into the Hatter's Pond processing plant. We find it, Cities Service finds itself in the same position here today that Exxon had there, and of course, as it turned out Getty did not oppose the Exxon proposal. They simply made a statement when it finally came to hearing, but there's a remarkable analogy between what happened in Hatter's Pond and what happened here. Now I believe that each reservoir ought to stand on its own bottom, you might say, but I think the evidence is clear and uncontradicted that this well is in the field and you should recognize it as being such.

MS. KING: Mr. Chairman, if I may I'd like to respond to Mr. Jorden's analogy to the Wilkie Gas Unit 28. As I understand it, that particular well was tested for five days. It was tested from July 1 of 1980 to July 5. It tested for these full five days at a rate of four to five million full

well stream per day. It ran good buildup pressure test and it recovered 1,000 barrels of condensate per day. Another important distinction is that the Wilkie Gas Unit 28 was adjacent to the field in question and was not separated by an undrilled unit. Finally, another distinction is that Exxon at that time made contacts with Getty. Getty expressed clearly an unwillingness to allow us in the field and into the plant. In this situation, although there is apparently some contact between Exxon and Belco, we've received no formal contact from Cities Services requesting entrance into the plant, and we've certainly not rejected their request.

FROM AUDIENCE: Gentlemen of the Board, I'm Richard H. Rowe. I'm manager of engineering for Belco Petroleum Corporation in Houston. Belco Petroleum Corporation has been active in this prospect for several years and has worked independently from Cities Service until we decided to join forces a year or so ago. The results and conclusions that Cities Service has reached Belco certainly endorses and they recommend, and Belco recommends that you approve the petitions that Cities has requested. I find it a little ironic that Belco, through some

subsidiary companies, also owns an interest in the Wilkie Gas Unit 28 No. 1 that's been previously referenced. Thank you.

CHMN. ADAMS: We'll take a short recess now.

(The Board was recessed 10 minutes)

CHMN. ADAMS: Let the record reflect that the Board is again in session.

MR. LEE: Mr. Chairman, I move that we grant the petitions in Items 36 and 37.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

MR. JORDEN: Thank you, gentlemen.

DR. MANCINI: Item 38, petition by Morrow Oil and Gas Company.

MR. HARRISON: Mr. Chairman, I'm Steve Harrison of Tuscaloosa representing Morrow Oil and Gas Company. I have one witness I'd like to have sworn please.

MR. CAREY: State your name and address, please.

MR. MORROW: W. E. Morrow, Jackson, Mississippi.

(Witness was sworn by Mr. Carey)

MR. HARRISON: Mr. Morrow, have you previously testified before this Board?

MR. MORROW: I have.

MR. HARRISON: And is there an affidavit of your qualifications on file with the Board at this time?

MR. MORROW: Yes, there is.

MR. HARRISON: I tender Mr. Morrow as an expert petroleum geologist.

CHMN. ADAMS: The witness is recognized as an expert.

MR. HARRISON: Gentlemen, this is a petition by Morrow Oil and Gas Company to establish the Beaver Creek Gas Field in Lamar County and to adopt Special Field Rules therefor. The Special Field Rules include a definition of the Lewis Sand Gas Pool as those strata of the Lewis Sand Gas Pool productive of hydrocarbons in the interval between 2438 feet and 2478 feet in the Babcock-Cole 10-13 No. 1 well. We are requesting spacing of 320 acres per well. We are also in-

cluding a provision in Rule 3 of the spacing rule of the Special Field Rules that provides as follows: "In situations where a dispute arises as to whether a unit will be a north-south or east-west unit, the decision of a majority of the participating working interest owners in both proposed units shall control the unit configuration to be applied for and the majority of the participating working interest owners in any proposed unit shall determine who will be the operator of the unit. In permit applications the operator shall designate the unit configuration decided by the majority which shall be subject to the approval of the State Oil and Gas Supervisor. We are hopeful that this provision may prevent situations in the future from arising like the situation that the Board has been exposed to in this area recently. Mr. Morrow, have you prepared exhibits in support of this petition?

MR. MORROW: Yes, I have.

MR. HARRISON: I would point out to the Board that we have discovered a drafting error on the Exhibits 1 and 2. There is a reference to Township 13 South at the top of each exhibit



and Range 14 West at the side of each exhibit. These are reversed. Township 13 South should be on the side and Range 14 West on the top. It does not have any bearing on the geologic nature of the exhibit.

W. E. MORROW

DIRECT EXAMINATION

Questions by Mr. Harrison:

Q Mr. Morrow, the field is shown on your Exhibit No. 1 by the heavy dashed outline, is that correct?

A That's correct.

Q And the yellow unit is the unit, is the existing unit, for the Babcock-Cole 10-13 No. 1 well?

A That's right.

Q O.K. I might point out to the Board that the reason for requesting Special Field Rules at this time for this area is to provide for orderly development of the Lewis Sand Gas Pool in this area. We have set up a proposed field consisting of really a one section step out in each direction from our existing productive well except for

Section 16. After conferring with the staff on this matter, Section 16 is currently a portion of the Armstrong Branch Gas Field which is a Carter Sand Gas Field, but to prevent any confusion at this time from overlapping fields we have simply eliminated Section 16 from our request for the field limits for the Beaver Creek Field. Mr. Morrow, would you explain to the Board what your Exhibit 1 is intended to portray?

A Exhibit 1 is a structural contour map and it's contoured on the top of the Lewis Limestone and it depicts the productive area essentially as a nose, and a southward plunging nose, and in controlling this nose I've more or less limited the area of the field to that nose. I think the production is controlled by the structure so I've gone no farther than that.

Q O.K. And your Exhibit No. 2?

A Exhibit No. 2 is an isopach of the Lewis Sandstone. It's taken from the E-log. It's essentially a northeast trending bar cutting across the nose I just described, which

would probably represent the trapping factor. Although the sand is present over the whole area, we still do not know where all the porosity trend is, so we've included enough within the field area to take care of it.

Q It is your current opinion that the majority of the area that we have requested to be included in the field is underlain by possibly productive Lewis Sand, is that correct?

A Yes, that's right.

Q All right, and your Exhibit No. 3?

A Exhibit No. 3 is a portion of the Dual Induction Focused Log showing the section from, of the Lewis Sandstone, from 2438 to 2478. Of that 40 feet were perforated from 2438 to 73 with two shots per foot. The last three feet were not perforated as it was a bit tighter, so we decided to leave a cushion. The initial potential was 1500 MCF per day with a tubing pressure of 780 pounds on a 18/64-inch choke after acid and fracing.

Q O.K. Mr. Morrow, has there been any water production at

all from the Babcock-Cole well?

A No.

Q Did not test any?

A No.

MR. HARRISON: We would request that Exhibits 1 through 3 to the testimony of Mr. Morrow be accepted into evidence.

CHMN. ADAMS: Your Exhibits 1 through 3 are admitted.

(Whereupon, Exhibits 1 through 3 were received in evidence to the testimony of Mr. Morrow)

MR. HARRISON: And also the affidavit of notice that was previously filed in this matter. We would request that that also be accepted into evidence at this time.

CHMN. ADAMS: The affidavit is admitted.

(Whereupon, the affidavit was received in evidence)

Q Mr. Morrow, are you familiar with the term "waste" as defined by the statutes of the State of Alabama?

A Yes, I am.

Q And in your opinion, will the granting of this petition prevent waste?

A Yes, it will.

Q And in your opinion will the granting of this petition protect the coequal and correlative rights of the majority of the owners in the proposed field?

A Yes, I think so.

MR. HARRISON: Mr. Chairman, we have nothing further at this time.

MR. PEARSON: Mr. Chairman, I'm Greg Pearson and I represent Anderman Oil Corporation in this matter.

MR. MASINGILL: Mr. Pearson, would you slide that other mike closer. That's the recording mike. Thank you.

MR. PEARSON: I guess in an effort to short cut this docket item perhaps, I would like to make a statement, an opening statement, and summarize my client's position. With your permission I'll do that. However, I would like to reserve the right to cross-examine Mr. Morrow if you don't accept my summarization and also to call my own witnesses at this time, but I would like to open with a summarization and perhaps we can short cut this docket item. If that's o.k. with you, I'll proceed. Anderman Oil Corporation owns an interest in seven of the eight sections that are proposed in this field, this Lewis Sand field, and it's our client's, my client's well taken

position that the Board has never approved an eight-section field, or hasn't recently approved an eight-section Lewis Sand field, on the basis of one discovery well. As a matter of fact, I don't think that this field would provide for 16 Lewis Sand wells in one field and I don't think that one exists right now. We're not necessarily in opposition to this item, but I think that we need more data. We've got one well, the Babcock-Cole well. We'd like more time to evaluate geological and production data, and I think that there's some presently available on the Babcock-Cole well and I think that we contemplate some more data, geological data, hopefully production data, on some wells that are going to be drilled in the immediate future. We right now have a proposal in existence to drill Section 2 of Township 13, Range 14, and we know from earlier today that Mr. Morrow has a proposal to drill two wells in Section 9, both the North Half and the South Half. He's been designated operator. I think that we would perhaps like to propose an alternative to the eight-well field that Mr. Morrow has suggested.

If it will fulfill his needs, we would have no objection at this time to a Lewis Sand field as he has defined in his petition under Section 9 and Section 10, and we also would like to state that in the future, perhaps in future Board meetings, depending on the outcome of our proposed well in Section 2 and other wells to be drilled in the area, we might be more than happy to join with Mr. Morrow in the future in establishing these field rules for the Lewis Sand field, and we'd provide, of course, for special fieldwide rules, provide for spacing, provide for permanent allowables. I guess that perhaps concludes the statement that my client would like to make, a summarization. I would like to say also that one of the special rules that's in this petition to allow a majority of the working interest owners to determine whether the unit is north-south or east-west, I think that that could have a bigger impact than it appears to on the surface. I mean units, obviously we provide for orderly development in our rules, but there's some geological testimony that has to go into determining east-west north-south units, and we need to think about that, provide for that. Also protecting the correlative rights of

all the owners in the unit is always the goal that may not necessarily be achievable in every case, but you're providing that a majority of the working interest owners can decide who is the operator. That may not in every case protect the correlative rights of all the owners in the unit. That's a special rule. Mr. Harrison has stated that it might prevent what's happened in Section 9. Well, you know, I agree it might prevent what's happened in Section 9, but I think my client, Anderman Oil Corporation, has shown more than a willingness to cooperate by removing any opposition to any wells drilled in Sections 9 and 10, and I think that if you are of the mind to grant an eight well, I mean an eight-section field under the Lewis Sands and you are of a mind to grant this particular Special Field Rule that we would like to put on our own testimony and, of course, present a brief on the impact that this might have in the future, and that's my statement at this time.

MR. HARRISON: Mr. Chairman, the purpose of our recommendation of an eight-section field is to provide for orderly development of this area so that additional wells that our geology shows, or that it is our opinion, will be in this same pro-



ductive sand as is defined in the Babcock-Cole well, will be protected by the establishment of the Special Field Rules. That is the purpose for attempting to set up a field at this time. That is the basis, our geologic interpretation is the basis for requesting the eight-section field. As to the provision in Rule 3, we have discussed this with several other operators in the field. We have had no objection from any of them. Most of them, or all of them that we have discussed it with have stated that they thought that it was a good idea. They are in favor of it. There are, well, the provision itself we feel will prevent problems from arising in the future. I really don't have anything further to say at this time.

MR. PEARSON: Again, one further thing that I would like to say, as I stated earlier, we don't necessarily have any objections to this petition at this time. As a matter of fact, we may support this petition after we've been given more time to evaluate data that we know is going to be coming in in the near future, and as I said, in the alternative we would certainly support a field on Sections 9 and 10 at this time, but not on the eight sections. We'd like more time to evaluate that and,

but we're not necessarily in opposition to it for all time but we would like time to evaluate it before we either oppose or agree to that.

DR. MANCINI: Mr. Harrison, rather than bringing all of the opposition witnesses up, maybe we need to ask our questions first and that might help out a little bit. We too are interested in justification, your justification for including all those sections, and we do see justification for 9 and 10, but we're curious about 2, 3, and 4, and also the dry hole in 11, and then there's a, I guess, a dry hole down in 21, and if you project that through 15, there's some question about 15 although perhaps the north part may have some potential. So if you could address what data, engineering and geologic data, you have to support inclusion of 2, 3, 4, 11, 14, and 15, that might help us out too.

#### EXAMINATION BY BOARD OR STAFF

MR. HARRISON: Can you address that further?

MR. MORROW: No, the data is very thin but I have, we formed this to coincide with the configuration of the structural nose. That's essentially it. Other than that we have no...

DR. MANCINI: But by establishing the field for 9 and 10 that would not hinder development for the rest of the sections

if such drilling needed to proceed?

MR. HARRISON: It would not hinder it but it would provide, if those sections are included, it would provide for more orderly development in that the Special Field Rules would exist. The spacing rules provided under the Special Field Rules would exist for these additional units. If the sections are not included there may be a question of exceptional locations if wells are located closer than 2,000 feet to an existing well in the field. We simply see the establishment of the entire area as a field necessary in order to provide for the most orderly development of what we feel the Lewis Sand is in this area.

DR. MANCINI: But at this time we don't have geologic and engineering data to support 2, 3, 4, 11, and 14 and 15? We have data that, we have limited data I guess that supports 10, and I guess you could project over into 9. Another question is on your Rule 3, Article A. I'm curious if we go with that as you recommend what would happen if we would have a dry hole in one of those areas and the controlling interest was such that it was in favor of where the dry hole was located. I

think sometimes once you make a rule like this down the road it may create more problems than what you are trying to solve by doing this. I just throw that out to you. How would you handle that?

MR. HARRISON: I'm not sure that I understand the question, Dr. Mancini.

DR. MANCINI: Well, if you're looking at a north-south east-west, and let's say there's a dry hole in what would be the east-west configuration, maybe in one of the corners, but the controlling interest, I guess as you have it here, the working interest, would be the dominant in the east-west direction, that would dictate that the unit be east-west rather than north-south. At least the way I read this. And perhaps the unit should be north-south because of the dry hole which would be included or the nonproductive acreage in the east-west direction.

MR. HARRISON: Right, right.

DR. MANCINI: And this would preclude that opportunity to look at the north-south rather than the east-west because the dominating decision making process is going to be the working interest owners as opposed to the dry hole in the section.

MR. HARRISON: The working interest owners will make a recommendation as to which unit is to be applied for, but you, as Supervisor, still have the...

DR. MANCINI: That's--I'm sorry, but that's not the way it reads. Or at least not the way I interpret it when I read it.

MR. HARRISON: Well, we are stating that the majority of the participating working interest owners shall control the unit configuration to be applied for.

DR. MANCINI: And then the second sentence says in permit applications, and then you go through that sentence. That says approval of State Oil and Gas Supervisor, but the first sentence which goes through all the situation doesn't say anything about the approval of the State Oil and Gas Supervisor.

MR. HARRISON: Well, I think that the first sentence sets up what the majority requests, or what the majority states that the operator will apply for, but then when the operator makes that application, the Oil and Gas Supervisor still has the decision making authority over that application.

DR. MANCINI: I understand what you're saying but I don't

interpret it that way. Maybe we could get John to just...

MR. MASINGILL: Let me just say one thing. Mr. Harrison, I think what he's saying is if the Board went ahead and force pooled it under that first situation and then you came with a permit application, that would really be pretty late in the game, if you see what I'm saying, because the unit is essentially already lined up.

DR. MANCINI: So we, of course, have some concern with the addition of that in your Special Field Rules too. I don't know. Does the opposition want to go ahead or--you want me to just make the recommendation?

(Discussion between Dr. Mancini and Board)

DR. MANCINI: Let me just say then that we will make a recommendation to the Board and that recommendation would be the staff feels that the data and testimony presented today are such that Sections 9 and 10, Township 13 South, Range 14 West, should be included in the Beaver Creek Field. Sufficient geologic and engineering information is not available at this time to warrant the inclusion of Sections 2, 3, 4, 11, 14, and 15, Township 13 South, Range 14 West. When sufficient information

is available on these sections, then that would be the appropriate time for their addition to a field. Therefore, the staff recommends that Item 38 be granted with the stipulation that the Beaver Creek Field include only Sections 9 and 10, Township 13 South, Range 14 West, and the staff further recommends that the following stipulation be included in the granting of this petition, that being that Rule 3, Spacing of Gas Wells, Section A, shall read: Every well drilled as a gas well in the Lewis Sand Gas Pool shall be drilled on a drilling unit consisting of 320 contiguous surface acres in a north-south or east-west unit within governmental half sections so as to include all productive areas in such unit.

MR. LEE: Mr. Chairman, I move that the recommendation of the staff be approved and that the Item 39--excuse me--38 be granted as recommended.

CHMN. ADAMS: I second the motion. All in favor of this move, motion, let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

MR. PEARSON: Mr. Chairman, may I ask one thing to get it clarified. Mr. Carey, did you say we are going to hear the emergency petition on the force pooling for the West Half of 2, 15-14 now or...

MR. CAREY: That will be after we conclude the rest of the public meeting.

MR. PEARSON: O.K. Thank you. I just wanted to ask that.

MR. HARRISON: Thank you, gentlemen.

DR. MANCINI: Mr. Chairman, that brings us to the part of the agenda dealing with Applications for Natural Gas Policy Act Well Status Determinations, and today we request action on two categories. The first category is a request for continuance which includes Items, Item 45, application by Key Operating Co; Items 46 and 49, applications by Amoco Production Company; Items 47 and 48, applications by Michigan Oil Company; Items 52, 53, and 54, applications by Carless Resources, Inc.; Item 55, application by Grace Petroleum Corporation. Is there anyone in attendance who has any comment concerning these requests for continuance? (No response)

MR. LEE: Mr. Chairman, I move that those items be continued.



CHMN. ADAMS: I second the motion. All in favor say "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it.

MR. CAREY: Mr. Chairman, the staff has examined applications and exhibits submitted concerning the following items: Items 40, 41, 42, 43, and 44, applications by Amoco Production Company; Items 50 and 51, applications by Terra Resources, Inc.; Items 56 and 57 and 59, applications by Enhanced Energy Resources; Item 58, application by Anderman/Smith Operating Company. The applications are in order and I would recommend to the Chairman that the exhibits be admitted into evidence.

CHMN. ADAMS: The exhibits are admitted.

MR. CAREY: If there are no objections from anyone here, the staff would recommend that these applications be granted.

MR. LEE: I so move.

CHMN. ADAMS: I second. All in favor of the motion let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: "Ayes" have it. Do I hear a motion to adjourn?

MR. LEE: Mr. Chairman, I move we adjourn.

CHMN. ADAMS: I second the motion. All in favor let it be known by saying "aye".

(Both Board members voted "aye")

CHMN. ADAMS: The "ayes" have it. We are adjourned.

(Whereupon at 6:47 p.m. the Regular Session of the Hearing was adjourned)

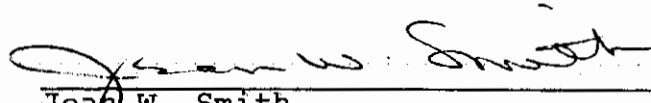
REPORTER'S CERTIFICATE

STATE OF ALABAMA       ()

COUNTY OF TUSCALOOSA()

I, Jean W. Smith, Hearings Reporter in and for the State of Alabama, do hereby certify that on Thursday, May 26, 1983, at the Continuing Education Center, University of Alabama, Tuscaloosa, Alabama, I reported the proceedings before the State Oil and Gas Board of Alabama in Regular Session; that the foregoing 464 typewritten pages contain a true and accurate verbatim transcription of said proceedings to the best of my ability, skill, knowledge, and belief.

I further certify that I am neither of kin or counsel to the parties to said cause, nor in any manner interested in the results thereof.



Jean W. Smith  
Hearings Reporter  
State of Alabama