213540332 NSL 5/26/02

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EL PATIO BUILDING
117 NORTH GUADALUPE
POST OFFICE BOX 2265
SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN*
*NEW MEXICO BOARD OF LEGAL SPECIALIZATION RECOGNIZED SPECIALIST IN THE AREA OF NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

May 6, 2002

HAND DELIVERED

Mr. Michael E. Stogner
Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87501

RE: **Walter "4" Well No. 1**
Administrative Application of Chesapeake Operating, Inc.
~~Chesapeake Oil Company~~ for Approval of an Unorthodox Oil Well Location,
Lea County, New Mexico

Dear Mr. Stogner:

On behalf of Chesapeake Oil Company, please find enclosed our administrative application for approval of an unorthodox oil well location for its Walter "4" Well No. 1 to be drilled 718 feet FWL and 2,260 feet FSL (Unit L) Section 4, T17S, R37E, Lea County, New Mexico, in and dedicated to a standard 80-acre oil proration and spacing unit consisting of the N/2SW/4 of said Section 4 for oil production from all 80-acre oil pools including but the Shipp-Strawn Pool.

Chesapeake Oil Company is the only offsetting operator and owner of 100% of the working interest in the S/2NE/4 of Section 4 affected by this application and therefore no notice is required by the NMOCD rules.

Very truly yours,

W. Thomas Kellahin

fxc: Chesapeake Oil Company
Attn: Lynda Townsend

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE ADMINISTRATIVE APPLICATION OF CHESAPEAKE OIL COMPANY FOR APPROVAL OF AN UNORTHODOX OIL WELL LOCATION, LEA COUNTY, NEW MEXICO

ADMINISTRATIVE APPLICATION

Comes now Chesapeake Oil Company, by and through its attorneys, Kellahin and Kellahin, and in accordance with Division General Rule 104.F applies to the New Mexico Oil Conservation Division for administrative approval of an unorthodox oil well location for its Walter "4" Well No. 1 to be drilled 718 feet from the West line and 2,260 feet from the South line (Unit F) Section 4, T17S, R37E, Lea County, New Mexico and dedicated to a standard 80-acre oil proration and spacing unit consisting of the N/2SW/4 of said Section 4 for oil production from the Shipp-Strawn Pool and in support states:

(1) Chesapeake Oil Company ("Chesapeake") is the proposed operator of the subject well and is the only working interest owner in the SW/4 of Section 4.

(2) Chesapeake proposes to drill its Walter "4" Well No. 1 at an unorthodox oil well location 718 feet from the West line and 2,260 feet from the South Line of Section 4, T17S, R37E, NMPM, Lea County, New Mexico. **(C-102-See Exhibit 1)**

(3) The subject well is to be drilled to test the Strawn formations in the which is subject to the Special Pool Rules providing for standard well locations with 150 feet to of the center of either 40-acre tract within a 80-acre unit.

(4) The subject well is encroaching towards offsetting spacing units operated by Chesapeake in which Chesapeake owned 100% of the working interest.

(5) For geologic reasons and based upon 3-D seismic interpretations, the subject well is to be drilled at an unorthodox well location so that it is located at the point of greatest potential structural height with reservoir characteristics not available at the closest standard location:

(a) Geologic narrative, Exhibit 2
(b) geologic isopach with production data, Exhibit 3
(c) geologic 3-D seismic line Exhibit 4
(d) geologic structure cross section, Exhibit 5

(6) Chesapeake's geologic conclusion is that a well drilled at the closest standard location would place the well in an unfavorable position in the Strawn formations which will substantially increase the risk of a non-commercial well while the proposed unorthodox well location has the best opportunity of encountering a productive reservoir.

WHEREFORE, Chesapeake Oil Company requests that this matter be approved administratively by the Division.

Respectfully submitted,

W. Thomas Kellahin
Kellahin and Kellahin
P.O. Box 2265
Santa Fe, New Mexico 87504-2265
(505) 982-4285
Attorneys for Applicant

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Shipp Strawn 55695

Property Code	Property Name	Well Number
	WALTER 4	1

OGRID No.	Operator Name	Elevation
147179	CHESAPEAKE OPERATING, INC.	3781

Surface Location

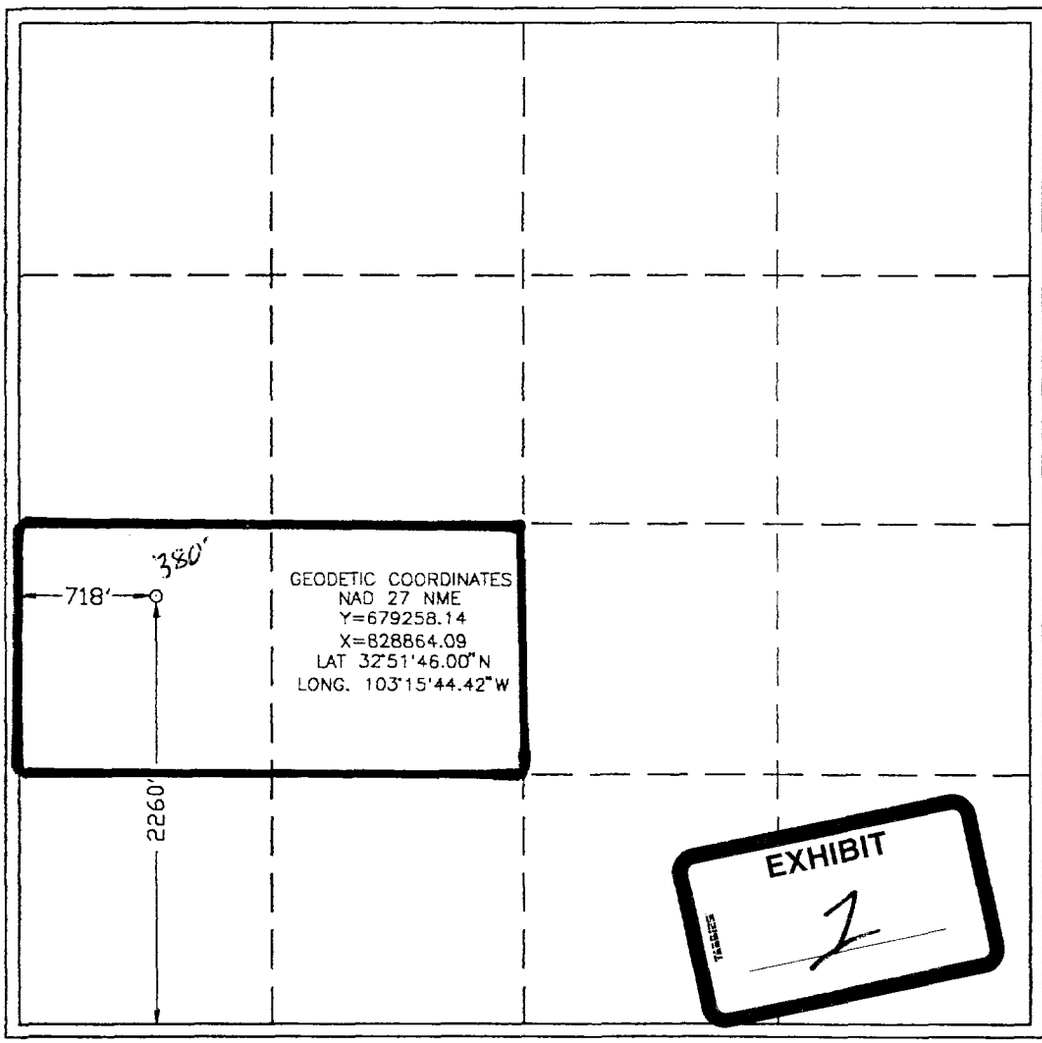
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	4	17 S	37 E		2260	SOUTH	718	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Barbara J. Bale
Printed Name

Regulatory Analyst
Title

04/23/02
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

APRIL 16, 2002
Date Surveyed WKT

Signature & Seal of Professional Surveyor

Ronald J. Eidson 4/17/02
02-11-0301

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

Chesapeake

Natural Gas.

Natural Advantage.

INTEROFFICE MEMORANDUM

To: Lynda Townsend

From: Robert A. Hefner IV

Date: 30-April-02

RE: APPLICATION FOR UNORTHODOX LOCATION
WALTER 1-4 17S/37E
N/2 SE/4

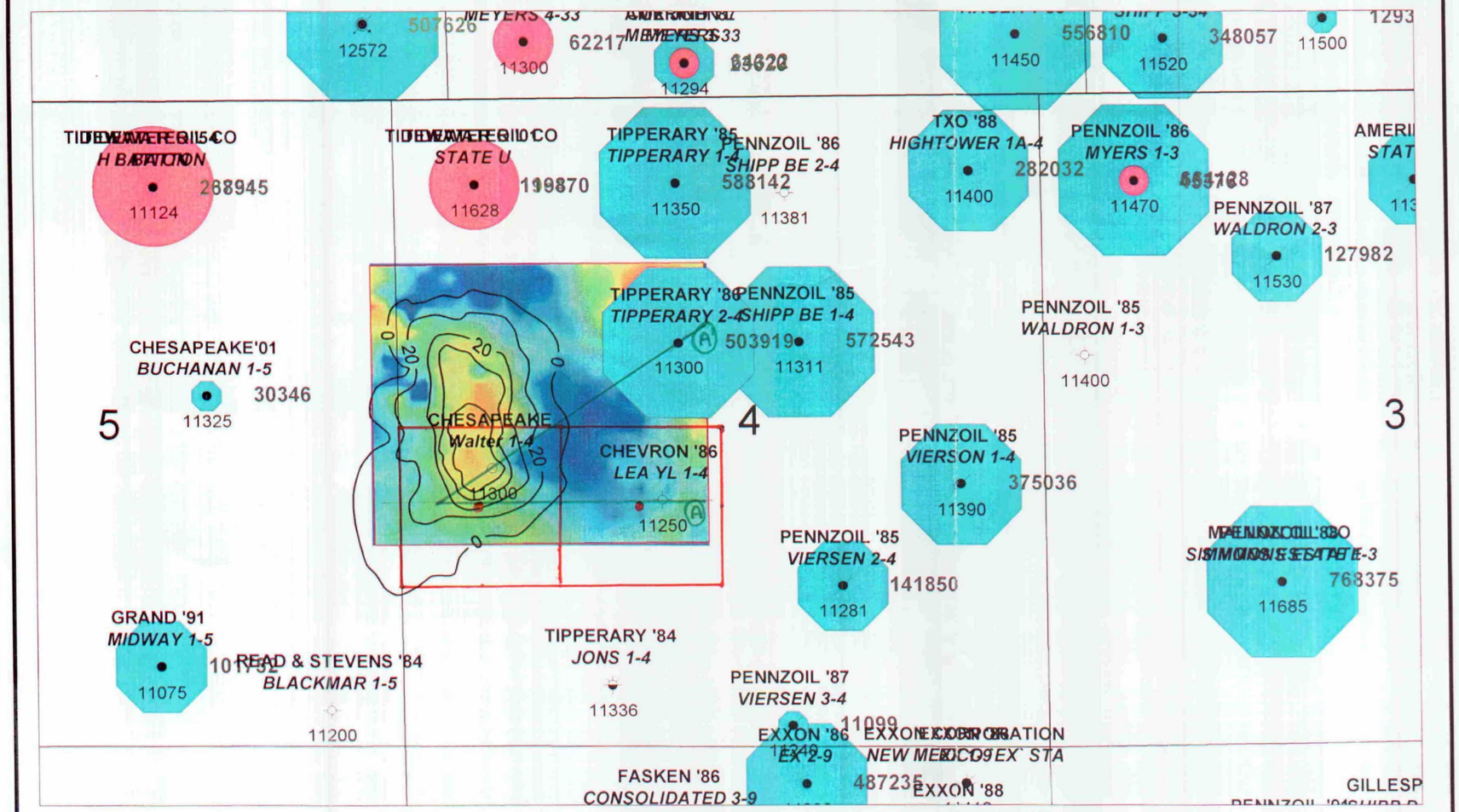
For geological and reservoir energy management reasons, supported by 3-D seismic interpretations, the subject well is recommended to be drilled at an unorthodox location of 2,260' FSL and 718' FWL. This location is 280' north and 58' east of the center of the NW/4 of the SW/4. It is our conclusion that a well drilled at the closest standard location would place the subject well in an unfavorable position in the Strawn formation, which will substantially increase the risk of a noncommercial well. Please find attached three exhibits that support the conclusions being made herein; (Figure 1) production plat with Strawn net pay isopach superimposed on 3-D seismically derived Strawn isochron, (Figure 2) arbitrary vertical seismic section A-A', and (Figure 3) Walter 1-4 structural cross section.

Figure 1 is a production map where the Strawn production is denoted by the blue hexagons and pink circles represent Padduck production. The size of the production bubble denotes the amount of cumulative production obtained to date; the value of which is annotated to the right of the well symbol expressed in barrels of oil equivalent. Inserted into this map is the 3-D seismically derived Strawn isochron (red represents the thickest and blue represents the thinnest), which aided the generation of the net pay isopach that is superimposed. Note that the unorthodox location being requested is not in the center of the maximum valued isopach. It is offset to the east. The reason for the offset is that the structural dip is to the east and, therefore, any drift of the borehole will be back to the west.

EXHIBIT 2

Figure 2 is an arbitrary vertical seismic section extracted from the 3-D seismic volume, and is annotated on the production map. The top of the Strawn limestone is found in the middle of the figure and is denoted by the blue horizon. The top of the Atoka shale is found below the Strawn horizon line and is denoted by the green horizon. The Strawn isochron referenced above in Figure 1 is generated by the time differences between these two horizons. The larger the value (red) the thicker the Strawn. It is assumed that the only variable responsible for the Strawn to thicken locally is due to algal build-ups providing the reservoir. Please note that the figure begins with the Lea YL 1-4 location on the left side, traverses due west before turning back to the northeast across to the Walter 1-4 proposed location and ending with the Tipperary 2-4 location on the right side of the figure. Three aspects of the character changes between the Strawn and Atoka horizons should be noted. The first observation is that when the Strawn limestone is regional (nonproductive), as represented by the Lea YL 1-4 that has zero net pay, the wavelet character is expressed by a single peak, or positive deflection to the right. However, when the Strawn limestone contains an algal build-up, as represented by the Tipperary 2-4 location that has approximately 140' of net pay, the isochron thickens and the wavelet breaks into two peaks with a trough in between. It goes without saying that the location of the Tipperary 2-4 seismic character response is same type of response that would provide us with the highest probability of success. The same type of seismic character response can be observed at the proposed Walter 1-4 location.

Figure 3 is a structural cross section constructed in the same path as Figure 2. It represents both an unsuccessful attempt by the Lea YL 1-4 dry hole and a successful attempt as found by the Tipperary 2-4. If the unorthodox location is granted for the Walter 1-4, then we will have the opportunity to expose the maximum vertical extent of reservoir to the borehole. This will provide us with the ability to maximize primary recovery by perforating only the lowermost portion of the reservoir thereby allowing for any gas expansion to assist in maximizing ultimate drainage of crude oil.



1 inch = 1000 feet

Chesapeake

CHESAPEAKE OPERATING, INC.

Walter 1-4 17S/37E Proposal
Production Map

WALTER 1-4 NET POROSITY ISOPACH

Date: 30 April, 2002 | Geologist: RAHIV

EXHIBIT 3

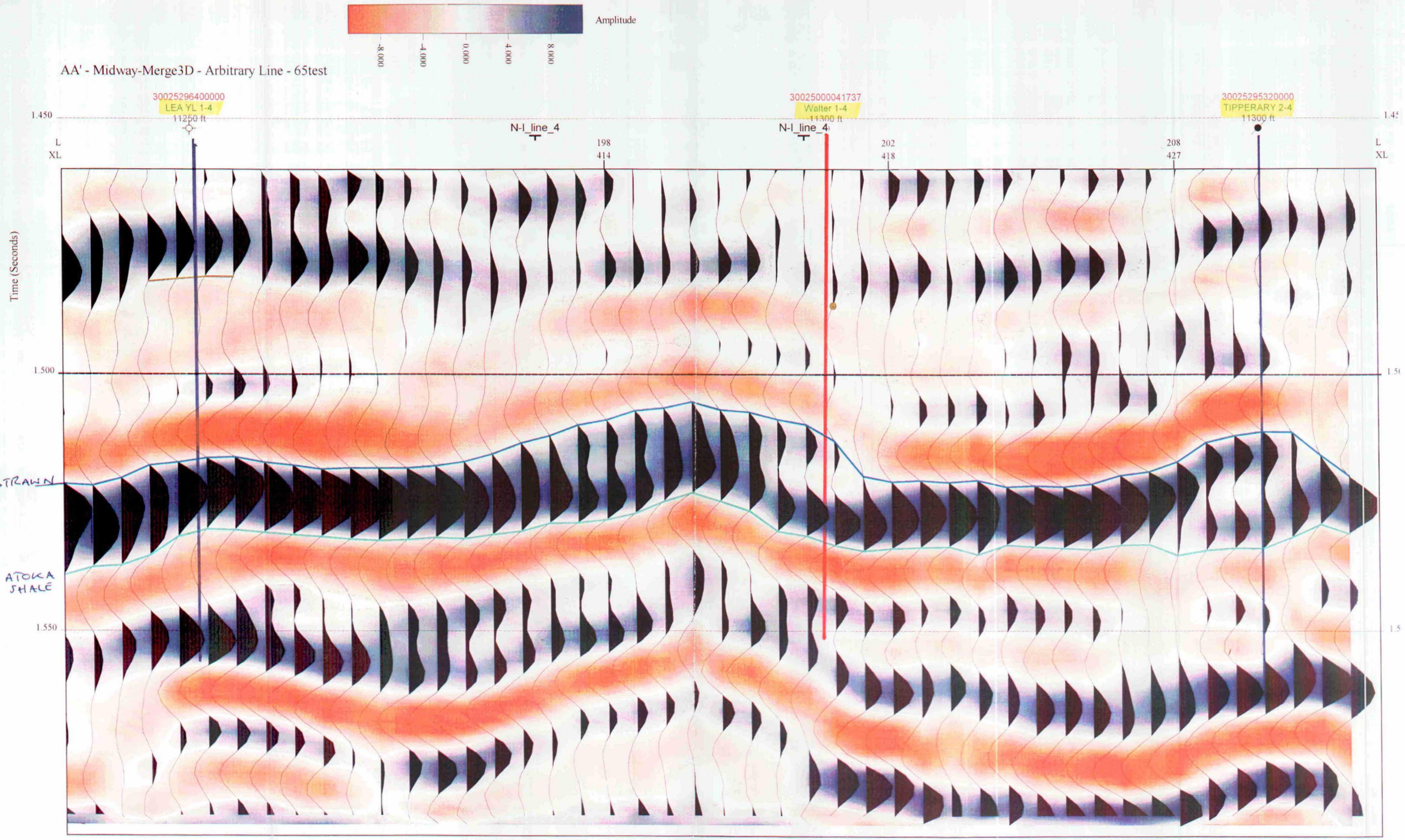

Amplitude
-8.000
-4.000
0.000
4.000
8.000
AA' - Midway-Merge3D - Arbitrary Line - 65test
30025296400000
LEA YL 1-4
11250 ft
30025000041737
Walter 1-4
11300 ft
30025295320000
TIPPERARY 2-4
11300 ft
N-I_line_4
N-I_line_4
L
XL
198
414
202
418
208
427
L
XL
Time (Seconds)
1.450
1.500
1.550
STRAWN
ATOKA
SHALE

EXHIBIT
4

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE