



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

November 15, 1996

Chesapeake Operating, Inc.
c/o W. Thomas Kellahin
P. O. Box 2265
Santa Fe, New Mexico 87504-2265

Administrative Order DD-158

Dear Mr. Kellahin:

Reference is made to your application on behalf of the operator, Chesapeake Operating, Inc., dated November 12, 1996, as amended, for authorization to directionally drill its proposed Lovington "5" Well No. 1, Lea County, New Mexico.

The Division Director Finds That:

- (1) The subject application has been duly filed under the provisions of Rule 111, Subparts "D" and "E" of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The operator proposes to drill the Lovington "5" Well No. 1 at a surface location 2190 feet from the South line and 810 feet from the West line (Unit T) of Section 4, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, drill vertically to a depth of approximately 8,300 feet, kickoff in a westerly direction and directionally drill to an estimated true vertical depth of 12,050 feet within the Undesignated West Lovington-Pennsylvanian Pool at a standard subsurface oil well location within the NE/4 SE/4 (Unit Q) of offsetting Section 5, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico;
- (3) The proposed bottomhole targeted location being within one mile of the West Lovington-Strawn Pool and is therefore subject to the "*Special Rules and Regulations for the West Lovington-Strawn Pool*", as promulgated by Division Order No. R-9722, as amended, which includes provisions for 80-acre oil spacing and proration units with wells to be located no closer than 330 feet to any governmental quarter-quarter section or subdivision inner boundary;

- (4) The N/2 SE/4 of said Section 5 is to be dedicated to said well thereby forming a standard 80-acre oil spacing and proration unit for said pool;
- (5) The subject well site and proposed bottomhole location are both adjacent to the City Limits of Lovington, New Mexico and are in close proximity to a both housing and commercial developments, it is therefore necessary for the operator to directionally drill the Lovington "5" Well No. 1 in the above-described manner in order to satisfy zoning restrictions imposed by the Lovington-Lea County Extraterritorial Zoning Authority;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 SE/4 of said Section 5 that is no closer than 330 feet to any quarter-quarter section line; and,
- (7) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rules 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The operator, Chesapeake Operating, Inc., is hereby authorized to drill its Lovington "5" Well No. 1 at a surface location 2190 feet from the South line and 750 feet from the West line (Unit T) of Section 4, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, drill vertically to a depth of approximately 8,300 feet, kickoff in a westerly direction, and continue to drill a slant hole in such a manner as to bottom said well within the Undesignated West Lovington-Strawn Pool at a standard subsurface oil well location within the NE/4 SE/4 (Unit Q) of Section 5, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, that is no closer than 330 feet to any quarter-quarter section line.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

- (2) The applicant shall notify the supervisor of the Hobbs district office of the Division

of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Hobbs offices of the Division upon completion.

(3) The N/2 SE/4 of said Section 5 shall be dedicated to said well thereby forming a standard 80-acre oil spacing and proration unit for said pool.

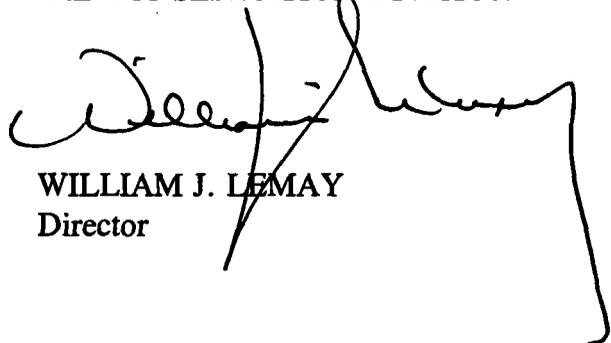
(4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(5) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L

WJL/MES/kv

cc: Oil Conservation Division - Hobbs
Lea County Clerk's Office - Lovington, New Mexico

DD-LOV

Rec: 11-12-96

~~Sup: 12-2-96~~

Released: 11/15/96

*NO since all
acres are
subject is
controlled*

November 15, 1996

*by
Chesapeake*

Chesapeake Operating, Inc.
c/o W. Thomas Kellahin
P. O. Box 2265
Santa Fe, New Mexico 87504-2265

Administrative Order DD-158

Dear Mr. Kellahin:

Reference is made to your application on behalf of the operator, Chesapeake Operating, Inc., dated November 12, 1996, as amended, ~~dated November 14, 1996~~, for authorization to directionally drill its proposed Lovington "5" Well No. 1, Lea County, New Mexico.

The Division Director Finds That:

- (1) The subject application has been duly filed under the provisions of Rule 111, Sub-parts "D" and "E" of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10388, issued by the Oil Conservation Commission in Case 11,274 on June 13, 1995;
- (2) The operator proposes to drill the Lovington "5" Well No. 1 at a surface location 2190 feet from the South line and 810 feet from the West line (Unit T) of Section 4, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, drill vertically to a depth of approximately 8,300 feet, kickoff in a westerly direction and directionally drill to an estimated true vertical depth of 12,050 feet within the Undesignated West Lovington-Pennsylvanian Pool at a standard subsurface oil well location within the NE/4 SE/4 (Unit Q) of offsetting Section 5, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico;
- (3) The proposed bottomhole targeted location being within one mile of the West Lovington-Strawn Pool and is therefore subject to the "Special Rules and Regulations for the West Lovington-Strawn Pool", as promulgated by Division Order No. R-9722, as amended, which includes provisions for 80-acre oil spacing and proration units with wells to be located no closer than 330 feet to any governmental quarter-quarter section or subdivision inner

boundary;

- (4) The N/2 SE/4 of said Section 5 is to be dedicated to said well thereby forming a standard 80-acre oil spacing and proration unit for said pool;
- (5) The subject well site and proposed bottomhole location are both adjacent to the City Limits of Lovington, New Mexico and are in close proximity to a both housing and commercial developments, it is therefore necessary for the operator to directionally drill the Lovington "5" Well No. 1 in the above-described manner in order to satisfy zoning restrictions imposed by the Lovington-Lea County Extraterritorial Zoning Authority;
- (6) The applicable drilling window or "producing area" for said wellbore should include that area within the NE/4 SE/4 of said Section 5 that is no closer than 330 feet to any quarter-quarter section line; and,
- (7) It appearing the applicant has satisfied all of the appropriate requirements prescribed in said Rules 111.D and E, the subject application should be approved and the well should be governed by the provisions contained within this order and all other applicable provisions of Division General Rule 111.

IT IS THEREFORE ORDERED THAT:

(1) The operator, Chesapeake Operating, Inc., is hereby authorized to drill its Lovington "5" Well No. 1 at a surface location 2190 feet from the South line and 750 feet from the West line (Unit T) of Section 4, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, drill vertically to a depth of approximately 8,300 feet, kickoff in a westerly direction, and continue to drill a slant hole in such a manner as to bottom said well within the Undesignated West Lovington-Strawn Pool at a standard subsurface oil well location within the NE/4 SE/4 (Unit Q) of Section 5, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, that is no closer than 330 feet to any quarter-quarter section line.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations in said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Hobbs district office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Hobbs offices of the Division upon completion.

(3) The N/2 SE/4 of said Section 5 shall be dedicated to said well thereby forming a standard 80-acre oil spacing and proration unit for said pool.

(4) The operator shall comply with all requirements and conditions set forth in Division General Rule 111.E(2) and any applicable requirements in 111.D and F.

(5) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY
Director

S E A L

WJL/MES/kv

cc: Oil Conservation Division - Hobbs
Lea County Clerk's Office - Lovington, New Mexico

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

TELEPHONE (505) 982-4288

TELEFAX (505) 982-2047

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)

November 15, 1996

VIA FACSIMILE

(505) 827-8177

Mr. Michael E. Stogner
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

*Re: Lovington 5 Well No. 1
Amended Administrative Application of
Chesapeake Operating, Inc.
for a Directional Wellbore
Lea County, New Mexico*

Dear Mr. Stogner:

In accordance with our conversation today, please find enclosed a new affidavit which attests to the fact that the additional specified lots are also controlled by Chesapeake and AnSon. I believe this now satisfies all requirements for approving this application.

Chesapeake is aware of and very much appreciates the fact that you have expedited your review of their application in order to accommodate their rig availability problems.

I would appreciate you calling me on Monday and letting me know the status of the requested approval.

Very truly yours,



W. Thomas Kellahin

cfx: Mr. Jerry Sexton (OCD-Hobbs)
cfx: Chesapeake Operating, Inc.
Attn: Mike Hazlip

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

November 14, 1996

W. THOMAS KELLAHIN*

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

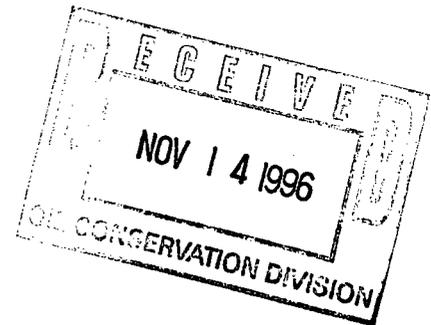
JASON KELLAHIN (RETIRED 1991)

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

HAND DELIVERED

Mr. Michael E. Stogner
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: *Lovington 5 Well No. 1
Amended Administrative Application of
Chesapeake Operating, Inc.
for a Directional Wellbore
Lea County, New Mexico*



Dear Mr. Stogner:

In accordance with our conversations today, and on behalf of Chesapeake Operating, Inc., please amend our application filed on November 12, 1996 as follows:

because of its proximity to the West Lovington Strawn Pool, the proposed 40-acre spacing unit needs to be increased to 80-acre spacing unit which will consists of the N/2SE/4 of said Section 5, T16S, R36E

In support of this modification, please find enclosed:

- (1) revised C-102 which shows the proposed 80-acre spacing unit, and
- (2) Mr. Hazlip's affidavit concerning common offset ownership and absence of a need for additional notifications.

Very truly yours,

W. Thomas Kellahin

cfx: Mr. Jerry Sexton (OCD-Hobbs)
cfx: Chesapeake Operating, Inc.
Attn: Mike Hazlip

District I
PO Box 1998, Hobbs, NM 88241-1998
District II
PO Drawer DD, Aramis, NM 88211-0719
District III
1000 Rio Grande Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APN Number		Pool Code		Pool Name	
				West Lovington Strawn	
Property Code		Property Name			Well Number
		LOVINGTON 5			1
OGRID No.		Operator Name			Elevation
		CHESAPEAKE OPERATING, INC.			3926'

10 Surface Location

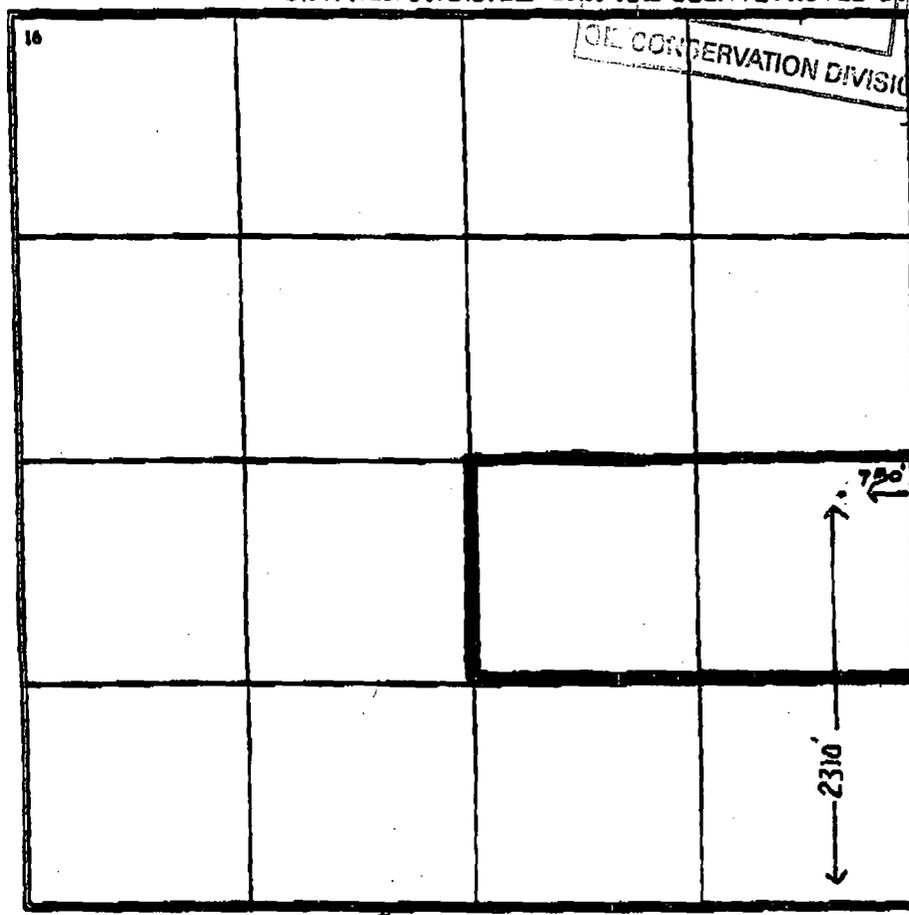
UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
T	4	16S	36E		2190	South	810'	West	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
	5	16S	36E		2310	South	750	East	LEA

Dedicated Acre		Joins or Infill		Consolidation Code		Order No.	
80 Acres							

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



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

Steve Tinton
Signature
Steve Tinton
Printed Name
Sr. Drilling Engineer
Title
November 14, 1996
Date

18 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 supervision, and that the same is true and correct to the best of my belief.

Date of Survey
Signature and Seal of Professional Surveyor:
Certificate Number

11/12/96 12/2/96 MS KV DD

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [SD-Simultaneous Dedication] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]

increase] Production Response]

[1]

Talked w/ T Kellahein - will submit C-102 or something showing the 80 acre unit

Chesapeake Operating Inc.

[] OLM

[] Recovery

[] PPR

[x] Does Not Apply

owners

[2]

[B] [] Offset Operators, Leaseholders or Surface Owner

[C] [] Application is One Which Requires Published Legal Notice

[D] [] Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] [] For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] [x] Waivers are Attached Note: Applicant is the offset operator

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

J. Mark Lester Print or Type Name

J. Mark Lester Signature

Sr. VP - Exploration Title

11/11/96 Date

DD 12/2/96

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

November 12, 1996

TELEPHONE (505) 982-4285

TELEFAX (505) 982-2047

W. THOMAS KELLAHIN*

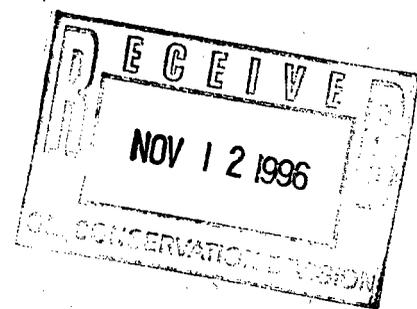
*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

HAND DELIVERED

Mr. Michael E. Stogner
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Lovington 5 Well No. 1
Administrative Application of
Chesapeake Operating, Inc.
for a Directional Wellbore
Lea County, New Mexico



Dear Mr. Stogner:

On behalf of Chesapeake Operating, Inc., please find enclosed our Application for approval of a Directional Wellbore pursuant to Rule 111.D

By copy of this letter, I am requesting the OCD-Hobbs, to accept and process the enclosed Application for Permit to Drill. I would appreciate Mr. Sexton calling me if there is anything else I need to submit to his office.

Very truly yours,

A handwritten signature in black ink, appearing to read "W. Thomas Kellahin".

W. Thomas Kellahin

cc: Mr. Jerry Sexton (OCD-Hobbs)
cfx: Chesapeake Operating, Inc.
Attn: Mike Hazlip

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

**APPLICATION OF CHESAPEAKE OPERATING, INC.
FOR A HIGH ANGLE/HORIZONTAL DIRECTION
LEA COUNTY, NEW MEXICO**

ADMINISTRATIVE APPLICATION

Comes now Chesapeake Operating, Inc. ("Chesapeake"), by and through its attorneys, Kellahin & Kellahin, and in accordance with Division Rule 111.D, applies to the New Mexico Oil Conservation Division for approval for a Directional Wellbore for its Lovington 5 Well No. 1 (API # 30-0-____) to be drilled from a standard surface location 2190 feet from the South line and 810 feet from the West line of Irregular Section 4, T16S, R36E, NMPM, to a standard subsurface location 2310 feet from the South line and 750 feet from the East line of Irregular Section 5, T16S, R36E, NMPM, and in support states:

(1) Chesapeake is the proposed operator for the NE/4SE/4 of Irregular Section 5, T16S,, R36E, NMPM, Lea County, New Mexico.

(2) Chesapeake is also the offset operator for all 40-acre spacing units adjacent to the NE/4SE/4 of Irregular Section 5, T16S,, R36E, NMPM, Lea County, New Mexico and therefore no offset notifications have been sent.

(3) Chesapeake desires to drill a well within near the City of Lovington to test for oil production from the Strawn formation underlying a 40-acre oil spacing unit being the NE/4SE/4 of Irregular Section 5, T16S, R36E, NMPM but is unable to find an acceptable surface locations in that 40-acre spacing unit due to zoning regulations adopted by the Lovington-Lea County Extraterritorial Zoning Authority, New Mexico.

(4) Therefore, Chesapeake propose to use the surface of the adjoining 40-acre spacing unit to the east (NW/4SW/4 of Section 5) and has obtained the approval of the Lovington-Lea County Extraterritorial Zoning Authority to use a standard surface location 2190 feet from the South line and 810 feet from the West line (Unit T) of Irregular Section 4, T16S, R36E, NMPM.

(5) Chesapeake proposes to commence drilling at the proposed standard surface location and to drill vertically to a kick off point at approximately 8278 TVD and then to commencing building angle at the rate of 3 degrees per 100 feet and to reach a total depth of approximately 12,100 feet (+ or - 100 feet) at a project point (bottom hole location) 2310 feet from South line and 750 feet from East line of Irregular Section 5, T16S, R36E, NMPM.

(6) Chesapeake proposes the following:

- (a) 40-acre dedication
- (b) drilling producing interval being 330 foot set back from each side boundary of the spacing unit
- (c) standard depth bracket oil allowable of 365 BOPD
- (d) Bottom hole target: not closer than 330 feet to any side boundary of the 40-acre spacing unit

(7) In accordance with Rule 111.D(2), the following exhibits are attached:

Exhibit 1: Plat indicating spacing units, surface and subsurface well location, offset units, and operators.

- Exhibit 2: Plat showing surface use limitations
- Exhibit 3: Form C-102 and supplemental surveyors plat
- Exhibit 4: Aerial photo of surface tract and subsurface tract
- Exhibit 5: Application for Permit to Drill
- Exhibit 6: Halliburton's vertical oriented plan view and horizontal plan view
- Exhibit 7: Resolution from Lovington-Lea County Extraterritorial Zoning Authority
- Exhibit 8: Permit for well site construction issued by Lea County Airport Planning and Zoning Commission dated October 25, 1996.
- Exhibit 9: Type Log

WHEREFORE, Applicant requests that this application be approved.

Respectfully submitted,

KELLAHIN & KELLAHIN

By: 

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

GILLESPIE '84
SNYDER "F" 2-5
10721
PVPM

10780
WFMP
GILLESPIE '89
SNYDER "C" 3-5
10760
WFPR

TXO '85
PHILLIPS "P" 1-5

10800
WFMP
FORAN '88
ROUSE 1-5

12300
MRRW

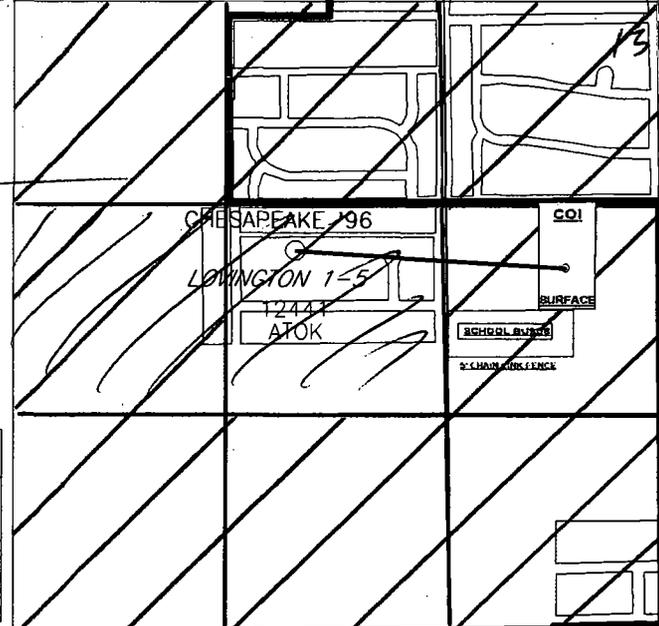
LOVINGTON CORPORATE BOUNDARY

16S/36E

5

4

EXHIBIT
2



CHESAPEAKE OPERATING, INC.
Lovington Townsite 3D Survey
LOVINGTON 1-5 DIRECTIONAL WELL
Lea County, New Mexico
Robert A. Hefner IV 1"=1200 Mike Hartz
ChE A. Hamech Scale 1:14400 11/6/96

 OFFSET OPERATOR—CHESAPEAKE OPERATING, INC.

CHESAPEAKE OPERATING, INC

LOVINGTON DRILL SITE
PROPOSAL

LEA COUNTY, NEW MEXICO

NORTH
17 TH STREET

60'

RESIDENTIAL AREA

330'

POWER LINES (Washington Avenue line dedicated ROW of 40' N.E. of S. of C.L.)

NORTH
13 TH STREET

990' FWL OF SEC. 4,
T-16-S, R-36-E

CITY LIMIT

[60' actual width w/center line, on 1/4-1/4 section line.]

OVERHEAD POWER LINES

PIPELINES

PROPERTY LINES

TWO LEVELED, UNDEVELOPED
330' X 660' TRACTS, WITH LOW,
SPARSE BRUSH COVER.

CHESAPEAKE
330' X 660'
FIVE ACRES

CHURCH

RESIDENTIAL
AREA

17 TH Street C.L.
coincident with
property lines

Overhead power
and phn cables

Level, with light
and sparse covering of
mesquite, curly
mesquite grass and
yucca re-growth

UNDEVELOPED
SOLORZANO
TRACT, HAS
SPARSE
COVERING
OF BRUSH

660'

PROPOSED BATTERY
SITE

Proposed tract entrance

Washington Avenue

SCHOOL BUS BARN

BURIED PIPELINES

CORPORATE BOUNDARY

4/10 mile North of
the Lovington Motor
Inn, located at the
intersection of 17TH
Street and the
Artesia hwy, SH-82

330' X 660' TRACT

Fence may be on the North boundary line
of bus barn tract, which overlies planned
ROW of C.O.I. Tract access road.

Five foot chain link fence.

THIS GREATER AREA IS UNDEVELOPED
SOUTH TO A LINE 330' NORTH OF SH-83,

SUBJECT: Highlighted Chesapeake Tract in association with continuous and similar non-developed tracts. This property lies at the Southwest edge of Lovington, New Mexico, just outside the corporate city limits. Plat attempts to show pertinent land features such as streets, residential development, power lines, probable pipeline positions, and other conditions relative to planned onsite drilling and construction.

SCALE: ONE INCH = 200'

EXHIBIT
2

DISTRICT I
P.O. Box 1880, Hobbs, NM 88241-1880

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

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

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

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

AMENDED REPORT

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		WILDCAT
Property Code	Property Name	Well Number
	LOVINGTON 5	1
OGRID No.	Operator Name	Elevation
	CHESAPEAKE OPERATING INC.	3926

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
T	4	16 S	36 E		2190	SOUTH	810	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
	5	16S	36E		2310	South	750	East	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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

LOT 4 50.60 ACRES	LOT 3 50.47 ACRES	LOT 2 50.35 ACRES	LOT 1 50.22 ACRES
LOT 5 40 ACRES	LOT 6 40 ACRES	LOT 7 40 ACRES	LOT 8 40 ACRES
LOT 12 40 ACRES	LOT 11 40 ACRES	LOT 10 40 ACRES	LOT 9 40 ACRES
LOT 13 40 ACRES	LOT 14 40 ACRES	LOT 15 40 ACRES	LOT 16 40 ACRES

810' - 0

2190'

OPERATOR CERTIFICATION

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

Colley Andrews
Signature

Colley Andrews
Printed Name

District Manager
Title

11-07-96
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 supervision, and that the same is true and correct to the best of my belief.

NOVEMBER 1, 1996

Date Surveyed JLP

Signature & Seal

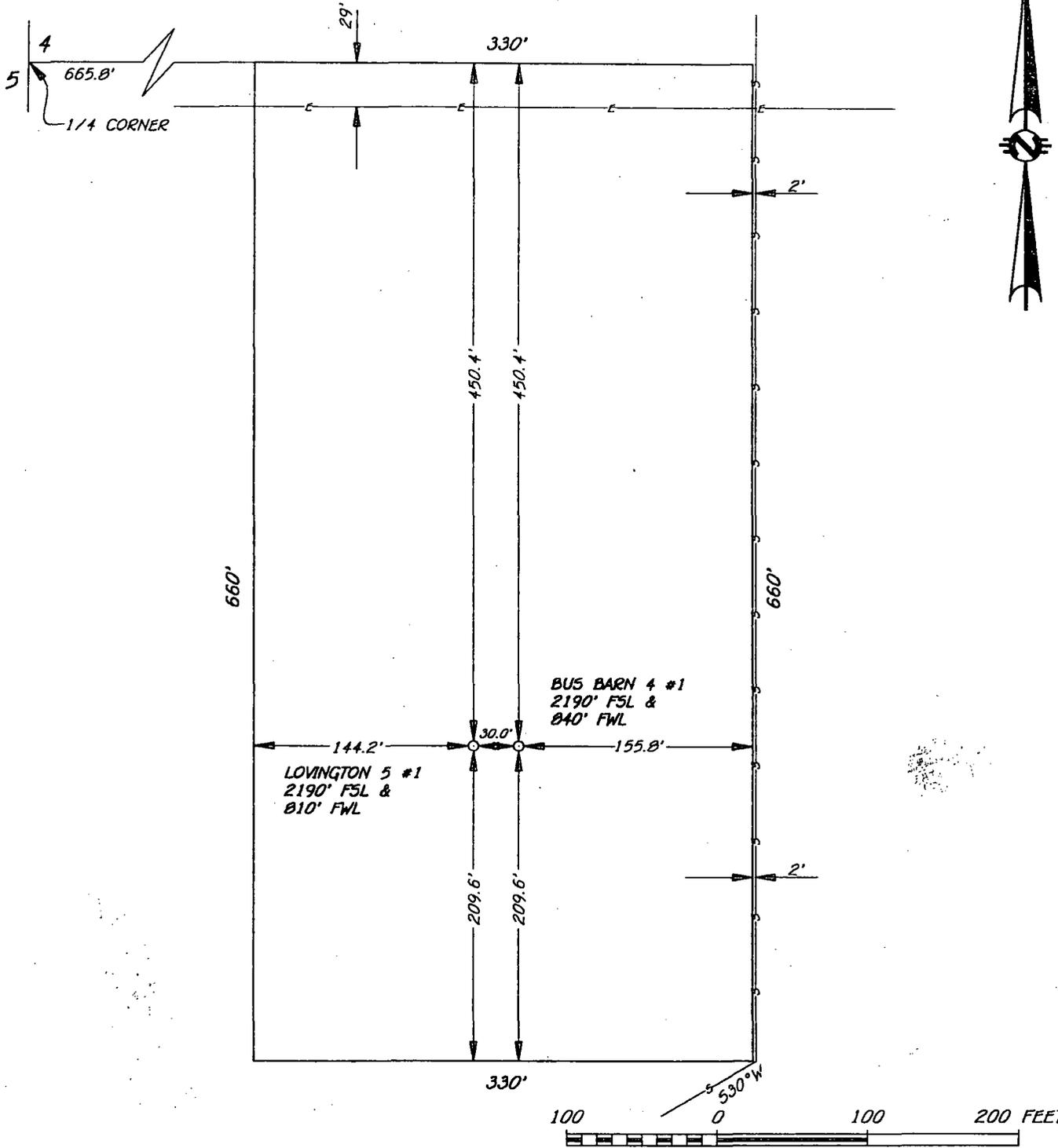
Professional Surveyor
NEW MEXICO
RONALD B. EIDSON
W.O. Num 96-1424

Certificate No. 3239
JOHN WEST, 676
RONALD B. EIDSON, 3239

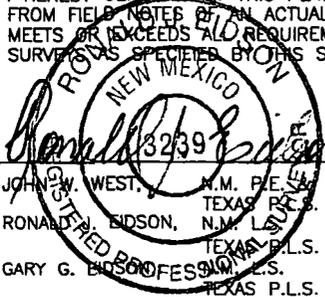
EXHIBIT

3

SECTION 4, TOWNSHIP 16 SOUTH, RANGE 36 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.



JOHN W. WEST, N.M. P.E., S.P.S. No. 676
 TEXAS P.E.S. No. 1138
 RONALD L. BIDSON, N.M. L.S. No. 3239
 TEXAS P.L.S. No. 1883
 GARY G. BIDSON, N.M. P.L.S. No. 12641
 TEXAS P.L.S. No. 4735

JOHN W. WEST ENGINEERING COMPANY
 CONSULTING ENGINEERS & SURVEYORS - HOBBS, NEW MEXICO

CHESAPEAKE OPERATING, INC.

LOCATION OF WELLS ON A 660'x 330' TRACT OF LAND
 LOCATED IN THE SW/4 SECTION 4, TOWNSHIP 16 SOUTH,
 RANGE 36 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 11/1/96	Sheet 1 of 1 Sheets
W.O. Number: 96-11-1424	Drawn By: JAMES L. PRESLEY
Date: 11/4/96	DISK:JLP#165
	CHE1424A



District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 PO Drawer DD, Artesia, NM 88211-0719
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

Form C-101
 Revised February 10, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 6 Copies
 Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address. Chesapeake Operating, Inc. P. O. Box 18496 Oklahoma City, OK 73154-0496		² OGRID Number
		³ API Number 30 - 0
⁴ Property Code	⁵ Property Name LOVINGTON 5	⁶ Well No. 1

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
T	4	16S	36E		2190	South	210'	West	LEA

⁸ Proposed 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
	5	16S	36E		2310	South	750	East	LEA

⁹ Proposed Pool 1 Wildcat	¹⁰ Proposed Pool 2
---	-------------------------------

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3926'
¹⁶ Multiple	¹⁷ Proposed Depth 12,438'	¹⁸ Formation Strawn	¹⁹ Contractor ZIA Drill	²⁰ Spud Date 11-14-96

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48	450'	348	Surface
12-1/4"	8-5/8"	28 & 32	4,221'	2020	Surface
7-7/8"	5-1/2"	20	12,438'	574 1st Stg	
				445 2nd Stg	

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Chesapeake Operating proposes to drill to 12,438' T.D. in the Strawn with ZIA Drill as the drilling contractor.

ZIA Drilling's BOP stack consists of 11"x5000# Camron Double with 5000# Hydrill Annular Preventor.

40 Acres - SW Sec 4

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Colley Andrews*

Printed name: Colley Andrews

Title: District Manager

Date: 11-07-96

Phone: (405) 848-3000

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration:

Conditions of Approval:
 Attached

EXHIBIT

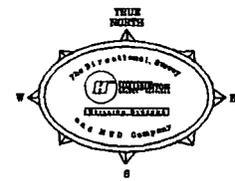
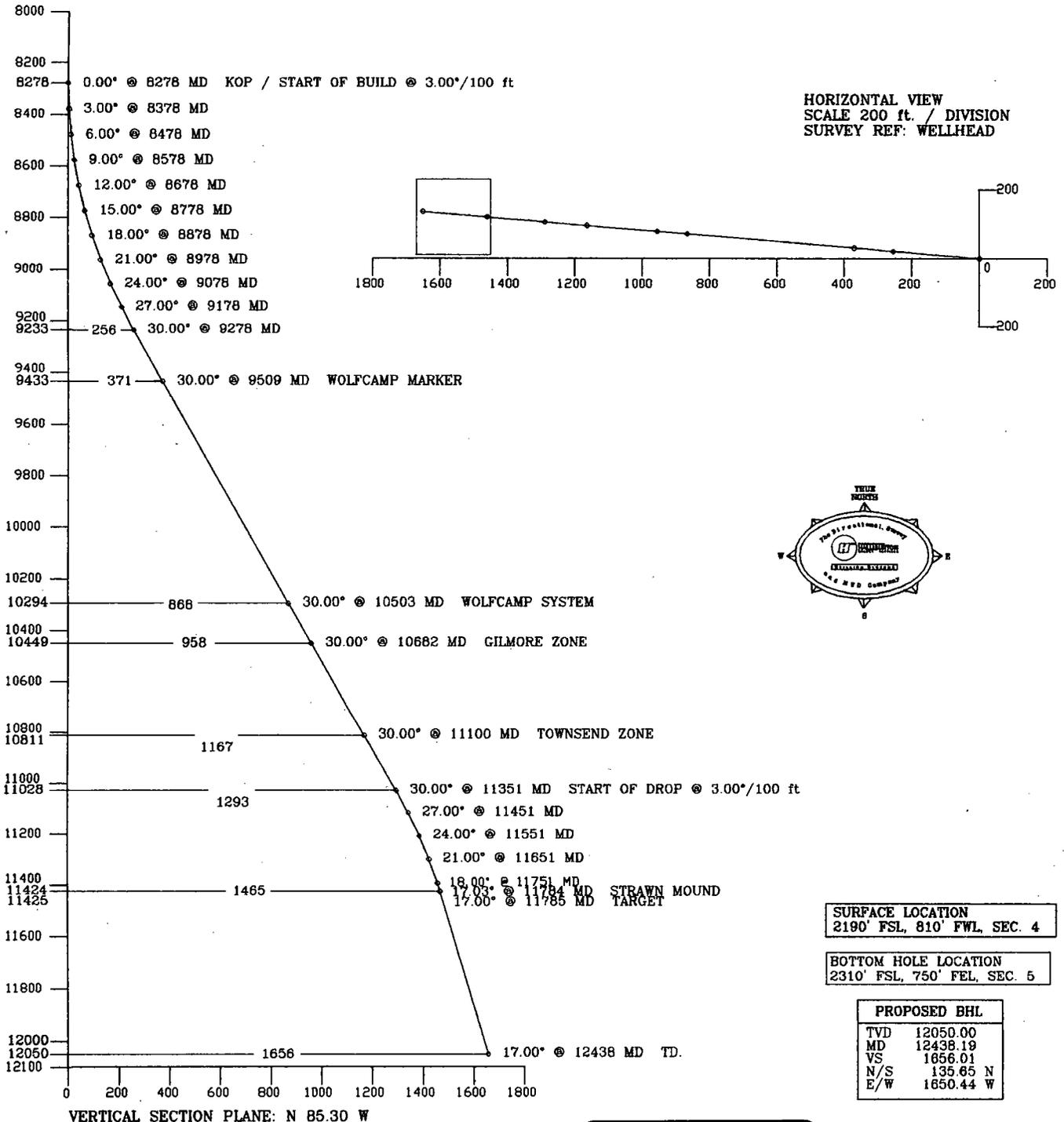
5

CHESAPEAKE ENERGY CORPORATION
 LOVINGTON #1-5
 LEA COUNTY, NEW MEXICO
 SEC.4-T16S-R36E



VERTICAL VIEW
 SCALE 200 ft. / DIVISION
 TVD REF: WELLHEAD
 VERTICAL SECTION REF: WELLHEAD

HORIZONTAL VIEW
 SCALE 200 ft. / DIVISION
 SURVEY REF: WELLHEAD

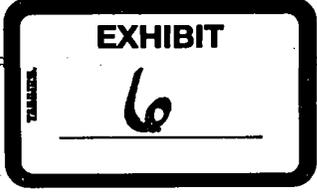


SURFACE LOCATION
 2190' FSL, 810' FWL, SEC. 4

BOTTOM HOLE LOCATION
 2310' FSL, 750' FWL, SEC. 5

PROPOSED BHL	
TVD	12050.00
MD	12438.19
VS	1656.01
N/S	135.65 N
E/W	1650.44 W

VERTICAL SECTION PLANE: N 85.30 W



Halliburton Energy Services

Proposal Report

Date: 11/1/96
 Time: 3:47 pm
 Wellpath ID: PROPOSAL
 Last Revision: 11/1/96

Calculated using the Minimum Curvature Method
 Computed using WIN-CADDS REV2.2.2
 Vertical Section Plane: N 85.30 W

Survey Reference: WELLHEAD
 Vertical Section Reference: WELLHEAD
 Closure Reference: WELLHEAD
 TVD Reference: WELLHEAD

CHESAPEAKE ENERGY CORPORATION
 LOVINGTON #1-5
 LEA COUNTY, NEW MEXICO
 SEC.4-T16S-R36E
 PROPOSAL
 SURFACE LOCATION
 2190' FSL, 810' FWL SEC. 4
 BOTTOM HOLE LOCATION
 2310' FSL, 750' FEL SEC. 5

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		DLS (dg/100ft)	
TIE IN									
0.00	0.00	N 0.00 E	0.00	0.00	0.00	0.00 N	0.00 E	0.00	
4500.00	0.00	N 0.00 E	4500.00	4500.00	0.00	0.00 N	0.00 E	0.00	
KOP / START OF BUILD @ 3.00 deg/100 ft									
8278.03	0.00	N 0.00 E	3778.03	8278.03	0.00	0.00 N	0.00 E	0.00	
8378.03	3.00	N 85.30 W	100.00	8377.99	2.62	0.21 N	2.61W	3.00	
8478.03	6.00	N 85.30 W	100.00	8477.67	10.46	0.86 N	10.43W	3.00	
8578.03	9.00	N 85.30 W	100.00	8576.80	23.51	1.93 N	23.43W	3.00	
8678.03	12.00	N 85.30 W	100.00	8675.12	41.74	3.42 N	41.59W	3.00	
8778.03	15.00	N 85.30 W	100.00	8772.34	65.08	5.33 N	64.86W	3.00	
8878.03	18.00	N 85.30 W	100.00	8868.21	93.48	7.66 N	93.16W	3.00	
8978.03	21.00	N 85.30 W	100.00	8962.47	126.85	10.39 N	126.43W	3.00	
9078.03	24.00	N 85.30 W	100.00	9054.84	165.12	13.53 N	164.56W	3.00	
9178.03	27.00	N 85.30 W	100.00	9145.09	208.16	17.05 N	207.46W	3.00	
9278.03	30.00	N 85.30 W	100.00	9232.96	255.87	20.96 N	255.01W	3.00	
WOLFCAMP MARKER									
9509.02	30.00	N 85.30 W	230.98	9433.00	371.36	30.42 N	370.12W	0.00	
WOLFCAMP SYSTEM									
10503.21	30.00	N 85.30 W	994.20	10294.00	868.46	71.14 N	865.54W	0.00	
GILMORE ZONE									
10682.19	30.00	N 85.30 W	178.98	10449.00	957.95	78.47 N	954.73W	0.00	
TOWNSEND ZONE									
11100.20	30.00	N 85.30 W	418.00	10811.00	1166.95	95.59 N	1163.03W	0.00	
START OF DROP @ 3.00 deg/100 ft									
11351.29	30.00	N 85.30 W	251.10	11028.46	1292.50	105.88 N	1288.16W	0.00	
11451.29	27.00	N 85.30 W	100.00	11116.33	1340.21	109.78 N	1335.71W	3.00	
11551.29	24.00	N 85.30 W	100.00	11206.58	1383.26	113.31 N	1378.61W	3.00	

Halliburton Energy Services

Page 2

Date: 11/1/96

Proposal Report

Wellpath ID: PROPOSAL

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		DLS (dg/100ft)
11651.29	21.00	N 85.30 W	100.00	11298.96	1421.52	116.44 N	1416.75W	3.00
11751.29	18.00	N 85.30 W	100.00	11393.21	1454.90	119.18 N	1450.01W	3.00
STRAWN MOUND								
11783.58	17.03	N 85.30 W	32.29	11424.00	1464.62	119.97 N	1459.70W	3.00
TARGET								
11784.63	17.00	N 85.30 W	1.04	11425.00	1464.92	120.00 N	1460.00W	3.00
TD.								
12438.19	17.00	N 85.30 W	653.56	12050.00	1656.01	135.65 N	1650.44W	0.00

**RESOLUTION OF THE LOVINGTON-LEA COUNTY
EXTRATERRITORIAL ZONING AUTHORITY**

At a regular meeting of the Lovington-Lea County Extraterritorial Zoning Authority held on October 3, 1996, the following action was taken:

WHEREAS, Chesapeake Operating, Inc., a corporation, whose address is PO Box 18496, Oklahoma City, Oklahoma, 73154 (Hereinafter the "Petitioner"), has filed a Petition for Variance to drill up to two oil and gas wells in the Lovington-Lea County Extraterritorial Zone on a five-acre tract more particularly described as the West Half of the Northeast Quarter of the Northwest Quarter of the Southwest Quarter (W/2NE/4NW/4SW/4) of Section 4, Township 16 South, Range 36 East, N.M.P.M., Lea County, New Mexico; and

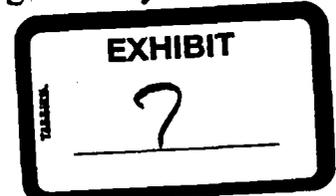
WHEREAS, Lovington 5 #1 well is to be drilled at a surface location which lies 825' from the west line and 2181' from the south line of said Section 4, Township 16 South, Range 36 East, N.M.P.M., Lea County, New Mexico; and then if Petitioner's Lovington 5 #1 is successfully completed, or the information developed by drilling of said well warrants, then a second well may be drilled within the above five-acre tract to be known as the Lovington Bus Barn 4 #1 well; and

WHEREAS, Petitioner has complied with legal notice requirements to adjoining and nearby landowners; and

WHEREAS, the strict adherence to the R-1, Single Family Residential, requirements of the Lovington-Lea County Extraterritorial Zoning Ordinance would result in peculiar, exceptional and undue hardship upon the Petitioner and mineral owners in and under said five-acre tract; and

WHEREAS, a variance from such strict application of the Lovington-Lea County Extraterritorial Zoning Ordinance should be granted to relieve such difficulties and hardships to and upon Petitioner, and to allow the drilling, operating, maintaining, and improvement of such well or wells, including facilities for the production, short term storage and marketing of product therefrom; and

WHEREAS, the Lovington-Lea County Extraterritorial Zoning Commission has previously held extensive public meeting on July 18, 1996,



and on August 20, 1996, and has recommended to the Extraterritorial Zoning Authority approval of Petitioner's variance request, subject to certain conditions; and

WHEREAS, the Lovington-Lea County Extraterritorial Zoning Authority finds that said Authority should approve the Petition of Petitioner for a variance to drill the two oil and gas wells subject to the twenty-one (21) conditions made a part hereof below; and:

WHEREAS, although the Lovington-Lea County Extraterritorial Zoning Authority finds that, due to the exceptional topographical, geological, and seismological conditions peculiar to the location of the underground mineral and also peculiar to the surface area involved, the variance requested by the Petitioner should be approved, the Lovington-Lea County Extraterritorial Zoning Authority does further find that it should adopt as conditions to its granting the variance request of Petitioner the twenty-one (21) conditions incorporated hereinbelow, all so that the interests of adjoining and adjacent land owners will be reasonably and adequately protected.

NOW, THEREFORE, BE IT RESOLVED that the Lovington-Lea County Extraterritorial Zoning Authority grant a variance to Chesapeake Operating, Inc., to drill, operate, maintain and improve up to two oil and gas wells, including facilities for the production, storage, and removal of product therefrom, upon the five-acre tract hereinabove described, with Petitioner's first of such two wells hereby authorized to be drilled at a surface location inside such five-acre tract that is 825 feet from the west line and 2,181 feet from the south line of Section 4, Township 16 South, Range 36 East, N.M.P.M., Lea County, New Mexico, and with the second well authorized, to be drilled within such five-acre tract subject to, and conditioned upon full compliance with, the following twenty-one (21) conditions.

1. Chesapeake shall install H₂S monitoring equipment during the drilling and completion phases of Chesapeake's proposed operations which will shut down drilling operations if unsafe levels of H₂S are detected.

In addition, Chesapeake shall maintain a post-completion monitoring system which will automatically shut the well in if unsafe levels of H₂S are detected. Chesapeake shall have all H₂S monitoring equipment checked for accuracy each 30 days and shall have same recalibrated as necessary to detect unsafe levels of H₂S.

2. To insure a secure drill site location, which will prevent inadvertent entry by children or animals, Chesapeake will build a seven foot chain link fence surrounding the proposed drill site prior to drilling.
3. To reduce disturbance to residents in close proximity to Chesapeake's drilling operations and mitigate dust transmission, our company will also construct a seven foot stockade-type wooden fence at the North frontage of Chesapeake's five acre tract. This stockade fence will remain in place during the entire drilling and completion phase of Chesapeake's operations.
4. To further reduce security concerns as well as to minimize noise and inconvenience to adjoining residents, Chesapeake will move its proposed second location back to the same drill site area where the company's initial well is to be drilled. Chesapeake shall not drill any well upon this five acre tract which will be within 400 feet of any existing residence or other building.
5. After this well(s) has been successfully completed, Chesapeake shall install high-security fencing and security lighting around the production facilities. Furthermore, the production facilities shall be maintained to an extraordinary standard with the premises to be kept clear of debris or trash.
6. Chesapeake's drilling operation on subject lands shall be conducted with a closed mud circulation system. All mud and cuttings shall be removed from the premises.
7. Chesapeake shall not engage in nor allow any disposal of produced water or waste liquids in, under or upon this five acre tract.
8. Chesapeake shall utilize biocides to reduce any offensive odors which might be generated from its operations.
9. Chesapeake will build a caliche road during the drilling and completion phase of its activities. The road shall be dampened as needed to minimize dust caused by ingress and egress to its location. After the well has been successfully completed, Chesapeake shall upgrade the road to a gravel or chat composition which will further inhibit the transmission of dust. Chesapeake shall maintain this lease road after completion of its well(s). This lease road shall provide access to this five acre tract only from 17th Street and shall be

utilized to provide such access while Chesapeake conducts its operations.

10. To reduce engine noise, Chesapeake shall utilize an electric pumping unit(s) on this production facility.
11. Chesapeake shall install tank batteries equipped with lightning arresters to reduce the likelihood of lightning strikes on its production facility.
12. After completion of this well(s), Chesapeake shall plant trees indigenous to the area and which can be maintained easily at various locations outside the production facility fencing, and Chesapeake shall maintain said trees with suitable watering.
13. The drilling location site shall be reduced in size to an area compatible with the location of the four dead man anchors after drilling and completion operations have concluded. Chesapeake shall restore the location to as near its original condition as reasonably possible by replacing topsoil and reseeding with natural grasses.
14. Subsequent to all completion and restoration exercises of whatever kind or character, Chesapeake will donate the Northernmost two acres of its five acre tract to the municipality. Upon plugging and abandonment of the well(s), the balance of the five acre tract shall be donated to the City of Lovington, provided that the first two acres have been donated to the City of Lovington, and provided that the City of Lovington is agreeable to accepting same.
15. Should Chesapeake decide to sell its interest in the well(s) to another party, the conditions under which Chesapeake is granted this variance shall extend to any such party and such party shall be bound by all these obligations. Prior to any such assignment, Chesapeake shall notify the Zoning Enforcement Officer of such planned transfer of interest. Any sale or assignment by Chesapeake of its interest in the well(s), in whole or in part, to another party shall not relieve Chesapeake, its successors and/or assigns, from responsibilities or obligations which are required of Chesapeake under the terms and conditions of any variance granted with respect to the City of Lovington-Lea County Extraterritorial Zoning Ordinance.
16. Chesapeake agrees to indemnify, save and hold harmless the Extraterritorial Zoning Commission/Authority, the City of Lovington, the County of Lea, their respective commissioners, officers, employes, agents and their respective heirs, legal representatives, successors, and assigns, from and against all claims, demands, injuries, losses, damages, costs, expenses, and attorney's fees, which

in any manner result from or arise out of or relate to Chesapeake's drilling, equipping, and production operations including its acts or omissions in connection therewith. This Agreement shall continue in force, beginning with the date Chesapeake commences such operations and shall extend beyond termination of any zoning variance granted to it for this five acre tract.

17. Chesapeake shall test all domestic water wells located in the North Half of the SouthWest Quarter of Section 4 and shall test any existing wells on the property to the South owned by Joe Sanders and shall thereafter test such water wells every six months until Chesapeake plugs and abandons the well(s) on this five acre tract, provided the owners of such real property consent to such testing. After plugging and abandonment have been accomplished, Chesapeake shall continue to test such domestic water wells and provide copies of the test reports, all as provided above, for a period of five (5) years. Chesapeake shall furnish the property owner, as well as the Lovington-Lea County Extraterritorial Zoning Commission/authority, with a copy of the test report for each test upon their respective property.
18. Chesapeake shall develop and implement spill prevention plans for its drilling and production operations and an overall emergency plan for its drilling and production operations, all acceptable to the Lovington-Lea County Extraterritorial Zoning Commission/Authority.
19. Chesapeake shall develop a plan for clean-up and closure upon plugging and abandonment of the well(s) upon this five acre tract. As a minimum, Chesapeake shall timely remove all of its equipment and other property; clean up any spill areas; remove caliche from pads and from the road; restore the surface to the contour of surrounding land; reseed with native grasses; and water sufficiently and maintain weed control until the grass turf is established. This plan must be acceptable initially to the Lovington-Lea County Extraterritorial Zoning Commission/Authority and, at the time of clean-up and closure, the Commission/Authority may require Chesapeake to do additional clean-up and closure over and above that required by the initial plan.
20. Petitioner shall be required to limit its tank battery or batteries on the five-acre tract to a total of no more than four 210 barrel oil tanks, two 210 barrel water tanks, and two heater treaters.
21. Chesapeake having specifically agreed to a condition that it mediates any claim by an owner of real property identified in Chesapeake's Proof of Notice and Supplemental Proof of Notice filed in the records of the Lovington-Lea County Extraterritorial Zoning Commission/Authority, for property damage of less than \$5,000.00 if

such a property owner requests mediation of the claim. Chesapeake shall contact such property owner to select a mediator within ten (10) business days after receiving a request for mediation from such property owner. If the parties cannot agree on a mediator, the parties will request a District Judge of Lea County, New Mexico, to select a mediator on their behalf who shall be a licensed and/or trained mediator. The costs of mediation shall be borne equally by the parties or otherwise as they may agree. All attorneys' fees shall be paid by the party who employs that attorney. The general procedure of mediation shall conform to the laws of the State of New Mexico. No legal proceedings may be brought by either party until the mediation process has been completed.

AND the Extraterritorial Zoning Commission/Authority reserves jurisdiction to modify, to amend, and/or require additional conditions of Chesapeake during the term of this variance in the event that there is a change in conditions in order to meet and to satisfy the purposes of the City of Lovington-Lea County Extraterritorial Zoning Ordinance, namely, "to promote health, safety, morals, and the general welfare" of the public.

DATED this 3rd day of October, 1996.

LOVINGTON-LEA COUNTY
EXTRATERRITORIAL ZONING AUTHORITY

by Don Zell
of Lovington-Lea County Extraterritorial
Zoning Authority

ATTEST:

Pat Chappelle Lea County Clerk
By Melinda Hughes Deputy

**PERMIT FOR CONSTRUCTION OF
STRUCTURE(S) WITHIN THE
LOVINGTON AIRPORT'S REGULATION ZONE**

Pursuant to Lea County Ordinance No. 6, the Lea County Airport Planning and Zoning Commission does hereby Permit the Construction of a Structure as described on the application attached of Chesapeake Operating, Inc.

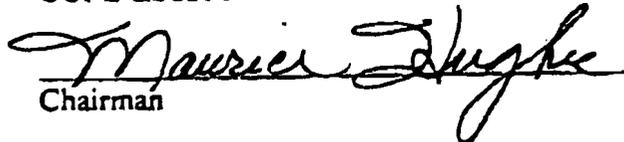
A. Special Conditions:

1. Strict adherence to application representations.
2. This Permit includes Servicing Units that may be brought onto location should a producing well(s) be produced, to cover the life of the well(s)
3. Advance Notice must be given to the County Airport Manager before the drilling rig(s) and any subsequent servicing rig is brought onto the well location.
4. This Permit includes authorization for Applicant's Lovington 5 #1 well and also for its proposed Bus Barn 4 #1 well to be located on the 5-acre tract of land acquired by Chesapeake described as the W/2NE/4NW/4SW/4 of §4, T16S, R36E, N.M.P.M., Lea County, New Mexico, **PROVIDED THAT SUCH WELL(S) SHALL BE LOCATED** on such 5-acre tract and in strict conformity to the requirements of the Lovington-Lea County Extraterritorial Zoning Authority.
5. Strict adherence to Federal Aviation Administration Regulations and Requirements.

EXECUTED in OPEN MEETING by the Chairman of the Airport Planning and

Zoning Commission on this 25th day of October, 1996.

AIRPORT PLANNING AND ZONING
COMMISSION


Chairman



by Wanda White
, Deputy



ACKNOWLEDGMENT OF NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

SPONSOR	Cheasapeake Operating, Inc. P.O. Box 18496 Oklahoma City, Oklahoma 73154-1525		CONSTRUCTION LOCATION	
			Lovington, NM	
CONSTRUCTION PROPOSED	DESCRIPTION Temporary Drilling Rig Site: Lovington 5 #1 Lease	LATITUDE		LONGITUDE (NAD83)
		32°56'59.42"		103°21'57.65"
		HEIGHT (IN FEET)		
		ABOVE GROUND	ABOVE ASL	
		150	4076	

The Federal Aviation Administration hereby acknowledges receipt of notice dated October 1, 1996 concerning the proposed construction or alteration described above.

A study has been conducted under the provisions of Part 77 of the Federal Aviation Regulations to determine whether the proposed construction would be an obstruction to air navigation, whether it should be marked and lighted to enhance safety in air navigation, and whether supplemental notice of start and completion of construction is required to permit timely charting and notification to airmen. The findings of that study are as follows.

- The proposed construction does not require notice to FAA.
- The proposed construction is not identified as an obstruction under the standards of FAR, Part 77, Subpart C and would not be a hazard to air navigation. **PROVIDED ADHERENCE TO CONDITIONS STATED ON PAGE 2.**
- The proposed construction is identified as an obstruction under the standards of FAR, Part 77, Subpart C but would not be a hazard to air navigation.
- The structure should be obstruction marked and lighted per FAA Advisory Circular AC 70/7450-1, "Obstruction Marking and Lighting," Chapters 3, 4, 5, 13 (FLAGGED/LIGHTED).
- Supplemental notice is required at least 48 hours before the start of construction and within five days after construction reaches its greatest height (use the enclosed FAA form).

This determination expires on April 30, 1998 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission and an application for a construction permit is made to the FCC on or before the above expiration date. In such case the determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC denies the application.

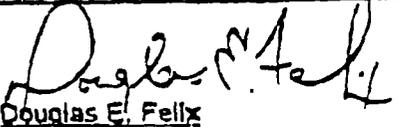
NOTE: Any request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

- The proposed construction would exceed Part 77 obstruction standards and further aeronautical study is necessary to determine whether it would be a hazard to air navigation. Pending completion of any further study, it is presumed the construction would be a hazard to air navigation. Further study:
 - Has been initiated by the FAA.
 - May be requested by the sponsor within 30 days of the date of this acknowledgment.
- If the proposed structure were reduced in height to not exceed _____ ft. above ground level (_____ ft. above sea level), it would not exceed Part 77 obstruction standards.

If the structure is subject to the licensing authority of the FCC, a copy of this acknowledgment will be sent to that Agency.

NOTICE IS REQUIRED ANYTIME THE PROJECT IS ABANDONED OR THE PROPOSAL IS MODIFIED.

(SEE CONDITIONS PAGE 2)

SIGNED 
Douglas E. Felix

TITLE Airspace Specialist

ISSUED IN FORT WORTH, TEXAS ON October 4, 1996
FAA FORM 7460-7 (4-83) SUPERSEDES PREVIOUS EDITION

Continuation Sheet:**FAA FORM 7460-7, ACKNOWLEDGMENT OF PROPOSED CONSTRUCTION OR ALTERATION****AERONAUTICAL STUDY NUMBER: 96-ASW-2764-OE****Lovington, New Mexico*****WELL SITE: Lease Lovington 5 #1*****Conditions for Operation of Temporary Drilling Rig**

· The temporary drilling rig shall be obstruction flagged and lighted in accordance with FAA Advisory Circular 70/7460-1 "Obstruction Marking and Lighting."

· Notify the Lea County - Zip Franklin Memorial Airport Manager, or his representative, at (505) 393-4943 or (505) 398-8521, prior to raising the temporary drilling rig and when the project is complete and the temporary drilling rig is removed from the site.

NOTE: This determination shall be valid for a period of 18 months. While the determination is valid, it is permissible to return the temporary drilling rig to the site without submitting a new FAA Form 7460-1, "Notice of Proposed Construction or Alteration," provided the following conditions are met:

· The temporary drilling equipment does not exceed a maximum height of 150 feet above ground level (AGL)/4076 feet above mean sea level (AMSL).

· The temporary drilling rig shall be obstruction flagged and lighted in accordance with FAA Advisory Circular 70/7460-1 "Obstruction Marking and Lighting."

· Notify the Lea County - Zip Franklin Memorial Airport Manager, or his representative, at (505) 393-4943 or (505) 398-8521, prior to raising the temporary drilling rig and when the project is complete and the temporary drilling rig is removed from the site.

FAA FORM 7460-1, "NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION" SHALL BE SUBMITTED FOR ANY TEMPORARY DRILLING EQUIPMENT THAT EXCEEDS THE MAXIMUM ALLOWABLE HEIGHT OF 150 FEET AGL / 4076 FEET AMSL.

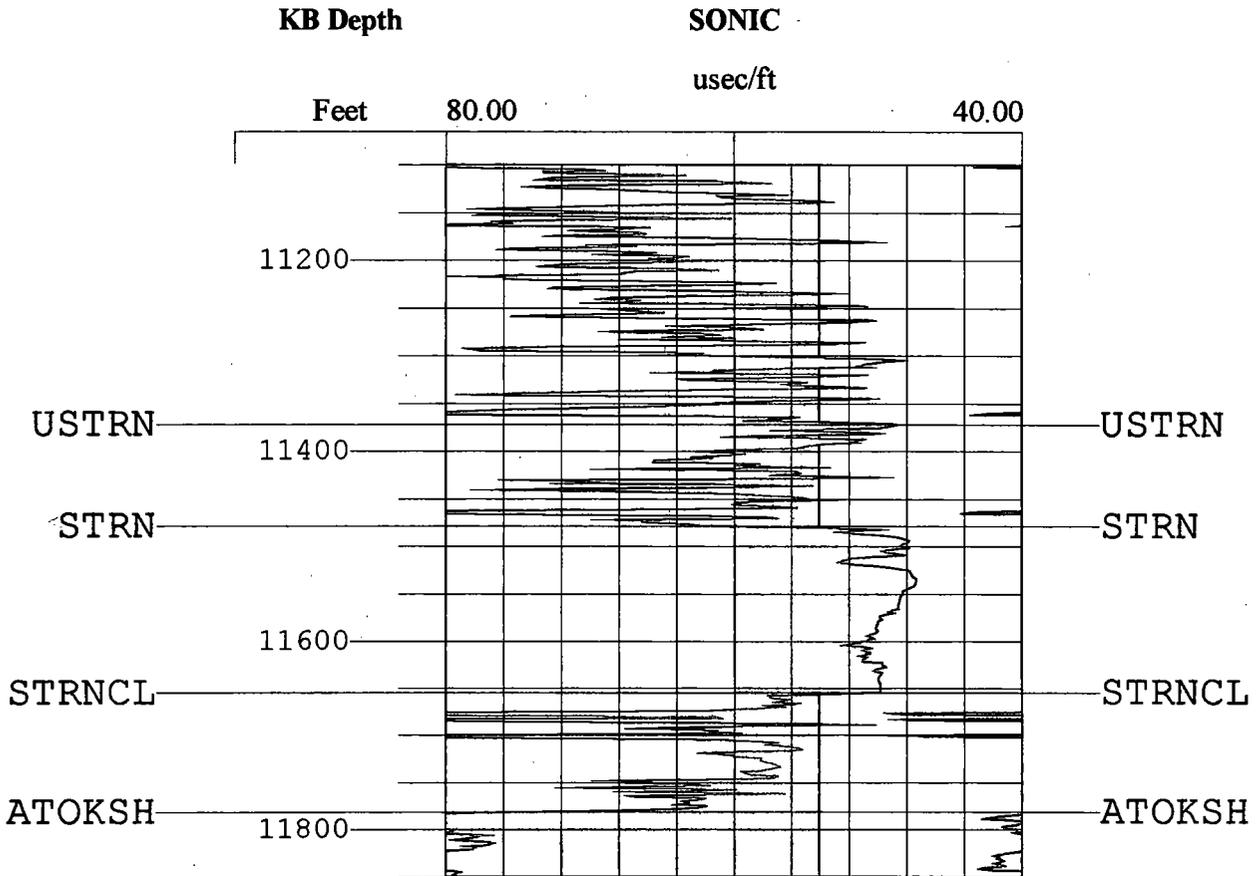
CHESAPEAKE OPERATING, INC

Lovington Strawn Project

FORAN'88
Rouse 1-5
5-16S-36E
3950' FNL 1550' FWL
Lea County, New Mexic

KB = 3960.00FT

Type Log for Lovington 1-5 Application



Depth Scale = 200.00 ft/inch
Date = Nov-07-1996 08:40:45

EXHIBIT

9

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

November 12, 1996

TELEPHONE (505) 982-4285

TELEFAX (505) 982-2047

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)

HAND DELIVERED

Mr. Michael E. Stogner
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Lovington 5 Well No. 1
Administrative Application of
Chesapeake Operating, Inc.
for a Directional Wellbore
Lea County, New Mexico

Dear Mr. Stogner:

On behalf of Chesapeake Operating, Inc., please find enclosed our Application for approval of a Directional Wellbore pursuant to Rule 11-1-1.

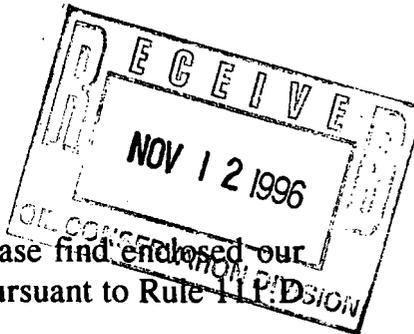
By copy of this letter, I am requesting the OCD-Hobbs, to accept and process the enclosed Application for Permit to Drill. I would appreciate Mr. Sexton calling me if there is anything else I need to submit to his office.

Very truly yours,

W. Thomas Kellahin

cc: Mr. Jerry Sexton (OCD-Hobbs)
cfx: Chesapeake Operating, Inc.
Attn: Mike Hazlip

COPY



ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
 [DD-Directional Drilling] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling

 NSL NSP DD SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

 DHC CTB PLC PC OLS OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

 WFX PMX SWD IPI EOR PPR[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply[A] Working, Royalty or Overriding Royalty Interest Owners[B] Offset Operators, Leaseholders or Surface Owner[C] Application is One Which Requires Published Legal Notice[D] Notification and/or Concurrent Approval by BLM or SLO

U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] For all of the above, Proof of Notification or Publication is Attached, and/or,[F] Waivers are Attached Note: Applicant is the offset operator

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

J. Mark Lester
 Print or Type Name

J. Mark Lester
 Signature

Sr. VP - Exploration
 Title

11/11/96
 Date

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

**APPLICATION OF CHESAPEAKE OPERATING, INC.
FOR A HIGH ANGLE/HORIZONTAL DIRECTION
LEA COUNTY, NEW MEXICO**

ADMINISTRATIVE APPLICATION

Comes now Chesapeake Operating, Inc. ("Chesapeake"), by and through its attorneys, Kellahin & Kellahin, and in accordance with Division Rule 111.D, applies to the New Mexico Oil Conservation Division for approval for a Directional Wellbore for its Lovington 5 Well No. 1 (API # 30-0-____) to be drilled from a standard surface location 2190 feet from the South line and 810 feet from the West line of Irregular Section 4, T16S, R36E, NMPM, to a standard subsurface location 2310 feet from the South line and 750 feet from the East line of Irregular Section 5, T16S, R36E, NMPM, and in support states:

(1) Chesapeake is the proposed operator for the NE/4SE/4 of Irregular Section 5, T16S,, R36E, NMPM, Lea County, New Mexico.

(2) Chesapeake is also the offset operator for all 40-acre spacing units adjacent to the NE/4SE/4 of Irregular Section 5, T16S,, R36E, NMPM, Lea County, New Mexico and therefore no offset notifications have been sent.

(3) Chesapeake desires to drill a well within near the City of Lovington to test for oil production from the Strawn formation underlying a 40-acre oil spacing unit being the NE/4SE/4 of Irregular Section 5, T16S, R36E, NMPM but is unable to find an acceptable surface locations in that 40-acre spacing unit due to zoning regulations adopted by the Lovington-Lea County Extraterritorial Zoning Authority, New Mexico.

(4) Therefore, Chesapeake propose to use the surface of the adjoining 40-acre spacing unit to the east (NW/4SW/4 of Section 5) and has obtained the approval of the Lovington-Lea County Extraterritorial Zoning Authority to use a standard surface location 2190 feet from the South line and 810 feet from the West line (Unit T) of Irregular Section 4, T16S, R36E, NMPM.

(5) Chesapeake proposes to commence drilling at the proposed standard surface location and to drill vertically to a kick off point at approximately 8278 TVD and then to commencing building angle at the rate of 3 degrees per 100 feet and to reach a total depth of approximately 12,100 feet (+ or - 100 feet) at a project point (bottom hole location) 2310 feet from South line and 750 feet from East line of Irregular Section 5, T16S, R36E, NMPM.

(6) Chesapeake proposes the following:

- (a) 40-acre dedication
- (b) drilling producing interval being 330 foot set back from each side boundary of the spacing unit
- (c) standard depth bracket oil allowable of 365 BOPD
- (d) Bottom hole target: not closer than 330 feet to any side boundary of the 40-acre spacing unit

(7) In accordance with Rule 111.D(2), the following exhibits are attached:

Exhibit 1: Plat indicating spacing units, surface and subsurface well location, offset units, and operators.

- Exhibit 2: Plat showing surface use limitations
- Exhibit 3: Form C-102 and supplemental surveyors plat
- Exhibit 4: Aerial photo of surface tract and subsurface tract
- Exhibit 5: Application for Permit to Drill
- Exhibit 6: Halliburton's vertical oriented plan view and horizontal plan view
- Exhibit 7: Resolution from Lovington-Lea County Extraterritorial Zoning Authority
- Exhibit 8: Permit for well site construction issued by Lea County Airport Planning and Zoning Commission dated October 25, 1996.
- Exhibit 9: Type Log

WHEREFORE, Applicant requests that this application be approved.

Respectfully submitted,

KELLAHIN & KELLAHIN

By: 

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

GILLESPIE '84
SNYDER "F" 2-5

10721
PVPM

10780
WFMP

GILLESPIE '89
SNYDER "C" 3-5

10760
WFPR

TXO '85
PHILLIPS "P" 1-5

10800
WFMP

FORAN '88
ROUSE 1-5

12300
MRRW

LOVINGTON CORPORATE BOUNDARY

SCHOOL

SCHOOL

16S/36E

5

4

CHESAPEAKE '96

LOVINGTON 1-5

ATOK

SCHOOL BLDG

2. CHESAPEAKE

CHESAPEAKE OPERATING, INC.

Lovington Townsite 3D Survey
LOVINGTON 1-5 DIRECTIONAL WELL
Lea County, New Mexico

Robert A. Heiser IV	1"=1200'	M&E Head
ChE A. Hamoch	Scale 1:14400	11/6/96



OFFSET OPERATOR—CHESAPEAKE OPERATING, INC.

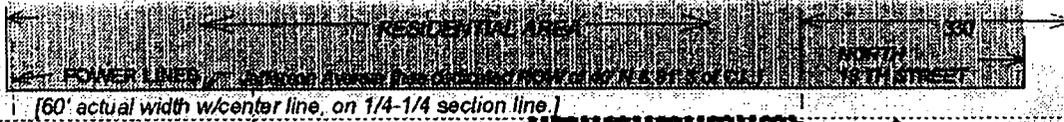


CHESAPEAKE OPERATING, INC

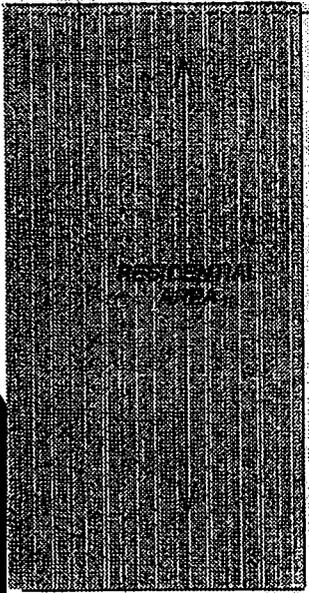
LOVINGTON DRILL SITE PROPOSAL

LEA COUNTY, NEW MEXICO

60' NORTH 17TH STREET



990' FWL OF SEC. 4, T-16-S, R-36-E CITY LIMIT



OVERHEAD POWER LINES

PIPELINES

PROPERTY LINES

TWO LEVELED, UNDEVELOPED 330' X 660' TRACTS, WITH LOW, SPARSE BRUSH COVER.

CHESAPEAKE 330' X 660' FIVE ACRES

CHURCH



17 TH Street C.L. coincident with property lines

Level, with light and sparse covering of mesquite, curly mesquite grass and yucca re-growth

UNDEVELOPED SOLORZANO TRACT, HAS SPARSE COVERING OF BRUSH

Overhead power and phn cables

PROPOSED BATTERY SITE



660'

Proposed tract entrance

BURIED PIPELINES

CORPORATE BOUNDARY

Washington Avenue

SCHOOL BUS BARN



330' X 660' TRACT

Fence may be on the North boundary line of bus barn tract, which overlies planned ROW of C.O.I. Tract access road.

THIS GREATER AREA IS UNDEVELOPED SOUTH TO A LINE 330' NORTH OF SH-83,

Five foot chain link fence.

TABLER
EXHIBIT
2

4/10 mile North of the Lovington Motor Inn, located at the intersection of 17TH Street and the Artesia hwy, SH-82



SCALE: ONE INCH = 200'

SUBJECT: Highlighted Chesapeake Tract in association with continuous and similar non-developed tracts. This property lies at the Southwest edge of Lovington, New Mexico, just outside the corporate city limits. Plat attempts to show pertinent land features such as streets, residential development, power lines, probable pipeline positions, and other conditions relative to planned onsite drilling and construction.

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

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

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

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

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

AMENDED REPORT

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		WILDCAT
Property Code	Property Name	Well Number
	LOVINGTON 5	1
OGRID No.	Operator Name	Elevation
	CHESAPEAKE OPERATING INC.	3926

Surface Location

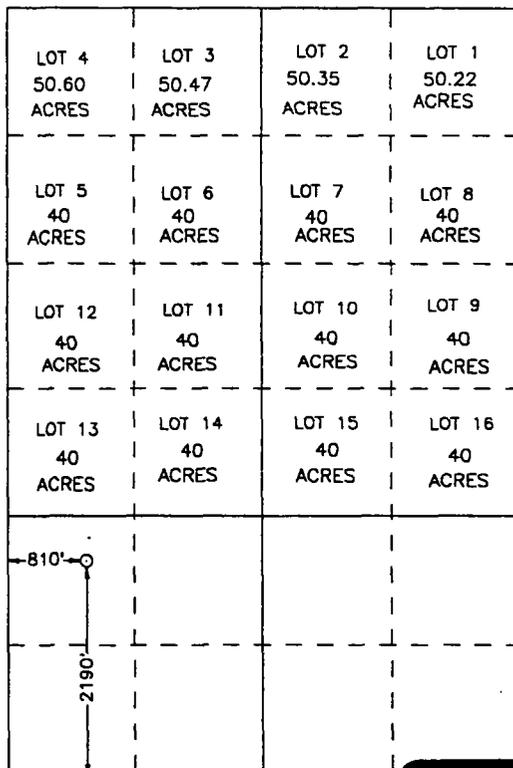
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
T	4	16 S	36 E		2190	SOUTH	810	WEST	LEA

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
	5	16S	36E		2310	South	750	East	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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.

Colley Andrews
Signature
Colley Andrews
Printed Name
District Manager
Title
11-07-96
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 supervision, and that the same is true and correct to the best of my belief.

NOVEMBER 1, 1996

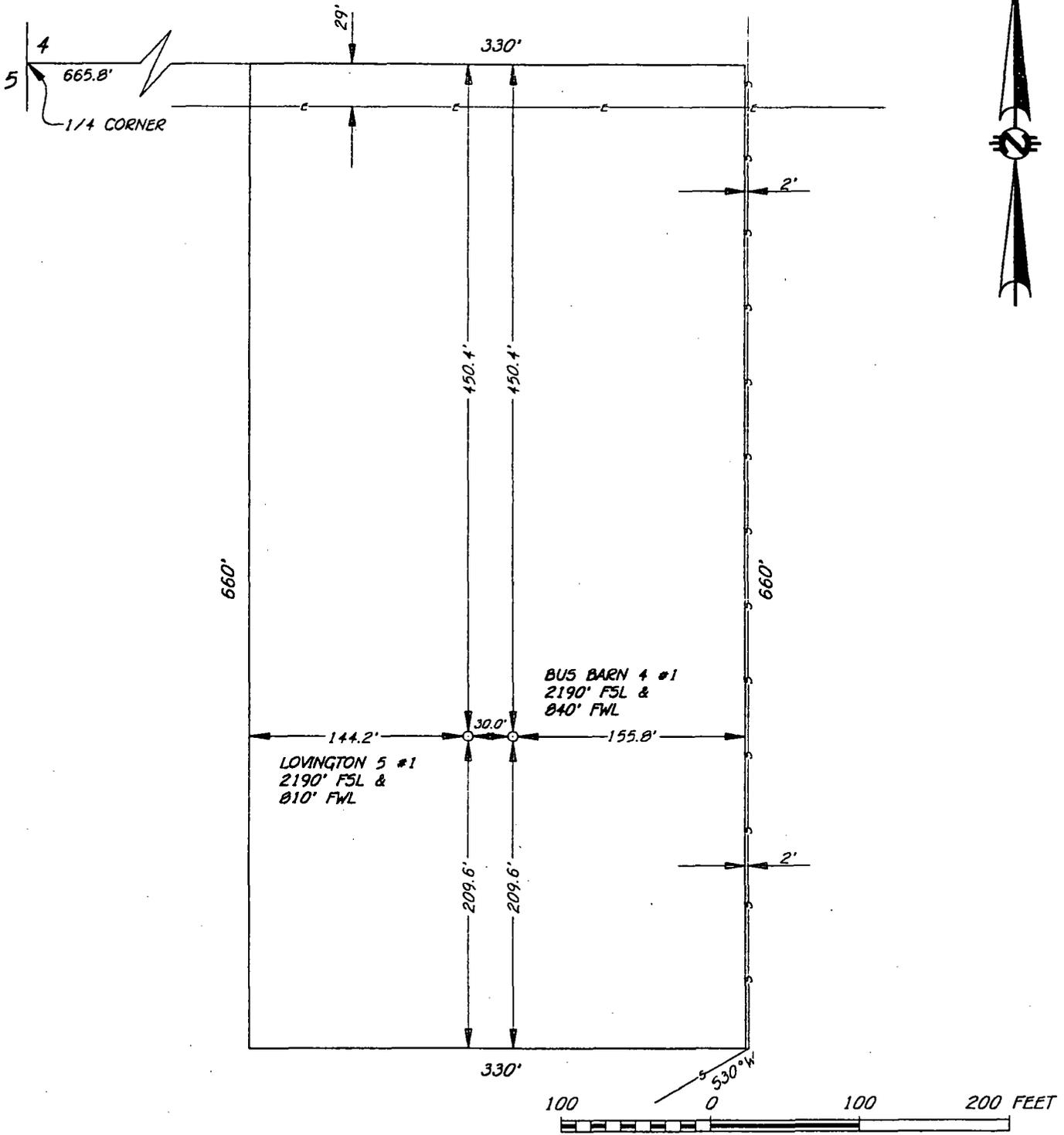
Date Surveyed JLP
Signature & Seal of Professional Surveyor

Ronald J. Eidson 11-04-96
W.O. Num. 96-11-1424

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

EXHIBIT
3

SECTION 4, TOWNSHIP 16 SOUTH, RANGE 36 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

Ronald J. Eidson 11-04-96
 JOHN W. WEST, N.M. P.E. & P.S. No. 676
 TEXAS P.L.S. No. 1138
 RONALD J. EIDSON, N.M. L.S. No. 3239
 TEXAS P.L.S. No. 1883
 GARY G. EIDSON, N.M. L.S. No. 12641
 TEXAS P.L.S. No. 4735

JOHN W. WEST ENGINEERING COMPANY
 CONSULTING ENGINEERS & SURVEYORS - HOBBS, NEW MEXICO

CHESAPEAKE OPERATING, INC.

LOCATION OF WELLS ON A 660' x 330' TRACT OF LAND
 LOCATED IN THE SW/4 SECTION 4, TOWNSHIP 16 SOUTH,
 RANGE 36 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 11/1/96	Sheet 1 of 1 Sheets
W.O. Number: 96-11-1424	Drawn By: JAMES L. PRESLEY
Date: 11/4/96	DISK:JLP#165
	CHE1424A

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 PO Drawer DD, Artesia, NM 88211-0719
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 87504-2088

Form C-101
 Revised February 10, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 6 Copies
 Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address. Chesapeake Operating, Inc. P. O. Box 13496 Oklahoma City, OK 73154-0496		OGRID Number
		API Number 30 - 0
Property Code	Property Name LOVINGTON 5	Well No. 1

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
T	4	16S	36E		2190	South	210	West	LEA

Proposed 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
	5	16S	36E		2310	South	750	East	LEA

Proposed Pool 1 Wildcat	Proposed Pool 2
----------------------------	-----------------

Work Type Code N	Well Type Code O	Cable/Rotary R	Lease Type Code P	Ground Level Elevation 3926'
Multiple	Proposed Depth 12,438'	Formation Strawn	Contractor ZIA Drill	Spud Date 11-14-96

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48	450'	348	Surface
12-1/4"	8-5/8"	28 & 32	4,221'	2020	Surface
7-7/8"	5-1/2"	20	12,438'	574 1st Stg	
				445 2nd Stg	

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Chesapeake Operating proposes to drill to 12,438' T.D. in the Strawn with ZIA Drill as the drilling contractor.

ZIA Drilling's BOP stack consists of 11"x5000# Camron Double with 5000# Hydrill Annular Preventor.

40 Acres - SW Sec 4

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Colley Andrews*

Printed name: Colley Andrews

Title: District Manager

Date: 11-07-96

Phone: (405) 848-3000

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration:

Conditions of Approval:

Attached

EXHIBIT

5

CHESAPEAKE ENERGY CORPORATION
 LOVINGTON #1-5
 LEA COUNTY, NEW MEXICO
 SEC. 4-T16 S-R36E



VERTICAL VIEW
 SCALE 200 ft. / DIVISION
 TVD REF: WELLHEAD
 VERTICAL SECTION REF: WELLHEAD

HORIZONTAL VIEW
 SCALE 200 ft. / DIVISION
 SURVEY REF: WELLHEAD

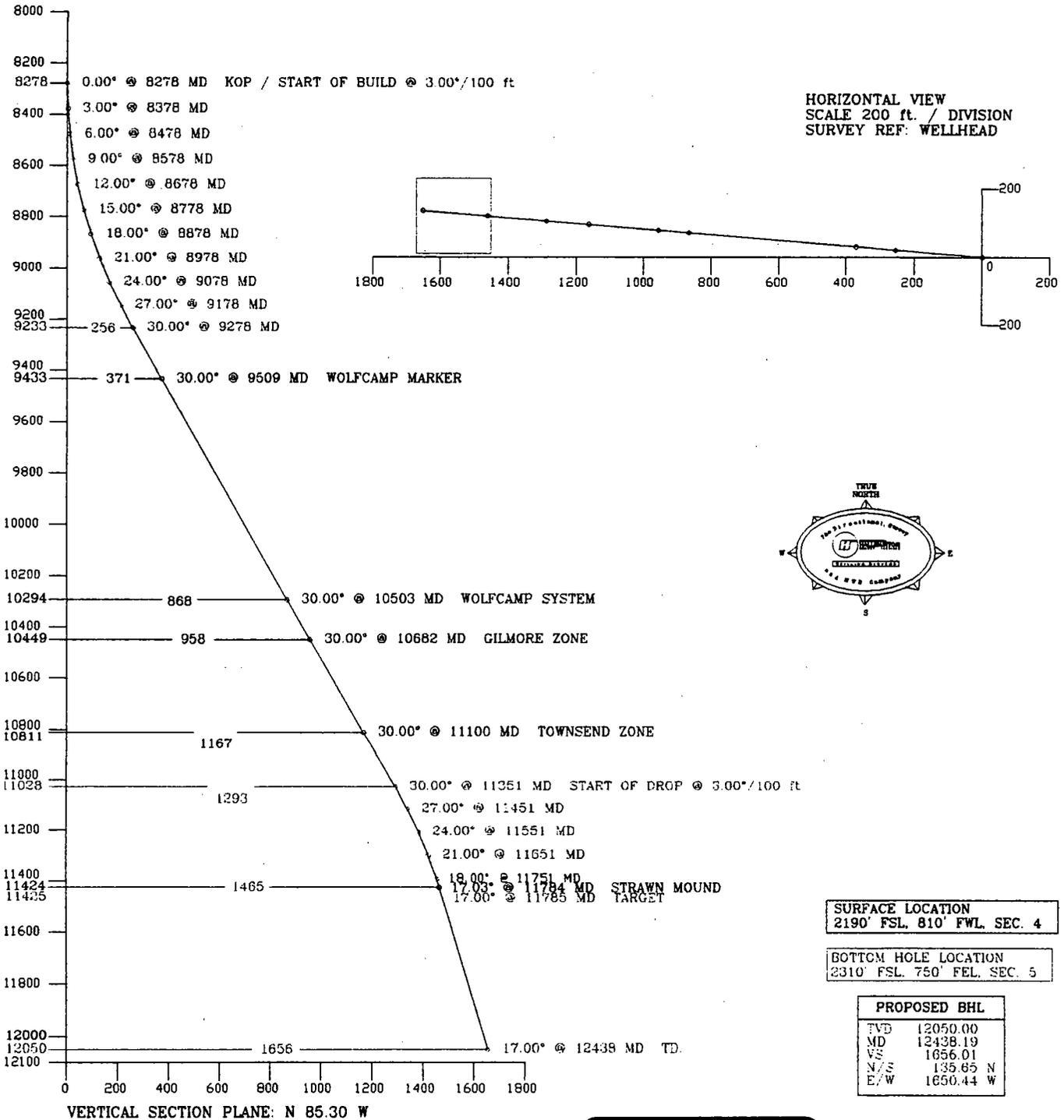


EXHIBIT
 6

Halliburton Energy Services

Proposal Report

Date: 11/1/96
 Time: 3:47 pm
 Wellpath ID: PROPOSAL
 Last Revision: 11/1/96

Calculated using the Minimum Curvature Method
 Computed using WIN-CADDS REV2.2.2
 Vertical Section Plane: N 85.30 W

Survey Reference: WELLHEAD
 Vertical Section Reference: WELLHEAD
 Closure Reference: WELLHEAD
 TVD Reference: WELLHEAD

CHESAPEAKE ENERGY CORPORATION
 LOVINGTON #1-5
 LEA COUNTY, NEW MEXICO
 SEC.4-T16S-R36E
 PROPOSAL
 SURFACE LOCATION
 2190' FSL, 810' FWL SEC. 4
 BOTTOM HOLE LOCATION
 2310' FSL, 750' FEL SEC. 5

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		DLS (dg/100ft)	
TIE IN									
0.00	0.00	N 0.00 E	0.00	0.00	0.00	0.00 N	0.00 E	0.00	
4500.00	0.00	N 0.00 E	4500.00	4500.00	0.00	0.00 N	0.00 E	0.00	
KOP / START OF BUILD @ 3.00 deg/100 ft									
8278.03	0.00	N 0.00 E	3778.03	8278.03	0.00	0.00 N	0.00 E	0.00	
8378.03	3.00	N 85.30 W	100.00	8377.99	2.62	0.21 N	2.61W	3.00	
8478.03	6.00	N 85.30 W	100.00	8477.67	10.46	0.86 N	10.43W	3.00	
8578.03	9.00	N 85.30 W	100.00	8576.80	23.51	1.93 N	23.43W	3.00	
8678.03	12.00	N 85.30 W	100.00	8675.12	41.74	3.42 N	41.59W	3.00	
8778.03	15.00	N 85.30 W	100.00	8772.34	65.08	5.33 N	64.86W	3.00	
8878.03	18.00	N 85.30 W	100.00	8868.21	93.48	7.66 N	93.16W	3.00	
8978.03	21.00	N 85.30 W	100.00	8962.47	126.85	10.39 N	126.43W	3.00	
9078.03	24.00	N 85.30 W	100.00	9054.84	165.12	13.53 N	164.56W	3.00	
9178.03	27.00	N 85.30 W	100.00	9145.09	208.16	17.05 N	207.46W	3.00	
9278.03	30.00	N 85.30 W	100.00	9232.96	255.87	20.96 N	255.01W	3.00	
WOLFCAMP MARKER									
9509.02	30.00	N 85.30 W	230.98	9433.00	371.36	30.42 N	370.12W	0.00	
WOLFCAMP SYSTEM									
10503.21	30.00	N 85.30 W	994.20	10294.00	868.46	71.14 N	865.54W	0.00	
GILMORE ZONE									
10682.19	30.00	N 85.30 W	178.98	10449.00	957.95	78.47 N	954.73W	0.00	
TOWNSEND ZONE									
11100.20	30.00	N 85.30 W	418.00	10811.00	1166.95	95.59 N	1163.03W	0.00	
START OF DROP @ 3.00 deg/100 ft									
11351.29	30.00	N 85.30 W	251.10	11028.46	1292.50	105.88 N	1288.16W	0.00	
11451.29	27.00	N 85.30 W	100.00	11116.33	1340.21	109.78 N	1335.71W	3.00	
11551.29	24.00	N 85.30 W	100.00	11206.58	1383.26	113.31 N	1378.61W	3.00	

Halliburton Energy Services

Proposal Report

Wellpath ID: PROPOSAL

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		DLS (dg/100ft)
11651.29	21.00	N 85.30 W	100.00	11298.96	1421.52	116.44 N	1416.75W	3.00
11751.29	18.00	N 85.30 W	100.00	11393.21	1454.90	119.18 N	1450.01W	3.00
STRAWN MOUND								
11783.58	17.03	N 85.30 W	32.29	11424.00	1464.62	119.97 N	1459.70W	3.00
TARGET								
11784.63	17.00	N 85.30 W	1.04	11425.00	1464.92	120.00 N	1460.00W	3.00
TD.								
12438.19	17.00	N 85.30 W	653.56	12050.00	1656.01	135.65 N	1650.44W	0.00

**RESOLUTION OF THE LOVINGTON-LEA COUNTY
EXTRATERRITORIAL ZONING AUTHORITY**

At a regular meeting of the Lovington-Lea County Extraterritorial Zoning Authority held on October 3, 1996, the following action was taken:

WHEREAS, Chesapeake Operating, Inc., a corporation, whose address is PO Box 18496, Oklahoma City, Oklahoma, 73154 (Hereinafter the "Petitioner"), has filed a Petition for Variance to drill up to two oil and gas wells in the Lovington-Lea County Extraterritorial Zone on a five-acre tract more particularly described as the West Half of the Northeast Quarter of the Northwest Quarter of the Southwest Quarter (W/2NE/4NW/4SW/4) of Section 4, Township 16 South, Range 36 East, N.M.P.M., Lea County, New Mexico; and

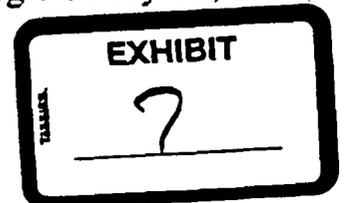
WHEREAS, Lovington 5 #1 well is to be drilled at a surface location which lies 825' from the west line and 2181' from the south line of said Section 4, Township 16 South, Range 36 East, N.M.P.M., Lea County, New Mexico; and then if Petitioner's Lovington 5 #1 is successfully completed, or the information developed by drilling of said well warrants, then a second well may be drilled within the above five-acre tract to be known as the Lovington Bus Barn 4 #1 well; and

WHEREAS, Petitioner has complied with legal notice requirements to adjoining and nearby landowners; and

WHEREAS, the strict adherence to the R-1, Single Family Residential, requirements of the Lovington-Lea County Extraterritorial Zoning Ordinance would result in peculiar, exceptional and undue hardship upon the Petitioner and mineral owners in and under said five-acre tract; and

WHEREAS, a variance from such strict application of the Lovington-Lea County Extraterritorial Zoning Ordinance should be granted to relieve such difficulties and hardships to and upon Petitioner, and to allow the drilling, operating, maintaining, and improvement of such well or wells, including facilities for the production, short term storage and marketing of product therefrom; and

WHEREAS, the Lovington-Lea County Extraterritorial Zoning Commission has previously held extensive public meeting on July 18, 1996,



and on August 20, 1996, and has recommended to the Extraterritorial Zoning Authority approval of Petitioner's variance request, subject to certain conditions; and

WHEREAS, the Lovington-Lea County Extraterritorial Zoning Authority finds that said Authority should approve the Petition of Petitioner for a variance to drill the two oil and gas wells subject to the twenty-one (21) conditions made a part hereof below; and:

WHEREAS, although the Lovington-Lea County Extraterritorial Zoning Authority finds that, due to the exceptional topographical, geological, and seismological conditions peculiar to the location of the underground mineral and also peculiar to the surface area involved, the variance requested by the Petitioner should be approved, the Lovington-Lea County Extraterritorial Zoning Authority does further find that it should adopt as conditions to its granting the variance request of Petitioner the twenty-one (21) conditions incorporated hereinbelow, all so that the interests of adjoining and adjacent land owners will be reasonably and adequately protected.

NOW, THEREFORE, BE IT RESOLVED that the Lovington-Lea County Extraterritorial Zoning Authority grant a variance to Chesapeake Operating, Inc., to drill, operate, maintain and improve up to two oil and gas wells, including facilities for the production, storage, and removal of product therefrom, upon the five-acre tract hereinabove described, with Petitioner's first of such two wells hereby authorized to be drilled at a surface location inside such five-acre tract that is 825 feet from the west line and 2,181 feet from the south line of Section 4, Township 16 South, Range 36 East, N.M.P.M., Lea County, New Mexico, and with the second well authorized, to be drilled within such five-acre tract subject to, and conditioned upon full compliance with, the following twenty-one (21) conditions.

1. Chesapeake shall install H₂S monitoring equipment during the drilling and completion phases of Chesapeake's proposed operations which will shut down drilling operations if unsafe levels of H₂S are detected.

In addition, Chesapeake shall maintain a post-completion monitoring system which will automatically shut the well in if unsafe levels of H₂S are detected. Chesapeake shall have all H₂S monitoring equipment checked for accuracy each 30 days and shall have same recalibrated as necessary to detect unsafe levels of H₂S.

2. To insure a secure drill site location, which will prevent inadvertent entry by children or animals, Chesapeake will build a seven foot chain link fence surrounding the proposed drill site prior to drilling.
3. To reduce disturbance to residents in close proximity to Chesapeake's drilling operations and mitigate dust transmission, our company will also construct a seven foot stockade-type wooden fence at the North frontage of Chesapeake's five acre tract. This stockade fence will remain in place during the entire drilling and completion phase of Chesapeake's operations.
4. To further reduce security concerns as well as to minimize noise and inconvenience to adjoining residents, Chesapeake will move its proposed second location back to the same drill site area where the company's initial well is to be drilled. Chesapeake shall not drill any well upon this five acre tract which will be within 400 feet of any existing residence or other building.
5. After this well(s) has been successfully completed, Chesapeake shall install high-security fencing and security lighting around the production facilities. Furthermore, the production facilities shall be maintained to an extraordinary standard with the premises to be kept clear of debris or trash.
6. Chesapeake's drilling operation on subject lands shall be conducted with a closed mud circulation system. All mud and cuttings shall be removed from the premises.
7. Chesapeake shall not engage in nor allow any disposal of produced water or waste liquids in, under or upon this five acre tract.
8. Chesapeake shall utilize biocides to reduce any offensive odors which might be generated from its operations.
9. Chesapeake will build a caliche road during the drilling and completion phase of its activities. The road shall be dampened as needed to minimize dust caused by ingress and egress to its location. After the well has been successfully completed, Chesapeake shall upgrade the road to a gravel or chat composition which will further inhibit the transmission of dust. Chesapeake shall maintain this lease road after completion of its well(s). This lease road shall provide access to this five acre tract only from 17th Street and shall be

utilized to provide such access while Chesapeake conducts its operations.

10. To reduce engine noise, Chesapeake shall utilize an electric pumping unit(s) on this production facility.
11. Chesapeake shall install tank batteries equipped with lightning arresters to reduce the likelihood of lightning strikes on its production facility.
12. After completion of this well(s), Chesapeake shall plant trees indigenous to the area and which can be maintained easily at various locations outside the production facility fencing, and Chesapeake shall maintain said trees with suitable watering.
13. The drilling location site shall be reduced in size to an area compatible with the location of the four dead man anchors after drilling and completion operations have concluded. Chesapeake shall restore the location to as near its original condition as reasonably possible by replacing topsoil and reseeding with natural grasses.
14. Subsequent to all completion and restoration exercises of whatever kind or character, Chesapeake will donate the Northernmost two acres of its five acre tract to the municipality. Upon plugging and abandonment of the well(s), the balance of the five acre tract shall be donated to the City of Lovington, provided that the first two acres have been donated to the City of Lovington, and provided that the City of Lovington is agreeable to accepting same.
15. Should Chesapeake decide to sell its interest in the well(s) to another party, the conditions under which Chesapeake is granted this variance shall extend to any such party and such party shall be bound by all these obligations. Prior to any such assignment, Chesapeake shall notify the Zoning Enforcement Officer of such planned transfer of interest. Any sale or assignment by Chesapeake of its interest in the well(s), in whole or in part, to another party shall not relieve Chesapeake, its successors and/or assigns, from responsibilities or obligations which are required of Chesapeake under the terms and conditions of any variance granted with respect to the City of Lovington-Lea County Extraterritorial Zoning Ordinance.
16. Chesapeake agrees to indemnify, save and hold harmless the Extraterritorial Zoning Commission/Authority, the City of Lovington, the County of Lea, their respective commissioners, officers, employees, agents and their respective heirs, legal representatives, successors, and assigns, from and against all claims, demands, injuries, losses, damages, costs, expenses, and attorney's fees, which

in any manner result from or arise out of or relate to Chesapeake's drilling, equipping, and production operations including its acts or omissions in connection therewith. This Agreement shall continue in force, beginning with the date Chesapeake commences such operations and shall extend beyond termination of any zoning variance granted to it for this five acre tract.

17. Chesapeake shall test all domestic water wells located in the North Half of the SouthWest Quarter of Section 4 and shall test any existing wells on the property to the South owned by Joe Sanders and shall thereafter test such water wells every six months until Chesapeake plugs and abandons the well(s) on this five acre tract, provided the owners of such real property consent to such testing. After plugging and abandonment have been accomplished, Chesapeake shall continue to test such domestic water wells and provide copies of the test reports, all as provided above, for a period of five (5) years. Chesapeake shall furnish the property owner, as well as the Lovington-Lea County Extraterritorial Zoning Commission/authority, with a copy of the test report for each test upon their respective property.
18. Chesapeake shall develop and implement spill prevention plans for its drilling and production operations and an overall emergency plan for its drilling and production operations, all acceptable to the Lovington-Lea County Extraterritorial Zoning Commission/Authority.
19. Chesapeake shall develop a plan for clean-up and closure upon plugging and abandonment of the well(s) upon this five acre tract. As a minimum, Chesapeake shall timely remove all of its equipment and other property; clean up any spill areas; remove caliche from pads and from the road; restore the surface to the contour of surrounding land; reseed with native grasses; and water sufficiently and maintain weed control until the grass turf is established. This plan must be acceptable initially to the Lovington-Lea County Extraterritorial Zoning Commission/Authority and, at the time of clean-up and closure, the Commission/Authority may require Chesapeake to do additional clean-up and closure over and above that required by the initial plan.
20. Petitioner shall be required to limit its tank battery or batteries on the five-acre tract to a total of no more than four 210 barrel oil tanks, two 210 barrel water tanks, and two heater treaters.
21. Chesapeake having specifically agreed to a condition that it mediates any claim by an owner of real property identified in Chesapeake's Proof of Notice and Supplemental Proof of Notice filed in the records of the Lovington-Lea County Extraterritorial Zoning Commission/Authority, for property damage of less than \$5,000.00 if

such a property owner requests mediation of the claim. Chesapeake shall contact such property owner to select a mediator within ten (10) business days after receiving a request for mediation from such property owner. If the parties cannot agree on a mediator, the parties will request a District Judge of Lea County, New Mexico, to select a mediator on their behalf who shall be a licensed and/or trained mediator. The costs of mediation shall be borne equally by the parties or otherwise as they may agree. All attorneys' fees shall be paid by the party who employs that attorney. The general procedure of mediation shall conform to the laws of the State of New Mexico. No legal proceedings may be brought by either party until the mediation process has been completed.

AND the Extraterritorial Zoning Commission/Authority reserves jurisdiction to modify, to amend, and/or require additional conditions of Chesapeake during the term of this variance in the event that there is a change in conditions in order to meet and to satisfy the purposes of the City of Lovington-Lea County Extraterritorial Zoning Ordinance, namely, "to promote health, safety, morals, and the general welfare" of the public.

DATED this 3rd day of October, 1996.

LOVINGTON-LEA COUNTY
EXTRATERRITORIAL ZONING AUTHORITY

by Jan Field
of Lovington-Lea County Extraterritorial
Zoning Authority

ATTEST:

Pat Chappell Lea County Clerk
By Melinda Hughes Deputy

**PERMIT FOR CONSTRUCTION OF
STRUCTURE(S) WITHIN THE
LOVINGTON AIRPORT'S REGULATION ZONE**

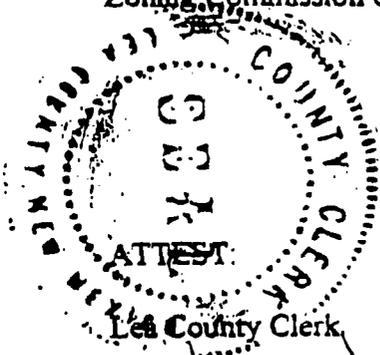
Pursuant to Lea County Ordinance No. 6, the Lea County Airport Planning and Zoning Commission does hereby Permit the Construction of a Structure as described on the application attached of Chesapeake Operating, Inc.

A. Special Conditions:

1. Strict adherence to application representations.
2. This Permit includes Servicing Units that may be brought onto location should a producing well(s) be produced, to cover the life of the well(s)
3. Advance Notice must be given to the County Airport Manager before the drilling rig(s) and any subsequent servicing rig is brought onto the well location.
4. This Permit includes authorization for Applicant's Lovington 5 #1 well and also for its proposed Bus Barn 4 #1 well to be located on the 5-acre tract of land acquired by Chesapeake described as the W/2NE/4NW/4SW/4 of §4, T16S, R36E, N.M.P.M., Lea County, New Mexico, PROVIDED THAT SUCH WELL(S) SHALL BE LOCATED on such 5-acre tract and in strict conformity to the requirements of the Lovington-Lea County Extraterritorial Zoning Authority.
5. Strict adherence to Federal Aviation Administration Regulations and Requirements.

EXECUTED in OPEN MEETING by the Chairman of the Airport Planning and

Zoning Commission on this 25th day of October, 1996.

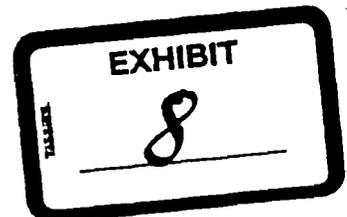


Lea County Clerk

by Wanda White
Deputy

AIRPORT PLANNING AND ZONING
COMMISSION

Maurice Hughes
Chairman





U.S. Department of Transportation

Federal Aviation Administration

AERONAUTICAL STUDY NO. 96-ASW-2764-OE

ACKNOWLEDGMENT OF NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

Table with columns: SPONSOR, CONSTRUCTION PROPOSED, CONSTRUCTION LOCATION, and Description. Includes details for Cheasapeake Operating, Inc. and Temporary Drilling Rig at Lovington 5 #1 Lease.

The Federal Aviation Administration hereby acknowledges receipt of notice dated October 1, 1996 concerning the proposed construction or alteration described above.

A study has been conducted under the provisions of Part 77 of the Federal Aviation Regulations to determine whether the proposed construction would be an obstruction to air navigation...

- Checkboxes for construction requirements: FAA notice, FAR Part 77 hazard, obstruction marking, and supplemental notice.

This determination expires on April 30, 1998 unless:

- (a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the FCC...

NOTE: Any request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

- Checkboxes for further study requirements: hazard to air navigation, FAA initiation, sponsor request, and height reduction.

If the structure is subject to the licensing authority of the FCC, a copy of this acknowledgment will be sent to that Agency.

NOTICE IS REQUIRED ANYTIME THE PROJECT IS ABANDONED OR THE PROPOSAL IS MODIFIED.

(SEE CONDITIONS PAGE 2)

SIGNED Douglas E. Felix (with signature)

TITLE Airspace Specialist

ISSUED IN FORT WORTH, TEXAS ON October 4, 1996
FAA FORM 7460-7 (4-83) SUPERSEDES PREVIOUS EDITION

Continuation Sheet:**FAA FORM 7460-7, ACKNOWLEDGMENT OF PROPOSED CONSTRUCTION OR ALTERATION****AERONAUTICAL STUDY NUMBER: 96-ASW-2764-OE****Lovington, New Mexico*****WELL SITE: Lease Lovington 5 #1*****Conditions for Operation of Temporary Drilling Rig**

· The temporary drilling rig shall be obstruction flagged and lighted in accordance with FAA Advisory Circular 70/7460-1 "Obstruction Marking and Lighting."

· Notify the Lea County - Zip Franklin Memorial Airport Manager, or his representative, at (505) 393-4943 or (505) 398-8521, prior to raising the temporary drilling rig and when the project is complete and the temporary drilling rig is removed from the site.

NOTE: This determination shall be valid for a period of 18 months. While the determination is valid, it is permissible to return the temporary drilling rig to the site without submitting a new FAA Form 7460-1, "Notice of Proposed Construction or Alteration," provided the following conditions are met:

· The temporary drilling equipment does not exceed a maximum height of 150 feet above ground level (AGL)/4076 feet above mean sea level (AMSL).

· The temporary drilling rig shall be obstruction flagged and lighted in accordance with FAA Advisory Circular 70/7460-1 "Obstruction Marking and Lighting."

· Notify the Lea County - Zip Franklin Memorial Airport Manager, or his representative, at (505) 393-4943 or (505) 398-8521, prior to raising the temporary drilling rig and when the project is complete and the temporary drilling rig is removed from the site.

FAA FORM 7460-1, "NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION" SHALL BE SUBMITTED FOR ANY TEMPORARY DRILLING EQUIPMENT THAT EXCEEDS THE MAXIMUM ALLOWABLE HEIGHT OF 150 FEET AGL / 4076 FEET AMSL.

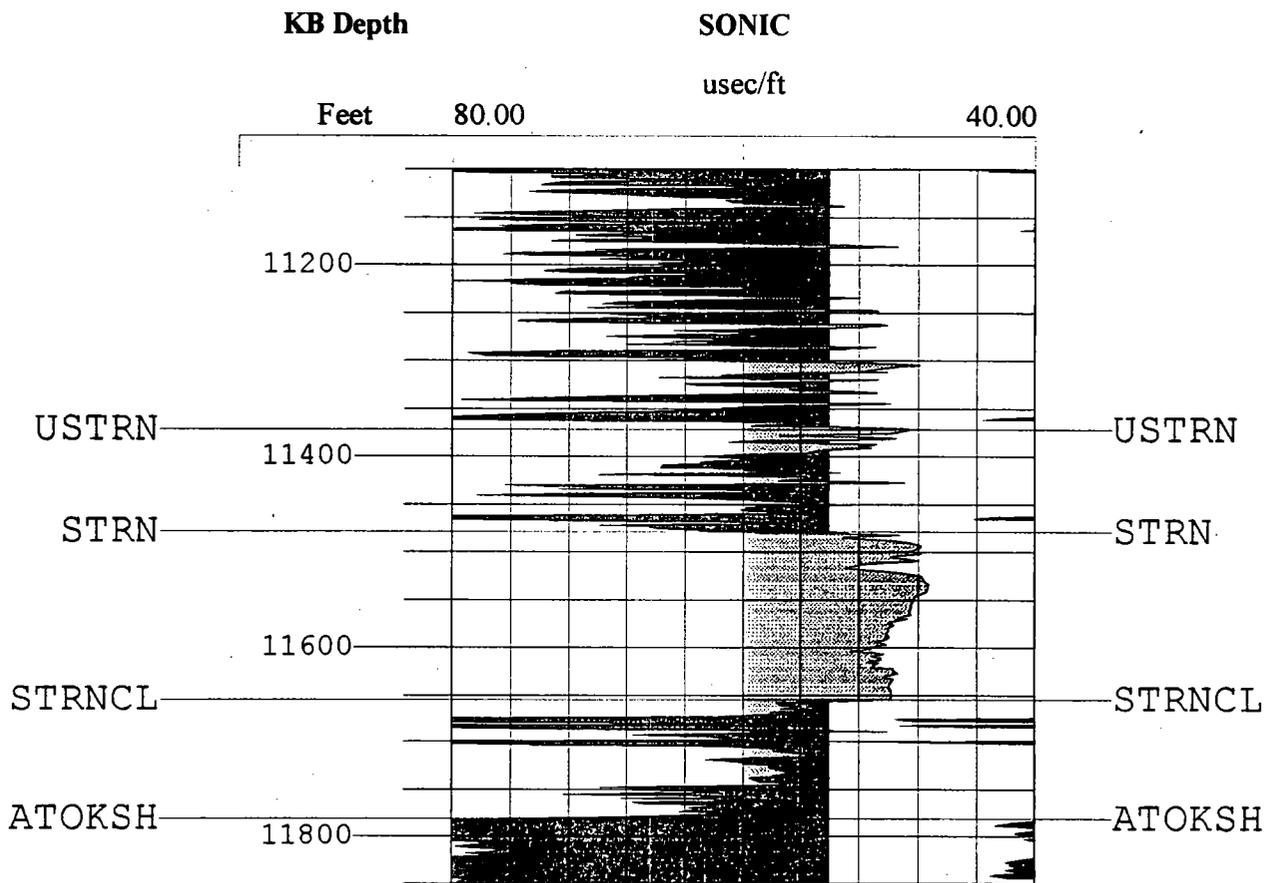
CHESAPEAKE OPERATING, INC

Lovington Strawn Project

FORAN'88
Rouse 1-5
5-16S-36E
3950' FNL 1550' FWL
Lea County, New Mexic

KB = 3960.00FT

Type Log for Lovington 1-5 Application



Depth Scale = 200.00 ft/inch
Date = Nov-07-1996 08:40:45

EXHIBIT
9

Sec : 05 Twp : 16S Rng : 36E Section Type : NORMAL

12 40.00	4 50.78	5 40.00	11 40.00	3 50.75	6 40.00	10 40.00	2 50.71	7 40.00	1 50.68	8 40.00	9 40.00
P A A			P			Federal owned			Federal owned		
Federal owned			Federal owned			Federal owned			Federal owned		
13 40.00			14 40.00			15 40.00			16 40.00		
Federal owned			Federal owned			Federal owned			Federal owned		

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06
PF07 BKWD PF08 FWD PF09 PRINT PF10 SDIV PF11 PF12

Sec : 04 Twp : 16S Rng : 36E Section Type : NORMAL

12 40.00 Federal owned	4 50.60 Federal owned	5 40.00 Federal owned	11 40.00 Federal owned	3 50.47 Federal owned	6 40.00 Federal owned	10 40.00 Federal owned	2 50.35 Federal owned	7 40.00 Federal owned	1 50.22 Federal owned	8 40.00 Federal owned	9 40.00 Federal owned
13 40.00 Federal owned	14 40.00 Federal owned		15 40.00 Federal owned			16 40.00 Federal owned					

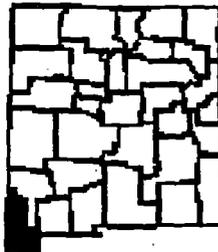
PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06
PF07 BKWD PF08 FWD PF09 PRINT PF10 SDIV PF11 PF12



Belinda Chavez (D)
County Clerk

HIDALGO COUNTY

Created February 25, 1919



Hidalgo County Courthouse
300 S. Shakespeare
Lordsburg, New Mexico 88045
(505) 542-9213 FAX: (505) 542-3414

HIDALGO was named for the Mexican town of Guadalupe Hidalgo, where the treaty of Guadalupe Hidalgo was signed in 1848. That treaty ended the Mexican war and ceded New Mexico and the upper California region to the United States. Lordsburg, the county seat, is the center of vast ranching, farming and mining interests. People come to Hidalgo to enjoy the wide open spaces and explore the area with its rich historical past. New Mexico's share of the Coronado National Forest lies entirely within Hidalgo County.



Martha McKnight Proctor (R)
County Clerk

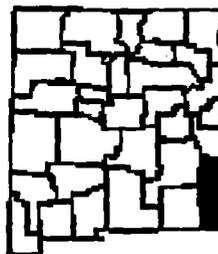
LINCOLN County ... rugged natural all part of the varied setting of Lincoln C the largest county in the United States e the famed 1870's Lincoln County War i seat, is located near the geological won resort featuring skiing, and nearby Ruid American Futurity. Capitan houses the S famous bear, which was rescued from ne history plus great fishing, excellent muse multi-cultural aspect of this unique coun



Pat Snipes Chappelle (R)
County Clerk

LEA COUNTY

Created March 7, 1917



Lea County Courthouse
P.O. Box 1507
Lovington, New Mexico 88260
(505) 396-8521 FAX: (505) 396-5684

LEA was created in 1917 from Chaves and Eddy counties and named for Captain Joseph Calloway Lea. Since the discovery of oil near LOVINGTON, the county seat, in the late 1920's, it continues to be one of the state's leading producers of oil and gas. Ranching, farming and the dairy industry are also part of the economy. It is the home of the New Mexico Junior College and the private sector, independently supported College of the Southwest, a senior college. It contains 4,393 square miles and is best known for its' wide open spaces and friendly people.



Nita Taylor (R)
County Clerk

Los Al:
2.
Los
(505)C

LOS ALAMOS is named for the co for the Los Alamos School for Boys, counties, it was created out of parts of research, which eventually resulted in t functions of both city and county, with a at work in all phases of nuclear resear

(SAN JUAN BASIN (DISPOSAL RULES - COMMERCIAL AND CENTRALIZED FACILITIES) - Cont'd.)**WEST LOVINGTON-STRAWN POOL
(Formerly East Big Dog-Strawn Pool)
Lea County, New Mexico**

pit is not located within a watercourse or within ten feet to ground water as measured from the base of the pit, and further provided that permission to use such pit shall immediately be sought from the Aztec district office.

(e) Notwithstanding any other provision of these rules, centralized facilities receiving any fluids other than, or in addition to, produced water, such as completion fluids, drilling mud, etc., shall be required to file a Pit Registration Form with the Division, clearly indicating the type and volumes of fluids and other materials disposed of.

RULE 6. Location, Construction and Operation Requirements

(a) Applications for approval of the design, construction, and installation of lined pits or below grade tanks should be made in accordance with Division "Guidelines". The location, construction, and operation of any commercial or centralized disposal or storage facility shall be such as to prevent contamination of fresh water.

(b) The criteria to be utilized by the Division in determining whether facilities covered by these rules present a threat of fresh water contamination are:

- (1) Volume of Discharge
- (2) Type of Pit (lined, unlined, tank)
- (3) Types and Total Dissolved Solids of Fluids
- (4) Presence and Concentration of Contaminants in Pit Fluids
- (5) Surface Location and Proximity to Water Courses
- (6) Nature and Permeability of Vadose Zone
- (7) Depth to Ground Water
- (8) Aquifer Water Quality
- (9) Nature and Areal Extent of Aquifer Potentially Affected
- (10) Such Other Relevant Factors as the Division May Determine

RULE 7. Permits, Additional Information, Appeals

(a) Upon a showing that operation of a centralized facility will not present a hazard to fresh water resources, the Director of the Division shall approve such facility for the stated use.

(b) If, upon review of a Pit Registration Form, the Division determines that utilization of any existing or proposed pit may present a threat of contamination to fresh water supplies, the Division shall request and the owner/operator shall provide such additional relevant information as the Division believes is necessary.

(c) If, upon review of all information regarding a Pit Registration Form, the Division believes that utilization of the facility may present a threat of contamination to fresh water supplies, the Division shall notify the owner/operator in writing of this fact and specify the reasons that the Division believes the facility presents a threat of contamination to fresh water supplies. This notice shall invite the owner/operator to consult with the Division to initiate such design, operation, or site changes as the Division believes are necessary to ensure structural integrity and allow the facility to comply with water protection requirements.

(d) If the Division and the owner/operator of a facility are unable to agree on such changes as the Division believes are necessary, the Division shall issue a second notice to such owner/operator specifying the potential threat(s) to fresh water supplies posed by the facility. The owner/operator of the facility shall then have thirty days from receipt of such notice in which to request a hearing to show that construction or operation of the facility will not result in contamination of fresh water supplies for the reasons set forth by the Division. Failure of the owner/operator to request a hearing shall result in a finding by the Division that the facility as designed or operated poses a threat of contamination to fresh water supplies and such facility, if proposed, shall not be constructed or, if existing, shall immediately cease operations.

RULE 8.

Nothing in these rules shall prohibit the Director of the Division from taking immediate action to suspend the use of any commercial or centralized disposal or storage facility when such suspension is necessary to protect fresh water.

Order No. R-9722, Adopting Temporary Operating Rules for the West Lovington-Strawn (Formerly East Big Dog-Strawn) Pool, Lea County, New Mexico, September 23, 1992, as Amended by Order No. R-9722-A, September 23, 1992.

Order No. R-9722-B, effective March 1, 1995, continues in full force and effect the rules adopted in Order No. R-9722, as amended.

Application of Charles B. Gillespie, Jr. for Pool Creation and Special Pool Rules, Lea County, New Mexico.

CASE NO. 10530
Order No. R-9722

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on September 3, 1992, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 23rd day of September, 1992 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Charles B. Gillespie, Jr., is the owner and operator of the Hamilton Federal Well No. 1 located 330 feet from the South line and 2145 feet from the East line (Unit O) of Section 33, Township 15 South, Range 35 East, NMPM, Lea County, New Mexico, which was completed in June 1992 as a wildcat Strawn oil well from perforations at 11,500 to 11,520 feet subsurface.

(3) The applicant now seeks the creation of a new pool for the production of oil from the Strawn formation comprising the W/2 SE/4 of Section 33, Township 15 South, Range 35 East, NMPM, Lea County, New Mexico, and the promulgation of special rules therefor including provisions for 80-acre spacing and designated well location requirements whereby wells would be no closer than 330 feet to the outer boundary of a spacing unit.

(4) Evidence presented by the applicant at the time of the hearing indicates that the newly discovered reservoir is similar in nature to other Strawn producing oil pools in the general area such as the Humble City, Shipp, and Casey Strawn Pools and the Northeast Lovington Pennsylvanian Pool, which is primarily a Strawn producing pool, all of which produce from localized high porous algal reef mounds within the Strawn interval. Such evidence further indicates that the Strawn formation encountered in the above-described well is of high permeability and is capable of draining an area in excess of 40 acres.

(5) In order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for said pool.

(6) The proposed 330-foot set-back requirement is a departure from the established set-back requirements for 80-acre pools which restricts well locations to an area of 150 feet radius of the center of either quarter-quarter section or lot in the unit.

(WEST LOVINGTON-STRAWN POOL) - Cont'd.)

(7) Numerous location exceptions have been granted over the years in the four above-mentioned pools based on geology so as to increase the likelihood for a well to intercept these numerous "patch reefs" found in the Strawn formation in this area of Lea County, New Mexico.

FINDING: The 330-foot set-back request would serve to provide the operators in the subject pool maximum flexibility in locating wells at more favorable positions on the reef mound or mounds in the immediate area

(8) In order to assure orderly development of the pool and to deter the grouping of wells at intersections of spacing units, a requirement of 1020 feet between wells should be adopted for said pool. (1020 feet being the minimum distance two wells could be from one another in pools with 80-acre spacing and the 150-foot radius setback requirements.)

(9) In the best interest of conservation and to protect correlative rights, the temporary special rules and regulations should include set-back requirements that incorporate the above-described restrictions.

(10) The applicant proposes to designate the above-described pool as the Patience-Strawn Pool; however the name "Patience" does not appear to correspond to the Division's long-standing policy of referencing nearby geographical place names to a pool name. On the recommendation of the Hobbs District Office, said pool should instead be designated the West Lovington-Strawn Pool.

(11) A new pool classified as an oil pool for Strawn production should be created and designated the West Lovington-Strawn Pool, with vertical limits to include the Strawn formation and the horizontal limits comprising the W/2 SE/4 of Section 33, Township 15 South, Range 35 East, NMPM, Lea County, New Mexico. Further, the proposed pool should be established for a two-year period in order to allow the operators in the subject pool to gather sufficient reservoir information to determine that the area can be sufficiently and economically drained and developed by one well.

(12) This case should therefore be reopened at an examiner hearing in September, 1994, at which time the operators in the subject pool should be prepared to appear and show cause why the temporary special pool rules for the West Lovington-Strawn Pool should not be rescinded.

IT IS THEREFORE ORDERED THAT:

(1) A new pool in Lea County, New Mexico, classified as an oil pool for Strawn production is hereby created and designated the West Lovington-Strawn Pool, with vertical limits comprising the Strawn formation and the horizontal limits comprising the following described area:

**TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM
Section 33: W/2 SE/4**

(2) The Temporary Special Rules and Regulations for the West Lovington-Strawn Pool, Lea County, New Mexico, are hereby promulgated as follows:

**TEMPORARY SPECIAL RULES AND REGULATIONS
FOR THE
WEST LOVINGTON-STRAWN POOL**

RULE 1. Each well completed or recompleted in the West Lovington-Strawn Pool or in the Strawn formation within one mile thereof, and not nearer to or within the limits of another Strawn oil pool, shall be spaced, drilled, operated and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2 or W/2 of a governmental quarter section; provided however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in that unit.

RULE 3. The Director of the Oil Conservation Division, hereinafter referred to as the "Division", may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within thirty days after the Director has received an application.

RULE 4. Each well shall be located no closer than 330 feet to any quarter-quarter section or subdivision inner boundary nor closer than 1020 feet to the nearest well drilling to or capable of producing from the same pool.

RULE 5. The Division Director may grant an exception to the requirements of Rule 4 without hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within twenty days after the Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be subject to an 80-acre depth-bracket allowable of 445 barrels of oil per day. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

(3) The locations of all wells presently drilling to or completed in the West Lovington-Strawn Pool or in the Strawn formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well within thirty days from the date of this order.

(4) Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), contained in Chapter 271, Laws of 1969, existing wells in the West Lovington-Strawn Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within sixty days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said sixty-day limitation, each well presently drilling to or completed in the West Lovington-Strawn Pool or in the Strawn formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(5) Unless called earlier upon the motion of the Division, this case shall be reopened at an examiner hearing in September, 1994, at which time the operators in the subject pool should be prepared to appear and show cause why the temporary special pool rules for the West Lovington-Strawn Pool should not be rescinded and said pool not be developed on 40-acre spacing units.

(6) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

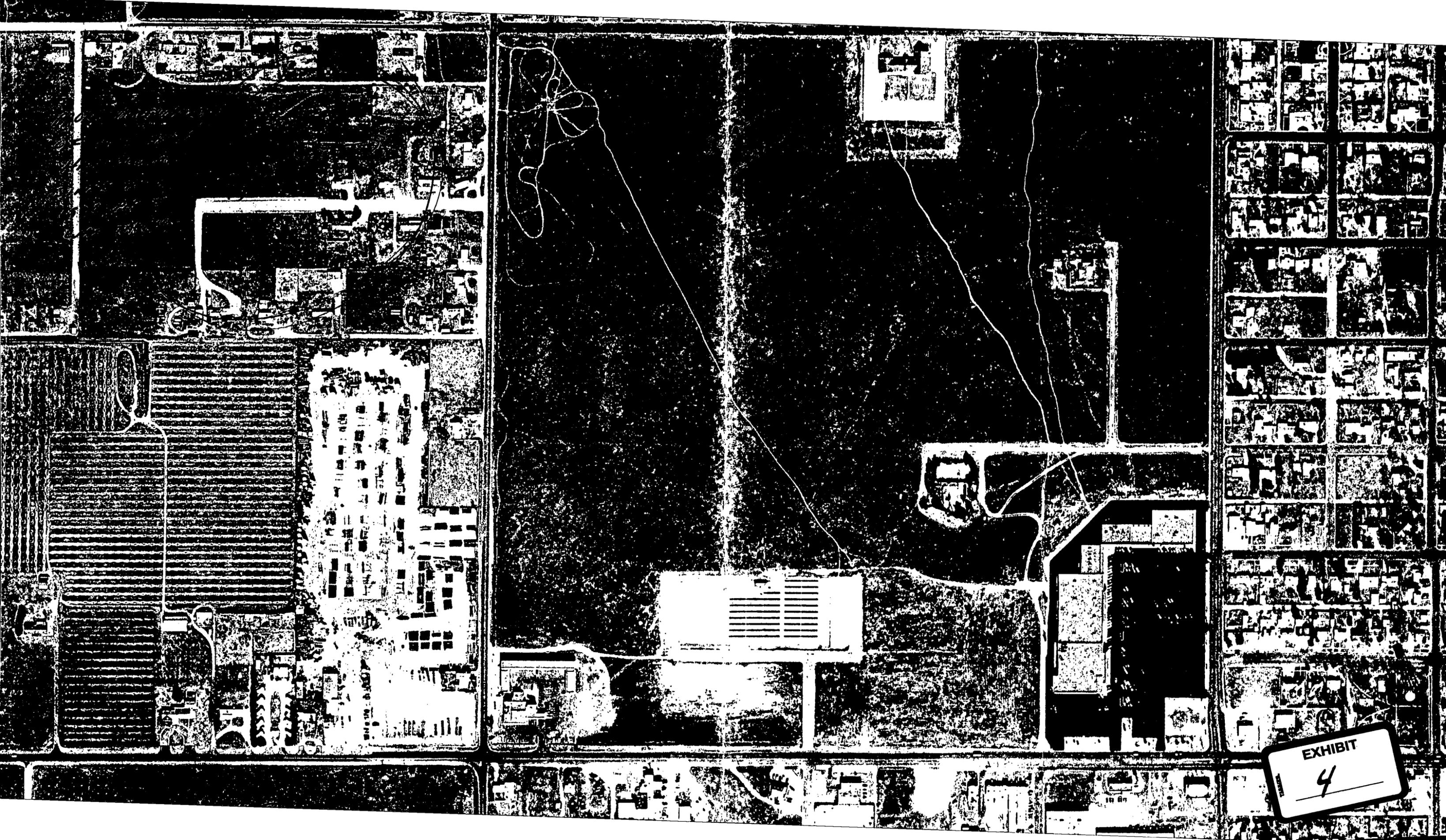


EXHIBIT
4

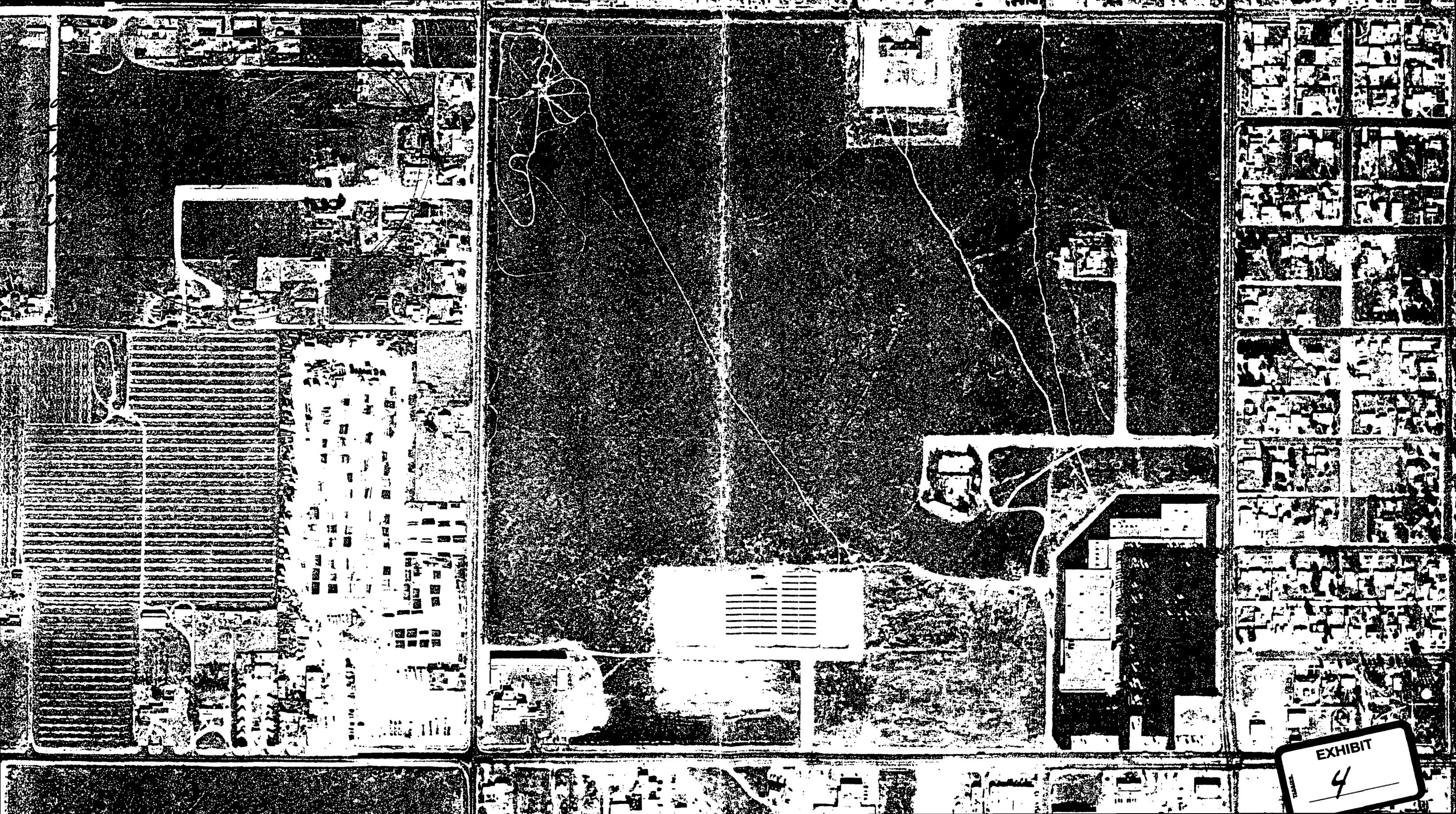
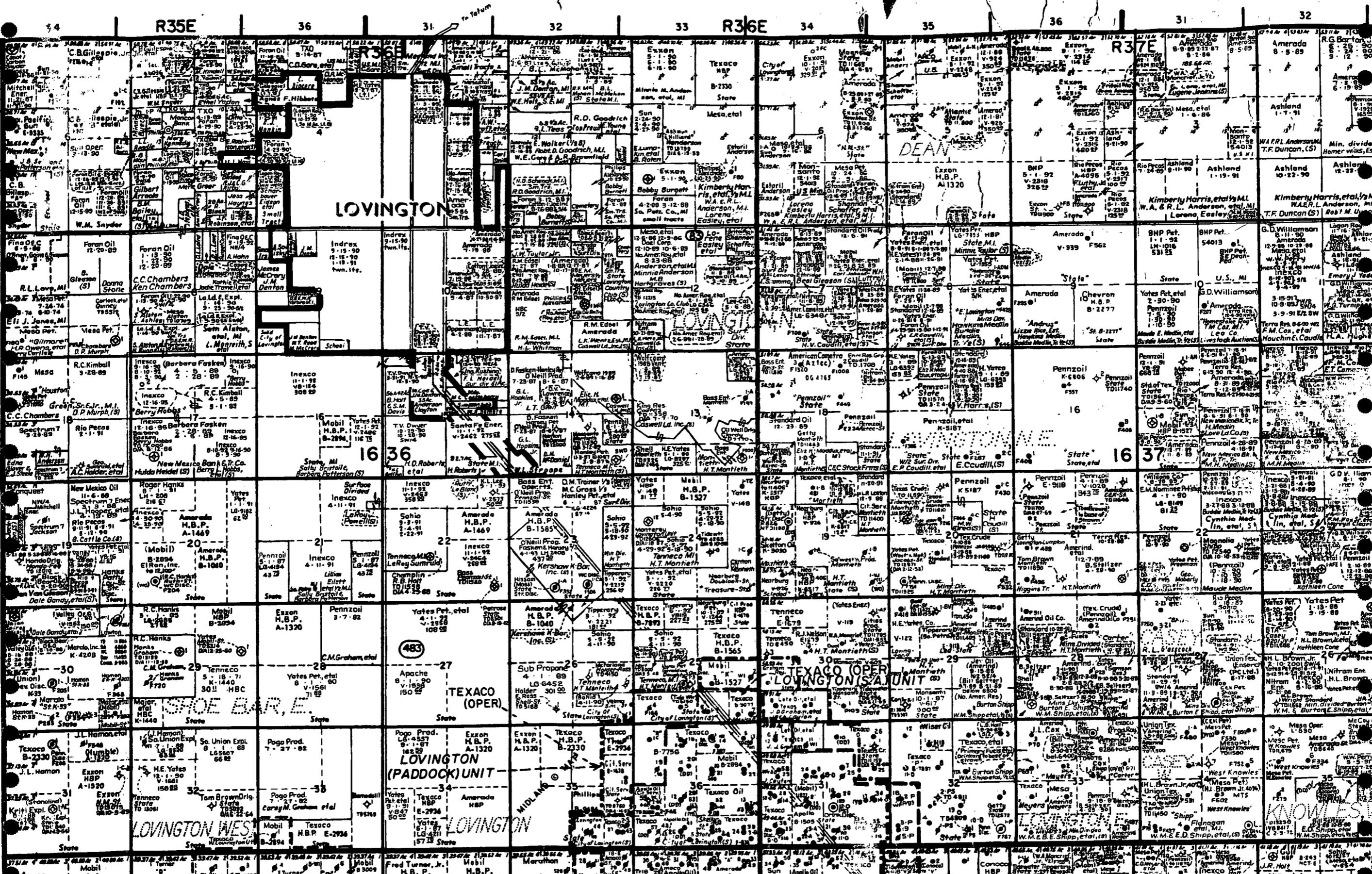


EXHIBIT
4



LOVINGTON

LOVINGTON

LOVINGTON (Paddock) UNIT

LOVINGTON WEST

LOVINGTON EAST

KNOWLES

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
 LIST OF AUTOMATIC DISBURSEMENTS BY DATE
 AS OF 10/19/92

ACCT TYPE	TRANS CODE	TRANS NBR	ACCEPT DT	BUDGET FY	REF NO	VEND NAME	AMOUNT	DB CR
02	AD	00757666	921005	93	93199001921	UNITED STATES POSTAL SERV	10,000.00	D
02	AD	00757667	921005	93	93199001719	NATIONAL FIRE PROTECTION	75.00	D
02	AD	00757668	921005	93	93199001910	PITNEY BOWES INC	57.14	D
02	AD	00757669	921005	93	93199001916	MERRETT, RONALD H	169.57	D
02	AD	00757669	921005	93	93199001916	MERRETT, RONALD H	95.67	D
02	AD	00757670	921005	93	93199001918	MERRETT, RONALD H	250.24	D
02	AD	00757670	921005	93	93199001918	MERRETT, RONALD H	30.00	D
02	AD	00757671	921005	93	93199001919	MERRETT, RONALD H	30.00	D
02	AD	00757671	921005	93	93199001919	MERRETT, RONALD H	10.61	D
02	AD	00757671	921005	93	93199001919	MERRETT, RONALD H	259.17	D
02	AD	00757672	921005	93	93199001737	SYNERGY GAS CORP	207.50	D
02	AD	00757673	921005	93	93199001601	AT & T	69.76	D
02	AD	00757674	921005	93	93199001874	EXXON COMPANY USA	56.84	D
02	AD	00757674	921005	93	93199001876	EXXON COMPANY USA	15.10	D
02	AD	00757675	921005	93	93199001886	EXXON COMPANY USA	196.34	D
02	AD	00757674	921005	93	93199001881	GREENE, PETER	54.00	D
02	AD	00757677	921005	93	93199001596	XEROX CORP	850.88	D
02	AD	00757678	921005	93	93199001923	XEROX CORP	155.20	D
02	AD	00757679	921005	93	93199001862	CHEVRON USA INC	28.74	D
02	AD	00757680	921005	93	93199001870	CHEVRON USA INC	51.49	D
02	AD	00757681	921005	93	93199001871	CHEVRON USA INC	111.85	D
02	AD	00757681	921005	93	93199001871	CHEVRON USA INC	58.76	D
02	AD	00757681	921005	93	93199001871	CHEVRON USA INC	10.62	D
02	AD	00757682	921005	93	93199001873	CHEVRON USA INC	11.40	D
02	AD	00757682	921005	93	93199001873	CHEVRON USA INC	60.72	D
02	AD	00757683	921005	93	93199001874	CHEVRON USA INC	89.87	D
02	AD	00757683	921005	93	93199001874	CHEVRON USA INC	240.63	D
02	AD	00757683	921005	93	93199001874	CHEVRON USA INC	37.18	D
02	AD	00757683	921005	93	93199001874	CHEVRON USA INC	2.00	D
02	AD	00757683	921005	93	93199001874	CHEVRON USA INC	35.91	D
02	AD	00757684	921005	93	93199001913	OMNICOPE INC	226.50	D
02	AD	00757685	921005	93	93199001893	NATIONAL GROUND WATER ASS	164.00	D
02	AD	00757686	921005	93	93199001891	TELEPHONE & RADIO COMMUNI	24,576.82	D
02	AD	00757687	921005	93	93199001937	LEMAY, WILLIAM J	137.50	D
02	AD	00757688	921005	93	93199001938	LEMAY, WILLIAM J	55.00	D
02	AD	00757688	921005	93	93199001938	LEMAY, WILLIAM J	54.00	D
02	AD	00757689	921005	93	93199001848	RED WING SHOE STORE	257.35	D
02	AD	00757690	921005	93	93199001839	LEE, RICHARD	35.50	D
02	AD	00757691	921005	93	93199001922	WILLIAMS, MIKE	64.00	D
02	AD	00757691	921005	93	93199001922	WILLIAMS, MIKE	128.26	D
02	AD	00757692	921005	93	93199000998	DUNN, BETTY JO	200.00	D
02	AD	00757693	921005	93	93199001024	DUNN, BETTY JO	263.34	D
02	AD	00757694	921005	93	93199001928	SKILLPATH INC	42.45	D
02	AD	00757695	921005	93	93199001852	KRETZMANN, JOHN A	54.00	D
02	AD	00757696	921005	93	93199001753	JUSTICE, WENDY R	64.00	D
02	AD	00757697	921005	93	93199001924	AT & T PARADYNE	51.00	D
02	AD	00757698	921005	93	93199001845	PRICHARD, MICHAEL S	15.00	D
02	AD	00757698	921005	93	93199001845	PRICHARD, MICHAEL S	91.08	D

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