Garfield County

AGENDA SHEET

BOARD MEETING DATE:	FEBRUARY 6, 2012
AGENDA CATEGORY:	REGULAR SESSION
DATE OF AGENDA SHEET:	JANUARY 30, 2012
PREPARED BY:	JAMAICA WATTS
PRESENTED BY:	KIRBY WYNN AND JAMAICA WATTS

SUBJECT:

Request for approval of and authorization for the Chairman to sign the contract with GeoTrans, Inc.

SUMMARY:

GeoTrans, Inc was originally selected through Request for Proposals RFP-GC-OG-09-R-28 to conduct phase III of the Hydrogeologic study of the Mamm Creek area. The 2012 contract is a continuation of that study which is scheduled for completion in 2012.

NECESSARY BOARD ACTION:

Discuss and either approve or disapprove a contract to **GeoTrans, Inc.** in an amount not to exceed **$94,839.00** for the continuation of Phase III of the Hydrogeologic Study of Mamm Creek area, and authorize the chair to sign a contract if awarded.

STAFF RECOMMENDATION:

It is the recommendation of staff that the Board approve a contract to **GeoTrans, Inc.** in an amount not to exceed **$94,839.00** for the continuation of Phase III Hydrogeologic Study of the Mamm Creek area.

PURCHASE OF SERVICES AGREEMENT

CONTINUATION OF PHASE III HYDROGEOLOGICAL STUDY

This PURCHASE OF SERVICES AGREEMENT ("Agreement") is made this **30th** day of **January, 2012**, by and between: the **BOARD OF COUNTY COMMISSIONERS OF GARFIELD COUNTY, COLORADO**, (hereinafter "BOCC"), whose address or principal place of business is **108 8th Street, Glenwood Springs, Colorado 81601**; and **GeoTrans, Inc. (a Virginia Corporation)**, whose legal address or principal place of business is **363 Centennial Parkway, Suite 210, Louisville, CO 80027**, (hereinafter "Contractor").

d/b/a Tetra Tech for EO

WHEREAS, the Contractor has been selected to provide services, in accordance with the applicable provisions of the Garfield County Procurement Manual; and

WHEREAS, the BOCC wishes to employ the services of Contractor as an independent contractor and Contractor wishes to provide services to the BOCC; and

WHEREAS, the BOCC has authority to acquire the services described in this Agreement under the provisions of §30-11-101, *et seq.*, C.R.S., as amended.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth hereinafter, the BOCC and the Contractor agree as follows:

1. **Scope of Services.** The Contractor shall perform in a satisfactory and proper manner, as determined by the BOCC, the services identified in the "Scope of Services", which is attached hereto, incorporated herein by this reference, and made a part hereof as "Attachment **A**". The responsibilities of the BOCC in relation to the Contractor's services, other than compensation of the Contractor, are detailed in Attachment **A**.

2. **Time of Performance.** Services of the Contractor shall commence on the **6TH** day of **February**, **2012**, and shall be completed by the **31st** day of **December**, **2012**, no matter the date of execution of this Agreement. This Agreement will terminate on the date set forth above unless renewed in writing at least thirty (30) days prior to the date of completion.

3. **Compensation/Appropriation.** The amount to be expended pursuant to this Agreement shall not exceed **Ninety Four Thousand, Eight Hundred Thirty Nine Dollars ($94,839.00)**. The BOCC has lawfully appropriated an amount that is equal to or in excess of the compensation set forth herein, which amount shall constitute the contract amount. Such amount may be altered by mutual written consent of parties.

This appropriation is limited solely to the work to be accomplished during fiscal year ending **December 31, 2012**. The BOCC is not obligated to make any future apportionment or allocation to this Agreement. Any work performed in excess of amounts appropriated shall be solely the risk of the Contractor. Notwithstanding any other terms of this Agreement, it is expressly understood and agreed that: (1) Any BOCC financial obligation, whether direct or contingent, for all or any part of the work under this Agreement, shall extend only to monies duly and lawfully appropriated and budgeted by the BOCC and irrevocably pledged pursuant to the purposes of this Agreement; (2) The BOCC does not by this Agreement irrevocably pledge present cash reserves for payments in this or future fiscal years; (3) This Agreement is not intended to create a multiple/fiscal year direct or indirect financial obligation of the BOCC; (4) The obligation of the BOCC for expenditures, if any, arising during subsequent fiscal years in which this Agreement could be extended and be in effect, shall only extend to utilization of monies appropriated and budgeted and encumbered for the purpose of this Agreement in the fiscal year in which obligations arise; and (5) No change order may be issued requiring compensation for work which causes the aggregate payable amount under this Agreement to exceed the amounts appropriated, budgeted and encumbered for the payment of this Agreement in the fiscal year in which such obligations arise, unless the Contractor receives written assurance by the BOCC that lawful appropriations to cover the cost of the additional work have been made. Any work completed for this Agreement shall be secured from harm until future monies are appropriated so that additional work may commence. In the event any future appropriation is made by the BOCC for the purposes of this Agreement, the BOCC will inform the Contractor in writing of any amounts appropriated for work proposed herein and will tender a renewed or amended Agreement covering the work to be compensated by such appropriation.

4. Method of Payment. The BOCC shall compensate the Contractor at the rates provided in Attachment **A**, which is attached hereto, incorporated herein by this reference, and made a part hereof. The Contractor shall submit to the BOCC's Representative, as identified below, a monthly billing or request for payment that will be paid in accordance with established procedures of the Garfield County Finance Department. Each billing or request for payment shall specify the total payment due the Contractor for the specific work that is the subject of the request for payment. Additionally, each billing or request for payment shall specifically state the job identification, date, time, hours, service performed, expenses, and total compensation requested. The total of all billings or requests for payment during the term of this Agreement shall not exceed the amount stated in Paragraph 3 above.

5. **Records, Reports, and Information.** At such times and in such forms as the BOCC may require, the Contractor shall furnish statements, records, reports, data and information pertaining to matters covered by this Agreement. The Contractor shall maintain its records in accordance with any requirements prescribed by the BOCC. Except as otherwise authorized by the BOCC, The Contractor shall maintain such records for a period of seven (7) years after receipt of final payment under this Agreement.

6. **Audits and Inspections.** At any time during normal business hours and as often as the BOCC may deem necessary, the Contractor shall make its records with respect to matters covered by this Agreement available for examination. The Contractor shall permit the BOCC to audit, examine, and make excerpts from such records and audit all contracts, invoices, materials, payrolls, records of personnel, conditions of employment, and other data relating to this Agreement. The BOCC may call for a certified, independent audit to be performed, at the Contractor's expense, by a mutually agreed upon auditor.

7. **Independent Contractor.**

A. The Contractor shall perform its duties hereunder as an independent contractor and not as an employee of the BOCC. The Contractor affirms that it has or will secure at its own expense all personnel and materials required to perform the services detailed in Attachment **A**. Such personnel shall not be employees of, nor have any contractual relationship with, the BOCC.

B. Services required hereunder shall be performed by the Contractor or under its supervision, and all personnel engaged in the work shall be fully qualified and properly licensed or certified, as required by all applicable local, state and federal laws or regulations to perform such services. Neither the Contractor nor its personnel, if any, is entitled to Worker's Compensation benefits or any other benefit of employment with Garfield County, Colorado. Further, the Contractor is obligated to pay all federal and state income tax on any compensation it is paid by the BOCC pursuant to this Agreement.

C. None of the services to be performed by the Contractor under this Agreement shall be subcontracted or otherwise delegated without the prior written consent of the BOCC. The subcontracted work shall be specified in a written agreement between the Contractor and its subcontractor(s), which agreement(s) shall be subject to each provision of this Agreement.

8. **No Assignment.** The Contractor and subcontractor(s) hereto shall not assign or transfer any rights in this Agreement without the prior written consent of the BOCC.

9. Illegal Aliens – Public Contract for Services.

A. The Contractor (entity or sole proprietor) shall execute the certification attached hereto as Attachment **B**, in conformance with the provisions of §8-17.5-102(1) and §24-76.5-101, C.R.S., as amended.

B. The Contractor shall not knowingly employ or contract with an illegal alien to perform work under this public contract for services; or enter into a contract with a subcontractor that fails to certify to the Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien who will perform work under this public contract for services.

C. The Contractor shall confirm the employment eligibility of all employees who are newly hired for employment to perform work under this public contract for services through participation in either the E-Verify Program or the Department Program.

D. The Contractor shall not use either the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this public contract for services is being performed.

E. If the Contractor obtains actual knowledge that a subcontractor performing work under this public contract for services knowingly employs or contracts with an illegal alien, the Contractor shall:

(1) Notify the subcontractor and the BOCC within three days that the Contractor has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and

(2) Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to subparagraph (1), above, the subcontractor does not stop employing or contracting with the illegal alien; except that the Contractor shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.

F. The Contractor shall comply with any reasonable request by the Department of Labor and Employment made in the course of an investigation that the Department is undertaking pursuant to its authority.

G. Notwithstanding any other provision of this public contract for services, if the Contractor violates any provision of this paragraph, the BOCC may terminate this public contract for services and the Contractor shall be liable for all actual and consequential damages resulting from that termination.

H. Except where exempted by federal law and except as provided in §24-76.5-103(3), C.R.S., as amended, the Contractor receiving Garfield County funds under this public contract for services must confirm that any individual natural person eighteen (18) years of age or older is lawfully present in the United States pursuant to §24-76.5-103(4), C.R.S., as amended, if such individual applies for public benefits provided under this public contract for services. If the Contractor has verified that the

County has accomplished such confirmation prior to the effective date of this public contract for services, the Contractor is relieved of responsibility under this paragraph.

10. Compliance with Laws. The Contractor shall comply with all applicable federal, state and local laws, ordinances, resolutions, codes and regulations in providing the services detailed in Attachment **A**.

11. Indemnification. The Contractor agrees to hold harmless, indemnify and defend the BOCC, and its officers, employees and agents, acting officially or otherwise, from any and all claims, demands, damages, and actions of any kind brought by anyone, including attorney's fees, which may arise out of or result from the negligent or willful misconduct of Contractor or its subcontractor(s) in the performance of services as set forth in this Agreement and/or the breach of any condition(s) of this Agreement.

To the extent permitted by law, the BOCC agrees to indemnify and hold harmless the Contractor, and its officers, employees and agents, from any and all claims, demands, damages, and actions of any kind brought by anyone, including attorneys' fees, which may arise out of a result from the negligent misconduct of BOCC, or its officers, employees and agents.

Nothing herein shall be interpreted as a waiver of governmental immunity to which the BOCC may otherwise be entitled under the provisions of §24-10-101, *et seq.*, C.R.S., as amended.

12. Insurance. The following provisions shall apply to Contractor providing services pursuant to this Agreement. In order to commence work and receive compensation pursuant to this Agreement, the terms of this paragraph must be satisfied prior to the commencement of work. The Contractor shall procure and maintain, until all of its obligations under this Agreement have been discharged, including any warranty periods, all insurance required under this paragraph.

The insurance requirements stated herein are the minimum limits for this Agreement and in no way limit the indemnity covenants contained in this Agreement. The BOCC in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Agreement by the Contractor, its agents, directors, employees, officers, representatives, or subcontractors; and, the Contractor is free to purchase additional insurance as it may determine necessary.

Minimum Types and Limits of Insurance: The Contractor shall provide coverage with limits of liability not less than those stated below. An excess liability policy or umbrella liability policy may be used to meet the minimum liability requirements provided that the coverage is written on a "following form" basis.

Commercial General Liability- Occurrence Form

The policy shall be endorsed to include the following "Additional Insured" language: "Public Entity, its subsidiary, parent, associated and/or affiliated entities, successors, or assigns, its elected officials, trustees, employees, agents, and volunteers shall be named as "Additional Insureds" with respect to liability arising out of the activities performed by, or on behalf of the Contractor ."

Minimum Limits:

General Aggregate	$2,000,000
Products/ Completed Operations Aggregate	$2,000,000
Each Occurrence Limit	$1,000,000
Personal/Advertising Injury	$1,000,000

Automobile Liability (***This subparagraph can be waived if the Contractor does not use any type of motor vehicle to perform any service under this Agreement/***)

Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of this Contract.

Minimum Limits:

Bodily Injury/Property Damage (Each Accident)	$1,000,000

Worker's Compensation and Employers' Liability

Minimum Limits:

Coverage A (Workers' Compensation)	Statutory
Coverage B (Employers Liability)	$100,000
	$100,000
	$500,000

Professional Liability (Errors and Omissions Liability)

(This subparagraph applies only if this Agreement is for a licensed professional service.)

The policy shall cover professional misconduct or lack of ordinary skill for professional services required by this Agreement.

In the event that the professional liability insurance required by this Agreement is written on a claims-made basis, the Contractor warrants that any retroactive date under the policy shall precede the effective date of this Agreement; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of two (2) years beginning at the time work under this Contract is completed.

Minimum Limits:

Per Loss	$1,000,000
Aggregate	$2,000,000

Additional Insurance Requirements: The policies shall include, or be endorsed to include, the following provisions:

On insurance policies where the Public Entity is named as an "Additional Insured", the Public Entity shall be an Additional Insured to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by the Agreement.

The Contractor's insurance coverage shall be primary insurance and non-contributory with respect to all other available sources.

With respect to **Commercial General Liability** and **Automobile Liability** coverage set forth above, the insurance policy must include contractual liability coverage.

All insurance required by this paragraph shall be issued by companies authorized to do business in the state of Colorado and written on forms satisfactory to, approved by, and filed with the Colorado Division of Insurance within the Colorado Department of Regulatory Agencies.

Notice of Cancellation: Each insurance policy required by the insurance provisions of this Contract shall provide the required coverage and shall not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to the BOCC. If cancellation is for the nonpayment of (a) premium(s), then ten (10) days prior notice may be given to the BOCC. Written notice shall be sent directly to the Office of Contract Administration, at the following address: **Garfield County Administration Building, Office of Contract Administration, 108 East 8th Street, Room 403, Glenwood Springs, Colorado 81601**.

Verification of Coverage: The Contractor shall furnish the BOCC with Certificates of Insurance (either an ACCRD form, or an equivalent approved by the BOCC).

The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.

All certificates and endorsements are to be received and approved by the BOCC before work commences. Each insurance policy required by this Agreement must be in effect at or prior to commencement of work under this Agreement and remain in effect for the duration of the project and for two (2) years after completion of the project. Failure to maintain the insurance policies as required by this Agreement, or to provide evidence of renewal, is a material breach of this Agreement.

All certificates and any required endorsement shall be sent directly to the Office of Contract Administration at the following address: **Garfield County Administration Building, Office of Contract Administration, 108 East 8th Street, Room 403, Glenwood Springs, Colorado 81601**. The BOCC reserves the right to require complete, certified copies of all insurance policies required by the Contract any time.

Approval: Any modification or variation from the insurance requirements in this Agreement shall only be made by the Office of Risk Management after consultation with the Garfield County Attorney's office. Modification shall not require a formal contract amendment, but may be made by administrative action.

13. Document Ownership - Works Made for Hire. All of the deliverable items, if any, prepared for the BOCC under this Agreement shall belong exclusively to the BOCC and shall be deemed to be "works made for hire" under the copyright laws of the United States. To the extent any of the deliverable items may not, by operation of law or otherwise, be works made for hire, the Contractor hereby assigns to the BOCC the ownership of the copyright in the deliverable items, and the BOCC shall have the right to obtain and hold in its own name, copyrights, registrations, and similar protections. The Contractor agrees to give the BOCC or its designee all assistance reasonably required to perfect such rights. To the extent that any pre-existing materials are contained in the deliverable items, the Contractor grants to the BOCC an irrevocable, non-exclusive, worldwide, royalty-free license to use, execute, publish, reproduce, display, perform, distribute copies of, and prepare derivative works based upon such pre-existing materials and derivative works thereof and to authorize others to do any, some, or all of the foregoing.

14. Termination for Cause. If the Contractor or the BOCC fails to fulfill its obligations under this Agreement in a timely and proper manner or violates any of the provisions of this Agreement, then the non-defaulting party shall thereupon have the right to terminate this Agreement for cause by giving written notice to the defaulting party of such termination and specifying the effective date of termination. The defaulting party, however, shall not be relieved of liability to the non-defaulting party for damages sustained by virtue of any breach of this Agreement. In the event of default by the Contractor, the BOCC may withhold payments due under paragraph 4, above, for the purpose of set-off until such time as the exact amount of damages due the BOCC from the Contractor is determined.

15. Termination for Convenience. Either party may terminate this Agreement without cause at any time. The BOCC may terminate this Agreement without cause at any time by giving at least thirty (30) days written notice to the Contractor. If this Agreement is terminated for the convenience of BOCC, the Contractor shall be paid for all services provided to and accepted by the BOCC prior to the date of termination.

16. Conflict of Interest. During the term of this Agreement, the Contractor shall not perform similar services for persons, firms, or entities, including governmental entities, which have the potential to create a conflict of interest, unless the potential conflict is disclosed to and approved by the BOCC.

17. Modifications. This Agreement may not be modified, amended or otherwise altered, unless mutually agreed upon in a writing executed by the BOCC and the Contractor.

18. Governing Law. The laws of the state of Colorado shall govern the validity, performance and enforcement of this Agreement. Should either the BOCC or the Contractor institute legal action for enforcement of any obligation contained herein, it is agreed that venue shall be in Garfield County, Colorado.

19. Severability. Should any provisions of this Agreement be determined by a court of competent jurisdiction to be unconstitutional or otherwise null and void, the remaining provisions of the Agreement shall remain in full force and effect.

20. Notices. Notices to be provided under this Agreement shall be given in writing either by hand delivery or by certified return receipt requested United States mail, to the following:

BOCC's Representative:

Kirby Wynn
Garfield County
Oil and Gas Liaison
0375 County Road 352
Rifle, CO 81650

Contractor:

David Bohmann, P.E.
GeoTrans, Inc.
Senior Engineer
363 Centennial Parkway, Ste 210
Louisville, CO 80027

21. Headings. Titles and paragraph divisions are inserted in this Agreement for ease of reference and do not define, limit, or prescribe the scope or intent of the provisions of this Agreement or any part thereof.

22. Authority. Each person signing this Agreement represents and warrants that he/she is fully authorized to enter into and execute this Agreement and to bind the party represented to the provisions of this Agreement.

23. Counterparts and Facsimile Signatures. This Agreement may be executed in counterparts, each of which shall be deemed an original. Facsimile signatures of, or on behalf of, the BOCC or the Contractor on this Agreement and any modification hereto shall be effective for all purposes.

24. Force Majeure. Neither party shall be liable for its failure to perform hereunder due to contingencies beyond its reasonable control, including but not limited to strikes, riots, war, and acts of God.

25. Integration of Understanding. This Agreement represents the entire Agreement between the parties and supersedes all prior negotiations and representations, whether written or oral. Nothing herein shall be deemed to give anyone not a party to this Agreement any right of action against either the BOCC or the Contractor.

IN WITNESS WHEREOF, the BOCC and the Contractor have set their hands and seals.

ATTEST:

By: _____
Clerk to the Board
Date: _____

BOARD OF COUNTY COMMISSIONERS
GARFIELD COUNTY, COLORADO

By: _____
John Martin, Chair
Date: _____

ATTEST:

SEAL (if any)

CONTRACTOR:

GEOTRANS, INC. d/b/a TetraTech GEO

By: James W. Mercer
Name: James W. Mercer
Title: Corporate Secretary or Equivalent
Date: 1/31/12
FEIN: 54-1120716

By: [signature]
Name: Candice L. Parker
Title: Director of Business Operations
Date: 1/31/12

STATE OF Virginia)
) ss.
COUNTY OF Loudoun)

The foregoing instrument was acknowledged before me this 31st day of January, 2012, by James W. Mercer (name), as Corporate Secretary (legal title) of Geotrans, Inc. d/b/a Tetra Tech GEO (legal name of business) a Corporation (legal type of entity).

My commission expires on: _____.

ANGELA M. MAZZA
Notary Public
Commonwealth of Virginia
302305
My Commission Expires Aug 31, 2013

Angela M. Mazza
Notary Public

Tetra Tech GEO
Street Address of Notary Public
21335 Signal Hill Plaza, Suite 100
Sterling, Virginia 20164
City, State & Zip Code

CONTRACT\FORM DOCS\Purchase of Services Agreement Form (updated 2.25.10) (WORD)

GeoTrans, Inc.

363 Centennial Parkway
Suite 210
Louisville, Colorado 80027

(303) 665-4390; FAX (303) 665-4391

January 30, 2012

Mr. Kirby Wynn
Oil and Gas Liaison
Oil and Gas Department of Garfield County
0375 County Road 352
Building 2060
Rifle, Colorado 81650

Subject: **Scope of Work and Cost Estimate for 2012 Work for the Phase III Hydrogeologic Study of the Mamm Creek Area**

Dear Mr. Kirby:

For review and consideration, GeoTrans, Inc. d/b/a Tetra Tech GEO (GeoTrans) has prepared the attached scope of work and cost estimate for 2012 work items for the Phase III Hydrogeologic Study of the Mamm Creek Area. The costs are valid for 30 days.

We appreciate the opportunity to provide Garfield County with our continued services. Should you require additional information, please feel free to contact me at (303) 665-4390.

Sincerely,

David Bohmann, P.E.
Senior Engineer

Attachments

2017-002976-0001568

Attachment 1: 2012 Scope of Work for the Phase III Hydrogeologic Characterization of the Mamm Creek Area

The Mamm Creek Study Area is located south of the cities of Rifle and Silt in Garfield County, Colorado. The Study Area is approximately 110 square miles in size, and comprises the majority of the Mamm Creek gas field in the southeastern portion of the Piceance Basin. This scope of work and cost estimate presents our understanding of the 2012 work items associated with the Phase III Hydrogeologic Characterization of the Mamm Creek Area. A cost estimate summary is provided on the attached Table 1.

Task 01 – Water-Levels Measurements

Six rounds of water-level measurements will be collected from the 3 monitoring wells nests (2 wells per nest) and the Currie private well. The water-level measurements will be collected on approximately a monthly basis beginning at the end of January or beginning of February 2012. Two of the rounds of water-level measurements will be conducted concurrently with groundwater sampling events. The water-level data will be used to evaluate the direction of groundwater flow in three dimensions in the vicinity of the monitoring wells.

Task 02 – Monitoring Well Development

Additional development will be performed on the monitoring wells. The work will first include removing the dedicated bladder pumps and tubing. The wells will then be developed by alternately surging with a surge block and bailing using a driller's work-over rig. The work is expected to take one week. It is assumed that the water will not need to be contained, and can be discharged onto the ground surface and special handling of the water is not required. Field parameters will be collected during development activities. Following development, the dedicated bladder pumps and tubing will be re-installed.

Task 03 - Groundwater Sampling

Two sample collection events will be performed at the nested monitoring wells and the Currie private well. The first event will take place after sufficient time has elapsed since the monitoring well development to allow water levels to recover. This is expected to be approximately one month after well development. The second sampling event will take place approximately 5 to 6 months after the initial sampling event to examine potential effects from seasonal variations. All groundwater level measurements and groundwater samples will be collected using industry-accepted protocols, in accordance with the County-approved QAPP.

Metals samples will be field filtered to allow analysis of dissolved parameters. It is assumed that one duplicate sample will be collected during each sampling event for hydrocarbons, general chemistry, dissolved metals, and anions/cations. The duplicate sample will not be analyzed for isotopic composition for cost savings purposes.

Low flow sampling techniques will be utilized, and as a result of the sampling, it is estimated that 5 to 10 gallons of purge water will be generated from the well during each sampling. This

2017-002976-0001569

quantity of water is not anticipated to have a negative impact on private property (erosion, mud, etc.), and therefore GeoTrans has anticipated that the purge water generated during sampling will be discharged directly to the ground.

The following analyses will be performed on the water samples:

Field Parameters	**General Chemistry**
Dissolved Oxygen	Alkalinity
pH	Hydrogen Sulfide
Specific conductance	Nitrogen, Ammonia
Temperature	TDS
Oxidation Reduction Potential	
	Dissolved Metals
Hydrocarbons/Organics	Barium
BTEX	Calcium
TPVH (GRO)	Potassium
	Magnesium
Dissolved Gases	Manganese
Nitrogen	Sodium
Oxygen	Strontium
Carbon Dioxide	Iron, Ferric
Argon	Iron, Ferrous
Hydrogen	Iron, Total
Helium	
Methane	**Anions/Cations**
Ethane	Bromide
Ethylene	Chloride
Propane	Fluoride
Iso-butane	Iodide
N-butane	Sulfate
Iso-pentane	Nitrogen, Nitrite
N-pentane	Nitrogen, Nitrate
Hexanes+	
Isotopic Analysis	
δ13C δD of Methane	

Task 04 – Incorporate Additional Data/Prepare Report

The data generated during the 2012 sampling and water-level measurement events will be incorporated into the existing data. The Phase I and II water quality data will also be incorporated into the existing data. This data will be geographically constrained to the areas around the monitoring wells. The water-level data will be used to evaluate the direction of

2017-002976-0001570

groundwater flow in three dimensions and potential seasonal effects. The additional water quality data will be used to build on interpretations of existing data. Tables, figures, and piper diagrams will be generated, and spatial mapping of some water quality constituents may be performed if appropriate. The field methods, data, and analysis will be combined into a draft report that will be submitted to Garfield County for review and comment. The draft report will be provided with the text in MS Word format and the attachments, including laboratory packages, field logs, and borehole logs, will be in PDF format. Comments by Garfield County on the draft report will be addressed, and a final report will be issued as a hardcopy and in electronic format.

Price and Assumptions

A cost estimate summary based on the scope of work above is provided on the attached Table 1. The costs associated with this scope of work assume the following:

- GeoTrans will minimize impacts from well development activities to surrounding land, but costs included in this scope of work do not assume that site restoration will be required.
- Purge water generated during well development and sampling will be disposed on the ground.

2017-002976-0001571

Table

Phase III Hydrogeologic Study of the Mamm Creek Area
Cost Estimate for 2012 Work Items

TASK NUMBER	TASK NAME	LABOR COSTS	SUB COSTS	ODCs	ESTIMATED BUDGET
01	*Water-Levels Measurements*	$3,247	$0	$2,105	$5,352
02	*Monitoring Well Development*	$5,880	$17,331	$2,397	$25,608
03	*Groundwater Sampling*	$19,756	$17,604	$11,466	$48,826
04	*Incorporate Additional Data/Prepare Report*	$14,998	$0	$55	$15,053
TOTAL		$43,881	$34,935	$16,023	**$94,839**

2017-002976-0001573

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE

I, Scott Gessler, as the Secretary of State of the State of Colorado, hereby certify that, according to the records of this office,

GEOTRANS, INC.

is an entity formed or registered under the law of **Virginia** has complied with all applicable requirements of this office, and is in good standing with this office. This entity has been assigned entity identification number 19881097331.

This certificate reflects facts established or disclosed by documents delivered to this office on paper through 01/26/2012 that have been posted, and by documents delivered to this office electronically through 01/30/2012 @ 09:08:58.

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, authenticated, issued, delivered and communicated this official certificate at Denver, Colorado on 01/30/2012 @ 09:08:58 pursuant to and in accordance with applicable law. This certificate is assigned Confirmation Number 8152462.

Secretary of State of the State of Colorado

**********End of Certificate**********

Notice: A certificate issued electronically from the Colorado Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Confirmation Page of the Secretary of State's Web site, http://www.sos.state.co.us/biz/CertificateSearchCriteria.do entering the certificate's confirmation number displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate. For more information, visit our Web site, http://www.sos.state.co.us/ click Business Center and select "Frequently Asked Questions."

CERT_GS_F Revised 08/20/2008

New World Systems Garfield County

myFavorites | Financial Management | Maintenance (2) (204)

Organization Inquiry > G/L Account Inquiry - 100.14.001.4320.478 - Prof. Serv.-Hydro Phase II & III > G/L Transaction Inquiry

G/L Transaction Detail

General

Journal Number	2012-00000148
Journal Type	Budget Adjustment
Source	MD
Reference	
Sub Ledger	General Ledger
Originating Department	Finance
G/L Account	100.14.001.4320.478 (General Fund, Oil and Gas, General Operations - Prof. Serv.-Hydro Phase II & III)
G/L Date	01/16/2012
Transaction Description	Supplement #1 to the 2012 approved budget.
Transaction Amount	$120,000.00
Due To/Due From	
Transfer Organization	

Source

Associated Journals

Export History

Documents

Remote Documents

Approvals