EXHIBIT 4

| | | 40 20 0 20 40 60 80 100 120 140 160 180 200 220 2 |
|---|---|---|
| VERTICAL VIEW SCALE 100 & / DIVI TVD REF: WELLHE/ VERTICAL SECTION | ab \$\$ 47,85 w a ReF. WELLHEAD \$\$ 58,40 w 8 71 \$\$ 58,40 w 8 71 \$\$ 31,70 w 8 83 | 748 M |
| 8000 | COLLEGE of the S.W. #1-1.5720.00 x 6 | 9032 MD |
| 8100 - | (PROPOSAL) 5 22.20 5 6 5 20.50 5 5 20.50 5 | P 4221 MD |
| 8300 - | - A0- 5 23.80 0.44* @ 3300 MD 5 25.20 5 25.20 5 25.20 | 0 802-9379 MD |
| 8400 - | 0.50° 0 \$400 MD | .1305 8 8 9505 MD 0.10 5 8 9568 MD |
| 8500 - | 3 | 200098 & 9 5633 MD 19.80 & 9 5634 MD 430 - 40 & 8 9758 MD |
| 8700 - | 0.84* 2 0701 MD | s 21 70 E 0 9822 MD 160 22.60 E 0 9885 MD |
| 8800 - | 1.00° @ 8740 MD 2.00° @ 8810 MD | s 20.40 £ 8 3947 MD 160 ³ 49.00 £ 9 10010 MD 3 22.40 £ 8 10014 MD |
| 8900 - | 4.00* 9 \$8 \$50 BOILD @ 200WIO0 B DX 2-78* HOLE 5.80* 8 9356 MD | 180 - 5 20.50 E @ 10137 MD 5 19:40 E @ 10200 MD FROM 11.012' TVD TO TD at 11.780' TV |
| 9009 | | 200 5 16.90 E @ 10264 MD 8 15.20 E @ 10267 MD (374'S & 109'E of SHL) |
| 9100 - | 200° 9 9127 HD 4009-00" 9 9130 MD | 220 - S 13.10 E 9 10350 MD S 10.60 E 9 10454 MD 240 - S 12.80 E 9 10517 MD |
| 9300 - | 0.60° 0 9253 MD 600° 9.10° 0 9315 MD | 260 - 5 15.60 E # 10579 MD |
| 9400 - | 8.00 10.10* 9 9379 MD 9.90* 9 9442 MD | 220 - S 13.80 E 8 10735 MD S 17.00 E 8 1773 MD |
| 9500 - | 10.00 ,10" 8 9505 MD 12.10" 8 9569 MD 12.10" 8 9569 MD 12.0" 8 9569 MD | 300 - 5 17.70 E \$ 10860 MD 5 16.16 E \$ 10926 MD |
| 9599 9700 - | 9.70° 8 9693 MD | 320 - 5 9.50 E 8 11018 MD 340 - 5 14.20 S 0 11118 MD |
| 9800 - | 9.60* 2007-001111*NC AS16299DBBETON 9.60* 29922 MD | 360 - (5 11.20 E 8 11207 MD 9 17.50 5 8 11300 MD |
| 9900 - | 9.50* 0 9865 MD 10.00* 0 9947 MD | 300 - (3 16.20 K 0 11394 MD) S 9.40 K 0 11480 MD |
| 10000 - | 9.80* 8 10010 MD 10.60* 8 10074 MD | 400 - S 6.60 E 0 11579 MD S 2.70 S 0 11571 MD |
| 10100 - | 10.50" 0 10137 MD 10.60" 0 10200 MD | 420 - |
| 10300 - | 10.10* 8 10264 MD 9.80* 8 10327 MD | 460 - 6 2)70 & 0 12030 MD |
| 10400 - 10431 - | - 109- Welfamp W2 Minter (9, 60* 9 10454 MD | 480 - |
| 10500 - | 3.50° % 10517 MD 9.30° % 10579 MD | 500 - |
| 10600 - | - 356 Olgover Jone 9, 00° 8 10541 MD 9, 80° 8 10764-MD BECHN DROP TO VERTICAL (8, 2004100 ft | THUR NOTE |
| 10000 - 10829 - | 11.00° # 18765 HD 1 × 10° # 18725 HD 1 × 10° # 8 10829 HD | W Correction E |
| 10900 - | 10.50" # 10892 MD 10.079" # 10955 MD | S TO CELANCE FROM A MACRETIC TO A TO BE DEPATION A MACRETIC |
| 11000 11032 11100 | - 259 - Caso Shale (TADGET TOP) 9.90* 8 11018 4D TARGET: 110' RADIUS CYLINDER 8.60* 8 11082 4EROM 11.012' TVD TO TD at 11.780' TVD CENTERED AT 607' FSL & 1100' FWL | |
| 11200 | 6677 (374'S & 109'E of SHL) | CRITICAL POINT DATA |
| 11300 - | 49780* 8 11269 MD 7.00* 8 11331 MD 17.20* 8 11331 MD 17.20* 8 11398 MD | MD Inc Azi TVD N/S E/W SHL 0 0.00° S16E 0 0 N 0 F |
| 11400 - | - 101 20xmm tel and | 8-58* CSG PT 4300 0.00° S 16 E 4300 0 N 0 I KOP 9000 0.00° S 16 E 9000 0 N 0 I END OF BUILD 9603 12.07° S 16 E 9599 61 S 18 I |
| 11500 | Size States | BEGIN DROP 10861 12.07° \$16 E 10829 313 S 911 |
| 11619 | And the Clarity | (TARGET TOP) 11047 8.35° \$ 16 E 11012 345 S 1011 PROPOSED BHL 11817 0.00° \$ 16 E 11780 374 S 109 I |
| 11800 - | 570 - 0.00* PECPOSED REL (WITHIN TARGET (\$ 11789' TVE) | DESIGNED BY DAVE EGEDARI FILE NAME, COLLEGE |
| 11900 - | (7,50° # 12050 MD | DATE: SEPTEMBER 10, 1999 |

SEP 2 7 1999

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131



NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

September 24, 1999

Chesapeake Operating, Inc. P. O. Box 18496 Oklahoma City, Oklahoma 73154-0496 Telefax No. (405) 879-9562

Attention: Lynda F. Townsend

Re: Application dated September 21, 1999 for Chesapeake Operating, Inc. to reenter and recomplete the plugged and abandoned David Fasken Berry Hobbs Well No. 1 (API No. 30-025-29535), to be redesignated the College of the Southwest "17" Well No. 1, by kicking-off and directionally drilling into the Undesignated Northeast Shoe Bar-Strawn Pool (if this is the correct pool that the Hobbs District office places this well) within the S/2 SW/4 Section 17, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico.

Dear Ms. Townsend:

The subject filing was received in this office on September 22, 1999. My review of this application indicates that, if this well is indeed placed in the Northeast Shoe Bar-Strawn Pool, it can be administered at the District level since it involves a well that is being directionally drilled and, as long as the resulting bottomhole location is within the set back requirements from the <u>outer boundary</u> of the applicable spacing and proration unit of the proposed interval to be completed [see Division Rules 111.A(6) and (7) and 111.C(1) and (2), which rules streamlined the directional drilling procedures and the "*Special Rules and Regulation for the Northeast Shoe Bar-Strawn Pool*", as promulgated by Division Order No. R-10848, as amended]. Your application for directional drilling will be forwarded to the Hobbs District office of the Division for processing. Please be aware however that if the Hobbs District office places this well into another pool with a different set of governing rules and procedures, Chesapeake Operating, Inc. will be responsible for obtaining an exception to those rules.

Should you have any questions or comments concerning this matter, please contact me in Santa Fe at (505) 827-8185. Thank you.

Sincerely

EXHIBIT 4

Michael E. Stogner Chief Hearing Officer/Engineer

cc: New Mexico Oil Conservation Division – Hobbs
W. Thomas Kellahin, Legal Counsel for Chesapeake Operating, Inc. - Santa Fe

District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer DD, Artesus, NM 88211-0719 listrict III 1000 Rio Brazos Rd., Aziec, NM \$7410 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. ¹ OGRID Number 147179 Chesapeake Operating, Inc. P. O. Box 18496 ³ API Number Oklahoma City, OK 73154-0496 30 - 0 25-29535 **Property** Code Well No. ³ Property Name 22484 College of the Southwest 17 1 ⁷ Surface Location Fost from the North/South line Township Range Lot Ida East/West Has Feet from the UL or lot no. Section Consty 991 981 So. West LEA 16S 36E 17 Μ ⁸ Proposed Bottom Hole Location If Different From Surface North/South line Lot Ida Fort from the UL or lot so. Section Township Range Fost from the East/West line County 36E 606 1095 West LEA 16S So. 17 М * Proposed Pool 1 14 Proceed Pool 2 N.E. Shoe Bar-Strawn " Work Type Code 12 Well Type Code 13 Cable/Rotary 14 Lease Type Code 15 Ground Level Elevation Ç. 3937' P R R-Horizontal 0 " Multiple ¹⁷ Proposed Depth " Formation " Contractor ¹⁶ Sped Date Patterson #48 Strawn 10,100' No as soon as approved ²¹ Proposed Casing and Cement Program Casing weight/foot Hole Size Casing Size Setting Depth Sacks of Cement **Estimated TOC** 399' 400 1.7" 13-3/8" 48# Surface 8-5/8" 24 & 32# 4300' 1825 Lite 12-1/4" 200 Cl. C Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the productive must and proposed new preductive mae. Describe the blowout prevention program, if say. Use additional shoets if necessary. Chesapeake Operating proposes to Re-Enter & directionally drill in the Strawn formation with Patterson as the drilling contractor. Chesapeake will TIH w/7-7/8" bit & drill out cement plugs. COI will then TIH with DP open ended to ± 10,000', set cement kick off plug from 10,000' to ± 9,000'. TOOH w/DP to 9000', C&C, TOOH to PU kick off BHA. RU csg crew & run 5-1/2" 17# P-110 LTC Date Unicos Contas A L to surface. Well previously known as Berry Hobbs #1. ¹⁰ I hereby certify that the information given above is true and complete to the best OIL CONSERVATION DIVISION of my knowledge and belief. Approved BEIGINAL SIGNED BY CHRIS WILLIAMS Signature: Ferbara Tick: Printed same: Barbara J. Bale Title: Approval De Expiration Date: 24 1999 Regulatory Analyst (405)848-3000 Date: Conditions of Approval : 09/21/99

Attached 0

DISTRICT I

P.O. Box 1980, Hobbs, NM 86241-1980

DISTRICT II P.O. Drawer DD, Artesia, NM 66211-0719

D. RICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV P.O. BOX 2008, SANTA FE, N.M. 67504-2068

991

1096

606

BOTTOM HOLE

LAT. 32°54'58.87" N LONG. 103°22'53.59" W

NME NAD 27

Y-698400.0

X-792080.0

State of New Mexico

Energy, Minerals and Natural Resources Department

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

OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

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12641 12185

Politics @

Certificate No. RONALD J. EIDSON GARY EIDSON MACON MCDONALD

WELL LOCATION AND ACREAGE DEDICATION PLAT

| API | Number | | <u>^</u> | Pool Code | | | Pool Name | · | <u>-</u> | |
|-----------------|------------------|---------------------------------------|-------------|-----------|-----------------|------------------|---------------|---|-----------------|--|
| 30-025-29 | 9535 | | 46 | 649 | N.E. | Shoe Bar-St | rawn | | | |
| Property (| | · · · · · · · · · · · · · · · · · · · | | | Property Nam | | | Well Num | nber | |
| | 34 | | C | OLLEGE | OF THE SO | UTHWEST 17 | | 1 | | |
| OGRID N | | | | | Operator Nam | ie | | Elevatio | Elevation | |
| 147179 |) | | | CHESAF | PEAKE OPER | ATING, INC. | | 3937 | 7 | |
| | | ····· | ······ | | Surface Loca | | , <u> </u> | | | |
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | Count | |
| M | 17 . | 16 S | 36 E | | 981 | SOUTH | 991 | WEST | LEA | |
| | | | Bottom | Hole Loo | cation If Diffe | rent From Sur | face | | | |
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | Count | |
| М | 17 | 16 S | 36 E | | 606 | SOUTH | 1096 | WEST | LE/ | |
| Dedicated Acres | s Joint o | or Infill Co | nsolidation | Code Or | der No. | • • • • | **** | | • | |
| 80 | | | | | | | ~ | | | |
| NO ALLO | WABLE W | VILL BE AS | SSIGNED | TO THIS | COMPLETION U | UNTIL ALL INTER | RESTS HAVE B | EEN CONSOLID | ATED | |
| | | | | | | APPROVED BY | | | | |
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| | | | | | | | Darba | a flale | | |
| <u></u> | | | | | | | Signature | | | |
| | | | | | | | Barbara | a J. Bale | · · · | |
| | 1 | | | | | | | | | |
| | | | | | | | Title | ory Analyst | | |
| | | | | | | | 09/21/9 |)9 | | |
| | | | | | | | Date | | | |
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| LAT. 32°55'0 | | | | | | | supervison, a | nd that the same is | s <i>true</i> a | |
| LONG. 103°22' | | | | | · | | correct to t | to best of my believe | ef. | |
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DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II P.O. Drawer DD, Artesia, NM 66211-0719

TRICT III

DISTRICT IV P.O. BOX 2088, SANTA FE, N.M. 87504-2088 State of New Mexico

Energy, Minerals and Natural Resources Department

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

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number | Pool Code | Pool Nan | Name | |
|---------------|-----------|------------------------------|-------------------|--|
| Property Code | • | HE SOUTHWEST 17 | Well Number 1 | |
| OGRID No. | • | itor Name OPERATING, INC. | Elevation 3937 | |

Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| М | 17 | 16 S | 36 E | | 981 | SOUTH | 991 | WEST | LEA |

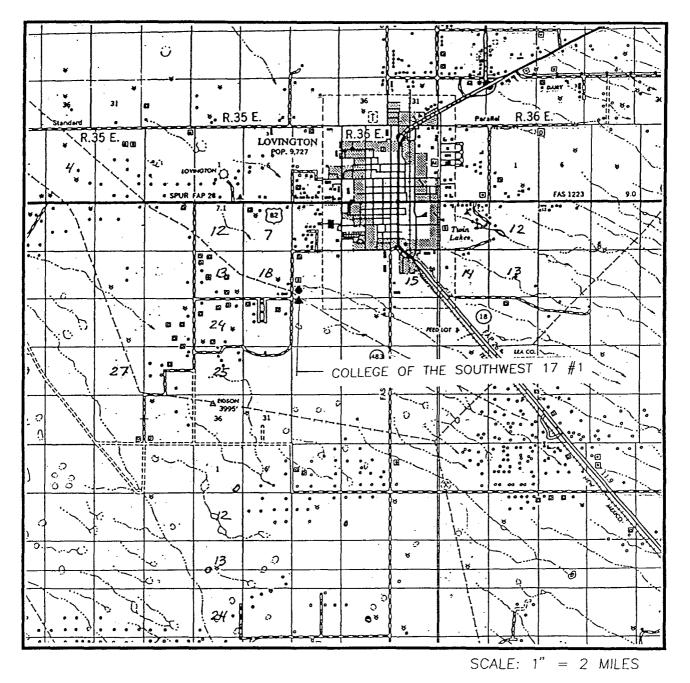
Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|----------------|-----------|-------------|-------------|---------|---------------|------------------|---------------|---|--------|
| M | 17 | 16 S | 36 E | | 606 | SOUTH | 1096 | WEST | LEA |
| Dedicated Acre | s Joint o | r Infill Co | nsolidation | Code Or | der No. | • | . | • · · · · · · · · · · · · · · · · · · · | L |
| | | | | | | | | | |

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

| 1. | and the second | | |
|------------------|--|---------------------------------------|--|
| | | | OPERATOR CERTIFICATION |
| $\left \right $ | | | I hereby certify the the information |
| | | | contained herein is true and complete to the |
| | | | best of my knowledge and belief. |
| | | | |
| | | | |
| | | ' | |
| | | 1 | Signature |
| | | | |
| | | | Printed Name |
| | | | Printed Name |
| $\ $ | | , , , , , , , , , , , , , , , , , , , | |
| | 1 | | Title |
| | | | |
| | | | Date |
| | | | SURVEYOR CERTIFICATION |
| | | | SURVEIOR CERTIFICATION |
| | 1 | | I hereby certify that the well location shown |
| | SURFACE | | on this plat was plotted from field notes of |
| | LAT. 32°55'02.58" N | | actual surveys made by me or under my |
| | LONG. 103°22'54.83 W | | supervison, and that the same is true and correct to the west officing betief. |
| | NME NAD 27 | | JULI DJ. EID |
| | Y698773.5 | | TANICI IST. 23 1000 |
| | X791971.3 | | Date Surveyed |
| | 4 | | Date Surveyed Signature & Seal of |
| | · Fush | | Professional Surveyor) |
| | | | |
| 1. | BOTTOM HOLE | | 1/1/20. () [0 |
| 1 | LAT. 32°54'58.87" N | | 0100 8.24.99 |
| | | | 19970FESSH685 |
| | 5% FSL- & BHL NME NAD 27 | | and the second sec |
| $\left \right $ | 0 1-090400.0 | EXHIBIT 4 | Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641 |
| | X-792080.0 | | MACON McDONALD 12185 |
| 1 1 | | | |

VICINITY MAP



SEC. <u>17</u> TWP. <u>16-S</u> RGE. <u>36-E</u>

SURVEY_____N.M.P.M.

COUNTY_____LEA

DESCRIPTION <u>981</u> FSL & 991' FWL ELEVATION <u>3937</u>

OPERATOR CHESAPEAKE OPERATING, INC. LEASE COLLEGE OF THE SOUTHWEST 17 JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117

LOCATION VERIFICATION MAP

