Form 3160-3
(December 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (See other instructions on reverse side)

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

CONFIDENTIAL – TIGHT HOLE

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.	NMNM 104724
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	NMNM 103145X
8. FARM OR LEASE NAME, WELL NO.	WTU 924 West Teas Y-7R UNT.
9. API WELL NO.	30-025-36073
10. FIELD AND POOL, OR WILDCAT	~~Yates~~ Teas; Y-7R West
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA	9-20S-33E

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: Janelle McNeely

3. ADDRESS AND TELEPHONE NO.
P.O. BOX 18496 OKLAHOMA CITY, OK 73154 **405-879-9406**

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface **2,560' FNL & 2,210' FWL**

F

At top proposed prod. zone **Same as above**

SUBJECT TO LIKE APPROVAL BY STATE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*	12. COUNTY OR PARISH	13. STATE
	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
80' FNLL	280.00	
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***
	3,290'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)	22. APPROX. DATE WORK WILL START*
3,540' GR at stake	Upon approval

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
12 ¼"	J-55, 8 5/8"	32#	0' ~~1,270'~~ 1350'	+/- 605 sx
7 7/8"	J-55, 5 ½"	15.5#	0' – 3,290'	+/- 585 sx

Chesapeake Operating, Inc. proposes to drill a well to 3,290' to test the Yates formations. 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 Oil Conservation Division requirements.

Attached please find the Surface Use Plan and Drilling Plan as required by Onshore Order No. 1. A generic rig layout is attached as Exhibit H. A final rig layout will be submitted prior to spud once rig is assigned.

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.

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 X J. Mark Lester TITLE J. Mark Lester Sr. Vice President Exploration DATE X 8/29/02

*(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 whi thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /S/ RICHARD A. WHITLEY TITLE ACTING STATE DIRECTOR DATE NOV 29 2002

OPER. OGRID NO. 147179
PROPERTY NO. 30422
POOL CODE 59110
EFF. DATE 12-10-02
API NO. 30-025-36073

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

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 will be utilized for WTU 924 in Section 9-20S-33E. See Exhibit D.
b. Location, access and vicinity plats attached hereto. See Exhibits A-1 through A-3.

2. PLANNED ACCESS ROADS

a. No new access road will be required for proposed location.
b. A locking gate will be installed at the site entrance.
c. Any fences cut will be repaired. Cattle guards will be installed, if needed.
d. 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

Production facilities will be located adjacent to existing WTU 932 – 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, if required, 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

A closed system will be utilized consisting of above ground steel tanks. 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

See Exhibit C for plant facility and Exhibit D for proposed flowlines. The plant facility will be entirely encompassed on an existing location. No new surface disturbance for the plant will be required. The details of the proposed flowlines and additional archeological survey will be submitted under separate sundry notice.

9. WELLSITE LAYOUT

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

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 levelling, and contouring are planned as soon as the drilling rig and steel tanks 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 F.

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) 879-7930 (FAX)
candrews@chkenergy.com

Drilling Engineer
Keith Curtis
P.O. Box 18496
Oklahoma City, OK 73154
(405) 848-8000 Ext. 623 (OFFICE)
(405) 879-9571 (FAX)
(405) 650-6399 (MOBILE)
kcurtis@chkenergy.com

Production Operations
Dave Wittman
303 E. McAlpine
Navasota, TX 77868
(936) 825-3226 (OFFICE)
(936) 825-3278 (FAX)
(979) 820-3308 (MOBILE)
dwittman@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.com

Regulatory Compliance
Janelle McNeely
Regulatory Compliance Coordinator
Mailing Address: P.O. Box 18496
Oklahoma City, OK 73154
Street Address: 6100 N. Western
Oklahoma City, OK 73118
(405) 879-9406 (OFFICE)
(405) 879-7930 (FAX)
jmcneely@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: X J. Mark Fester

Date: X 8/29/02

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:

Purpose	Interval	Hole Size	Casing Size	Weight	Grade	Thread	Condition
Surface	0' - 1,270'	12-1/4"	8-5/8"	32	J-55	STC	NEW
Production Liner	0' - 3,290'	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: 410 sx Tail: 195 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: 390 sx Tail: 195 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' - 1,270'	Water Based	8.5-9.3ppg	32-36	NC
1,270' - 3,290'	Water based	10.0-10.2ppg	28-30	15-20

A 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 pressure is 450 psi. No abnormal pressures or temperatures are anticipated.
b. Hydrogen sulfide gas is not expected to be encountered.

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	1,250	-2,304
Salt	1,281	-2,273
Base Salt	2,895	-659
Tansill Dolmite	2,900	-654
Yates	3,046	508
Yates Upper 1 Sand	3,050	504
Yates Lower 1 Sand	3,093	461
Yates 2 Carbonate	3,129	425
Yates 2 Sand	3,152	402
Yates 2 Lower Carbonate	3,192	362
Yates 3 U Sand	3,217	337
Yates 3 Middle Sand	3,234	320
Yates 3 Lower Sand	3,262	292
Seven Rivers	3,287	267
Total Depth	**3,290**	

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	3,050
Oil	Yates Lower 1 Sand	3,093
Oil	Yates 2 Sand	3,152
Oil	Yates 3 U Sand	3,217
Oil	Yates 3 Middle Sand	3,234
Oil	Yates 3 Lower Sand	3,262

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 G.
(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.
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.

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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
30-025-36673	59110	Teas; Yates-7R, West

Property Code	Property Name	Well Number
30422	West Teas Y-7R ~~WTU~~ Unit	924

OGRID No.	Operator Name	Elevation
147179	CHESAPEAKE OPERATING, INC.	3540'

Surface Location

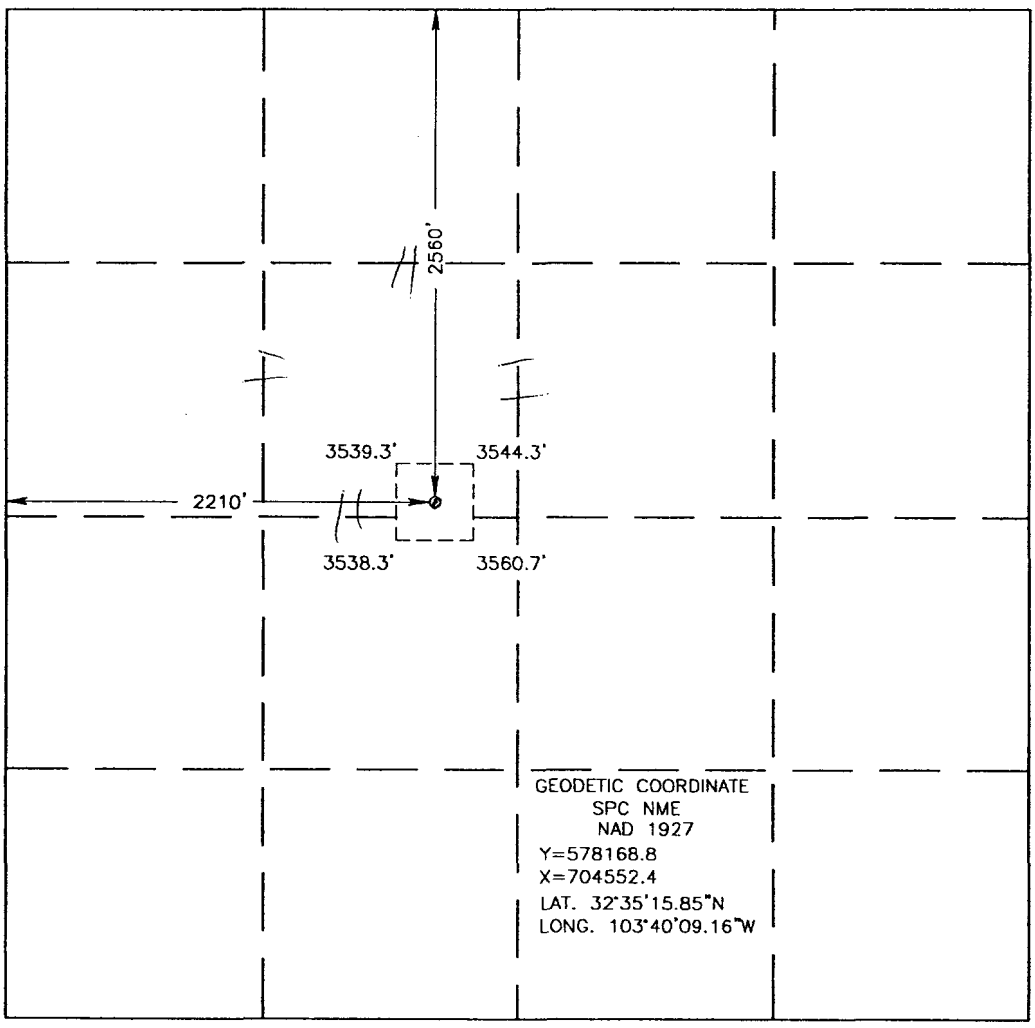
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	9	20-S	33-E		2560	NORTH	2210	WEST	LEA

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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.

x Lynda F. Townsend
Signature

Lynda F. Townsend
Printed Name

Landman
Title

08-19-02
Date

SURVEYOR CERTIFICATION

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

AUGUST 01, 2002
Date Surveyed AWB

Signature & Seal of Professional Surveyor

RONALD J. EIDSON NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

Gary L. Eidson 8/16/02

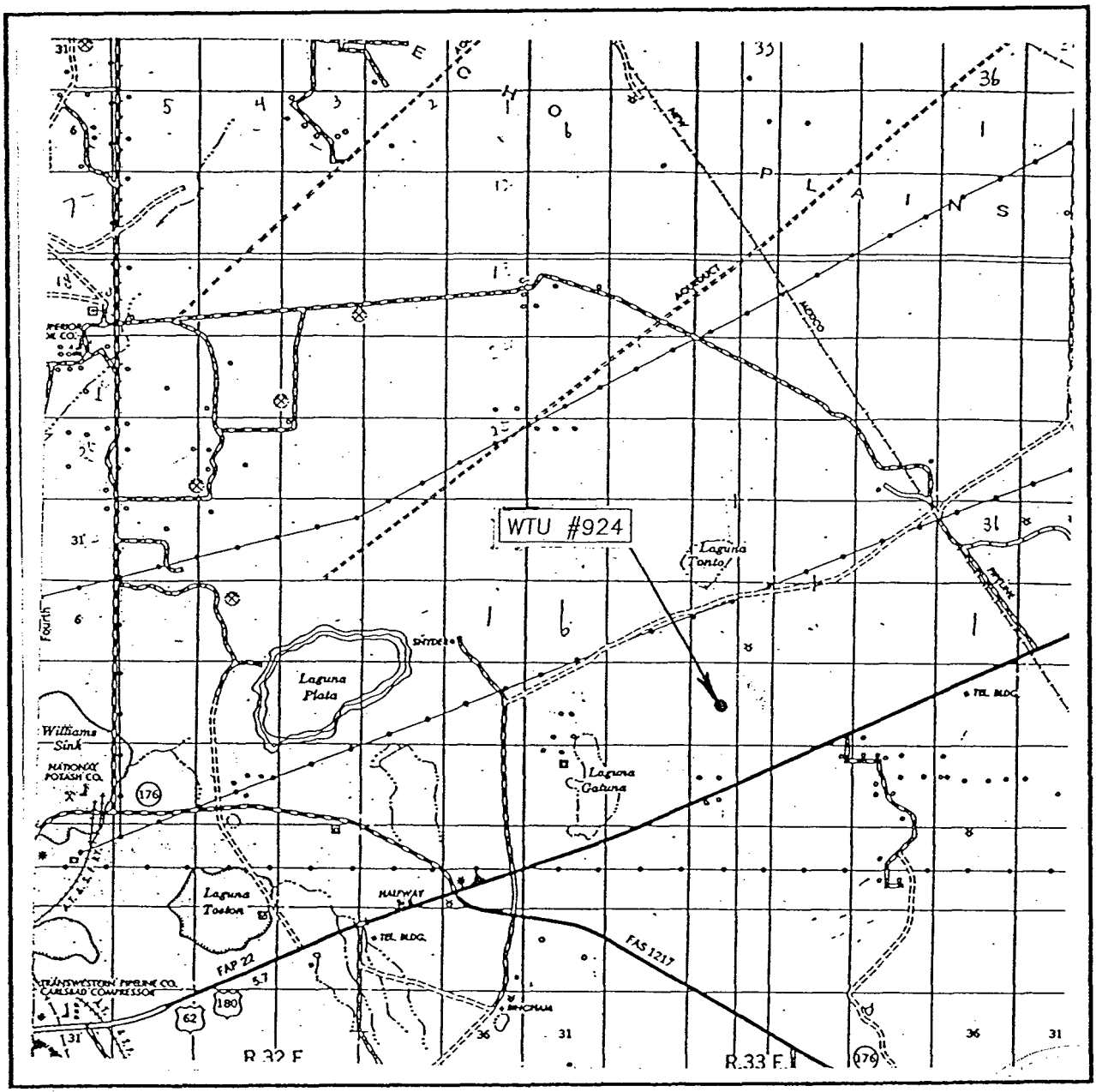
02.11.0549

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

Exhibit A-1

CONFIDENTIAL

VICINITY MAP



SCALE: 1" = 2 MILES

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

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2560' FNL & 2210' FWL

ELEVATION 3540'

OPERATOR CHESAPEAKE OPERATING, INC.

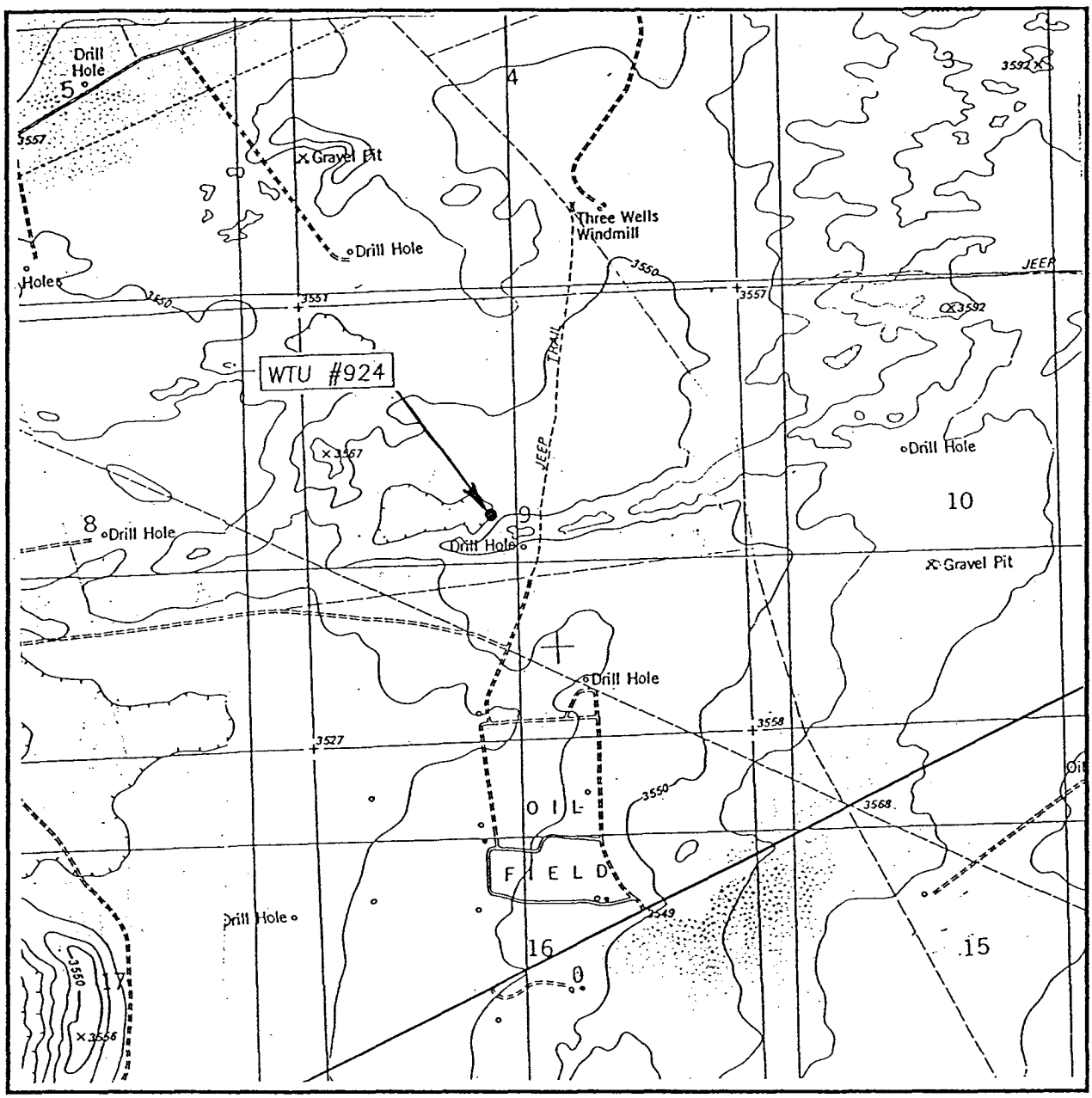
LEASE WTU

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

Exhibit A-2

CONFIDENTIAL

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 2560' FNL & 2210' FWL

ELEVATION 3540'

OPERATOR CHESAPEAKE OPERATING, INC.

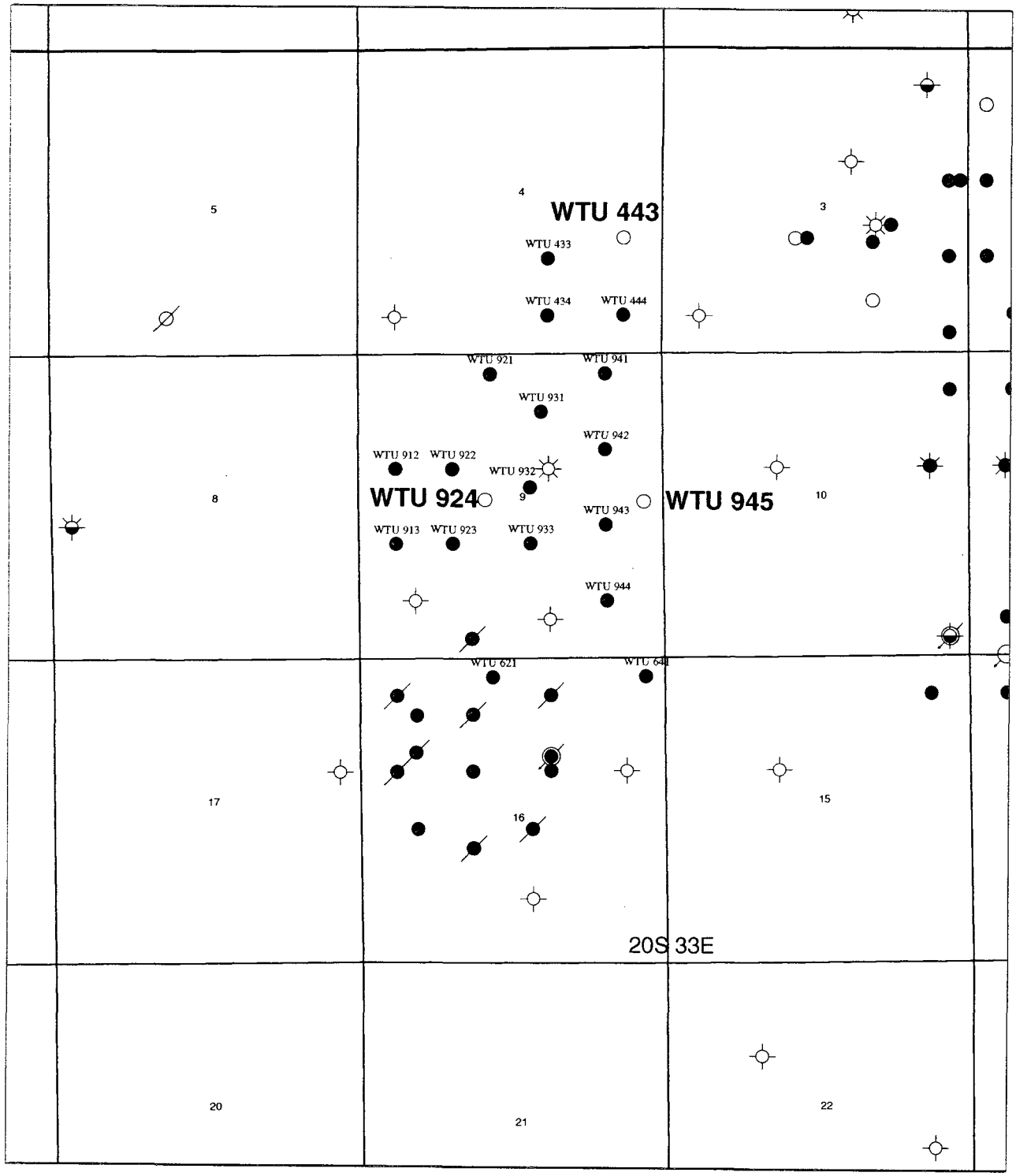
LEASE WTU

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

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

Exhibit A-3

CONFIDENTIAL



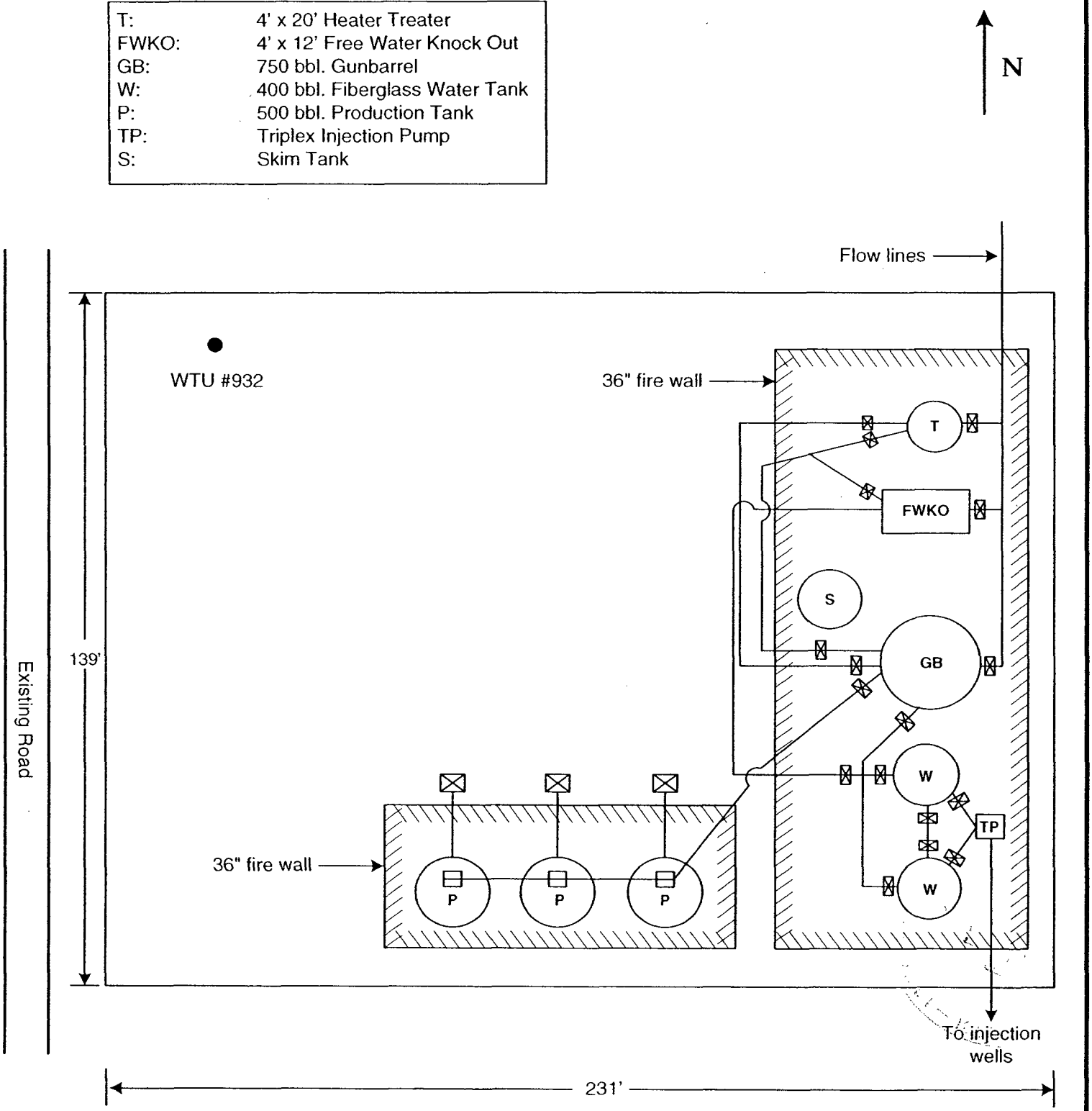
Chesapeake	CHESAPEAKE OPERATING, INC.
West Teas Unit Lea Co., New Mexico WTU 924 Location MapFile.gmp	
Date: 7 August, 2002	**Geologist:** Doug Bellis

Exhibit B

CONFIDENTIAL

Chesapeake Energy
Proposed West Teas Unit Plant
2310' FNL - 2310' FEL
SW NE Section 9-T20S-R33E
Lea County, NM

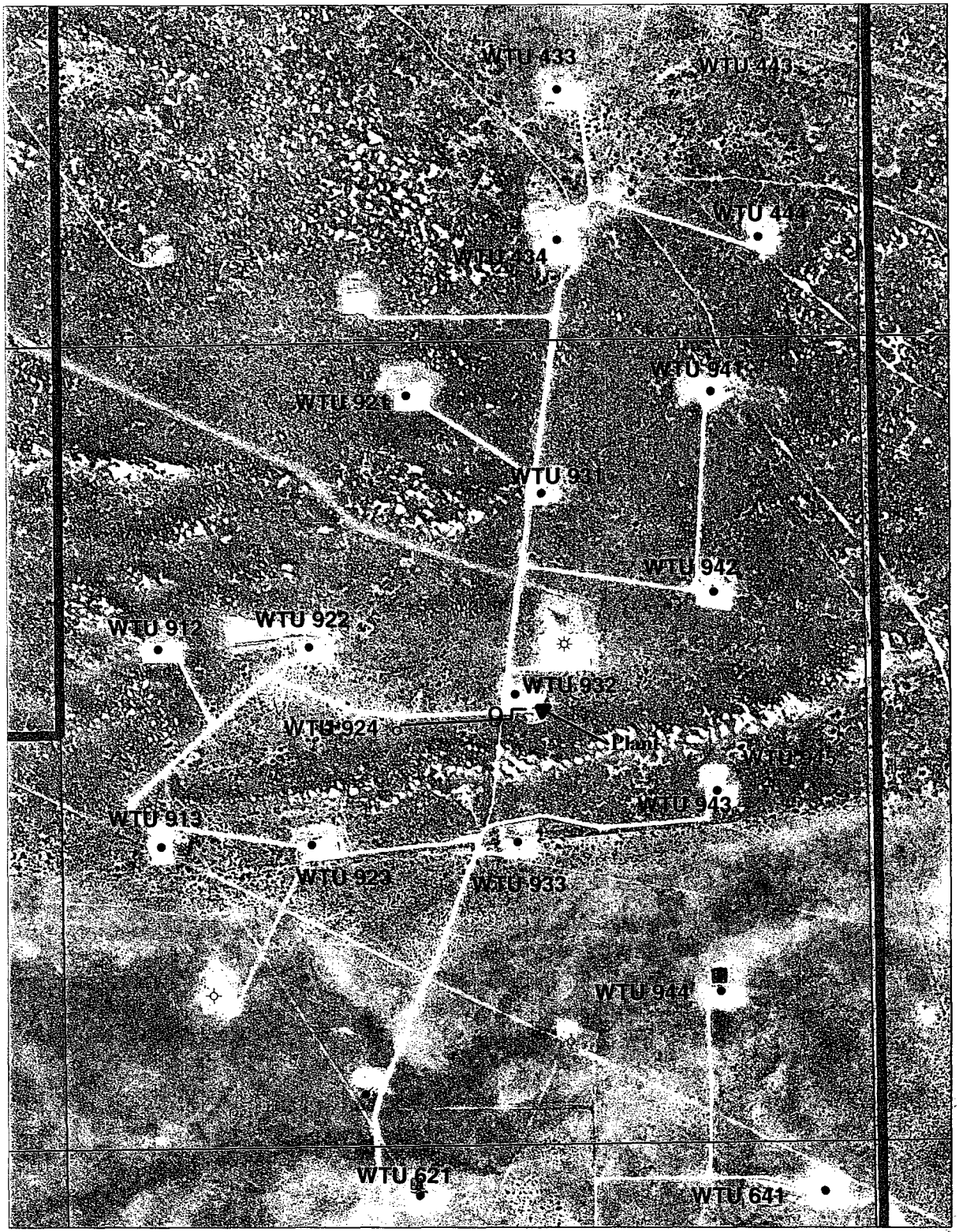
T:	4' x 20' Heater Treater
FWKO:	4' x 12' Free Water Knock Out
GB:	750 bbl. Gunbarrel
W:	400 bbl. Fiberglass Water Tank
P:	500 bbl. Production Tank
TP:	Triplex Injection Pump
S:	Skim Tank



Note: Pad site is existing. No incremental ground encroachment required.

Exhibit C

CONFIDENTIAL



Chesapeake	CHESAPEAKE OPERATING, INC.
West Teas Unit Lea County, New Mexico Airphotos with well spots	
Date: 13 August, 2002	West Teas Air Photos.gmp Geologist: Doug Bellis

WTU 924
Proposed Flowline

Exhibit D

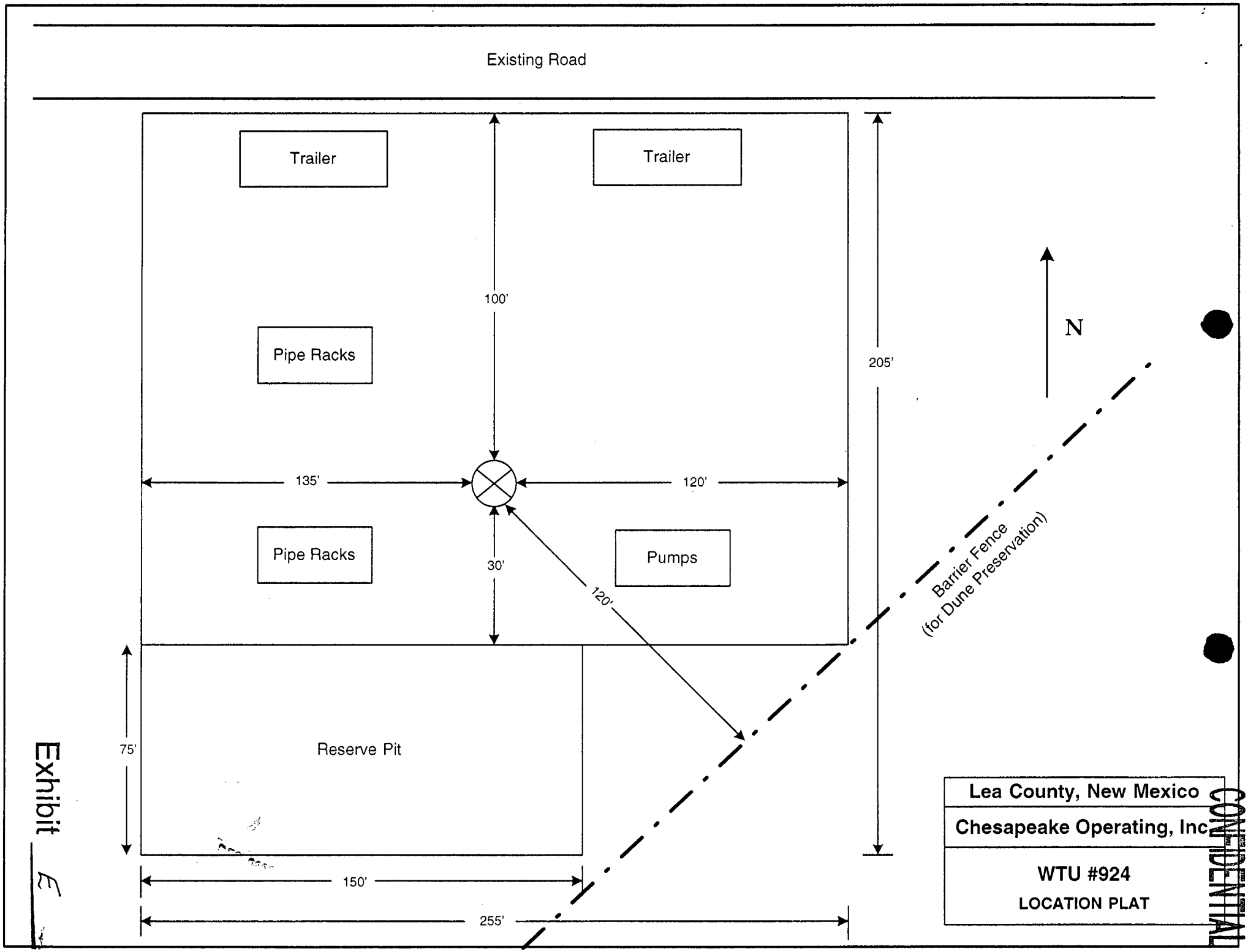

Existing Road
Trailer
Trailer
Pipe Racks
Pipe Racks
Pumps
Reserve Pit
100'
205'
135'
120'
30'
120'
75'
150'
255'
N
Barrier Fence
(for Dune Preservation)
Lea County, New Mexico
Chesapeake Operating, Inc.
WTU #924
LOCATION PLAT
CONFIDENTIAL

Exhibit E

CONFIDENTIAL

BOONE ARCHAEOLOGICAL SERVICES LLC
2030 NORTH CANAL
CARLSBAD, NM 88220
EMAIL: annboone@cavemen.net
OFFICE: 505-885-1352

FAX NUMBER 505-887-7667

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Janelle McNeely	Danny Boone
COMPANY:	DATE:
Chesapeake Operating, INC.	08/21/02
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
405-879-7930	9
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
405-879-9406	BAS 8-2-05
RE:	YOUR REFERENCE NUMBER:
Arch Report	WTU No. 924 & WTU No. 945

☐ URGENT ☑ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS

Janelle here is the completed report, I will mail original today.

Thank you for your business

Exhibit F

CONFIDENTIAL

TITLE PAGE/ABSTRACT/
NEGATIVE SITE REPORT
CFO/RFO

1/95

1. BLM Report No.	2. (ACCEPTED) (REJECTED)	3. NMCRIS No. 80020
4. Title of Report (Project Title) Class III archaeological survey of a pad for the WTU well No. 924 and a pad and access road for the WTU well No. 945 for Chesapeake Operating, INC in Section 9, T 20S, R 33E, NMPM, Lea County, New Mexico.		5. Project Date(s) 31 July, 2002 to 16August, 2002 6. Report Date 21 August, 2002
7. Consultant Name & Address: Direct Charge: Danny Boone Name: Boone Archaeological Services, LLC Address: 2030 N. Canal Carlsbad, New Mexico Authors Name: Danny Boone Field Personnel Names: Danny Boone Phone: (505) 885-1352		8. Permit No. 190-2920-02-B 9. Consultant Report No. BAS 8-2-05
10. Sponsor Name and Address: Indiv. Responsible: Janelle McNeely Name: Chesapeake Operating, INC. Address: P.O. Box 18496 Oklahoma City, Oklahoma 73154-7930 Phone: (405) 848-8000		11. For BLM Use Only. 12. ACREAGE: Total No. of acres surveyed: 31.2 (+/-) SURFACE OWNERSHIP: Federal: 31.2 (-/+) State: 0, Private: 0

13. 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, WTU No. 924; SE NW, NE SW: WTU No. 945 Pad; SE NE, NE SE, Access Road, NE NE SE, NW NE SE:
   Well Footages: WTU No. 924, 2562' FNL, 2210' FWL
   WTU No. 945, 2612' FNL, 330' FEL
   f. USGS 7.5 Map Name(s) and Code Number(s): LAGUNA GATUNA, NM (1984) 32103-E6
   g. Area: Block: surveyed: 400' x 400' times 2 pads
   Impact: Within survey area of pads [See 14 b.]
   Linear: Surveyed: 100' x 443'
   Impact: 50' x 443'

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14. a. Records Search; ARMS: Date(s): 15 August, 2002 Name(s): Danny Boone
BLM Office: Date(s): 01 August, 2002 Name(s): Danny Boone
List Sites within .25 miles of Project:
Show sites within 500' on Project Map

b. Description of Undertaking:

On 31 July 2002 Danny Boone was at the location to meet with Chesapeake representative Andrew McCalmont but due to a mixup in communication this did not occur. On 01 August, 2002 Danny Boone of Boone Archaeological Services, Don Peterson of the Carlsbad BLM, Chesapeake personnel D. O. Wittman and Andrew McCalmont met in the field and the affected area was superficially examined. Due to environmental concerns a new location for the WTU No. 945 was selected and John West Engineering then proceeded with the staking process.

The WTU well No. 924 will be served by an existing lease road that passes through the north portion of the pad area. The WTU well No. 945 has an access road that begins at the northeast portion of the WTU well No. 943 and trends northeast to a point approximately 50 inside of the southwest portion of the pad survey area. Plats are attached to this report. Total survey acreage is estimation and was arrived at because of the update of LA 59589.

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

Topography: Transition zone from flat sandy plain to high dunes

Vegetation: 40% (-/+) groundcover, mesquite, sage brush, shin oak, soap berry tree, broom snakeweed, assorted sunflowers, various grasses and other flora.

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

d. Field Methods:

Transect Intervals: For the pads, a grid of parallel transects spaced fifteen meters or less and for the road, transects spaced up to 15 meters each side of flagged center line.

Crew Size: One

Time in Field: 35 hrs.

15. Cultural Resource Findings:

a. Identification and description

The southeast corner of the WTU No. 924 and the north portion of the WTU No. 945 were in contact with the drawn boundaries of LA 59589 and this site was updated. The original recording of LA 59589 in 1987 recommended inclusion in the National Register of Hisoric Places and stated that the length was 700 meters east to west, an update by the same recorders in 1992 states 700 meters long but on the Topographic Map it had grown to approximately 1650 meters (one mile). Another update in 1995 by another orginazation shows a site aproxmately 700 meters long. The 1992 update collected a carbon sample and the 1995 update collected a obsidian flake, these samples or the results do not appear in the records beyond this. The 1992 update resulted in the placement of a overhead electric line across LA 59589. The current update resulted in a total redifining of the boundaries of LA 59589 and resulted in the recording of LA 137102 and LA 137103. LA 137102 is recommended for the National Register.

LA 59589 at UTM cordinates 625798E, 3606290N, BLM II site recommended for the National Register.

LA 137102 at UTM cordinaates 624783E, 3606063N, BLM II site recommended for the National Register.

LA 137103 at UTM cordinates 625098E, 3606099N BLM II site not recommended for the National Register.

16. Management Summary (Recommendations):

Archaeological clearance of a pad for the WTU well No. 924 and the pad and access road for the WTU well No. 945 for Chesapeake Operating, INC in Section 9, T 20S, R 33E, NMPM, Lea County, New Mexico as presently staked is recommended provided that two stipulations are followed. A barrier fence be erected on the WTU No. 924 120' southeast of the drill hole across the southeast portion of the pad and no construction be allowed beyond this point; a barrier fence be erected on the WTU No. 945 across the northern portion of the pad 120' north of the drill hole and no construction be allowed beyond this point and a

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qualified archaeological monitor is present during initial surface disturbing activities. See attached diagrams. All activity should cease and the B LM archaeologist be notified immediately if any cultural resources are encountered at any time.

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

Responsible Archaeologist Danny Boone 8-21-02

Signature Date

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Pad for the WTU well No. 924 and a pad and access road for the WTU well No. 945 for Chesapeake Operating, INC

Boone Archaeological Services, LLC
Report No.: BAS 8-2-05

NMCRIS No. 80020

Chesapeake Operating, INC.
P.O. Box 18496
Oklahoma City, Oklahoma 73154-7930

Attention:
Ms Janelle McNeely

1. **Introduction:**

An intensive archaeological survey of a pad for the WTU well No. 924 and a pad and access road for the WTU well No. 945 for Chesapeake Operating, INC in Section 9, T 20S, R 33E, NMPM, Lea County, New Mexico. Fieldwork was conducted on 7, 13, 14, & 16 August 2002 and resulted in the update of LA 59589, recording of LA 137102 and LA 137103.

2. **Legal Description:**

T 20S, R 33E, Sec. 9; WTU No. 924; SE NW, NE SW: 2562' FNL, 2210' FWL.
WTU No. 945, WTU No. 945 Pad; SE NE, NE SE, 2612' FNL, 330' FEL
Access Road, NE NE SE, NW NE SE; 443' in length:
Map Reference, USGS 7.5' Series: LAGUNA GATUNA, NM (1984) 32103-E6
Land Status: BLM, Carlsbad Field Office

Project Description:

On 31 July Danny Boone was at the location to meet with Chesapeake representative Andrew McCalmont but due to a mix-up in communication this did not occur. On 01 August, 2002 Danny Boone of Boone Archaeological Services, Don Peterson of the Carlsbad BLM, Chesapeake personnel D. O. Wittman and Andrew McCalmont met in the field and the affected area was superficially examined. Due to environmental concerns a new location for the WTU No. 945 was selected and John West Engineering then proceeded with the staking process.

The WTU well No. 924 will be served by an existing lease road that passes through the north portion of the pad area. The WTU well No. 945 has an access road that begins at the northeast portion of the WTU well No. 943 and trends northeast to a point approximately 50' inside of the southwest portion of the pad survey area. Plats are attached to this report. Total survey acreage is estimation and was arrived at because of the update of LA 59589.

Topography: Transition zone from flat sandy plain to high dunes

Vegetation: 40% (-/+) groundcover, mesquite, sage brush, shin oak, soap berry tree, broom snakeweed, assorted sunflowers, various grasses and other flora.

NRCS: Simona-Pajaraito association: sandy, deep soils and soils that are shallow to caliche; from wind-worked deposits..

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Aspect: 360 degrees
Elevation: Varies from 3550' (+/-)
Lithic Resources: Chert and quartzite occur in the local gravels
Water Sources: (potential) No known potable source nearby
(permanent) Pecos River approximately 35 miles west.

3. **Examination Procedure:**
For the pad, a grid of parallel transects spaced fifteen meters or less and for the road, transects spaced up to 15 meters each side of flagged center line.
Area Delineation: Staked by client
Visibility: 15 to 100 %
Weather: Clear, sunny, hot
Lighting Conditions: Good
Work Hours on the Ground: 35
Crew Size: One

4. **Findings:**
The southeast corner of the WTU No. 924 and the north portion of the WTU No. 945 were in contact with the drawn boundaries of LA 59589 and this site was updated. The original recording of LA 59589 in 1987 recommended inclusion in the National Register of Hisoric Places and stated that the length was 700 meters east to west, an update by the same recorders in 1992 states 700 meters long but on the Topographic Map it had grown to approximately 1650 meters (one mile). Another update in 1995 by another orginazation shows a site aproxmately 700 meters long. The 1992 update collected a carbon sample and the 1995 update collected a obsidian flake, these samples or the results do not appear in the records beyond this. The 1992 update resulted in the placement of a overhead electric line across LA 59589. The current update resulted in a total redifining of the boundaries of LA 59589 and resulted in the recording of LA 137102 and LA 137103. LA 137102 is recommended for the National Register.

LA 59589 at UTM cordinates 625798E, 3606290N, BLM II site recommended for the National Register.
LA 137102 at UTM cordinaates 624783E, 3606063N, BLM II site recommended for the National Register.
LA 137103 at UTM cordinates 625098E, 3606099N BLM II site not recommended for the National Register.

Recommendations:
Archaeological clearance of a pad for the WTU well No. 924 and the pad and access road for the WTU well No. 945 for Chesapeake Operating, INC in Section 9, T 20S, R 33E, NMPM, Lea County, New Mexico as presently staked is recommended provided that two stipulations are followed. A barrier fence be erected on the WTU No. 924 120' southeast of the drill hole across the southeast portion of the pad and no construction be allowed beyond this point; a barrier fence be erected on the WTU No. 945 across the northern portion of the pad 120' north of the drill hole and no construction be allowed beyond this point and a qualified archaeological monitor is present during initial surface disturbing activities. See attached diagrams. All activity should cease and the B LM archaeologist be notified immediately if any cultural resources are encountered at any time.

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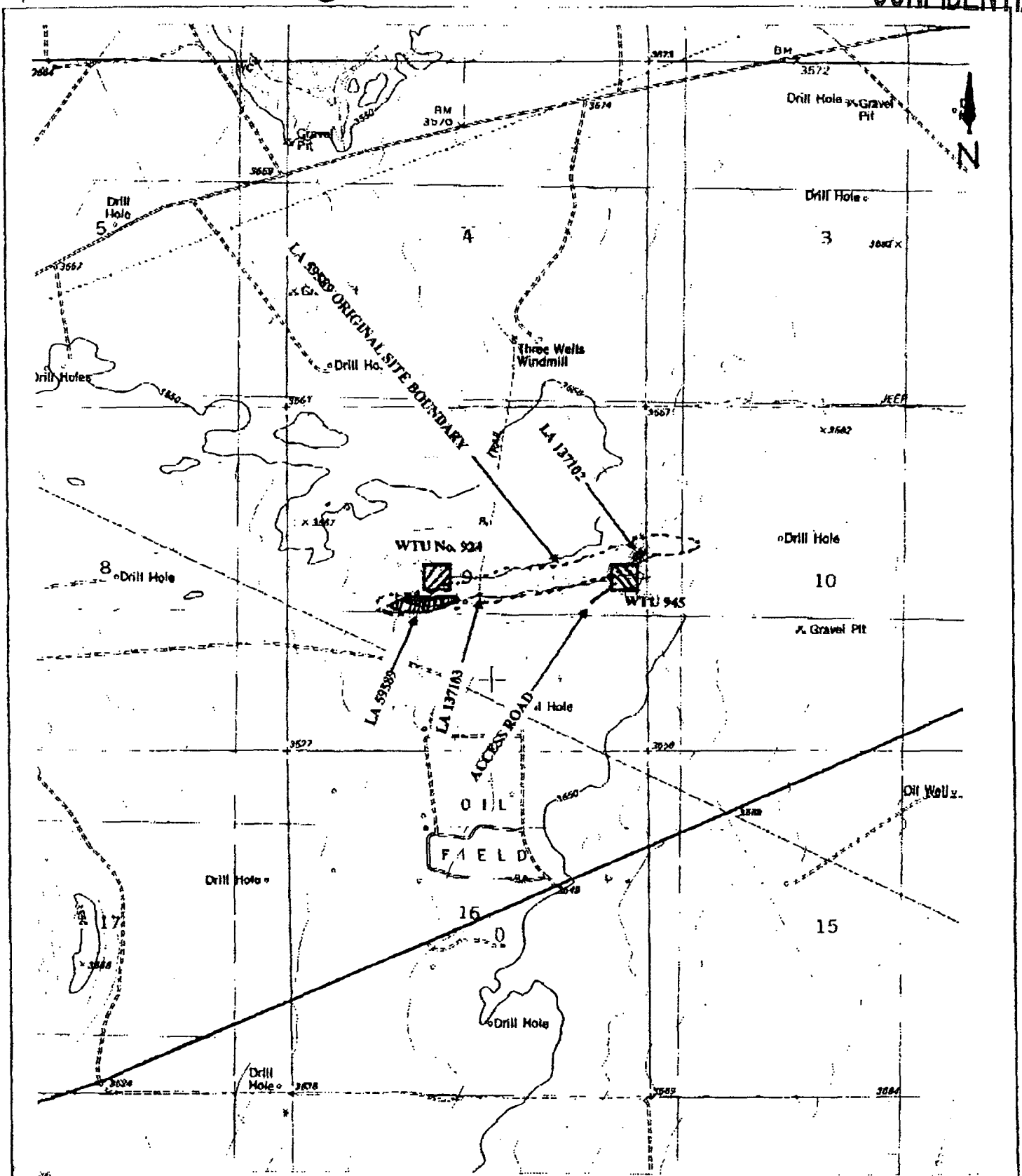

Location Map for of a pad for the WTU well No. 924 and a pad and access road for the WTU well No. 945 for Chesapeake Operating, INC in Section 9, T 20S, R 33E, NMPM, Lea County, New Mexico.
Map Reference USGS 7.5' Series: LAGUNA GATUNA, NM (1984) 32103-E6

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DIAGRAM FOR WTU WELL No. 924

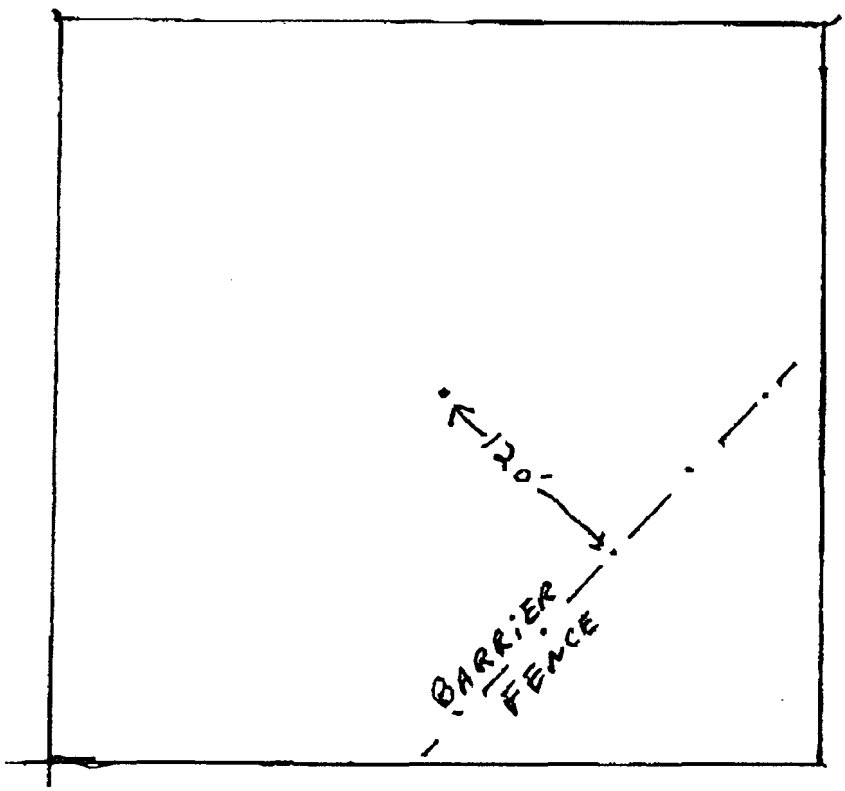

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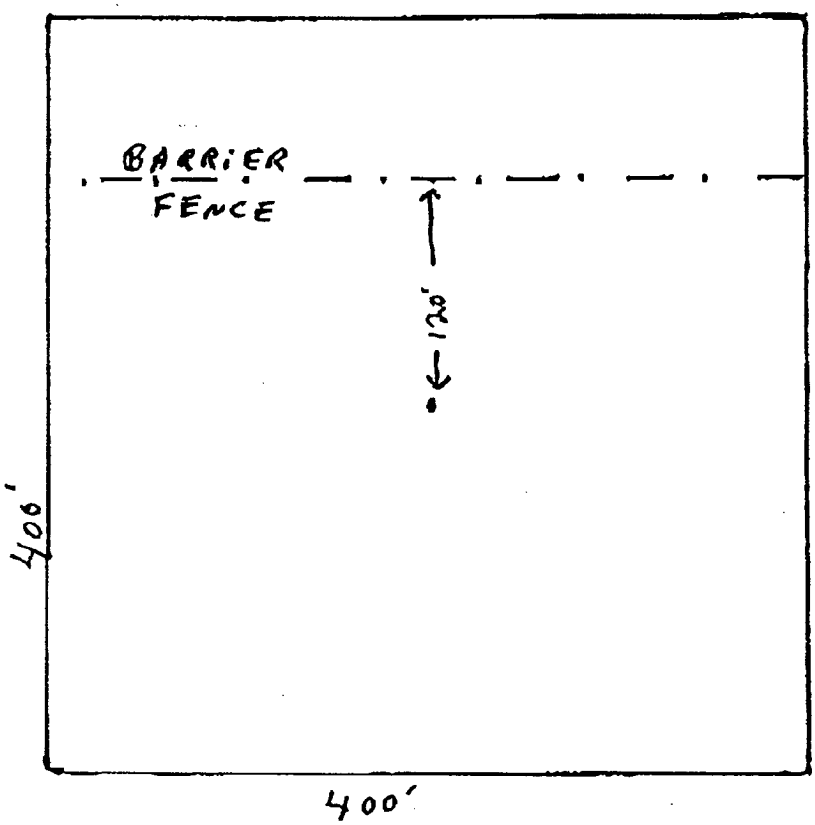
DIAGRAM FOR WTU WELL No. 945



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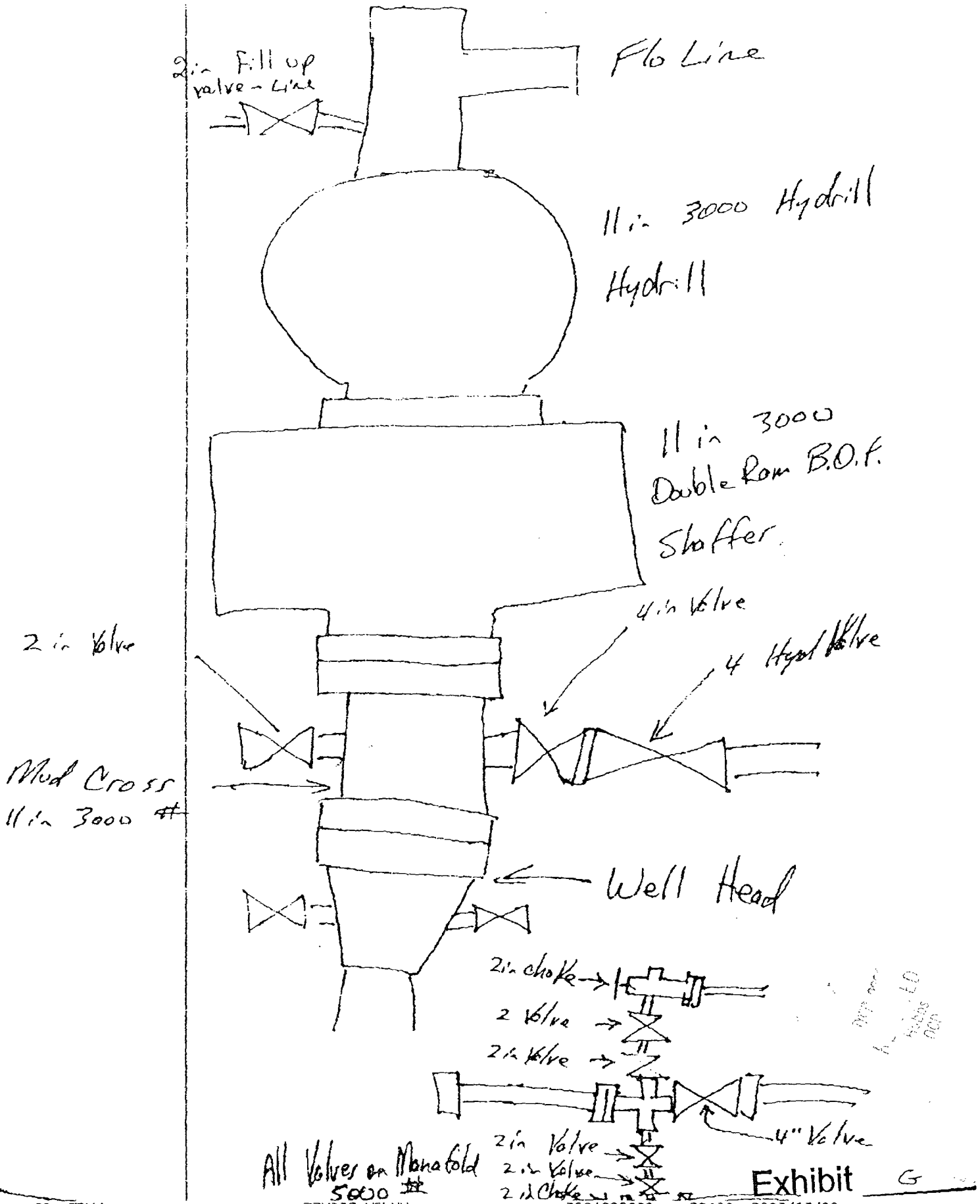
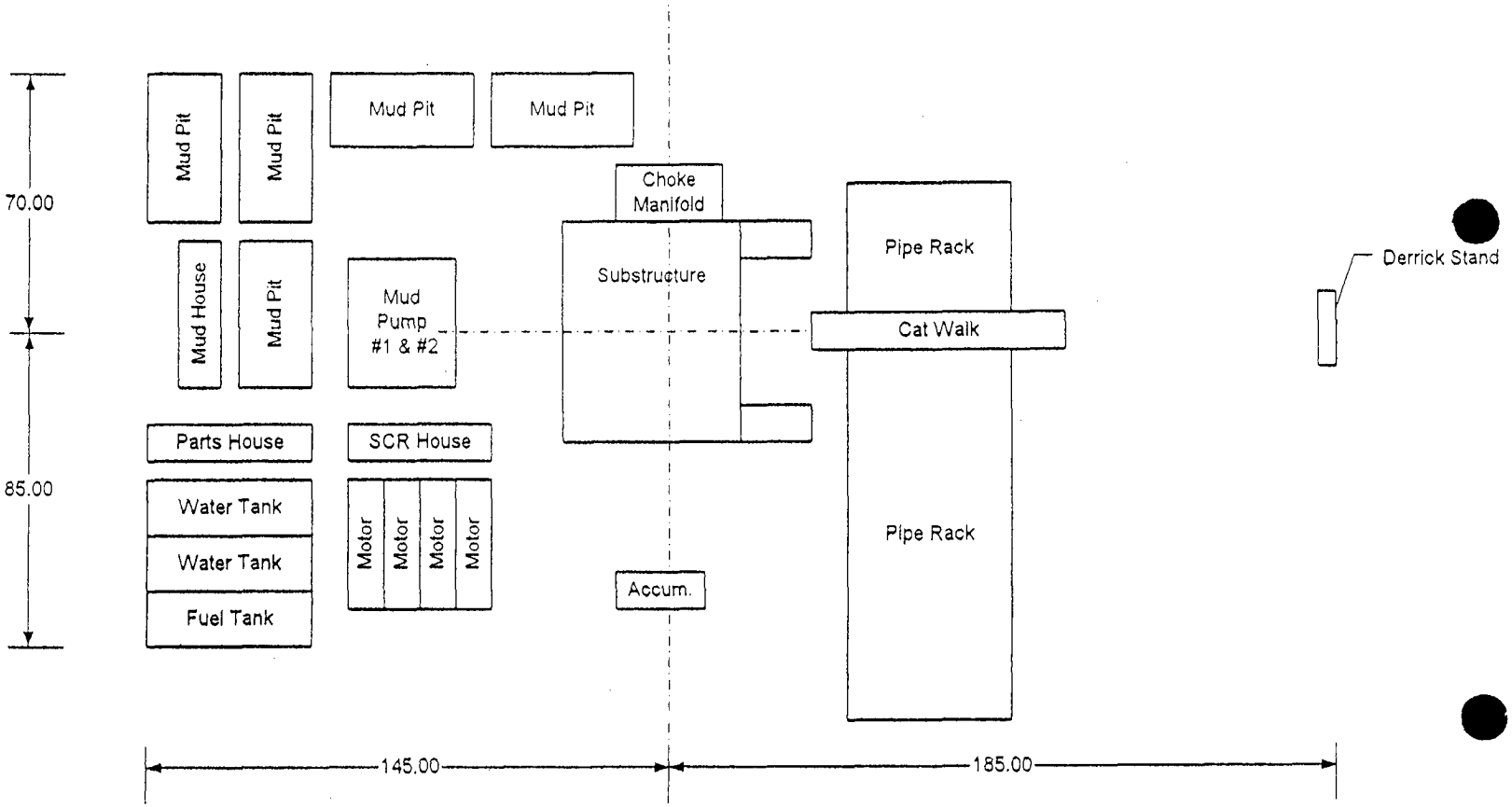


Exhibit G



Chesapeake Operating, Inc

General Rig Layout

SIZE	FSCM NO	DWG NO	
SCALE	Not to Scale	SHEET	1 OF 1

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EXHIBIT H

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT
New Mexico State Office
1474 Rodeo Road
P. O. Box 27115
Santa Fe, New Mexico 87502-0115

IN REPLY REFER TO:
3104 (93200-rayo)
Nationwide Bond

June 21, 1999

DECISION

Bonded Subsidiaries:	:	
Chesapeake Operating, Inc.	:	BLM Bond No.: NM2634
Chesapeake Mid-Continent Corp.	:	
Chesapeake Exploration Limited Partnership	:	Surety Bond No.: B7258
P.O. Box 18496	:	
Oklahoma City, OK 73154	:	Bond Type: Oil and Gas
Surety:	:	Amount of Bond $150,000.00
Underwriters Indemnity Company	:	Execution Date: 3/20/1998
Greenway Plaza, Suite 400	:	
Houston, TX 77046	:	

Rider Accepted

On February 11, 1999, Rider No. 4 was filed to the bond described above. The rider adds Chesapeake Exploration Limited Partnership, as an additional principal. The rider has been examined and found satisfactory and is accepted effective, February 11, 1999, the date filed in this office.

The parent company, Chesapeake Energy Corporation, holds no title to any properties in this name, and is not required to be bonded at this time. Chesapeake Exploration Limited Partnership is a subsidiary of Chesapeake Energy Corporation.

RECEIVED
JUN 24 1999
BY:

Exhibit

We specifically call your attention to the fact that the bond described above now provides coverage for Chesapeake Exploration Limited Partnership, either jointly or individually, as long as the ownership remains the same.

If you have any questions, you may contact me at (505) 438-7610.

/s/ Rose Ann Ortiz
Rose Ann Ortiz
Land Law Examiner
Fluids Adjudication Team