| CHESAPEAKE | OPERA | TING, INC. |
|------------|-------|------------|
|------------|-------|------------|

| Project Area: | | AUTHORIZATION FOR EXPENDITURE | County, State: | Lea, New Mexic |
|----------------------|----------------------------|---|-----------------------------|------------------------------|
| Well Name: | Langley Greer 3H | | Date: | 10/23/200 |
| Operator: | Chesapeake Operating, Inc. | | Vertical Depth: | 12,40 |
| AFE #: | 145493 | | Vertical Section: | 2,18 |
| Spacing Unit: | N/2 Section 21-22S-36E | | Total Depth: | 14,38 |
| | | | Formation: | Devonia |
| | | | Property #: | 61771 |
| ODE | INTANGIBLE COSTS | WORK DESCRIPTION | DRY HOLE | PRODUCE |
| 33400 | Location: | Roads, Location, Pits | \$75,000.00 | \$75,000.00 |
| 33401 | | Damages | \$15,000.00 | \$15,000.00 |
| 33402 | | Governmental Filings | \$3,000.00 | \$3,000.00 |
| 33404 | | Seismic Costs | \$0,00 \$50,000.00 | \$0.0 \$50,000.00 |
| 33405 33408 | | Reclamation Top Drive | \$0.00 | \$50,000.00 \$0.0 |
| 33408 | Drilling: | Pipeline Construction | \$0.00 | \$0.0 |
| 33409 | | Fuel | \$149,000.00 | \$160,000.0 |
| 233410 | | Drilling Contractor: 54/58 days @ \$15000 per day | \$810,000.00 | \$870,000.0 |
| 233411 | | Directional Services | \$303,000.00 | \$303,000.0 |
| 233413 233414 | | Rig Mobilization/Demobilization Contract Labor | \$125,000.00 \$70,000.00 | \$125,000.00 \$151,000.00 |
| 33415 | | Bits | \$130,000.00 | \$135,000.0 |
| 33416 | | Supplies and Utilities | \$1,000.00 | \$2,000.00 |
| 33426 | | Cement Conductor | \$0.00 | \$0.0 |
| 233417 | | Cement Surface Casing | \$15,000.00 | \$16,000.00 |
| 33420 | | Cement Intermediate Casing | \$35,000.00 | \$32,000.0 |
| 33424 | | Cement Production Casing | \$0.00 \$0.00 | \$0.0 \$0.0 |
| 233425 233452 | | Cement Drilling Liner Cement Production Liner | \$0.00 | \$35,000.0 |
| 233452 | | Mud Logging | \$32,000.00 | \$32,000.00 |
| 233419 | | Drilling Fluids, Mud, Chem. | \$140,000.00 | \$145,000.00 |
| 233421 | | Drill String Inspection | \$5,000.00 | \$5,000.00 |
| 233423 | | Open Hole Logging | \$45,000.00 | \$45,000.00 |
| 233427 | | Fishing | \$0.00 | \$0.00 |
| 233428 233430 | | Downhole Rental Equipment Completion Unit | \$52,000.00 \$0,00 | \$72,000.00 \$250,000.00 |
| 233430 | Completion: | Cased Hole Services/Perforating | \$0.00 | \$80,000.00 |
| 233433 | - | Jetting | \$0.00 | \$0.0 |
| 233434 | | Formation Stimulation | \$0.00 | \$500,000.00 |
| 233437 | General: | Surface Equipment Rental | \$76,000.00 | \$176,000.00 |
| 233438 | General. | Transportation | \$15,000.00 | \$30,000.00 \$20,000.00 |
| 233440 233442 | | Flowback Hauloff Blowout/Emergencies | \$0.00 \$0.00 | \$20,000.00 |
| 233443 | | Supervision | \$22,000.00 | \$24,000.00 |
| 233439 | | Technical Labor | \$19,000.00 | \$21,000.00 |
| 233435 | | Direct Labor | \$19,000.00 | \$21,000.00 |
| 233444 | | Consultants | \$65,000.00 | \$90,000.00 |
| 233446 233447 | | Company Overhead Insurance | \$19,000.00 \$22,000.00 | \$21,000.00 \$22,000.00 |
| 233450 | | Plug to Abandon | \$0.00 | \$22,000.00 |
| 200400 | | 10% Contingency | \$232,000.00 | \$353,000.00 |
| TOTAL INTANC | GIBLES | Total Intangible Costs | \$2,544,000.00 | \$3,879,000.00 |
| CODE | TANGIBLE COSTS | WORK DESCRIPTION | | |
| 230108 | Tubulars: | Conductor: 20" 40' | \$0,00 | \$0.00 |
| 30100 | | Surface Casing: 13-3/8" 400' | \$12,000.00 | \$12,000.0 |
| 30101 | | Intermediate Casing: 9-5/8" 4,600' Production Casing: 7" 12,200' | \$128,000.00 \$0.00 | \$128,000.00 \$319,000.00 |
| 230102 | | Drilling Liner: | \$0.00 | \$319,000.00 |
| 30109 | | Production Liner: 4-1/2" 2,500' | \$0.00 | \$36,000.0 |
| 30104 | | Float Equipment | \$8,000.00 | \$25,000.0 |
| 30105 | | Tubing: 2-7/8" 12,200' | \$0.00 | \$82,000.0 |
| 30106 | Lease Equipment: | Wellhead Equipment | \$20,000.00 | \$35,000.00 |
| 30107 30111 | | Downhole Equipment Artificial Lift-Pumping Unit | \$0.00 \$0.00 | \$50,000.04 \$125,000.00 |
| 30113 | | Production Equipment | \$0.00 | \$40,000.00 |
| 30115 | | Compressor/Compression | \$0.00 | \$0,0 |
| 30116 | | Pipeline Equipment | \$0.00 | \$0.0 |
| 30120 | | Non-Controllable Equipment | \$0.00 | \$0.0 |
| | | 10% Contingency | \$17,000.00 | \$86,000.00 |
| OTAL TANGI | BLES | Total Tangible Costs | \$185,000.00 | \$938,000.00 |
| | | Total Costs | \$2,729,000.00 | \$4,817,000.00 |
| | Prepared by: RLP | Approved by: CMB | | |
| | | | DATE KOL | Jan |
| UPERATUR'S | | Operations/Geology | DATE: 10/2 | Ho./ |
| ODEDATORIO | | Laurent - | | -3/50 |
| OPERATOR'S APPROVAL: | | UAIE: 10/ | | |

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. In executing this AFE, the participant agrees to pay its proportionate share of actual costs incurred, including legal, curative, regulatory, brokerage, and well costs under the terms of the applicable joint operating agreement, regulatory order, or other agreement covering this well, as modified by any Accounting Procedure Exception attached to this AFE. The Operator may contract with an affiliated entity to drill the well at prevailing retes in the area. Participant shall be covered by and billed proportionately for Operator's well control and general liability insurance unless participant provides Operator by the date of spud.

DATE:

Land/Accounting

NON-OPERATOR'S APPROVAL:

BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Case No. <u>14027</u>..... Exhibit No. 4 Submitted by: <u>CHESAPEAKE OPERATING, INC.</u> Hearing Date: January 10, 2008