N.M. Oil Cons. Division
1625 N. French Dr.
Hobbs, NM 88240

POTASH

Form 3160-3
(December 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved

CONFIDENTIAL - TIGHT HOLE

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☒ Other ____ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
CHESAPEAKE OPERATING, INC. Attn. Sharon Dries

3. ADDRESS AND TELEPHONE NO.
P.O. BOX 18496 OKLAHOMA CITY, OK 73154 405-879-7985

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 990FNL 330 FEL NENE
At top proposed prod. zone SAME

A

R-111-P Potash

5. LEASE DESIGNATION AND SERIAL NO.
NMNM 89889 104724

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
WTU 946

9. API WELL NO.
30-025-36412

10. FIELD AND POOL, OR WILDCAT
West ~~Texas~~ Teas, "Yates Seven Rivers Unit"

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Section 9-20S-33E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*	12. COUNTY OR PARISH	13. STATE
Approximately 35 miles west of Hobbs, New Mexico	LEA	NM

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
330	200	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS***
	3400	ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)	22. APPROX. DATE WORK WILL START*
3559 Capitan Controlled Water Basin	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
"	"	#	'	+/-
"	"	#	'	+/-
	"	#	'	+/-

Chesapeake Operating, Inc. proposes to drill a well to 3400' to test the Yates Sands formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and New Mexico OCD requirements.

Attached please find the Surface Use Plan and Drilling Plan as required by Onshore Order No. 1.

Please be advised that Chesapeake Operating, Inc. is considered to be the Operator of the above mentioned well. Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

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OCD

Bond coverage for this well is provided by Chesapeake Operating, Inc. under their Nationwide Bond No. NM2634.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED J. Mark Lester TITLE Sr. Vice President Exploration DATE August 1, 2003

J. Mark Lester

*(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which thereon.

CONDITIONS OF APPROVAL, IF ANY:

OPER. OGRID NO. 147179
PROPERTY NO. 30422
POOL CODE 59110
EFF. DATE 9-18-03
API NO. 30-025-36412

APPROVED BY /S/ RICHARD A. WHITLEY TITLE ACTING STATE DIRECTOR DATE SEP 10 2003

See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

KG

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

1. EXISTING ROADS

   a. Existing access road to WTU 941 in Section 9-20S-33E will be utilized.
   b. See Exhibit A-2 for proposed access road.
   c. Location, access and vicinity plats attached hereto. See Exhibits A-1 through A-2.

2. PLANNED ACCESS ROADS

   a. A new access road 840' in length and 14' in travel way with a maximum disturbance area of 30' will be built coming off the existing WTU 941 location in a southeasterly direction. See Exhibits A-2 and A-3. The road will be built in accordance with guidelines set forth in the BLM Onshore Orders.
   b. No turnouts are expected.
   c. A locking gate will be installed at the site entrance.
   d. Any fences cut will be repaired. Cattle guards will be installed, if needed.
   e. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

3. LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS OF THE PROPOSED LOCATION – see Exhibit B.

4. LOCATION OF PRODUCTION FACILITIES

   The well will be connected to existing facilities by a pipeline to the central battery. Oil and gas measurements are done at the central facility. The pipeline will be along the access road. See Exhibit C.

5. LOCATION AND TYPE OF WATER SUPPLY

   Water will be obtained from a private water source. Chesapeake Operating, Inc. will ensure all proper notifications and filings are made with the state.

6. CONSTRUCTION MATERIALS

It is Chesapeake's understanding, caliche for road building may be obtained from the caliche pit in the NW/4 of Section 9-20S-33E per the BLM. All other material (i.e. shale) will be acquired from private or commercial sources.

7. METHODS FOR HANDLING WASTE DISPOSAL

Drilling cuttings will be contained and buried in an earthen reserve pit after the drilling fluids have evaporated. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toliet and then hauled to an approved sanitary landfill.

8. ANCILLARY FACILITIES

None

9. WELLSITE LAYOUT

The proposed site layout plat is attached showing rig orientation and equipment location. See Exhibit D.

10. PLANS FOR RECLAMATION OF THE SURFACE

The location will be restored to as near as original condition as possible. Reclamation of the surface shall be done in strict compliance with the existing New Mexico Oil Conservation Division regulations.

Backfilling leveling, and contouring are planned as soon as the drilling rig and equipment are removed. Wastes and spoils materials will be buried immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible. The rehabilitation will begin after the drilling rig is removed.

11. SURFACE AND MINERAL OWNERSHIP

United States of America
Department of Interior
Bureau of Land Management
Grazing Lease Held by:
Kenneth Smith, Inc.
P.O. Box 764
Carlsbad, NM 88220

12. ADDITIONAL INFORMATION

A Class III cultural resource inventory report was prepared by Danny Boone of Boone Archaeological Services, LLC, for the proposed location and new access road. Clearance has been recommended. See Exhibit E.

13. OPERATOR'S REPRESENTATIVES

Drilling and Completion Operations
Colley Andrews
District Manager
P.O. Box 18496
Oklahoma City, OK 73154
405-879-9230 (OFFICE)
405-850-4336 (MOBILE)
405-879-7930 (FAX)
candrews@chkenergy.com

Drilling Engineer
Rob Jones
P.O. Box 18496
Oklahoma City, OK 73154
405-810-2694 (OFFICE)
405-879-9573 (FAX)
405-623-5880 (MOBILE)
rjones@chkenergy.com

Production Operations
Mark Mabe
5014 Carlsbad Hwy.
Hobbs, NM 88240
505-391-1462 (OFFICE)
505-391-6679 (FAX)
505-390-0221 (MOBILE)
mmabe@chkenergy.com

Asset Manager
Andrew McCalmont
P.O. Box 18496
Oklahoma City, OK 73154-0496
405-848-8000 Ext. 852 (OFFICE)
405-879-7930 (FAX)
amccalmont@chkenergy

Regulatory Compliance
Sharon E. Dries
Regulatory Compliance Analyst
Mailing Address: P.O. Box 18496
Oklahoma City, OK 73154
Street Address: 6100 N. Western
Oklahoma City, OK 73118
405-879-7985 (OFFICE)
405-879-9583 (FAX)
sdries@chkenergy.com

14. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this surface use plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed will be performed by operator (including contractors and subcontractors) submitting the APD, in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

By: J. Mark Lister

Date: 8/1/03

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (CFR 43, Part 3160) and the approved Application for Permit to Drill. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling and completion operations.

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

Formation	Depth	Subsea
Rustler	1,320	2,248
Salt	1,370	2,198
Base Salt	2,935	633
Tansill Dolomite	2,945	623
Yates	3,095	473
Yates Upper 1 Sand	3,105	463
Yates Lower 1 Sand	3,155	413
Yates 2 Carbonate	3,195	373
Yates 2 Sand	3,210	358
Yates 2 Lower Carbonate	3,235	333
Yates 3 U Sand	3,255	313
Yates 3 Middle Sand	3,280	288
Yates 3 Lower Sand	3,305	263
Seven Rivers	3,320	248
Total Depth	**3,400**	

2. ESTIMATED DEPTH OF WATER, OIL GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Oil	Yates Upper 1 Sand	3105
Oil	Yates Lower 1 Sand	3155
Oil	Yates 2 Sand	3210
Oil	Yates 3 U Sand	3255
Oil	Yates 3 Middle Sand	3280
Oil	Yates 3 Lower Sand	3305

All shows of fresh water and minerals will be reported and protected.

3. BOP EQUIPMENT: **3,000# System**

Chesapeake Operating, Inc.'s minimum specifications for pressure control equipment are as follows:

I. BOP, Annular, Choke Manifold, Pressure Test

A. Equipment
1. The equipment to be tested includes all of the following that is installed on the well. See Exhibit F.
   (a) Ram-type and annular preventers,
   (b) Choke manifolds and valves,
   (c) Kill lines and valves, and
   (d) Upper and lower kelly cock valves, inside BOP's and safety valves.

B. Test Frequency
1. All tests should be performed with clear **water**,
   (a) when installed,
   (b) before drilling out each casing string,
   (c) at any time that there is a repair requiring a pressure seal to be broken in the assembly, and
   (d) at least once every **30 days** while drilling.

C. Test Pressure
1. In some drilling operations, the pressures to be used for low and high-pressure testing of preventers and casing may be different from those given below due to governmental regulations, or approved local practices.
2. If an individual component does not test at the low pressure, **do not,** test to the high pressure and then drop back down to the low pressure.
3. All valves located downstream of a valve being tested must be placed in the open position.
4. All equipment will be tested with an initial "low pressure" test at 250 psi.
5. The subsequent "high pressure" test will be conducted at the rated working pressure of the equipment for all equipment except the annular preventer.

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6. The "high pressure" test for the annular preventer will be conducted at 70% of the rated working pressure.
7. A record of all pressures will be made on a pressure-recording chart.

D. Test Duration
1. In each case, the individual components should be monitored for leaks for **5 minutes,** with no observable pressure decline, once the test pressure as been applied.

II. Accumulator Performance Test

A. Scope
1. The purpose of this test is to check the capabilities of the BOP control systems, and to detect deficiencies in the hydraulic oil volume and recharge time.

B. Test Frequency
1. The accumulator is to be tested each time the BOP's are tested, or any time a major repair is performed.

C. Minimum Requirements
1. The accumulator should be of sufficient volume to supply 1.5 times the volume to close and hold all BOP equipment in sequence, **without recharging** and the **pump turned off**, and have remaining pressures of **200 PSI above the precharge pressure**.

2. Minimum precharge pressures for the various accumulator systems per **manufacturers recommended specifications** are as follows:

System Operating Pressures	Precharge Pressure
1,500 PSI	750 PSI
2,000 PSI	1,000 PSI
3,000 PSI	1,000 PSI

3. Closing times for the Hydril should be less than **20 seconds**, and for the ram-type preventers less than **10 seconds**.

4. System Recharge time should not exceed **10 minutes**.

D. Test Procedure
1. Shut accumulator pumps off and record accumulator pressure.

2. In sequence, close the annular and one set of properly sized pipe rams, and open the HCR valve.

3. Record time to close or open each element and the remaining accumulator pressure after each operation.

4. Record the remaining accumulator pressure at the end of the test sequence. Per the previous requirement, this pressure **should not be less** than the following pressures:

System Pressure	Remaining Pressure At Conclusion of Test
1,500 PSI	950 PSI
2,000 PSI	1,200 PSI
3,000 PSI	1,200 PSI

5. Turn the accumulator pumps on and record the recharge time. This time should not exceed **10 minutes.**

6. Open annular and ram-type preventers. Close HCR valve.

7. Place all 4-way control valves in **full open** or **full closed** position. **Do not leave in neutral position**.

4. CASING AND CEMENTING PROGRAM

a. The proposed casing program will be as follows:

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Purpose	Interval	Hole Size	Casing Size	Weight	Grade	Thread	Condition
Surface	0' - 1,330'	12-1/4"	8-5/8"	24	J-55	STC	NEW
Production Liner	0' - 3,400'	7-7/8"	5-1/2"	15.5	J-55	LTC	NEW

b. Casing design subject to revision based on geologic conditions encountered.
c. The cementing program will be as follows:

Interval	Type	Amount	Yield	Washout	Excess
Surface	Lead: 35:65 Poz:Class C + 5% Salt + 6% Gel + 0.1 pps Celloflake Tail: Class C + 2% CC + 0.1 pps Cellofalke	Lead: 500 sx Tail: 200 sx	Lead: 1.94 Tail: 1.34	50%	Lead: 100% Tail: 100%
Production	Lead: Lead: 35:65 Poz:Class C + 5% Salt + 6% Gel + 0.1 pps Celloflake Tail: 50:50 Poz:Class C + 5% Salt + 2% Gel	Lead: 400 sx Tail: 200 sx	Lead: 2.14 Tail: 1.35	20%	Lead: 150% Tail: 50%

5. MUD PROGRAM

a. The proposed circulating mediums to be used in drilling are as follows:

Interval	Mud Type	Mud Weight	Viscosity	Fluid Loss
0-1,330'	Water Based	8.5-9.3ppg	32-36	NC
1,310'-3,360'	Water based	10.0-10.2ppg	28-30	15-20

A Lined earthen and steel pit will be utilized during the drilling of this well. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conversation Division rules and regulations.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

6. TESTING, LOGGING AND CORING
The anticipated type and amount of testing, logging and coring are as follows:

a. Drill stem tests are not planned.
b. The logging program will consist of GR, Density, Neutron and High Resolution Induction from surface to TD.
c. Cores samples are not planned.

7. ABNORMAL PRESSURES AND HYDROGEN SULFIDE
a. The estimated bottom hole pressures is 500 psi. No abnormal pressures or temperatures are anticipated.
b. Hydrogen sulfide gas is not expected to be encountered.

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-36412	59110	W. Teas; Y-7R Unit

Property Code	Property Name	Well Number
30422	WEST ~~TEXAS~~ Teas "YATES SEVEN RIVERS UNIT"	946'

OGRID No.	Operator Name	Elevation
147179	CHESAPEAKE OPERATING, INC.	3552'

Surface Location

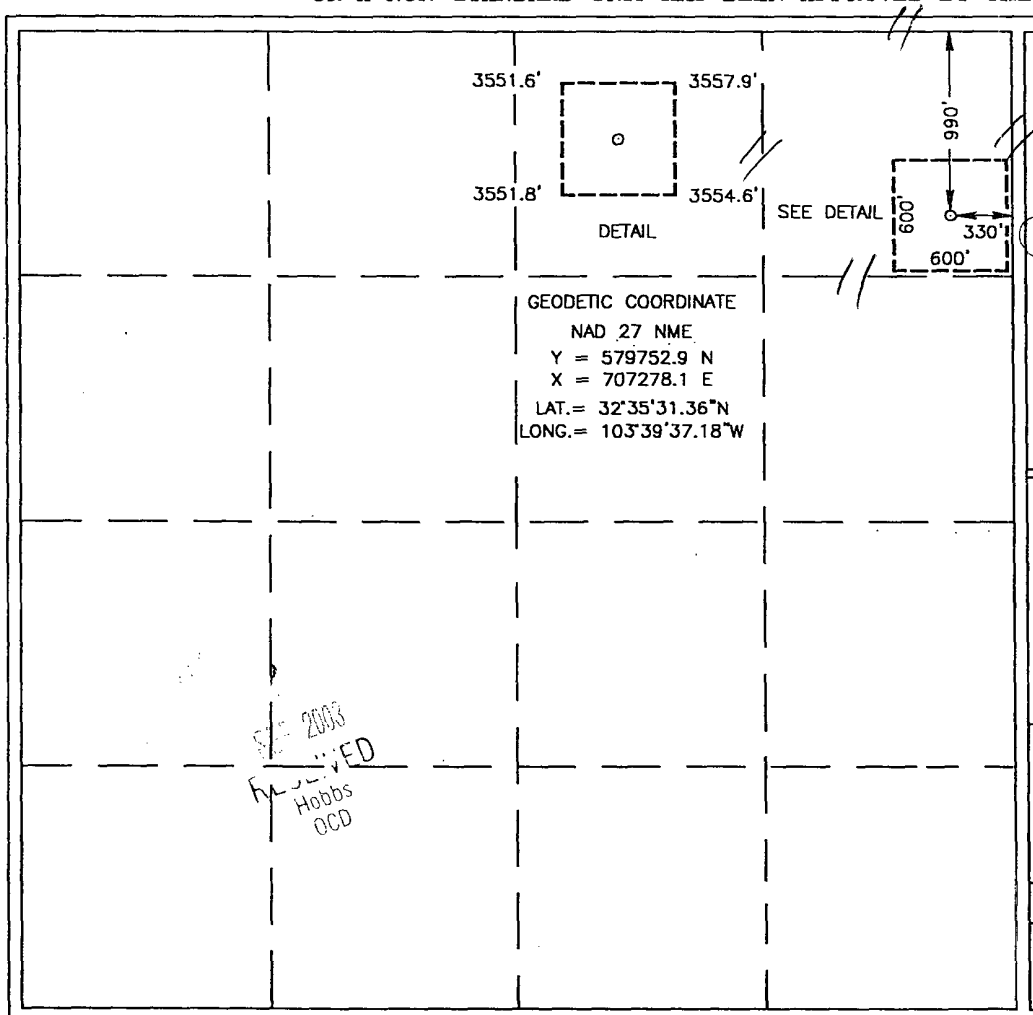
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	9	20-S	33-E		990'	NORTH	330'	EAST	LEA

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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



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OPERATOR CERTIFICATION

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

Signature: Linda F. Townsend

Printed Name: Linda F. Townsend

Title: Landman

Date: 6-2-03

SURVEYOR CERTIFICATION

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

May 29, 2003

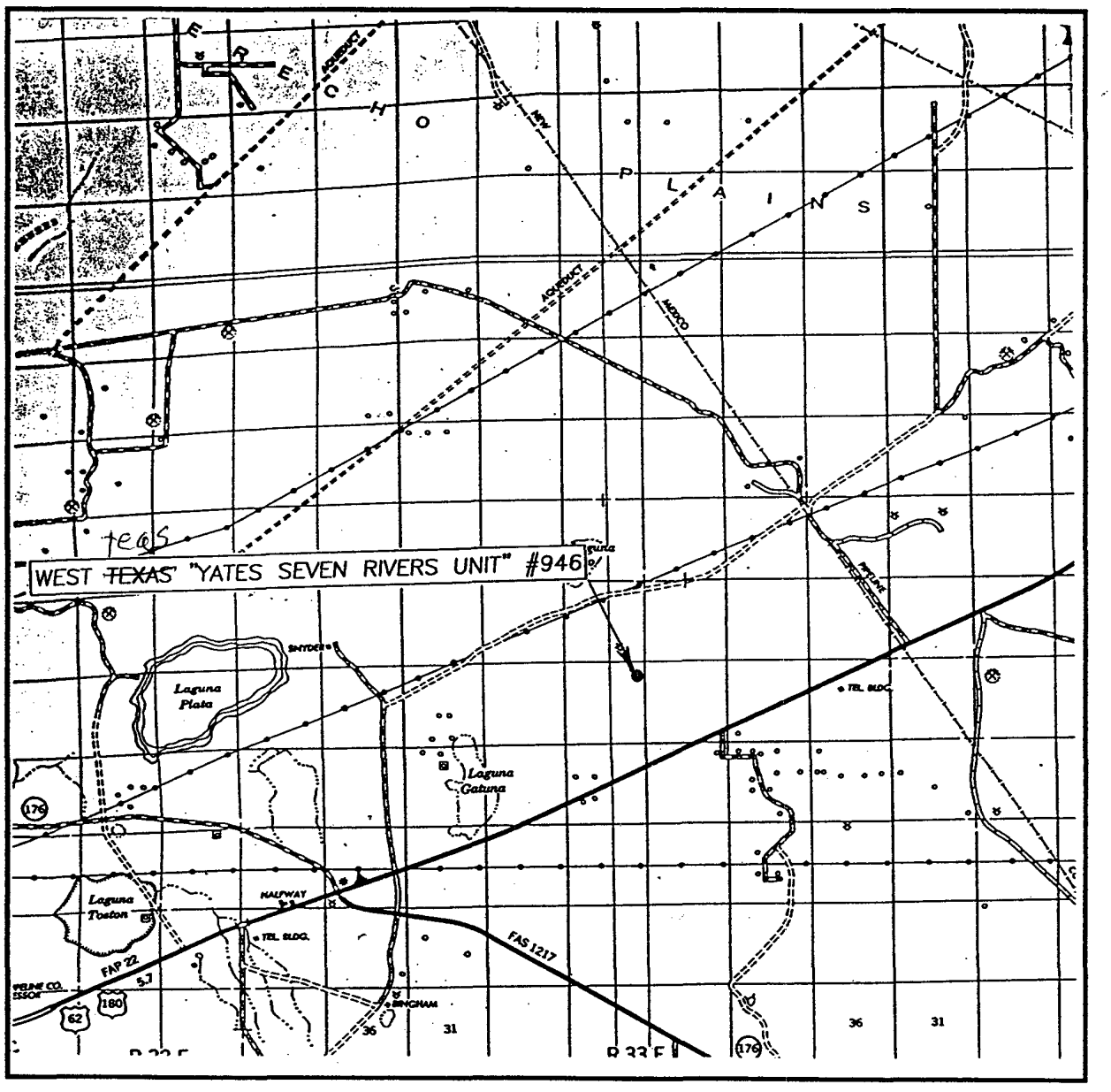
Date Surveyed: AWB

Signature & Seal of Professional Surveyor: Ronald J. Eidson 5/30/03

03.11.0559

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 9 TWP. 20-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 990' FNL & 330' FEL

ELEVATION 3552'

OPERATOR CHESAPEAKE OPERATING, INC.

LEASE WEST ~~TEXAS~~ "YATES SEVEN RIVERS UNIT"
teas

2003
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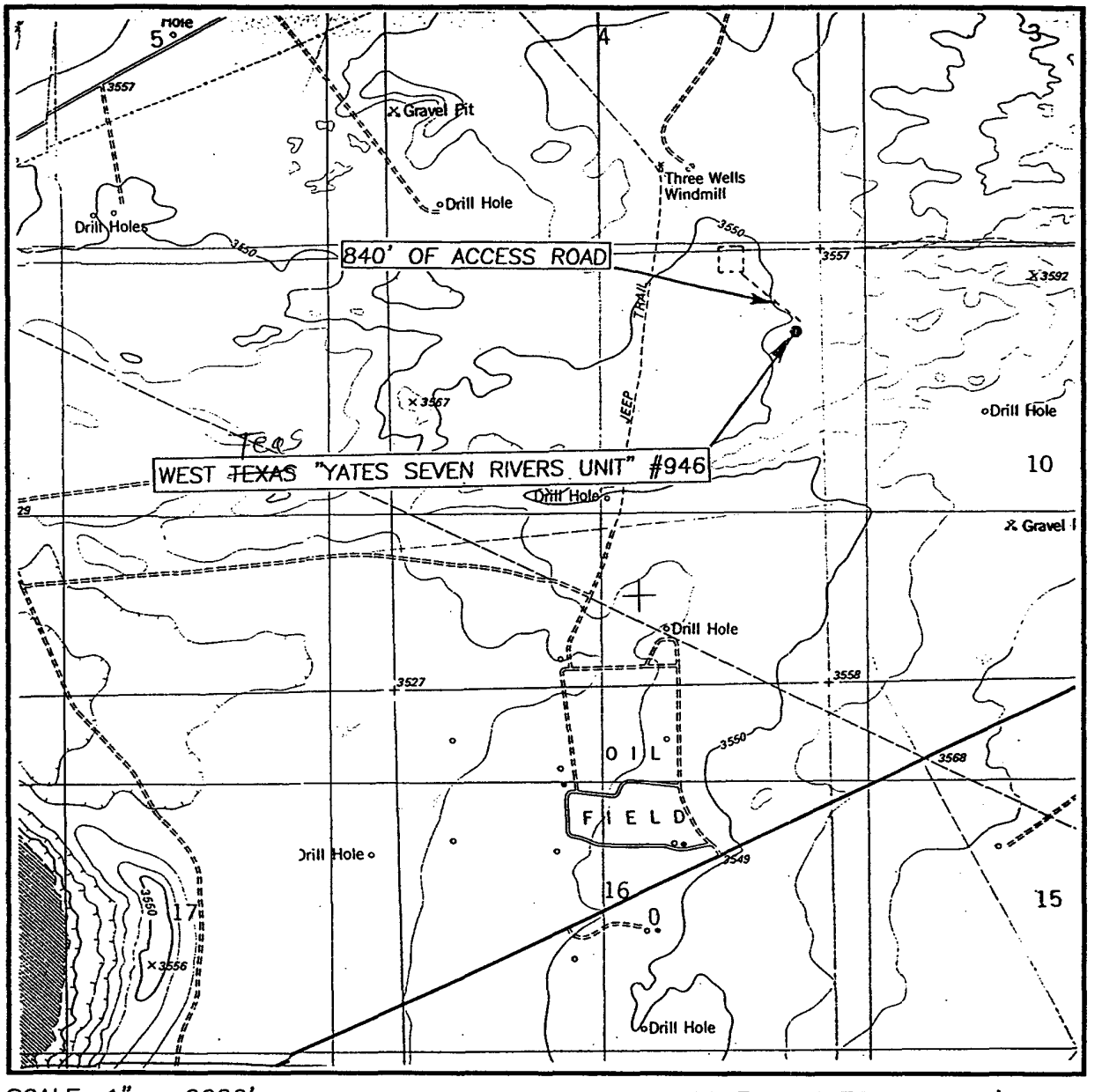
Hobbs
OCD

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
LAGUNA GATUNA, N.M.

SEC. 9 TWP. 20-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 990' FNL & 330' FEL

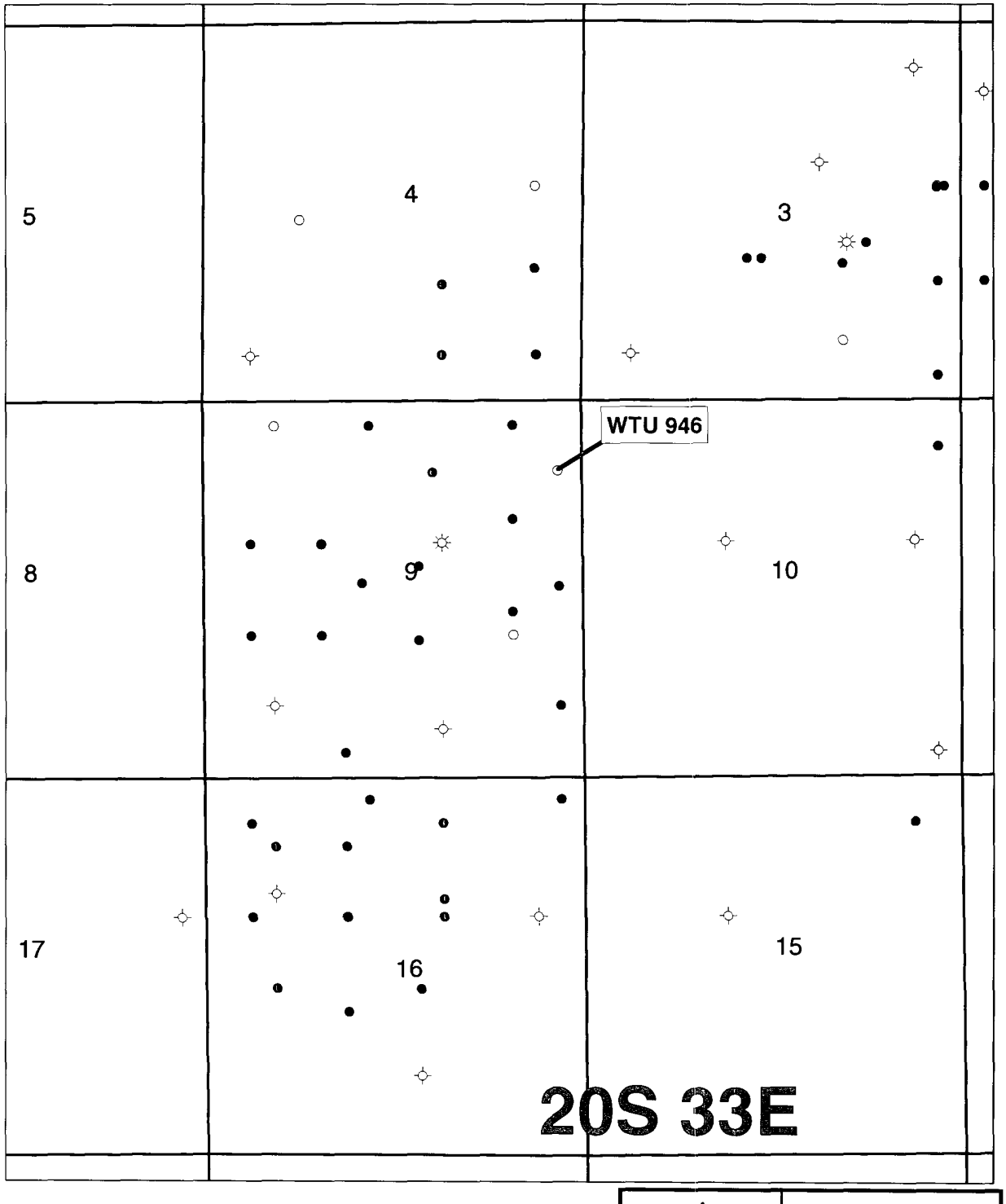
ELEVATION 3552'

OPERATOR CHESAPEAKE OPERATING, INC.

LEASE WEST ~~TEXAS~~ Teas "YATES SEVEN RIVERS UNIT"

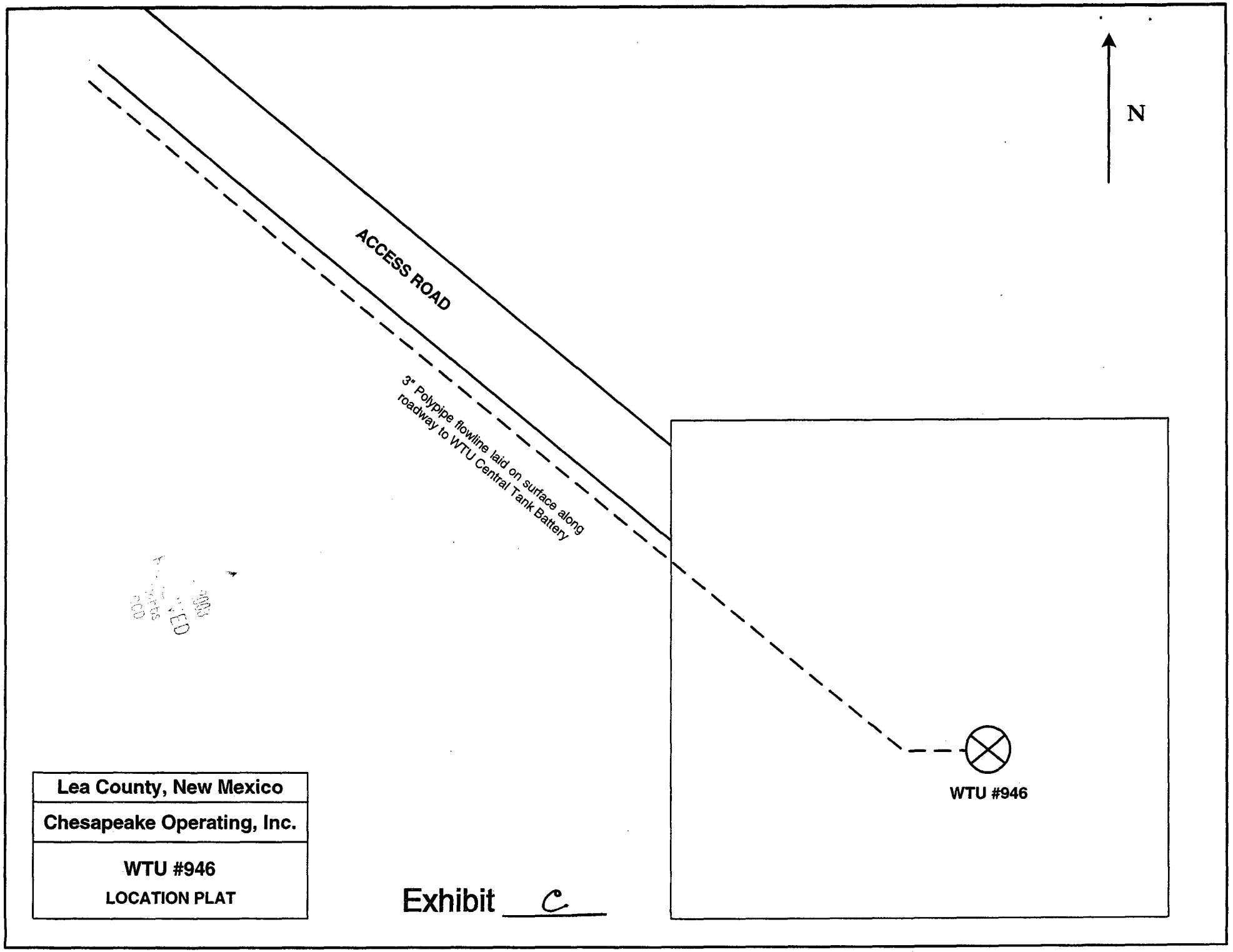
U.S.G.S. TOPOGRAPHIC MAP
LAGUNA GATUNA, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117



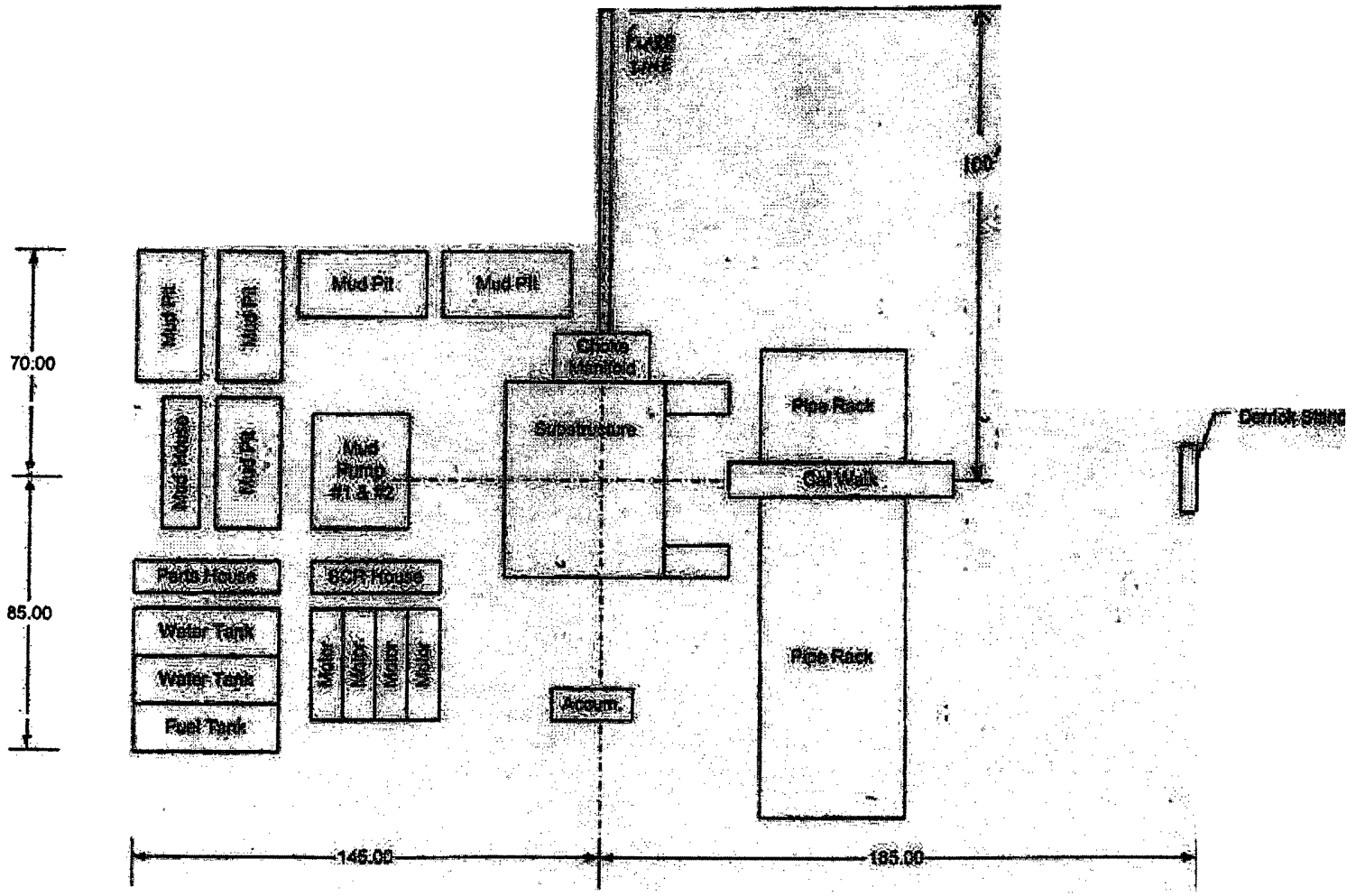
Chesapeake Natural Gas Natural Advantages	CHESAPEAKE OPERATING, INC.
WTU 946 LOCATION All wells within 1 mile of WTU 946 Lea County, New Mexico	
Date: 30 July, 2003 **Scale:** 1" = 2000'	**Geologist:** Doug Bellis

Exhibit B



Lea County, New Mexico
Chesapeake Operating, Inc.
WTU #946 LOCATION PLAT

Exhibit C



Chesapeake Operating, Inc			
General Rig Layout			
SIZE	FSCM NO	DWG NO Generic	REV

Exhibit D

1/03

TITLE PAGE/ABSTRACT/
NEGATIVE SITE REPORT
CFO/RFO

1. BLM Report No.	2. Reviewer's Initials/Date_____ ACCEPTED ( ) REJECTED ( )	3. NMCRIS No.: 84101

4. Type of Report: Negative(X) Positive ( )

5.Title of Report:
Class III archaeological survey of a pad and access road for the West Texas "Yates Seven rivers Unit" well No. 946 for Chesapeake Operating, Inc.

Author(s): Ann Boone

6. Fieldwork Date(s)
from 21 June, 2003 to

7. Report Date 30, June, 2003

8. Consultant Name & Address:
Boone Archaeological Services
2030 North Canal
Carlsbad, NM 88220
Direct Charge: Danny Boone
Field Personnel Names: Danny Boone
Phone: (505) 885-1352

9. Cultural Resource Permit No.
190-2920-03-C

10. Consultant Report No.
BAS 06-03-07

11. Customer Name: Chesapeake Operating, Inc.
Responsible Individual: Sharon Dries
Address: P.O. Box 18496
Oklahoma City, Oklahoma 73154-0496
Phone: (405) 848-8000

12. Customer Project No.:
None

13. Land Status	BLM	STATE	PRIVATE	OTHER	TOTAL
a. Area Surveyed (acres)	10.06 (-/+)	0	0	0	10.06 (-/+)
b. Area of Effect (acres)	4.25	0	0	0	4.25

14. Linear: Length; 840' Width; 130'
Block: 600' x 600'

15. Location: (Maps Attached if Negative Survey)
a. State: New Mexico
b. County: Lea
c. BLM Office: Carlsbad
d. Nearest City or Town: Maljamar, New Mexico
e. Legal Location: T 20S, R 33E, Sec. 9; Pad NE,NE, Access road NE NE:
f. Well Pad Footages: 990' FNL, 330' FEL
g. USGS 7.5 Map Name(s) and Code Number(s): LAGUNA GATUNA, NM (1984) 32103-E6

Exhibit

16. Project Data:

a. Records Search: Date(s) of BLM File Review: 17 June, 2003 Name of Reviewer (s): Danny Boone

Date(s) of ARMS Data Review: 17 June, 2003 Name of Reviewer (s): Ann Boone

Findings (see Field Office requirements to determine area to be reviewed during records search):

LA 137102 and LA 59589 are within 500'

b. Description of Undertaking:

The pad is staked as a 600' x 600' and required no buffer zone. The access road begins in the southeast portion of the pad impact area for the WTU well No. 941 and trends southeast for 840' to a point approximately 240' inside of the north central part of the proposed pad survey area. This resulted in an estimated survey area for the raod of 640' in length by 130' in width. Plats are attached to this report.

c. Environmental Setting (NRCS soil designation; vegetative community; etc.):

Topography: Featureless sandy plain, deflation basin, 10-15 meters long, 1-2 meters deep

Vegetation: 40% ground cover, shin oak, mesquite, sage brush, broom snakeweed, assorted grasses andj other flora.

NRCS: Peyote-Maljamar-Kermit association: Gently undulating and rolling, deep, sandy soils

d. Field Methods: (transect intervals; crew size; time in field, ect.):

Transects: For the pad a grid of parallel transects spaced 15 meters of less, for the road 2 parallel zig-zag transects spaced up to 10 meters apart on each side of staked centerline.

Crew Size: One

Time in Field: 3.0

e. Artifacts Collected (?): None

17. Cultural Resource Findings:

a. Identification and description: None

b. Evaluation of significance of Each Resource: None

18. Management Summary (Recommendations):

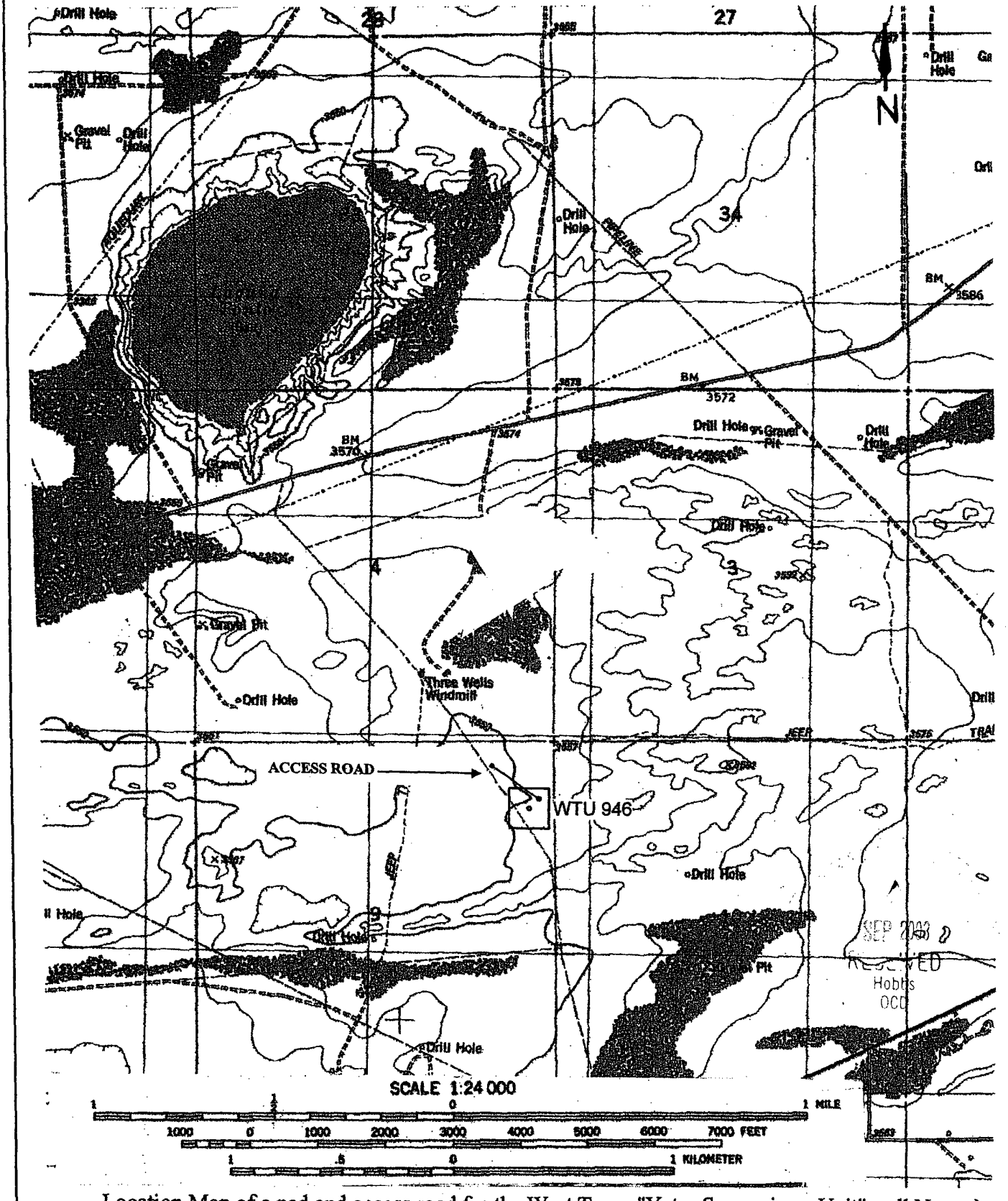
Archaeological clearance of a pad and access road for the WTU "Yates Seven Rivers Unit" well No. 946 for Chesapeake Operating, Inc. as presently staked is recommended. If cultural resources are encountered at any time all activity should cease and the BLM Archaeologist notified immediately.

19.

I certify that the information provided above is correct and accurate and meets all appreciable BLM standards.

Responsible Archaeologist Danny Boone 2 July 2003

Signature Date

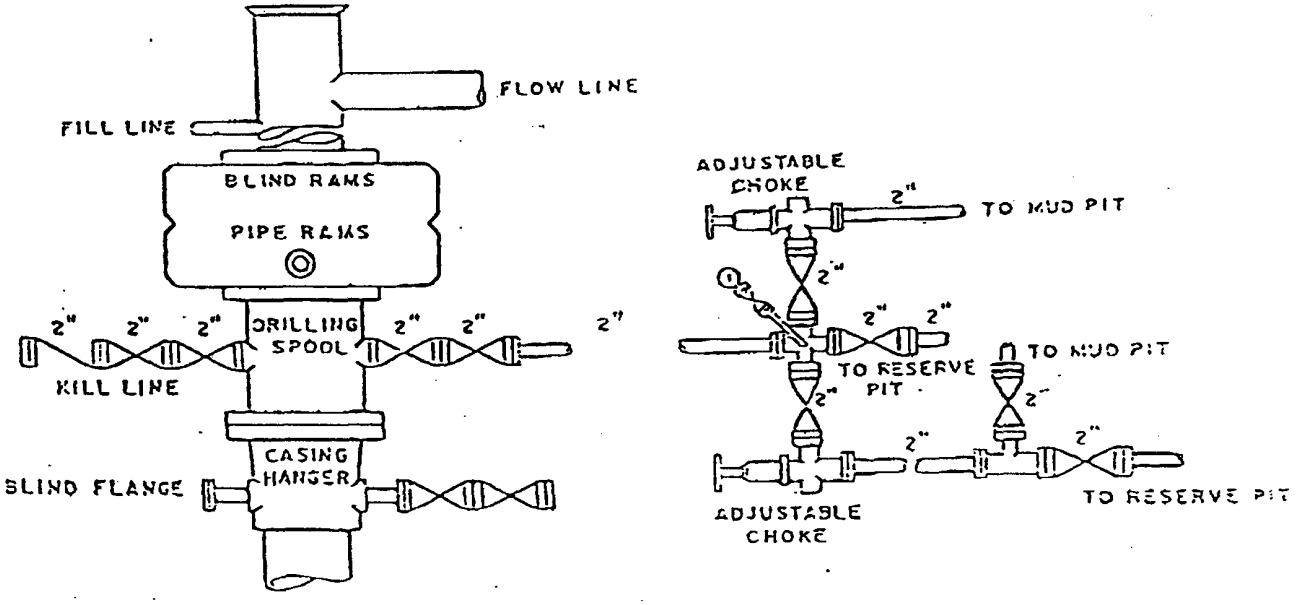


Location Map of a pad and access road for the West ~~Texas~~ Texas "Yates Seven rivers Unit" well No. 946 for Chesapeake Operating, Inc. in Sections 9, T 20S, R 33E, NMPM, Lea County, New Mexico.

Map Reference USGS 7.5' Series: LAGUNA GATUNA, NM (1984) 32103-E6

BAS

11" Cameron Double Ram BOP



BOP DIAGRAM

3000# Working Pressure
Rams Operated Daily

WTU 946

Exhibit F