Exhibit 10.12  
 AMENDMENT NO. 2  
 This AMENDMENT NO. 2 (this “Amendment No. 2”) is made as of May 1, 2004 among GeoLease Partners, L.P., a Delaware limited partnership (the “Partnership”), the undersigned Guarantors (“Guarantors”) and Geokinetics Inc., a Delaware corporation (the “Company”). This Amendment No. 2 is made with reference to that Lease Agreement, dated October 1, 1999 as Amended and Restated as of May 2, 2003, as amended by Amendment No. 1 as of May 2, 2003, among the Company, the Guarantors and the Partnership (collectively, the “Lease Agreement”). All capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Lease Agreement.  
 WHEREAS, the Company, the Guarantors and the Partnership desire to amend certain provisions of the Lease Agreement in order to, among other things, extend the term of the Lease Agreement and restructure the Company’s payment obligations under the Lease Agreement;  
 NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:  
 SECTION 1. AMENDMENTS TO LEASE AGREEMENT  
 1.1 Section 5.2(b) of the Lease Agreement (Covenants – Information) is hereby amended by deleting the word “and” at the end of clause (ii), inserting the word “and” at the end of clause (iii) and adding the following as a new clause (iv):  
 “(iv) receipt by any Obligor of any net proceeds arising out of a Qualified Offering or an Extraordinary Asset Sale, such notice to set forth the amount of the net proceeds.”  
 1.2 Section 6.2 of the Lease Agreement (BASIC RENT) is hereby amended by replacing the first sentence thereof in its entirety with the following:  
 “Lessee hereby agrees to pay the Lessor the following amounts as basic rent (the “Basic Rent”) until the later of the Basic Term Expiration Date or return of all of the Lease Equipment pursuant to Section 9: (A) $31,200 per month for the period beginning May 1, 2004 until October 31, 2004, (B) $21,200 per month for the period beginning November 1, 2004 until April 30, 2005, (C) $11,200 per month for the period beginning May 1, 2005 until April 30, 2007, and (D) $5,600 per month for the period beginning May 1, 2007 until April 30, 2008; provided, however, that at any time after the Accrued Lease Obligation has been reduced to 0, Lessee may, upon reasonable advance notice to Lessor, pay Lessor an amount equal to the present value (calculated using a discount rate of 8% per annum) of all (but not part) of the  
   
 remaining scheduled Basic Rent payments payable through April 30, 2008, and such payment will constitute full and final payment of the Basic Rent payable under this Lease.”  
 1.3 Section 6.2 of the Lease Agreement (BASIC RENT) is hereby amended by adding the following as the second sentence thereof:  
 “The Basic Rent for each month during the Basic Term shall be paid in advance at the beginning of each such month.”  
 1.4 The section cross reference currently contained in the last sentence of Section 6.2 is hereby amended by replacing “Section 6.2” with “Section 6.3.”  
 1.5 Section 6.3 of the Lease Agreement (SUPPLEMENTAL RENT) is hereby amended by replacing the second sentence thereof in its entirety with the following:  
 “Lessee will also pay, as Supplemental Rent, but without duplication, to the extent permitted by applicable law, a late fee calculated at the Late Rate on (x) any part of any installment of Basic Rent not paid when initially due for any period for which the same shall be overdue on the earlier of the Basic Term Expiration Date or upon the occurrence of a Lease Event of Default which shall not have been cured or waived, (y) the Accrued Lease Obligation if not paid when due or upon the occurrence of a Lease Event of Default which shall not have been cured or waived and (z) any other payment of Supplemental Rent not paid when due or ten days after demanded, as the case may be, for the period from such date or ten days after demanded, as the case may be, until the same shall be paid, on demand. Lessee shall notify Lessor to the extent Lessee becomes aware of any Supplemental Rent due and payable under this Lease and will furnish Lessor monthly calculations of any such Supplemental Rent.  
 1.6 Section 6.4 of the Lease Agreement (MANNER OF PAYMENTS) is hereby amended by replacing the first sentence thereof in its entirety with the following:  
 “All Rent (other than Supplemental Rent payable to Persons other than Lessor, which shall be payable to such other Persons in accordance with written instructions furnished to Lessee by such Persons) and the Accrued Lease Obligation shall be paid by Lessee to Lessor by wire transfer of immediately available funds in accordance with wire transfer instructions provided in writing by Lessor to Lessee from time to time.”  
 1.7 Section 6.6 of the Lease Agreement (RESTRUCTURING OF OLD EQUIPMENT LEASE) is hereby deleted and replaced in its entirety with the following:  
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 “Section 6.6 Restructuring of Accrued Lease Balance.  
 (a) As of May 1, 2004, the accrued lease balance owed by Lessee under the Lease Agreement is hereby agreed to be an aggregate principal amount of $4,170,491.17 (the “Accrued Lease Balance”), with interest at 8% per annum accruing on the Accrued Lease Balance (such Accrued Lease Balance to the extent outstanding from time to time, plus accrued but unpaid interest thereon, being the “Accrued Lease Obligation”). Lessee shall pay Lessor the Accrued Lease Obligation according to the schedule of installments attached hereto as Exhibit A, as revised from time to time pursuant to Section 6.6(d) below.  
 (b) Subject to the terms and provisions of this Section 6.6(b), Lessee shall prepay the Accrued Lease Obligation as follows (each such prepayment being, an “Annual Accrued Lease Obligation Prepayment”): (A) an amount equal to thirty-seven and one half percent (37.5%) of Lessee’s Free Cash Flow for the calendar year ending December 31, 2004, (B) an amount equal to 50% of Lessee’s Free Cash Flow for the calendar year ending December 31, 2005, (C) an amount equal to 50% of Lessee’s Free Cash Flow for the calendar year ending December 31, 2006 and (D) an amount equal to 50% of Lessee’s Free Cash Flow for the calendar year ending December 31, 2007. The amount of each Annual Accrued Lease Obligation Prepayment shall be determined and paid as follows:  
 (i) Within thirty (30) days after the end of each calendar year ending during the Basic Term, Lessee shall cause to be prepared and delivered to Lessor an annual prepayment statement (each, an “Estimated Annual Prepayment Statement”) based on the unaudited consolidated financial statements of Lessee prepared in accordance with GAAP and showing a calculation of the amount of Lessee’s Free Cash Flow, if any, during the most recently completed calendar year. Lessee shall deliver to Lessor the Estimated Annual Prepayment Statement, together with a payment equal to 80% of the Annual Accrued Lease Obligation Prepayment shown thereon (each, an “Estimated Annual Prepayment”), such amount being an acceptable estimate of 80% of the Annual Accrued Lease Obligation Prepayment.  
 (ii) Within ninety (90) days after the end of each calendar year ending during the Basic Term, Lessee shall cause to be prepared and delivered to Lessor a final annual prepayment statement (each, a “Final Annual Prepayment Statement”) based on the audited consolidated financial statements of Lessee prepared in accordance with GAAP and showing a calculation of the amount of Lessee’s Free Cash Flow, if any, during the most recently completed calendar year.  
 (iii) The Final Annual Prepayment Statement shall be deemed to be accepted by Lessor and shall be conclusive for the purposes of this Section 6.6(b) upon the fifteenth (15) day after the date on which the Final Annual Prepayment Statement is delivered to the Lessor, unless Lessor shall have delivered to Lessee, prior to such  
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 fifteenth (15) day, a written notice stating each and every item to which the Lessor takes exception as not being in accordance with GAAP or otherwise being incorrect, specifying in reasonable detail the nature and extent of any such exception (it being understood that any amounts not disputed shall be deemed accepted). If a change proposed by Lessor is disputed by Lessee, then Lessee and Lessor shall negotiate in good faith to resolve such dispute for a period of thirty (30) days following the date Lessee notifies Lessor of such dispute. Any dispute involving this Section 6.6(b) which cannot be resolved by agreement within such thirty (30) day period will be referred to an independent third party acceptable to Lessor and Lessee, or if Lessor and Lessee are not able to agree on such third party, the disputed matters shall be referred to an arbitrator chosen in accordance with the rules and procedures of the American Arbitration Association for commercial arbitrations, and the good faith determination of such third party or arbitrator will be final. The party who does not win any such dispute shall be responsible for all of the fees and expenses of the third party or arbitrator.  
 (iv) If the amount of the Annual Accrued Lease Obligation Prepayment as shown on the Final Annual Prepayment Statement as finally determined in accordance with Section 6(b)(iii) exceeds the Estimated Annual Prepayment, Lessee will pay to Lessor the amount of such excess within three (3) business days after the date on which the Final Annual Prepayment Statement is accepted pursuant to Section 6.6(b)(iii). If the amount of the Estimated Annual Prepayment exceeds the amount of the Annual Accrued Lease Obligation Prepayment as shown on the Final Annual Prepayment Statement, Lessor will pay Lessee the amount of such excess by wire transfer of immediately available funds within ten (10) business days after the date on which the Final Annual Prepayment Statement is accepted pursuant to this Section 6.6(b). For purposes of this Section 6.6:  
 (A) The term “Asset Sale” means any direct or indirect sale, issuance, conveyance, transfer, lease (other than operating leases entered into in the ordinary course of business), assignment or other transfer for value by Lessee or any of its Subsidiaries to any Person other than Lessee or a Subsidiary of Lessee of (i) any Equity Interest of any Subsidiary of the Company or (ii) any other property or assets of Lessee or any Subsidiary of Lessee other than in the ordinary course of business.  
 (B) The term “Capitalized Lease Obligation” means, as to any Person, the obligations of such Person under a lease that are required to be classified and accounted for as capital lease obligations under GAAP and, for purposes of this definition, the amount of such obligations at any date shall be the capitalized amount of such obligations that is included on a balance sheet of such Person at such date, determined in accordance with GAAP.  
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 (C) The term “Consolidated EBITDA” means, with respect to Lessee, for any period, the sum (without duplication) of (i) Consolidated Net Income and (ii) to the extent Consolidated Net Income has been reduced thereby, (a) all income Taxes of Lessee and its Subsidiaries paid or accrued in accordance with GAAP for such period, (b) Consolidated Interest Expense and (c) Consolidated Non-cash Charges less any non-cash items increasing Consolidated Net Income for such period, all as determined on a consolidated basis for Lessee and its Subsidiaries in accordance with GAAP.  
 (D) The term “Consolidated Interest Expense” means, with respect to Lessee for any period, the sum of, without duplication: (i) the aggregate of the interest expense of Lessee and its Subsidiaries for such period determined on a consolidated basis in conformity with GAAP, including, without limitation, (a) any amortization of debt discount and amortization or write-off of deferred financing costs, (b) the net costs under Interest Swap Obligations, (c) all capitalized interest and (d) the interest portion of any deferred payment obligation; and (ii) without duplication of any amount in clause (i), the interest component of Capitalized Lease Obligations paid, accrued and/or scheduled to be paid or accrued (in each case, without duplication) by Lessee and its Subsidiaries during such period as determined on a consolidated basis in accordance with GAAP.  
 (E) The term “Consolidated Net Income” means, with respect to Lessee, for any period, the aggregate net income (or loss) of Lessee and its Subsidiaries for such period on a consolidated basis, determined in accordance with GAAP; provided that there shall be excluded therefrom (i) after-tax gains and losses from Asset Sales, (ii) after-tax items classified as extraordinary or non-recurring gains, (iii) the net income of any Person acquired in a “pooling of interests” transaction accrued prior to the date it becomes a Subsidiary of Lessee or is merged or consolidated with Lessee or any Subsidiary of Lessee, (iv) the net income (but not loss) of any Subsidiary of Lessee to the extent that the declaration of dividends or similar distributions by that Subsidiary of that income is restricted by contract, operation of law or otherwise, except to the extent of cash dividends or distributions paid to Lessee or a Subsidiary of Lessee by such Subsidiary, (v) the net income of any Person, other than a Subsidiary of Lessee, except to the extent of cash dividends or distributions paid to Lessee or a Subsidiary of Lessee by such Person, (vi) any restoration to income of any contingency reserve, except to the extent that provision for such reserve was made out of Consolidated Net Income accrued at any time following May 1, 2004, (vii) income or loss attributable to discontinued operations (including, without limitation, operations disposed of during such period whether or not such operations were classified as discontinued) and (viii) in the case of a successor to Lessee by consolidation or  
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 merger or as a transferee of Lessee’s assets, the aggregate net income (or loss) of the successor corporation prior to such consolidation, merger or transfer of assets.  
 (F) The term, “Consolidated Non-cash Charges” means, with respect to Lessee, for any period, the aggregate depreciation, amortization and other non-cash expenses of Lessee and its Subsidiaries reducing Consolidated Net Income of Lessee and its Subsidiaries for such period, determined on a consolidated basis in accordance with GAAP (excluding any such non-cash charge which requires an accrual of or a reserve for cash charges for any future period).  
 (G) The term “Current Assets” means with respect to Lessee, all current assets of Lessee and its Subsidiaries on a consolidated basis as of any date of determination calculated in accordance with GAAP, but excluding cash and cash equivalents.  
 (H) The term “Current Liabilities” means, with respect to Lessee, all liabilities of Lessee and its Subsidiaries on a consolidated basis that should, in accordance with GAAP, be classified as current liabilities, and in any event shall include all indebtedness payable on demand or within one year from any date of determination without any option on the part of the obligor to extend or renew beyond such year, all accruals for federal or other Taxes based on or measured by income and payable within such year, but excluding the current portion of long-term debt.  
 (I) The term “Free Cash Flow” for any applicable period means the amount, if any, by which Lessee’s Consolidated EBITDA exceeds zero (1) minus the following, without duplication: (i) amounts of Lessee’s scheduled payments made in connection with any Permitted Indebtedness, (ii) amounts Lessee paid in satisfaction of the Accrued Lease Obligation, (iii) amounts of Lessee’s interest obligations, (iv) amounts of Lessee’s Tax obligations, (v) amounts paid by Lessee for capital expenditures during the year covered by the Final Annual Prepayment Statement solely to the extent such capital expenditures in the aggregate for an applicable period are less than or equal to 33.33% of Lessee’s Consolidated EBITDA for such period (or such higher percentage as Lessor and Lessee may mutually agree), (vi) payments made in satisfaction of Lessee’s GDC stay bonus obligations existing on the date hereof (totaling $845,763.68 as of March 31, 2004), and (vii) the amount, if any, by which Lessee’s Working Capital increased during the calendar year covered by the Final Annual Prepayment Statement, and (2) plus the amount, if any, by which Lessee’s Working Capital decreased during the calendar year covered by the Final Annual Prepayment Statement; provided however, that notwithstanding the foregoing, in the event that Lessee’s Free Cash Flow for an applicable period is greater than or equal to Lessee’s Consolidated  
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 EBITDA for such period, then the Free Cash Flow shall be automatically reduced to equal the Consolidated EBITDA for such period.  
 (J) The term “Interest Rate Swap Obligation” means the obligations of any Person, pursuant to any arrangement with any other Person, whereby, directly or indirectly, such Person is entitled to receive from time to time periodic payments calculated by applying either a floating or a fixed rate of interest on a stated notional amount in exchange for periodic payments made by such other Person calculated by applying a fixed or a floating rate of interest on the same notional amount and shall include, without limitation, interest rate swaps, caps, floors, collars and similar agreements.  
 (K) The term “Working Capital” means Current Assets minus Current Liabilities.  
 (c) Lessee shall also prepay the Accrued Lease Obligation in an amount (“Accrued Lease Obligation Transaction Prepayment”) equal to 100% of the cash proceeds (after deducting transaction expenses) received by Lessee pursuant to any Qualified Financing (defined below) or any Extraordinary Asset Sale (defined below). For purposes of this Section 6.6:  
 (i) “Qualified Financing” shall mean any public or private offering of Equity Interests or convertible debt securities of Lessee or any of its Subsidiaries in a single transaction or series of related transactions from one or more sources in which Lessee or any of its Subsidiaries receives cash proceeds (after deducting all transaction expenses) pursuant to either (A) a registration statement filed under the Securities Act of 1933 as amended or (B) an offering in reliance on an exemption from registration under the Securities Act of 1933 as amended; provided, however, that the term “Qualified Financing” shall not include a transaction (i) relating to any capital stock options, warrants or other rights to acquire any such Equity Interests issued or to be issued to directors, officers, employees, consultants or other service providers of Lessee or any of its Subsidiaries, (ii) relating to any employee benefit plan or interests therein, (iii) issuance of Equity Interests or convertible debt securities in connection with a bona fide business acquisition of or by Lessee or any of its Subsidiaries, whether by merger, consolidation, sale of assets, sale or exchange of stock or otherwise approved by Lessee’s board of directors or (iv) any other non-cash issuances of Lessee’s securities.  
 (ii) “Extraordinary Asset Sale” shall mean any sale, transfer or other disposition of the assets or properties of Lessee or any of its Subsidiaries in which Lessee or any of its Subsidiaries receives cash proceeds (after deducting all transaction expenses); provided that any transaction occurring in the Ordinary Course of Business shall not constitute an Extraordinary Asset Sale. An action shall be deemed to be taken in the “Ordinary Course of Business” only if (A) such action is consistent with the past  
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 practices of Lessee or its Subsidiary and is taken in the ordinary course of the normal day to day operations of Lessee or such Subsidiary, and (B) such action is not required to be authorized by the board of directors of Lessee or such Subsidiary.  
 (d) All Annual Accrued Lease Obligation Prepayments and Transaction Accrued Lease Obligation Prepayments made by Lessee under this Section 6.6 shall be applied first to accrued and unpaid Supplemental Rent, if any, and then to the last installments of the Accrued Lease Obligation. Upon each such prepayment, Lessee shall promptly revise and attach the Schedule of Installments attached hereto as Exhibit A stating the then current balance of the Accrued Lease Obligation reflecting the application of such prepayment; provided, however, that except for the remaining balance, if any, of the Accrued Lease Obligation after giving effect to the application of such prepayment, nothing in the Schedule of Installments shall change as a result of any prepayments including, without limitation, the interest rate and the monthly payment amounts (including the $500,000 scheduled payments) stated on the Schedule of Installments attached hereto.”  
 1.8 Subsection (b) of Section 16 of the Lease Agreement (LEASE EVENTS OF DEFAULT) is hereby amended by replacing the subsection in its entirety with the following:  
 “(b) Lessee shall fail to (i) make any payment of any Supplemental Rent (excluding Supplemental Rent covered by clause (a) preceding) to be paid by Lessee pursuant to this Lease after the same shall have become due and such failure shall continue unremedied for ten days after receipt by Lessee of the original demand therefor from Lessor, or (ii) make any payment of the Accrued Lease Obligation when due as provided in Section 6.6; or”  
 1.9 Section 17(e) is hereby amended by deleting the phrase “Prior Accrued Balance” and inserting the phrase “Accrued Lease Balance” in the ninth line thereof.  
 1.10 Section 24.1 of the Lease Agreement (Election to Retain or Return Equipment at End of Basic Term) hereby amended by replacing the section in its entirety with the following:  
 “Section 24.1 Election to Retain or Return Equipment at End of Basic Term. At or prior to the end of the Basic Term, Lessee shall give Lessor irrevocable written notice of its decision to return or retain all of the Units at the end of the Basic Term. If Lessee fails to timely give the notice required by this Section 24.1, Lessee shall be deemed to have irrevocably elected to return all of the Units at the end of the Basic Term. Any notice given by Lessee pursuant to this Section 24.1 shall be irrevocable.”  
 1.11 Section 25.15 of the Lease Agreement (PREPAYMENT) is hereby amended by replacing the section in its entirety with the following:  
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 “Section 25.15 Prepayment. Lessee may prepay, in whole or in part, the Accrued Lease Obligation without any penalty or premium. Lessee shall provide reasonable advance notice to Lessor of any such prepayment.”  
 1.12 Appendix A to the Lease Agreement is hereby amended by deleting the definition of “Prior Accrued Balance” in its entirety.  
 1.13 Appendix A to the Lease Agreement (DEFINITIONS) is hereby amended by replacing the following definitions in their entirety as follows:  
 “BACK RENT” shall mean (x) 5,317,803, representing 28% of shares of Common Stock, (y) the Residual Amount and (z) an amount equal to $62,000 (inclusive of any applicable taxes) for each calendar month (or portion thereof) from April 1, 2002 through the Effective Date in satisfaction of the Basic Rent accrued under the Old Equipment Lease and owed by Lessee through the Effective Date.  
 “ ‘BASIC TERM EXPIRATION DATE’ shall mean the earliest of (i) April 30, 2008, (ii) the date on which the Obligations are paid in full, (iii) a Subsidiary Sale by Lessee or (iv) the declaration of such pursuant to Section 17.  
 “ ‘OBLIGATIONS’ means Lessee’s obligations to pay Basic Rent, the Accrued Lease Obligation and Supplemental Rent, if any.  
 “ ‘SUPPLEMENTAL RENT’ shall mean all amounts, liabilities and obligations (other than Basic Rent and the Accrued Lease Obligation) which Lessee assumes or agrees to pay under this Lease to or on behalf of any of the other parties thereto.”  
 “ ‘FAIR MARKET RENTAL VALUE’ or ‘FAIR MARKET SALES VALUE’ with respect to any Unit of Lease Equipment shall mean the cash rent or cash price, respectively, obtainable for such Unit in an arm’s length lease or sale, respectively, between an informed and willing lessee or purchaser, respectively, under no compulsion to lease or purchase, as the case may be, and an informed and willing lessor or seller, under no compulsion to lease or sell, as the case may be, as the same shall be determined by a nationally or industry-wide (with respect to the oil and gas exploration industry) recognized independent appraisal firm in the practice of regularly appraising equipment similar to the Lease Equipment selected by Lessor and reasonably acceptable to Lessor and Lessee; provided, however, that notwithstanding anything in this Lease to the contrary, the aggregate Fair Market Sales Value with respect to Units purchased by Lessee pursuant to Section 24.2 of this Lease following the discounted present value payment of  
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 Basic Rent as provided in the proviso at the end of the first sentence of Section 6.2 of this Lease shall be deemed to be $1.00 in the aggregate.  
 1.14 Appendix A to the Lease Agreement (DEFINITIONS) is hereby amended by adding the following definitions in their entirety as follows:  
 “ ‘ACCRUED LEASE BALANCE’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘ACCRUED LEASE OBLIGATION’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘ANNUAL ACCRUED LEASE OBLIGATION PREPAYMENT’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘ASSET SALE’ shall have the meaning set forth in Section 6.6. of this Lease Agreement.  
 “ ‘CAPITALIZED LEASE OBLIGATIONS’ shall have the meaning set forth in Section 6.6. of this Lease Agreement.  
 “ ‘CONSOLIDATED EBITDA’ shall have the meaning set forth in Section 6.6. of this Lease Agreement.  
 “ ‘CONSOLIDATED INTEREST EXPENSE’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘CONSOLIDATED NET INCOME’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘CONSOLIDATED NON-CASH CHARGES’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘CURRENT ASSETS’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘CURRENT LIABILITIES’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘ESTIMATED ANNUAL PREPAYMENT’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
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 “ ‘ESTIMATED ANNUAL PREPAYMENT STATEMENT’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘EXTRAORDINARY ASSET SALE’ shall have the meaning set forth in Section 6.6 of this Lease.  
 “ ‘FINAL ANNUAL PREPAYMENT STATEMENT’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘FREE CASH FLOW’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘INTEREST SWAP OBLIGATIONS’ shall have the meaning set forth in Section 6.6. of this Lease Agreement.  
 “ ‘ORDINARY COURSE OF BUSINESS” shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘QUALIFIED FINANCING’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘TRANSACTION ACCRUED LEASE OBLIGATION PREPAYMENT’ shall have the meaning set forth in Section 6.6 of this Lease Agreement.  
 “ ‘WORKING CAPITAL’ shall have the meaning set forth in this Lease Agreement.”  
 SECTION 2. RATIFICATION OF THE LEASE AGREEMENT  
 To induce the Partnership to enter into this Amendment No. 2, the Company represents and warrants that, after giving effect to this Amendment No. 2, no violation of the terms of the Lease Agreement exists and all representations and warranties contained in the Lease Agreement are true, correct and complete in all material respects on and as of the date hereof except to the extent such representations and warranties specifically relate to an earlier date in which case they were true, correct and complete in all material respects on and as of such earlier date.  
 SECTION 3. COUNTERPARTS; EFFECTIVENESS  
 This Amendment No. 2 may be executed in any number of counterparts, and all such counterparts taken together shall be deemed to constitute one and the same instrument. Signature pages may be detached from counterpart documents and reassembled to form duplicate  
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 executed originals. This Amendment No. 2 shall become effective as of the date hereof upon the execution of the counterparts hereof by the Company and the Partnership.  
 SECTION 4. GOVERNING LAW  
 THIS AMENDMENT NO. 2 SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF DELAWARE WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW.  
 [Remainder of page intentionally left blank]  
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 SIGNATURES  
 IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 2 to the Lease Agreement to be duly executed, all as of the date first written above.  
 Company:  
 GEOKINETICS INC.  
 By  
/s/ Xxxxxx X. Xxxxxxxxx  
 Name:  
Xxxxxx X. Xxxxxxxxx  
 Title:  
Vice President  
 13  
  
 Partnership:  
 GEOLEASE PARTNERS, L.P.  
 By:  
GEOLEASE GP, INC.,  
 its general partner  
 By  
/s/ Xxxxxxx Xxxxxx  
 Name:  
Xxxxxxx Xxxxxx  
 Title:  
President  
 14  
  
 Guarantors:  
 GEOKINETICS PRODUCTION CO., INC.  
 By  
/s/ Xxxxxx X. Xxxxxxxxx  
 Name:  
Xxxxxx X. Xxxxxxxxx  
 Title:  
Treasurer  
 GEOPHYSICAL DEVELOPMENT CORPORATION  
 By  
/s/ Xxxxxx X. Xxxxxxxxx  
 Name:  
Xxxxxx X. Xxxxxxxxx  
 Title:  
Treasurer  
 QUANTUM GEOPHYSICAL, INC.  
 By  
/s/ Xxxxxx X. Xxxxxxxxx  
 Name:  
Xxxxxx X. Xxxxxxxxx  
 Title:  
Treasurer  
 15  
  
 EXHIBIT A  
 Schedule of Installments for Accrued Lease Obligation  
 16  
  
 Geolease Restructuring Payment Proposal  
Compound Period Monthly  
 Nominal Annual Rate  
 8.000  
%  
Effective Annual Rate  
 8.300  
%  
Periodic Rate  
 0.6667  
%  
Daily Rate  
 0.02192  
%  
 Event  
 Start Date  
 Amount  
 Number  
 Period  
 End Date  
 1  
 Loan  
 01-May-04  
 4,170,491.15  
 1  
 2  
 Payment  
 01-May-04  
 500,000.00  
 1  
 3  
 Payment  
 01-Jun-04  
 72,350.03  
 11  
 Monthly  
 04/01/2005  
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 Payment  
 01-May-05  
 500,000.00  
 1  
 5  
 Payment  
 01-Jun-05  
 72,350.03  
 11  
 Monthly  
 04/01/2006  
 6  
 Payment  
 01-May-06  
 500,000.00  
 1  
 7  
 Payment  
 01-Jun-06  
 72,350.03  
 23  
 Monthly  
 04/01/2008  
 AMORTIZATION SCHEDULE - Normal Amortization  
 #  
 Date  
 Payment  
 Interest  
 Principal  
 Balance  
 Loan  
 01-May-04  
 4,170,491.15  
 1  
 01-May-04  
 500,000.00  
 0.00  
 500,000.00  
 3,670,491.15  
 2  
 01-Jun-04  
 72,350.03  
 24,469.94  
 47,880.09  
 3,622,611.06  
 3  
 01-Jul-04  
 72,350.03  
 24,150.74  
 48,199.29  
 3,574,411.77  
 4  
 01-Aug-04  
 72,350.03  
 23,829.41  
 48,520.62  
 3,525,891.15  
 5  
 01-Sep-04  
 72,350.03  
 23,505.94  
 48,844.09  
 3,477,047.06  
 6  
 01-Oct-04  
 72,350.03  
 23,180.31  
 49,169.72  
 3,427,877.34  
 7  
 01-Nov-04  
 72,350.03  
 22,852.52  
 49,497.51  
 3,378,379.83  
 8  
 01-Dec-04  
 72,350.03  
 22,522.53  
 49,827.50  
 3,328,552.33  
 2004 Totals  
 1,006,450.21  
 164,511.39  
 841,938.82  
 9  
 01-Jan-05  
 72,350.03  
 22,190.35  
 50,159.68  
 3,278,392.65  
 10  
 01-Feb-05  
 72,350.03  
 21,855.95  
 50,494.08  
 3,227,898.57  
 11  
 01-Mar-05  
 72,350.03  
 21,519.32  
 50,830.71  
 3,177,067.86  
 12  
 01-Apr-05  
 72,350.03  
 21,180.45  
 51,169.58  
 3,125,898.28  
 13  
 01-May-05  
 500,000.00  
 20,839.32  
 479,160.68  
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 14  
 01-Jun-05  
 72,350.03  
 17,644.92  
 54,705.11  
 2,592,032.49  
 15  
 01-Jul-05  
 72,350.03  
 17,280.22  
 55,069.81  
 2,536,962.68  
 16  
 01-Aug-05  
 72,350.03  
 16,913.08  
 55,436.95  
 2,481,525.73  
 17  
 01-Sep-05  
 72,350.03  
 16,543.50  
 55,806.53  
 2,425,719.20  
 18  
 01-Oct-05  
 72,350.03  
 16,171.46  
 56,178.57  
 2,369,540.63  
 17  
  
 19  
 01-Nov-05  
 72,350.03  
 15,796.94  
 56,553.09  
 2,312,987.54  
 20  
 01-Dec-05  
 72,350.03  
 15,419.92  
 56,930.11  
 2,256,057.43  
 2005 Totals  
 1,295,850.33  
 223,355.43  
 1,072,494.90  
 21  
 01-Jan-06  
 72,350.03  
 15,040.38  
 57,309.65  
 2,198,747.78  
 22  
 01-Feb-06  
 72,350.03  
 14,658.32  
 57,691.71  
 2,141,056.07  
 23  
 01-Mar-06  
 72,350.03  
 14,273.71  
 58,076.32  
 2,082,979.75  
 24  
 01-Apr-06  
 72,350.03  
 13,886.53  
 58,463.50  
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 25  
 01-May-06  
 500,000.00  
 13,496.78  
 486,503.22  
 1,538,013.03  
 26  
 01-Jun-06  
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 62,096.61  
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 27  
 01-Jul-06  
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 9,839.44  
 62,510.59  
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 28  
 01-Aug-06  
 72,350.03  
 9,422.71  
 62,927.32  
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 29  
 01-Sep-06  
 72,350.03  
 9,003.19  
 63,346.84  
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 30  
 01-Oct-06  
 72,350.03  
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 63,769.15  
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 31  
 01-Nov-06  
 72,350.03  
 8,155.75  
 64,194.28  
 1,159,168.24  
 32  
 01-Dec-06  
 72,350.03  
 7,727.79  
 64,622.24  
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 2006 Totals  
 1,295,850.33  
 134,338.90  
 1,161,511.43  
 33  
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 72,350.03  
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 65,053.06  
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 34  
 01-Feb-07  
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 6,863.29  
 65,486.74  
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 35  
 01-Mar-07  
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 36  
 01-Apr-07  
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 66,362.81  
 831,720.07  
 37  
 01-May-07  
 72,350.03  
 5,544.80  
 66,805.23  
 764,914.84  
 38  
 01-Jun-07  
 72,350.03  
 5,099.43  
 67,250.60  
 697,664.24  
 39  
 01-Jul-07  
 72,350.03  
 4,651.09  
 67,698.94  
 629,965.30  
 40  
 01-Aug-07  
 72,350.03  
 4,199.77  
 68,150.26  
 561,815.04  
 41  
 01-Sep-07  
 72,350.03  
 3,745.43  
 68,604.60  
 493,210.44  
 42  
 01-Oct-07  
 72,350.03  
 3,288.07  
 69,061.96  
 424,148.48  
 43  
 01-Nov-07  
 72,350.03  
 2,827.66  
 69,522.37  
 354,626.11  
 44  
 01-Dec-07  
 72,350.03  
 2,364.17  
 69,985.86  
 284,640.25  
 2007 Totals  
 868,200.36  
 58,294.61  
 809,905.75  
 45  
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 72,350.03  
 1,897.60  
 70,452.43  
 214,187.82  
 46  
 01-Feb-08  
 72,350.03  
 1,427.92  
 70,922.11  
 143,265.71  
 47  
 01-Mar-08  
 72,350.03  
 955.10  
 71,394.93  
 71,870.78  
 48  
 01-Apr-08  
 72,350.03  
 479.25  
 71,870.78  
 0.00  
 2008 Totals  
 289,400.12  
 4,759.87  
 284,640.25  
 Grand Totals  
 4,755,751.35  
 585,260.20  
 4,170,491.15  
 Last interest amount increased by 0.11 due to rounding.  
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