MAYOR & COUNCIL COMMUNICATION

August 8, 2006

Subject: Amendment #1 to Silverbell Subdivision Development Agreement (Ward 1)

Issue – The Community Services Department (CSD), in conjunction Pathway Holdings, LLC (Pathway), has completed a plat and are ready to begin construction of a 148 lot mixed income subdivision on Silverbell Road at Goret. The approved Development Agreement with Pathway requires revision to reflect the number of lots and location in the final plat and the current schedule.

Recommendation – It is recommended that the Mayor and Council approve the attached Resolution adopting the revised Development Agreement between the City and Pathway Holdings, LLC.

Background –The project, known as Silverbell Subdivision, will provide housing for elderly and disabled residents as well as new market rate housing and new affordable homeownership opportunities, and is in support of the Martin Luther King HOPE VI project. After a Request for Qualifications in September 2004, Pathway was selected as the developer to partner with CSD on Silverbell Subdivision. Mayor and Council approved a purchase agreement in January 2005. Mayor and Council approved a Development Agreement with Pathway in December of 2005. A final plat for Silverbell Subdivision was recorded on June 30, 2006.

Current Considerations - Over the past year Pathway worked closely with CSD to prepare a subdivision plat incorporating the new urbanism principles of pedestrian friendly streets and alley parking for cars. CSD will construct 28 new homes for the elderly and disabled designed to blend with the market rate architecture, and construct two affordable rental units. CSD will subsidize 8 additional Pathway units with HOME down payment assistance funds for affordable homeownership.

The revised development agreement is in accordance with the previously approved development agreement and makes no substantial changes to the requirements of either the City or Pathway. The revisions to the agreement include the following:

1) Revised performance dates and penalties based on the actual recording date of the final plat.
2) Defines the City's share of infrastructure costs based on the proportion of City lots in Phase I and II.
3) Revised payment phasing based on the total number of lots in each Phase.
4) Replaced requirement for a swimming pool/recreation building with pedestrian pathways and passive recreation.

Financial Considerations – Through the Development Agreement, Pathway will purchase approximately 18.57 Acres of City property to construct Phase I of the subdivision, based on the final plat, at a cost of $979,750. This excludes 1.57 Acres of Phase I that represents the 28 platted lots for public housing. Upon completion of a planned sewer connection that will serve

the subdivision to the north, Pathway will purchase approximately 11.1 Acres of City property to construct Phase II of the subdivision, subject to a final plat, at a cost of $962,750. This excludes 0.1 Acres of Phase II that represents the 2 platted lots for affordable rental housing. The total cost of $1,942,500 remains unchanged. Pathway is committing to build 110 market rate single family homes and 8 affordable single-family homes at their expense. Time frame for completion is defined in the Development Agreement.

Legal Considerations – The City Attorney has prepared the attached revised Development Agreement.

Respectfully submitted,

Liz R. Miller
Assistant City Manager

LRM:Emily Nottingham/jc/oa
Community Services
AUG8-06-429
Attachment: A. Resolution

ADOPTED BY THE
MAYOR AND COUNCIL

_____

RESOLUTION NO. 20427

RELATING TO REAL ESTATE; AUTHORIZING AND APPROVING THE EXECUTION OF AN AMENDED DEVELOPMENT AGREEMENT BETWEEN THE CITY OF TUCSON AND PATHWAY HOLDINGS, L.L.C. FOR THE CONSTRUCTION OF THE SILVERBELL RESIDENTIAL SUBDIVISION LOCATED AT SILVERBELL ROAD AND GORET ROAD; AND DECLARING AN EMERGENCY.

BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF TUCSON, ARIZONA, AS FOLLOWS:

SECTION 1. The amended Development Agreement between the City of Tucson and Pathway Holdings, L.L.C for the construction of the Silverbell Residential Subdivision located at Silverbell Road and Goret Road, attached to this Resolution as Exhibit 1, is approved.

SECTION 2. The Mayor shall execute, and the City Clerk shall attest to, the amended Development Agreement.

SECTION 3. The various City officers and employees shall perform all acts necessary or desirable to give effect to this resolution.

SECTION 4. The City Manager may execute such other documents as may be required to give effect to this Resolution and the amended Development Agreement.

SECTION 5. WHEREAS, it is necessary for the preservation of the peace, health and safety of the City of Tucson that this resolution become immediately effective, an emergency is declared to exist, and this resolution shall be effective upon its passage and adoption.

PASSED, ADOPTED, AND APPROVED by the Mayor and Council of the City of Tucson, Arizona, _____.

_____
MAYOR

ATTEST:

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

REVIEWED BY:

_____
CITY MANAGER

DD:tc
07/21/2006 3:58 PM

DEVELOPMENT AND PURCHASE AGREEMENT

FOR

SILVERBELL SUBDIVISION

THIS DEVELOPMENT AND SALE AGREEMENT ("Agreement") is entered into by and among the CITY OF TUCSON ("City"), and PATHWAY HOLDINGS, L.L.C. ("Developer"). City and Developer are referred collectively to in this Agreement as "the Party" or "the Parties".

RECITALS

A. City is a municipal corporation.

B. Developer is an Arizona limited liability corporation.

C. Developer intends to design an integrated mixed-income subdivision of approximately 148 homes that will include 28 public housing units for the elderly and disabled and 2 rental units for low income individuals constructed by the City and 118 homes constructed by the Developer (the "Project").

D. City and Developer entered into an Offer to Purchase accepted on January 11, 2005, as authorized by City Ordinance No. 10105 (the "Offer"), attached hereto as **Exhibit "A".** The Parties now intend that this Agreement shall supersede the Offer and all of the terms and conditions provided therein.

E. The City owns that certain real property, currently vacant land, generally located east of Silverbell Road at the intersection of Silverbell and Goret, legally described in **Exhibit "B"** attached hereto (the "Property").

F. Upon satisfaction of certain terms and conditions in this Agreement, the City intends to authorize conveyance to Developer portions of the Property to be determined by a final plat (the "Subdivision") in two phases. The property subject to each phase is legally described in **Exhibit "C".** The City will retain 30 lots, as described in **Exhibit "D"**, to construct 28 units of public housing for the elderly and disabled and 2 rental units for low income individuals (the "City Lots").

G. In exchange for conveyance of the Subdivision from City, Developer agrees to develop the Property pursuant to this Agreement.

H. This Agreement is intended to be a development agreement between the City and Developer for purposes of determining the Parties' respective rights and obligations in connection with the purchase and sale and development of the Property.

I. The City intends to delegate the authority to manage this Agreement, including the right to grant extensions for contingencies and deadlines therein, to the City Manager or Director of the Community Services Department or their designee.

J. This Agreement is intended to be a development agreement between City and Developer and a real estate sales agreement transferring fee simple title to a portion of the Property from the City to the Developer;

K. The City expressly finds and determines that the consideration and commitments herein outlined from Developer and City in this Agreement are justified based on the other

consideration provided under this Agreement, including without limitation the economic development benefits to the community resulting from this Agreement.

L. The Parties expressly find and determine that the terms of this Agreement are justified based on the other consideration provided under this Agreement, including, without limitation, the rights and liabilities conferred and imposed on the Parties and the economic development benefits to the community resulting from this Agreement.

M. This Agreement is subject to the provisions of A.R.S. § 38-511.

N. A Final Plat for Phase I of the Project was approved by the Mayor and Council and subsequently recorded with the Pima County Recorder on June 30, 2006.

AGREEMENT

NOW, THEREFORE, BASED ON THE FOREGOING RECITALS, WHICH ARE INCORPORATED HERE AS THE INTENTION OF THE PARTIES IN ENTERING INTO THIS AGREEMENT, the Parties agree as follows:

1. Purchase and Sale.

1.1 *City Property.*

1.1.1. Sale Price. City shall sell the Subdivision to Developer as two separate parcels corresponding to Phase I & Phase II of the Tentative Plat of the Subdivision. The total price for both parcels will be $1,942,500.00 with the price of Phase I being $979,750.00 and the price of Phase II being $962,750.00upon the Closings (as defined herein). The City shall retain ownership of the City Lots as described in **Exhibit "D"**. The Developer's deposit of One Hundred Thousand dollars ($100,000.00) shall be credited to the purchase price of Phase I.

1.1.2. Closing. The Closing of the Phase I parcel shall occur no later than August 30, 2006. The Closing of the Phase II parcel shall occur within 30 days of the construction and acceptance by Pima County of a sewer line of sufficient size and design to accept the flow from the Phase II lots and terminating at a manhole at the northern boundary of the Phase II parcel.

1.1.2.1. Developer shall pursue and be financially responsible for the platting of the Subdivision.

1.1.2.2. Developer shall perform any and all environmental, geotechnical, and other testing of the Property as Developer deems appropriate to satisfy its due diligence. The City shall share any information and reports it has in its possession related to soil and title conditions with Developer.

1.1.3. Extensions.

1.1.3.1.Developer may, upon the payment required under **Section 1.1.3.2.** for each extension requested, request an extension of each Closing and the time periods defined in **Section 2.6** upon written notice to the City to be provided at least ten (10) days before the date on which each such time period is scheduled to occur. The extension of Closing and Start of Construction may not be longer than 60 days and the extension of Infrastructure Completion may not be longer than 45 days. Only one extension of each Closing and Start of Construction and only two extensions of Infrastructure Completion may be granted. City shall approve such request if the extension is required due to delays outside of Developer's control and the payment required by Section 1.1.3.2. shall not be required.

1.1.3.2. If the reason for the extension is for a cause or causes within the control of the Developer, then within five (5) business days after the City approves the extension as provided in this **Section 1.1.3.1**, the Developer shall provide to City a $35,000 nonrefundable fee or irrevocable letter of credit payable on demand to the City in lieu of cash. If such payment is not made as required, the City's approval shall be deemed withdrawn. The determination of whether the reason for the extension is within or outside the control of the Developer shall be made by the Director of the Department of Community Services. The Director's decision is subject to appeal to arbitration.

1.1.4. Acceptance of Property. By taking possession from City of any or all of the Property, Developer accepts such Property in the condition existing as of the Closing. City makes no representation or warranty with respect to the condition of such Property and shall not be liable for any latent or patent defect in such Property. Developer has fully investigated the condition of such Property, including without limitation the use or occupation that may be made of such Property, City's title to such Property, and any subsurface or soil or fill conditions or any latent defects of such Property. City shall not be liable for any claims relating to the condition of such Property. City shall not be required under this Agreement to remediate any environmental or other condition of such Property.

2. Developer Development Rights and Obligations.

2.1 *Conditions of Conveyance and Development.* Developer shall initiate and proceed with development in accordance with this Agreement. Except as may be otherwise set out in this Agreement, Developer shall, at its expense, comply with all existing and future federal, state, county and municipal laws, ordinances, rules, and regulations in connection with the use, operation, maintenance, and construction of all improvements on the Property.

2.2 *Development.* Developer shall construct the Project as follows:

2.2.1. Infrastructure. Streets, sidewalks, water, and sewer connections to each lot underground power, telephone, and cable to each lot, and any other improvements defined by the tentative plat to create a functional subdivision.

2.2.2. Residential. A maximum of 118 single family dwelling units on the Property, exclusive of the 30 units to be built by the City.

2.2.3. Common Facilities. Pedestrian walkways, pocket parks, and other recreation areas as depicted in the tentative subdivision plat shall be constructed by the Developer. Developer shall be financially responsible for the construction of such common facilities.

2.2.4. Affordable homes. Eight three-bedroom homes of modest design to be marketed by the City to qualifying low-income families. Developer shall cooperate with the City in controlling costs for such homes. Two of the homes will be handicap accessible and six will be handicap adaptable. The City, through the HUD HOME program, shall provide mortgage downpayment assistance to the eight homebuyers. The homes shall be sold for not more than the U.S. Department of Housing and Urban Development (HUD) Section 203b Maximum Sale Price, as periodically published by the HUD. The Maximum Sales Price for Pima County as of March 16, 2006, was $239,850.00.

2.2.5. *Design.* The design of the Subdivision shall incorporate the Project Goals as described in the Request for Proposals, attached as **Exhibit "F"**.

2.2.6. *Homeowners Association.* The Developer shall form a homeowners association that shall include all lots in the subdivision as participating members subject to dues and assessments, including the City Lots.

2.2.7. *Right of Entry.* Developer, City and City's construction shall have the right to enter the Property at any time during the term of this Agreement for purposes of effecting design and construction of the Property.

2.3 *Standards for Construction of Property.*

2.3.1. Developer shall use and employ only licensed, bonded, and qualified contractors.

2.3.2. All improvements shall be constructed in a good and workmanlike manner, and constructed and maintained in compliance with all applicable laws, rules, ordinances, and regulations.

2.3.3. All improvements constructed in City rights of way shall be built to standards set by the City. Plans for any such improvements shall be approved by the City prior to any construction.

2.4 *Governmental Approvals.* Developer shall obtain all necessary government approvals, permits, or licenses that are necessary to Developer's construction, operation, use, or improvement of the Property. If any certificate, permit, license, or approval issued to Developer is cancelled, expires, lapses, or is otherwise withdrawn by any such governmental authority, Developer shall make every effort to obtain replacement permits for the governmental approval to the satisfaction of City. Failure to do so shall constitute default under this Agreement.

2.5 *Mechanics' and Materialmen's Liens.* Developer shall promptly and diligently take whatever action is necessary to remove any mechanic's or materialmen's liens.

2.6 *Schedule.* "Start of Construction" shall be defined as the date on which work permitted by City begins on the Infrastructure. Start of Construction shall occur not later than September 15, 2006. Infrastructure Construction shall be completed pursuant to the terms and conditions of this Agreement, with reasonable delay for force majeure events permitted, but in no event later than 9 months from the date of Closing.

2.7 *Signs.* Prior to the Closing, Developer may place signs on the Property in conformance with applicable government regulations, with City's prior written consent to design, size, and location, said consent to be provided or denied by City within no more than ten (10) business days of request by Developer.

2.8 *Graffiti.* Developer shall be solely responsible for graffiti abatement on the Property after the Closing.

2.9 *Taxes, Fees, and Other Developer Payables.*

2.9.1. After the Closing of the Property, Developer shall bear, pay, and discharge all of the following (which are collectively referred to in this Agreement as "Impositions") as they apply to the Property at least fifteen (15) days before the last day when payment may be made without penalty or interest and before the nonpayment constitutes a default under the provisions of any mortgage on the Property after the Closing:

2.9.1.1. All taxes, assessments, water rents, rates and charges, sewer rents, license and permit, fees and all other governmental impositions and charges of every kind and nature whatsoever, general and special, ordinary and extraordinary, foreseen and unforeseen, of any kind or nature whatsoever, and each and every installment thereof, which shall prior to and during the term of this Agreement be charged, laid, levied, assessed, imposed, become due and payable or arise.

2.9.1.2. All taxes charged, laid, levied, assessed, or imposed in lieu of or in addition to the foregoing under or by virtue of all present or future laws, ordinances, requirements, orders, directions, rules, or regulations of the federal, state, county, and municipal governments and of all other governmental authorities whatsoever, and in connection with the use, occupancy, or possession of or grow due or payable out of or for the Property or any part it, or any building, appurtenances, or equipment on or in the Property or any part of it or the sidewalks or streets in front of or adjoining the Property, or any rents or additional rents payable under this Agreement.

2.9.2. To the extent permitted by law and by any mortgage, Developer shall have the right to apply for the conversion of any special assessment for local improvements to cause the same to be payable in installments, and upon such conversion Developer shall be obligated to pay and discharge punctually only such of said installments (with interest and charges thereon) as shall become due and payable during the term of this Agreement.

2.9.3. Developer shall pay, as they become due and payable, all fees, charges, taxes, and expenses required for licenses and/or permits required for, or occasioned by Developer's use of the Property.

2.10 *Utilities.* Except as otherwise provided in this Agreement, Developer shall be responsible for obtaining any utility service agreement needed for the Property and shall pay when due all charges for utilities to the Property.

2.11 *Closing Costs.* Upon the Closing, the City and the Developer shall each pay one-half of all closing costs.

2.12 *Insurance.* Prior to entry upon the Project Site pursuant to a right of entry and continuing until the termination of this Agreement, Developer shall (or shall cause its contractors and consultants to) maintain and keep in force insurance, naming City as an additional insured, if applicable, of the following types, said insurance policy to be provided to the City prior to the execution of this Agreement:

2.12.1. "All Risk" insurance against loss or damage by fire, flood, and such other risks and matters including, without limitation, business interruption, rental loss, public

liability, and boiler damage and liability. The amount of such insurance will not be less than 100% of the full replacement value of the Development, including the cost of debris removal, without deduction for depreciation.

2.12.2. General liability insurance with a combined single limit of not less than $5,000,000 for injury to or death of any one person, for injury to or death of any number of persons in one occurrence, and for damage to property insuring against any and all liability of City and Developer including, without limitation, coverage for contractual liability and broad form property damage.

2.12.3. Workers' Compensation insurance in accordance with the laws of Arizona.

2.13 *Indemnity.* No Party to this Agreement shall at any time be liable for injury or damage occurring to any person or property from any cause whatsoever arising out of any other Party's construction, maintenance, repair, use, management, operation, condition or dismantling of the facility on the Property, except in the event of negligence or intentional acts of another Party.

3. City Development Rights and Obligations.

3.1 *Taxes, Fees, and Other Developer Payables.* Prior to closing, City shall pay all Impositions as they apply to the Property or, in the alternative at the City's discretion, pro rate the amount of such Impositions at time of closing. After closing, Developer shall be responsible for the Impositions as provided in **Section 2.9.1** of this Agreement.

3.2 *No City Future Expenditures.* The City shall not be required to make any repairs or improvements to the Property following conveyance of the Property to Developer, in connection with this Agreement, the terms and conditions of all attached and referenced Agreements notwithstanding.

3.3 *Plan Review.* City agrees to third-party Building Code and Land Use Code review of all plans for the Property, but such review shall be at Developer's sole expense. Further, City agrees to designate a project manager who shall be responsible for coordinating and expediting to the greatest extent practicable all required reviews.

3.4 *Environmental and Archeology Review.* The City shall prepare and deliver to Developer any required archeology clearance for the Project. The City shall also provide to Developer any information the City has in its possession concerning any environmental tests or surveys done on the Property.

3.5 *Pro-rata share of Infrastructure.* The City shall reimburse the Developer for a pro-rata share of infrastructure improvement costs of or in the right of way. The City's pro-rata share shall be 20.5% of the total infrastructure costs for Phase I and 1.9% of the total infrastructure cost for Phase II. The cost estimate for any improvement sought by Developer for reimbursement pursuant to this Paragraph must be approved by the City prior to construction and shall be consistent with the approved tentative plat and City law. Infrastructure reimbursement amounts shall be based on actual costs.

3.6 *Deed.* At the Closing of each phase, the City shall convey title to the property subject to each phase to the Developer by special warranty deed (the "Deed").

3.7 *Right of Entry.* City shall grant Developer a "Right of Entry" in the form routinely used by City to allow Developer right to enter the Property at any time during the term of this Agreement and prior to the Closing for purposes of effecting investigation, testing, due diligence, design, and planning for construction of the Property in the standard form used by City for such purposes

4. Default Provisions.

4.1 Developer Default. Developer shall be in default under this Agreement if it fails to perform any covenant or condition of this Agreement and does not cure such failure within thirty (30) days after written notice from City or such allowable longer period of time in the event Developer is, in the reasonable opinion of City, diligently attempting to cure the non-monetary default. In the event of default by the Developer prior to Closing, the City shall have the right to eject Developer from the Property and obtain another entity to complete the Project or other development in the City's discretion.

4.2 *City Default.* City shall be in default under this Agreement if it:

4.2.1. fails to make payment upon receipt of valid requests when due and does not cure such nonpayment within ten days after written notice from Developer specifying the default complained of; or

4.2.2. fails to perform any other covenant or condition of this Agreement and does not cure such failure within thirty (30) days after written notice from Developer or such allowable longer period of time in the event City is, in the reasonable opinion of Developer, diligently attempting to cure the non-monetary default.

5. General Provisions.

5.1 *Damage or Destruction.* If the Property or any portion of it is destroyed or damaged through no fault or negligence of Developer in a way that materially hinders its effective use, Developer shall make necessary repairs within a reasonable period of time, unless mutually deemed infeasible. The City shall have no obligation to repair any damage to any portion of the Property.

5.2 *Zoning Compliance.* The City intends that the Property be developed substantially as proposed by this Agreement. Construction upon the Property shall be in conformance with the requirements of the City Land Use Code ("LUC"). This provision shall not preclude or limit Developer's right to seek text amendments or variances as may be permissible under and in accordance with the LUC and Arizona law.

5.3 *Notices.* All notices, requests, demands, and other communications under this Agreement shall be in writing and shall be deemed given if personally delivered or mailed, certified mail, return receipt requested; to the following addresses:

If to City:

City of Tucson, Department of Community Services
Attention: John Siry
PO Box 27210
Tucson, AZ 85701

With copies to:

City of Tucson, City Clerk's Office
P. O. Box 27210
Tucson, AZ 85726-7210

City of Tucson, Real Estate Division
P. O. Box 27210
Tucson, AZ 85726-7210

City Attorney's Office
255 West Alameda, 7th Floor
P.O. Box 27210
Tucson, Arizona 85726-7210

If to Developer:

Michael Teufel, Principal
Pathway Holdings, LLC.
6885 N. Oracle Road
Tucson, Arizona 85704

With copy to:

5.4 *Successors and Assigns.* All of the provisions of this Agreement shall inure to the benefit of and be binding upon successors and assigns of the parties to this Agreement pursuant to A.R.S. § 9-500.05(D). Any assignment of this Agreement by the Developer shall be approved by the City in writing prior to any assignment, which shall not be unreasonably withheld. An assignment to any person or entity in any way not affiliated with or controlled by Developer, or to any entity in which Developer is a member, partner, or shareholder, where Developer has less than or equal to a fifty (50) percent equity interest shall be presumed to be unreasonable.

5.5 *No Waiver of Strict Performance.* The failure of any Party to insist upon a strict performance of any of the agreements, terms, covenants, and conditions of this Agreement shall not be deemed a waiver of any rights or remedies that other Parties may have and shall not be deemed a waiver of any subsequent breach or default in any of such agreements, terms, covenants, and conditions.

5.6 *Quiet Enjoyment.* The City and District covenants that as long as Developer shall faithfully perform the agreements, terms, covenants, and conditions hereof, Developer shall and may peaceably and quietly have, hold, and enjoy the Property for the Term granted without molestation or disturbance by or from City, subject, however, to all of the provisions of this Agreement and all encumbrances to which this Agreement is made subject and subordinate as herein provided.

5.7 *Authority to Execute Agreement; Authority to Manage Agreement.* The individuals executing this Agreement represent that they have full right, power, and authority to execute this Agreement on behalf of their respective Parties. City may delegate the authority to manage this Agreement, including the authority to authorize waivers or extensions of the Contingency Periods provided for herein, to the City Manager or the Manager's delegate.

5.8 *Entire Agreement.* This Agreement constitutes the entire agreement and understanding of the Parties pertaining to the subject matter of the Agreement and supersedes all offers, negotiations, and other agreements of any kind. All prior and contemporaneous agreements, representations, and understandings of the Parties, oral or written, including but not limited to the Offer or any prior Request for Proposal, are superseded and merged in this Agreement. There are no representations or understandings of any kind not set forth herein.

5.9 *Governing Law.* This Agreement shall be construed in accordance with the laws of the State of Arizona.

5.10 *Non-Severability.* The provisions of this Agreement shall not be given effect individually, and to this end, the provisions of this Agreement are not severable.

5.11 *Anti-Moratorium.* No moratorium, as that term is defined in A.R.S. § 9-463.06, shall be imposed on the Property unless it is imposed pursuant to an ordinance that complies with A.R.S. § 9-463.06, as it may be amended.

5.12 *Headings.* The descriptive headings of the Sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the Agreement's provisions.

5.13 *Exhibits.* Any exhibit attached to this Agreement shall be deemed to have been incorporated in this Agreement by this reference with the same force and effect as if it were fully set forth in the body of the Agreement

5.14 *Further Acts.* All Parties to this Agreement shall promptly and expeditiously execute and deliver all such documents and perform all such acts as reasonably necessary, from time to time, to carry out the matters contemplated by this Agreement.

5.15 *Recordation.* This Agreement shall be recorded in its entirety in the official records of Pima County, Arizona, not later than ten days after this Agreement is executed by all Parties and an Ordinance is enacted by the Mayor and Council authorizing this Agreement.

5.16 *Amendments.* No change or addition is to be made to this Agreement except by a written amendment executed by all of the Parties. An amendment shall be recorded in the official records of Pima County, Arizona within ten days after its execution.

5.17 *Time of Essence.* Time is of the essence for this Agreement.

5.18 *Force Majeure.* Notwithstanding any other term, condition or provision of this Agreement to the contrary, if any Party to this Agreement is precluded from satisfying or fulfilling any duty or obligation imposed upon it due to labor strikes, material shortages, war, civil disturbances, weather conditions, natural disasters, acts of God, or other events beyond the control of such Party, the time period provided herein for the performance by such Party of such duty or obligation shall be extended for a period equal to the delay occasioned by such events.

5.19 *Attorneys' Fees.* In the event any Party shall commence any civil action against the others to enforce or terminate this Agreement or to recover damages for the breach of any of the provisions, covenants, or terms of this Agreement on the part of the other Party, the prevailing Party in such civil action shall be entitled to recover from the other Party(s), in addition to any relief to which such prevailing Party may be entitled, all costs, expenses and reasonable attorneys' fees incurred in connection therewith.

5.20 *Counterparts.* This Agreement may be executed in three or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The signature pages from one or more counterparts may be removed from such counterparts and such signature pages all attached to a single instrument so that the signatures of all parties may be physically attached to a single document.

5.21 *Effective Date.* This Agreement shall be considered effective on December 13, 2005.

5.22 *Term/Termination Date.* This Agreement shall terminate upon completion of the Project. Completion of the Project shall be determined by the acceptance of all improvements noted on the tentative plat by the City of Tucson Department of Transportation, Water Department, and Pima County Waste Water Department, in addition to the completion of 50 of the Developer's homes. Completion of the Developer's homes shall be determined by the issuance of a passed final inspection certificate issued by the City Development Services Department.

Executed this __ day of _____, 2005.

By: _____

Its: _____

CITY OF TUCSON an Arizona municipal corporation

By:_____
Mayor

ATTEST:

By:_____
City Clerk

Dated:_____

APPROVED AS TO FORM:

By:_____
City Attorney

Dated: 7/21/06

EXHIBITS

Exhibit "A" Offer to Purchase

Exhibit "B" Legal Description of the **City** Property

Exhibit "C" Legal Description of property subject to each phase

Exhibit "D" Legal Description of City Lots

Exhibit "E" Offer to Purchase concept plan

Exhibit "F" Project Goals from RFP

Exhibit "A"
Offer to Purchase

EXHIBIT B:

OFFER TO PURCHASE

TO: *City of Tucson* *Silverbell Subdivision*
Community Services Department
310 N. Commerce Park Loop
Tucson, AZ 85701
Copies to: *Real Estate Division*
City Clerk

Pathway Holdings, LLC, an Arizona limited liability company *hereinafter called the BUYER(S), hereby offers and agrees to purchase from the CITY OF TUCSON, a municipal corporation, hereinafter called the CITY, at the price and subject to their terms, conditions and covenants herein stated, the following described property:*

A future platted subdivision of approximately 31 acres, consisting of 105 market lots and 15 lots retained by the City, as represented in Exhibit B of this document. (The final purchase agreement will be based on the legal descriptions generated by the final plat).

SUBJECT TO all provisions, conditions, easements, restrictions, rights-of-way, covenants, encumbrances, obligations, liabilities, and other matters of record, and to all zoning, building or other laws or ordinances, and to any matters which would be shown by an accurate survey or inspection of the property.

The purchase price shall be One Million Nine Hundred Forty-Two Thousand and Five Hundred & 00/100 *DOLLARS ($*1,942,500.00*) which includes the deposit tendered with this offer.*

The BUYER(S) hereby tenders as a deposit the sum of ***One Hundered Thousand and no/100 DOLLARS*** *($100,000.00), representing the minimum allowable deposit amount, on the following conditions:*

The balance of said purchase price in the amount of One Million Eight Hundred and Forty-Two Thousand and Five Hundred and 00/100 *DOLLARS ($* 1,842,500.00 *) shall be paid in cash at closing.*

The closing date shall be delayed until recordation of a final plat for the subdivision. If the Buyer(s) fail to fulfill their part of this instrument, the deposit tendered with this offer shall be forfeited to the City. This sale is subject to approval by the City Manager, and if forwarded for review, subject to approval of the Mayor and Council. The City reserves the right to reject any and all offers either at the City Manager or Mayor and Council level of authority.

Ninety (90) days from the date of the bid opening are hereby given to the City to obtain official Mayor and Council acceptance of this offer. If accepted, the acceptance portion of this instrument shall be signed by the City and delivered to the Buyer(s) within ten (10) business days following the date of acceptance.

If this offer is not accepted, the amount of the deposit will be returned to the Buyer(s) with reasonable promptness. The escrow closing agent shall be Fidelity National Title Agency, Inc.
City shall provide standard form of title insurance policy in the amount of the purchase price. If Buyer(s) require(s) an extended ALTA title policy, Buyer(s) shall pay for all costs exceeding standard from of title insurance policy. Title insurance policy to be issued by Fidelity National Title Agency, Inc. All other title and escrow costs and expenses incidental to this transaction shall be charged to the parties in the customary manner. Possession of the property shall be given to Buyer(s) on closing.

If applicable, the Buyer(s) acknowledge(s) Michael Sarabia
as his/their Broker/Agent. As a result of this sale, the City agrees to pay a commission fee on closing to said Broker/Agent. If deposit is forfeited and/or this transaction does not close, no commission will be paid. No commission fee will be paid if Broker/Agent is also a Principal/Buyer. Commission fee shall be 4% (four percent), under the terms and conditions noted herein. Commission will be paid only to qualified Arizona Licensed Brokers.

The Buyer(s) understand(s) and acknowledge(s) that the utility locations and/or dimensions shown herein and in the sales brochure are based on information believed to be reliable; however, the City does not guarantee or warrant this information. Building and occupancy permits are subject to availability of water/sewer capacity at time of actual application.

Except as specifically set forth in this Agreement, Seller has not made, nor authorized anyone to make, any warranty or representation about the present or future physical or environmental condition of the subject property and no such representation or warranty shall be implied. Buyer expressly acknowledges that no such warranty or representation has been made and that Buyer is not relying upon any warranty or representation whatsoever, except as may be expressly set forth in this agreement. Buyer acknowledges and agrees that, having been given the opportunity to inspect the property, Buyer is relying solely upon its own investigation of the property and not on any information provided or to be provided by the Seller.

Buyer further acknowledges that any information provided on behalf of Seller with respect to the property was obtained from a variety of sources, and that Seller has not made any independent investigation or verification of such information, and makes no representations or warranties as to the accuracy or completeness of such information. Buyer further acknowledges that, to the maximum extent allowed by law, the sale of the subject property is made in an "as is" condition and with all faults.

Buyer agrees to commence platting activities by no later than 30 days after executing this agreement, and shall record a final plat within 240 days from that date. Buyer agrees to pay Seller an amount of $100.00 (One hundred and no/100 dollars) per day as liquidated damages for each day delay from this schedule. Seller shall consider extensions to this schedule based on delays beyond the buyers control. The Agreement between the City of Tucson and the Offeror shall be terminated in the event platting the proposed subdivision is not feasible due to unforeseen site conditions, and deposit monies shall be returned to the Buyer. Should the Buyer terminate the Agreement for any other reason before completion of the plat, all work related to the plat shall become the property of the City of Tucson and deposit monies shall be forfeited.

The Buyer shall work closely with the Community Services Department of the City of Tucson to achieve a subdivision final plat of approximately 105 market lots and 15 public housing townhome lots to be retained by the City. The City lots shall be a minimum of 4,500 square feet. The actual number of market lots may be less due to requirements of governing Codes and Regulations, however the number of market lots may not exceed 115. The Buyer shall pay for all platting costs. The Buyer shall be responsible for establishing a Homeowners Association including transfer of governance of the Association to the homeowners.

Phase I shall be completion of project infrastructure including required Silverbell improvements, the La Cholla extension through the site and all infrastructure internal to the site. Infrastructure includes construction of all roads and utilities to each lot. The Buyer shall complete Phase I within nine months of close of escrow. Extensions will be considered based on legitimate delays beyond the control of the Buyer. Failure of the Buyer to comply with this requirement will result in a financial penalty of one million dollars ($1,000,000) payable to the City of Tucson.

Buyer shall accept the subject property "as is" and in its condition on the date of the Closing, subject only to the express provisions, if any, of this agreement. Buyer, for and on behalf of itself, and its heirs, successors, and/or assigns, hereby releases and agrees to hold harmless Seller, its Mayor and Council, Boards, Committees, and Commissions, officers and employees, from and against any and all claims that it may now or hereafter have against Seller for any cost, loss, liability, damage, expense, demand, claim, or cause of action arising or alleged to have arisen from or relating to any defect or condition, including environmental matters, affecting the property or any portion thereof. The hold-harmless provisions of this section shall survive the closing.

Transfer of property, if sold, shall be by City of Tucson form of Special Warranty Deed. All terms, covenants, conditions and provisions herein contained, including all development guidelines, shall extend to and be binding upon the parties, their assignees, heirs, devisees, personal representatives or other successors in interest, irrespective of how said interest was acquired. All conditions of sale referenced in the Request for Proposals issued by the City of Tucson in association with the conveyance of this property are made a part hereof by reference, and shall amend this Offer to Purchase accordingly.

Amendments/Additional Conditions or Contingencies:

Buyer shall have the option to assign its rights and interests under this agreement to any entity under the management control of Buyer. City of Tucson will pay a pro rated share of infrastructure improvement costs for all City public housing townhome lots.

Sale of this property shall be contingent upon approval of a negotiated development agreement signed by City and Buyer(s). NOS

This instrument contains the entire agreement between the City and the Buyer(s). All understandings, conversations and communications, oral or written, between the parties hereto, or on behalf of either of them, are merged into and superseded by this instrument and shall be of no further force or effect.

DATED this 8th *day of* November, *2004.*

BUYER(S) SIGNATURE

michael@pathwaydevelopments.co
E-MAIL ADDRESS

6885 N. Oracle Rd.
Tucson, AZ 85704
ADDRESS OF BUYER(S)

520-795-7555, 520-795-5211
TELEPHONE & FAX NUMBER

ACCEPTANCE

The hereinabove offer to purchase City property at the price and according to the terms, covenants, conditions, and provisions above stated is hereby accepted pursuant to approval by the Mayor and Council. The City agrees to pay applicable brokerage fee upon close of escrow to **{to be filled in by Buyer and/or Buyer's agent/broker}**

DATED this 11 *day of* January, 2005 ~~2004~~.

CITY OF TUCSON, a municipal corporation

By _____
MAYOR

ATTEST:

By Kathleen S. Detrick
City Clerk

APPROVED AS TO FORM:

By _____
PA-Asst *City Attorney*

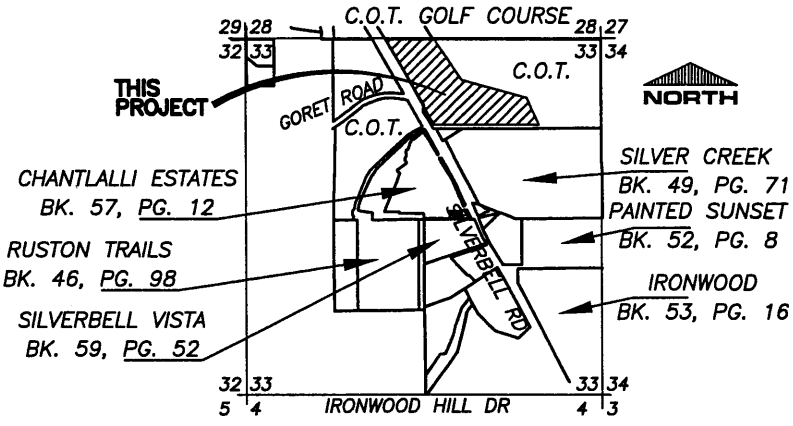
OFFER AND ACCEPTANCE READ AND CONCURRED:

DATED this 4 *day of* January, *2004.*

By _____
BROKER/AGENT

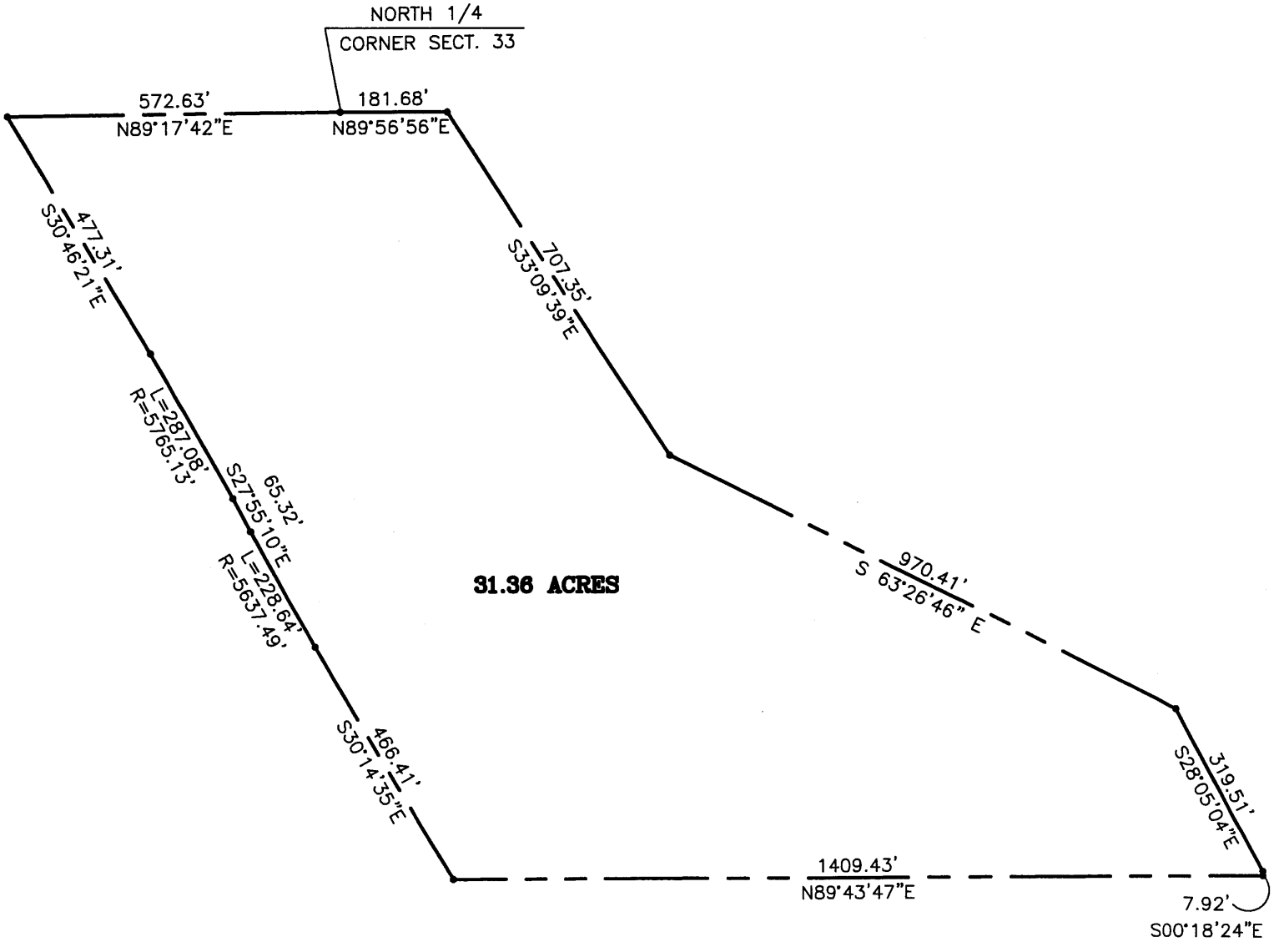
EXHIBIT 'B'
LEGAL DESCRIPTION OF THE CITY PROPERTY

THE BASIS OF BEARING USED FOR THIS SURVEY IS THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 13 SOUTH, RANGE 13 EAST, GILA AND SALT RIVER BASE AND MERIDIAN, PIMA COUNTY, ARIZONA BEARING N 89°17'42" E.



LOCATION PLAN

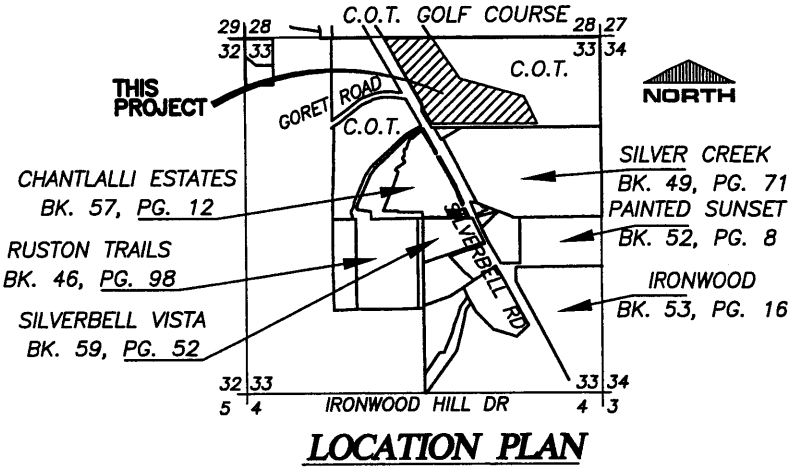
A PORTION OF THE N 1/2 OF THE NE 1/4 AND THE NE 1/4 OF THE NW 1/4 OF SECTION 33 T13S, R13E, G.&S.R.B.&M., PIMA COUNTY, AZ.



EX. B TO EX. 1 TO RESOLUTION 20427

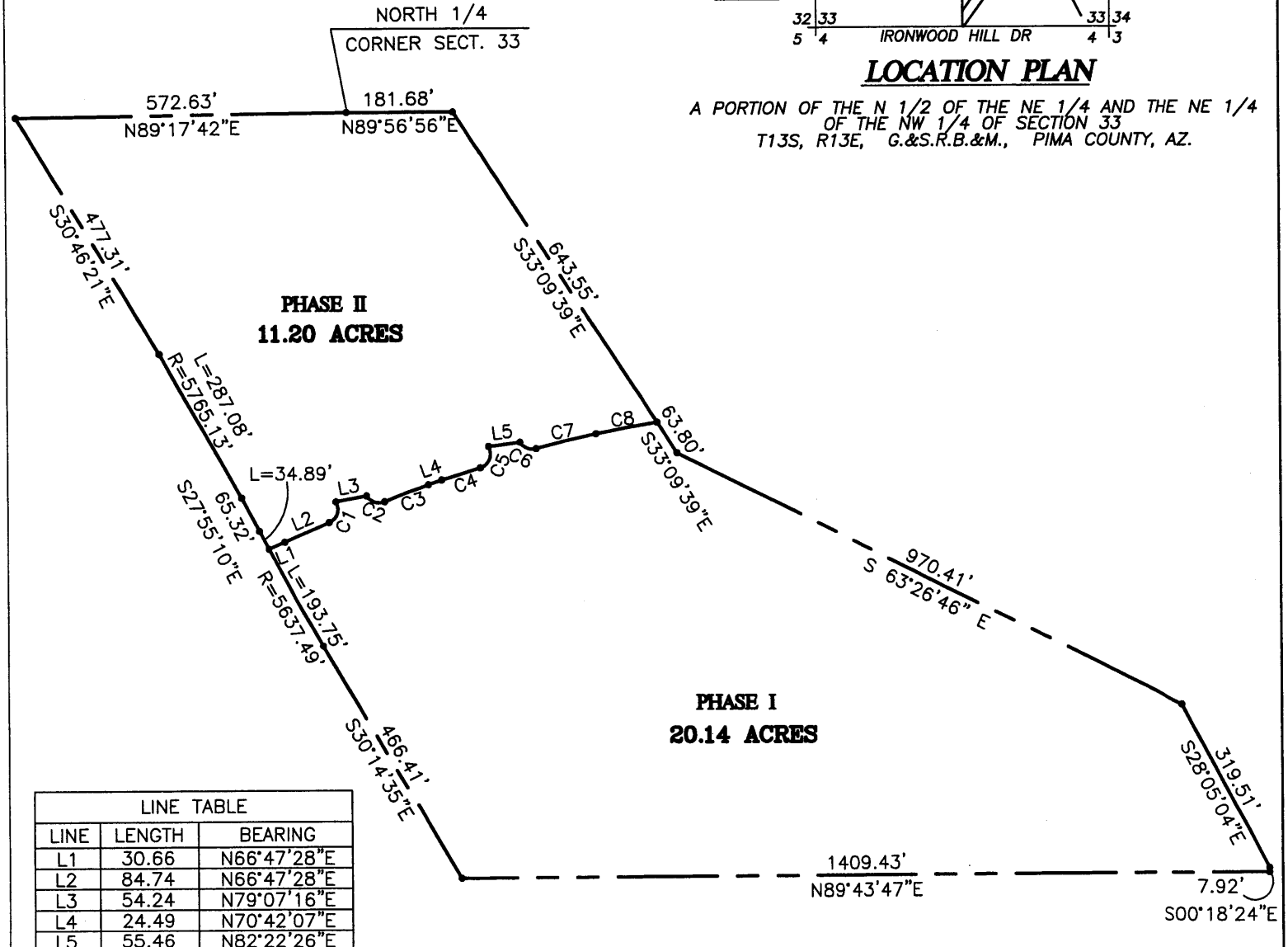
EXHIBIT 'C'
LEGAL DESCRIPTION OF THE PROPERTY SUBJECT TO EACH PHASE

THE BASIS OF BEARING USED FOR THIS SURVEY IS THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 13 SOUTH, RANGE 13 EAST, GILA AND SALT RIVER BASE AND MERIDIAN, PIMA COUNTY, ARIZONA BEARING N 89°17'42" E.



LOCATION PLAN

A PORTION OF THE N 1/2 OF THE NE 1/4 AND THE NE 1/4 OF THE NW 1/4 OF SECTION 33
T13S, R13E, G.&S.R.B.&M., PIMA COUNTY, AZ.



LINE TABLE		
LINE	LENGTH	BEARING
L1	30.66	N66°47'28"E
L2	84.74	N66°47'28"E
L3	54.24	N79°07'16"E
L4	24.49	N70°42'07"E
L5	55.46	N82°22'26"E

CURVE TABLE		
CURVE	LENGTH	RADIUS
C1	42.57	25.00
C2	35.95	25.00
C3	79.35	1353.71
C4	70.49	1353.71
C5	45.80	25.00
C6	32.57	25.00
C7	106.57	1854.25
C8	108.42	1854.25

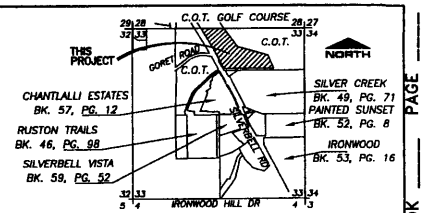
EXHIBIT 'D' - PG 1 EX. D TO RESOLUTION 20427

LEGAL DESCRIPTION OF CITY LOTS

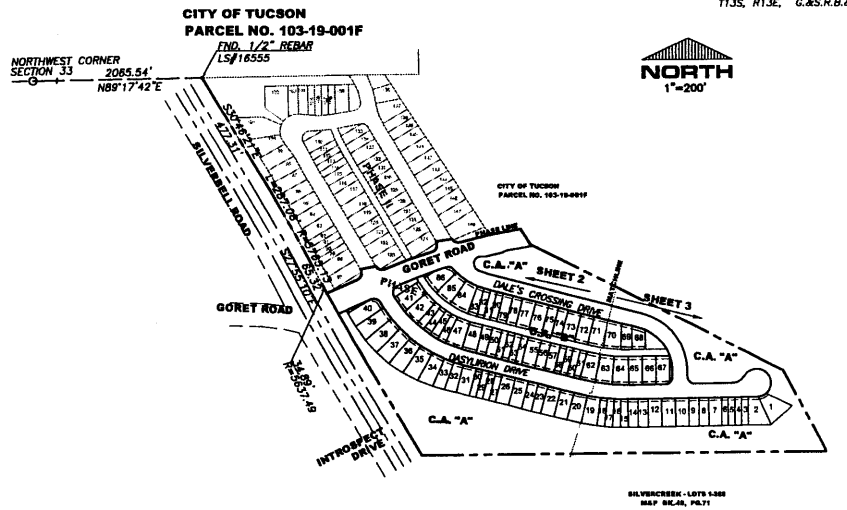
FINAL PLAT OF SILVERBELL RESIDENTIAL SUBDIVISION PHASE I

LOTS 1–86 & COMMON AREA "A"
(DRAINAGE, RECREATION, UTILITIES & LANDSCAPING)

COMMON AREA "B" (PRIVATE STREETS)



LOCATION PLAN
SCALE 3"= 1 MILE
A PORTION OF THE N 1/2 OF THE NE 1/4 AND THE NE 1/4 OF THE NW 1/4 OF SECTION 33 T13S, R13E, G.&S.R.B.&M., PIMA COUNTY, AZ.



GENERAL NOTES

A. THE GROSS AREA OF THIS SUBDIVISION IS 20.14 ACRES.

B. THE TOTAL NUMBER OF LOTS IS 86.

C. TOTAL MILES OF NEW PUBLIC STREETS ARE 0.64 AND .2 MILES OF PRIVATE STREETS.

D. THIS SUBDIVISION IS SUBJECT TO ANNEXATION CASE C9-60.39 AND ORDINANCE NO. 2014, WHICH ESTABLISHED ZONING IN THE WEST SILVERBELL ROAD SOUTH TO SAN XAVIER INDIAN RESERVATION ANNEXATION AREA IN 1960.

E. THERE WILL BE NO FURTHER DIVISION OF LOTS WITHOUT THE EXPRESSED APPROVAL OF THE CITY OF TUCSON.

F. THE BASIS OF BEARING USED FOR THIS SURVEY IS THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 13 SOUTH, RANGE 13 EAST, GILA AND SALT RIVER BASE AND MERIDIAN, PIMA COUNTY, ARIZONA BEARING N 89°17'42" E.

G. THIS SUBDIVISION IS SUBJECT TO SCENIC CORRIDOR ZONE REQUIREMENTS.

DEDICATION

WE THE UNDERSIGNED, HEREBY WARRANT THAT WE ARE THE OWNERS AND THE ONLY PARTIES HAVING INTEREST IN THE LAND SHOWN ON THIS PLAT, AND WE CONSENT TO THE SUBDIVISION OF SAID LAND IN THE MANNER SHOWN HEREON.

WE HEREBY DEDICATE AND CONVEY TO THE PUBLIC FOREVER ALL RIGHTS-OF-WAY AS SHOWN HEREON, INCLUDING ALL STREETS, ROADS, AND EASEMENTS.

WE HEREBY GRANT TO THE PUBLIC AND ALL UTILITY COMPANIES ALL EASEMENTS AS SHOWN HEREON FOR THE PURPOSES OF ACCESS, INSTALLATION AND MAINTENANCE OF PUBLIC SEWERS AND UTILITIES AND OTHER USES AS DESIGNATED BY THIS PLAT.

PRIVATE DRAINAGEWAYS AND COMMON AREAS, AS SHOWN HEREON, ARE RESERVED FOR THE PRIVATE USE AND CONVENIENCE OF ALL OWNERS OF PROPERTY WITHIN THIS SUBDIVISION AND ARE GRANTED AS EASEMENTS TO THE PUBLIC AND ALL UTILITY COMPANIES FOR THE PURPOSES OF ACCESS, INSTALLATION AND MAINTENANCE OF UTILITIES, DRAINAGE AND PUBLIC SEWERS. TITLE TO THE LAND OF ALL PRIVATE DRAINAGEWAYS AND COMMON AREAS SHALL BE VESTED IN AN ASSOCIATION OF INDIVIDUAL LOT OWNERS AS ESTABLISHED BY COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED IN DOCKET ____, AT PAGES ____ THROUGH ____, IN THE OFFICE OF THE PIMA COUNTY RECORDER. THE ASSOCIATION WILL ACCEPT RESPONSIBILITY FOR CONTROL, MAINTENANCE AND LIABILITY FOR THE PRIVATE DRAINAGEWAYS AND COMMON AREAS WITHIN THIS SUBDIVISION.

WE, THE UNDERSIGNED, DO HEREBY HOLD HARMLESS THE CITY OF TUCSON, ITS SUCCESSORS AND ASSIGNS, THEIR EMPLOYEES, OFFICERS AND AGENTS FROM ANY AND ALL CLAIMS FOR DAMAGES RELATED TO THE USE OF THE PROPERTY DEPICTED ON THIS PLAT NOW AND IN THE FUTURE BY REASON OF FLOODING, FLOWAGE, EROSION OR DAMAGE CAUSED BY WATER, WHETHER SURFACE FLOOD OR RAINFALL.

CERTIFICATION OF SURVEY

I HEREBY CERTIFY THAT THE BOUNDARY SURVEY AS SHOWN ON THIS PLAT WAS PERFORMED UNDER MY DIRECTION AND THAT ALL EXISTING OR PROPOSED SURVEY MONUMENTS AND MARKERS SHOWN ARE CORRECTLY DESCRIBED. I FURTHER CERTIFY THAT THIS PLAT WAS PREPARED UNDER MY DIRECTION.

ALFONSO TORRES
LANDMARK ENGINEERING, INC.
REGISTERED LAND SURVEYOR NO. 15342
EXP. DATE 9/30/07, STATE OF ARIZONA

CERTIFICATION OF ENGINEERING

I HEREBY CERTIFY THAT THE FLOODPRONE LIMITS AND/OR EROSION HAZARD SETBACKS SHOWN ON THIS PLAT WERE PREPARED BY ME OR UNDER MY SUPERVISION.

EDWIN BRUCE WILSON, P.E. #10011 — DATE:
LANDMARK ENGINEERING, INC.

ASSURANCES

THIS IS TO CERTIFY THAT ALL IMPROVEMENTS, SUCH AS STREETS, SIDEWALKS, SEWERS, WATER AND UTILITY INSTALLATION, DRAINAGE AND FLOOD CONTROL FACILITIES AND MONUMENTS, REQUIRED BY THE CITY OF TUCSON HAVE BEEN COMPLETED OR THE FUTURE COMPLETION OF SUCH IMPROVEMENTS HAS BEEN ASSURED BY THE POSTING OF PERFORMANCE BONDS, ASSURANCES OR OTHER SECURITY AS THE CITY OF TUCSON DEEMS NECESSARY AND PROPER.

CITY OF TUCSON DEVELOPMENT SERVICES DEPARTMENT DIRECTOR

CITY OF TUCSON DEVELOPMENT SERVICES DEPARTMENT ENGINEERING ADMINISTRATOR

TICOR TITLE INSURANCE COMPANY
ESCROW/TITLE NO: 70100150-PEN-701

ASSISTANT VICE PRESIDENT

ACKNOWLEDGMENT

STATE OF ARIZONA } } SS
COUNTY OF PIMA }

ON THIS THE____ DAY OF _____, 2005, BEFORE ME, _____, THE UNDERSIGNED, APPEARED _____ WHO ACKNOWLEDGED ___SELF TO BE THE _____ OF TICOR TITLE INSURANCE COMPANY, AN ARIZONA CORPORATION AS TRUSTEE AND THAT S/HE AS SUCH OFFICER BEING DULY AUTHORIZED SO TO DO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED, BY SIGNING THE NAME OF THE CORPORATION, AS TRUSTEE.

IN WITNESS WHEREOF, I HERE UNTO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC — DATE

MY COMMISSION EXPIRES _____

APPROVAL

I, _____, CLERK OF THE CITY OF TUCSON, ARIZONA, HEREBY CERTIFY THAT THIS PLAT WAS APPROVED BY THE MAYOR AND COUNCIL OF THE CITY OF TUCSON, ARIZONA, ON THIS, _____ DAY OF _____, 20___.

CLERK, CITY OF TUCSON — DATE

RECORDING DATA

STATE OF ARIZONA } } SS
COUNTY OF PIMA }

SEQ. NO. _____
FEE: _____

THIS INSTRUMENT WAS FILED FOR RECORD AT THE REQUEST OF LANDMARK ENGINEERING, INC. ON THIS _____ DAY OF _____, 20___, AT ___M. IN BOOK ____ OF MAPS AND PLATS AT PAGE ____ THEREOF. WITNESS MY HAND AND OFFICIAL SEAL, THE DAY AND YEAR ABOVE AS WRITTEN.

F. ANN RODRIGUEZ, PIMA COUNTY RECORDER — DEPUTY COUNTY RECORDER

LEGEND

⊥ OR ●	INDICATES SET 1/2" REBAR TAGGED BY A REGISTERED LAND SURVEYOR
o	INDICATES FOUND 1/2" REBAR
■	INDICATES A 2" BRASS SURVEY MONUMENT IN STREETS TO BE SET IN CONCRETE OR AS NOTED
■	INDICATES FOUND 2" SURVEY MONUMENT OR AS NOTED
L3	LINE NUMBER – SEE LINE DATA TABLE
C3	CURVE NUMBER – SEE CURVE DATA TABLE
15	NEW LOT NUMBER
———	SUBDIVISION BOUNDARY
★	ADDRESSING LOCATION
- - - -	EROSION HAZARD SETBACK (BEARING BREAK, NO PIN SET)
— — —	100 YR FLOODPLAIN LINE

SHEET INDEX

SHEET	DESCRIPTION
1.	COVER SHEET, COMPOSITE MAP AND NOTES
2–3.	PLAN SHEETS

ABBREVIATION LIST

C.A. COMMON AREA

BENEFICIARY

THE BENEFICIARY OF TITOR TITLE INSURANCE COMPANY TRUST NO. 70100150-PEN-701

OWNER

CITY OF TUCSON, A MUNICIPAL CORPORATION
CITY COUNCIL MAYOR, ROBERT E. WALKUP

DEVELOPER

PATHWAY HOLDINGS, LLC.
6885 N. ORACLE ROAD, TUCSON, AZ. 85704
ATTN: MIKE TEUFEL, (520)795-7555

S05-093

LANDMARK ENGINEERING INC
3645 NORTH BUSINESS CENTER DRIVE, SUITE #107, TUCSON, AZ. 85705
PHONE: (520) 628-1382 FAX: (520) 628-1382

FINAL PLAT
SILVERBELL RESIDENTIAL SUBDIVISION
LOTS 1–86,COMMON AREA "A" (DRAINAGE, RECREATION, UTILITIES & LANDSCAPING) AND COMMON AREA "B" (PRIVATE STREETS).
A RESIDENTIAL CLUSTER PROJECT

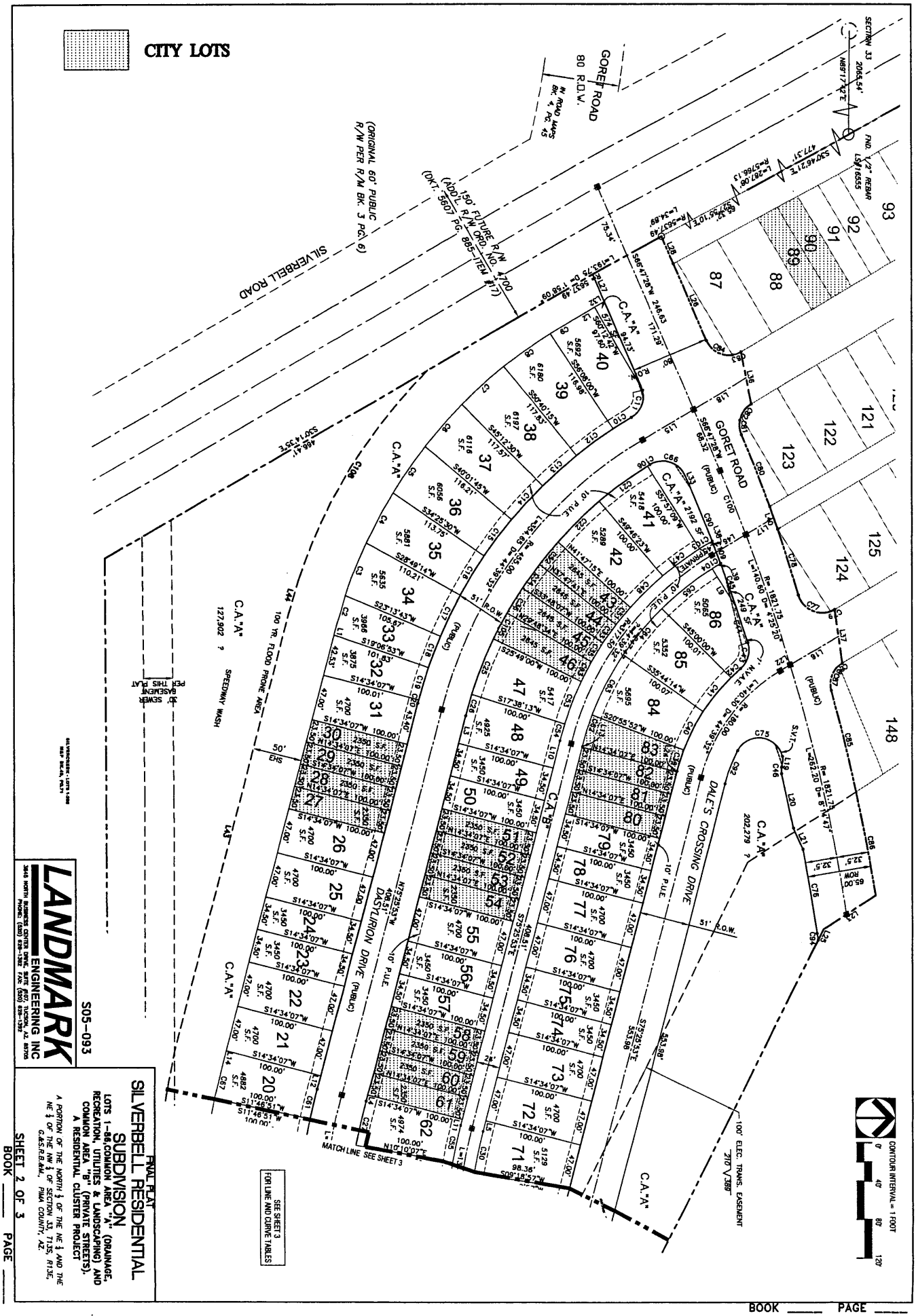
A PORTION OF THE NORTH ½ OF THE NE ¼ AND THE NE ¼ OF THE NW ¼ OF SECTION 33, T13S, R13E, G.&S.R.B.&M., PIMA COUNTY, AZ.

SHEET 1 OF 3

BOOK ____ PAGE ____

BOOK ____ PAGE ____

EXHIBIT 'D' - PG 2
LEGAL DESCRIPTION OF CITY LOTS



LANDMARK ENGINEERING INC
3645 NORTH RUTHRAUFF ROAD, SUITE 250, TUCSON, ARIZONA 85705
PHONE: (520) 888-7382 FAX: (520) 888-7392

S05-093

FINAL PLAT

SILVERBELL RESIDENTIAL

SUBDIVISION

LOTS 1-86,COMMON AREA "A", (DRAINAGE, RECREATION, UTILITIES & LANDSCAPING) AND COMMON AREA "B" (PRIVATE STREETS).
A RESIDENTIAL CLUSTER PROJECT

A PORTION OF THE NORTH ½ OF THE NE ¼ AND THE NE ¼ OF THE NW ¼ OF SECTION 33, T13S, R13E, G.&S.R.B.&M., PIMA COUNTY, AZ.

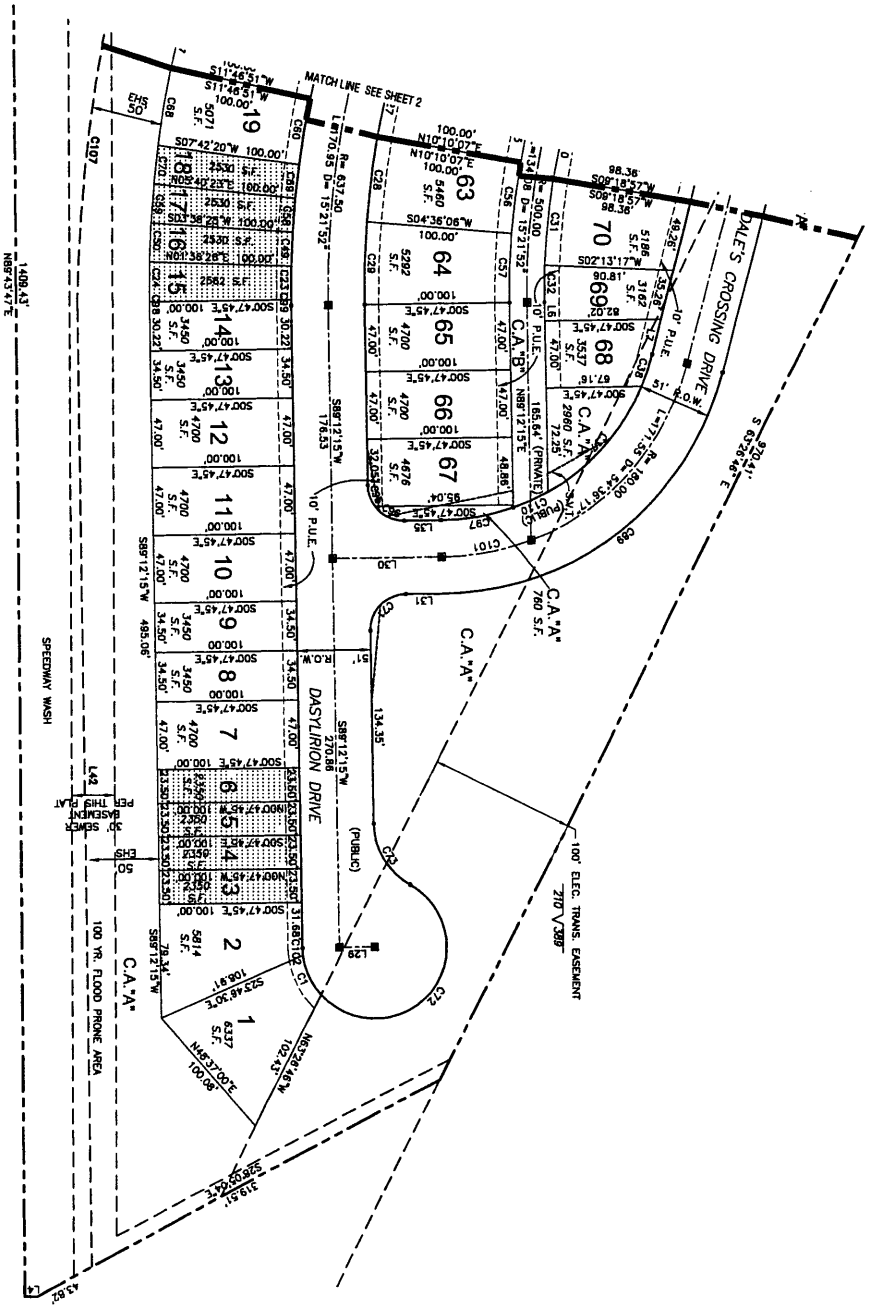
SHEET 2 OF 3

BOOK ____ PAGE ____

BOOK ____ PAGE ____

EXHIBIT 'D' - PG 3
LEGAL DESCRIPTION OF CITY LOTS

CITY LOTS



FINAL PLAT

SILVERBELL RESIDENTIAL SUBDIVISION

LOTS 1-86,COMMON AREA "A" (DRAINAGE, RECREATION, UTILITIES & LANDSCAPING) AND COMMON AREA "B" (PRIVATE STREETS).
A RESIDENTIAL CLUSTER PROJECT

A PORTION OF THE NORTH ½ OF THE NE ¼ AND THE NE ¼ OF THE NW ¼ OF SECTION 33, T13S, R13E, G.&S.R.B.&M., PIMA COUNTY, AZ.

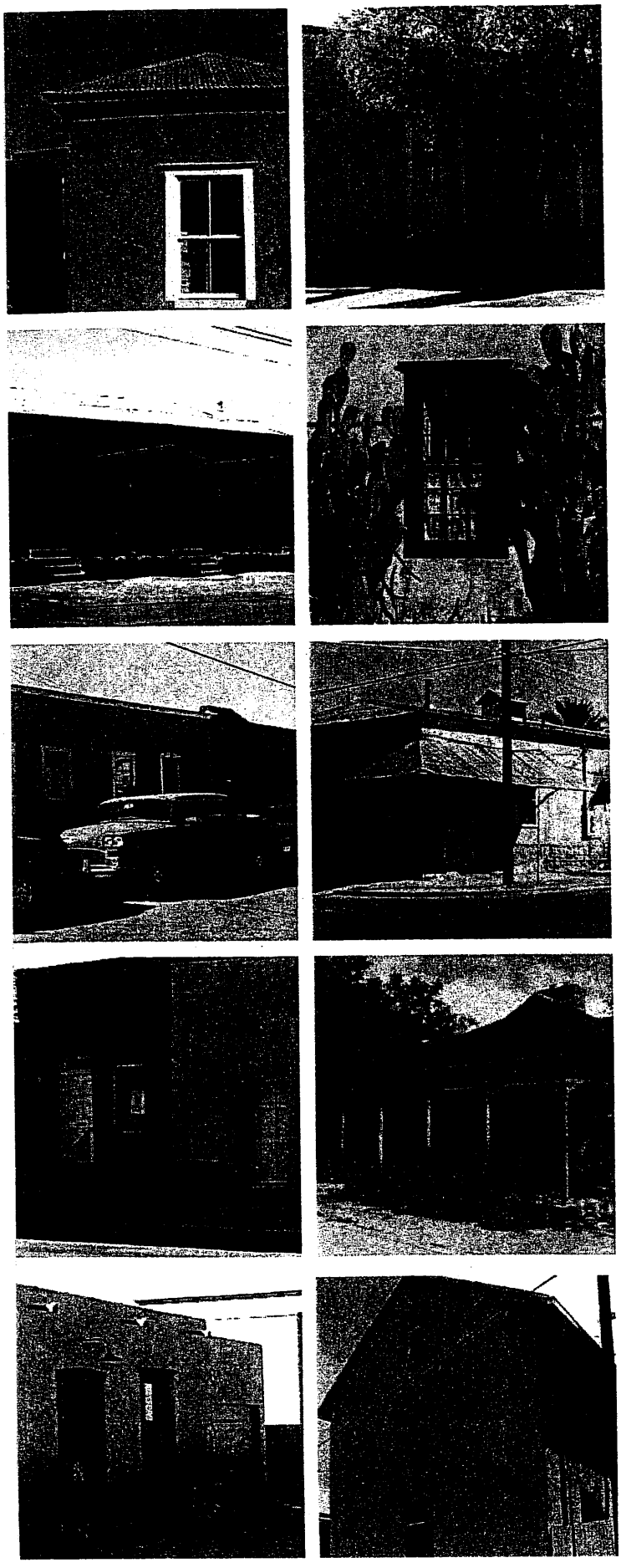
SHEET 3 OF 3

BOOK ____ PAGE ____

LANDMARK ENGINEERING INC
3644 NORTH BUSINESS CENTER DRIVE, SUITE #107, TUCSON, AZ. 85705
PHONE: (520) 628-1362 FAX: (520) 628-1362

S05-093

BOOK ____ PAGE ____



Silverbell Residential Subdivision

Our vision for the Silverbell Subdivision is a neighborhood that seamlessly integrates families of different income levels by providing quality design of the homes and their site context. We hope to create a dense, people-oriented neighborhood that fosters a sense of community and a pride in ownership. Fifteen out of one hundred twenty lots will be allocated for public housing. The public housing town homes are scattered throughout the subdivision allowing these residents to become an integrated part of the new community.

The style of these homes will reflect the historic tradition of the Tucson Barrio districts and respect the climate of the Sonoran desert as outlined in "Building from the Best of Tucson" by the Sonoran Institute. A variety of housing will be offered to the Silverbell residents including both one and two story units ranging from 1,350 to 2,400 square feet. Over half of the houses on the lots along the perimeter share driveways, which allow for side load garages. Houses on the interior lots have front porches, which line the street facade and garages, which face a common rear alley. This considerably lessens the impact of garage doors on the streetscape. By demphasizing the position of the automobile, the tree-lined sidewalks encourage pedestrian traffic and front porches facilitate the interaction of neighbors.

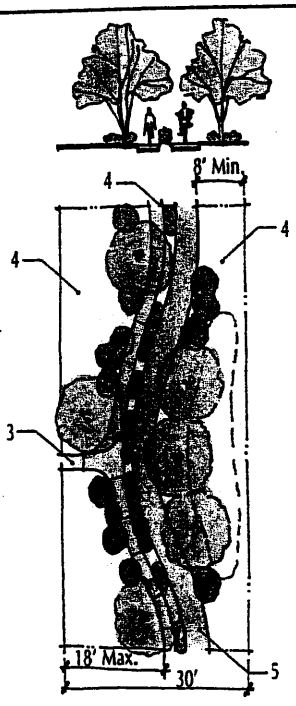
Sidewalks along the street connect into meandering pedestrian and bicycle paths that encircle the site. These paths connect two new public amenities for the Silverbell Development: a shaded park with gazebo and a community pool. Access to the existing River Park Trail and public transit will be provided along pleasant tree lined sidewalks.

We appreciate the opportunity to play a key role in creating a quality community that enriches the lives of the residents of the Silverbell Subdivision.

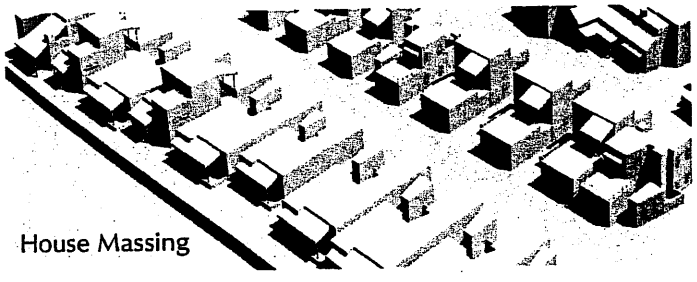
Vision

Exhibit "E"
Offer to Purchase concept plan

S.M.A.R.T. Design



Pedsetrian Pathways
1. Asphalt Street
2. Brick Paving / Parking Area
3. Concete Walk
4. Landscape Strip
5. Decomposed Granite



House Massing

Creating a sense of community is the underlying goal of our planning process. The pedestrian circulation paths, small public play areas, and water features in the green space will create a stage for social interaction. Architectural elements will give a visual connection to the surrounding neighborhood. Front porches face a shared communal green space. Each type of housing unit will have its own private exterior courtyard allowing all residents to have a place where their children can play and their pets can live.

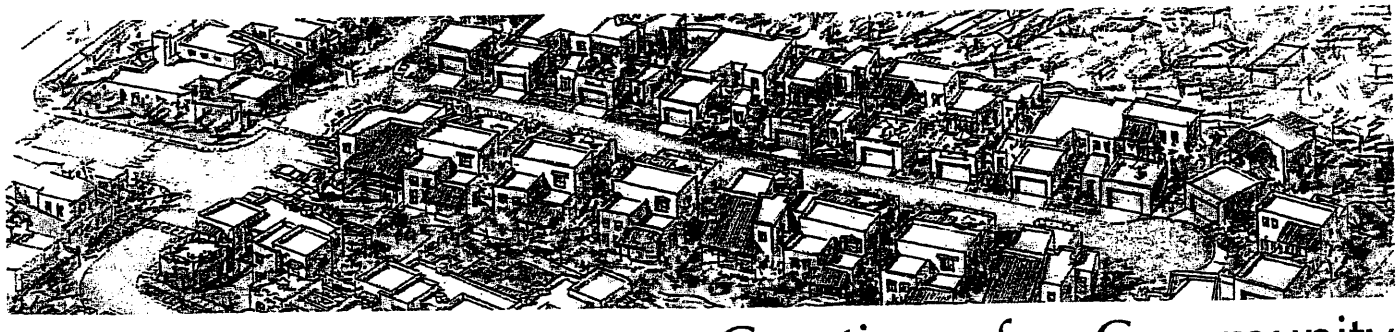
Safe and Secure
clearly marked lit pathways and crosswalks
no blind corner or hidden alleys
ability for neighbors to look out for each other

Mixed Income Neighborhoods
We are offering a variety of price points and a range of building types with varying square footages. Housing opportunities will be available for:
low income
entry level buyers
move up buyers

Accessibility to Services
A network of circulation paths makes access to the on site and offsite amenities convenient. We hope to encourage minimal vehicular dependence, and make use of the City and Rio Nuevo amenities.

Responsive to the Surrounding Environment
All houses will be responsive to the environment by being very energy efficient. A few design components to help us achieve this goal are:
deep overhangs for southern and western sun exposure
well insulated walls and ceilings
trees strategically placed to provide sun screening
and xeriscaping used to conserve water
rain water harvesting
passive solar options for all site and pathway lighting

Tucson Design Solutions
We will connect to Tucson's identity through the studied use of historical and progressive desert architecture. Materials and textures envisioned are:
Stucco; some of which should be a hand trowelled
Corrugated tin and metal accents at roofs & porches
Standard low sloped roofs combined with historically proportioned parapets
Mortar washed adobe accent walls



Creation of a Community

Exhibit "F"

Project Goals from RFP

II. The Goals:

The City of Tucson is developing Silverbell Subdivision in conjunction with the development of Depot Plaza, a redevelopment of the current Martin Luther King public housing building and adjacent land in downtown Tucson. To offer a patio home alternative to the downtown site, thirty duplex townhomes for elderly and disabled public housing tenants will be located in the Silverbell Subdivision. The public housing will remain under the ownership and management of the City of Tucson.

The vision of the Silverbell Subdivision is to create an integrated mixed income community that reflects the best of current design principles and construction quality. The public housing duplex townhomes should fit into the architectural context of the subdivision, and complement and enhance the overall appearance of the project. The density of the subdivision should be compatible with the densities of the adjacent subdivisions.

IV. Project Goals:

The following summarizes key objectives and design principles for this project:

1. Integration of public housing townhomes

   The project design should seamlessly integrate the public housing townhomes into the design context of the subdivision.

2. Best design practices

   Housing should respond to Tucson's climate, culture and traditions. The Sonoran Institute's "Building from the Best of Tucson" publication of 2001 should be used as a guide for the design principles for Silverbell Subdivision. This publication is available at www.sonoran.org.

3. Housing Options

   Housing units may include detached single family and townhomes, with several floor plans and elevations to encourage unique configuration, design diversity, and a range of costs.

4. Garages

   A primary design goal is to reduce the impact of a repetitive streetscape of garage doors. The preliminary layout offers the possibility of an alley and rear loaded garages for the units in the project's interior. The goal for the street front access perimeter lots is to have not more than 50% of the garage doors facing the street. Parking solutions should be architecturally integrated with other project elements and compatible with the street character.

5. Pedestrian & Bicycle Connections

   Pedestrian and bicycle circulation should link to public transit, River Park trails, the Silverbell Municipal Golf Course and include safe, aesthetically pleasing, pedestrian-oriented open space.

9. Construction Timing

   Complete infrastructure within nine months after approval of the final plat. Complete 20% of the homes within 18 months of approval of final plat.

TICOR TITLE AGENCY OF ARIZONA, INC.

6245 East Broadway, Suite 200, Tucson, Az 85711-4091
(520) 747-7373

SELLERS CLOSING STATEMENT

FINAL

Seller: **City of Tucson**

Escrow No: **70100150-701 PEN**
Close Date: **09/01/2006**
Proration Date: **09/01/2006**
Date Prepared: **09/15/2006**

Property: **Silverbell**
Tucson, AZ

Description	Debit	Credit
TOTAL CONSIDERATION:		
Total Consideration		979,750.00
accrued interest		679.80
ESCROW CHARGES		
Escrow Fee to TICOR Title Agency of Arizona, Inc.	372.75	
TITLE CHARGES:		
Owners Policy to TICOR Title Agency of Arizona, Inc.	1,901.20	
COMMISSIONS:		
Commission	39,190.00	
$39,190.00 to Michael Sarabia		
Sub Totals	41,463.95	980,429.80
Proceeds Due Seller	938,965.85	
Totals	$980,429.80	$980,429.80

CITY OF TUCSON
Collections Section
791-4583
Water Inquiries 791-3242
Permit Inquiries 791-5550
CUSTOMER RECEIPT

Miscellaneous

Payment Type:
MP - Miscellaneous Payments
Trans Type:
RV - ReVenue Acct Coll Rec
Fund: 001
Agency: 125
Revenue Source: 8711
Sub Revenue: 71
Name: TICOR TITLE
Desc: RP#527
Comments: SILVERBELL LAND SALES
Amt Paid: 938,965.85
<26/6 #65-1>
0626106-2 19Sep06 02:35PM 938,965.85
0111

1 ITEMS: AMT DUE $938,965.85
Check# 701038756
938,965.85 Check
****
Tue, September 19, 2006 14:35:58PM
AMOUNT DUE: $938,965.85
AMOUNT PAID: $938,965.85
****

From: George Parker
To: Koss, Dave
Date: 8/10/2007 2:07 PM
Subject: Change of responsible Dept for a small portion of RP 527.

Dave, please designate, on the maps and in the data base, the Dept. of Environmental Services as the responsible department for an area of approx. 100 ft. by 150 ft. around the ramada and restrooms at the shooting range on RP 527. Thanks

F. ANN RODRIGUEZ, RECORDER
RECORDED BY: M_S
DEPUTY RECORDER
1966 PE3

W
LINDA YANEY
ESTES CO
1010 N FINANCIAL CENTER DR 200
TUCSON AZ 85710

DOCKET: 12983
PAGE: 105
NO. OF PAGES: 6
SEQUENCE: 20070220047
02/01/2007
EASMNT 11:04

MAIL
AMOUNT PAID $ 11.00

DOCUMENT TITLE: **Easement**

From: City of Tucson, a municipal corporation

To: First American Title Insurance Company, as trustee under Trust no.9165

12983 0105

When recorded, return to:

Linda Yaney
Estes Land and Development Co.
1010 North Finance Center Dr., #200
Tucson, Arizona 85710

SLOPE EASEMENT

This document supercedes the Slope Easement recorded June 12, 2006 in Docket 12823, page 175.

12933 00106

SLOPE EASEMENT

For and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the CITY OF TUCSON, a municipal corporation , ("Grantor"), grants unto FIRST AMERICAN TITLE INSURANCE COMPANY, an Arizona corporation, as Trustee under Trust No. 9165 and not otherwise ("Grantee"), an easement for sloping on the real property described on Exhibit "A" attached hereto and by this reference incorporated herein (the "Property").

This easement is subject to the following terms and conditions:

1. Grantee shall have the right to construct a slope on the above-described property. The slope shall be constructed in such a manner so as to preserve the north row of mesquite trees located within the easement area. No disturbance of any kind shall be allowed within the dripline of said trees. The south row of mesquite trees shall be transplanted or replaced approximately to their existing east-west alignment. They shall be located in between the north row of trees to create a staggered effect. Irrigation revisions for all trees will be the sole responsibility of the Grantor.

2. Grantee shall place a ground cover of ¼" minus, desert pink, decomposed granite over the entire easement area.

3. Following construction of the slope and acceptance by the City of Tucson, Development Services Department, the slope shall be maintained in perpetuity by Tucson City Golf.

4. Nothing herein contained shall be construed as granting title to the land belonging to the Grantor.

5. The Grantor may use the land area of the slope easement for any purpose not inconsistent with the Grantee's purpose of said slope easement. The natural or existing contours of the easement, as constructed by Grantee in the purpose of the grant hereof, shall not be excavated, filled or altered without the prior approval of the Grantee.

6. It is understood and agreed that this easement is only for the purpose of the construction and maintenance of the slope adjacent to the Silverbell Crossings subdivision and not for recreation or other use by the general public.

7. If at any time hereafter the easement is abandoned by the Grantee, it shall revert to the Grantor or to the successors in interest of the Grantor, and all right, title, interest or claim existing by virtue and authority of this instrument shall be extinguished.

10883 0107

8. Such other items as may be required by the City of Tucson, Real Estate Department, prior to acceptance by the City of Tucson, Development Services Department.

IN WITNESS WHEREOF, the undersigned Grantor has executed this Slope Easement this 30 day of January, 2007.

Approved as to form
January 11th, 2007
Tobin Rosen
Principal Asst. City Attorney

CITY OF TUCSON, a municipal corporation

By: _____

Its: Robert E. Walkup, Mayor

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

ATTEST: _____
Kathleen S. Detrick, City Clerk

Before me this 31st day of January, 2007, personally appeared Robert E. Walkup who acknowledged himself/herself to be the Mayor of the CITY OF TUCSON, and as such, being authorized so to do, executed the foregoing instrument for the purposes set forth therein.

OFFICIAL SEAL
ROLANDA MAZEIKA
NOTARY PUBLIC-ARIZONA
PIMA COUNTY
My Comm. Exp. Feb. 10, 2009

_____
Notary Public

My Commission Expires:

STATE OF ARIZONA)
)ss.
COUNTY OF PIMA)

Before me this 31st day of January, 2007, personally appeared Kathleen S. Detrick who acknowledged herself to be the City Clerk of the CITY OF TUCSON, and as such, being authorized so to do, executed the foregoing instrument for the purposes set forth therein.

OFFICIAL SEAL
ROLANDA MAZEIKA
NOTARY PUBLIC-ARIZONA
PIMA COUNTY
My Comm. Exp. Feb. 10, 2009

_____
Notary Public

LEGAL DESCRIPTION

Slope Easement

All that certain real property situated in the county of Pima, State of Arizona, being a portion of Section 28 Township 13 South Range 13 East, Gila and Salt River Base and Meridian, Pima County, Arizona, Containing 18,208.85 sq. ft. or 0.42 acres, more or less and more particularly described as follows.

Commencing at a found 1 ¼" ACP, at the SE corner of the NW quarter of said section 28;

Thence South 89° 29' 40" West along the south line of said NW quarter, a distance of 1564.70 feet;

Thence, North 33° 02' 50" West, a distance of 159.38 feet to the **POINT OF BEGINNING**;

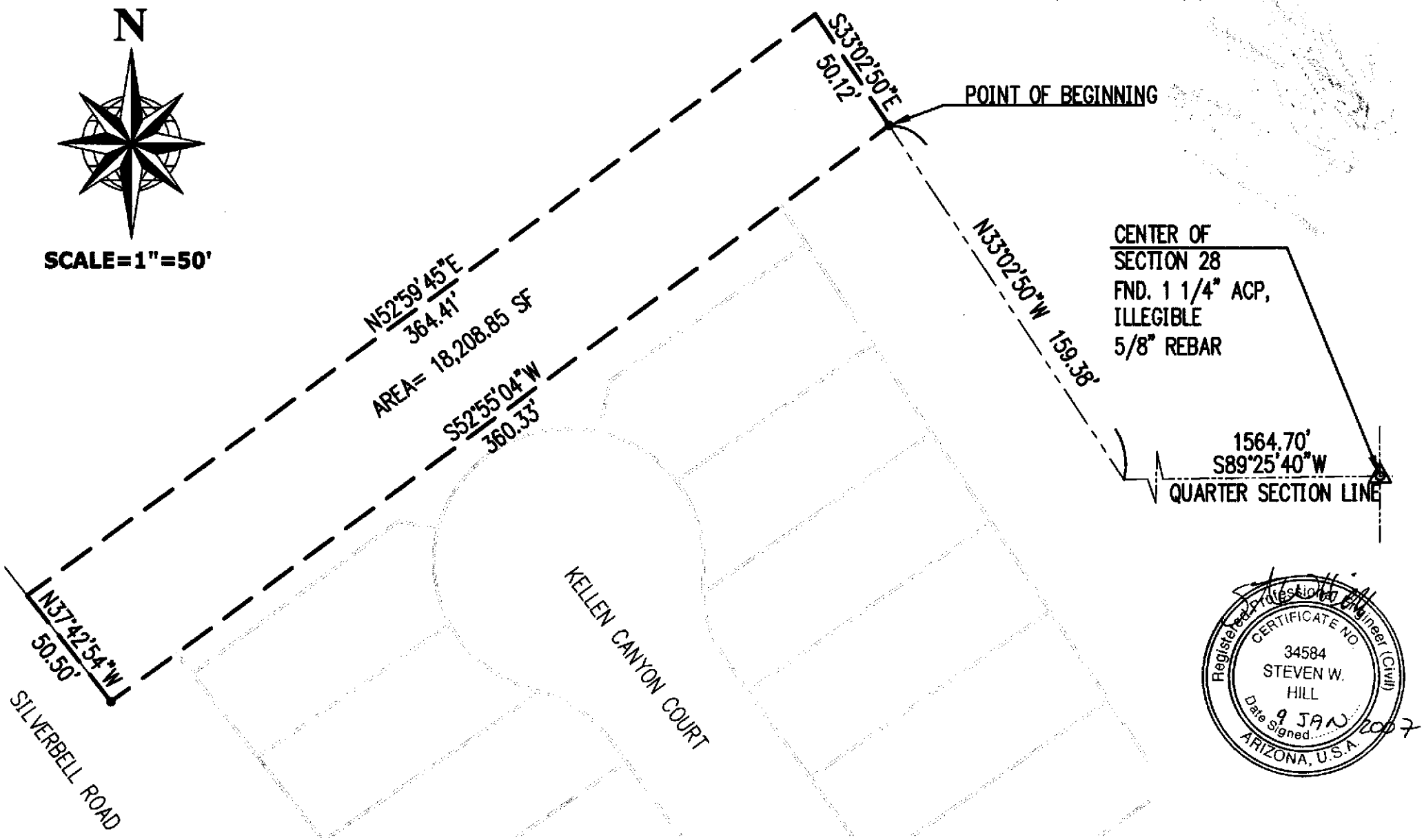
Thence South 52°55' 04" West, a distance of 360.33 feet to the north right-of-way line of Silverbell Road Road;

Thence North 37°42' 54" West, a distance of 50.50 feet;

Thence North 52°59' 45" East, a distance of 364.41 feet;

Thence South 33° 02' 50" East, a distance of 50.12 feet; to the **POINT OF BEGINNING.**

20070040306



SKETCH SHOWING

SLOPE EASEMENT FOR SILVERBELL CROSSINGS

A POTION OF NORTHWEST QUARTER OF SECTION 28, T-13-S, R-13-E, G. S. R. & B. & M., PIMA COUNTY, ARIZONA

LEADSTAR ENGINEERING
Civil Engineering • Land Development • Community Planning
1010 N. Finance Center Dr., Suite 200 Tucson, AZ 85710 Ph: 520.546.8517/Fax: 520.571.1961

F. ANN RODRIGUEZ, RECORDER
RECORDED BY: M_S
DEPUTY RECORDER
1966 PE3

W
LINDA YANEY
ESTES CO
1010 N FINANCIAL CENTER DR 200
TUCSON AZ 85710

DOCKET:	12983
PAGE:	111
NO. OF PAGES:	5
SEQUENCE:	20070220048
	02/01/2007
EASMNT	11:04
MAIL	
AMOUNT PAID	$ 10.00

DOCUMENT TITLE: **Easement**

From: City of Tucson, a municipal corporation

To: First American Title Insurance Company, as trustee under Trust no.9165

TC8833 00111

When recorded return to:
Linda Yaney
The Estes Co.
1010 North Finance Center Dr., #200
Tucson, Arizona 85710

CONSTRUCTION, DRAINAGE AND MAINTENANCE EASEMENT

For and in consideration of the sum of Ten Dollars ($10.00), the receipt and sufficiency of which is acknowledged as in hand paid, the CITY OF TUCSON, a municipal corporation ("Grantor"), grants unto FIRST AMERICAN TITLE INSURANCE COMPANY, a California corporation as trustee under Trust no. 9165 and not otherwise ("Grantee"), an easement in connection with the construction associated with the Silverbell Crossings subdivision ("Project"). The purpose of this easement is to allow Grantee, its agents, contractors and assigns, to use the Property, as described herein, for construction, drainage and maintenance of a stormwater bleeder pipe for the Project. This Construction, Drainage and Maintenance Easement shall be on, over and across the real property described on Exhibit "A" attached hereto and by this reference incorporated herein (the "Property").

This easement is subject to the following terms and conditions:

1. Grantee shall have the right to construct and install a stormwater bleeder pipe on the above-described Property, together with the right to enter upon the Property for the purpose of maintaining the easement and its improvements located thereon.

2. Nothing herein contained shall be construed as granting title to the land belonging to the Grantor.

3. The Grantor may use the easement Property for any purpose not inconsistent with the Grantee's purpose of said easement and Grantor covenants to keep the easement Property open and free from any obstruction or encroachment at all times so that the Grantee may access its facilities.

4. Grantee shall repair and restore the Property to a like and equivalent condition as existed prior to the construction activity following any use of the Property for the above purposes.

5. All grants, covenants and conditions of this easement shall inure to the benefit of and be binding upon the successors-in-interest to the Grantee and Grantor.

6. It is understood and agreement that this easement is only for the purpose of the construction and maintenance of the stormwater bleeder pipe and not for recreation or other use by the general public.

20030240142

IN WITNESS WHEREOF, the undersigned Grantor has executed this Drainage Easement this 30 day of January, 2007

Approved as to form
January 11, 2007
Tobin Rosen
Principal Asst. City Attorney

CITY OF TUCSON, a municipal corporation

By: _____

Its: Robert E. Walkup, Mayor

ATTEST: _____

Kathleen S. Detrick, City Clerk

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

Before me this 31st day of January, 2007, personally appeared Robert E. Walkup who acknowledged himself/herself to be the Mayor of the CITY OF TUCSON, and as such, being authorized so to do, executed the foregoing instrument for the purposes set forth therein.

OFFICIAL SEAL
ROLANDA MAZEIKA
NOTARY PUBLIC-ARIZONA
PIMA COUNTY
My Comm. Exp. Feb. 10, 2009

_____
Notary Public

My Commission Expires:

STATE OF ARIZONA)
)ss.
COUNTY OF PIMA)

Before me this 31st day of January, 2007, personally appeared Kathleen S. Detrick who acknowledged herself to be the City Clerk of the CITY OF TUCSON, and as such, being authorized so to do, executed the foregoing instrument for the purposes set forth therein.

OFFICIAL SEAL
ROLANDA MAZEIKA
NOTARY PUBLIC-ARIZONA
PIMA COUNTY
My Comm. Exp. Feb. 10, 2009

_____
Notary Public

20070440003

LEGAL DESCRIPTION

Construction, Drainage, and Maintenance Easement

All that certain real property situated in the county of Pima, State of Arizona, being a portion of Section 28 Township 13 South Range 13 East, Gila and Salt River Base and Meridian, Pima County, Arizona, Containing 13,223.65 sq. ft. or 0.30 acres, more or less and more particularly described as follows.

Commencing at a found 1 ¼" ACP, at the NE corner of the SW quarter of said section 28;

Thence South 00° 20' 03" East along the east line of said SW quarter, a distance of 1253.40 feet;

Thence, South 88°10' 05" West, a distance of 253.73 feet to the **POINT OF BEGINNING**;

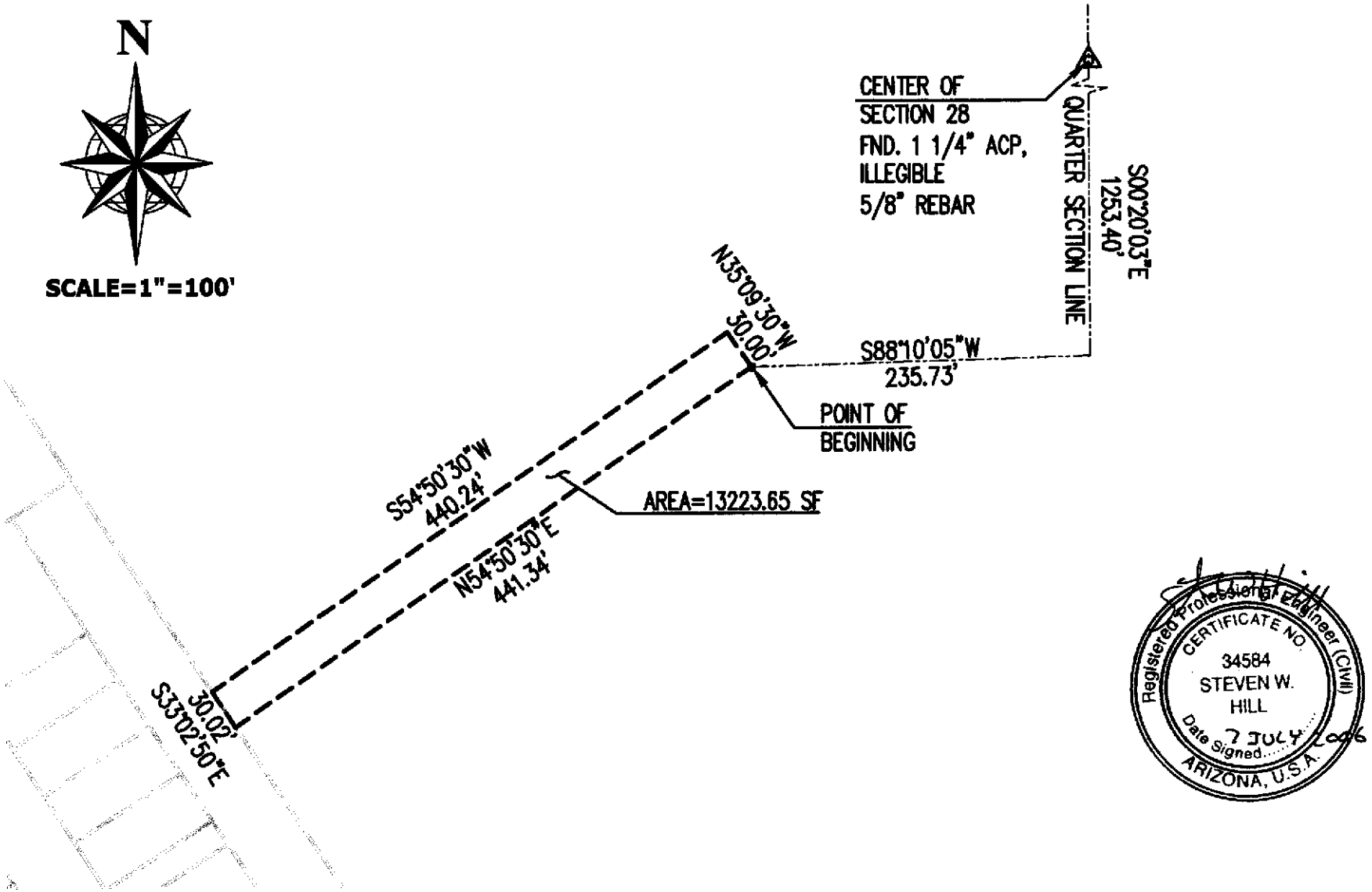
Thence North 35°09' 30" West, a distance of 30.00 feet;

Thence South 54°50' 30" West, a distance of 440.24 feet;

Thence South 33°02' 50" East, a distance of 30.02 feet;

Thence North 54°50' 30" East, a distance of 441. feet;
to the **POINT OF BEGINNING.**

20060880144



SKETCH SHOWING
CONSTRUCTION, DRAINAGE & MAINTENANCE EASEMENT FOR SILVERBELL CROSSINGS

A POTION OF NORTHWEST QUARTER OF SECTION 28, T-13-S, R-13-E,
G. S. R. & B. & M., PIMA COUNTY, ARIZONA

LEADSTAR ENGINEERING
Civil Engineering • Land Development • Community Planning
1010 N. Finance Center Dr., Suite 200 Tucson, AZ 85710 Ph: 520.546.6617/Fax: 520.571.1961

F. ANN RODRIGUEZ, RECORDER
RECORDED BY: M_S
DEPUTY RECORDER
1966 PE3

W
PIMA CO REAL PROPERTY SERVICES
ATTN: LAURA LANE
PICK UP

DOCKET: 12983
PAGE: 116
NO. OF PAGES: 5
SEQUENCE: 20070220049
02/01/2007
EASMNT 11:04

PICKUP
AMOUNT PAID $ 9.00

SEWER EASEMENT

For valuable consideration, City of Tucson, a municipal corporation, "Grantor(s)", does/do hereby grant to Pima County, a political subdivision of the State of Arizona, "County", a permanent easement for the construction, installation, maintenance, repair, operation, replacement and removal of sewer lines, manholes and appurtenances in, over, under and across the real property described on the attached **Exhibit "A"** (the "Property").

County may enter on the Property at any time for the purpose of construction, maintenance, repair, service, replacement and removal of any sewer lines, manholes and appurtenances. Following any use of the Property for the above purposes, County will restore the Property to its condition prior to County's use.

Grantor(s) may use the Property for any purpose consistent with the exercise of the easement by County. Grantor(s) agrees to maintain the easement free of any obstruction or encroachment sufficient to allow County access to its facilities at all times.

THIS EASEMENT is granted this 30 day of January, 2007.

CITY OF TUCSON, a municipal corporation

By _____
Mayor

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
Principal Assistant City Attorney

STATE OF ARIZONA)
)ss.
COUNTY OF PIMA)

This instrument was acknowledged before me this 31st day of January, 2007, by Robert E. Walkup, as Mayor, and Kathleen S. Detrick, as City Clerk of the City of Tucson, a municipal corporation, as the Act of said municipal corporation.

OFFICIAL SEAL
ROLANDA MAZEIKA
NOTARY PUBLIC-ARIZONA
PIMA COUNTY
My Comm. Exp. Feb. 10, 2009

_____
Notary Public

RES #2007-022 & RP #527

Board of Supervisors Approval:		S____/T____/R____	
Agent:	File #:	Activity #:4RPWWMADM8	P [ ] De [X] Do [ ] E [ ]

Easement-Sewer - Rev. 09-05

12983 0116

5

EXHIBIT A (page 1 of 4)

LEGAL DESCRIPTION

Sewer Easement

All that certain real property situated in the county of Pima, State of Arizona, being a portion of Section 28 Township 13 South Range 13 East, Gila and Salt River Base and Meridian, Pima County, Arizona, Containing 22,220.10 sq. ft. or 0.52 acres, more or less and more particularly described as follows.

Commencing at a found 1 ¼" ACP, at the NE corner of the SW quarter of said section 28;

Thence South 00° 20' 03" East along the east line of said SW quarter, a distance of 679.09 feet;

Thence, South 89° 39' 57" West, a distance of 0.14 feet to the **POINT OF BEGINNING**;

Thence South 88°42' 27" West, a distance of 236.16 feet;

Thence South 19°22' 22" West, a distance of 218.88 feet;

Thence South 86°05' 47" West, a distance of 662.32 feet;

Thence South 33°02' 50" East, a distance of 22.90 feet;

Thence North 86°05' 47" East, a distance of 664.34 feet;

Thence North 19°22' 22" East, a distance of 218.21 feet;

Thence North 88°42' 27" East, a distance of 222.10 feet;

Thence North 00° 37' 58" West, a distance of 20.00 feet; to the **POINT OF BEGINNING.**

20060330117

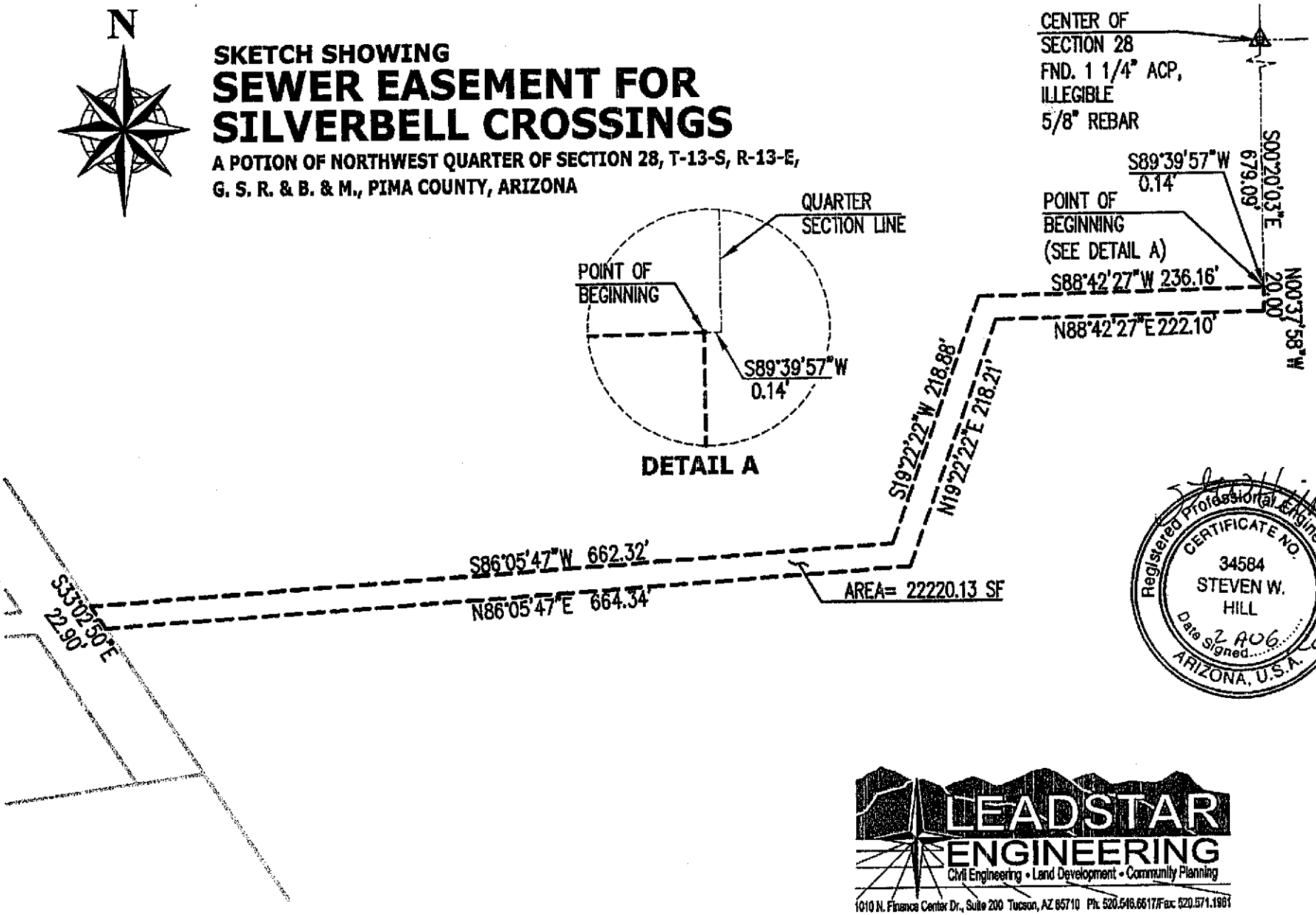
EXHIBIT A (page 2 of 4)

SKETCH SHOWING

SEWER EASEMENT FOR SILVERBELL CROSSINGS

A POTION OF NORTHWEST QUARTER OF SECTION 28, T-13-S, R-13-E,
G. S. R. & B. & M., PIMA COUNTY, ARIZONA

DETAIL A



Registered Professional Engineer (Civil)
CERTIFICATE NO.
34584
STEVEN W.
HILL
Date Signed 2-AUG-06
ARIZONA, U.S.A.

LEADSTAR ENGINEERING
Civil Engineering • Land Development • Community Planning
1010 N. Finance Center Dr., Suite 200 Tucson, AZ 85710 Ph: 520.546.6617/Fax: 520.571.1987

EXHIBIT A (page 3 of 4)

LEGAL DESCRIPTION

Sewer Easement

All that certain real property situated in the county of Pima, State of Arizona, being a portion of Section 28 Township 13 South Range 13 East, Gila and Salt River Base and Meridian, Pima County, Arizona, Containing 12,929.25 sq. ft. or 0.30 acres, more or less and more particularly described as follows.

Commencing at a found 1 ¼" ACP, at the NE corner of the SW quarter of said section 28;

Thence South 00° 20' 03" East along the east line of said SW quarter, a distance of 1245.85 feet;

Thence, South 89° 39' 57" West, a distance of 2.25 feet to the **POINT OF BEGINNING**;

Thence South 62°47' 35" West, a distance of 510.52 feet;

Thence South 56°57' 10" West, a distance of 136.97 feet;

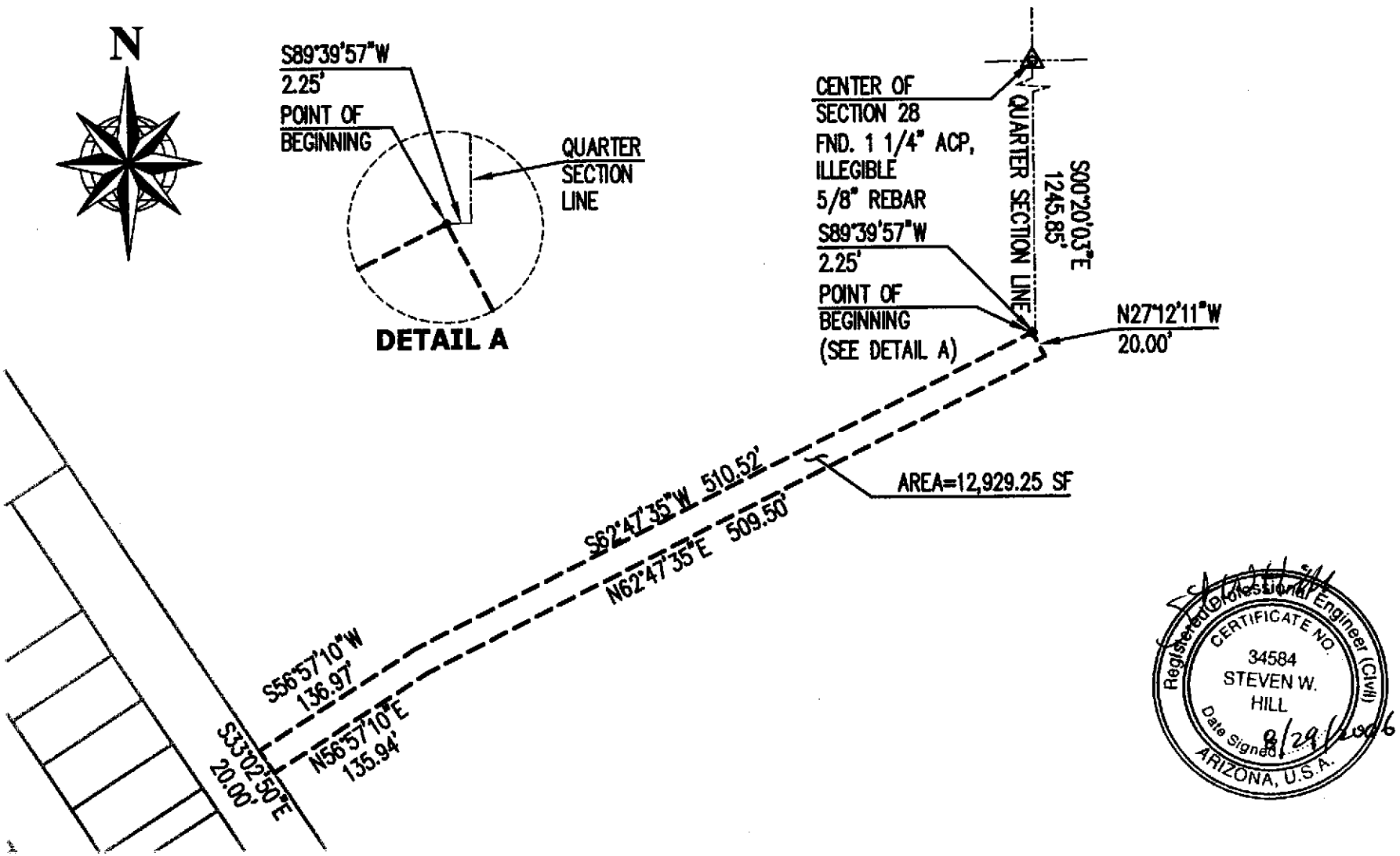
Thence South 33°02' 50" East, a distance of 20.00 feet;

Thence North 56°57' 10" East, a distance of 135.94 feet;

Thence North 62°47' 35" East, a distance of 509.50 feet;

Thence North 27°12' 11" West, a distance of 20.00 feet;
to the **POINT OF BEGINNING.**

20060030116



Registered Professional Engineer (Civil)
CERTIFICATE NO.
34584
STEVEN W.
HILL
Date Signed 8/29/2006
ARIZONA, U.S.A.

SKETCH SHOWING

SEWER EASEMENT FOR SILVERBELL CROSSINGS

A POTION OF NORTHWEST QUARTER OF SECTION 28, T-13-S, R-13-E, G. S. R. & B. & M., PIMA COUNTY, ARIZONA

LEADSTAR ENGINEERING
Civil Engineering • Land Development • Community Planning
1010 N. Finance Center Dr., Suite 200 Tucson, AZ 85710 Ph: 520.548.8617/Fax: 520.571.1961

EXHIBIT A (page 4 of 4)

OPERATIONS & MAINTENANCE REPORT
SILVERBELL FIRING RANGE

Prepared for

City of Tucson – Environmental Services

August 15, 2008

OPERATIONS & MAINTENANCE REPORT
SILVERBELL FIRING RANGE
TUCSON, ARIZONA

Prepared for
City of Tucson – Environmental Services
100 North Stone Avenue, 2nd Floor
Tucson, Arizona, 85701

August 15, 2008

Brown and Caldwell Constructors Project #: 134894

BROWN AND CALDWELL
CONSTRUCTORS

110 South Church Avenue, Suite 2300
Tucson, Arizona, 85004

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Appendix C	Laboratory Analytical Reports
Appendix D	Work Plan & Health and Safety Plan
Appendix Z	CD – PDF version of Entire Report

LIST OF ACRONYMS

°C	degrees Celsius
A.A.C.	Arizona Administrative Code
A.R.S.	Arizona Revised Statutes
ADEQ	Arizona Department of Environmental Quality
AZPDES	Arizona Pollutant Discharge Elimination System
BCC	Brown and Caldwell Constructors
COC	contaminants of concern
CY	cubic yards
ESC	Environmental Science Corporation
LCS	laboratory control sample
mg	milligrams
mg/Kg	milligrams per kilogram
mg/L	milligrams per liter
mg/m3	milligrams per cubic meter
MS/MSD	matrix spike/matrix spike duplicate
MT^2	Metals Treatment Technologies
NFA	No Further Action
NOI	Notice of Intent
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
PAH	polynuclear aromatic hydrocarbons
PCS	petroleum contaminated soil
PQL	practical quantitation limit
QA/QC	quality assurance/quality control
RAR	Remedial Action Report
RCRA	Resource Conservation and Recovery Act
RPD	relative percent difference
rSRL	residential soil remediation level
SRL	soil remediation level
SSHP	Site Safety and Health Plan
SWPPP	Storm Water Pollution Prevention Plan
TC	toxicity characteristic
TCLP	toxicity characteristic leaching procedure
TWA	time-weighted average
USEPA	U.S. Environmental Protection Agency
VRP	Voluntary Remediation Program
WP	Work Plan

1. INTRODUCTION

This Operations and Maintenance(O&M) Report describes the procedures implemented and the analytical results obtained during the conduct of O&M activities at the Silverbell Firing Range (Site). The Site is located at 3200 North Silverbell Road in Tucson, Arizona (Figure 1). The Site is owned by the City of Tucson (City), who contracted with Brown and Caldwell Constructors (BCC), a wholly owned subsidiary of Brown and Caldwell licensed in the State of Arizona to perform general contracting (ROC 145798), to provide environmental engineering consulting services throughout the project. These services consisted of the preparation of the O&M Work Plan (WP), preparation of a health and safety plan (HASP), performance of baseline sample collection, O&M oversight, soil clearance sampling, and preparation of this O&M report. Brown and Caldwell retained Metals Treatment Technologies, LLC (MT^2) to perform the required soil excavation, metal separation and recycling, soil stabilization, waste transportation and disposal, and site restoration.

1.1 Site Description and Project Background

According to the City Real Estate Department records, as stated in the City of Tucson Request for Proposal dated June 13, 2007, the City has owned the property since 1930, and originally contained a wastewater treatment plant. In 1953, the City closed and converted part of the wastewater plant into an armory. The target storage and tower for the firing range were erected in 1954. The shooting range has remained relatively unchanged. However, a backstop systems consisting of metal plates and a conveyor were removed in 1990.

A lead reclamation event was conducted in mid-1990s (after conveyor system disassembly) in which the soil backstop was excavated and screened. The shooting lanes and range floor were also screened for metals removal. The reclamation event resulted in 24 tons of projectiles and screened soil, which were sold to a smelter. No lead reclamation has occurred since. Two soil berms currently act as backstops.

The area of the range floor is approximately 200 feet (ft) by 150 ft. The northern half of the shooting range is covered by a shade structure standing approximately 15 ft high. Two berms (primary and secondary) are located directly to the north of the shooting range. The primary backstop extends from the base of the range floor to approximately 20 ft high. The secondary berm located north of the primary berm extending from its top, is approximately 30 ft wide by 300 ft long and 20 ft high. The armory is located in the southeast corner of the range floor.

1.2 Operations and Maintenance Objective

The City elected to perform O&M activities and to remediate the Site to residential soil remediation levels (rSRLs) to allow management of the property without environmental restrictions. These activities were performed solely for O&M purposes outside of regulatory oversight. However, the O&M activities performed under this contract were completed according to best management practices and current regulations at the time the work was completed.

None of the contaminants of concern (COCs) is a known human carcinogen identified in A.A.C. R18-7-205.D. Additionally, the current or currently intended future use of the property does not include a child care facility or a school where children below the age of 18 are reasonably expected to be in frequent, repeated contact with the soil. Therefore, the O&M objective for the Site is based on the rSRLs that correspond with a 1×10^{-5} excess lifetime cancer risk.

This section further states that a person who conducts a soil remediation based on the standards set forth in R18-7-205 or R18-7-206 shall remediate soil so that any concentration of contaminants remaining in the soil after remediation does not:

1. Cause or threaten to cause a violation of Water Quality Standards prescribed in 18 A.A.C. 11. If the remediation level for a contaminant in the soil is not protective of aquifer water quality and surface water quality, the person shall remediate soil to an alternative soil remediation level that is protective of aquifer water quality and surface water quality.
2. Exhibit a hazardous waste characteristic of ignitability, corrosivity, or reactivity as defined in A.A.C. R18-8-261(A). If the remediation level for a contaminant in the soil results in leaving soils that exhibit a hazardous waste characteristic other than toxicity, the person shall remediate soil to an alternative soil remediation level such that the soil does not exhibit a hazardous waste characteristic other than toxicity.
3. Cause or threaten to cause an adverse impact to ecological receptors. If the Department determines that the remediation level for a contaminant in soil may impact ecological receptors based on the existence of ecological receptors and complete exposure pathways, the person shall conduct an ecological risk assessment. If the ecological risk assessment indicates that any concentration of contaminants remaining in the soil after remediation causes or threatens to cause an adverse impact to ecological receptors, the person shall remediate soil to an alternative soil remediation level, derived from the ecological risk assessment that is protective of ecological receptors.

Review of the contaminants associated with the proposed treatment areas indicated that use of pre-determined remediation levels (R17-7-205) was appropriate in determining the concentration of contaminants in soil requiring treatment.

1.3 Operations and Maintenance Approach

To accomplish this O&M objective, the following approach was implemented:

- meet all regulatory requirements for site work including:
  - lead in construction monitoring requirements,
  - storm water management and erosion control,
  - control of fugitive dust emissions,
  - waste characterization and management, and
  - site security;
- utility clearance for all areas where excavation may occur;
- coordination and participation in City's preconstruction meetings;
- collect baseline samples and perform exploratory excavations to evaluate the basal soil within the secondary berm;
- delineate impacted areas and perform excavation, treatment and disposal operations;
- conduct soil clearance sampling after O&M activities are complete to confirm that the concentration of remaining metals are below their respective rSRLs; and
- collect wipe samples from the armory building surfaces.

2. OPERATION & MAINTENANCE ACTIVITIES

The following sections describe the O&M tasks implemented at the Site. During the O&M activities, storm water control and dust control procedures, as well as personal and area perimeter air monitoring were implemented in accordance with the work plan (WP) and/or with specific permit requirements.

2.1 Community Relations

Prior to the start of field activities, Brown and Caldwell Constructors and the City prepared and distributed a general public notice to property owners located within ⅛ mile of the Site that may encounter potential impacts either by dust or noise from the work area. This notice was delivered as door hangings, and was in the form of a fact sheet containing contact information for Brown and Caldwell Constructors and City of Tucson's Project Managers, as well as a description of the nature and type of O&M activities to be conducted, and the anticipated schedule of field activities. A copy of the general public notice is included in Appendix A.

In addition to the above notice, a sign was located near the southwest corner of the Site including the names and telephone numbers of persons who may be contacted for information regarding the site activities.

2.2 Baseline Composite Soil Sampling

Baseline composite soil samples from the secondary berm, primary backstop, the range floor, and the basal layer of the secondary berm were collected using the following procedures:

- Prior to sampling, new nitrile gloves were worn to prevent cross-contamination.
- Each sub-sample was collected from the specified locations of the range floor, primary, and secondary berms using a disposable polyethylene scoop or similar.
- A laboratory-supplied 4-ounce glass jar was filled with soil material from each sub-sample location. The soil was placed into a clean 1-gallon plastic sealable bag.
- Soil from each sub-sample was thoroughly mixed in the 1-gallon plastic bag to generate a homogenized material. The 4-ounce glass jar was filled with the homogenized material to comprise the composite sample.
- Each sample container was properly labeled, logged onto chain-of-custody and field sampling forms, placed in sealable plastic bags, and stored with ice in an insulated container maintained at 4 degrees Celsius (°C) until submitted to the laboratory for analyses.

Specific identification used for the samples conformed to the following naming convention:

For baseline composite samples collected from the near surface of the secondary berm, the sample identification was **COT-BSB-NS-E/EC/C/WC/W**, where COT stands for City of Tucson, BSB refers to baseline sample from the secondary berm, NS refers to near surface, and E/EC/C/WC/W is a two letter designation of the segment of the berm where the composite sample was collected.

For baseline composite samples collected from the primary backstop, the sample identification was **COT-BPB-E/EC/C/WC/W**, where COT stands for City of Tucson, BPB refers to baseline sample from primary backstop, and E/EC/C/WC/W is a two letter designation of the segment of the berm where the composite sample was collected.

For baseline composite samples collected from each quadrant of the range floor, the sample identification was **COT-BRF-SW/NW/NE/SE**, where COT stands for City of Tucson, BRF refers to baseline sample from range floor, and SW/NW/NE/SE is a two letter designation of the quadrant where the sample was collected.

For baseline composite samples collected from the basal soil of the secondary berm, the sample identification was **COT-BSB-BS-W/C/E-##**, where COT stands for City of Tucson, BSB refers to baseline sample from the secondary berm, BS refers to basal soil, W/C/E refers to the trench from which the composite sample was collected (west, central or east), and ## refers to the depth in inches at which the sample was collected.

Dates and times of collection for each sample were noted on the container label, the field notes, and the chain-of-custody. The required documentation for each sample was recorded in the field notes, as applicable.

The baseline composite samples were analyzed for total lead and/or antimony, arsenic and copper, using USEPA Test Method 6010B. The analytical results obtained are discussed in Section 3.1.

2.3 Treatment Process

Two methods of treatment were used at the site to address soil impacted with lead: chemical stabilization using EcoBond® and a mechanical screening process to remove bullet sized fragments. The following sections provide a summary of each treatment method implemented during the O&M activities.

2.3.1 Chemical Stabilization (EcoBond®)

The method of treatment for the lead impacted soil was chemical stabilization. The reagent used to treat the lead impacted soil was EcoBond®, which is a phosphate-based stabilizing agent that chemically bonds with lead and other metals when mixed with the soil. MT² performed the soil treatment, confirmation sampling, and worker air monitoring and Brown and Caldwell Constructors performed clearance sampling and perimeter air monitoring. The treatment goal was the resource conservation and recovery act (RCRA) toxicity characteristic (TC) limit for lead (5.0 milligrams per liter [mg/L]).

The EcoBond® was delivered by truck and stored on site in a manageable stockpile. MT² conducted treatment of soils in place prior to excavating the material. The area was prepared for treatment by loosening the soil to the desired depth with an excavator or dozer with rippers. The EcoBond® pellets were dispersed over the surface of the area to be treated using a front-end loader. The EcoBond® was mixed into the soil using an excavator or dozer with rippers to ensure adequate dispersion. A water truck sprayed the area during mixing to keep fugitive dust emissions to a minimum and to expedite the bonding process. Details regarding EcoBond® are included in Sections 6.0 and 7.0 of the MT² report (Appendix B).

2.3.2 Mechanical Screening

MT² used mechanical screening to recover bullet-sized fragments from soil and to evaluate for potential metals recycling. Soil treated with EcoBond® from the first lift of the range floor and the primary backstop was screened. Additionally, approximately three inches of soil from the east and west side slope areas of the range floor were also excavated and screened. This material did not receive EcoBond® treatment, however, the mechanical screening removed some of the bullet-sized fragments that were visually observed in the field and the remaining soil was put back in place. A sample from the screened material collected by MT² detected a lead content of only 1 to 4 percent by weight. The presence of a large volume of bullet-sized rocks resulted in a low lead concentration and; therefore, a very low recyclable value. Screened material was then treated with EcoBond® and disposed of with metals impacted soil. Details regarding the soil screening and evaluation for metal recycling are included in Section 7.0 of the MT² report (Appendix B).

2.4 Treatment Confirmation Sampling

Following the in-place mixing, one composite soil sample was collected from each 100 cubic yard (CY) of treated material. Treatment confirmation composite samples were collected using the following procedures:

- Prior to sampling, new nitrile gloves were worn to sample treated soil to prevent cross-contamination.
- A total of four sub-samples were collected from various locations of the treated area at an approximate depth of 12 inches, using a disposable polyethylene scoop.
- A laboratory-supplied, 4-ounce glass jar was filled with soil material from each sub-sample location. The soil was then placed into a clean 1-gallon plastic resealable bag.
- Soil from each sub-sample was thoroughly mixed to generate a homogenized material. A new laboratory-supplied, 4-ounce glass jar was then filled with the homogenized material.
- Each sample container was labeled, logged onto chain-of-custody and field sampling forms, placed in resealable plastic bags, and stored with ice in an insulated container maintained at 4°C until submitted to the laboratory for analyses.

Dates and times of collection for each sample were noted on the container label, the field notes, and the chain-of-custody. The required documentation of each sample was recorded in the field notes, as applicable.

Treated confirmation composite samples were analyzed for toxicity characteristic leaching procedure (TCLP) for the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury) using U.S. Environmental Protection Agency (USEPA) Test Methods 6010B and 7470. The analytical results obtained are discussed in Section 3.2. The material was left in place until the laboratory results confirmed that the TCLP analysis was below the TC limit. Material associated with each lead treatment confirmation sample results below 5 mg/L, was excavated and stockpiled.

2.5 Treatment, Excavation and Clearance Sampling

Clearance samples were collected from the Site to demonstrate that contaminants of concern (COCs) are not present at concentrations in excess of their respective rSRLs. Clearance soil samples were collected from the secondary berm, primary backstop, and the range floor. Lead wipe samples were collected from the armory building.

2.5.1 Clearance Soil Sampling

Following treatment, approximately 3 inches of treated soil were removed from the top and south face of the secondary berm. Clearance soil samples were collected along the top of the secondary berm following treatment and removal as shown in Figure 3. Eight soil samples were collected at intervals of approximately 30 ft starting from the east end of the secondary berm.

The primary backstop was treated in two sections. Approximately 1.5 ft of soil was removed from 150 ft of the south face of the primary backstop starting at the west end of the berm. For the remaining 50 ft of the primary backstop on the east side, 1 ft of soil was removed. The adjustment to the depth of excavation was based on the presence of a retaining wall located behind the primary backstop. Eight clearance soil samples were collected at the locations shown in Figure 4.

For the initial treatment of the range floor, 6 inches of soil was removed. A total of 12 soil samples were collected from the range floor, 3 from each quadrant, at the locations shown in Figure 5.

The area between the primary and secondary berm was treated and approximately 3 inches of treated soil, for a total of 22 CY, were removed from that area.

Wood, metal, and debris was located along the southern portion of the range floor. Once the debris was removed from the area south of the four main quadrants of the range floor, two composite soil samples were collected from the western and the eastern ends of the area. The sample identifications used were COT-RF-BW/BE, where COT stands for City of Tucson, RF stands for range floor, and BW/BE stands for "back west" or "back east" section. The results are discussed in Section 3.1.

A concrete pipe located in the northeast portion of the range floor used for rifle shooting was removed. The soil above and around the pipe was removed and stockpiled for later use as backfill following pipe removal. The pipe was removed from the range as well as soil beneath and in the pipe. Soil beneath and inside the pipe was treated with EcoBond®. A total of eight CY were treated from the area of the rifle tunnel. On April 21, 2008, a composite soil sample was collected and analyzed for total lead using USEPA Test Method 6010. The sample identification used was COT-PIPE-01. The results are discussed in Section 3.5.

The clearance soil samples were collected using the following procedures:

- Prior to sampling, new nitrile gloves were worn at each new composite sampling location to prevent cross-contamination.
- Clearance samples were collected from a depth of 0 to 3 inches using disposable polyethylene scoops.
- Using the sampling tool, the top layer of soil, vegetation, roots, pebbles, and/or debris was removed from the sampling area.
- A laboratory-provided 4-ounce glass jar was filled with soil material from each sample location.
- Each sample container was properly labeled, logged onto a chain-of-custody and field sampling forms, placed in sealable bags, and stored with ice in an insulated container maintained at 4ºC until submitted to the laboratory for analyses.

The naming convention for the clearance samples followed **COT-RF/PB/SB-##,** where COT stands for City of Tucson, followed by the appropriate two letter location designation (RF for range floor, PB for primary backstop, and SB for secondary berm), followed by the numeric identification for each sample location. If additional treatment and removal of material was necessary based on elevated metals result, the naming convention was appended with **-##**, representing the additional number of inches of soil that was treated and removed from the area.

The dates and times of collection for each sample were also noted on the container label, the field notes, and the chain-of-custody. The required documentation of each sample was recorded in the field notes, as applicable.

The soil clearance samples were submitted to the laboratory to be analyzed for total lead and/or arsenic, antimony, and copper by USEPA Test Method 6010. The analytical results obtained are discussed in Section 3.3.

Additionally, Brown and Caldwell Constructors and MT[2] utilized a hand held x-ray fluorescence (XRF) analyzer to field screen levels of total lead in surficial soils. The XRF was used to give real time estimates of total lead in surficial samples. Soils analyzed by the XRF were placed in a clear plastic bag. The XRF was placed on the surface of the bag and held in place for at least one minute to collect a reading. Results of the XRF are discussed in Section 3.3.

2.5.2 Armory Building Lead Wipe Sampling

BCC collected a total of six lead wipe samples from the armory building using a sampling gauze and a 10 centimeter-square (cm^2) template using the following procedure:

- Sample location was identified randomly from the interior of the building.

- The template was placed flat against the surface at the selected sample location.
- The gauze was used to wipe the area on the surface exposed by the template in ascending horizontal strokes.
- The gauze was then placed in a 4-ounce glass jar and labeled. The sample was stored in a sealable plastic bag and stored with ice in an insulated container maintained at 4°C until submitted to the laboratory for analyses.
- The template was cleaned and dried between each use.

Specific identification used for the samples conformed to the following naming convention: **COT-AB-MMDD**-##, in sequential order for each random location sampled where COT stands for City of Tucson, AB stands for "Armory Building," MM is the two-digit month, DD is the two-digit day, and ## is the sequential number of the sample collected.

Dates and times of collection for each sample were noted on the container label, the field notes, and the chain-of-custody. The required documentation of each sample was recorded in the field notes, as applicable. Samples were submitted to the laboratory for analysis of total lead using USEPA Test Method 6010. The analytical results obtained are discussed in Section 3.4.

2.6 Transportation and Disposal of Treated Material

Once the analytical results verified the treatment goal was met (TCLP lead less than 5.0 mg/L), MT^2 submitted each analytical laboratory report to City of Tucson's Los Reales Landfill (Los Reales) for review and approval. Following acceptance of each 100 CY of treated material, MT^2 loaded, transported, and disposed of the treated material at Los Reales as non-hazardous waste. The trucking company used was Rueger's H20 Trucking. A total of 71 truck loads, containing 1,521.05 tons of screened and treated material, were disposed at Los Reales as non-hazardous waste. The waste disposal manifests are included in MT^2's report in Appendix B.

2.7 Storm Water Management

The O&M project involved construction-related activities regulated under the Arizona Pollutant Discharge Elimination System (AZPDES) Program for Discharges from Construction Activities (General Permit). Accordingly, MT^2 prepared and submitted to Arizona Department of Environmental Quality (ADEQ) a Notice of Intent (NOI) pursuant to the General Permit. Because the proposed discharge from the O&M activities was classified as a "Routine Discharge" under Part II.B.4 of the General Permit, the NOI was submitted to ADEQ within two business days prior to any construction activity. A Storm Water Pollution Prevention Plan (SWPPP) was developed for this project and maintained on Site by MT^2.

2.8 Dust Control

MT^2 obtained a dust control permit from Pima County Department of Environmental Quality – Air Program for earthmoving activities conducted at the Site. The procedural requirements specified in the associated dust control plan were conducted on Site to reduce fugitive dust emissions.

2.9 Air Monitoring

During O&M activities, MT^2 and Brown and Caldwell Constructors performed worker area and perimeter air monitoring in accordance with the procedures described in the air monitoring plan included in the WP. The purpose of the air monitoring was to identify and quantify airborne contaminants to verify the level of worker

protection and evaluate potential off-site impacts. Air monitoring was performed using air sampling pumps and particulate monitors (Data-Ram) as summarized below:

- Baseline air monitoring, using the Data-Ram, was performed in morning prior to the start of O&M activities from April 16, 2008 – April 25, 2008. After which monitoring was discontinued based on continuous observations of low levels of particulates detected and as described in Section 5 of the Health and Safety Plan (Brown and Caldwell, 2008).
- Real-time measurements were made as near as feasible to the breathing zone of workers with the greatest exposure potential in each active work area.
- Perimeter air monitoring was performed at scheduled intervals (approximately every 30 minutes) during O&M activities using a Data-Ram between April 16, 2008 and April 25, 2008.

The potential generation of lead-containing fugitive dust emissions during O&M activities was minimized using dust control procedures. Worker and perimeter air monitoring was conducted to verify the adequacy of control measures. A total of 15 air filter samples were collected and submitted to Turner Laboratories for total lead analyses using USEPA Test Method 6010. Analytical results obtained are presented in MT^2's report in Appendix B.

3. ANALYTICAL RESULTS

This section presents the analytical results obtained from the analyses of treatment confirmation samples; surface soil clearance samples from the secondary berm, the primary backstop, and the range floor; lead wipe samples from the armory building; and continuous air monitoring samples.

3.1 Baseline Composite Soil Samples

A total of 15 (14 parent samples and 1 duplicate sample) baseline composite soil samples were collected from the secondary berm, the primary backstop and the range floor on March 24, 2008. The parent baseline soil samples consisted of five composite soil samples from the secondary berm, five composite soil samples from the face of the primary backstop, and four composite soil samples (one for each quadrant) from the range floor. All baseline composite soil samples were analyzed for total lead using USEPA Test Method 6010B. Additionally, a total of seven samples from these three areas (2 samples from each area plus the duplicate sample) were also analyzed for total antimony, arsenic, and copper using USEPA Test Method 6010B.

The basal layer of the secondary berm was investigated on April 21, 2008 by excavating three trenches: one on the west end, one centrally located, and one on the east end of the berm (Figure 2). For each trench, three composite samples were collected from each depth of 3, 18, and 30 inches above the base of the berm and were composed of three sub-samples from each depth. All samples were submitted for total lead, antimony, arsenic and copper, using USEPA Test Method 6010B. No samples from the basal layer of the secondary berm had results that exceeded the respective rSRLs; therefore, no further excavation of the overburden of the secondary berm was conducted.

These results for all of the baseline soil samples are summarized in Table 1 and the complete analytical laboratory reports are included on compact disc in Appendix C.

3.2 Treatment Confirmation Samples

During the period of April 12 through April 28, 2008, MT[2] collected a total of 15 treatment confirmation soil samples. Samples were submitted to Turner Laboratories for TCLP analyses for 8 RCRA metals (arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury) to confirm treatment effectiveness in reducing lead leachability to below the 5.0 mg/L TC limit. The analytical results are summarized in Table 2. Complete analytical laboratory reports are included on compact disc in Appendix C.

The analytical results indicate that the concentration of TCLP lead in the 15 samples were all non-detect (i.e., less than 1.0 mg/L) except one sample (TCLP-0423-05) which had a concentration of 1.1 mg/L, which is well below the 5.0 mg/L treatment goal. All other metals analyzed were below their respective laboratory detection limits.

3.3 Clearance Soil Sampling

A total of 54 surface soil clearance samples (consisting of 37 parent samples, 5 duplicate samples, and 12 samples from areas that required additional excavation and treatment) were collected and submitted to Turner Laboratories for total lead analyses using USEPA Test Method 6010. Additionally, 10 of the parent surface soil clearance samples were analyzed for total arsenic, antimony, and copper using USEPA Test Method 6010B. The analytical results of metals are summarized in Table 3. Complete analytical laboratory reports are included on compact disc in Appendix C.

Based on the initial clearance soil sample results, several areas were determined to contain concentrations of total lead, antimony, and/or arsenic in excess of their rSRLs. For the secondary berm, 1 sample (COT-SB-05) exceeded the rSRLs for lead and antimony. MT[2] treated and excavated an additional 3 inches of soil from this area. Brown and Caldwell Constructors collected another surface soil clearance sample (COT-SB-05+03) from the newly exposed area and the analytical results indicated that the concentrations of lead and antimony were below their rSRLs. Similarly, the primary backstop had three soil samples with results that exceeded the rSRL for lead and/or antimony. An additional 6 inches was treated and removed from these areas and three secondary clearance samples were collected and analyzed. The three secondary clearance samples for the primary backstop contained metal concentrations below their rSRLs. The range floor had seven samples that exceeded rSRLs for lead and/or antimony and arsenic. Three to six inches of additional material was treated and removed from the areas associated with these samples. Figure 5 shows the areas of the range floor that had additional soil removed and the additional depth of excavation. All of the secondary clearance samples associated with the additional excavations on the range floor contained metal concentrations below their respective rSRLs.

3.4 Armory Building Lead Wipe Sample Results

A total of eight lead wipe samples, consisting of six primary samples and two equipment blanks, were collected from the armory building interior walls. These eight samples were submitted to Turner Laboratories for total lead analyses using USEPA Test Method 6010. The analytical results of total lead analysis are summarized in Table 4. Results were reported in milligram (mg) per wipe. All results were reported as less than the detection limit of 10 mg per wipe. Complete analytical laboratory reports are included on compact disc in Appendix C.

3.5 Miscellaneous Soil Sampling Results

Two composite soil samples were collected from the western and the eastern ends of the southern portion of the range floor. These two samples were analyzed for total lead using USEPA Test Method 6010B.

A concrete pipe located in the northeast portion of the range floor used for rifle shooting was removed. On April 21, 2008, a composite soil sample was collected and analyzed for total lead using USEPA Test Method 6010. The sample identification used was COT-PIPE-01.

The results obtained from the above three composite samples are also presented in Table 4. None of these soil samples contained concentrations of lead above the rSRL of 400 milligrams per kilogram (mg/Kg).

3.6 Air Sampling

During O&M activities, a total of 15 daily personal air filter samples were collected and submitted to Turner Laboratories for total lead analyses using USEPA Test Method 6010. Analytical laboratory reports are included on compact disc in Appendix C. None of the 15 air samples contained detectable concentrations of total lead.

3.7 Quality Assurance/Quality Control

Field quality assurance/quality control (QA/QC) samples collected during the O&M project consisted of duplicate samples. Brown and Caldwell Constructors collected duplicate samples at a frequency of 1 per 10 field samples collected, excluding the lead wipe samples collected in the armory building. Duplicate samples were collected in the same manner as original samples and analyzed for the same parameters.

Turner prepared and analyzed several types of QA/QC samples, including method blanks, laboratory control samples (LCS), surrogate spike analyses, matrix spike/matrix spike duplicate (MS/MSD) samples, and check standards. Results of these QA/QC samples analyses are included with the analytical laboratory reports provided on compact disc in Appendix C.

3.8 Data Verification and Validation

The verification and validation of data generated during this O&M effort was performed in a manner that is consistent with industry standards. Upon receipt of complete and final analytical reports from the laboratory, Brown and Caldwell Constructors performed a Level II data review on 100 percent of the soil clearance sample results.

At a minimum, the following activities were performed:

- Comparison of primary and field duplicate samples analytical results.
- Evaluation of detections in blank samples.
- Evaluation of matrix spike recoveries.
- Evaluation of laboratory control samples.
- Evaluation of surrogate spike analyses.

The acceptance criteria applied during evaluation of the analytical data and the results of the evaluation are provided below:

- **Comparison of primary and field duplicate samples analytical results**: The relative percent difference (RPD) for each analyte should be ± 50 percent. Four of the 6 duplicate treatment confirmation samples collected exceeded the 50 percent RPD limit.
  - Duplicate sample COT-B-DUP01 (associated with sample COT-BPB-C, Table 1) exceeded the RPD for all 4 metals and ranged from 58 percent to 150 percent. These elevated RPD values may be the result of variability between the samples collected due to the variability of site conditions. These two samples contained very high concentrations of metals, significantly higher than the rSRLs; therefore, the data is deemed acceptable.
  - Duplicate sample COT-DUP03 (associated with COT-BSB-BS-C-06, Table 1) exceeded the RPD for lead (60 percent). The detected concentrations were very low and significantly lower than the rSRL of 400 mg/Kg; therefore, the data is deemed acceptable.
  - Duplicate sample COT-DUP04 (associated with COT-RF-07, Table 3) was analyzed for all 4 metals but only antimony slightly exceeded the RPD (51 percent). The RPD for the three other metals associated with this sample ranged from 7 to 35 percent. The slight exceedance for antimony is attributed to soil variations in the sample collected. These two samples contained very high concentrations of metals, significantly higher than the rSRLs; therefore, the data is deemed acceptable.
  - Duplicate sample COT-DUP06 (associated with COT-RF-07+06, Table 3) was analyzed for three metals. Only lead had a slight RPD exceedance of 52 percent. The RPD for the other two analytes were 0 to 4 percent. The exceedance for lead is attributed to variation within the samples, and both concentrations were well below the rSRL. Therefore, the data is deemed acceptable.
- **Evaluation of detections in blank samples**: No analytes should be detected in the method blanks at concentrations greater than their respective practical quantitation limits (PQLs). Lead and antimony were detected in one of the method blanks. Concentrations were very low and were flagged appropriately by Turner Laboratories.

- **Evaluation of MS recoveries**: The recovery rate should be between 75 and 125 percent. Turner Laboratories properly "flagged" any analytical results where the MS recovery rate was outside the above limits.
- **Evaluation of laboratory control samples**: The RPD between the LCS and the LCSD should not exceed 20 percent. Turner Laboratories properly "flagged" any analytical results where the RPD between the LCS and the LCSD was outside the above limits.

4. CONCLUSIONS AND RECOMMENDATIONS

Based on the clearance samples analytical results obtained during the O&M activities, Brown and Caldwell Constructors has the following conclusions:

1. The EcoBond® treatment process was effective in reducing the leachability of lead to below the TC limit of 5.0 mg/L, allowing approximately 1,083 CY of treated material to be disposed as non-hazardous waste at the Los Reales Landfill.
2. The surface soil secondary berm, primary backstop, and range floor samples analytical results confirmed that the concentrations of total lead, antimony, arsenic, and copper remaining at the Site following O&M activities are below their respective rSRLs.
3. The armory building lead wipe samples indicate that the interior walls have not been adversely impacted by lead resulting from prior site activities.
4. The air samples analytical results indicate that the dust control measures implemented during the conduct of the O&M activities were effective in preventing the off-site migration of lead within fugitive dust.

Based on the findings and results of the O&M activities, the Site can continue to be used as a firing range or be redeveloped without any environmental restrictions associated with the COCs addressed in this report. No other COCs beyond those associated with the firing range operations were addressed in this report.

5. REFERENCES

Brown and Caldwell, 2008. *Silverbell Firing Range Operations and Maintenance Work Plan.* Prepared for the City of Tucson. March 25, 2008.

USEPA, 2002. *EPA Guidance for Quality Assurance Project Plans.* USEPA/QA/G-5, EPA/600/R-98/018. December, 2002.

Metals Treatment Technologies, 2008. *City of Tucson Silverbell Firing Range Operations & Maintenance Report.* Prepared for: Brown and Caldwell. May 2008.

TABLES

Table 1. Baseline Sampling Analytical Results						
Sample ID	Sample Date	Analyte (mg/Kg)				Comments
		Lead	Antimony	Arsenic	Copper	
Secondary Berm - Baseline						
COT-BSB-NS-E	3/24/2008	53	--	--	--	East end of Secondary berm, near surface
COT-BSB-NS-EC	3/24/2008	49	<10	4.0J	29	East central location of Secondary berm, near surface
COT-BSB-NS-C	3/24/2008	350	--	--	--	Central location of Secondary berm, near surface
COT-BSB-NS-WC	3/24/2008	66	<10	5.0J	36	West central location of Secondary berm, near surface
COT-BSB-NS-W	3/24/2008	15,000	--	--	--	West end of Secondary berm, near surface
Primary Berm - Baseline						
COT-BPB-E	3/24/2008	6700	--	--	--	East end of Primary berm, near surface
COT-BPB-EC	3/24/2008	23,000	160	14	19,000	East central location of Primary berm, near surface
COT-BPB-C	3/24/2008	6,200	46	12	390	Central location of Primary berm, near surface
COT-B-DUP01	3/24/2008	32,000	320	24	710	Duplicate sample associated with COT-BPB-C
COT-BPB-WC	3/24/2008	29,000	--	--	--	West central location of Primary berm, near surface
COT-BPB-W	3/24/2008	2,700	--	--	--	West end of Primary berm, near surface
Range Floor - Baseline						Each sample is composite of 3 subsamples
COT-BRF-NW	3/24/2008	1,100	9.0J	7.6	89	Collected from northwest quadrant
COT-BRF-SW	3/24/2008	560	--	--	--	Collected from southwest quadrant
COT-BRF-SE	3/24/2008	34,000	--	--	--	Collected from southeast quadrant
COT-BRF-NE	3/24/2008	25,000	730	72	110	Collected from northeast quadrant
Basal Layer of Secondary Berm						
COT-BSB-BS-W-06	4/21/2008	20	<10	4.0J	29	West end trench, ~6" above base of berm
COT-BSB-BS-W-18	4/21/2008	63	<10	4.0J	33	West end trench, ~18" above base of berm
COT-BSB-BS-W-30	4/21/2008	26	<10	3.0J	21	West end trench, ~30" above base of berm
COT-BSB-BS-E-06	4/21/2008	20	<10	4.0J	28	Central trench, ~6" above base of berm
COT-BSB-BS-E-18	4/21/2008	28	<10	4.0J	31	Central trench, ~18" above base of berm
COT-BSB-BS-E-30	4/21/2008	25	<10	5.0J	24	Central trench, ~30" above base of berm
COT-BSB-BS-C-06	4/21/2008	24	<10	4.0J	22	West end trench, ~6" above base of berm
COT-DUP03	4/21/2008	45	<10	5.3	26	Duplicate sample associated with COT-BSB-BS-C-06
COT-BSB-BS-C-18	4/21/2008	23	<10	4.0J	20	West end trench, ~18" above base of berm
COT-BSB-BS-C-30	4/21/2008	23	<10	4.0J	22	West end trench, ~30" above base of berm
r-SRL		400	31	10	3100	

Note:

All samples collected prior to excavation work being conducted at the Site.

mg/Kg - milligram per Kilogram

-- not analyzed for target analyte

< - result is not detected. Value shown is reporting limit.

J - laboratory data flag indicating analyte detected below quantitation limit

r-SRL - residential Soil Remediation Level

Results in **Bold** exceed the r-SRL

Table 2. MT^2 TCLP Treatment Confirmation Results										
Sample ID	Sample Date	Mercury	Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Comment
		mg/L								
SB0417-01	4/17/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Secondary berm
TCLP-0417-02	4/17/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Primary berm
TCLP-0418-03	4/18/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Range floor
TCLP-0418-04	4/18/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Range floor
TCLP-0423-05	4/23/2008	<0.0010	<1.0	<10	<0.50	<1.0	1.1	<0.50	<2.0	Primary berm
COT-TSP1-0425-06	4/25/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Stockpile 1
COT-TSP1-0425-07	4/25/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Stockpile 1
COT-TSP1-0425-08	4/25/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Stockpile 1
COT-TSP1-0425-09	4/25/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Stockpile 1
COT-TSP2-0425-10	4/25/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Stockpile 2
TCLP-0428-11	4/28/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Range floor, second lift
TCLP-0428-12	4/28/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Range floor, second lift
TCLP-0428-13	4/28/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Range floor, second lift
TCLP-0428-14	4/28/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Range floor, second lift
TCLP-0428-15	4/28/2008	<0.0010	<1.0	<10	<0.50	<1.0	<1.0	<0.50	<2.0	Range floor, second lift
TC Limit		0.2	5.0	100.0	1.0	5.0	5.0	1.0	5.0	

Notes:
MT2 - Metals Treatment Technologies
TCLP - toxicity characteristic leaching procedure
mg/L - milligram per Liter
< - result is not detected. Value shown is reporting limit.

Table 3. Soil Clearance Sampling Analytical Results							
Sample ID	Sample Date	Analyte (mg/Kg)					Comment
		XRF	Lead	Antimony	Arsenic	Copper	
Secondary Berm - Clearance Samples							
COT-SB-01	4/16/2008	42	41	--	--	--	Top of secondary berm, ~0' from east end
COT-SB-02	4/16/2008	42	21	<10	5.0J	26	Top of secondary berm, ~30' from east end
COT-SB-03	4/16/2008	69	46	--	--	--	Top of secondary berm, ~60' from east end
COT-SB-04	4/16/2008	46	20	--	--	--	Top of secondary berm, ~90' from east end
COT-SB-05	4/16/2008	123	7800	150	5.8	130	Top of secondary berm, ~120' from east end
COT-SB-05+03	4/25/2008	136	64	<10	--	--	Sample collected from COT-SB-05 location after additional 3" removed
COT-DUP05	4/25/2008	126	76	<10	--	--	Duplicate sample associated with COT-SB-05+03
COT-SB-06	4/16/2008	51	41	--	--	--	Top of secondary berm, ~150' from east end
COT-SB-07	4/16/2008	51	26	<10	4.0J	33	Top of secondary berm, ~180' from east end
COT-SB-08	4/16/2008	91	23	--	--	--	Top of secondary berm, ~210' from east end
Primary Berm - Clearance Samples							
COT-PB-01	4/17/2008	1000	15	--	--	--	Face of primary berm, ~21.5' from east end
COT-PB-02	4/17/2008	437	1500	<10	7.1	39	Face of primary berm, ~43' from east end
COT-PB-02+06	4/25/2008	16	22	--	--	--	Sample collected from COT-PB-02 location after additional 6" removed
COT-PB-03	4/17/2008	209	1700	--	--	--	Face of primary berm, ~64.5' from east end
COT-PB-03+06	4/25/2008	28	15	--	--	--	Sample collected from COT-PB-03 location after additional 6" removed
COT-PB-04	4/17/2008	28	11	<10	5.8	11	Face of primary berm, ~86' from east end
COT-DUP02	4/17/2008	19	8.0J	<10	6.3	12	Duplicate sample associated with COT-PB-04
COT-PB-05	4/17/2008	23	9.0J	--	--	--	Face of primary berm, ~107.5' from east end
COT-PB-06	4/17/2008	7427	5000	43	8.1	180	Face of primary berm, ~129' from east end
COT-PB-06+06	4/25/2008	47	87	<10	6.3	--	Sample collected from COT-PB-06 location after additional 6" removed
COT-PB-07	4/17/2008	18	10	--	--	--	Face of primary berm, ~150.5' from east end
COT-PB-08	4/17/2008	15	15	--	--	--	Face of primary berm, ~172' from east end
Range Floor - Clearance Samples							
COT-RF-01	4/21/2008	268	480	--	--	--	Southeast quadrant, southwest corner
COT-RF-01+03	5/1/2008	110	47	--	--	--	Sample collected from COT-RF-01 location after additional 3" removed
COT-RF-02	4/21/2008	144	84	--	--	--	Southeast quadrant, central on east side
COT-RF-03	4/21/2008	302	11000	190	14	110	Southeast quadrant, central on north half
COT-RF-03+06	5/1/2008	73	31	<10	7.9	--	Sample collected from COT-RF-03 location after additional 6" removed
COT-RF-04	4/21/2008	451	590	--	--	--	Northeast quadrant, southeast corner
COT-RF-04+06	5/1/2008	50	22	--	--	--	Sample collected from COT-RF-04 location after additional 6" removed
COT-RF-05	4/21/2008	217	430	--	--	--	Northeast quadrant, southwest corner
COT-RF-05+06	5/1/2008		22	--	--	--	Sample collected from COT-RF-05 location after additional 6" removed
COT-RF-06	4/21/2008	3027	6500	80	57	120	Northeast quadrant, northeast corner
COT-RF-06+06	5/1/2008	55	21	<10	7.1	--	Sample collected from COT-RF-06 location after additional 6" removed

Table 3. Soil Clearance Sampling Analytical Results							
Sample ID	Sample Date	Analyte (mg/Kg)					Comment
		XRF	Lead	Antimony	Arsenic	Copper	
COT-RF-07	4/21/2008	4617	29,000	500	130	260	Northwest quadrant, north central
COT-DUP04	4/21/2008		27,000	840	150	370	Duplicate sample associated with COT-RF-07
COT-RF-07+06	5/1/2008		63	<10	7.5	--	Sample collected from COT-RF-07 location after additional 6" removed
COT-DUP06	5/1/2008		37	<10	7.8	--	Duplicate sample associated with COT-RF-07+06
COT-RF-08	4/21/2008	246	260	--	--	--	Northwest quadrant, southeast corner
COT-RF-09	4/21/2008	146	120	--	--	--	Northwest quadrant, central on west side
COT-RF-10	4/21/2008	211	160	<10	5	110	Southwest quadrant, central on north side
COT-RF-11	4/21/2008	141	200	--	--	--	Southwest quadrant, southeast corner
COT-RF-12	4/21/2008	102	4900	--	--	--	Southwest quadrant, northwest corner
COT-RF-12+03	5/1/2008		22	--	--	--	Sample collected from COT-RF-12 location after additional 3" removed
r-SRL			400	31	10	3100	

Notes:

mg/Kg - milligram per Kilogram

XRF - x-ray fluorescence

-- not analyzed for target analyte

< - result is not detected. Value shown is reporting limit.

J - laboratory data flag indicating analyte detected below quantitation limit

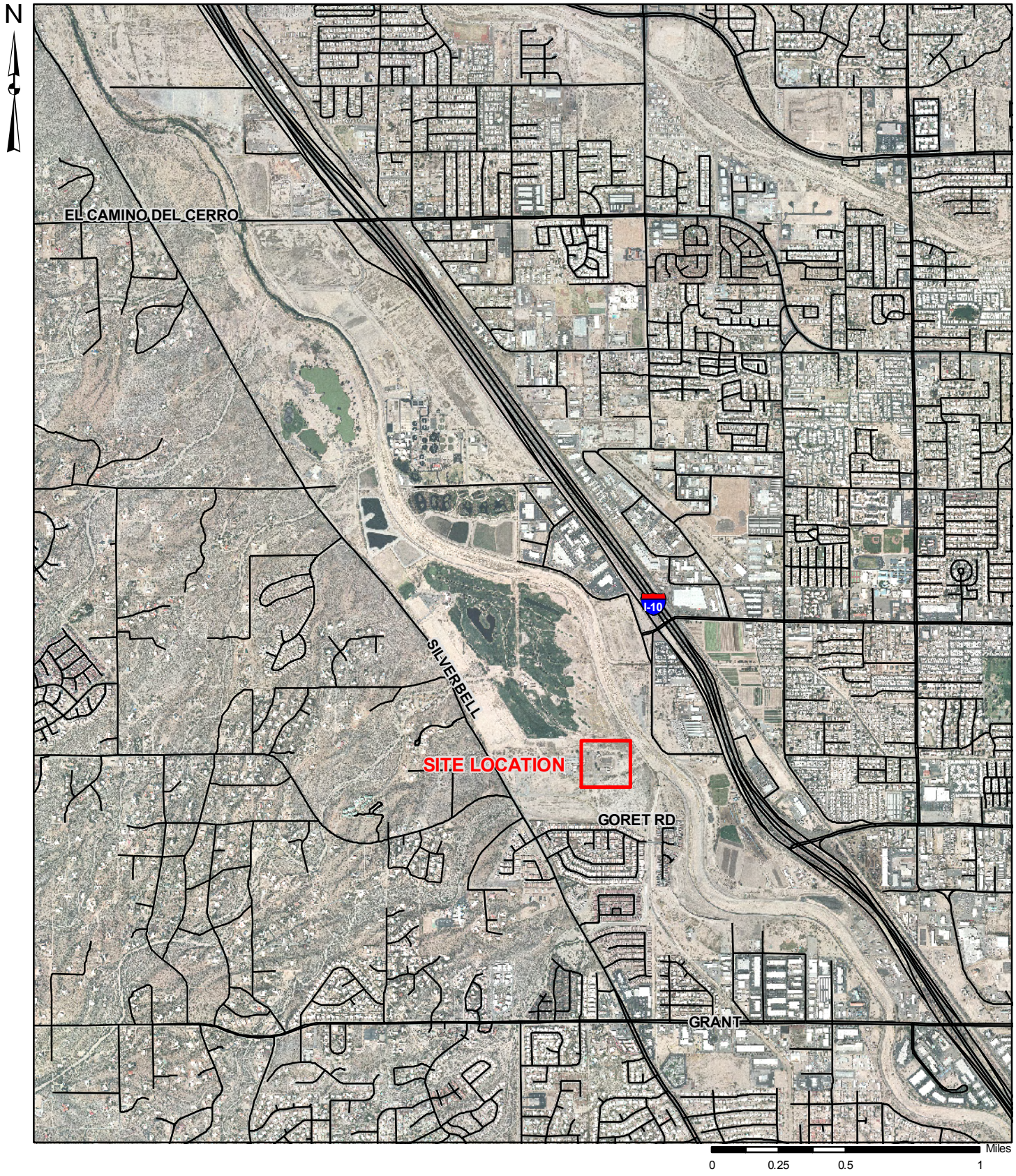
r-SRL - residential Soil Remediation Level

Results in **Bold** exceed the r-SRL

Table 4. Armory Building and Miscellaneous Analytical Results				
Sample ID	Sample Date	Units	Lead	**Comments**
Armory Building - Interior Lead Wipe Samples				
COT-AB-0429-01	4/29/2008	mg/wipe	<10	West wall, south of door
COT-AB-0429-02	4/29/2008	mg/wipe	<10	North wall, west of window
COT-AB-0429-03	4/29/2008	mg/wipe	<10	East wall, middle
COT-AB-0429-04	4/29/2008	mg/wipe	<10	South wall, west side below vent
COT-AB-0429-05	4/29/2008	mg/wipe	<10	West wall, south end
COT-AB-0429-06	4/29/2008	mg/wipe	<10	West wall near corner with north wall
COT-EB042908LT	4/29/2008	mg/wipe	<10	Equipment blank of 10 cm^2 template
COT-EB042908LW	4/29/2008	mg/wipe	<10	Equipment blank for gauze wipe
Range Floor - Behind Main Area				
COT-RF-BW	5/2/2008	mg/Kg	110	Area south of main range floor - west side
COT-RF-BE	5/2/2008	mg/Kg	96	Area south of main range floor - east side
Rifle Tunnel				
COT-PIPE-01	4/21/2008	mg/Kg	37	sample collected from behind pipe tunnel on east side

Notes:
mg/Kg - milligram per Kilogram
mg/wipe - milligram per gauze wipe
< - result is not detected. Value shown is reporting limit.

FIGURES



BROWN AND CALDWELL

Figure 1
SITE LOCATION MAP
SILVERBELL FIRING RANGE
3200 N SILVERBELL RD
CITY OF TUCSON

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BROWN AND CALDWELL

Figure 2
SITE OVERVIEW MAP
SILVERBELL FIRING RANGE
3200 N SILVERBELL RD
CITY OF TUCSON

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N

COT-SB-05		COT-SB-05+03	COT-DUP05
4/16/2008		4/25/2008	4/25/2008
Pb	**7800**	64	76
Sb	**150**	<10	<10
As	5.8	--	--
Cu	130	--	--

COT-SB-04	
4/16/2008	
Pb	20

COT-SB-03	
4/16/2008	
Pb	46

COT-SB-02	
4/16/2008	
Pb	21
Sb	<10
As	5.0J
Cu	26

COT-SB-06	
4/16/2008	
Pb	41

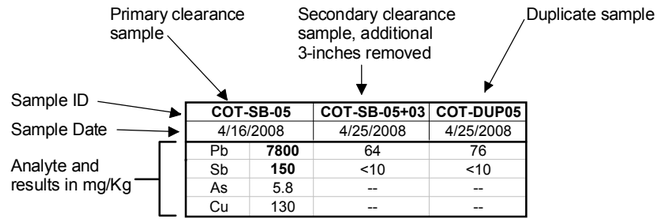
COT-SB-07	
4/16/2008	
Pb	26
Sb	<10
As	4.0J
Cu	33

COT-SB-08	
4/16/2008	
Pb	23

COT-SB-01	
4/16/2008	
Pb	41

EXPLANATION

Approximate Sample Locations



NOTES

1. All results in milligrams per Kilogram (mg/Kg).
2. 3-inches were removed from Secondary Berm initially. An additional 3-inches removed near COT-SB-05 due to exceedance in primary clearance sample. All clearance samples were collected 0 to 3-inches below exposed surface.
3. Results in **Bold** exceed the residential soil remediation level (r-SRL).

- - Not analyzed
J - Analyte detected below quantitation limit
Pb - Lead (r-SRL = 400mg/Kg)
Sb - Antimony (r-SRL = 31mg/Kg)
As - Arsenic (r-SRL = 10mg/Kg)
Cu - Copper (r-SRL = 3100mg/Kg)

BROWN AND CALDWELL

Figure 3
SECONDARY BERM
CLEARANCE SAMPLES
SILVERBELL FIRING RANGE
3200 N SILVERBELL RD
CITY OF TUCSON

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N

COT-PB-05	
4/17/2008	
Pb	9.0J

COT-PB-04		COT-DUP02
4/17/2008		4/17/2008
Pb	11	8.0J
Sb	<10	<10
As	5.8	6.3
Cu	11	12

COT-PB-03		COT-PB-03+06	
4/17/2008		4/25/2008	
Pb	**1700**	Pb	15

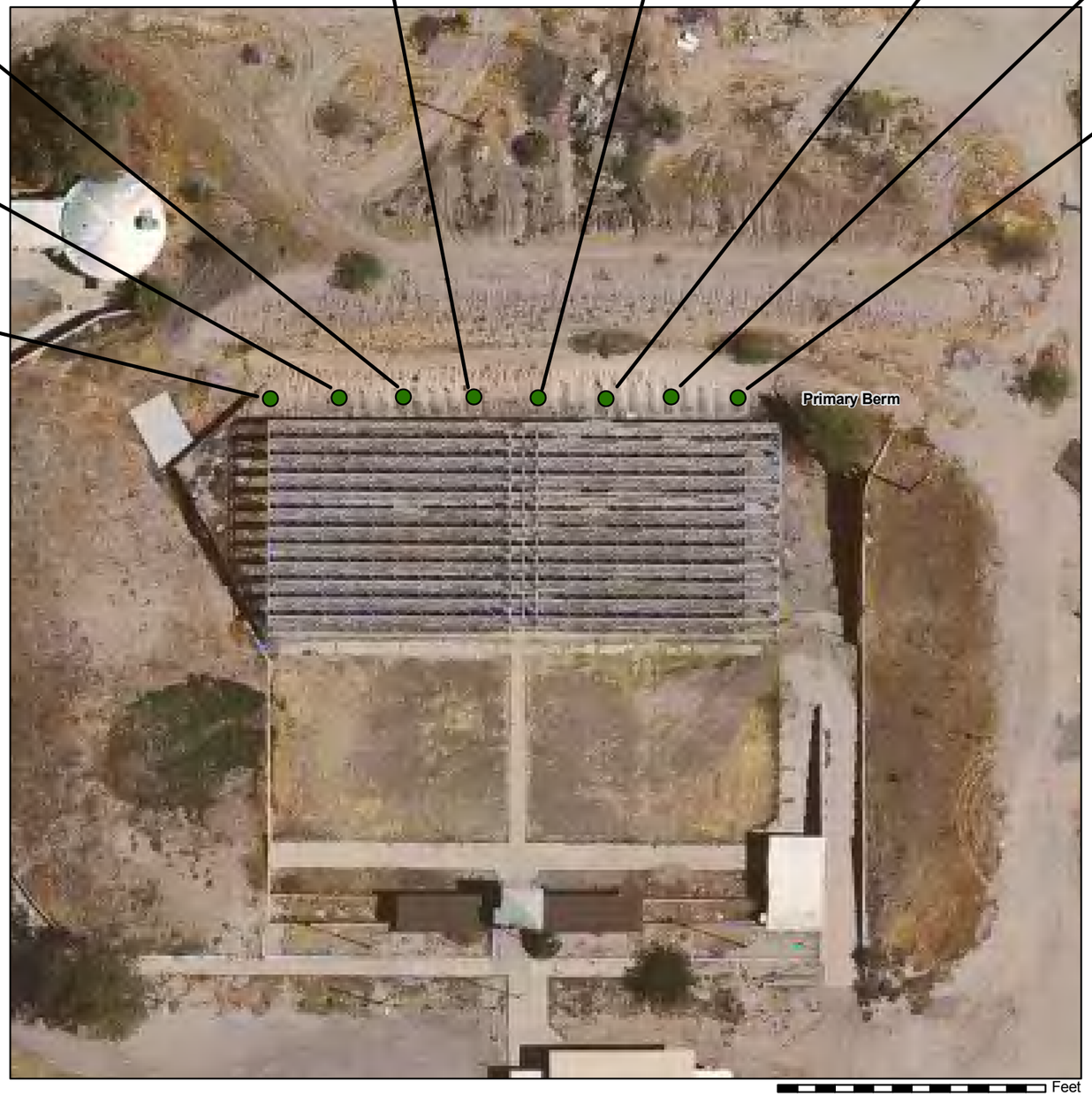
COT-PB-02		COT-PB-02+06
4/17/2008		4/25/2008
Pb	**1500**	22
Sb	ND	--
As	7.1	--
Cu	39	--

COT-PB-06		COT-PB-06+06
4/17/2008		4/25/2008
Pb	**5000**	87
Sb	**43**	<10
As	8.1	6.3
Cu	180	--

COT-PB-01	
4/17/2008	
Pb	15

COT-PB-07	
4/17/2008	
Pb	10

COT-PB-08	
4/17/2008	
Pb	15



EXPLANATION

Approximate Sample Locations

Primary clearance sample

Secondary clearance sample, additional 6-inches removed

Sample ID

Sample Date

Analyte and results in mg/Kg

COT-PB-02		COT-PB-02+06
4/17/2008		4/25/2008
Pb	**1500**	22
Sb	ND	--
As	7.1	--
Cu	39	--

NOTES

1. All results in milligrams per Kilogram (mg/Kg).
2. From 0 to 50 feet from east side of the Primary Berm, 1-foot of material was removed. From 50 to 200 feet, 1.5-feet was removed. Areas where primary clearance sample exceeded rSRLs, an additional 6-inches was removed. All clearance samples were collected 0 to 3-inches below exposed surface.
3. Results in **Bold** exceed the residential soil remediation level (r-SRL).

- - Not analyzed
J - Analyte detected below quantitation limit
Pb - Lead (r-SRL = 400mg/Kg)
Sb - Antimony (r-SRL = 31mg/Kg)
As - Arsenic (r-SRL = 10mg/Kg)
Cu - Copper (r-SRL = 3100mg/Kg)

BROWN AND CALDWELL

Figure 4
PRIMARY BERM
CLEARANCE SAMPLES
SILVERBELL FIRING RANGE
3200 N SILVERBELL RD
CITY OF TUCSON

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N

COT-RF-07		COT-DUP04	COT-RF-07+06	COT-DUP06
4/21/2008		4/21/2008	5/1/2008	5/1/2008
Pb	**29,000**	**27,000**	63	37
Sb	**500**	**840**	<10	<10
As	**130**	**150**	7.5	7.8
Cu	260	370	--	--

COT-RF-05		COT-RF-05+06
4/21/2008		5/1/2008
Pb	**430**	22

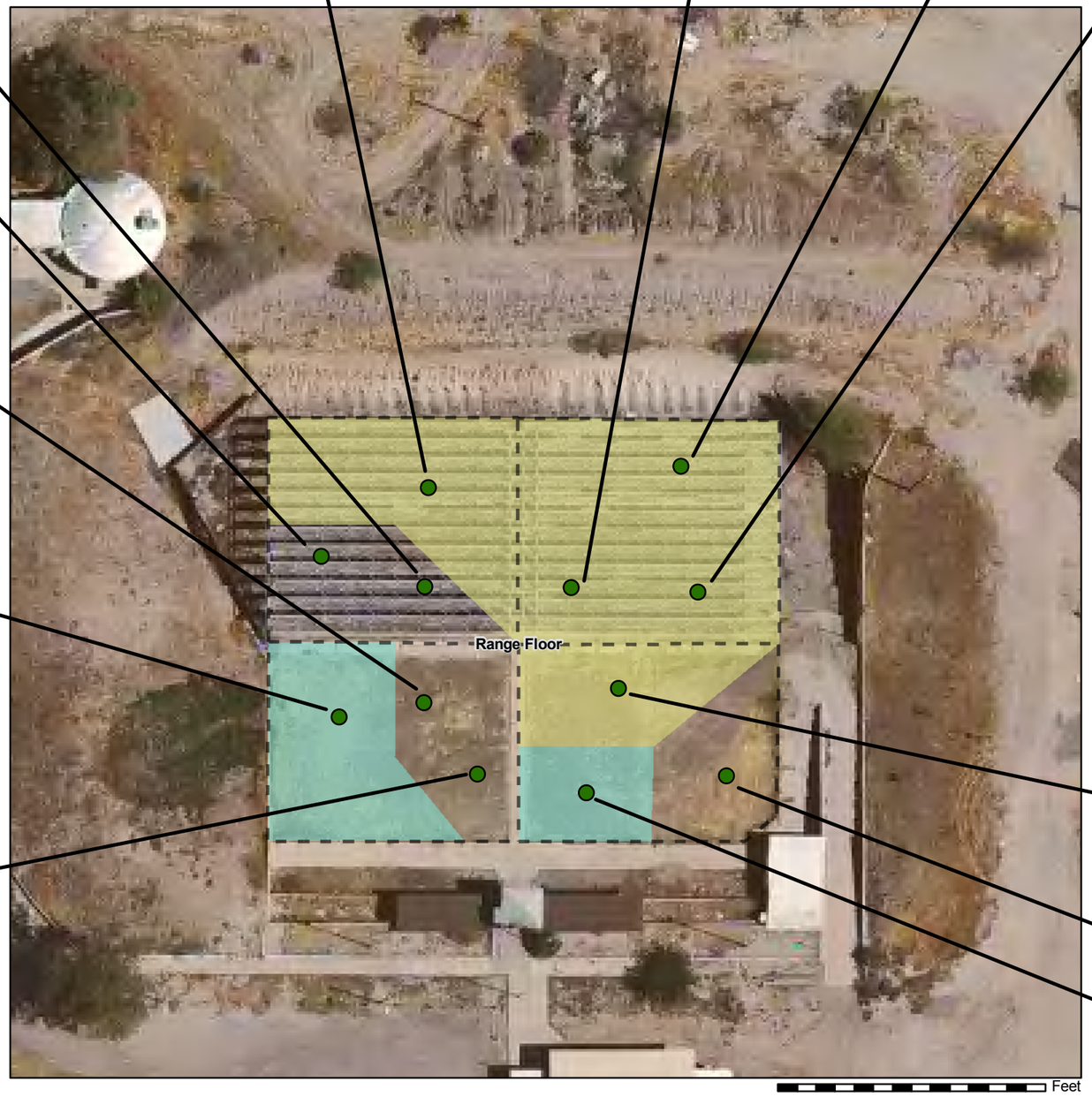
COT-RF-06		COT-RF-06+06
4/21/2008		5/1/2008
Pb	**6500**	21
Sb	**80**	<10
As	**57**	7.1
Cu	120	--

COT-RF-04		COT-RF-04+06
4/21/2008		5/1/2008
Pb	**590**	22

COT-RF-08	
4/21/2008	
Pb	260

COT-RF-09	
4/21/2008	
Pb	120

COT-RF-10	
4/21/2008	
Pb	160
Sb	<10
As	5
Cu	110



COT-RF-12		COT-RF-12+03
4/21/2008		5/1/2008
Pb	**4900**	22

COT-RF-11	
4/21/2008	
Pb	200

EXPLANATION

- Approximate Sample Locations
- Additional 3-inches Removed
- Additional 6-inches Removed

Primary clearance sample

Secondary clearance sample, additional 6-inches removed

Sample ID

Sample Date

Analyte and results in mg/Kg

COT-RF-06		COT-RF-06+06
4/21/2008		5/1/2008
Pb	**6500**	21
Sb	**80**	<10
As	**57**	7.1
Cu	120	--

NOTES

1. All results in milligrams per Kilogram (mg/Kg).
2. Initially, 6-inches was removed from the Range Floor. Additional soil was removed based on primary clearance sample results, as indicated by shading. All clearance samples were collected 0 to 3-inches below exposed surface.
3. Results in **Bold** exceed the residential soil remediation level (r-SRL).

- - Not analyzed
J - Analyte detected below quantitation limit
Pb - Lead (r-SRL = 400mg/Kg)
Sb - Antimony (r-SRL = 31mg/Kg)
As - Arsenic (r-SRL = 10mg/Kg)
Cu - Copper (r-SRL = 3100mg/Kg)

COT-RF-03		COT-RF-03+06
4/21/2008		5/1/2008
Pb	**11000**	31
Sb	**190**	<10
As	**14**	7.9
Cu	110	--

COT-RF-02	
4/21/2008	
Pb	84

COT-RF-01		COT-RF-01+03
4/21/2008		5/1/2008
Pb	**480**	47

BROWN AND CALDWELL

Figure 5
RANGE FLOOR
CLEARANCE SAMPLES
SILVERBELL FIRING RANGE
3200 N SILVERBELL RD
CITY OF TUCSON

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APPENDIX A

Copy of Public Notice

CITY OF TUCSON

ENVIRONMENTAL SERVICES

April 8, 2008

Notice of Maintenance Activities - 3200 N. Silverbell Road, Tucson, AZ

Dear Residents:

During April 2008, the City of Tucson Environmental Services Department will be conducting maintenance activities at the firing range located adjacent to the closed Silverbell Landfill (see attached map). This range was recently used by the U.S. Customs and Border Protection and other Federal agencies. The City has contracted with Brown and Caldwell to oversee the excavation, transportation, and off-site disposal of metals, miscellaneous materials, and soil from the firing range.

The City plans to recycle metals recovered from the firing range backstop area, and treat and remove soil that may have residual metals concentrations. The area will be tested to ensure that remaining soil meets residential soil clean-up levels established by the Arizona Department of Environmental Quality (ADEQ).

Operations and maintenance activities are scheduled to begin the week of April 14, 2008. Work hours will be from 7 a.m. until 6 p.m., Monday through Friday. The work is not expected to take longer than two to three weeks.

All work will be conducted in accordance with all applicable Federal, State, and local regulations. The only potential impact to neighborhood activities may be additional truck traffic on Silverbell Road.

If you have any questions regarding this notice or planned maintenance activities, please contact Richard M. Byrd or Randy Bauer at the addresses provided below.

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Brown and Caldwell
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Very truly yours,

Andrew H. Quigley
Director

AHQ/RB/dg

CITY OF TUCSON
ENVIRONMENTAL SERVICES

Abril 8, 2008

Aviso de actividades de mantenimiento - 3200 N. Silverbell Road, Tucson, AZ

Estimados residentes:

Durante el mes de Abril, 2008, el Departamento de Servicios Ambientales de la Ciudad de Tucson realizará actividades de mantenimiento al campo de tiro localizado junto al cerrado Basurero Silverbell (ver mapa anexo). Este campo fue utilizado recientemente por el Servicio de Aduanas y Protección Fronteriza de los Estados Unidos y por otras dependencias federales. La Ciudad ha contratadoa la empresa Brown and Caldwell para que supervise la excavación, transporte y disposición en otro sitio de metales, materiales misceláneos y suelo del campo de tiro.

La Ciudad planea reciclar los metales que se recuperen de los bordos del campo de tiro, así como tratar o remover el suelo que pueda tener residuos de concentracion de metales. El area será probada para asegurar que el suelo que quede cumpla con los requisitos para limpieza de suelos residenciales establecidos por el Departamento de Calidad Ambiental de Arizona (ADEQ).

Se tiene programado iniciar las operaciones y actividades de mantenimiento la semana del 14 de Abril, 2008. Las horas de trabajo serán de las 7 a.m. hasta las 6 p.m., de Lunes a Vernes. Se espera que el trabajo tenga una duración de dos a tres semanas.

Todo el trabajo se realizará de acuerdo a las disposiciones Federales, Estatales y locales aplicables. El único impacto potencial a las actividades de la vecindad pudiera ser tráfico adicional de camiones en Silverbell Road.

Si Usted tiene alguna pregunta relative a este aviso o a las actividades de mantenimiento programadas, por favor comuníquese con Richard M. Byrd o con Randy Bauer a las direcciones que se indicant a continuación:

Richard M. Byrd
Lead Hydrologist
City of Tucson, Environmental Services
P.O. Box 27210
Tucson, AZ 85726-7210
(Tel) 520-791-5414, (Fax) 520-791-5417
richard.byrd@tucsonaz.gov

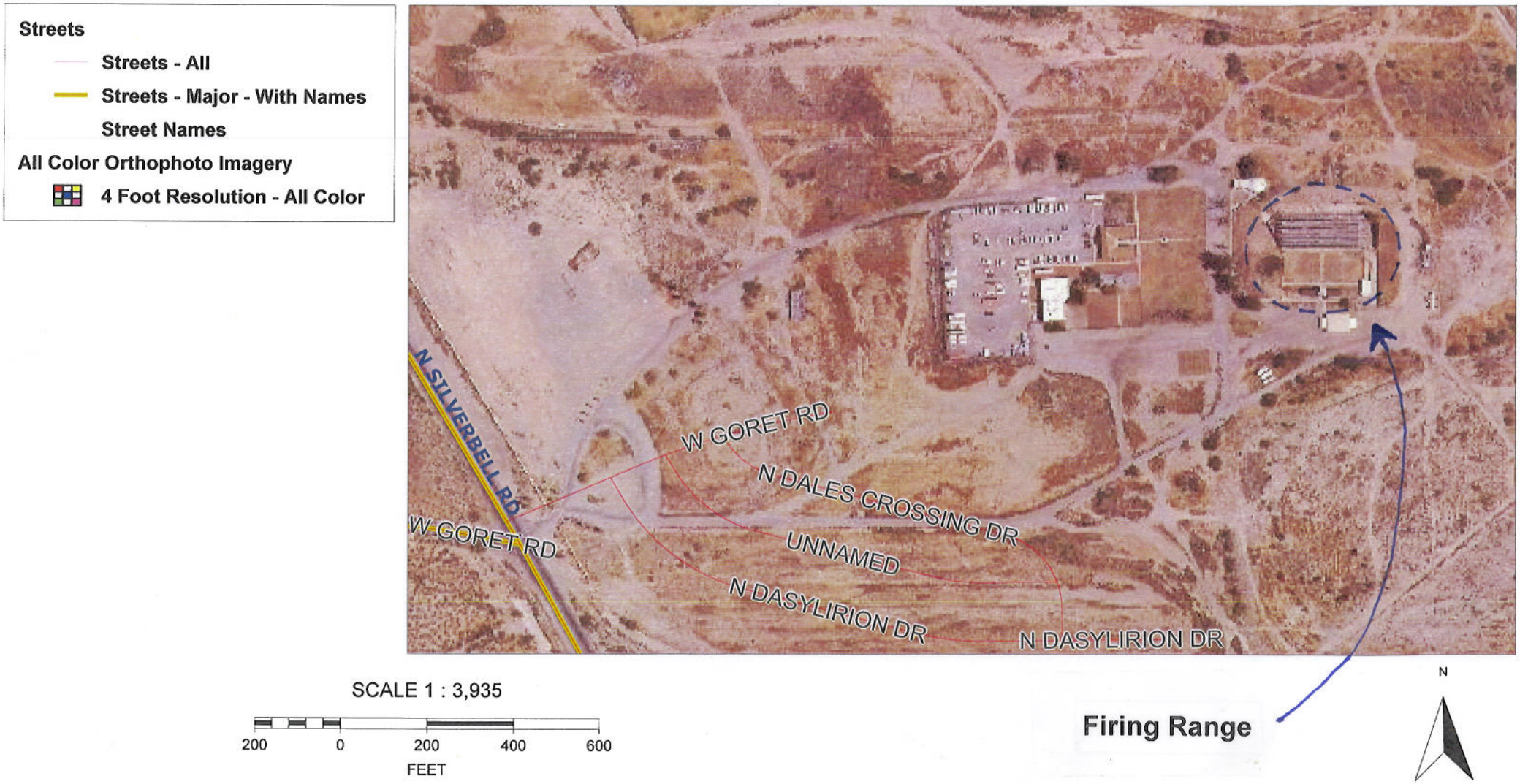
Randy D. Bauer
Supervising Hydrogeologist
Brown and Caldwell
201 E. Washington Street, Suite 500
Phoenix, AZ 85004
(Tel) 602-567-3860 (Fax) 602-567-4001
rbauer@brwncald.com

Muy sinceramente suyo,

Andrew H. Quigley
Director

AHQ/RB/dg

City of Tucson Silverbell Firing Range Location Map



APPENDIX B

MT² Report

(provided in a separate 3-ring binder)

City of Tucson Silverbell Firing Range Operations & Maintenance

Final Report

Prepared For:

Brown & Caldwell

Tucson, AZ

May 2008

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1.0 INTRODUCTION

This Range Operation & Maintenance (O&M) Final Report is for on-site treatment of lead impacted soil at the City of Tucson Silverbell Firing Range site with MT2 proprietary ECOBOND® treatment to stabilize the lead in the soil to meet the RCRA criteria of 5.0mg/L leachable lead. As part of the treatment process, all 8 RCRA metals were verified to be below the RCRA TCLP criteria. The soil was treated with ECOBOND®, sampled to confirm treatment to below RCRA TCLP metals criteria, and transported and disposed of at the City of Tucson, Los Reales Landfill. The range soils from the Primary Backstop, the Range Floor, and Range Side Slope Areas, were screened for the recovery of bullets and bullet fragments. Due to the presence of many bullet sized rocks, bullet recovery for recycling was not economically feasible. Screened bullet piles were treated with ECOBOND®, and transported and disposed of at the Los Reales Landfill. All impact berms, the range floor, and side slope areas were returned to their original usable conditions after the aforementioned Range Operation & Maintenance.

2.0 SITE HISTORY AND CURRENT CONDITIONS

The City of Tucson Silverbell Firing Range is located at 3200 N Silverbell Road, Tucson, AZ. The range has been in use for approximately 40 years. The range consists of approximately 30 shooting positions from which targets can be engaged from distances of seven yards to fifty yards. All rounds are fired into the Primary Backstop. The Secondary Berm is a safety berm, with no rounds being fired directly into the berm. A small Rifle Tube is located on the east end of the range and is used for occasional rifle test firing.

3.0 TREATABILITY STUDY

In July of 2007, Brown & Caldwell personnel collected representative composite samples of soil from the Primary Backstop and Range Floor. These samples represented a "worst case" scenario with regards to the highest expected concentrations of lead (Pb). At the MT2 laboratory, the samples were analyzed and treated with ECOBOND® to determine the appropriate level of treatment necessary at the Silverbell Firing Range. As reported in the MT2 Treatability Study, TCLP Pb concentrations dropped by at least 90% after treatment to below the RCRA TCLP Pb Criteria of 5.0mg/L. ECOBOND treatment is a permanent treatment with Multiple Extraction Procedure testing of treated soil remaining below the RCRA TCLP criteria for more than 10 extractions, or more than 1000 years of landfill acid rain leaching. MT2 applied approximately 1%, by weight, ECOBOND® Pb to the soil at the Silverbell Firing Range. Treatment was performed from April 16 to 28, 2008.
See Appendix A for the MT2 Treatability Study.

4.0 SOIL SAMPLING AND ANALYSIS

MT2 was responsible for only the sampling of ECOBOND® treated soil at the Silverbell Firing Range. Treated soil was sampled according to the Brown & Caldwell "*Work Plan Silverbell Firing Range Operations and Maintenance*" March 25, 2008.
Table 4.1 lists the soil stabilization confirmation samples, sampling locations, treatment volumes, and laboratory results.

Table 4.1

Sample ID	Date Sampled	Area Sampled	Cubic Yards	TCLP Pb (mg/L)
SB-0417-01	4/17/08	Secondary Berm Top & Front	58	<1.0
TCLP-0417-02	4/17/08	Primary Berm Face – 1st Lift	257	<1.0
TCLP-0418-03	4/18/08	Range Floor Under Canopy – 1st Lift	167	<1.0
TCLP-0418-04	4/18/08	Range Floor, south End – 1st Lift	167	<1.0
TCLP-0423-05	4/23/08	East & West side Areas of Range floor; Primary & Secondary Berm additional areas	85	1.1
COT-TSP1-0425-06	4/25/08	Treated and screened stockpile	146	<1.0
COT-TSP1-0425-07	4/25/08	Treated and screened stockpile	146	<1.0
COT-TSP1-0425-08	4/25/08	Treated and screened stockpile	146	<1.0
COT-TSP1-0425-09	4/25/08	Treated and screened stockpile	146	<1.0
COT-TSP1-0425-10	4/25/08	Treated and screened stockpile	146	<1.0
TCLP-0428-11	4/28/08	SE & SW Quadrants of Range Floor	89	<1.0
TCLP-0428-12	4/28/08	NW Quadrant of Range Floor	100	<1.0
TCLP-0428-13	4/28/08	North end of NE quadrant of Range Floor	72	<1.0
TCLP-0428-14	4/28/08	South end of NE quadrant of Range Floor	72	<1.0
TCLP-0428-15	4/28/08	Side slope areas bullet pile	16	<1.0

Note that all soil treatment samples were also analyzed for the remaining 7 RCRA Metals (Arsenic, Barium, Cadmium, Chromium, Mercury, Selenium, and Silver) and all samples were identified as having no TCLP metals concentrations above analytical detection limits for the aforementioned analytes. All treated soil met the RCRA TCLP criteria for all 8 RCRA metals.
See Appendix B for the complete laboratory reports.

Samples COT-TSP1-0425-06 thru -10 were samples collected on the treated and screened soils from the range areas associated with samples SB-0417-01, TCLP-0417-02, TCLP-0418-03, TCLP-0418-04, TCLP-0423-05. Samples COT-TSP1-0425-06 thru -10 were collected to confirm the treatment process.

A total of **1083 cubic yards** of soil from the City of Tucson Silverbell Firing Range was treated with ECOBOND®.

5.0 SITE PREPARATION

Prior to work at the site, an underground utilities locating service marked any service lines or piping. Brown & Caldwell indicated there were no underground utilities in the treatment area.

Site treatment and screening construction equipment:

- Excavator, Track hoe – CAT 320
- 2500-Gallon Water Truck
- Mini Excavator – CAT 305C
- Front End Loader – CAT 950H
- Roadrunner 5x12 Screening Plant

Site preparation included clearing and grubbing of the range floor, and the removal of construction debris consisting mostly of plywood sheets, lumber, and other debris.

6.0 SOIL TREATMENT WITH ECOBOND®

Lead impacted soil stabilization treatment with ECOBOND® was performed at the Silverbell Firing range site from April 17 to April 28, 2008. The lead impacted soil was treated with 16 tons of ECOBOND Pb utilizing a CAT 320 and CAT 305C excavators to mix the soil. Water was applied as required for dust control and treatment. A small portion of ECOBOND (approx one ton) was not used for soil treatment. At the request of the City of Tucson, the remaining one ton of ECOBOND® was left on the site. A total of 1083 cubic yards or 1,521.05 tons of the Silverbell Firing Range soil was treated with ECOBOND®. See Appendix G for ECOBOND MSDS.

7.0 SOIL SCREENING

All treated soil from the Primary Backstop, the first lift of the Range Floor, and the East and West Side Slope Areas of the Silverbell Range were mechanically screened for the removal of bullets and bullet fragments. A Roadrunner 5x12 screening plant with 0.50" and 0.25" screens was used for the soil screening. All bullets, bullet fragments, similar sized rocks, stones, and dirt clods measuring between 0.25" and 0.50" were removed from the soil. The soil at the range contains high concentrations of rocks, stones and dirt clods in this size range and the resulting pile of screened material did not have any commercial value. As tested by the MT2 laboratory, the bullet/lead content of the screened material was approximately 1% to 4% bullets by weight. All screened soil was treated with ECOBOND (either pre or post screening) and transported to the landfill for disposal.

8.0 AIR MONITORING

MT2 performed air cartridge monitoring for total airborne lead. Starting with earthmoving activities on April 16, 2008 MT2 personnel wore air cartridges attached to Gillian GilAir 5 air pumps. Air monitoring was discontinued after 4/23/2008 when the absence of airborne lead was demonstrated by analytical laboratory results.
The following table lists the sample ID, person, location, duration of sampling, and analytical result.
See Appendix B for laboratory air cartridge reports.

Sample ID	Crew Member and Location	Date	Minutes Run	Flow Rate (cc/min)	Pb (mg/filter)
Air #1	J. Miller, loader	4/16/08	390	4	<1
Air #2	B. Taylor, water truck	4/16/08	380	4	<1
Air #3	J. Porter, mini excavator	4/16/08	385	4	<1
Air #4	J. Sod, excavator	4/17/08	530	4	<1
Air #5	B. Taylor, water truck	4/17/08	535	4	<1
Air #6	M. Pokorny, on ground - roaming	4/17/08	540	4	<1
Air #7	J. Porter, loader	4/18/08	480	4	<1
Air #8	B. Taylor, water truck	4/18/08	485	4	<1
Air #9	M. Pokorny, on ground - roaming	4/18/08	490	4	<1
Air #10	M. Pokorny, on ground - roaming	4/21/08	535	4	<1
Air #11	J. Sod, excavator	4/21/08	540	4	<1
Air #12	J. Porter, water truck	4/22/08	540	4	<1
Air #13	M. Pokorny, on ground - roaming	4/22/08	545	4	<1
Air #14	J. Sod, excavator	4/23/08	540	4	<1
Air #15	M. Pokorny, on ground - roaming	4/23/08	545	4	<1

9.0 TRANSPORTATION *& DISPOSAL*

MT2 retained Ruger's H2O Trucking of Queen Creek, AZ for the transportation of ECOBOND treated non-hazardous soils to the City of Tucson, Los Reales Landfill. On May 1 and 2, 2008, Ruger's utilized seven side dump and end dump trucks to transport 1,521.05 tons of soil to the landfill. Soil weights were verified by the certified scales at the landfill. See Appendix C for the landfill truckload weight totals.

At the request of the City of Tucson, MT2 utilized the Tucson Los Reales Landfill for the disposal of the ECOBOND treated non-hazardous soils from the Silverbell Firing Range. All soil disposed of at the landfill was first characterized as non-hazardous by analytical

testing for RCRA TCLP 8 RCRA metals. All transported Silverbell Firing Range soil samples met the RCRA criteria for all 8 RCRA metals. See Section 4.0 and Appendix B for analytical laboratory sample results.

10.0 PERMITS

MT2 obtained a Notice of Intent (NOI) for stormwater discharges associated with the operations and maintenance activity at the Silverbell Range under the AZDES General Permit. The NOI was issued 03/12/2008, Authorization # AZCON-32665. At the demobilization from the Silverbell Range, MT2 filed a Notice of Termination (NOT) for the site on 05/15/2008. See Appendix D for the NOI and NOT.

MT2 obtained an Air Quality Activity Permit with the Pima County Department of Environmental Quality – Air Program. Permit number 5516 was granted on 03/13/2008. At the demobilization from the Silverbell Range, MT2 filed a Notice of Intent to Terminate Air Quality Activity Permit for the site on 05/15/2008. See Appendix E for the Air Quality Activity Permit and the Notice Of Intent To Terminate.

11.0 SITE CLEANUP, RESTORATION AND DEMOBILIZATION

At the conclusion of range Operations and Maintenance, MT2 demobilized from the Silverbell Firing Range on May 2, 2008. All equipment was removed from the site on May 2, 2008. Site restoration included returning all firing range Backstop and berms to original configuration, wetting and compaction of the range floor and side slope areas, and general site cleanup.

12.0 CONCLUSION

MT2 provided Range Operation & Maintenance (O&M) for the on-site treatment of lead impacted soil at the City of Tucson Silverbell Firing Range site with MT2 proprietary ECOBOND® treatment to stabilize the lead in the soil to meet the RCRA TCLP Criteria for all 8 RCRA metals. The soil was treated with ECOBOND®, sampled to confirm treatment to below RCRA TCLP metals criteria, and transported and disposed of at the City of Tucson, Los Reales Landfill. The range soils from the Primary Berm, the Range Floor, and Range Side Slope Areas, were screened for the recovery of bullets and bullet fragments. Due to the presence of many bullet sized rocks, bullet recovery for recycling was not economically feasible. Screened bullet piles were treated with ECOBOND®, and transported and disposed of at the Los Reales Landfill. All impact berms, the range floor, and side slope areas were returned to their original usable conditions after the aforementioned Range Operation & Maintenance. A total of 1083 cubic yards, or 1521.05 tons, of treated non-hazardous soil were removed from the Silverbell Firing Range.

Appendix A

Treatability Study

City of Tucson
Outdoor Firing Range

TREATABILITY REPORT

Mark Peters, Ph.D.
MT2 (Metals Treatment Technologies), LLC

July 6, 2007

This document contains MT^2 Proprietary and Confidential Information

1.0 OBJECTIVE

The objective of this report is to present the findings of a laboratory treatability study conducted on the City of Tucson Silverbell Firing Range samples by MT2 designed to determine RCRA leachable lead (Pb) concentrations from Pb contaminated samples and to develop a chemical formulation that ensures the Pb remain below the TCLP Pb criteria.

2.0 SAMPLE DESCRIPTION and CHARACTERIZATION

Two samples of Pb contaminated material were delivered to MT2 Sample Receiving. The samples were received in a one-gallon plastic bag. Before analysis, the sample was transferred to a plastic bag and blended to ensure homogeneous sub-sampling. A description of the samples is presented in Table 1.

Table 1. SAMPLE DESCRIPTION and CHARACTERIZATION

MT^2 Sample #	Client I.D. #	Description
246-1	Primary Berm	Light brown sandy soil with some small rocks.
246-2	Range Floor	Light brown sandy soil with some small rocks.

The material was then tested for hazardous Pb by using EPA's SW-846 Method No. 1311 "Toxicity Characteristic Leaching Procedure" (TCLP). The TCLP extraction fluids were then filtered and analyzed by ICP. The results of the subsequent analysis are presented in Table 2.

Table 2. PRE-TREATMENT TCLP RESULTS

MT² Sample #	Client I.D. #		MT² Test #	Natural pH of the Material	TCLP Pb (mg/l)
246-1	Primary Berm		16-24-1	8.33	**544.**
246-2	Range Floor		16-24-2	7.49	**16.8**
RCRA Criteria					**5.0 mg/l**
UTS Limit					**0.75 mg/l**

The untreated TCLP Pb extraction values of the samples indicates that the materials are above the RCRA criteria for leachable Pb.

3.0 TREATMENT STUDIES

ECOBOND® Pb formula was applied and mixed with the samples at the 2.0% and 4.0% weight % levels. As the sample was received moist, nowater was added to the sample. After weighing measurements and complete mixing with the treatment materials, the samples and treatment materials were allowed to cure and stabilize at least overnight. The following day, sub-samples were taken and extracted for Pb implementing EPA's SW-846 Method No. 1311 "Toxicity Characteristic Leaching Procedure" (TCLP). The TCLP extraction fluids were then filtered and analyzed by ICP. The results of the ECOBOND® Pb treatment test are presented in Table 3.

Table 3. ECOBOND® Pb TCLP Treatment Data

MT² Test #	MT² I.D. #	Client I.D. #	Sample Weight, grams	ECOBOND® Pb Formulation (Weight %)	TCLP Pb mg/l UNTREATED	TCLP Pb mg/l TREATED
16-24-3	246-1	Primary Berm	100	2.0	544.	2.5
16-24-4	246-1	Primary Berm	100	4.0	544.	1.5
16-24-5	246-2	Range Floor	100	2.0	16.8	1.2
16-24-6	246-2	Range Floor	100	4.0	16.8	0.9
RCRA Criteria						**5.0 mg/l**
UTS Limit						**0.75 mg/l**

4.0 CONCLUSIONS

The addition of 2.0% and 4.0% ECOBOND® Pb did significantly lower the TCLP Pb in both of the City of Tucson samples to below the RCRA limit of 5.0 mg/L.

5.0 RECOMMENDATION

MT^2 recommends the addition of 3.0 to 4.0% weight % of ECOBOND® Pb to the City of Tucson Primary Berm and Range Floor soil samples to effectively lower the TCLP Pb to well below the RCRA TCLP criteria to ensure all contaminated materials meet the RCRA limits.

MT2 has extensive experience treating firing range soils in Arizona and scross the United States. MT2 has found that actual range soils, once excavated and processed to remove bullets and bullet fragments, are usually treatable to below RCRA TCLP criteria with less ECOBOND® than is indicated in the treatability study, which is most often performed on "worst case" range samples.

Appendix B

Laboratory Reports

TURNER
LABORATORIES INC.

April 23, 2008

Mark Pokorny
Metals Treatment Technologies
14045 W 66th Ave
Arvada, CO 80004
TEL: (303) 994-4948
FAX (303) 456-6998

RE: COT-Silverbell Order No.: 0804647

Dear Mark Pokorny,

Turner Laboratories, Inc. received 1 sample on 4/17/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT:	Metals Treatment Technologies
Project:	COT-Silverbell
Lab Order:	0804647
Date Received:	4/17/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804647-01A	SB0417-01		4/17/2008 9:10:00 AM

1

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	SB0417-01
Lab Order:	0804647	**Collection Date:**	4/17/2008 9:10:00 AM
Project:	COT-Silverbell		
Lab ID:	0804647-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/18/2008 4:01:00 PM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/18/2008 6:55:00 PM
Barium	ND	10		mg/L	10	4/18/2008 6:55:00 PM
Cadmium	ND	0.50		mg/L	10	4/18/2008 6:55:00 PM
Chromium	ND	1.0		mg/L	10	4/18/2008 6:55:00 PM
Lead	ND	1.0		mg/L	10	4/18/2008 6:55:00 PM
Selenium	ND	0.50		mg/L	10	4/18/2008 6:55:00 PM
Silver	ND	2.0		mg/L	10	4/18/2008 6:55:00 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

2

Turner Laboratories, Inc.

23-Apr-08

Lab Order: 0804647
Client: Metals Treatment Technologies
Project: COT-Silverbell

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804647-01A	SB0417-01	4/17/2008 9:10:00 AM	Soil	ICP Metals, TCLP Leached		4/18/2008	4/18/2008 6:55:00 PM
				Mercury, TCLP Leached		4/18/2008	4/18/2008 4:01:00 PM

TURNER LABORATORIES, INC.

QC SUMMARY REPORT

LEVEL II

Turner Work Order No.: 0804647
Client: Metals Treatment Technologies
Project: COT-Silverbell

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804647
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10587** Batch ID: **10587** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/18/2008 3:19:00 PM** Prep Date: **4/18/2008**
Client ID: Run ID: **HGANALYZER_080418** SeqNo: **620070**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.001									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

CLIENT: Metals Treatment Technologies
Work Order: 0804647
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10586** Batch ID: **10586** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/18/2008 5:19:47 PM** Prep Date: **4/18/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **620006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1									
Barium	ND	10									
Cadmium	ND	0.5									
Chromium	ND	1									
Lead	ND	1									
Selenium	ND	0.5									
Silver	ND	2									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804647
Project: COT-Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804522-01AMS**	Batch ID: **10587**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/18/2008 3:29:00 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **HGANALYZER_080418**		SeqNo: **620074**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004916	0.001	0.005	0	98.3	85	115	0			

Sample ID: **0804522-01AMSD**	Batch ID: **10587**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/18/2008 3:31:00 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **HGANALYZER_080418**		SeqNo: **620075**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005042	0.001	0.005	0	101	85	115	0.004916	2.53	20	

Sample ID: **0804661-01AMS**	Batch ID: **10587**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/18/2008 3:36:00 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **HGANALYZER_080418**		SeqNo: **620077**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005142	0.001	0.005	0	103	85	115	0			

Sample ID: **0804661-01AMSD**	Batch ID: **10587**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/18/2008 3:39:00 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **HGANALYZER_080418**		SeqNo: **620078**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005171	0.001	0.005	0	103	85	115	0.005142	0.562	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804647
Project: COT-Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804522-01AMS** Batch ID: **10586** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/18/2008 5:41:14 PM** Prep Date: **4/18/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **620010**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.133	1	2	0	107	75	125	0			
Barium	2.952	10	2	0.8576	105	75	125	0			J
Cadmium	3.613	0.5	2	1.501	106	75	125	0			*
Chromium	2.158	1	2	0	108	75	125	0			
Lead	2.1	1	2	0	105	75	125	0			
Selenium	2.194	0.5	2	0	110	75	125	0			*
Silver	0.9698	2	1	0	97	75	125	0			J

Sample ID: **0804522-01AMSD** Batch ID: **10586** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/18/2008 5:45:33 PM** Prep Date: **4/18/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **620011**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.156	1	2	0	108	75	125	2.133	1.1	20	
Barium	2.957	10	2	0.8576	105	75	125	2.952	0	20	J
Cadmium	3.621	0.5	2	1.501	106	75	125	3.613	0.226	20	*
Chromium	2.163	1	2	0	108	75	125	2.158	0.22	20	
Lead	2.102	1	2	0	105	75	125	2.1	0.105	20	
Selenium	2.232	0.5	2	0	112	75	125	2.194	1.74	20	*
Silver	0.9754	2	1	0	97.5	75	125	0.9698	0	20	J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804647
Project: COT-Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804661-01AMS** Batch ID: **10586** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/18/2008 5:58:28 PM** Prep Date: **4/18/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **620013**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.046	1	2	0	102	75	125	0			
Barium	2.765	10	2	0.6545	106	75	125	0			J
Cadmium	2.165	0.5	2	0	108	75	125	0			*
Chromium	2.052	1	2	0	103	75	125	0			
Lead	2.008	1	2	0	100	75	125	0			
Selenium	2.143	0.5	2	0	107	75	125	0			*
Silver	0.9769	2	1	0	97.7	75	125	0			J

Sample ID: **0804661-01AMSD** Batch ID: **10586** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/18/2008 6:02:49 PM** Prep Date: **4/18/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **620014**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.129	1	2	0	106	75	125	2.046	4	20	
Barium	2.754	10	2	0.6545	105	75	125	2.765	0	20	J
Cadmium	2.165	0.5	2	0	108	75	125	2.165	0.00351	20	*
Chromium	2.149	1	2	0	107	75	125	2.052	4.64	20	
Lead	2.105	1	2	0	105	75	125	2.008	4.68	20	
Selenium	2.231	0.5	2	0	112	75	125	2.143	4.02	20	*
Silver	0.9724	2	1	0	97.2	75	125	0.9769	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804647
Project: COT-Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10587**	Batch ID: **10587**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/18/2008 3:22:00 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **HGANALYZER_080418**		SeqNo: **620071**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0048	0.001	0.005	0	96	85	115	0			

Sample ID: **LCSD-10587**	Batch ID: **10587**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/18/2008 3:24:00 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **HGANALYZER_080418**		SeqNo: **620072**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004916	0.001	0.005	0	98.3	85	115	0.0048	2.39	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804647
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10586** Batch ID: **10586** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/18/2008 5:24:03 PM** Prep Date: **4/18/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **620007**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.12	1	2	0	106	80	120	0			
Barium	2.125	10	2	0	106	80	120	0			J
Cadmium	2.134	0.5	2	0	107	80	120	0			*
Chromium	2.123	1	2	0	106	80	120	0			
Lead	2.065	1	2	0	103	80	120	0			
Selenium	2.121	0.5	2	0	106	80	120	0			*
Silver	0.9712	2	1	0	97.1	80	120	0			J

Sample ID: **LCSD-10586** Batch ID: **10586** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/18/2008 5:28:22 PM** Prep Date: **4/18/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **620008**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.115	1	2	0	106	80	120	2.12	0.223	20	
Barium	2.139	10	2	0	107	80	120	2.125	0	20	J
Cadmium	2.152	0.5	2	0	108	80	120	2.134	0.852	20	*
Chromium	2.137	1	2	0	107	80	120	2.123	0.641	20	
Lead	2.069	1	2	0	103	80	120	2.065	0.151	20	
Selenium	2.149	0.5	2	0	107	80	120	2.121	1.34	20	*
Silver	0.9677	2	1	0	96.8	80	120	0.9712	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804647

Received By: DW

Received Date/Time: 4/17/08 09:35

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes	☐ Above 100ml	
		☒ Not Applicable	☐ Below 100ml	

12. Temperature upon receipt? 12

13. Number of sample containers received? 3

Additional Comments:

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA

TURNER LABORATORIES INC
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804647 DATE _____ PAGE _____ OF _____

PROJECT NAME COT - SILVERBELL # _____
CONTACT NAME MARK POKORNY
COMPANY NAME METALS TREATMENT TECHNOLOGIES
ADDRESS 14045 W. 66th AVE ARVADA, CO 80004 PHONE 303.456.6977 FAX 303.456.6998
SAMPLER'S SIGNATURE [signature] 303-994-4948

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX
SB0417-01	4.17.08	0910		SOIL	3	TCLP Metals: X

Analysis columns: Base Neutrals 625/8270; Acids; Volatile Organics 624/524.2/8260; THMS; HAA5; Pesticides 8081; PCB's 8082; Total Petroleum Hydrocarbons IR(8015A2); Oil and Grease Grav. 1664A; 1664A; TCLP Analysis: VOA; Semi-VOA; Pest./Herb.; Metals: TCLP; Dissolved; Total; Priority Pollutants; Cyanide: Total; Amen.; WAD; SDWA-INORGANICS PRIMARY; SECONDARY; Coliform: MPN; Colilert; pH; Cl2; COD; TSS; BOD

1. RELINQUISHED BY:
Signature [signature]
Printed Name MARK POKORNY
Firm MTT
Date/Time 4-17-08 0935

2. RECEIVED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day X 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
_____
_____
Total Containers 3
Temperature 12
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

4. RECEIVED BY:
Signature [signature]
Printed Name DawnWeyer
Firm TURNER LABORATORIES, INC.
Date/Time 4/17/08 09:35

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

8 RCRA METALS
TCLP
RUSH - 4/8 HRS.

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

April 23, 2008

Mark Pokorny
Metals Treatment Technologies
14045 W 66th Ave
Arvada, CO 80004
TEL: (303) 994-4948
FAX (303) 456-6998

RE: COT Silverbell Order No.: 0804649

Dear Mark Pokorny,

Turner Laboratories, Inc. received 3 samples on 4/17/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT:	Metals Treatment Technologies
Project:	COT Silverbell
Lab Order:	0804649
Date Received:	4/17/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804649-01A	Air #1		4/16/2008 6:00:00 PM
0804649-02A	Air #2		4/16/2008 5:50:00 PM
0804649-03A	Air #3		4/16/2008 5:55:00 PM

Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #1
Lab Order:	0804649	**Collection Date:**	4/16/2008 6:00:00 PM
Project:	COT Silverbell		
Lab ID:	0804649-01A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/18/2008 7:51:26 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

2

Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #2
Lab Order:	0804649	**Collection Date:**	4/16/2008 5:50:00 PM
Project:	COT Silverbell		
Lab ID:	0804649-02A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/18/2008 7:55:44 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

3

Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #3
Lab Order:	0804649	**Collection Date:**	4/16/2008 5:55:00 PM
Project:	COT Silverbell		
Lab ID:	0804649-03A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/18/2008 8:00:04 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

4

Turner Laboratories, Inc. *23-Apr-08*

Lab Order: 0804649
Client: Metals Treatment Technologies
Project: COT Silverbell

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804649-01A	Air #1	4/16/2008 6:00:00 PM	Solid	ICP Metals-RCRA, Total		4/17/2008	4/18/2008 7:51:26 PM
0804649-02A	Air #2	4/16/2008 5:50:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 7:55:44 PM
0804649-03A	Air #3	4/16/2008 5:55:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 8:00:04 PM

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804649

Received By: AW

Received Date/Time: 4/17/08 10:10

Delivered by: Client

1.	Shipping container/cooler in good condition?	☐ Yes	☐ No	☒ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml
		☒ Not Applicable		☐ Below 100ml
12.	Temperature upon receipt? NA			
13.	Number of sample containers received? 3			

Additional Comments:

2445 NORTH COYOTE DRIVE ▪ SUITE #104 ▪ TUCSON, ARIZONA 85745 ▪ 520 882-5880 ▪ FAX # 520 882-9788

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 08041049 DATE _____ PAGE _____ OF _____

PROJECT NAME CGT SILVERBELL # _____
CONTACT NAME MARK POKORNY
COMPANY NAME METALS TREATMENT TECH
ADDRESS 14045 W. 66th AVE ARVADA, CO 80004 PHONE 303-456-6977 FAX 303-456-6998
SAMPLER'S SIGNATURE [signature]

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals ☐ Acids ☐ 625/8270	Volatile Organics 624/524.2/8260	TTHMS ☐	HAA5 ☐	Pesticides ☐ PCB's ☐ 8081 8082	Total Petroleum Hydrocarbons IR/8015A2	Oil and Grease ☐ 1664A ☐ Grav. 1664A ☐	TCLP Analysis VOA ☐ Semi-VOA ☐ Pest./Herb. ☐	Metals TCLP ☐ Dissolved ☐ Total ☐ Pb ☐ Priority Pollutants ☐	Cyanide Total ☐ Amen. ☐ WAD ☐	SDWA-INORGANICS PRIMARY ☐ SECONDARY ☐	Coliform MPN ☐ Colilert ☐	pH ☐ Cl2 ☐	COD ☐ TSS ☐ BOD ☐
AIR #1	4/16/08	18:00		CARTRIDGE	1								X						
AIR #2	↓	17:50		↓	1								X						
AIR #3	↓	17:55		↓	1								X						

1. RELINQUISHED BY:
Signature [signature]
Printed Name MARK POKORNY
Firm MT2
Date/Time 4.17.08 10:10

2. RECEIVED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day X 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 3
Temperature N/A
☐ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

4. RECEIVED BY:
Signature [signature]
Printed Name Dan Brunkhyer
Firm TURNER LABORATORIES, INC.
Date/Time 4/17/08 10:10

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

AIR CARTRIDGE FOR TOTAL Pb
48 HR RUSH
EMAIL RESULTS TO MPOKORNY@MT2.COM

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

April 23, 2008

Mark Pokorny
Metals Treatment Technologies
14045 W 66th Ave
Arvada, CO 80004
TEL: (303) 994-4948
FAX (303) 456-6998

RE: COT Silverbell Order No.: 0804682

Dear Mark Pokorny,

Turner Laboratories, Inc. received 4 samples on 4/17/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Project: COT Silverbell
Lab Order: 0804682
Date Received: 4/17/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804682-01A	TCLP-0417-02		4/17/2008 3:45:00 PM
0804682-02A	Air #4		4/17/2008 3:50:00 PM
0804682-03A	Air #5		4/17/2008 3:55:00 PM
0804682-04A	Air #6		4/17/2008 4:00:00 PM

1

Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP-0417-02
Lab Order:	0804682	**Collection Date:**	4/17/2008 3:45:00 PM
Project:	COT Silverbell		
Lab ID:	0804682-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/21/2008 10:30:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/21/2008 1:42:51 PM
Barium	ND	10		mg/L	10	4/20/2008 12:47:07 PM
Cadmium	ND	0.50		mg/L	10	4/20/2008 12:47:07 PM
Chromium	ND	1.0		mg/L	10	4/20/2008 12:47:07 PM
Lead	ND	1.0		mg/L	10	4/20/2008 12:47:07 PM
Selenium	ND	0.50		mg/L	10	4/20/2008 12:47:07 PM
Silver	ND	2.0		mg/L	10	4/21/2008 1:42:51 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

2

Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #4
Lab Order:	0804682	**Collection Date:**	4/17/2008 3:50:00 PM
Project:	COT Silverbell		
Lab ID:	0804682-02A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/20/2008 3:43:28 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

3

Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #5
Lab Order:	0804682	**Collection Date:**	4/17/2008 3:55:00 PM
Project:	COT Silverbell		
Lab ID:	0804682-03A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/20/2008 3:47:49 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

4

Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #6
Lab Order:	0804682	**Collection Date:**	4/17/2008 4:00:00 PM
Project:	COT Silverbell		
Lab ID:	0804682-04A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/20/2008 4:13:46 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

5

TURNER LABORATORIES, INC.

QC SUMMARY REPORT

LEVEL II

Turner Work Order No.: 0804682
Client: Metals Treatment Technologies
Project: COT-Silverbell

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10593** Batch ID: **10593** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/21/2008 10:22:00 AM** Prep Date: **4/20/2008**
Client ID: Run ID: **HGANALYZER_080421** SeqNo: **620258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.001									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10589** Batch ID: **10589** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/20/2008 12:29:58 PM** Prep Date: **4/19/2008**
Client ID: Run ID: **ICP_080420A** SeqNo: **620160**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	10									
Cadmium	ND	0.5									
Chromium	ND	1									
Lead	ND	1									
Selenium	ND	0.5									

Sample ID: **MB-10589** Batch ID: **10589** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 1:25:44 PM** Prep Date: **4/19/2008**
Client ID: Run ID: **ICP_080421A** SeqNo: **620375**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1									
Silver	ND	2									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10585**	Batch ID: **10585**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/20/2008 2:50:17 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **ICP_080420A**		SeqNo: **620140**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Sample ID: **MB-10585**	Batch ID: **10585**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/21/2008 2:51:44 PM**	Prep Date: **4/13/2008**
Client ID:		Run ID: **ICP_080421A**		SeqNo: **620364**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

3

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804682-01AMS**	Batch ID: **10593**	Test Code: **SW1311/7470**	Units: **mg/L**		Analysis Date: **4/21/2008 10:32:00 AM**				Prep Date: **4/20/2008**	
Client ID: **TCLP-0417-02**		Run ID: **HGANALYZER_080421**			SeqNo: **620262**					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004456	0.001	0.005	0	89.1	85	115	0			

Sample ID: **0804682-01AMSD**	Batch ID: **10593**	Test Code: **SW1311/7470**	Units: **mg/L**		Analysis Date: **4/21/2008 10:34:00 AM**				Prep Date: **4/20/2008**	
Client ID: **TCLP-0417-02**		Run ID: **HGANALYZER_080421**			SeqNo: **620263**					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00473	0.001	0.005	0	94.6	85	115	0.004456	5.97	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

4

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804682-01AMS** Batch ID: **10589** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/20/2008 12:51:46 PM** Prep Date: **4/19/2008**
Client ID: **TCLP-0417-02** Run ID: **ICP_080420A** SeqNo: **620164**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	2.249	10	2	0	112	75	125	0			J
Cadmium	2.233	0.5	2	0	112	75	125	0			*
Chromium	2.139	1	2	0	107	75	125	0			
Lead	2.549	1	2	0.4315	106	75	125	0			
Selenium	2.146	0.5	2	0	107	75	125	0			*

Sample ID: **0804682-01AMSD** Batch ID: **10589** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/20/2008 12:56:27 PM** Prep Date: **4/19/2008**
Client ID: **TCLP-0417-02** Run ID: **ICP_080420A** SeqNo: **620165**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	2.206	10	2	0	110	75	125	2.249	0	20	J
Cadmium	2.194	0.5	2	0	110	75	125	2.233	1.78	20	*
Chromium	2.094	1	2	0	105	75	125	2.139	2.16	20	
Lead	2.522	1	2	0.4315	105	75	125	2.549	1.06	20	
Selenium	2.109	0.5	2	0	105	75	125	2.146	1.77	20	*

Sample ID: **0804682-01AMS** Batch ID: **10589** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 1:47:30 PM** Prep Date: **4/19/2008**
Client ID: **TCLP-0417-02** Run ID: **ICP_080421A** SeqNo: **620379**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.468	1	2	0	123	75	125	0			
Silver	0.955	2	1	0	95.5	75	125	0			J

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID: **0804682-01AMSD** Batch ID: **10589** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 1:51:56 PM** Prep Date: **4/19/2008**
Client ID: **TCLP-0417-02** Run ID: **ICP_080421A** SeqNo: **620380**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.391	1	2	0	120	75	125	2.468	3.16	20	
Silver	0.9531	2	1	0	95.3	75	125	0.955	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sample ID: **0804681-01AMS** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **4/20/2008 3:12:50 PM** Prep Date: **4/18/2008**											
Client ID: Run ID: **ICP_080420A** SeqNo: **620144**											
Lead	165.9	10	50	15.12	302	75	125	0			S
Sample ID: **0804681-01AMSD** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **4/20/2008 3:17:06 PM** Prep Date: **4/18/2008**											
Client ID: Run ID: **ICP_080420A** SeqNo: **620145**											
Lead	63.85	10	50	15.12	97.5	75	125	165.9	88.8	20	R
Sample ID: **0804681-09AMS** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **4/20/2008 3:30:36 PM** Prep Date: **4/18/2008**											
Client ID: Run ID: **ICP_080420A** SeqNo: **620147**											
Lead	51.09	10	50	7.883	86.4	75	125	0			
Sample ID: **0804681-09AMSD** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **4/20/2008 3:34:53 PM** Prep Date: **4/18/2008**											
Client ID: Run ID: **ICP_080420A** SeqNo: **620148**											
Lead	52.29	10	50	7.883	88.8	75	125	51.09	2.33	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10593** Batch ID: **10593** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/21/2008 10:25:00 AM** Prep Date: **4/20/2008**
Client ID: Run ID: **HGANALYZER_080421** SeqNo: **620259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005085	0.001	0.005	0	102	85	115	0			

Sample ID: **LCSD-10593** Batch ID: **10593** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/21/2008 10:27:00 AM** Prep Date: **4/20/2008**
Client ID: Run ID: **HGANALYZER_080421** SeqNo: **620260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005005	0.001	0.005	0	100	85	115	0.005085	1.59	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10589**	Batch ID: **10589**	Test Code: **SW1311/6010**	Units: **mg/L**	Analysis Date: **4/20/2008 12:34:14 PM**	Prep Date: **4/19/2008**
Client ID:		Run ID: **ICP_080420A**		SeqNo: **620161**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	2.13	10	2	0	107	80	120	0			J
Cadmium	2.154	0.5	2	0	108	80	120	0			*
Chromium	2.139	1	2	0	107	80	120	0			
Lead	2.115	1	2	0	106	80	120	0			
Selenium	2.172	0.5	2	0	109	80	120	0			*

Sample ID: **LCSD-10589**	Batch ID: **10589**	Test Code: **SW1311/6010**	Units: **mg/L**	Analysis Date: **4/20/2008 12:38:33 PM**	Prep Date: **4/19/2008**
Client ID:		Run ID: **ICP_080420A**		SeqNo: **620162**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	2.133	10	2	0	107	80	120	2.13	0	20	J
Cadmium	2.158	0.5	2	0	108	80	120	2.154	0.197	20	*
Chromium	2.127	1	2	0	106	80	120	2.139	0.543	20	
Lead	2.109	1	2	0	105	80	120	2.115	0.252	20	
Selenium	2.127	0.5	2	0	106	80	120	2.172	2.08	20	*

Sample ID: **LCS-10589**	Batch ID: **10589**	Test Code: **SW1311/6010**	Units: **mg/L**	Analysis Date: **4/21/2008 1:30:00 PM**	Prep Date: **4/19/2008**
Client ID:		Run ID: **ICP_080421A**		SeqNo: **620376**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.015	1	2	0	101	80	120	0			
Silver	0.9558	2	1	0	95.6	80	120	0			J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD-10589** Batch ID: **10589** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 1:34:18 PM** Prep Date: **4/19/2008**
Client ID: Run ID: **ICP_080421A** SeqNo: **620377**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLmit	Qual
Arsenic	1.956	1	2	0	97.8	30	120	2.015	2.97	20	
Silver	0.944	2	1	0	94.4	30	120	0.9558	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

10

CLIENT: Metals Treatment Technologies
Work Order: 0804682
Project: COT Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10585**	Batch ID: **10585**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/20/2008 2:54:32 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **ICP_080420A**		SeqNo: **620141**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	104	20	100	0	104	80	120	0			

Sample ID: **LCSD-10585**	Batch ID: **10585**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/20/2008 2:59:05 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **ICP_080420A**		SeqNo: **620142**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	106.9	20	100	0	107	80	120	104	2.78	20	

Sample ID: **LCS-10585**	Batch ID: **10585**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/21/2008 2:55:10 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **ICP_080421A**		SeqNo: **620365**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	107	20	100	0	107	80	120	0			

Sample ID: **LCSD-10585**	Batch ID: **10585**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/21/2008 2:59:41 PM**	Prep Date: **4/18/2008**
Client ID:		Run ID: **ICP_080421A**		SeqNo: **620366**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	106.3	20	100	0	106	80	120	107	0.681	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804649

Received By: AW

Received Date/Time: 4/17/08 10:10

Delivered by: Client

1.	Shipping container/cooler in good condition?	☐ Yes	☐ No	☒ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml
		☒ Not Applicable		☐ Below 100ml

12. Temperature upon receipt? NA

13. Number of sample containers received? 3

Additional Comments:

2445 NORTH COYOTE DRIVE ▪ SUITE #104 ▪ TUCSON, ARIZONA 85745 ▪ 520 882-5880 ▪ FAX # 520 882-9788

2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804082 DATE 4/17/2008 PAGE 1 OF 1

PROJECT NAME COT SILVERBELL # _____
CONTACT NAME MARK POKORNY
COMPANY NAME MT2
ADDRESS 14045 W. LEE TEN AVE ARIVADA CO 80004 PHONE 303-456-6977 FAX _____
SAMPLER'S SIGNATURE _____

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals 625/8270	Acids	Volatile Organics 624/524.2/8260	THMS	HAAS	Pesticides 8081	PCB's 8082	Total Petroleum Hydrocarbons IR(8015A2)	Oil and Grease Grav. 1664A	VOA	TCLP Analysis Semi-VOA	Pest./Herb.	TCLP	Dissolved	Metals 8 RCRA Total	Priority Pollutants	Total	Cyanide Amen.	WAD	SDWA-INORGANICS PRIMARY	SECONDARY	Coliform MPN	Collect	pH	Cl	COD	TSS	BOD					
TCLP-0417-02	4.17.08	1545		SOIL	1													1															TCLP	8 RCRA			2 DAY
		1545 MP																		ZNP																	
AIR#4		1550		CART.	1															1													Pb - TOTAL				
AIR#5		1555			1															1													Pb - TOTAL				
AIR#6		1600			1															1													Pb - TOTAL				

1. RELINQUISHED BY:
Signature _____
Printed Name MARK POKORNY
Firm MT2
Date/Time 4.17.08 16:00

2. RECEIVED BY:
Signature _____
Printed Name Michele Mahal
Firm Brown & Caldwell
Date/Time 4-17-08 - 1600

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day X 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 4
Temperature 1.9
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature _____
Printed Name Michele Mahal
Firm Brown & Caldwell
Date/Time 4-17-08 1618

4. RECEIVED BY:
Signature _____
Printed Name Dawn Weyer
Firm TURNER LABORATORIES, INC.
Date/Time 4/17/08 1618

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
48 HR RUSH
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

April 23, 2008

Mark Pokorny
Metals Treatment Technologies
14045 W 66th Ave
Arvada, CO 80004
TEL: (303) 994-4948
FAX (303) 456-6998

RE: COT Silverbell Order No.: 0804701

Dear Mark Pokorny,

Turner Laboratories, Inc. received 5 samples on 4/18/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Project: COT Silverbell
Lab Order: 0804701
Date Received: 4/18/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804701-01A	TCLP-0418-03		4/18/2008 2:35:00 PM
0804701-02A	TCLP-0418-04		4/18/2008 3:00:00 PM
0804701-03A	Air #7		4/18/2008 3:00:00 PM
0804701-04A	Air #8		4/18/2008 3:05:00 PM
0804701-05A	Air #9		4/18/2008 3:10:00 PM

Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP-0418-03
Lab Order:	0804701	**Collection Date:**	4/18/2008 2:35:00 PM
Project:	COT Silverbell		
Lab ID:	0804701-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/21/2008 10:37:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/21/2008 2:16:13 PM
Barium	ND	10		mg/L	10	4/21/2008 2:16:13 PM
Cadmium	ND	0.50		mg/L	10	4/21/2008 2:16:13 PM
Chromium	ND	1.0		mg/L	10	4/21/2008 2:16:13 PM
Lead	ND	1.0		mg/L	10	4/21/2008 2:16:13 PM
Selenium	ND	0.50		mg/L	10	4/21/2008 2:16:13 PM
Silver	ND	2.0		mg/L	10	4/21/2008 2:16:13 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

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Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP-0418-04
Lab Order:	0804701	**Collection Date:**	4/18/2008 3:00:00 PM
Project:	COT Silverbell		
Lab ID:	0804701-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/21/2008 10:39:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/21/2008 2:34:06 PM
Barium	ND	10		mg/L	10	4/21/2008 2:34:06 PM
Cadmium	ND	0.50		mg/L	10	4/21/2008 2:34:06 PM
Chromium	ND	1.0		mg/L	10	4/21/2008 2:34:06 PM
Lead	ND	1.0		mg/L	10	4/21/2008 2:34:06 PM
Selenium	ND	0.50		mg/L	10	4/21/2008 2:34:06 PM
Silver	ND	2.0		mg/L	10	4/21/2008 2:34:06 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

3

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #7
Lab Order:	0804701	**Collection Date:**	4/18/2008 3:00:00 PM
Project:	COT Silverbell		
Lab ID:	0804701-03A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/20/2008 2:15:47 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

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Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #8
Lab Order:	0804701	**Collection Date:**	4/18/2008 3:05:00 PM
Project:	COT Silverbell		
Lab ID:	0804701-04A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/20/2008 2:20:09 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

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Turner Laboratories, Inc. **Date:** *23-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #9
Lab Order:	0804701	**Collection Date:**	4/18/2008 3:10:00 PM
Project:	COT Silverbell		
Lab ID:	0804701-05A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/20/2008 2:24:25 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

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Turner Laboratories, Inc. *23-Apr-08*

Lab Order: 0804701
Client: Metals Treatment Technologies
Project: COT Silverbell

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804701-01A	TCLP-0418-03	4/18/2008 2:35:00 PM	Soil	ICP Metals, TCLP Leached		4/20/2008	4/21/2008 2:16:13 PM
				Mercury, TCLP Leached		4/20/2008	4/21/2008 10:37:00 AM
0804701-02A	TCLP-0418-04	4/18/2008 3:00:00 PM		ICP Metals, TCLP Leached		4/20/2008	4/21/2008 2:34:06 PM
				Mercury, TCLP Leached		4/20/2008	4/21/2008 10:39:00 AM
0804701-03A	Air #7		Solid	ICP Metals-RCRA, Total		4/19/2008	4/20/2008 2:15:47 PM
0804701-04A	Air #8	4/18/2008 3:05:00 PM		ICP Metals-RCRA, Total		4/19/2008	4/20/2008 2:20:09 PM
0804701-05A	Air #9	4/18/2008 3:10:00 PM		ICP Metals-RCRA, Total		4/19/2008	4/20/2008 2:24:25 PM

TURNER LABORATORIES, INC.

QC SUMMARY REPORT

LEVEL II

Turner Work Order No.: 0804701
Client: Metals Treatment Technologies
Project: COT-Silverbell

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804701
Project: COT Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10593** Batch ID: **10593** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/21/2008 10:22:00 AM** Prep Date: **4/20/2008**
Client ID: Run ID: **HGANALYZER_080421** SeqNo: **620258**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.001									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804701
Project: COT Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10592** Batch ID: **10592** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 2:00:54 PM** Prep Date: **4/20/2008**
Client ID: Run ID: **ICP_080421A** SeqNo: **620381**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1									
Barium	ND	10									
Cadmium	ND	0.5									
Chromium	ND	1									
Lead	ND	1									
Selenium	ND	0.5									
Silver	ND	2									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

2

CLIENT: Metals Treatment Technologies
Work Order: 0804701
Project: COT Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10590** Batch ID: **10590** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **4/20/2008 1:57:52 PM** Prep Date: **4/19/2008**

Client ID: Run ID: **ICP_080420A** SeqNo: **620166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

3

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804701
Project: COT Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804682-01AMS** Batch ID: **10593** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/21/2008 10:32:00 AM** Prep Date: **4/20/2008**
Client ID: Run ID: **HGANALYZER_080421** SeqNo: **620262**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004456	0.001	0.005	0	89.1	85	115	0			

Sample ID: **0804682-01AMSD** Batch ID: **10593** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/21/2008 10:34:00 AM** Prep Date: **4/20/2008**
Client ID: Run ID: **HGANALYZER_080421** SeqNo: **620263**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00473	0.001	0.005	0	94.6	85	115	0.004456	5.97	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804701
Project: COT Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804701-01AMS** Batch ID: **10592** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 2:20:37 PM** Prep Date: **4/20/2008**
Client ID: **TCLP-0418-03** Run ID: **ICP_080421A** SeqNo: **620385**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.108	1	2	0	105	75	125	0			
Barium	2.246	10	2	0	112	75	125	0			J
Cadmium	2.201	0.5	2	0	110	75	125	0			*
Chromium	2.097	1	2	0	105	75	125	0			
Lead	2.144	1	2	0	107	75	125	0			
Selenium	2.12	0.5	2	0	106	75	125	0			*
Silver	0.9489	2	1	0	94.9	75	125	0			J

Sample ID: **0804701-01AMSD** Batch ID: **10592** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 2:25:06 PM** Prep Date: **4/20/2008**
Client ID: **TCLP-0418-03** Run ID: **ICP_080421A** SeqNo: **620386**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2	1	2	0	100	75	125	2.108	5.22	20	
Barium	2.202	10	2	0	110	75	125	2.246	0	20	J
Cadmium	2.153	0.5	2	0	108	75	125	2.201	2.23	20	*
Chromium	1.987	1	2	0	99.4	75	125	2.097	5.39	20	
Lead	2.023	1	2	0	101	75	125	2.144	5.83	20	
Selenium	1.955	0.5	2	0	97.8	75	125	2.12	8.11	20	*
Silver	0.938	2	1	0	93.8	75	125	0.9489	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Turner Laboratories, Inc.

Date: *23-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804701
Project: COT Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10593** Batch ID: **10593** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/21/2008 10:25:00 AM** Prep Date: **4/20/2008**
Client ID: Run ID: **HGANALYZER_080421** SeqNo: **620259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005085	0.001	0.005	0	102	85	115	0			

Sample ID: **LCSD-10593** Batch ID: **10593** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/21/2008 10:27:00 AM** Prep Date: **4/20/2008**
Client ID: Run ID: **HGANALYZER_080421** SeqNo: **620260**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005005	0.001	0.005	0	100	85	115	0.005085	1.59	20	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804701
Project: COT Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10592** Batch ID: **10592** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 2:03:57 PM** Prep Date: **4/20/2008**
Client ID: Run ID: **ICP_080421A** SeqNo: **620382**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	1.994	1	2	0	99.7	80	120	0			
Barium	2.162	10	2	0	108	80	120	0			J
Cadmium	2.197	0.5	2	0	110	80	120	0			*
Chromium	2.137	1	2	0	107	80	120	0			
Lead	2.124	1	2	0	106	80	120	0			
Selenium	2.1	0.5	2	0	105	80	120	0			*
Silver	0.9842	2	1	0	98.4	80	120	0			J

Sample ID: **LCSD-10592** Batch ID: **10592** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/21/2008 2:08:18 PM** Prep Date: **4/20/2008**
Client ID: Run ID: **ICP_080421A** SeqNo: **620383**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2	1	2	0	100	80	120	1.994	0.338	20	
Barium	2.165	10	2	0	108	80	120	2.162	0	20	J
Cadmium	2.194	0.5	2	0	110	80	120	2.197	0.131	20	*
Chromium	2.145	1	2	0	107	80	120	2.137	0.387	20	
Lead	2.149	1	2	0	107	80	120	2.124	1.18	20	
Selenium	2.116	0.5	2	0	106	80	120	2.1	0.746	20	*
Silver	0.9881	2	1	0	98.8	80	120	0.9842	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804701
Project: COT Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10590**	Batch ID: **10590**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/20/2008 2:02:13 PM**	Prep Date: **4/19/2008**
Client ID:		Run ID: **ICP_080420A**		SeqNo: **620167**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	102.8	20	100	0	103	80	120	0			

Sample ID: **LCSD-10590**	Batch ID: **10590**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/20/2008 2:06:52 PM**	Prep Date: **4/19/2008**
Client ID:		Run ID: **ICP_080420A**		SeqNo: **620168**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	106.7	20	100	0	107	80	120	102.8	3.73	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

8

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804701

Received By: DW

Received Date/Time: 4/18/08 @ 1530

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes	☐ Above 100ml	
		☒ Not Applicable	☐ Below 100ml	
12.	Temperature upon receipt? 2.4			
13.	Number of sample containers received? 5			

Additional Comments:

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804701 DATE _____ PAGE _____ OF _____

PROJECT NAME CoT SILVERBELL # _____
CONTACT NAME MARK POKORNY
COMPANY NAME MT2
ADDRESS 14045 W. 66TH AVE, ARVADA CO 80004 PHONE 303-456 6977 FAX 303-456 6998
SAMPLER'S SIGNATURE _____

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	TCLP Pb & As
TCLP-0418-03	4.18.08	1435		SOIL	1	X
TCLP-0418-04	"	15:00		SOIL	1	X
AIR #7	"	15:00		CART.	1	
AIR #8	"	15:05		"	1	
AIR #9	"	15:10		"	1	

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

Base Neutrals ☐ Acids ☐ 625/8270
Volatile Organics 624/524.2/8260 ☐
TTHMS ☐
HAA5 ☐
Pesticides ☐ PCB's ☐ 8081 8082
Total Petroleum Hydrocarbons IR(8015A2) ☐ 1664A ☐
Oil and Grease Grav. 1664A ☐
TCLP Analysis VOA ☐ SemiVOA ☐ Pest./Herb. ☐ TCLP ☐ Dissolved ☐ 8 RCRA Metals
Total ☐ Priority Pollutants ☐
Cyanide Total ☐ Amen. ☐ WAD ☐
SDWA/INORGANICS PRIMARY ☐ SECONDARY ☐
Coliform MPN ☐ Colilert ☐ pH ☐ Cl2 ☐ COD ☐ TSS ☐ BOD ☐
TOTAL Pb

1. RELINQUISHED BY: Signature _____ Printed Name MARK POKORNY Firm MT2 Date/Time 4.18.08 15:30
2. RECEIVED BY: Signature _____ Printed Name _____ Firm _____ Date/Time _____
3. RELINQUISHED BY: Signature _____ Printed Name _____ Firm _____ Date/Time _____
4. RECEIVED BY: Signature _____ Printed Name _____ Firm TURNER LABORATORIES, INC. Date/Time 4/18/08 15:30

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 5
Temperature 24
☐ Wet Ice ☐ Blue Ice

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No
48 HR RUSH
EMAIL RESULTS: MPOKORNY@MT2.COM

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

April 29, 2008

Mark Pokorny
Metals Treatment Technologies
14045 W 66th Ave
Arvada, CO 80004
TEL: (303) 994-4948
FAX (303) 456-6998

RE: COT-Silverbell

Order No.: 0804781

Dear Mark Pokorny,

Turner Laboratories, Inc. received 5 samples on 4/23/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman
Laboratory Director

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

Turner Laboratories, Inc.

Date: *29-Apr-08*

CLIENT: Metals Treatment Technologies
Project: COT-Silverbell
Lab Order: 0804781
Date Received: 4/23/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804781-01A	AIR #10		4/21/2008 3:55:00 PM
0804781-02A	AIR #11		4/21/2008 4:00:00 PM
0804781-03A	AIR #12		4/22/2008 4:00:00 PM
0804781-04A	AIR #13		4/22/2008 4:05:00 PM
0804781-05A	TCLP -0423-05		4/23/2008 10:20:00 AM

Turner Laboratories, Inc. **Date:** *29-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	AIR #10
Lab Order:	0804781	**Collection Date:**	4/21/2008 3:55:00 PM
Project:	COT-Silverbell		
Lab ID:	0804781-01A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/24/2008 3:53:47 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

2

Turner Laboratories, Inc. **Date:** *29-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	AIR #11
Lab Order:	0804781	**Collection Date:**	4/21/2008 4:00:00 PM
Project:	COT-Silverbell		
Lab ID:	0804781-02A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/24/2008 3:58:07 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

3

Turner Laboratories, Inc. **Date:** *29-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	AIR #12
Lab Order:	0804781	**Collection Date:**	4/22/2008 4:00:00 PM
Project:	COT-Silverbell		
Lab ID:	0804781-03A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/24/2008 4:02:29 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

4

Turner Laboratories, Inc. **Date:** *29-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	AIR #13
Lab Order:	0804781	**Collection Date:**	4/22/2008 4:05:00 PM
Project:	COT-Silverbell		
Lab ID:	0804781-04A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/24/2008 4:06:50 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

5

Turner Laboratories, Inc. **Date:** *29-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP -0423-05
Lab Order:	0804781	**Collection Date:**	4/23/2008 10:20:00 AM
Project:	COT-Silverbell		
Lab ID:	0804781-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/24/2008 2:50:00 PM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/24/2008 3:09:58 PM
Barium	ND	10		mg/L	10	4/24/2008 3:09:58 PM
Cadmium	ND	0.50		mg/L	10	4/24/2008 3:09:58 PM
Chromium	ND	1.0		mg/L	10	4/24/2008 3:09:58 PM
Lead	1.1	1.0		mg/L	10	4/24/2008 3:09:58 PM
Selenium	ND	0.50		mg/L	10	4/24/2008 3:09:58 PM
Silver	ND	2.0		mg/L	10	4/24/2008 3:09:58 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

6

29-Apr-08

Turner Laboratories, Inc.

DATES REPORT

Lab Order: 0804781
Client: Metals Treatment Technologies
Project: COT-Silverbell

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804781-01A	AIR #10	4/21/2008 3:55:00 PM	Solid	ICP Metals-RCRA, Total		4/23/2008	4/24/2008 3:53:47 PM
0804781-02A	AIR #11	4/21/2008 4:00:00 PM		ICP Metals-RCRA, Total		4/23/2008	4/24/2008 3:58:07 PM
0804781-03A	AIR #12	4/22/2008 4:00:00 PM		ICP Metals-RCRA, Total		4/23/2008	4/24/2008 4:02:29 PM
0804781-04A	AIR #13	4/22/2008 4:05:00 PM		ICP Metals-RCRA, Total		4/23/2008	4/24/2008 4:06:50 PM
0804781-05A	TCLP -0423-05	4/23/2008 10:20:00 AM	Soil	ICP Metals, TCLP Leached		4/24/2008	4/24/2008 3:09:58 PM
				Mercury, TCLP Leached		4/24/2008	4/24/2008 2:50:00 PM

TURNER LABORATORIES, INC.

QC SUMMARY REPORT

LEVEL II

Turner Work Order No.: 0804781
Client: Metals Treatment Technologies
Project: COT-Silverbell

Turner Laboratories, Inc.

Date: *29-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804781
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10612**	Batch ID: **10612**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/24/2008 2:35:00 PM**	Prep Date: **4/24/2008**
Client ID:		Run ID: **HGANALYZER_080424**		SeqNo: **621173**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.001									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

CLIENT: Metals Treatment Technologies
Work Order: 0804781
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10610** Batch ID: **10610** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/24/2008 2:52:28 PM** Prep Date: **4/24/2008**
Client ID: Run ID: **ICP_080424B** SeqNo: **621210**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1									
Barium	ND	10									
Cadmium	ND	0.5									
Chromium	ND	1									
Lead	ND	1									
Selenium	ND	0.5									
Silver	ND	2									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804781
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10605** Batch ID: **10605** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **4/24/2008 3:35:55 PM** Prep Date: **4/23/2008**

Client ID: Run ID: **ICP_080424B** SeqNo: **621202**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

3

Turner Laboratories, Inc.

Date: *29-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804781
Project: COT-Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804733-01CMS** Batch ID: **10612** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/24/2008 2:45:00 PM** Prep Date: **4/24/2008**
Client ID: Run ID: **HGANALYZER_080424** SeqNo: **621177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005164	0.001	0.005	0	103	85	115	0			

Sample ID: **0804733-01CMSD** Batch ID: **10612** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/24/2008 2:47:00 PM** Prep Date: **4/24/2008**
Client ID: Run ID: **HGANALYZER_080424** SeqNo: **621178**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005161	0.001	0.005	0	103	85	115	0.005164	0.0581	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804781
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0804781-05AMS** Batch ID: **10610** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/24/2008 3:14:36 PM** Prep Date: **4/24/2008**
Client ID: **TCLP -0423-05** Run ID: **ICP_080424B** SeqNo: **621214**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.206	1	2	0	110	75	125	0			
Barium	2.319	10	2	0	116	75	125	0			J
Cadmium	2.233	0.5	2	0	112	75	125	0			*
Chromium	2.171	1	2	0	109	75	125	0			
Lead	3.275	1	2	1.108	108	75	125	0			
Selenium	2.257	0.5	2	0	113	75	125	0			*
Silver	0.967	2	1	0	96.7	75	125	0			J

Sample ID: **0804781-05AMSD** Batch ID: **10610** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/24/2008 3:19:16 PM** Prep Date: **4/24/2008**
Client ID: **TCLP -0423-05** Run ID: **ICP_080424B** SeqNo: **621215**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.182	1	2	0	109	75	125	2.206	1.1	20	
Barium	2.327	10	2	0	116	75	125	2.319	0	20	J
Cadmium	2.239	0.5	2	0	112	75	125	2.233	0.242	20	*
Chromium	2.159	1	2	0	108	75	125	2.171	0.55	20	
Lead	3.257	1	2	1.108	107	75	125	3.275	0.524	20	
Selenium	2.222	0.5	2	0	111	75	125	2.257	1.57	20	*
Silver	0.9721	2	1	0	97.2	75	125	0.967	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Turner Laboratories, Inc.

Date: *29-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804781
Project: COT-Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10612** Batch ID: **10612** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/24/2008 2:38:00 PM** Prep Date: **4/24/2008**
Client ID: Run ID: **HGANALYZER_080424** SeqNo: **621174**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005305	0.001	0.005	0	106	85	115	0			

Sample ID: **LCSD-10612** Batch ID: **10612** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/24/2008 2:40:00 PM** Prep Date: **4/24/2008**
Client ID: Run ID: **HGANALYZER_080424** SeqNo: **621175**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005328	0.001	0.005	0	107	85	115	0.005305	0.433	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804781
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10610** Batch ID: **10610** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/24/2008 2:57:00 PM** Prep Date: **4/24/2008**
Client ID: Run ID: **ICP_080424B** SeqNo: **621211**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.065	1	2	0	103	80	120	0			
Barium	2.124	10	2	0	106	80	120	0			J
Cadmium	2.125	0.5	2	0	106	80	120	0			*
Chromium	2.112	1	2	0	106	80	120	0			
Lead	2.11	1	2	0	106	80	120	0			
Selenium	2.155	0.5	2	0	108	80	120	0			*
Silver	0.9756	2	1	0	97.6	80	120	0			J

Sample ID: **LCSD-10610** Batch ID: **10610** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/24/2008 3:01:19 PM** Prep Date: **4/24/2008**
Client ID: Run ID: **ICP_080424B** SeqNo: **621212**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.057	1	2	0	103	80	120	2.065	0.353	20	
Barium	2.145	10	2	0	107	80	120	2.124	0	20	J
Cadmium	2.151	0.5	2	0	108	80	120	2.125	1.19	20	*
Chromium	2.132	1	2	0	107	80	120	2.112	0.906	20	
Lead	2.114	1	2	0	106	80	120	2.11	0.15	20	
Selenium	2.198	0.5	2	0	110	80	120	2.155	1.99	20	*
Silver	0.985	2	1	0	98.5	80	120	0.9756	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804781
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10605**	Batch ID: **10605**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/24/2008 3:40:13 PM**	Prep Date: **4/23/2008**
Client ID:		Run ID: **ICP_080424B**		SeqNo: **621203**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	105.7	20	100	0	106	80	120	0			

Sample ID: **LCSD-10605**	Batch ID: **10605**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/24/2008 3:44:49 PM**	Prep Date: **4/23/2008**
Client ID:		Run ID: **ICP_080424B**		SeqNo: **621204**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	107	20	100	0	107	80	120	105.7	1.3	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804781

Received By: DW

Received Date/Time: 4/25/08 0:55

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present	
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present	
3.	Chain of custody present?	☒ Yes	☐ No		
4.	COC signed when relinquished and received?	☒ Yes	☐ No		
5.	COC agrees with sample labels?	☒ Yes	☐ No		
6.	Samples in proper container/bottle?	☒ Yes	☐ No		
7.	Sample container intact?	☒ Yes	☐ No		
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No		
9.	Samples received within holding times?	☒ Yes	☐ No		
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials	
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml	
		☒ Not Applicable		☐ Below 100ml	
12.	Temperature upon receipt? 21				
13.	Number of sample containers received? 5				

Additional Comments:

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804781 DATE _____ PAGE _____ OF _____

PROJECT NAME COT - SILVERBELL # _____
CONTACT NAME MARK POKORNY
COMPANY NAME MTZ
ADDRESS 14045 W. 66th AVE ARVADA CO 80004 PHONE 303-999-4948 303-456-6998
SAMPLER'S SIGNATURE M. Pokorny

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	TOTAL Pb
~~AIR #9~~ WP						
AIR #10	4-21-08	15:55		AIR CARTRDG.	1	X
AIR #11	4-21-08	16:00		"	1	X
AIR #12	4-22-08	16:00		"	1	X
AIR #13	4-22-08	16:05		"	1	X
TCLP-0423-05	4-23-08	10:20		SOIL	1	RUSH

Base Neutrals ☐ Acids ☐ 625/8270
Volatile Organics 624/524.2/8260
TTHMS ☐
HAA5 ☐
Pesticides ☐ PCB's ☐ 8081 8082
Total Petroleum Hydrocarbons IR(8015A2) ☐ 1664A ☐
Oil and Grease Grav. 1664A ☐
TCLP Analysis VOA ☐ Semi-VOA ☐ 8 RCRA Metals ☐ Pest./Herb. ☐ TCLP ☐ Dissolved ☐
Total ☐ Priority Pollutants ☐
Total ☐ Cyanide Amen ☐ WAD ☐
SDWA/INORGANICS PRIMARY ☐
SECONDARY ☐
Coliform MPN ☐ Colilert ☐ pH ☐ Cl2 ☐ COD ☐ TSS ☐ BOD ☐

1. RELINQUISHED BY:
Signature M. Pokorny
Printed Name MARK POKORNY
Firm MTZ
Date/Time 4.23.08 10:55

2. RECEIVED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day X 2 Day X 5 Day*
____ Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 5
Temperature 21
X Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

4. RECEIVED BY:
Signature Dan Weyer
Printed Name Dawn Weyer
Firm TURNER LABORATORIES, INC.
Date/Time 4/23/08 10:55

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

5 DAY TURN ON AIR CARTRIDGES
48 TURN ON TCLP

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

April 30, 2008

Mark Pokorny
Metals Treatment Technologies
14045 W 66th Ave
Arvada, CO 80004
TEL: (303) 994-4948
FAX (303) 456-6998

RE: COT-Silverbell

Order No.: 0804854

Dear Mark Pokorny,

Turner Laboratories, Inc. received 7 samples on 4/25/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman
Laboratory Director

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

Turner Laboratories, Inc.

Date: *30-Apr-08*

CLIENT: Metals Treatment Technologies
Project: COT-Silverbell
Lab Order: 0804854
Date Received: 4/25/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804854-01A	Air #14		4/23/2008 4:00:00 PM
0804854-02A	Air #15		4/23/2008 4:05:00 PM
0804854-03A	COT-TSP1-0425-06		4/25/2008 3:20:00 PM
0804854-04A	COT-TSP1-0425-07		4/25/2008 3:25:00 PM
0804854-05A	COT-TSP1-0425-08		4/25/2008 3:30:00 PM
0804854-06A	COT-TSP1-0425-09		4/25/2008 3:35:00 PM
0804854-07A	COT-TSP1-0425-10		4/25/2008 3:40:00 PM

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #14
Lab Order:	0804854	**Collection Date:**	4/23/2008 4:00:00 PM
Project:	COT-Silverbell		
Lab ID:	0804854-01A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/29/2008 8:27:21 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

2

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	Air #15
Lab Order:	0804854	**Collection Date:**	4/23/2008 4:05:00 PM
Project:	COT-Silverbell		
Lab ID:	0804854-02A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/Filter	1	4/29/2008 8:31:39 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

3

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	COT-TSP1-0425-06
Lab Order:	0804854	**Collection Date:**	4/25/2008 3:20:00 PM
Project:	COT-Silverbell		
Lab ID:	0804854-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 11:02:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:31:08 PM
Barium	ND	10		mg/L	10	4/29/2008 5:31:08 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:31:08 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:31:08 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:31:08 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:31:08 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:31:08 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

4

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	COT-TSP1-0425-07
Lab Order:	0804854	**Collection Date:**	4/25/2008 3:25:00 PM
Project:	COT-Silverbell		
Lab ID:	0804854-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 11:05:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:35:51 PM
Barium	ND	10		mg/L	10	4/29/2008 5:35:51 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:35:51 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:35:51 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:35:51 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:35:51 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:35:51 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

5

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	COT-TSP1-0425-08
Lab Order:	0804854	**Collection Date:**	4/25/2008 3:30:00 PM
Project:	COT-Silverbell		
Lab ID:	0804854-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 11:07:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:40:33 PM
Barium	ND	10		mg/L	10	4/29/2008 5:40:33 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:40:33 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:40:33 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:40:33 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:40:33 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:40:33 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

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Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	COT-TSP1-0425-09
Lab Order:	0804854	**Collection Date:**	4/25/2008 3:35:00 PM
Project:	COT-Silverbell		
Lab ID:	0804854-06A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 11:09:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:45:16 PM
Barium	ND	10		mg/L	10	4/29/2008 5:45:16 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:45:16 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:45:16 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:45:16 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:45:16 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:45:16 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

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Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	COT-TSP1-0425-10
Lab Order:	0804854	**Collection Date:**	4/25/2008 3:40:00 PM
Project:	COT-Silverbell		
Lab ID:	0804854-07A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 11:12:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:49:59 PM
Barium	ND	10		mg/L	10	4/29/2008 5:49:59 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:49:59 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:49:59 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:49:59 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:49:59 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:49:59 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

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Turner Laboratories, Inc. *30-Apr-08*

Lab Order: 0804854
Client: Metals Treatment Technologies
Project: COT-Silverbell

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804854-01A	Air #14	4/23/2008 4:30:00 PM	Solid	ICP Metals-RCRA, Total		4/28/2008	4/29/2008 8:27:21 PM
0804854-02A	Air #15	4/23/2008 4:05:00 PM		ICP Metals-RCRA, Total		4/28/2008	4/29/2008 8:31:39 PM
0804854-03A	COT-TSP1-0425-06	4/25/2008 3:20:00 PM	Soil	ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:31:08 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 11:02:00 AM
0804854-04A	COT-TSP1-0425-07	4/25/2008 3:25:00 PM		ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:35:51 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 11:05:00 AM
0804854-05A	COT-TSP1-0425-08	4/25/2008 3:30:00 PM		ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:40:33 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 11:07:00 AM
0804854-06A	COT-TSP1-0425-09	4/25/2008 3:35:00 PM		ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:45:16 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 11:09:00 AM
0804854-07A	COT-TSP1-0425-10	4/25/2008 3:40:00 PM		ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:49:59 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 11:12:00 AM

Turner Laboratories, Inc.

Date: *30-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10631** Batch ID: **10631** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/30/2008 10:38:00 AM** Prep Date: **4/29/2008**
Client ID: Run ID: **HGANALYZER_080430** SeqNo: **622090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.001									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10626** Batch ID: **10626** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/29/2008 4:37:17 PM** Prep Date: **4/29/2008**

Client ID: Run ID: **ICP_080429A** SeqNo: **622019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1									
Barium	ND	10									
Cadmium	ND	0.5									
Chromium	ND	1									
Lead	ND	1									
Selenium	ND	0.5									
Silver	ND	2									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

2

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10618** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **4/29/2008 7:47:44 PM** Prep Date: **4/28/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **621992**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.02209	20									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Turner Laboratories, Inc.

Date: *30-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804874-01AMS** Batch ID: **10631** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/30/2008 10:47:00 AM** Prep Date: **4/29/2008**
Client ID: Run ID: **HGANALYZER_080430** SeqNo: **622094**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005095	0.001	0.005	0	102	85	115	0			

Sample ID: **0804874-01AMSD** Batch ID: **10631** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/30/2008 10:50:00 AM** Prep Date: **4/29/2008**
Client ID: Run ID: **HGANALYZER_080430** SeqNo: **622095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005099	0.001	0.005	0	102	85	115	0.005095	0.0785	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804874-01AMS** Batch ID: **10626** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/29/2008 4:59:05 PM** Prep Date: **4/29/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **622023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.27	1	2	0	113	75	125	0			
Barium	2.284	10	2	0	114	75	125	0			J
Cadmium	2.211	0.5	2	0	111	75	125	0			*
Chromium	2.19	1	2	0	109	75	125	0			
Lead	2.179	1	2	0	109	75	125	0			
Selenium	2.246	0.5	2	0	112	75	125	0			*
Silver	0.9474	2	1	0	94.7	75	125	0			J

Sample ID: **0804874-01AMSD** Batch ID: **10626** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/29/2008 5:03:46 PM** Prep Date: **4/29/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **622024**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.233	1	2	0	112	75	125	2.27	1.63	20	
Barium	2.298	10	2	0	115	75	125	2.284	0	20	J
Cadmium	2.228	0.5	2	0	111	75	125	2.211	0.779	20	*
Chromium	2.186	1	2	0	109	75	125	2.19	0.161	20	
Lead	2.185	1	2	0	109	75	125	2.179	0.31	20	
Selenium	2.221	0.5	2	0	111	75	125	2.246	1.11	20	*
Silver	0.9515	2	1	0	95.1	75	125	0.9474	0	20	J

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0804855-03AMS	Batch ID: 10618	Test Code: SW6010B	Units: mg/Kg	Analysis Date: 4/29/2008 8:10:19 PM	Prep Date: 4/28/2008
Client ID:		Run ID: ICP_080429A		SeqNo: 621996	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	51.86	10	50	22.48	58.8	75	125	0			S

Sample ID: 0804855-03AMSD	Batch ID: 10618	Test Code: SW6010B	Units: mg/Kg	Analysis Date: 4/29/2008 8:14:33 PM	Prep Date: 4/28/2008
Client ID:		Run ID: ICP_080429A		SeqNo: 621997	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	53.13	10	50	22.48	61.3	75	125	51.86	2.42	20	S

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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Turner Laboratories, Inc.

Date: *30-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10631** Batch ID: **10631** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/30/2008 10:40:00 AM** Prep Date: **4/29/2008**
Client ID: Run ID: **HGANALYZER_080430** SeqNo: **622091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005225	0.001	0.005	0	104	85	115	0			

Sample ID: **LCSD-10631** Batch ID: **10631** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/30/2008 10:43:00 AM** Prep Date: **4/29/2008**
Client ID: Run ID: **HGANALYZER_080430** SeqNo: **622092**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0052	0.001	0.005	0	104	85	115	0.005225	0.48	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10626** Batch ID: **10626** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/29/2008 4:41:33 PM** Prep Date: **4/29/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **622020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.095	1	2	0	105	80	120	0			
Barium	2.126	10	2	0	106	80	120	0			J
Cadmium	2.138	0.5	2	0	107	80	120	0			*
Chromium	2.151	1	2	0	108	80	120	0			
Lead	2.095	1	2	0	105	80	120	0			
Selenium	2.202	0.5	2	0	110	80	120	0			*
Silver	0.9622	2	1	0	96.2	80	120	0			J

Sample ID: **LCSD-10626** Batch ID: **10626** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/29/2008 4:45:52 PM** Prep Date: **4/29/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **622021**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.028	1	2	0	101	80	120	2.095	3.25	20	
Barium	2.113	10	2	0	106	80	120	2.126	0	20	J
Cadmium	2.114	0.5	2	0	106	80	120	2.138	1.1	20	*
Chromium	2.131	1	2	0	107	80	120	2.151	0.938	20	
Lead	2.081	1	2	0	104	80	120	2.095	0.649	20	
Selenium	2.175	0.5	2	0	109	80	120	2.202	1.22	20	*
Silver	0.9614	2	1	0	96.1	80	120	0.9622	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804854
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10618**	Batch ID: **10618**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/29/2008 7:52:05 PM**	Prep Date: **4/28/2008**
Client ID:		Run ID: **ICP_080429A**		SeqNo: **621993**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	106.2	20	100	0.02209	106	80	120	0			

Sample ID: **LCSD-10618**	Batch ID: **10618**	Test Code: **SW6010B**	Units: **mg/Kg**	Analysis Date: **4/29/2008 7:56:38 PM**	Prep Date: **4/28/2008**
Client ID:		Run ID: **ICP_080429A**		SeqNo: **621994**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	103.7	20	100	0.02209	104	80	120	106.2	2.34	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804854

Received By: DW

Received Date/Time: 4/25/08 1055

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml
		☒ Not Applicable		☐ Below 100ml

12. Temperature upon receipt? 10

13. Number of sample containers received? 7

Additional Comments: Client aware no one was present to approve RUSH

2445 NORTH COYOTE DRIVE ▪ SUITE #104 ▪ TUCSON, ARIZONA 85745 ▪ 520 882-5880 ▪ FAX # 520 882-9788

0804854

Company Name/Address:	Alternate billing information:	Analysis/Container/Preservative	Chain of Custody Page 1 of 1
MT2 14045 W. 66th Ave. Arvada,CO 80004			Prepared by: **ENVIRONMENTAL SCIENCE CORP.** 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859
Report to: MARK POKORNY (MT2)	Email to: mpokorny@MT2.com		
Project Description: COT-SILVERBELL	City/State Collected: Tucson Az		
Phone: **(303) 456-6977** FAX: **(303) 456-6998**	Client Project #:	ESC Key:	
Collected by:	Site/Facility ID#:	P.O.#:	
Collected by (signature): Immediately Packed on Ice N___ Y ✓	**Rush?** (Lab MUST Be Notified) ___ Same Day. . . . . 200% ___ Next Day. . . . . 100% ___ Two Day. . . . . 50% Three Day. 25%	**Date Results Needed:** Email? __No X Yes FAX? __No__Yes	CoCode: **MT2WRCO** (lab use only) Template/Prelogin Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	TCLP 8 RCRA Metals	Total Pb	Remarks/Contaminant	Sample # (lab only)
AIR#14	-	filter		4.23.08	1600			X		
AIR#15	-	↓		4.23.08	1605			x		
COT-TSP1-0425-06	C	SL	-	4.25.08	1520		x			
COT-TSP1-0425-07	↓	SL	-	↓	1525		x			
COT-TSP1-0425-08		SL	-		1530		x			
COT-TSP1-0425-09		SL	-		1535		x			
COT-TSP2-0425-10	↓	SL	-	↓	1540		x			

*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
	4-25-08	4:40			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 16 / Bottles Received: 7	CoC Seals Intact ___ Y ___ N ___ NA
	4.25.08	4:55			
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time: / pH Checked: / NCF:

TURNER
LABORATORIES INC.

April 30, 2008

Mark Pokorny
Metals Treatment Technologies
14045 W 66th Ave
Arvada, CO 80004
TEL: (303) 994-4948
FAX (303) 456-6998

RE: COT-Silverbell Order No.: 0804874

Dear Mark Pokorny,

Turner Laboratories, Inc. received 5 samples on 4/28/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman
Laboratory Director

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

Turner Laboratories, Inc.

Date: *30-Apr-08*

CLIENT: Metals Treatment Technologies
Project: COT-Silverbell
Lab Order: 0804874
Date Received: 4/28/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804874-01A	TCLP-0428-11		4/28/2008 1:15:00 PM
0804874-02A	TCLP-0428-12		4/28/2008 1:20:00 PM
0804874-03A	TCLP-0428-13		4/28/2008 1:23:00 PM
0804874-04A	TCLP-0428-14		4/28/2008 1:28:00 PM
0804874-05A	TCLP-0428-15		4/28/2008 1:45:00 PM

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP-0428-11
Lab Order:	0804874	**Collection Date:**	4/28/2008 1:15:00 PM
Project:	COT-Silverbell		
Lab ID:	0804874-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 10:45:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 4:54:26 PM
Barium	ND	10		mg/L	10	4/29/2008 4:54:26 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 4:54:26 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 4:54:26 PM
Lead	ND	1.0		mg/L	10	4/29/2008 4:54:26 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 4:54:26 PM
Silver	ND	2.0		mg/L	10	4/29/2008 4:54:26 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

2

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP-0428-12
Lab Order:	0804874	**Collection Date:**	4/28/2008 1:20:00 PM
Project:	COT-Silverbell		
Lab ID:	0804874-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 10:52:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:12:43 PM
Barium	ND	10		mg/L	10	4/29/2008 5:12:43 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:12:43 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:12:43 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:12:43 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:12:43 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:12:43 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

3

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP-0428-13
Lab Order:	0804874	**Collection Date:**	4/28/2008 1:23:00 PM
Project:	COT-Silverbell		
Lab ID:	0804874-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 10:55:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:17:24 PM
Barium	ND	10		mg/L	10	4/29/2008 5:17:24 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:17:24 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:17:24 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:17:24 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:17:24 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:17:24 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

4

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP-0428-14
Lab Order:	0804874	**Collection Date:**	4/28/2008 1:28:00 PM
Project:	COT-Silverbell		
Lab ID:	0804874-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 10:57:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:22:04 PM
Barium	ND	10		mg/L	10	4/29/2008 5:22:04 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:22:04 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:22:04 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:22:04 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:22:04 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:22:04 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

5

Turner Laboratories, Inc. **Date:** *30-Apr-08*

CLIENT:	Metals Treatment Technologies	**Client Sample ID:**	TCLP-0428-15
Lab Order:	0804874	**Collection Date:**	4/28/2008 1:45:00 PM
Project:	COT-Silverbell		
Lab ID:	0804874-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED		**SW1311/7470A**				Analyst: **RAD**
Mercury	ND	0.0010		mg/L	1	4/30/2008 11:00:00 AM
ICP METALS, TCLP LEACHED		**SW1311/6010B**				Analyst: **RAD**
Arsenic	ND	1.0		mg/L	10	4/29/2008 5:26:27 PM
Barium	ND	10		mg/L	10	4/29/2008 5:26:27 PM
Cadmium	ND	0.50		mg/L	10	4/29/2008 5:26:27 PM
Chromium	ND	1.0		mg/L	10	4/29/2008 5:26:27 PM
Lead	ND	1.0		mg/L	10	4/29/2008 5:26:27 PM
Selenium	ND	0.50		mg/L	10	4/29/2008 5:26:27 PM
Silver	ND	2.0		mg/L	10	4/29/2008 5:26:27 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

6

Turner Laboratories, Inc. *30-Apr-08*

Lab Order: 0804874
Client: Metals Treatment Technologies
Project: COT-Silverbell

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804874-01A	TCLP-0428-11	4/28/2008 1:15:00 PM	Soil	ICP Metals, TCLP Leached		4/29/2008	4/29/2008 4:54:26 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 10:45:00 AM
0804874-02A	TCLP-0428-12	4/28/2008 1:20:00 PM		ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:12:43 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 10:52:00 AM
0804874-03A	TCLP-0428-13	4/28/2008 1:23:00 PM		ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:17:24 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 10:55:00 AM
0804874-04A	TCLP-0428-14	4/28/2008 1:28:00 PM		ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:22:04 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 10:57:00 AM
0804874-05A	TCLP-0428-15	4/28/2008 1:45:00 PM		ICP Metals, TCLP Leached		4/29/2008	4/29/2008 5:26:27 PM
				Mercury, TCLP Leached		4/29/2008	4/30/2008 11:00:00 AM

Turner Laboratories, Inc.

Date: *30-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804874
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10631** Batch ID: **10631** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/30/2008 10:38:00 AM** Prep Date: **4/29/2008**
Client ID: Run ID: **HGANALYZER_080430** SeqNo: **622090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.001									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804874
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10626** Batch ID: **10626** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/29/2008 4:37:17 PM** Prep Date: **4/29/2008**

Client ID: Run ID: **ICP_080429A** SeqNo: **622019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1									
Barium	ND	10									
Cadmium	ND	0.5									
Chromium	ND	1									
Lead	ND	1									
Selenium	ND	0.5									
Silver	ND	2									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Turner Laboratories, Inc.

Date: *30-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804874
Project: COT-Silverbell

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID: **0804874-01AMS** Batch ID: **10631** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/30/2008 10:47:00 AM** Prep Date: **4/29/2008**
Client ID: **TCLP-0428-11** Run ID: **HGANALYZER_080430** SeqNo: **622094**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005095	0.001	0.005	0	102	85	115	0			

Sample ID: **0804874-01AMSD** Batch ID: **10631** Test Code: **SW1311/7470** Units: **mg/L** Analysis Date: **4/30/2008 10:50:00 AM** Prep Date: **4/29/2008**
Client ID: **TCLP-0428-11** Run ID: **HGANALYZER_080430** SeqNo: **622095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005099	0.001	0.005	0	102	85	115	0.005095	0.0785	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804874
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: 0804874-01AMS	Batch ID: 10626	Test Code: SW1311/6010	Units: mg/L	Analysis Date: 4/29/2008 4:59:05 PM	Prep Date: 4/29/2008
Client ID: TCLP-0428-11		Run ID: ICP_080429A		SeqNo: 622023	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.27	1	2	0	113	75	125	0			
Barium	2.284	10	2	0	114	75	125	0			J
Cadmium	2.211	0.5	2	0	111	75	125	0			*
Chromium	2.19	1	2	0	109	75	125	0			
Lead	2.179	1	2	0	109	75	125	0			
Selenium	2.246	0.5	2	0	112	75	125	0			*
Silver	0.9474	2	1	0	94.7	75	125	0			J

Sample ID: 0804374-01AMSD	Batch ID: 10626	Test Code: SW1311/6010	Units: mg/L	Analysis Date: 4/29/2008 5:03:46 PM	Prep Date: 4/29/2008
Client ID: TCLP-0428-11		Run ID: ICP_080429A		SeqNo: 622024	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.233	1	2	0	112	75	125	2.27	1.63	20	
Barium	2.298	10	2	0	115	75	125	2.284	0	20	J
Cadmium	2.228	0.5	2	0	111	75	125	2.211	0.779	20	*
Chromium	2.186	1	2	0	109	75	125	2.19	0.161	20	
Lead	2.185	1	2	0	109	75	125	2.179	0.31	20	
Selenium	2.221	0.5	2	0	111	75	125	2.246	1.11	20	*
Silver	0.9515	2	1	0	95.1	75	125	0.9474	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

4

Turner Laboratories, Inc.

Date: *30-Apr-08*

CLIENT: Metals Treatment Technologies
Work Order: 0804874
Project: COT-Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10631**	Batch ID: **10631**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/30/2008 10:40:00 AM**	Prep Date: **4/29/2008**
Client ID:		Run ID: **HGANALYZER_080430**		SeqNo: **622091**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005225	0.001	0.005	0	104	85	115	0			

Sample ID: **LCSD-10631**	Batch ID: **10631**	Test Code: **SW1311/7470**	Units: **mg/L**	Analysis Date: **4/30/2008 10:43:00 AM**	Prep Date: **4/29/2008**
Client ID:		Run ID: **HGANALYZER_080430**		SeqNo: **622092**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0052	0.001	0.005	0	104	85	115	0.005225	0.48	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Metals Treatment Technologies
Work Order: 0804874
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-10626** Batch ID: **10626** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/29/2008 4:41:33 PM** Prep Date: **4/29/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **622020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.095	1	2	0	105	80	120	0			
Barium	2.126	10	2	0	106	80	120	0			J
Cadmium	2.138	0.5	2	0	107	80	120	0			*
Chromium	2.151	1	2	0	108	80	120	0			
Lead	2.095	1	2	0	105	80	120	0			
Selenium	2.202	0.5	2	0	110	80	120	0			*
Silver	0.9622	2	1	0	96.2	80	120	0			J

Sample ID: **LCSD-10626** Batch ID: **10626** Test Code: **SW1311/6010** Units: **mg/L** Analysis Date: **4/29/2008 4:45:52 PM** Prep Date: **4/29/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **622021**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	2.028	1	2	0	101	80	120	2.095	3.25	20	
Barium	2.113	10	2	0	106	80	120	2.126	0	20	J
Cadmium	2.114	0.5	2	0	106	80	120	2.138	1.1	20	*
Chromium	2.131	1	2	0	107	80	120	2.151	0.938	20	
Lead	2.081	1	2	0	104	80	120	2.095	0.649	20	
Selenium	2.175	0.5	2	0	109	80	120	2.202	1.22	20	*
Silver	0.9614	2	1	0	96.1	80	120	0.9622	0	20	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: C804874

Received By: DW

Received Date/Time: 4/28/08 14:00

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☑ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes	☐ Above 100ml	
		☒ Not Applicable	☐ Below 100ml	
12.	Temperature upon receipt? 10			
13.	Number of sample containers received? 5			

Additional Comments:

2445 NORTH COYOTE DRIVE ■ SUITE #104 ■ TUCSON, ARIZONA 85745 ■ 520 882-5880 ■ FAX # 520 882-9788

TURNER LABORATORIES INC.
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804874 DATE _____ PAGE _____ OF _____

PROJECT NAME COT - SILVERBELL # _____
CONTACT NAME MARK POKORNY
COMPANY NAME MTZ
ADDRESS 14045 W. 66TH AVE ARVADA CO 80004 PHONE _____ FAX _____
SAMPLER'S SIGNATURE [signature]

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	TCLP Analysis 8RCRA Metals
TCLP-0428-11	4-28-08	13:15		SOIL	1	X
TCLP-0428-12	"	13:20		"	1	X
TCLP-0428-13	"	13:23		"	1	X
TCLP-0428-14	"	13:28		"	1	X
TCLP-0428-15	4-28-08	13:45		SOIL	1	X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

Base Neutrals ☐ Acids ☐ 625/8270
Volatile Organics 624/524.2/8260 ☐
TTHMS ☐
HAA5 ☐
Pesticides ☐ PCB's ☐ 8081 8082
Total Petroleum Hydrocarbons IR(8015A2) ☐
Oil and Grease Grav. 1664A ☐ 1664A ☐
TCLP Analysis VOA ☐ Semi-VOA ☐ Pest./Herb. ☐
8RCRA Metals TCLP ☒ Dissolved ☐
Total ☐ Priority Pollutants ☐
Cyanide Amen. ☐ WAD ☐
Total ☐ SDWA-INORGANICS PRIMARY ☐ SECONDARY ☐
Coliform MPN ☐ Colilert ☐
pH ☐ Cl2 ☐
COD ☐ TSS ☐ BOD ☐

1. RELINQUISHED BY:	2. RECEIVED BY:	TURNAROUND REQUIREMENTS:	REPORT REQUIREMENTS:	INVOICE INFORMATION:	SAMPLE RECEIPT:
Signature: [signature]	Signature:	____ Standard (approx. 10 days)*	____ I. Routine Report	Account ____ Y ____ N	Total Containers: 5
Printed Name: MARK POKORNY	Printed Name:	____ Next Day X 2 Day ____ 5 Day*	X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)	P.O. #	Temperature: 10
Firm: MTZ	Firm:	____ Fax Preliminary Results	____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice	Bill to:	☒ Wet Ice ☐ Blue Ice
Date/Time: 4.28.08 14:00	Date/Time:	Requested Report Date _____			
3. RELINQUISHED BY:	4. RECEIVED BY:	* Working Days			
Signature:	Signature: [signature]				
Printed Name:	Printed Name: DAWN WEYER				
Firm:	Firm: TURNER LABORATORIES, INC.				
Date/Time:	Date/Time: 4/28/08 14:00				

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

48 HR RUSH
TCLP & RCRA

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

Appendix C

Landfill Summary

FAX Cover Sheet

CITY OF TUCSON
ENVIRONMENTAL SERVICES
LOS REALES LANDFILL
PO BOX 27210
TUCSON, AZ 85726-7210
(520) 791-4183
(520) 791-5642 (FAX)

DATE: 5/6/08

Number of pages including cover sheet: 5

TO: MARC POKORNY

Phone number:
FAX number: 303 452 6998

FROM: CHRIS DREYER

SUBJECT: LOS REALES LANDFILL REPORT

REMARKS:

MAY-06-2008 08:55 From: 7915642 To:913034566998 P.1/5

MAY-06-2008 08:55 From: 7915642 To:913034566998 P.2/5

5/5/2008
8:59:11AM

Page 1 of 4

Online Report
001 Landfill
5/1/2008 Through 5/2/2008

Ticket / Load	WSid	User	Hauler	Truck	Customer	Source	Product	Profile	Date	TimeIn	TimeOut	Gross	Tare	Net	Yards/Units	Total Cost	V	M	E
1City of Tucson																			
687360	1 2	Richard	COM	TEMP	04488	1	150		05/01/2008	7:03A	7:16A	45.780	16.390	29.390	0.00	$675.97			G
687365	1 1	Richard	COM	TEMP1	04488	1	150		05/01/2008	7:06A	7:19A	42.900	16.480	26.420	0.00	$607.66			G
687370	1 1	Richard	COM	TEMP2	04488	1	150		05/01/2008	7:09A	7:23A	38.990	15.360	23.630	0.00	$543.49			G
687373	1 1	Richard	COM	TEMP3	04488	1	150		05/01/2008	7:11A	7:24A	38.980	15.830	23.150	0.00	$532.45			G
687374	1 1	Richard	COM	TEMP5	04488	1	150		05/01/2008	7:12A	7:26A	45.320	17.180	28.140	0.00	$647.22			G
687375	1 1	Richard	COM	TEMP6	04488	1	150		05/01/2008	7:13A	7:27A	46.370	17.260	29.110	0.00	$669.53			G
687449	1 3	Casandra	COM	TEMP5	04488	1	150		05/01/2008	8:44A	8:44A	39.080	15.830	23.250	0.00	$534.75		M	
687451	1 2	Richard	COM	TEMP2	04488	1	150		05/01/2008	8:46A	8:46A	38.410	15.360	23.050	0.00	$530.15		M	G
687452	1 2	Richard	COM	TEMP6	04488	1	150		05/01/2008	8:49A	8:49A	41.280	17.260	24.020	0.00	$552.46		M	G
687453	1 1	Casandra	COM	TEMP3	04488	1	150		05/01/2008	8:36A	8:50A	40.450	16.360	24.090	0.00	$554.07			G
687459	1 2	Richard	COM	TEMP5	04488	1	150		05/01/2008	8:53A	8:53A	39.020	17.180	21.840	0.00	$502.32		M	
687467	1 1	Casandra	COM	TEMP4	04488	1	150		05/01/2008	8:42A	8:59A	39.740	14.210	25.530	0.00	$587.19			G
687525	1 2	Richard	COM	TEMP2	04488	1	150		05/01/2008	9:58A	9:58A	36.630	16.480	20.150	0.00	$463.45		M	G
687527	1 2	Richard	COM	TEMP2	04488	1	150		05/01/2008	10:00A	10:00A	41.060	16.480	24.580	0.00	$565.34		M	G
687530	1 3	Raul	COM	TEMP3	04488	1	150		05/01/2008	10:01A	10:01A	35.810	15.830	19.980	0.00	$459.54		M	G
687536	1 3	Raul	COM	TEMP2	04488	1	150		05/01/2008	10:06A	10:06A	41.110	16.360	24.750	0.00	$569.25		M	G
687540	1 2	Richard	COM	TEMP2	04488	1	150		05/01/2008	10:08A	10:08A	39.040	15.360	23.680	0.00	$544.64		M	G
687541	1 3	Raul	COM	TEMP5	04488	1	150		05/01/2008	10:08A	10:08A	39.970	14.210	25.760	0.00	$592.48		M	
687547	1 2	Richard	COM	TEMP6	04488	1	150		05/01/2008	10:16A	10:16A	36.380	17.260	19.120	0.00	$439.76		M	G
687552	1 2	Richard	COM	TEMP5	04488	1	150		05/01/2008	10:18A	10:18A	44.750	17.180	27.570	0.00	$634.11		M	G
687624	1 2	Richard	COM	TEMP2	04488	1	150		05/01/2008	11:22A	11:22A	34.190	15.830	18.360	0.00	$422.28		M	G
687636	1 2	Richard	COM	TEMP1	04488	1	150		05/01/2008	11:26A	11:26A	41.480	16.480	25.000	0.00	$575.00		M	G
687638	1 2	Richard	COM	TEMP4	04488	1	150		05/01/2008	11:28A	11:28A	40.700	14.200	26.500	0.00	$609.50		M	G
687639	1 3	Raul	COM	TEMP3	04488	1	150		05/01/2008	11:28A	11:28A	34.740	16.360	18.380	0.00	$422.74		M	
687645	1 2	Richard	COM	TEMP5	04488	1	150		05/01/2008	11:34A	11:34A	36.820	17.180	19.640	0.00	$451.72		M	G
687646	1 2	Richard	COM	TEMP2	04488	1	150		05/01/2008	11:35A	11:35A	42.890	15.360	27.530	0.00	$633.19		M	G
687652	1 2	Richard	COM	TEMP6	04488	1	150		05/01/2008	11:42A	11:42A	38.510	17.260	21.250	0.00	$488.75		M	G
687707	1 2	Casandra	COM	TEMP2	04488	1	150		05/01/2008	12:43P	12:43P	34.050	16.480	17.570	0.00	$404.11		M	G
687708	1 3	Richard	COM	TEMP3	04488	1	150		05/01/2008	12:44P	12:44P	39.720	16.360	23.360	0.00	$537.28		M	
687721	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	12:51P	12:51P	39.520	14.200	25.320	0.00	$582.36		M	G
687724	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	12:53P	12:53P	34.680	17.180	17.500	0.00	$402.50		M	G
687730	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	12:57P	12:57P	36.810	15.360	21.450	0.00	$493.35		M	G
687743	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	1:06P	1:06P	36.870	15.830	21.040	0.00	$483.92		M	G
687766	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	1:27P	1:27P	35.500	17.260	18.240	0.00	$419.52		M	G
687825	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	2:04P	2:04P	29.270	16.480	12.790	0.00	$294.17		M	G
687827	1 3	Richard	COM	TEMP3	04488	1	150		05/01/2008	2:05P	2:05P	28.410	16.360	12.050	0.00	$277.15		M	
687853	1 2	Casandra	COM	TEMP2	04488	1	150		05/01/2008	2:21P	2:21P	28.810	17.180	11.630	0.00	$267.49		M	G
687856	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	2:24P	2:24P	39.360	14.200	25.160	0.00	$578.68		M	G
687859	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	2:28P	2:28P	34.980	15.830	19.070	0.00	$438.61		M	G
687883	1 2	Casandra	COM	TEMP1	04488	1	150		05/01/2008	2:46P	2:46P	34.680	17.260	17.340	0.00	$398.82		M	G

MAY-06-2008 08:55 From: 7915642 To:9130345669998 P.3/5

5/5/2008
8:59:11AM

Online Report
001 Landfill
5/1/2008 Through 5/2/2008

Ticket / Load	WSid	User	Hauler	Truck	Customer	Source	Product	Profile	Date	TimeIn	TimeOut	Gross	Tare	Net	Yards/Units	Total Cost	V	M	E
687933	1 3	Richard	COM	TEMP3	04488	1	150		05/01/2008	3:37P	3:37P	35.860	16.360	19.500	0.00	$448.50		M	
687969	1 2	Casandra	COM	TEMP4	04488	1	150		05/01/2008	4:06P	4:06P	37.040	14.210	22.830	0.00	$525.09		M	G
687972	1 2	Casandra	COM	TEMP4	04488	1	150		05/01/2008	4:07P	4:07P	32.830	15.830	17.000	0.00	$391.00		M	G
687978	1 2	Casandra	COM	TEMP2	04488	1	150		05/01/2008	3:56P	4:11P	35.960	17.210	18.750	0.00	$431.25			G
688022	1 2	Pauline	COM	TEMP	04488	1	150		05/02/2008	7:03A	7:03A	40.800	15.360	25.440	0.00	$585.12		M	G
688025	1 2	Pauline	COM	TEMP	04488	1	150		05/02/2008	7:05A	7:05A	34.040	17.260	16.780	0.00	$385.94		M	G
688027	1 3	Casandra	COM	TEMP1	04488	1	150		05/02/2008	7:07A	7:07A	39.810	15.830	23.980	0.00	$551.54		M	G
688029	1 2	Pauline	COM	TEMP2	04488	1	150		05/02/2008	7:08A	7:08A	20.300	17.210	3.090	0.00	$71.07		M	G
688033	1 2	Pauline	COM	TEMP3	04488	1	150		05/02/2008	7:10A	7:10A	40.960	14.210	26.750	0.00	$615.25		M	G
688045	1 1	Richard	COM	TEMP1	04488	1	150		05/01/2008	3:37P	7:22A	35.390	16.560	18.830	0.00	$433.09			G
688046	1 1	Richard	COM	TEMP	04488	1	150		05/02/2008	7:06A	7:23A	35.380	16.560	18.820	0.00	$432.86			G
688113	1 3	Casandra	COM	TEMP3	04488	1	150		05/02/2008	8:22A	8:22A	35.230	16.360	18.870	0.00	$434.01		M	
688123	1 2	Pauline	COM	TEMP	04488	1	150		05/02/2008	8:29A	8:29A	41.090	15.360	25.730	0.00	$591.79		M	G
688131	1 2	Pauline	COM	TEMP	04488	1	150		05/02/2008	8:33A	8:33A	34.790	16.560	18.230	0.00	$419.29		M	G
688135	1 2	Pauline	COM	TEMP	04488	1	150		05/02/2008	8:35A	8:35A	40.600	14.210	26.390	0.00	$606.97		M	G
688137	1 3	Casandra	COM	TEMP2	04488	1	150		05/02/2008	8:39A	8:39A	37.390	15.830	21.560	0.00	$495.88		M	G
688144	1 2	Pauline	COM	TEMP	04488	1	150		05/02/2008	8:46A	8:46A	38.940	17.260	21.680	0.00	$498.64		M	G
688151	1 2	Pauline	COM	TEMP	04488	1	150		05/02/2008	8:50A	8:50A	43.180	17.210	25.970	0.00	$597.31		M	G
688204	1 2	Richard	COM	TEMP3	04488	1	150		05/02/2008	9:45A	9:45A	36.230	16.360	19.870	0.00	$457.01		M	
688212	1 2	Richard	COM	TEMP	04488	1	150		05/02/2008	9:50A	9:50A	33.870	16.560	17.310	0.00	$398.13		M	G
688221	1 3	Casandra	COM	TEMP2	04488	1	150		05/02/2008	9:58A	9:58A	35.930	15.830	20.100	0.00	$462.30		M	G
688222	1 2	Richard	COM	TEMP	04488	1	150		05/02/2008	9:58A	9:58A	39.330	14.210	25.120	0.00	$577.76		M	G
688233	1 3	Casandra	COM	TEMP3	04488	1	150		05/02/2008	10:06A	10:06A	41.230	15.360	25.870	0.00	$595.01		M	
688237	1 2	Richard	COM	TEMP	04488	1	150		05/02/2008	10:09A	10:09A	37.630	17.260	20.370	0.00	$468.51		M	G
688252	1 2	Richard	COM	TEMP2	04488	1	150		05/02/2008	10:19A	10:19A	37.690	17.210	20.480	0.00	$471.04		M	G
688319	1 3	Casandra	COM	TEMP2	04488	1	150		05/02/2008	11:02A	11:02A	40.510	16.360	24.150	0.00	$555.45		M	G
688333	1 2	Pauline	COM	TEMP	04488	1	150		05/02/2008	11:16A	11:16A	19.540	16.560	2.980	0.00	$68.54		M	G
688335	1 3	Casandra	COM	TEMP3	04488	1	150		05/02/2008	11:17A	11:17A	35.700	15.830	19.870	0.00	$457.01		M	
688375	1 2	Richard	COM	TEMP	04488	1	150		05/02/2008	11:50A	11:50A	38.980	14.210	24.770	0.00	$569.71		M	G
688432	1 2	Richard	COM	TEMP	04488	1	150		05/02/2008	12:14P	12:26P	40.710	17.359	23.360	0.00	$537.28			G
688454	1 2	Richard	COM	TEMP3	04488	1	150		05/02/2008	12:43P	12:43P	36.570	16.360	20.210	0.00	$464.83		M	

1 Total Tickets 71 Total Loads 71

In Tons :	1,521.05	Total Product Cost : $34,984.15
Out Tons :	0.00	
Total In&Out Tons :	1,521.05	

MAY-06-2008 08:56 From: 7915642 To:913034566998 P.4/5

5/5/2008
8:59:11AM

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Online Report
001 Landfill
5/1/2008 Through 5/2/2008

Ticket / Load	WSid	User	Hauler	Truck	Customer	Source	Product	Profile	Date	TimeIn	TimeOut	Gross	Tare	Net	Yards/Units	Total Cost	V	M	E
Total Tickets 71 Total Loads 71																			

In Tons :	1,521.05	**Total Product Cost :** **$34,984.15**
Out Tons :	0.00	
Total In&Out Tons :	1,521.05	

MAY-06-2008 08:56 From: 7915642 To:913034566998 P.5/5

Page 4 of 4

Online Report
001 Landfill
5/1/2008 Through 5/2/2008

5/5/2008
8:59:11 AM

Date From :	5/1/2008 12:00:00AM	Operator :	**ALL**
Date To :	5/2/2008 11:59:59PM	Workstation :	**ALL**
Company :		Trans Type :	**ALL**
Profile :		Inbound :	True
Hauler :		OutBound :	True
Truck :		Voids :	Exclude
Customer :	04488	Unit Wt. Produc :	Include
BillTo :			
Route :			
Source :			
Destination :			
Product :			

Tax :	
Program :	
Container :	
Driver :	
Stockpile :	
Category :	
GenericA :	
GenericB :	
Coal :	
Fee :	
Price Rounding :	$0.01

Appendix D

Stormwater Permit

Form# appr031c

ADEQ

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activitiy Under the AZPDES General Permit

Arizona Department Of Environmental Quality
1110 West Washington Street, 5415A-1 • Phoenix, Arizona 85007
(Office) 602-771-4632 • (Fax) 602-771-4528

Notice of Intent (NOI) Certificate

Authorization Number: AZCON-32665

Approval Date: 03/12/2008

Application Information:

ID Number:	32665	**Name:**	NOI-SILVERBELL FIRING RANGE	**Received:**	03/12/2008
Inventory #	105986	**Type:**	GEN-CONST		
AZPDES #:	AZCON-32665				

Owner/Operator:

First:	MARK	**Last**	POKORNY	**Phone:**	(303) 994-4948
Business:	METALS TREATMENT TECHNOLOGIES (MT2)			**Fax:**	(303) 456-6998
Address:	14045 W 66TH AVENUE				
City:	ARVADA	**State:**	CO	**Zip:**	80004

Facility/Site:

Start Date:	03/24/2008	**Business:**	SILVERBELL FIRING RANGE	**Phone:**	(303) 994-4948
End Date:	04/18/2008	**Address:**	3200 N SILVERBELL ROAD	**County:**	MARICOPA
Facility Type:		**City:**	TUCSON, AZ 85745		
COMMERCIAL		**Access:**	1 BLOCK EAST OF SILVERBELL		

Subdivision/Other Permits: **Other IDs:**

Subdivision Approval? NA

Latitude:	321554.27	**1/4 mile of impaired or unique water?**	No	**Total acres Disturbed**	
Longitude:	1110042.60	**Discharge into municipal conveyance?**	No	**Project**	**Operations**
Watershed:	SANTA CRUZ	**System Owner (Conveyance):**		2	1.5
Closest Water	SANTA CRUZ RIVER				
Perennial Water:	Sabino Creek				

Storm Water Pollution Prevention Plan (SWPPP):

First:	MARK	**Last:**	POKORNY	**Phone:**	(303) 994-4948
Business:	SILVERBELL FIRING RANGE			**SWPPP Confirmation:**	Y
Address:	3200 N SILVERBELL ROAD				
City:	TUCSON	**State:**	AZ	**Zip:**	85745
				SWPPP Submitted:	

Certification:

First:	MARK	**Last:**	POKORNY	**Phone:**	(303) 994-4948
Business:	METALS TREATMENT TECHNOLOGIES (MT2)			**Certification Signed**	Y
Address:	14045 W 66TH AVENUE				
City:	ARVADA	**State:**	CO	**Zip:**	80004

Appendix E

Air Permit

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR PROGRAM
33 NORTH STONE AVE
TUCSON, ARIZONA 85701
PHONE: (520) 740-3340 FAX: (520) 243-7340
www.deq.pima.gov

Air Quality Activity Permit Receipt

Issued To	Mark Pokorny 14045 W. 66th Ave. Arvada CO 80004-	Account Number Check Number	0 50558

Permit Number	5516	Effective Date	3/13/2008
Site Location	3200 N. Silverbell Road COT Firing Range Silverbell & Goret Rd		

Activity	Amount	Fee
Landstripping (ac)	1+ to 2 acres	$100.00
Trenching (ft)	- none -	$0.00
Road Construction (ft)	- none -	$0.00
Blasting	- none -	$0.00
Multiple Activities (ac)	- none -	$0.00
	Amount Paid	**$100.00**

NOTICE OF INTENT TO TERMINATE
AIR QUALITY ACTIVITY PERMIT

Pima County Department of Environmental Quality
33 N. Stone Ave. -7th Floor
Tucson, AZ 85701
Phone: (520) 740-3340 Fax: (520) 243-7340

PERMIT NUMBER: 5516 DATE: 5·15·2008

PERMITTEE NAME (as stated in permit): MARK POKORNY

PROJECT LOCATION: 3200 N. SILVERBELL ROAD
TUCSON, AZ 85745

TOWNSHIP: _____ RANGE: _____ SECTION: _____

REASON FOR TERMINATION: PROJECT IS COMPLETE.

For PDEQ to consider terminating your Air Quality Activity Permit, you must first demonstrate that you have permanently stabilized the soil that was disturbed. Pima County Code Title 17, Section 17.16.080 states:

No vacant lot, housing plot, building site, parking area, sales lot, playground, livestock feedlot, or other open area other than those used solely for soil-cultivation or vegetative-crop-producing and harvesting agricultural purposes shall be used or left in such a state after construction, alteration, clearing, leveling, or excavation that naturally induced wind blowing over the area causes a violation of section 17.16.050. Dust emissions must be permanently suppressed by landscaping, covering with gravel or vegetation, paving, or applying equivalently effective controls.

I, MARK POKORNY, (NAME OF RESPONSIBLE OFFICIAL) verify that no further soil disturbing construction activities will be endorsed by the permittee under this permit at the above referenced location. All project soils designated by this permit have been permanently stabilized by the following method(s):

☐ BUILDINGS	☒ LANDSCAPING
☐ PAVING	☐ GRAVEL
☐ DUST PALLIATIVE	☐ OTHER:

SIGNATURE OF RESPONSIBLE OFFICIAL: _____ DATE: 5·15·2008

FIRM & TITLE: METALS TREATMENT TECHNOLOGIES / SENIOR ENVIRONMENTAL SCIENTIST

***Mail or fax your Permit Completion Termination to the address or number listed above.**

Janet Napolitano
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Surface Water Section / Permits Unit / Stormwater Program
1110 West Washington Street, 5415A-1 • Phoenix, Arizona 85007
(Office) 602-771-4632 • (Fax) 602-771-4528 • www.azdeq.gov

Stephen A. Owens
Director

May 8, 2008

Owner/Operator:
MARK POKORNY
MT2 METALS TREATMENT TECHNOLOGIES
14045 W 66TH AVENUE
ARVADA, CO 80004

Facility Information:
PHOENIX TRAP & SKEET
12450 W INDIAN SCHOOL ROAD
AVONDALE, AZ 85323
Lat: 332939 Long: 1121930

Termination Number: **AZCON-23076-T**

NOTICE OF TERMINATION ACKNOWLEDGEMENT

Dear Owner/Operator:

Your Notice of Termination (NOT) to cease coverage under the AZPDES Stormwater Construction General Permit (AZG2003-001) for the above-referenced project has been processed by the Arizona Department of Environmental Quality. Authorization to discharge at this site terminates at midnight on the date of this letter. By submission of this NOT form, you are certifying that you have reviewed the terms and conditions of the construction permit and have determined that the site no longer requires coverage.

Please keep this document for your records and use the termination number for any correspondence.

Please contact Shirley Conard at (602)771-4632 if you have any questions regarding this letter. If you have technical questions concerning the stormwater program, please contact Sara Konrad at (602)771-4449.

Northern Regional Office
1801 W. Route 66, Suite 117 • Flagstaff, AZ 86001
(928) 779-0313

Southern Regional Office
400 W. Congress Street, Suite 433 • Tucson, AZ 85701
(520) 628-6733

Printed on recycled paper

Appendix F

Photographs

Appendix G

EcoBond Pb MSDS

Silverbell Range – Pre O&M

Silverbell Range – Pre O&M

Silverbell Range – Pre O&M

EcoBond Treatment of 2° Berm Top

EcoBond Treatment of Range Floor

Screening of Range Soil

Excavation of West Side Slope Area

Silverbell Firing Range

Close up of Screened Soil

Firing Range After O&M

Range Construction Debris Prior to Disposa

Completed East Side Slope Area

Completed Silverbell Firing Range O&M

Appendix G

EcoBond Pb MSDS

Material Safety Data Sheet
ECOBOND® Pb

1 SECTION 1 – PRODUCT AND COMPANY ID

Product Name: ECOBOND® Pb
Chemical Family: Inorganic Salt
Date of Preparation:
Information Phone Number: (888) 435-6645

Manufacturers' Name:
MT², LLC
14045 West 66th Avenue
Arvada, CO 80004
Emergency Phone Number: (888) 435-6645
Information Phone Number: (888) 435-6645

2 SECTION 2 – PRECAUTIONARY MEASURES

Avoid breathing dust.
Avoid ingestion.
Avoid excessive contact with eyes or skin.
Use in adequate ventilation.

Respiratory protection: Single use dust respirator.
Skin Protection: Protect open wounds.
2.1.1 **Eye protection:** Eye protection should be worn at all times; wash thoroughly after handling.

3 SECTION 3 – emergency and first aid procedures

IF IN EYES: Immediately flush with plenty of water for at least 30 minutes. Seek medical attention.
IF ON SKIN: Wash contaminated area with soap or mild detergent and water. If solution soaks through clothing, remove clothing in area and wash contaminated skin as above. If irritation persists after washing, seek medical attention.
IF INHALED: Move to fresh air. Treat symptomatically. Get medical attention promptly.
IF INGESTED: First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

4 SECTION 4 – health hazard data

May casus severe eye burns. Keep container tightly closed. Use ventilation adequate to keep exposures below recommended limits. Do not get in eyes. Wear appropriate eye protection. Wash thoroughly after handling.
OSHA: Total weighted average for dust over an 8-hour period is 15 mg/m^3
ACGIH: Total weighted average for dust over an 8-hour period is 10 mg/m^3
NFPA Hazard Class

Health:		2 (Minor)
Flammability:		0 (Least)
Instability:	Special	0 (Least)
Hazard:		None

5 SECTION 5 – physical data

Boiling Point (ºF): Decomposes
Melting Point (ºF): 288 degrees F
Vapor Pressure (mmHg): Not applicable
Specific Gravity (H_2O=1): 2.22
% Volatile by Volume: Not applicable
Vapor Density: Not applicable
Solubility in Water: (20ºC): 85.0%
Evaporation Rate (Butyl Acetate = 1): Not applicable
Physical State: Solid
Density: Bulk (Packed), 68-72 Lbs./Ft^3
pH: (1% Sol), 2.5 to 3.0
Appearance And Odor: Black to Green, Granulated Solid Material. Slight Odor.

6 SECTION 6 – reactivity

Stability: Stable
Hazardous Polymerization: Will not occur
Conditions And Materials To Avoid: Extreme temperatures.
Hazardous Decomposition Products. Extreme temperatures such as a fire cause formation of toxic fumes of PO_x.

7 SECTION 7 – fire and explosion hazards

Flash Point: Not applicable.
Flammable Limits: Not applicable.
Extinguishing Media: Small Fire – Water spray, foam, dry chemical, or CO_2. Large Fire – Water spray, fog, or foam.
Special Fire Fighting Procedures: Use self-contained breathing apparatus. Wear full protective clothing.
Unusual Fire and Explosion Hazards: Toxic PO_x fumes are formed in a fire.

8 Section 8 – Spill/leak

Storage: When possible store this material in cool, dry, well-ventilated areas to protect product quality. Keep container(s) tightly closed. Store only in approved containers, if applicable. Protect container(s) against physical damage.
Emergency Action: Avoid breathing dust. Wear respiratory equipment.
Small Spills: Carefully shovel material into clean, dry container. Remove from site.
Large Spills: Use same procedure as above. Contact proper local, state or Federal regulatory agency to ascertain proper disposal technique and procedure.

9 section 9 – other Information

Transport: Not listed in the hazardous materials shipping regulations (49 CFR, Table 172.101) by the U.S. Department of Transportation or in the Transport of Dangerous Goods (TDG) Regulations, Canada.

9.1.1 Regulatory Information

CERCLA: No
RCRA 261.33: No

9.1.2 **TSCA:** 8(b) Chemical Inventory: Yes TSCA 8(d): No

9.1.3 Proposition 65 (CA Health & Safety Code Section 25249.5): Warning: This product contains substances known to the State of California to cause cancer and birth defects or other reproductive harm.

9.1.4 **NTP, IARC, OSGA:** This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

References: Sax and Lewis, Dangerous Properties of Industrial Materials, seventh edition, Van Nostrand Reinhold Co., N.Y., 1989.

10 Disclaimer

The information in this document is believed to be correct as of the date of issue. **However, no warranty of merchantability, fitness for any particular purpose or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product or the hazards related to its use.** This information and product are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof. Metals Treatment Technologies, LLC (MT^2, LLC) specifically **disclaims any liability whatsoever for the use of such information**, including without limitation any recommendations which user may construe and attempt to apply which may infringe or violate patents, licenses and/or copyright.

APPENDIX C

Analytical Laboratory Reports

TURNER
LABORATORIES INC.

April 18, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: Silverbell Firing Range Order No.: 0803742

Dear Keith Fritz,

Turner Laboratories, Inc. received 15 samples on 3/24/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

Turner Laboratories, Inc. **Date:** *18-Apr-08*

CLIENT: Brown & Caldwell
Project: Silverbell Firing Range
Lab Order: 0803742

CASE NARRATIVE

Analytical Comments for METHOD ICP_RS, SAMPLE 0803742-01 through -15: The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Analytical Comments for METHOD ICP_RS, SAMPLE 0803742-01AMS/MSD:The recoveries is outside of acceptance limits due to matrix interferences. The recovery is acceptable in the LCS/LCSD.

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-NS-E
Lab Order:	0803742	**Collection Date:**	3/24/2008 11:10:00 AM
Project:	Silverbell Firing Range		
Lab ID:	0803742-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	53	10		mg/Kg	1	3/28/2008 2:03:03 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-NS-EC
Lab Order:	0803742	**Collection Date:**	3/24/2008 11:20:00 AM
Project:	Silverbell Firing Range		
Lab ID:	0803742-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	3/28/2008 2:51:23 PM
Arsenic	4.0	5.0	J	mg/Kg	1	3/28/2008 2:51:23 PM
Copper	29	5.0		mg/Kg	1	3/28/2008 2:51:23 PM
Lead	49	10		mg/Kg	1	3/28/2008 2:51:23 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-NS-C
Lab Order:	0803742	**Collection Date:**	3/24/2008 11:30:00 AM
Project:	Silverbell Firing Range		
Lab ID:	0803742-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	350	10		mg/Kg	1	3/28/2008 2:56:44 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-NS-WC
Lab Order:	0803742	**Collection Date:**	3/24/2008 11:40:00 AM
Project:	Silverbell Firing Range		
Lab ID:	0803742-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	3/28/2008 3:02:30 PM
Arsenic	5.0	5.0	J	mg/Kg	1	3/28/2008 3:02:30 PM
Copper	36	5.0		mg/Kg	1	3/28/2008 3:02:30 PM
Lead	66	10		mg/Kg	1	3/28/2008 3:02:30 PM

Qualifiers:

ND - Not Detected at or above the PQL
PQL - Practical Quantitation Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
R - RPD outside accepted recovery limits
* - Value exceeds Maximum Contaminant Level
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-NS-W
Lab Order:	0803742	**Collection Date:**	3/24/2008 11:50:00 AM
Project:	Silverbell Firing Range		
Lab ID:	0803742-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	15,000	1,000		mg/Kg	100	3/28/2008 3:34:45 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BPB-E
Lab Order:	0803742	**Collection Date:**	3/24/2008 2:00:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-06A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	6,700	1,000		mg/Kg	100	3/28/2008 3:57:54 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BPB-EC
Lab Order:	0803742	**Collection Date:**	3/24/2008 2:10:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-07A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	160	10		mg/Kg	1	3/31/2008 1:35:54 PM
Arsenic	14	5.0		mg/Kg	1	3/31/2008 1:35:54 PM
Copper	19,000	500		mg/Kg	100	3/28/2008 4:02:14 PM
Lead	23,000	1,000		mg/Kg	100	3/28/2008 4:02:14 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BPB-C
Lab Order:	0803742	**Collection Date:**	3/24/2008 2:20:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-08A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	46	10		mg/Kg	1	3/28/2008 4:28:20 PM
Arsenic	12	5.0		mg/Kg	1	3/28/2008 4:28:20 PM
Copper	390	5.0		mg/Kg	1	3/28/2008 4:28:20 PM
Lead	6,200	1,000		mg/Kg	100	3/31/2008 12:38:46 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BPB-WC
Lab Order:	0803742	**Collection Date:**	3/24/2008 2:25:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-09A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	29,000	1,000		mg/Kg	100	3/31/2008 12:43:05 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BPB-W
Lab Order:	0803742	**Collection Date:**	3/24/2008 2:30:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-10A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	2,700	100		mg/Kg	10	3/31/2008 12:47:25 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-B-DUP01
Lab Order:	0803742	**Collection Date:**	3/24/2008 2:35:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-11A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	320	10		mg/Kg	1	3/28/2008 4:41:28 PM
Arsenic	24	5.0		mg/Kg	1	3/28/2008 4:41:28 PM
Copper	710	5.0		mg/Kg	1	3/28/2008 4:41:28 PM
Lead	32,000	1,000		mg/Kg	100	3/31/2008 12:52:21 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BRF-NW
Lab Order:	0803742	**Collection Date:**	3/24/2008 2:50:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-12A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	9.0	10	J	mg/Kg	1	3/28/2008 4:45:35 PM
Arsenic	7.6	5.0		mg/Kg	1	3/28/2008 4:45:35 PM
Copper	89	5.0		mg/Kg	1	3/28/2008 4:45:35 PM
Lead	1,100	100		mg/Kg	10	3/31/2008 12:56:41 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BRF-SW
Lab Order:	0803742	**Collection Date:**	3/24/2008 3:00:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-13A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	560	100		mg/Kg	10	3/31/2008 1:01:26 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BRF-SE
Lab Order:	0803742	**Collection Date:**	3/24/2008 3:10:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-14A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	34,000	1,000		mg/Kg	100	3/31/2008 1:06:12 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *18-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BRF-NE
Lab Order:	0803742	**Collection Date:**	3/24/2008 3:20:00 PM
Project:	Silverbell Firing Range		
Lab ID:	0803742-15A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	730	10		mg/Kg	1	3/28/2008 5:00:07 PM
Arsenic	72	5.0		mg/Kg	1	3/28/2008 5:00:07 PM
Copper	110	5.0		mg/Kg	1	3/28/2008 5:00:07 PM
Lead	25,000	1,000		mg/Kg	100	3/31/2008 1:10:33 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0803742

Received By: DW

Received Date/Time: 3/24/08 15:38

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml
		☒ Not Applicable		☐ Below 100ml

12. Temperature upon receipt? ~~+0~~ DW 14 °C

13. Number of sample containers received? 15

Additional Comments:

TURNER LABORATORIES INC.
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0803742 DATE 3/24-08 PAGE 1 OF 2

PROJECT NAME SILVER BELL FIRING RANGE# _____
CONTACT NAME KEITH FRITZ
COMPANY NAME Brown & Caldwell
ADDRESS 110 S. Church Ave Ste 2300
Tucson 85701 PHONE 624-5744 FAX _____
SAMPLER'S SIGNATURE Michele Mahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX: TCLP Analysis VOA / Semi-VOA / Pest./Herb.	Metals TCLP / Dissolved / Total / Priority Pollutants	Cyanide Total / Amen. / WAD	SDWA-INORGANICS PRIMARY / SECONDARY	Coliform MPN / Colilert	pH	COD	TSS	BOD	Total Sb, As, Cu
COT-BSB-NS-E	3/24/08	1110		S	1		X								
COT-BSB-NS-EC		1120			1		X								X
COT-BSB-NS-C		1130			1		X								
COT-BSB-NS-WC		1140			1		X								X
COT-BSB-NS-W		1150			1		X								
COT-BPB-E		1400			1		X								
COT-BPB-EC		1410			1		X								X
COT-BPB-C		1420			1		X								X
COT-BPB-WC		1425			1		X								
COT-BPB-W		1430			1		X								

1. RELINQUISHED BY:
Signature: Michele Mahal
Printed Name: Michele Mahal
Firm: BC
Date/Time: 3.24.08 1545

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date ____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # ____
Bill to: ____

SAMPLE RECEIPT:
Total Containers 10
Temperature 14
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name: Dan Wey / Dan Wenkyer
Firm: TURNER LABORATORIES, INC.
Date/Time: 3/24/08 15:38

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER LABORATORIES INC.
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0803742 DATE 3-24-08 PAGE 2 OF 2

PROJECT NAME SILVERBELL FIRING RANGE # _____
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & Caldwell
ADDRESS 1105 Church Ave Ste 230 Tucson AZ 85707 PHONE 624-5744 FAX _____
SAMPLER'S SIGNATURE _____

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	TCLP Metals	Total Priority Pollutants Metals	Total Cyanide	SDWA-INORGANICS PRIMARY	SECONDARY	Coliform MPN	Coliform Colilert	pH	Cl	COD	TSS	BOD	Total Sb, As, Cr.
COT-B-DUP01	3.24.08	1435		S	1	X												X
COT-BRF-NW		1450			1	X												X
COT-BRF-SW		1500			1	X												
COT-BRF-SE		1510			1	X												
COT-BRF-NE	↓	1520		↓	1	X												X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

1. RELINQUISHED BY:
Signature: MK Mahal
Printed Name: Michele Mahal
Firm: BC
Date/Time: 3.24.08 1545

2. RECEIVED BY:
Signature: _____
Printed Name: _____
Firm: _____
Date/Time: _____

TURNAROUND REQUIREMENTS:
____ Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 5
Temperature 14
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature: _____
Printed Name: _____
Firm: _____
Date/Time: _____

4. RECEIVED BY:
Signature: Dawn Weyn
Printed Name: Dawn Weyn
Firm: TURNER LABORATORIES, INC.
Date/Time: 3/24/08 15:37

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

April 24, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell Order No.: 0804638

Dear Keith Fritz,

Turner Laboratories, Inc. received 8 samples on 4/16/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT: Brown & Caldwell
Project: COT-Silverbell
Lab Order: 0804638
Date Received: 4/16/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804638-01A	COT-SB-01		4/16/2008 3:30:00 PM
0804638-02A	COT-SB-02		4/16/2008 3:37:00 PM
0804638-03A	COT-SB-03		4/16/2008 3:45:00 PM
0804638-04A	COT-SB-04		4/1/2008 3:50:00 PM
0804638-05A	COT-SB-05		4/16/2008 4:00:00 PM
0804638-06A	COT-SB-06		4/16/2008 4:05:00 PM
0804638-07A	COT-SB-07		4/16/2008 4:10:00 PM
0804638-08A	COT-SB-08		4/16/2008 4:15:00 PM

CLIENT: Brown & Caldwell
Project: COT-Silverbell
Lab Order: 0804638

CASE NARRATIVE

Analytical Comments for METHOD ICP, SAMPLE 0804638-01 through -08:The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-SB-01
Lab Order:	0804638	**Collection Date:**	4/16/2008 3:30:00 PM
Project:	COT-Silverbell		
Lab ID:	0804638-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	41	10		mg/Kg	1	4/18/2008 8:21:43 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-SB-02
Lab Order:	0804638	**Collection Date:**	4/16/2008 3:37:00 PM
Project:	COT-Silverbell		
Lab ID:	0804638-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/18/2008 8:57:21 PM
Arsenic	5.0	5.0	J	mg/Kg	1	4/18/2008 8:57:21 PM
Copper	26	5.0		mg/Kg	1	4/18/2008 8:57:21 PM
Lead	21	10		mg/Kg	1	4/18/2008 8:57:21 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-SB-03
Lab Order:	0804638	**Collection Date:**	4/16/2008 3:45:00 PM
Project:	COT-Silverbell		
Lab ID:	0804638-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	46	10		mg/Kg	1	4/18/2008 9:02:42 PM

Qualifiers:

ND - Not Detected at or above the PQL
PQL - Practical Quantitation Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
R - RPD outside accepted recovery limits
* - Value exceeds Maximum Contaminant Level
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-SB-04
Lab Order:	0804638	**Collection Date:**	4/1/2008 3:50:00 PM
Project:	COT-Silverbell		
Lab ID:	0804638-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	20	10		mg/Kg	1	4/18/2008 9:08:02 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-SB-05
Lab Order:	0804638	**Collection Date:**	4/16/2008 4:00:00 PM
Project:	COT-Silverbell		
Lab ID:	0804638-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	150	10		mg/Kg	1	4/18/2008 9:13:23 PM
Arsenic	5.8	5.0		mg/Kg	1	4/18/2008 9:13:23 PM
Copper	130	5.0		mg/Kg	1	4/18/2008 9:13:23 PM
Lead	7,800	10		mg/Kg	1	4/18/2008 9:13:23 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-SB-06
Lab Order:	0804638	**Collection Date:**	4/16/2008 4:05:00 PM
Project:	COT-Silverbell		
Lab ID:	0804638-06A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	41	10		mg/Kg	1	4/18/2008 8:41:55 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804638
Project: COT-Silverbell
Lab ID: 0804638-07A

Client Sample ID: COT-SB-07
Collection Date: 4/16/2008 4:10:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/18/2008 9:18:03 PM
Arsenic	4.0	5.0	J	mg/Kg	1	4/18/2008 9:18:03 PM
Copper	33	5.0		mg/Kg	1	4/18/2008 9:18:03 PM
Lead	26	10		mg/Kg	1	4/18/2008 9:18:03 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-SB-08
Lab Order:	0804638	**Collection Date:**	4/16/2008 4:15:00 PM
Project:	COT-Silverbell		
Lab ID:	0804638-08A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	23	10		mg/Kg	1	4/18/2008 9:23:38 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Lab Order: 0804638
Client: Brown & Caldwell
Project: COT-Silverbell

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804638-01A	COT-SB-01	4/16/2008 3:30:00 PM	Soil	ICP Metals-RCRA, Total		4/17/2008	4/18/2008 8:21:43 PM
0804638-02A	COT-SB-02	4/16/2008 3:37:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 8:57:21 PM
0804638-03A	COT-SB-03	4/16/2008 3:45:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 9:02:42 PM
0804638-04A	COT-SB-04	4/1/2008 3:50:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 9:08:02 PM
0804638-05A	COT-SB-05	4/16/2008 4:00:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 9:13:23 PM
0804638-06A	COT-SB-06	4/16/2008 4:05:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 8:41:55 PM
0804638-07A	COT-SB-07	4/16/2008 4:10:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 9:18:03 PM
0804638-08A	COT-SB-08	4/16/2008 4:15:00 PM		ICP Metals-RCRA, Total		4/17/2008	4/18/2008 9:23:38 PM

TURNER LABORATORIES, INC.

QC Report

Level II

Turner Laboratories WO #: 0804638
Client: Brown and Caldwell
Project Name: COT-Silverbell

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT: Brown & Caldwell
Work Order: 0804638
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID **MB-10583** Batch ID: **10583** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/18/2008 7:29:27 PM** Prep Date **4/17/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **619987**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									
Arsenic	ND	10									
Copper	ND	10									
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804638
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0804638-01AMS** Batch ID: **10583** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/18/2008 8:27:19 PM** Prep Date **4/17/2008**
Client ID: **COT-SB-01** Run ID: **ICP_080418A** SeqNo: **619994**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	19.4	10	50	0.8234	37.2	75	125	0			S
Arsenic	51.01	5	50	4.403	93.2	75	125	0			
Copper	82.9	5	50	34.1	97.6	75	125	0			
Lead	78.51	10	50	40.57	75.9	75	125	0			

Sample ID **0804638-01AMSD** Batch ID: **10583** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/18/2008 8:32:27 PM** Prep Date **4/17/2008**
Client ID: **COT-SB-01** Run ID: **ICP_080418A** SeqNo: **619995**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	17.43	10	50	0.8234	33.2	75	125	19.4	10.7	20	S
Arsenic	52.61	5	50	4.403	96.4	75	125	51.01	3.09	20	
Copper	81.53	5	50	34.1	94.9	75	125	82.9	1.66	20	
Lead	58.98	10	50	40.57	36.8	75	125	78.51	28.4	20	SR

Sample ID **0804638-06AMS** Batch ID: **10583** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/18/2008 8:47:22 PM** Prep Date **4/17/2008**
Client ID: **COT-SB-06** Run ID: **ICP_080418A** SeqNo: **619997**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	18.58	10	50	0.7016	35.8	75	125	0			S
Arsenic	48.06	5	50	3.79	88.5	75	125	0			
Copper	74.73	5	50	27.94	93.6	75	125	0			
Lead	83.99	10	50	41.04	85.9	75	125	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804638
Project: COT-Silverbell

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID **0804638-06AMSD** Batch ID: **10583** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/18/2008 8:52:22 PM** Prep Date **4/17/2008**

Client ID: **COT-SB-06** Run ID: **ICP_080418A** SeqNo: **619998**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	134.8	10	50	0.7016	268	75	125	18.58	152	20	SR
Arsenic	49.38	5	50	3.79	91.2	75	125	48.06	2.7	20	
Copper	78.14	5	50	27.94	100	75	125	74.73	4.46	20	
Lead	6022	10	50	41.04	12000	75	125	83.99	194	20	SR

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804638
Project: COT-Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS-10583** Batch ID: **10583** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/18/2008 7:33:44 PM** Prep Date **4/17/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **619988**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	94.8	20	100	0	94.8	80	120	0			
Arsenic	103.4	10	100	0	103	80	120	0			
Copper	110.4	10	100	0	110	80	120	0			
Lead	106.3	20	100	0	106	80	120	0			

Sample ID **LCSD-10583** Batch ID: **10583** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/18/2008 7:38:19 PM** Prep Date **4/17/2008**
Client ID: Run ID: **ICP_080418A** SeqNo: **619989**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	94.72	20	100	0	94.7	80	120	94.8	0.0765	20	
Arsenic	102.9	10	100	0	103	80	120	103.4	0.438	20	
Copper	110.5	10	100	0	111	80	120	110.4	0.0784	20	
Lead	106	20	100	0	106	80	120	106.3	0.315	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804638

Received By: DW

Received Date/Time: 4/16/08 16:15

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes	☐ Above 100ml	
		☒ Not Applicable	☐ Below 100ml	
12.	Temperature upon receipt? 8			
13.	Number of sample containers received? 8			

Additional Comments:

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER LABORATORIES INC
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

TURNER WORK ORDER # 0804638 DATE 4/16/08 PAGE 1 OF 1

PROJECT NAME COT-SILVERBELL # _____
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S Church Ave ste2300 TUCSON AZ 85701 PHONE 624-5744 FAX _____
SAMPLER'S SIGNATURE MKMahal

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals 625/8270	Acids	Volatile Organics 624/524.2/8260	TTHMS	HAA5	Pesticides 8081	PCB's 8082	Total Petroleum Hydrocarbons (R(8015AZ)	Oil and Grease Grav. 1664A	1664A	TCLP Analysis VOA	Semi-VOA	Pest./Herb.	Metals TCLP	Dissolved	Total	Priority Pollutants	Cyanide Total	Amen.	WAD	SDWA-INORGANICS PRIMARY	SECONDARY	Coliform MPN	Colilert	pH	Cl	COD	TSS	BOD	TOTAL Pb 6010	TOTAL As, Sb, Cu 6010				
COT-SB-01	4.16.08	1530		S																													X						
COT-SB-02		1537																															X	X					
COT-SB-03		1545																															X						
COT-SB-04		1550																															X						
COT-SB-05		1606																															X	X					
COT-SB-06		1605																															X						
COT-SB-07		1610																															X	X					
COT-SB-08	↓	1615		↓																													X						

1. RELINQUISHED BY: MKMahal
Signature: Michele Mahal
Printed Name: BC
Firm: 4/16-08 1615
Date/Time

2. RECEIVED BY:
Signature: Keith Fritz
Printed Name: BC
Firm: 4/16/08 1675
Date/Time

TURNAROUND REQUIREMENTS:
___ Standard (approx. 10 days)*
___ Next Day X 2 Day ___ 5 Day*
X Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
___ I. Routine Report
___ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 8
Temperature 8
X Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature: Keith Fritz
Printed Name: BC
Firm: 4/16/08 1700
Date/Time

4. RECEIVED BY: DawnWeyer
Signature
Printed Name: DawnWeyer
TURNER LABORATORIES, INC.
Firm: 4/16/08 16:45
Date/Time

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

791-2738
fax or email
kfritz@bruncald.com

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

April 24, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell Order No.: 0804681

Dear Keith Fritz,

Turner Laboratories, Inc. received 9 samples on 4/17/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT: Brown & Caldwell
Project: COT-Silverbell
Lab Order: 0804681
Date Received: 4/17/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804681-01A	COT-PB-01		4/17/2008 2:25:00 PM
0804681-02A	COT-PB-02		4/17/2008 2:40:00 PM
0804681-03A	COT-PB-03		4/17/2008 2:45:00 PM
0804681-04A	COT-PB-04		4/17/2008 2:50:00 PM
0804681-05A	COT-PB-05		4/17/2008 3:00:00 PM
0804681-06A	COT-PB-06		4/17/2008 3:05:00 PM
0804681-07A	COT-PB-07		4/17/2008 3:10:00 PM
0804681-08A	COT-PB-08		4/17/2008 3:15:00 PM
0804681-09A	COT-Dup 02		4/17/2008 2:00:00 PM

CLIENT: Brown & Caldwell
Project: COT-Silverbell
Lab Order: 0804681

CASE NARRATIVE

Analytical Comments for METHOD ICP_RS, SAMPLE 0804681-01 through -09:The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-PB-01
Lab Order:	0804681	**Collection Date:**	4/17/2008 2:25:00 PM
Project:	COT-Silverbell		
Lab ID:	0804681-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	15	10		mg/Kg	1	4/20/2008 3:07:55 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-PB-02
Lab Order:	0804681	**Collection Date:**	4/17/2008 2:40:00 PM
Project:	COT-Silverbell		
Lab ID:	0804681-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/22/2008 10:34:26 AM
Arsenic	7.1	5.0		mg/Kg	1	4/22/2008 10:34:26 AM
Copper	39	5.0		mg/Kg	1	4/20/2008 4:18:07 PM
Lead	1,500	10		mg/Kg	1	4/20/2008 4:18:07 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804681
Project: COT-Silverbell
Lab ID: 0804681-03A

Client Sample ID: COT-PB-03
Collection Date: 4/17/2008 2:45:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	1,700	10		mg/Kg	1	4/20/2008 4:23:11 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804681
Project: COT-Silverbell
Lab ID: 0804681-04A

Client Sample ID: COT-PB-04
Collection Date: 4/17/2008 2:50:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/22/2008 10:38:34 AM
Arsenic	5.8	5.0		mg/Kg	1	4/22/2008 10:38:34 AM
Copper	11	5.0		mg/Kg	1	4/20/2008 4:28:12 PM
Lead	11	10		mg/Kg	1	4/20/2008 4:28:12 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804681
Project: COT-Silverbell
Lab ID: 0804681-05A

Client Sample ID: COT-PB-05
Collection Date: 4/17/2008 3:00:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	9.0	10	J	mg/Kg	1	4/20/2008 4:33:05 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-PB-06
Lab Order:	0804681	**Collection Date:**	4/17/2008 3:05:00 PM
Project:	COT-Silverbell		
Lab ID:	0804681-06A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	43	10		mg/Kg	1	4/22/2008 10:43:31 AM
Arsenic	8.1	5.0		mg/Kg	1	4/22/2008 10:43:31 AM
Copper	180	5.0		mg/Kg	1	4/20/2008 4:37:57 PM
Lead	6,100	200		mg/Kg	20	4/21/2008 3:36:44 PM
Lead	5,000	10		mg/Kg	1	4/20/2008 4:37:57 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

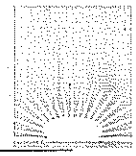
* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-PB-07
Lab Order:	0804681	**Collection Date:**	4/17/2008 3:10:00 PM
Project:	COT-Silverbell		
Lab ID:	0804681-07A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	10	10		mg/Kg	1	4/20/2008 4:42:52 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-PB-08
Lab Order:	0804681	**Collection Date:**	4/17/2008 3:15:00 PM
Project:	COT-Silverbell		
Lab ID:	0804681-08A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	15	10		mg/Kg	1	4/20/2008 4:47:45 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-Dup 02
Lab Order:	0804681	**Collection Date:**	4/17/2008 2:00:00 PM
Project:	COT-Silverbell		
Lab ID:	0804681-09A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/22/2008 10:17:29 AM
Arsenic	6.3	5.0		mg/Kg	1	4/22/2008 10:17:29 AM
Copper	12	5.0		mg/Kg	1	4/20/2008 3:25:39 PM
Lead	8.0	10	J	mg/Kg	1	4/20/2008 3:25:39 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Lab Order: 0804681
Client: Brown & Caldwell
Project: COT-Silverbell

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804681-01A	COT-PB-01	4/17/2008 2:25:00 PM	Soil	ICP Metals-RCRA, Total		4/18/2008	4/20/2008 3:07:55 PM
0804681-02A	COT-PB-02	4/17/2008 2:40:00 PM		ICP Metals-RCRA, Total		4/18/2008	4/22/2008 10:34:26 AM
				ICP Metals-RCRA, Total		4/18/2008	4/20/2008 4:18:07 PM
0804681-03A	COT-PB-03	4/17/2008 2:45:00 PM		ICP Metals-RCRA, Total		4/18/2008	4/20/2008 4:23:11 PM
0804681-04A	COT-PB-04	4/17/2008 2:50:00 PM		ICP Metals-RCRA, Total		4/18/2008	4/22/2008 10:38:34 AM
				ICP Metals-RCRA, Total		4/18/2008	4/20/2008 4:28:12 PM
0804681-05A	COT-PB-05	4/17/2008 3:00:00 PM		ICP Metals-RCRA, Total		4/18/2008	4/20/2008 4:33:05 PM
0804681-06A	COT-PB-06	4/17/2008 3:05:00 PM		ICP Metals-RCRA, Total		4/18/2008	4/22/2008 10:43:31 AM
				ICP Metals-RCRA, Total		4/18/2008	4/21/2008 3:36:44 PM
				ICP Metals-RCRA, Total		4/18/2008	4/20/2008 4:37:57 PM
0804681-07A	COT-PB-07	4/17/2008 3:10:00 PM		ICP Metals-RCRA, Total		4/18/2008	4/20/2008 4:42:52 PM
0804681-08A	COT-PB-08	4/17/2008 3:15:00 PM		ICP Metals-RCRA, Total		4/18/2008	4/20/2008 4:47:45 PM
0804681-09A	COT-Dup 02	4/17/2008 2:00:00 PM		ICP Metals-RCRA, Total		4/18/2008	4/22/2008 10:17:29 AM
				ICP Metals-RCRA, Total		4/18/2008	4/20/2008 3:25:39 PM

TURNER LABORATORIES, INC.

QC Report

Level II

Turner Laboratories WO #: 0804681
Client: Brown and Caldwell
Project Name: COT-Silverbell

Turner Laboratories, Inc.

Date: *24-Apr-08*

CLIENT: Brown & Caldwell
Work Order: 0804681
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID **MB-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/20/2008 2:50:17 PM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080420A** SeqNo: **620140**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	10									
Lead	ND	20									

Sample ID **MB-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/21/2008 2:51:44 PM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080421A** SeqNo: **620364**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Sample ID **MB-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/22/2008 9:59:44 AM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080422B** SeqNo: **620452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									
Arsenic	ND	10									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804681
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0804681-01AMS** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/20/2008 3:12:50 PM** Prep Date **4/18/2008**
Client ID: **COT-PB-01** Run ID: **ICP_080420A** SeqNo: **620144**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	67.91	5	50	13.23	109	75	125	0			
Lead	165.9	10	50	15.12	302	75	125	0			S

Sample ID **0804681-01AMSD** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/20/2008 3:17:06 PM** Prep Date **4/18/2008**
Client ID: **COT-PB-01** Run ID: **ICP_080420A** SeqNo: **620145**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	62.48	5	50	13.23	98.5	75	125	67.91	8.33	20	
Lead	63.85	10	50	15.12	97.5	75	125	165.9	88.8	20	R

Sample ID **0804681-09AMS** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/20/2008 3:30:36 PM** Prep Date **4/18/2008**
Client ID: **COT-Dup 02** Run ID: **ICP_080420A** SeqNo: **620147**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	60.7	5	50	11.78	97.8	75	125	0			
Lead	51.09	10	50	7.883	86.4	75	125	0			

Sample ID **0804681-09AMSD** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/20/2008 3:34:53 PM** Prep Date **4/18/2008**
Client ID: **COT-Dup 02** Run ID: **ICP_080420A** SeqNo: **620148**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	62.13	5	50	11.78	101	75	125	60.7	2.33	20	
Lead	52.29	10	50	7.883	88.8	75	125	51.09	2.33	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804681
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0804681-09AMS** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/22/2008 10:21:31 AM** Prep Date **4/18/2008**
Client ID: **COT-Dup 02** Run ID: **ICP_080422B** SeqNo: **620456**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	20.05	10	50	0.3425	39.4	75	125	0			S
Arsenic	53.22	5	50	6.257	93.9	75	125	0			

Sample ID **0804681-09AMSD** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/22/2008 10:25:51 AM** Prep Date **4/18/2008**
Client ID: **COT-Dup 02** Run ID: **ICP_080422B** SeqNo: **620457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	20.73	10	50	0.3425	40.8	75	125	20.05	3.33	20	S
Arsenic	52.84	5	50	6.257	93.2	75	125	53.22	0.7	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804681
Project: COT-Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/20/2008 2:54:32 PM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080420A** SeqNo: **620141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	105.9	10	100	0	106	80	120	0			
Lead	104	20	100	0	104	80	120	0			

Sample ID **LCSD-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/20/2008 2:59:05 PM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080420A** SeqNo: **620142**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	109.2	10	100	0	109	80	120	105.9	3.03	20	
Lead	106.9	20	100	0	107	80	120	104	2.78	20	

Sample ID **LCS-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/21/2008 2:55:10 PM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080421A** SeqNo: **620365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	107	20	100	0	107	80	120	0			

Sample ID **LCSD-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/21/2008 2:59:41 PM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080421A** SeqNo: **620366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	106.3	20	100	0	106	80	120	107	0.681	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804681
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/22/2008 10:04:02 AM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080422B** SeqNo: **620453**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	108.1	20	100	0	108	80	120	0			
Arsenic	103.6	10	100	0	104	80	120	0			

Sample ID **LCSD-10585** Batch ID: **10585** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/22/2008 10:08:38 AM** Prep Date **4/18/2008**
Client ID: Run ID: **ICP_080422B** SeqNo: **620454**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	109.9	20	100	0	110	80	120	108.1	1.6	20	
Arsenic	104.5	10	100	0	105	80	120	103.6	0.849	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES INC.
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804681 DATE 4/17/2008 PAGE 1 OF 1

PROJECT NAME COT - SILVERBELL #
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S. CHURCH AVE, STE. 2300
Tucson AZ 85701 PHONE 624-5744 FAX
SAMPLER'S SIGNATURE MKMahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	TOTAL Pb 6010	TOTAL Sb, As, Cu
COT-PB-01	4.17.08	1425		SL	1	X	
COT-PB-02		1440				X	X
COT-PB-03		1445				X	
COT-PB-04		1450				X	X
COT-PB-05		1500				X	
COT-PB-06		1505				X	X
COT-PB-07		1510				X	
COT-PB-08		1515				X	
COT-DUP02		1400				X	X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

Base Neutrals ☐ 625/8270 · Acids ☐ · Volatile Organics ☐ 624/524.2/8260 · TTHMS ☐ · HAA5 ☐ · Pesticides ☐ 8081 · PCB's ☐ 8082 · Total Petroleum Hydrocarbons IR(8015AZ) ☐ · Oil and Grease ☐ Grav. 1664A · TCLP Analysis VOA ☐ Semi-VOA ☐ Pest./Herb. ☐ · Metals TCLP ☐ Dissolved ☐ Total ☐ Priority Pollutants ☐ · Cyanide Total ☐ Amen. ☐ · WAD ☐ · SDWA-INORGANICS PRIMARY ☐ · SECONDARY ☐ · Coliform MPN ☐ · Colilert ☐ · pH ☐ · Cl ☐ · COD ☐ · TSS ☐ · BOD ☐

1. RELINQUISHED BY:
Signature
Printed Name: MICHELE MAHAL
Firm: BROWN & CALDWELL
Date/Time: 4.17.08

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx. 10 days)*
___ Next Day ___ 2 Day ___ 5 Day*
___ Fax Preliminary Results
Requested Report Date ___
* Working Days

REPORT REQUIREMENTS:
X I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. #
Bill to:

SAMPLE RECEIPT:
Total Containers: 9
Temperature: 19
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name: DawnWeyer
Firm: TURNER LABORATORIES, INC.
Date/Time: 4/17/08 16:15

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

May 05, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell

Order No.: 0804702

Dear Keith Fritz,

Turner Laboratories, Inc. received 1 sample on 4/21/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

CC:

CLIENT: Brown & Caldwell
Project: COT-Silverbell
Lab Order: 0804702

CASE NARRATIVE

Analytical Comments for METHOD ICP_RS, SAMPLE 0804702-01A:The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-PIPE-01
Lab Order:	0804702	**Collection Date:**	4/21/2008 7:15:00 AM
Project:	COT-Silverbell		
Lab ID:	0804702-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	37	10		mg/Kg	1	4/23/2008 3:26:24 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

TURNER LABORATORIES, INC.

QC SUMMARY

LEVEL II

Turner Laboratories WO #:0804702
Client: Brown & Caldwell
Project Name: COT-Silverbell

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT: Brown & Caldwell
Work Order: 0804702
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID **MB-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:27:55 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620898**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Sample ID **MB-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:03:13 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804702
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID 0804735-01AMS	Batch ID: 10601	Test Code: SW6010B	Units: mg/Kg	Analysis Date 4/23/2008 1:50:58 PM	Prep Date 4/22/2008
Client ID:		Run ID: ICP_080423A		SeqNo: 620902	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	63.29	10	50	20.13	86.3	75	125	0			

Sample ID 0804735-01AMSD	Batch ID: 10601	Test Code: SW6010B	Units: mg/Kg	Analysis Date 4/23/2008 1:55:51 PM	Prep Date 4/22/2008
Client ID:		Run ID: ICP_080423A		SeqNo: 620903	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	62.67	10	50	20.13	85.1	75	125	63.29	0.977	20	

Sample ID 0804736-01AMS	Batch ID: 10601	Test Code: SW6010B	Units: mg/Kg	Analysis Date 4/23/2008 2:09:22 PM	Prep Date 4/22/2008
Client ID:		Run ID: ICP_080423A		SeqNo: 620905	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	270.8	10	50	475.9	-410	75	125	0			S

Sample ID 0804736-01AMSD	Batch ID: 10601	Test Code: SW6010B	Units: mg/Kg	Analysis Date 4/23/2008 2:14:31 PM	Prep Date 4/22/2008
Client ID:		Run ID: ICP_080423A		SeqNo: 620906	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	256.4	10	50	475.9	-439	75	125	270.8	5.43	20	S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804702
Project: COT-Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID LCS-10601	Batch ID: 10601	Test Code: SW6010B	Units: mg/Kg	Analysis Date 4/23/2008 1:32:11 PM	Prep Date 4/22/2008
Client ID:		Run ID: ICP_080423A		SeqNo: 620899	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	104.5	20	100	0	104	80	120	0			

Sample ID LCSD-10601	Batch ID: 10601	Test Code: SW6010B	Units: mg/Kg	Analysis Date 4/23/2008 1:36:45 PM	Prep Date 4/22/2008
Client ID:		Run ID: ICP_080423A		SeqNo: 620900	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	104	20	100	0	104	80	120	104.5	0.482	20	

Sample ID LCS-10601	Batch ID: 10601	Test Code: SW6010B	Units: mg/Kg	Analysis Date 4/24/2008 11:07:32 AM	Prep Date 4/22/2008
Client ID:		Run ID: ICP_080424A		SeqNo: 621125	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	105.5	20	100	0	105	80	120	0			

Sample ID LCSD-10601	Batch ID: 10601	Test Code: SW6010B	Units: mg/Kg	Analysis Date 4/24/2008 11:12:09 AM	Prep Date 4/22/2008
Client ID:		Run ID: ICP_080424A		SeqNo: 621126	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	105.1	20	100	0	105	80	120	105.5	0.366	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804702

Received By: DW

Received Date/Time: 4/21/08 8:05

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes	☐ Above 100ml	
		☒ Not Applicable	☐ Below 100ml	
12.	Temperature upon receipt? 10			
13.	Number of sample containers received? 1			

Additional Comments:

TURNER LABORATORIES INC
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804702 DATE 4-21-2008 PAGE 1 OF 1

PROJECT NAME COT-SILVERBELL # _____
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S. CHURCH AVE STE 2300
TUCSON 85701 PHONE 624-5744 FAX _____
SAMPLER'S SIGNATURE MK Mahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX: Base Neutrals 625/8270 ☐ / Acids ☐	Volatile Organics 624/524.2/8260 ☐	TTHMS ☐	HAA5 ☐	Pesticides 8081 ☐	PCB's 8082 ☐	Total Petroleum Hydrocarbons IR(8015AZ) ☐	Oil and Grease Grav. 1664A ☐	TCLP Analysis: VOA ☐ / Semi-VOA ☐ / Pest./Herb. ☐ / TCLP ☐	Metals: Total ☐ / Priority Pollutants ☐ / Dissolved ☐	Cyanide: Total ☐ / Amen. ☐	WAD ☐	SDWA-INORGANICS: PRIMARY ☐ / SECONDARY ☐	Coliform: MPN ☐ / Colifert ☐	pH ☐	Cl2 ☐	COD ☐	TSS ☐	BOD ☐	TOTAL Pb
COT-PIPE-01	4.21.08	0715		S	1																			X

1. RELINQUISHED BY:
MK Mahal
Signature
MICHELE MAHAL
Printed Name
BROWN & CALDWELL
Firm
4.21.08 0805
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
(X) Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
X I. Routine Report
____ II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to Invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 1
Temperature 10
X Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Dawn Weyer
Signature
Dawn Weyer
Printed Name
TURNER LABORATORIES, INC.
Firm
4/21/08 8:05
Date/Time

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

May 05, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell Order No.: 0804735

Dear Keith Fritz,

Turner Laboratories, Inc. received 10 samples on 4/21/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

CC:

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT: Brown & Caldwell
Project: COT-Silverbell
Lab Order: 0804735
Date Received: 4/21/2008

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date
0804735-01A	COT-BSB-BS-W-06		4/21/2008 9:30:00 AM
0804735-02A	COT-BSB-BS-W-18		4/21/2008 9:40:00 AM
0804735-03A	COT-BSB-BS-W-30		4/21/2008 9:45:00 AM
0804735-04A	COT-BSB-BS-E-06		4/21/2008 10:50:00 AM
0804735-05A	COT-BSB-BS-E-18		4/21/2008 10:55:00 AM
0804735-06A	COT-BSB-BS-E-30		4/21/2008 11:05:00 AM
0804735-07A	COT-BSB-BS-C-06		4/21/2008 11:15:00 AM
0804735-08A	COT-BSB-BS-C-18		4/21/2008 11:20:00 AM
0804735-09A	COT-BSB-BS-C-30		4/21/2008 11:25:00 AM
0804735-10A	COT-DUP03		4/21/2008 12:00:00 PM

CLIENT: Brown & Caldwell
Project: COT-Silverbell
Lab Order: 0804735

CASE NARRATIVE

Analytical Comments for METHOD ICP_RS, SAMPLE 0804735-01 through -10:The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-BS-W-06
Lab Order:	0804735	**Collection Date:**	4/21/2008 9:30:00 AM
Project:	COT-Silverbell		
Lab ID:	0804735-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 1:45:35 PM
Arsenic	4.0	5.0	J	mg/Kg	1	4/23/2008 1:45:35 PM
Copper	29	5.0		mg/Kg	1	4/23/2008 1:45:35 PM
Lead	20	10		mg/Kg	1	4/23/2008 1:45:35 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-BS-W-18
Lab Order:	0804735	**Collection Date:**	4/21/2008 9:40:00 AM
Project:	COT-Silverbell		
Lab ID:	0804735-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 2:23:58 PM
Arsenic	4.0	5.0	J	mg/Kg	1	4/23/2008 2:23:58 PM
Copper	33	5.0		mg/Kg	1	4/23/2008 2:23:58 PM
Lead	63	10		mg/Kg	1	4/23/2008 2:23:58 PM

Qualifiers:

ND - Not Detected at or above the PQL
PQL - Practical Quantitation Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
R - RPD outside accepted recovery limits
* - Value exceeds Maximum Contaminant Level
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-BS-W-30
Lab Order:	0804735	**Collection Date:**	4/21/2008 9:45:00 AM
Project:	COT-Silverbell		
Lab ID:	0804735-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 2:29:24 PM
Arsenic	3.0	5.0	J	mg/Kg	1	4/23/2008 2:29:24 PM
Copper	21	5.0		mg/Kg	1	4/23/2008 2:29:24 PM
Lead	26	10		mg/Kg	1	4/23/2008 2:29:24 PM

Qualifiers:

ND - Not Detected at or above the PQL
PQL - Practical Quantitation Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
R - RPD outside accepted recovery limits
* - Value exceeds Maximum Contaminant Level
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-BS-E-06
Lab Order:	0804735	**Collection Date:**	4/21/2008 10:50:00 AM
Project:	COT-Silverbell		
Lab ID:	0804735-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 2:49:51 PM
Arsenic	4.0	5.0	J	mg/Kg	1	4/23/2008 2:49:51 PM
Copper	28	5.0		mg/Kg	1	4/23/2008 2:49:51 PM
Lead	20	10		mg/Kg	1	4/23/2008 2:49:51 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-BS-E-18
Lab Order:	0804735	**Collection Date:**	4/21/2008 10:55:00 AM
Project:	COT-Silverbell		
Lab ID:	0804735-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 2:54:58 PM
Arsenic	4.0	5.0	J	mg/Kg	1	4/23/2008 2:54:58 PM
Copper	31	5.0		mg/Kg	1	4/23/2008 2:54:58 PM
Lead	28	10		mg/Kg	1	4/23/2008 2:54:58 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-BS-E-30
Lab Order:	0804735	**Collection Date:**	4/21/2008 11:05:00 AM
Project:	COT-Silverbell		
Lab ID:	0804735-06A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 3:00:29 PM
Arsenic	5.0	5.0	J	mg/Kg	1	4/23/2008 3:00:29 PM
Copper	24	5.0		mg/Kg	1	4/23/2008 3:00:29 PM
Lead	25	10		mg/Kg	1	4/23/2008 3:00:29 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-BS-C-06
Lab Order:	0804735	**Collection Date:**	4/21/2008 11:15:00 AM
Project:	COT-Silverbell		
Lab ID:	0804735-07A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 3:05:39 PM
Arsenic	4.0	5.0	J	mg/Kg	1	4/23/2008 3:05:39 PM
Copper	22	5.0		mg/Kg	1	4/23/2008 3:05:39 PM
Lead	24	10		mg/Kg	1	4/23/2008 3:05:39 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804735
Project: COT-Silverbell
Lab ID: 0804735-08A

Client Sample ID: COT-BSB-BS-C-18
Collection Date: 4/21/2008 11:20:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 3:11:00 PM
Arsenic	4.0	5.0	J	mg/Kg	1	4/23/2008 3:11:00 PM
Copper	20	5.0		mg/Kg	1	4/23/2008 3:11:00 PM
Lead	23	10		mg/Kg	1	4/23/2008 3:11:00 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-BSB-BS-C-30
Lab Order:	0804735	**Collection Date:**	4/21/2008 11:25:00 AM
Project:	COT-Silverbell		
Lab ID:	0804735-09A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 3:16:00 PM
Arsenic	4.0	5.0	J	mg/Kg	1	4/23/2008 3:16:00 PM
Copper	22	5.0		mg/Kg	1	4/23/2008 3:16:00 PM
Lead	23	10		mg/Kg	1	4/23/2008 3:16:00 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-DUP03
Lab Order:	0804735	**Collection Date:**	4/21/2008 12:00:00 PM
Project:	COT-Silverbell		
Lab ID:	0804735-10A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 3:21:22 PM
Arsenic	5.3	5.0		mg/Kg	1	4/23/2008 3:21:22 PM
Copper	26	5.0		mg/Kg	1	4/23/2008 3:21:22 PM
Lead	45	10		mg/Kg	1	4/23/2008 3:21:22 PM

Qualifiers:

ND - Not Detected at or above the PQL
PQL - Practical Quantitation Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
R - RPD outside accepted recovery limits
* - Value exceeds Maximum Contaminant Level
E - Value above quantitation range

Lab Order: 0804735
Client: Brown & Caldwell
Project: COT-Silverbell

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0804735-01A	COT-BSB-BS-W-06	4/21/2008 9:30:00 AM	Soil	ICP Metals-RCRA, Total		4/22/2008	4/23/2008 1:45:35 PM
0804735-02A	COT-BSB-BS-W-18	4/21/2008 9:40:00 AM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 2:23:58 PM
0804735-03A	COT-BSB-BS-W-30	4/21/2008 9:45:00 AM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 2:29:24 PM
0804735-04A	COT-BSB-BS-E-06	4/21/2008 10:50:00 AM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 2:49:51 PM
0804735-05A	COT-BSB-BS-E-18	4/21/2008 10:55:00 AM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 2:54:58 PM
0804735-06A	COT-BSB-BS-E-30	4/21/2008 11:05:00 AM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 3:00:29 PM
0804735-07A	COT-BSB-BS-C-06	4/21/2008 11:15:00 AM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 3:05:39 PM
0804735-08A	COT-BSB-BS-C-18	4/21/2008 11:20:00 AM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 3:11:00 PM
0804735-09A	COT-BSB-BS-C-30	4/21/2008 11:25:00 AM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 3:16:00 PM
0804735-10A	COT-DUP03	4/21/2008 12:00:00 PM		ICP Metals-RCRA, Total		4/22/2008	4/23/2008 3:21:22 PM

TURNER LABORATORIES, INC.

QC SUMMARY

LEVEL II

Turner Laboratories WO #:0804735
Client: Brown & Caldwell
Project Name: COT-Silverbell

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT: Brown & Caldwell
Work Order: 0804735
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID **MB-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:27:55 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620898**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									
Arsenic	ND	10									
Copper	ND	10									
Lead	ND	20									

Sample ID **MB-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:03:13 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804735
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0804735-01AMS** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:50:58 PM** Prep Date **4/22/2008**
Client ID: **COT-BSB-BS-W-0** Run ID: **ICP_080423A** SeqNo: **620902**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	18.86	10	50	0	37.7	75	125	0			S
Arsenic	47.22	5	50	4.073	86.3	75	125	0			
Copper	71.37	5	50	29.49	83.7	75	125	0			
Lead	63.29	10	50	20.13	86.3	75	125	0			

Sample ID **0804735-01AMSD** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:55:51 PM** Prep Date **4/22/2008**
Client ID: **COT-BSB-BS-W-0** Run ID: **ICP_080423A** SeqNo: **620903**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	17.94	10	50	0	35.9	75	125	18.86	5	20	S
Arsenic	46.82	5	50	4.073	85.5	75	125	47.22	0.858	20	
Copper	74.29	5	50	29.49	89.6	75	125	71.37	4.01	20	
Lead	62.67	10	50	20.13	85.1	75	125	63.29	0.977	20	

Sample ID **0804736-01AMS** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 2:09:22 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	270.8	10	50	475.9	-410	75	125	0			S

Sample ID **0804736-01AMSD** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 2:14:31 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620906**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	256.4	10	50	475.9	-439	75	125	270.8	5.43	20	S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804735
Project: COT-Silverbell

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:32:11 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620899**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	101.5	20	100	0	101	80	120	0			
Arsenic	100.8	10	100	0	101	80	120	0			
Copper	106.2	10	100	0	106	80	120	0			
Lead	104.5	20	100	0	104	80	120	0			

Sample ID **LCSD-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:36:45 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	102.1	20	100	0	102	80	120	101.5	0.595	20	
Arsenic	99.13	10	100	0	99.1	80	120	100.8	1.71	20	
Copper	106.1	10	100	0	106	80	120	106.2	0.082	20	
Lead	104	20	100	0	104	80	120	104.5	0.482	20	

Sample ID **LCS-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:07:32 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621125**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	105.5	20	100	0	105	80	120	0			

Sample ID **LCSD-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:12:09 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621126**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	105.1	20	100	0	105	80	120	105.5	0.366	20	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT: Brown & Caldwell
Work Order: 0804736
Project: COT-Silverbell

QC SUMMARY REPORT
Method Blank

Sample ID **MB-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:27:55 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620898**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									
Arsenic	ND	10									
Copper	ND	10									
Lead	ND	20									

Sample ID **MB-10602** Batch ID: **10602** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 5:08:57 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620927**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									
Arsenic	ND	10									
Copper	ND	10									
Lead	ND	20									

Sample ID **MB-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:03:13 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621124**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Sample ID **MB-10602** Batch ID: **10602** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:42:38 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621130**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.4225	20									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804735

Received By: DW

Received Date/Time: 4/21/08 1605

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml
		☒ Not Applicable		☐ Below 100ml
12.	Temperature upon receipt? 8°			
13.	Number of sample containers received? 10			

Additional Comments:

TURNER LABORATORIES INC.
2343 N. Coyote Drive, Suite 107
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804735 DATE 4-21-08 PAGE 1 OF 3

PROJECT NAME COT-SILVERBELL # _____
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S. CHURCH AVE, STE 2300
Tucson 85701 PHONE 624-5744 FAX _____
SAMPLER'S SIGNATURE MKMahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	TOTAL Pb	Total As, Sb, Cu
COT-BSB-BS-W-06	4.21.08	0930		SL	1	X	X
COT-BSB-BS-W-18		0940			1	X	X
COT-BSB-BS-W-30		0945			1	X	X
COT-BSB-BS-E-06		1050			1	X	X
COT-BSB-BS-E-18		1055			1	X	X
COT-BSB-BS-E-30		1105			1	X	X
COT-BSB-BS-C-06		1115			1	X	X
COT-BSB-BS-C-18		1120			1	X	X
COT-BSB-BS-C-30		1125			1	X	X
COT-DUP03		1200			1	X	X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

Base Neutrals 625/8270 ☐ Acids ☐
Volatile Organics 624/524.2/8260 ☐
TTHMS ☐
HAA5 ☐
Pesticides 8081 ☐ PCB's 8082 ☐
Total Petroleum Hydrocarbons IR(8015AZ) ☐ Oil and Grease Grav. 1664A ☐ 1664A ☐
TCLP Analysis Semi-VOA ☐ Pest/Herb ☐ VOA ☐
Metals Total ☐ Priority Pollutants ☐ TCLP ☐ Dissolved ☐
Cyanide Amen. ☐ WAD ☐ Total ☐
SDWA-INORGANICS PRIMARY ☐ SECONDARY ☐
Coliform MPN ☐ Colilert ☐ pH ☐
Cl2 ☐ COD ☐
TSS ☐ BOD ☐

1. RELINQUISHED BY:
Signature MKMahal
Printed Name Michele Mahal
Firm BC
Date/Time 4/21/08 1625

2. RECEIVED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

TURNAROUND REQUIREMENTS:
Standard (approx. 10 days)*
X Next Day ____ 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date _____
* Working Days

REPORT REQUIREMENTS:
X I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # _____
Bill to: _____

SAMPLE RECEIPT:
Total Containers 10
Temperature 8
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature _____
Printed Name _____
Firm _____
Date/Time _____

4. RECEIVED BY:
Signature DanWer
Printed Name DanWeaver
Firm TURNER LABORATORIES, INC.
Date/Time 4/21/08 16:25

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

May 05, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell Order No.: 0804736

Dear Keith Fritz,

Turner Laboratories, Inc. received 13 samples on 4/21/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

CC:

CLIENT: Brown & Caldwell
Project: COT-Silverbell
Lab Order: 0804736

CASE NARRATIVE

Analytical Comments for METHOD ICP_RS, SAMPLE 0804736-01 through 13:The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-01
Lab Order:	0804736	**Collection Date:**	4/21/2008 1:30:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	480	10		mg/Kg	1	4/23/2008 2:04:32 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-02
Lab Order:	0804736	**Collection Date:**	4/21/2008 1:35:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	84	10		mg/Kg	1	4/23/2008 3:43:38 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

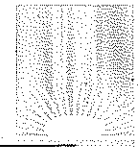
Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-03
Lab Order:	0804736	**Collection Date:**	4/21/2008 1:40:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	190	10		mg/Kg	1	4/23/2008 3:48:28 PM
Arsenic	14	5.0		mg/Kg	1	4/23/2008 3:48:28 PM
Copper	110	5.0		mg/Kg	1	4/23/2008 3:48:28 PM
Lead	11,000	1,000		mg/Kg	100	4/23/2008 4:09:40 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range



Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-04
Lab Order:	0804736	**Collection Date:**	4/21/2008 1:45:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	590	10		mg/Kg	1	4/23/2008 4:18:48 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-05
Lab Order:	0804736	**Collection Date:**	4/21/2008 1:50:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	430	10		mg/Kg	1	4/23/2008 4:22:59 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804736
Project: COT-Silverbell
Lab ID: 0804736-06A

Client Sample ID: COT-RF-06
Collection Date: 4/21/2008 1:55:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	80	10		mg/Kg	1	4/23/2008 4:28:01 PM
Arsenic	57	5.0		mg/Kg	1	4/23/2008 4:28:01 PM
Copper	120	5.0		mg/Kg	1	4/23/2008 4:28:01 PM
Lead	6,500	1,000		mg/Kg	100	4/24/2008 11:21:05 AM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804736
Project: COT-Silverbell
Lab ID: 0804736-07A

Client Sample ID: COT-RF-07
Collection Date: 4/21/2008 2:00:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	500	10		mg/Kg	1	4/23/2008 4:32:50 PM
Arsenic	130	5.0		mg/Kg	1	4/23/2008 4:32:50 PM
Copper	260	5.0		mg/Kg	1	4/23/2008 4:32:50 PM
Lead	29,000	1,000		mg/Kg	100	4/24/2008 11:25:28 AM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-08
Lab Order:	0804736	**Collection Date:**	4/21/2008 2:10:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-08A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	250	10		mg/Kg	1	4/24/2008 11:30:02 AM
Lead	260	10		mg/Kg	1	4/23/2008 4:37:40 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-09
Lab Order:	0804736	**Collection Date:**	4/21/2008 2:15:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-09A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	120	10		mg/Kg	1	4/23/2008 4:42:30 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-10
Lab Order:	0804736	**Collection Date:**	4/21/2008 2:20:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-10A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/23/2008 5:26:51 PM
Arsenic	5.0	5.0		mg/Kg	1	4/23/2008 5:26:51 PM
Copper	110	5.0		mg/Kg	1	4/23/2008 5:26:51 PM
Lead	160	10		mg/Kg	1	4/23/2008 5:26:51 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804736
Project: COT-Silverbell
Lab ID: 0804736-11A

Client Sample ID: COT-RF-11
Collection Date: 4/21/2008 2:30:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	200	10		mg/Kg	1	4/23/2008 5:46:02 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *05-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-12
Lab Order:	0804736	**Collection Date:**	4/21/2008 2:35:00 PM
Project:	COT-Silverbell		
Lab ID:	0804736-12A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	4,900	1,000		mg/Kg	100	4/24/2008 12:00:29 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804736
Project: COT-Silverbell
Lab ID: 0804736-13A

Client Sample ID: COT-DUP 04
Collection Date: 4/21/2008 12:05:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	840	10		mg/Kg	1	4/23/2008 5:55:36 PM
Arsenic	150	5.0		mg/Kg	1	4/23/2008 5:55:36 PM
Copper	370	5.0		mg/Kg	1	4/23/2008 5:55:36 PM
Lead	27,000	1,000		mg/Kg	100	4/24/2008 12:04:47 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

TURNER LABORATORIES, INC.

QC SUMMARY

LEVEL II

Turner Laboratories WO #:0804736
Client: Brown & Caldwell
Project Name: COT-Silverbell

CLIENT: Brown & Caldwell
Work Order: 0804736
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0804735-01AMS** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:50:58 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620902**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	18.86	10	50	0	37.7	75	125	0			S
Arsenic	47.22	5	50	4.073	86.3	75	125	0			
Copper	71.37	5	50	29.49	83.7	75	125	0			
Lead	63.29	10	50	20.13	86.3	75	125	0			

Sample ID **0804735-01AMSD** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:55:51 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620903**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	17.94	10	50	0	35.9	75	125	18.86	5	20	S
Arsenic	46.82	5	50	4.073	85.5	75	125	47.22	0.858	20	
Copper	74.29	5	50	29.49	89.6	75	125	71.37	4.01	20	
Lead	62.67	10	50	20.13	85.1	75	125	63.29	0.977	20	

Sample ID **0804736-01AMS** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 2:09:22 PM** Prep Date **4/22/2008**
Client ID: **COT-RF-01** Run ID: **ICP_080423A** SeqNo: **620905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	270.8	10	50	475.9	-410	75	125	0			S

Sample ID **0804736-01AMSD** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 2:14:31 PM** Prep Date **4/22/2008**
Client ID: **COT-RF-01** Run ID: **ICP_080423A** SeqNo: **620906**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	256.4	10	50	475.9	-439	75	125	270.8	5.43	20	S

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Brown & Caldwell
Work Order: 0804736
Project: COT-Silverbell

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0804736-10AMS** Batch ID: **10602** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 5:31:38 PM** Prep Date **4/22/2008**
Client ID: **COT-RF-10** Run ID: **ICP_080423A** SeqNo: **620931**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	12.58	10	50	0	25.2	75	125	0			S
Arsenic	43.51	5	50	5.031	77	75	125	0			
Copper	153	5	50	106.7	92.7	75	125	0			
Lead	202.5	10	50	155.4	94.2	75	125	0			

Sample ID **0804736-10AMSD** Batch ID: **10602** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 5:36:41 PM** Prep Date **4/22/2008**
Client ID: **COT-RF-10** Run ID: **ICP_080423A** SeqNo: **620932**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	12.73	10	50	0	25.5	75	125	12.58	1.18	20	S
Arsenic	42.89	5	50	5.031	75.7	75	125	43.51	1.44	20	
Copper	156.5	5	50	106.7	99.7	75	125	153	2.25	20	
Lead	251.7	10	50	155.4	193	75	125	202.5	21.6	20	SR

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804736
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:32:11 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620899**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	101.5	20	100	0	101	80	120	0			
Arsenic	100.8	10	100	0	101	80	120	0			
Copper	106.2	10	100	0	106	80	120	0			
Lead	104.5	20	100	0	104	80	120	0			

Sample ID **LCSD-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 1:36:45 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	102.1	20	100	0	102	80	120	101.5	0.595	20	
Arsenic	99.13	10	100	0	99.1	80	120	100.8	1.71	20	
Copper	106.1	10	100	0	106	80	120	106.2	0.082	20	
Lead	104	20	100	0	104	80	120	104.5	0.482	20	

Sample ID **LCS-10602** Batch ID: **10602** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 5:13:18 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620928**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	102	20	100	0	102	80	120	0			
Arsenic	96.16	10	100	0	96.2	80	120	0			
Copper	107.3	10	100	0	107	80	120	0			
Lead	103.7	20	100	0	104	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804736
Project: COT-Silverbell

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-10602** Batch ID: **10602** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/23/2008 5:17:56 PM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080423A** SeqNo: **620929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	103.9	20	100	0	104	80	120	102	1.86	20	
Arsenic	97.36	10	100	0	97.4	80	120	96.16	1.25	20	
Copper	108.1	10	100	0	108	80	120	107.3	0.766	20	
Lead	105.1	20	100	0	105	80	120	103.7	1.4	20	

Sample ID **LCS-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:07:32 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621125**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	105.5	20	100	0	105	80	120	0			

Sample ID **LCSD-10601** Batch ID: **10601** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:12:09 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621126**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	105.1	20	100	0	105	80	120	105.5	0.366	20	

Sample ID **LCS-10602** Batch ID: **10602** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:47:00 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621131**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	104.4	20	100	0.4225	104	80	120	0			

Sample ID **LCSD-10602** Batch ID: **10602** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/24/2008 11:51:36 AM** Prep Date **4/22/2008**
Client ID: Run ID: **ICP_080424A** SeqNo: **621132**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	104.2	20	100	0.4225	104	80	120	104.4	0.15	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804736

Received By: DW

Received Date/Time: 4/21/08 10:25

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml
		☒ Not Applicable		☐ Below 100ml
12.	Temperature upon receipt? 8			
13.	Number of sample containers received? 13			

Additional Comments:

2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 08047360 DATE 4.21.2008 PAGE 1 OF 2

PROJECT NAME COT-SILVERBELL # _____
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S. Church Ave., Ste 2300
Tucson 85701 PHONE 624-5744 FAX _____
SAMPLER'S SIGNATURE MKMahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	TOTAL Pb	TOTAL Sb, As, Cu
COT-RF-01	4.21.08	1330		SL	1	X	
COT-RF-02		1335			1	X	
COT-RF-03		1340			1	X	X
COT-RF-04		1345			1	X	
COT-RF-05		1350			1	X	
COT-RF-06		1355			1	X	X
COT-RF-07		1400			1	X	X
COT-RF-08		1410			1	X	
COT-RF-09		1415			1	X	
COT-RF-10		1420			1	X	X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

Base Neutrals ☐ Acids ☐ 625/8270
Volatile Organics 624/524.2/8260 ☐
TTHMS ☐ HAA5 ☐
Pesticides ☐ PCB's ☐ 8081 8082
Total Petroleum Hydrocarbons (R)(8015AZ) ☐
Oil and Grease Grav. 1664A ☐ 1664A ☐
TCLP Analysis VOA ☐ Semi-VOA ☐ Pest./Herb. ☐
Metals TCLP ☐ Dissolved ☐ Total ☐
Priority Pollutants ☐
Cyanide Total ☐ Amen. ☐ WAD ☐
SDWA-INORGANICS PRIMARY ☐
SECONDARY ☐
Coliform MPN ☐
Colilert ☐
pH ☐
Cl ☐
COD ☐
TSS ☐
BOD ☐

1. RELINQUISHED BY:
MKMahal
Signature
Michele Mahal
Printed Name
BC
Firm
4.21.08 1625
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx. 10 days)*
____ Next Day ____ 2 Day ____ 5 Day*
____ Fax Preliminary Results
Requested Report Date ____
* Working Days

REPORT REQUIREMENTS:
____ I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
____ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ____ Y ____ N
P.O. # ____
Bill to: ____

SAMPLE RECEIPT:
Total Containers 13
Temperature 8°
X Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
DaronWeyer
Signature
DaronWeyer
Printed Name
TURNER LABORATORIES, INC.
Firm
4/21/08 16:25
Date/Time

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER LABORATORIES INC.
Tucson, Arizona 85745
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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804736 DATE 4.21.2008 PAGE 3 2 OF 3 2

PROJECT NAME COT-SILVERBELL # _____
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S. Church Ave. Ste. 2300
Tucson 85701 PHONE 624-5744 FAX _____
SAMPLER'S SIGNATURE MKMahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals 625/8270	Acids	Volatile Organics 624/524.2/8260	TTHMs	HAA5	Pesticides 8081	PCB's 8082	Total Petroleum Hydrocarbons IR(8015AZ)	Oil and Grease Grav. 1664A	1664A	TCLP Analysis VOA	Semi-VOA	Pest./Herb.	TCLP	Metals Dissolved	Total	Priority Pollutants	Cyanide Total	Amen.	WAD	SDWA-INORGANICS PRIMARY	SECONDARY	Coliform MPN	Colilert	pH	Cl	COD	TSS	BOD	TOTAL Pb	TOTAL As, Sb, Cu
COT-RF-11	4.21.08	1430		SL	1																												X		
COT-RF-12	↓	1435		↓	1																												X		
COT-DUP04	↓	1205		↓	1																												X	X	

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

1. RELINQUISHED BY:
MKMahal
Signature
Michele Mahal
Printed Name
BC
Firm
4-21-08 1625
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx. 10 days)*
___ Next Day ___ 2 Day ___ 5 Day*
___ Fax Preliminary Results
Requested Report Date ___
* Working Days

REPORT REQUIREMENTS:
___ I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. # ___
Bill to: ___

SAMPLE RECEIPT:
Total Containers 13
Temperature 8
X Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
DawnWeyer
Signature
DawnWeyer
Printed Name
TURNER LABORATORIES, INC.
Firm
4/21/08 16:25
Date/Time

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

May 12, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell 134.894 Order No.: 0804855

Dear Keith Fritz,

Turner Laboratories, Inc. received 6 samples on 4/25/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

CC:

Turner Laboratories, Inc. **Date:** *12-May-08*

CLIENT: Brown & Caldwell
Project: COT-Silverbell 134.894
Lab Order: 0804855

CASE NARRATIVE

Analytical Comments for METHOD ICP_RS, SAMPLE 0804855-02 through -06:The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Turner Laboratories, Inc.

Date: *12-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-EB0425085
Lab Order:	0804855	**Collection Date:**	4/25/2008 8:25:00 AM
Project:	COT-Silverbell 134.894		
Lab ID:	0804855-01A	**Matrix:**	GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP (TOTAL) METALS		**E200.7**				Analyst: **RAD**
Copper	ND	0.020		mg/L	1	5/1/2008 3:30:45 PM
GFAA METALS IN WATER		**E200.9**				Analyst: **RAD**
Antimony	ND	0.0048		mg/L	1	5/2/2008 7:56:00 PM
Arsenic	ND	0.0050		mg/L	1	5/6/2008 3:05:00 PM
Lead	ND	0.0050		mg/L	1	5/7/2008 12:59:00 PM
Selenium	ND	0.0050		mg/L	1	5/1/2008 8:38:00 PM
Thallium	ND	0.0016		mg/L	1	5/5/2008 5:06:00 PM

Qualifiers:

ND - Not Detected at or above the PQL
PQL - Practical Quantitation Limit
J - Analyte detected below quanititation limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
R - RPD outside accepted recovery limits
* - Value exceeds Maximum Contaminant Level
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *12-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-SB-05+03
Lab Order:	0804855	**Collection Date:**	4/25/2008 9:00:00 AM
Project:	COT-Silverbell 134.894		
Lab ID:	0804855-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/30/2008 9:57:12 AM
Lead	64	10		mg/Kg	1	4/29/2008 8:35:56 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *12-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-PB-02+06
Lab Order:	0804855	**Collection Date:**	4/25/2008 9:10:00 AM
Project:	COT-Silverbell 134.894		
Lab ID:	0804855-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	22	10		mg/Kg	1	4/29/2008 8:05:26 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quanititation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *12-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-PB-03+06
Lab Order:	0804855	**Collection Date:**	4/25/2008 9:15:00 AM
Project:	COT-Silverbell 134.894		
Lab ID:	0804855-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	15	10		mg/Kg	1	4/29/2008 8:39:58 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: Brown & Caldwell
Lab Order: 0804855
Project: COT-Silverbell 134.894
Lab ID: 0804855-05A

Client Sample ID: COT-PB-06+06
Collection Date: 4/25/2008 9:20:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/30/2008 10:01:13 AM
Arsenic	6.3	5.0		mg/Kg	1	4/29/2008 8:43:59 PM
Lead	87	10		mg/Kg	1	4/29/2008 8:43:59 PM

Qualifiers:
ND - Not Detected at or above the PQL
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *12-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-DUP05
Lab Order:	0804855	**Collection Date:**	4/25/2008 12:00:00 PM
Project:	COT-Silverbell 134.894		
Lab ID:	0804855-06A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	4/30/2008 10:05:13 AM
Lead	76	10		mg/Kg	1	4/29/2008 8:48:00 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quanititation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

TURNER LABORATORIES, INC.

QC SUMMARY REPORT

LEVEL II

Turner Lab Work Order #: 0804855
Client: Brown and Caldwell
Project: COT Silverbell

Turner Laboratories, Inc.

Date: *12-May-08*

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT
Method Blank

Sample ID **MB-10636** Batch ID: **10636** Test Code: **E200.7** Units: **mg/L** Analysis Date **5/1/2008 10:53:00 AM** Prep Date **5/1/2008**
Client ID: Run ID: **ICP_080501A** SeqNo: **622722**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	0.003									
Chromium	ND	0.03									
Copper	ND	0.02									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT

Method Blank

Sample ID MB-10636	Batch ID: 10636	Test Code: E200.9	Units: mg/L	Analysis Date 5/2/2008 5:55:00 PM	Prep Date 5/1/2008
Client ID:		Run ID: GFAA_SIMAA_080502A		SeqNo: 622999	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.0048									

Sample ID MB-10636	Batch ID: 10636	Test Code: E200.9	Units: mg/L	Analysis Date 5/6/2008 1:03:00 PM	Prep Date 5/1/2008
Client ID:		Run ID: GFAA_SIMAA_080506A		SeqNo: 623471	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.005									

Sample ID MB-10636	Batch ID: 10636	Test Code: E200.9	Units: mg/L	Analysis Date 5/7/2008 11:18:00 AM	Prep Date 5/1/2008
Client ID:		Run ID: GFAA_SIMAA_080507A		SeqNo: 624228	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.005									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT
Method Blank

Sample ID **MB-10618** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/29/2008 7:47:44 PM** Prep Date **4/28/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **621992**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									
Arsenic	0.3663	10									J
Lead	0.02209	20									J

Sample ID **MB-10618** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/30/2008 9:39:31 AM** Prep Date **4/28/2008**
Client ID: Run ID: **ICP_080430B** SeqNo: **622178**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0804876-03AMS** Batch ID: **10636** Test Code: **E200.7** Units: **mg/L** Analysis Date **5/1/2008 2:42:18 PM** Prep Date **5/1/2008**
Client ID: Run ID: **ICP_080501A** SeqNo: **622681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.04869	0.003	0.05	0	97.4	70	130	0			
Chromium	0.2049	0.03	0.2	0	102	70	130	0			
Copper	0.2712	0.02	0.25	0	108	70	130	0			

Sample ID **0804855-01AMS** Batch ID: **10636** Test Code: **E200.7** Units: **mg/L** Analysis Date **5/1/2008 3:35:06 PM** Prep Date **5/1/2008**
Client ID: **COT-EB0425085** Run ID: **ICP_080501A** SeqNo: **622688**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.2594	0.02	0.25	0	104	70	130	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0804855-03AMS** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/29/2008 8:10:19 PM** Prep Date **4/28/2008**
Client ID: **COT-PB-02+06** Run ID: **ICP_080429A** SeqNo: **621996**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	51.86	10	50	22.48	58.8	75	125	0			S

Sample ID **0804855-03AMSD** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/29/2008 8:14:33 PM** Prep Date **4/28/2008**
Client ID: **COT-PB-02+06** Run ID: **ICP_080429A** SeqNo: **621997**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	53.13	10	50	22.48	61.3	75	125	51.86	2.42	20	S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS-10636** Batch ID: **10636** Test Code: **E200.7** Units: **mg/L** Analysis Date **5/1/2008 10:57:00 AM** Prep Date **5/1/2008**
Client ID: Run ID: **ICP_080501A** SeqNo: **622723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.04933	0.003	0.05	0	98.7	85	115	0			
Chromium	0.2018	0.03	0.2	0	101	85	115	0			
Copper	0.2738	0.02	0.25	0	110	85	115	0			

Sample ID **LCSD-10636** Batch ID: **10636** Test Code: **E200.7** Units: **mg/L** Analysis Date **5/1/2008 11:01:00 AM** Prep Date **5/1/2008**
Client ID: Run ID: **ICP_080501A** SeqNo: **622724**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.04995	0.003	0.05	0	99.9	85	115	0.04933	1.25	20	
Chromium	0.2032	0.03	0.2	0	102	85	115	0.2018	0.691	20	
Copper	0.2774	0.02	0.25	0	111	85	115	0.2738	1.31	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID LCS-10636	Batch ID: 10636	Test Code: E200.9	Units: mg/L		Analysis Date 5/2/2008 6:01:00 PM			Prep Date 5/1/2008			
Client ID:		Run ID: GFAA_SIMAA_080502A			SeqNo: 623000						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.01048	0.0048	0.01	0	105	85	115	0			*

Sample ID LCSD-10636	Batch ID: 10636	Test Code: E200.9	Units: mg/L		Analysis Date 5/2/2008 6:23:00 PM			Prep Date 5/1/2008			
Client ID:		Run ID: GFAA_SIMAA_080502A			SeqNo: 623001						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.01011	0.0048	0.01	0	101	85	115	0.01048	3.59	20	*

Sample ID LCS-10636	Batch ID: 10636	Test Code: E200.9	Units: mg/L		Analysis Date 5/6/2008 1:10:00 PM			Prep Date 5/1/2008			
Client ID:		Run ID: GFAA_SIMAA_080506A			SeqNo: 623472						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.009737	0.005	0.01	0	97.4	85	115	0			

Sample ID LCSD-10636	Batch ID: 10636	Test Code: E200.9	Units: mg/L		Analysis Date 5/6/2008 1:16:00 PM			Prep Date 5/1/2008			
Client ID:		Run ID: GFAA_SIMAA_080506A			SeqNo: 623473						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.009712	0.005	0.01	0	97.1	85	115	0.009737	0.257	20	

Sample ID LCS-10636	Batch ID: 10636	Test Code: E200.9	Units: mg/L		Analysis Date 5/7/2008 11:39:00 AM			Prep Date 5/1/2008			
Client ID:		Run ID: GFAA_SIMAA_080507A			SeqNo: 624229						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.01032	0.005	0.01	0	103	85	115	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID **LCSD-10636** Batch ID: **10636** Test Code: **E200.9** Units: **mg/L** Analysis Date **5/7/2008 11:46:00 AM** Prep Date **5/1/2008**

Client ID: Run ID: **GFAA_SIMAA_080507A** SeqNo: **624230**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0103	0.005	0.01	0	103	85	115	0.01032	0.194	20	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804855
Project: COT-Silverbell 134.894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS-10618** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/29/2008 7:52:05 PM** Prep Date **4/28/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **621993**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	92.98	20	100	0	93	80	120	0			
Arsenic	96.24	10	100	0.3663	95.9	80	120	0			
Lead	106.2	20	100	0.02209	106	80	120	0			

Sample ID **LCSD-10618** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/29/2008 7:56:38 PM** Prep Date **4/28/2008**
Client ID: Run ID: **ICP_080429A** SeqNo: **621994**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	90.7	20	100	0	90.7	80	120	92.98	2.48	20	
Arsenic	93.71	10	100	0.3663	93.3	80	120	96.24	2.66	20	
Lead	103.7	20	100	0.02209	104	80	120	106.2	2.34	20	

Sample ID **LCS-10618** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/30/2008 9:43:47 AM** Prep Date **4/28/2008**
Client ID: Run ID: **ICP_080430B** SeqNo: **622179**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	113.5	20	100	0	114	80	120	0			

Sample ID **LCSD-10618** Batch ID: **10618** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date **4/30/2008 9:48:22 AM** Prep Date **4/28/2008**
Client ID: Run ID: **ICP_080430B** SeqNo: **622180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	113.9	20	100	0	114	80	120	113.5	0.341	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0804855

Received By: DW

Received Date/Time: 4/25/08 1605

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ N/A Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml
		☒ Not Applicable		☐ Below 100ml
12.	Temperature upon receipt? 1.0			
13.	Number of sample containers received? 6			

Additional Comments:

2445 NORTH COYOTE DRIVE ▪ SUITE #104 ▪ TUCSON, ARIZONA 85745 ▪ 520 882-5880 ▪ FAX # 520 882-9788

TURNER LABORATORIES INC.
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804855 DATE 4-25-2008 PAGE 1 OF 1

PROJECT NAME COT-SILVERBELL # 134,894
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S. Church Ave, 2300
Tucson 85701 PHONE 624.5744 FAX
SAMPLER'S SIGNATURE

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals ☐ 625/8270	Acids ☐ Volatile Organics 624/524.2/8260	TTHMS ☐	HAA5 ☐ Pesticides ☐ 8081	PCB's ☐ 8082 Total Petroleum Hydrocarbons IR(8015A2) ☐	1664A ☐ Oil and Grease Grav. 1664A ☐	TCLP Analysis VOA ☐	Semi-VOA ☐ Pest/Herb. ☐	Metals TCLP ☐	Total ☐ Dissolved ☐ Priority Pollutants ☐	Cyanide Total ☐	Amen. ☐ WAD ☐	SDWA-INORGANICS PRIMARY ☐	SECONDARY ☐	Coliform MPN ☐	Coliform pH ☐	Cl2 ☐	COD ☐	TSS ☐	BOD ☐	TOTAL Pb	TOTAL Sb	TOTAL As	TOTAL Cu
COT-EB042508S	4.25.08	0825		W	1																					X	X	X	X
COT-SB-05+03		0900		SL	1																					X	X		
COT-~~X~~MMPB-02+06		0910			1																					X			
COT-PB-03+06		0915			1																					X			
COT-PB-06+06		0920			1																					X	X	X	
COT-DUP05	↓	1200		↓	1																					X	X		

1. RELINQUISHED BY:
Signature: MCMahal
Printed Name: Michele Mahal
Firm: Brown & Caldwell
Date/Time: 4.25.08 1655

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx. 10 days)*
___ Next Day ___ 2 Day ___ 5 Day*
___ Fax Preliminary Results
Requested Report Date ___
* Working Days

REPORT REQUIREMENTS:
___ I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. # ___
Bill to: ___

SAMPLE RECEIPT:
Total Containers 10
Temperature 16
X Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name: Dawn Weyer
TURNER LABORATORIES, INC.
Firm
Date/Time: 4/25/08 1655

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER
LABORATORIES INC.

May 15, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell 134894 Order No.: 0804889

Dear Keith Fritz,

Turner Laboratories, Inc. received 7 samples on 4/29/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-AB-0429-01
Lab Order:	0804889	**Collection Date:**	4/29/2008 8:25:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0804889-01A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/2/2008 5:02:40 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-AB-0429-02
Lab Order:	0804889	**Collection Date:**	4/29/2008 8:30:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0804889-02A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/2/2008 5:07:01 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-AB-0429-03
Lab Order:	0804889	**Collection Date:**	4/29/2008 8:35:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0804889-03A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/2/2008 5:11:16 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-AB-0429-04
Lab Order:	0804889	**Collection Date:**	4/29/2008 8:40:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0804889-04A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/2/2008 5:15:30 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-AB-0429-05
Lab Order:	0804889	**Collection Date:**	4/29/2008 8:45:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0804889-05A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/2/2008 5:19:44 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-AB-0429-06
Lab Order:	0804889	**Collection Date:**	4/29/2008 8:50:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0804889-06A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/2/2008 5:24:00 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-EB042908LT
Lab Order:	0804889	**Collection Date:**	4/29/2008 8:00:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0804889-07A	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/2/2008 5:28:16 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. # C804889

Received By: Dee

Received Date/Time: 4/29/08 9:40

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present
3.	Chain of custody present?	☒ Yes	☐ No	
4.	COC signed when relinquished and received?	☒ Yes	☐ No	
5.	COC agrees with sample labels?	☒ Yes	☐ No	
6.	Samples in proper container/bottle?	☒ Yes	☐ No	
7.	Sample container intact?	☒ Yes	☐ No	
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No	
9.	Samples received within holding times?	☒ Yes	☐ No	
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials
11.	Bacti bottles received with appropriate headspace?	☐ Yes	☐ Above 100ml	
		☒ Not Applicable	☐ Below 100ml	
12.	Temperature upon receipt? 7			
13.	Number of sample containers received? 7			

Additional Comments:

TURNER LABORATORIES INC.
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0804889 DATE 4.29.2008 PAGE 1 OF 1

PROJECT NAME COT-SILVERBELL # 134894
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S. Church Ave, Ste 2300
Tucson 85701 PHONE 624-5744 FAX
SAMPLER'S SIGNATURE MKMahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Total Pb
COT-AB-0429-01	4.29.08	0825		wipe	1	X
COT-AB-0429-02		0830			1	X
COT-AB-0429-03		0835			1	X
COT-AB-0429-04		0840			1	X
COT-AB-0429-05		0845			1	X
COT-AB-0429-06		0850			1	X
COT-EB042908LT		0800			1	X

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

Base Neutrals ☐ Acids ☐ 625/8270
Volatile Organics 624/524.2/8260
TTHMS ☐ HAA5 ☐
Pesticides ☐ PCB's ☐ 8081 8082
Total Petroleum Hydrocarbons IR(8015AZ) ☐ Oil and Grease Grav. 1664A ☐ 1664A ☐
TCLP Analysis VOA ☐ Semi-VOA ☐ Pest./Herb. ☐
Metals TCLP ☐ Dissolved ☐ Total ☐ Priority Pollutants ☐
Cyanide Total ☐ Amen. ☐ WAD ☐
SDWA-INORGANICS PRIMARY ☐ SECONDARY ☐
Coliform MPN ☐ Colilert ☐
pH ☐ Cl, ☐
COD ☐ TSS ☐ BOD ☐

1. RELINQUISHED BY:
MKMahal
Signature
Michele Mahal
Printed Name
Brown & Caldwell
Firm
4.29.08 0940
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx. 10 days)*
___ Next Day ___ 2 Day ___ 5 Day*
___ Fax Preliminary Results
Requested Report Date ___
* Working Days

REPORT REQUIREMENTS:
___ I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. # 134894
Bill to: ___

SAMPLE RECEIPT:
Total Containers 7
Temperature 7
☒ Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
DawnWeyer
Signature
DawnWeyer
Printed Name
TURNER LABORATORIES, INC.
Firm
4/29/08 9:40
Date/Time

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER LABORATORIES, INC.

QC SUMMARY REPORT

LEVEL II

Turner Work Order No.: 0804889
Client: Brown and Caldwell
Project: COT-Silverbell 134894

Turner Laboratories, Inc.

Date: *27-May-08*

CLIENT: Brown & Caldwell
Work Order: 0804889
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10637** Batch ID: **10637** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/2/2008 4:23:18 PM** Prep Date: **5/1/2008**
Client ID: Run ID: **ICP_080502A** SeqNo: **622878**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0804889
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0804861-01AMS** Batch ID: **10637** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/2/2008 4:45:04 PM** Prep Date: **5/1/2008**
Client ID: Run ID: **ICP_080502A** SeqNo: **622882**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	52.13	10	50	0	104	75	125	0			

Sample ID: **0804861-01AMSD** Batch ID: **10637** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/2/2008 4:49:35 PM** Prep Date: **5/1/2008**
Client ID: Run ID: **ICP_080502A** SeqNo: **622883**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	51.51	10	50	0	103	75	125	52.13	1.19	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Turner Laboratories, Inc.

Date: *27-May-08*

CLIENT: Brown & Caldwell
Work Order: 0804889
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10637** Batch ID: **10637** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/2/2008 4:27:36 PM** Prep Date: **5/1/2008**
Client ID: Run ID: **ICP_080502A** SeqNo: **622879**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	100.2	20	100	0	100	80	120	0			

Sample ID: **LCSD-10637** Batch ID: **10637** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/2/2008 4:32:03 PM** Prep Date: **5/1/2008**
Client ID: Run ID: **ICP_080502A** SeqNo: **622880**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	102.5	20	100	0	103	80	120	100.2	2.28	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER
LABORATORIES INC.

May 15, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell 134894 Order No.: 0805051

Dear Keith Fritz,

Turner Laboratories, Inc. received 10 samples on 5/2/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

CLIENT: Brown & Caldwell
Project: COT-Silverbell 134894
Lab Order: 0805051

CASE NARRATIVE

Analytical Comments for METHOD ICP_RS, SAMPLE 0805051-02 through -09:The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-EB042908LW
Lab Order:	0805051	**Collection Date:**	4/29/2008 8:15:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/7/2008 2:21:59 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-01+03
Lab Order:	0805051	**Collection Date:**	5/1/2008 1:30:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	47	10		mg/Kg	1	5/7/2008 2:26:20 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-04+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 1:40:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	22	10		mg/Kg	1	5/7/2008 2:31:59 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-03+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 1:45:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	5/7/2008 2:37:30 PM
Arsenic	7.9	5.0		mg/Kg	1	5/7/2008 2:37:30 PM
Lead	31	10		mg/Kg	1	5/7/2008 2:37:30 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-06+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 1:50:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	5/7/2008 1:34:09 PM
Arsenic	7.1	5.0		mg/Kg	1	5/7/2008 1:34:09 PM
Lead	21	10		mg/Kg	1	5/7/2008 1:34:09 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-05+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 4:30:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-06A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	22	10		mg/Kg	1	5/7/2008 2:42:15 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-07+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 2:45:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-07A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	5/7/2008 2:47:48 PM
Arsenic	7.5	5.0		mg/Kg	1	5/7/2008 2:47:48 PM
Lead	63	10		mg/Kg	1	5/7/2008 2:47:48 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-12+03
Lab Order:	0805051	**Collection Date:**	5/1/2008 4:25:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-08A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	22	10		mg/Kg	1	5/7/2008 2:53:20 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-DUP06
Lab Order:	0805051	**Collection Date:**	5/1/2008 12:00:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-09A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	5/7/2008 2:58:43 PM
Arsenic	7.8	5.0		mg/Kg	1	5/7/2008 2:58:43 PM
Lead	37	10		mg/Kg	1	5/7/2008 2:58:43 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT: Brown & Caldwell
Lab Order: 0805051
Project: COT-Silverbell 134894
Lab ID: 0805051-10A

Client Sample ID: EB0502085
Collection Date: 5/2/2008 9:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP (TOTAL) METALS		**E200.7**				Analyst: **RAD**
Copper	ND	0.020		mg/L	1	5/8/2008 5:44:18 PM
GFAA METALS IN WATER		**E200.9**				Analyst: **RAD**
Antimony	ND	0.0048		mg/L	1	5/13/2008 1:47:00 PM
Arsenic	ND	0.0050		mg/L	1	5/8/2008 5:42:00 PM
Arsenic	ND	0.0050		mg/L	1	5/6/2008 5:23:00 PM
Lead	ND	0.0050		mg/L	1	5/7/2008 3:09:00 PM
Selenium	ND	0.0050		mg/L	1	5/9/2008 2:46:00 PM
Thallium	ND	0.0016		mg/L	1	5/14/2008 1:13:00 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0805051

Received By: DW

Received Date/Time: 5-2-08 11:35

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present	
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present	
3.	Chain of custody present?	☒ Yes	☐ No		
4.	COC signed when relinquished and received?	☒ Yes	☐ No		
5.	COC agrees with sample labels?	☒ Yes	☐ No		
6.	Samples in proper container/bottle?	☒ Yes	☐ No		
7.	Sample container intact?	☒ Yes	☐ No		
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No		
9.	Samples received within holding times?	☒ Yes	☐ No		
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials	
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml	
		☒ Not Applicable		☐ Below 100ml	

12. Temperature upon receipt? 1

13. Number of sample containers received? 10

Additional Comments:

TURNER LABORATORIES INC
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0805051 DATE 5-1-2008 PAGE 1 OF 1

PROJECT NAME COT-SILVERBELL # 134894
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S Church Ave Ste 2300
Tucson 85701 PHONE 624-5744 FAX
SAMPLER'S SIGNATURE MKMahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals 625/8270	Acids	Volatile Organics 624/524.2/8260	TTHMS	HAA5	Pesticides 8081	PCB's 8082	Total Petroleum Hydrocarbons IR(8015A2)	Oil and Grease Grav. 1664A	VOA	TCLP Analysis Semi-VOA	Pest/Herb.	Metals TCLP	Total	Dissolved	Priority Pollutants	Total	Cyanide Amen.	WAD	SDWA-INORGANICS PRIMARY	SECONDARY	MPN	Coliform	Colilert	pH	COD	TSS	BOD	TOTAL Pb	TOTAL Sb, As	TOTAL Cu
COT-EB042408SL	4-24-08	0815		WIPE	1																											X			
COT-RF-01+03	5-1-08	1330		SL	1																											X			
COT-RF-04+06	↓	1340		↓	1																											X			
COT-RF-03+06		1345			1																											X	X		
COT-RF-06+06		1350			1																											X	X		
COT-RF-05+06		1630			1																											X			
COT-RF-07+06		1445			1																											X	X		
COT-RF-12+03		1625			1																											X			
COT-DUP#6	↓	1200		↓	1																											X	X		
EB050209S	5-2-08	0950		WW	1																											X	X	X	

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

1. RELINQUISHED BY:
MKMahal
Signature
Michele Mahal
Printed Name
Brown + Caldwell
Firm
5-2-08 1135
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx. 10 days)*
___ Next Day ___ 2 Day ___ 5 Day*
___ Fax Preliminary Results
Requested Report Date ___
* Working Days

REPORT REQUIREMENTS:
___ I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. # ___
Bill to: ___

SAMPLE RECEIPT:
Total Containers 10
Temperature 1
X Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name
TURNER LABORATORIES, INC.
Firm
5-2-08 11:35
Date/Time

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER LABORATORIES, INC.

QC SUMMARY REPORT

LEVEL II

Turner Work Order No.: 0805051
Client: Brown and Caldwell
Project: COT-Silverbell 134894

Turner Laboratories, Inc.

Date: *27-May-08*

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.7** Units: **mg/L** Analysis Date: **5/8/2008 2:22:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080508A** SeqNo: **624715**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	0.003									
Chromium	ND	0.03									
Copper	ND	0.02									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/6/2008 1:03:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080506A** SeqNo: **623485**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.005									

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/7/2008 11:18:00 AM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080507A** SeqNo: **624248**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.005									

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/8/2008 2:30:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080508A** SeqNo: **624571**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.005									

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/13/2008 12:22:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080513A** SeqNo: **625240**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.0048									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10648** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 12:59:05 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623696**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									
Arsenic	ND	10									
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0805050-01AMS** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:21:24 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623700**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	142.5	10	50	105.9	73.2	75	125	0			S

Sample ID: **0805050-01AMSD** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:25:39 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623701**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	152.2	10	50	105.9	92.6	75	125	142.5	6.58	20	

Sample ID: **0805051-05AMS** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:39:52 PM** Prep Date: **5/5/2008**
Client ID: **COT-RF-06+06** Run ID: **ICP_080507A** SeqNo: **623703**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	11.08	10	50	0	22.2	75	125	0			S
Arsenic	47.7	5	50	7.117	81.2	75	125	0			
Lead	55.43	10	50	21.15	68.6	75	125	0			S

Sample ID: **0805051-05AMSD** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:44:49 PM** Prep Date: **5/5/2008**
Client ID: **COT-RF-06+06** Run ID: **ICP_080507A** SeqNo: **623704**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	11.67	10	50	0	23.3	75	125	11.08	5.19	20	S
Arsenic	48.28	5	50	7.117	82.3	75	125	47.7	1.21	20	
Lead	58.62	10	50	21.15	74.9	75	125	55.43	5.58	20	S

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.7** Units: **mg/L** Analysis Date: **5/8/2008 2:26:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080508A** SeqNo: **624716**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.04448	0.003	0.05	0	89	85	115	0			
Chromium	0.1872	0.03	0.2	0	93.6	85	115	0			
Copper	0.2751	0.02	0.25	0	110	85	115	0			

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.7** Units: **mg/L** Analysis Date: **5/8/2008 2:31:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080508A** SeqNo: **624717**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.04425	0.003	0.05	0	88.5	85	115	0.04448	0.518	20	
Chromium	0.1865	0.03	0.2	0	93.2	85	115	0.1872	0.375	20	
Copper	0.2737	0.02	0.25	0	109	85	115	0.2751	0.51	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/6/2008 1:10:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080506A** SeqNo: **623486**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.009737	0.005	0.01	0	97.4	85	115	0			

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/6/2008 1:16:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080506A** SeqNo: **623487**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.009712	0.005	0.01	0	97.1	85	115	0.009737	0.257	20	

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/7/2008 11:39:00 AM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080507A** SeqNo: **624249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.01032	0.005	0.01	0	103	85	115	0			

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/7/2008 11:46:00 AM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080507A** SeqNo: **624250**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0103	0.005	0.01	0	103	85	115	0.01032	0.194	20	

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/8/2008 2:37:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080508A** SeqNo: **624572**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0107	0.005	0.01	0	107	85	115	0			*

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/8/2008 2:43:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080508A** SeqNo: **624573**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.01041	0.005	0.01	0	104	85	115	0.0107	2.75	20	

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/13/2008 12:29:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080513A** SeqNo: **625241**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.009153	0.0048	0.01	0	91.5	85	115	0			*

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/13/2008 12:36:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080513A** SeqNo: **625242**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.009579	0.0048	0.01	0	95.8	85	115	0.009153	4.55	20	*

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10648** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:03:19 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623697**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	91.99	20	100	0	92	80	120	0			
Arsenic	104.8	10	100	0	105	80	120	0			
Lead	102.3	20	100	0	102	80	120	0			

Sample ID: **LCSD-10648** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:07:43 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	93.23	20	100	0	93.2	80	120	91.99	1.35	20	
Arsenic	105.2	10	100	0	105	80	120	104.8	0.405	20	
Lead	103.7	20	100	0	104	80	120	102.3	1.39	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

TURNER
LABORATORIES INC.

May 15, 2008

Keith Fritz
Brown & Caldwell
110 S. Church Street, Ste 2300
Tucson, AZ 85701
TEL: (520) 624-5744
FAX (520) 791-2738

RE: COT-Silverbell 134894 Order No.: 0805051

Dear Keith Fritz,

Turner Laboratories, Inc. received 10 samples on 5/2/2008 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Shari Bauman

Shari Bauman
Laboratory Director

CLIENT: Brown & Caldwell
Project: COT-Silverbell 134894
Lab Order: 0805051

CASE NARRATIVE

Analytical Comments for METHOD ICP_RS, SAMPLE 0805051-02 through -09:The metals concentrations may be estimates, due to the elevated iron concentration (iron is a major interferent for ICP analysis).

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-EB042908LW
Lab Order:	0805051	**Collection Date:**	4/29/2008 8:15:00 AM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-01A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	ND	10		ppm/wipe	1	5/7/2008 2:21:59 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-01+03
Lab Order:	0805051	**Collection Date:**	5/1/2008 1:30:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-02A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	47	10		mg/Kg	1	5/7/2008 2:26:20 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-04+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 1:40:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-03A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	22	10		mg/Kg	1	5/7/2008 2:31:59 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-03+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 1:45:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-04A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	5/7/2008 2:37:30 PM
Arsenic	7.9	5.0		mg/Kg	1	5/7/2008 2:37:30 PM
Lead	31	10		mg/Kg	1	5/7/2008 2:37:30 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-06+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 1:50:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-05A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	5/7/2008 1:34:09 PM
Arsenic	7.1	5.0		mg/Kg	1	5/7/2008 1:34:09 PM
Lead	21	10		mg/Kg	1	5/7/2008 1:34:09 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-05+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 4:30:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-06A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	22	10		mg/Kg	1	5/7/2008 2:42:15 PM

Qualifiers:

- ND - Not Detected at or above the PQL
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- PQL - Practical Quantitation Limit
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-07+06
Lab Order:	0805051	**Collection Date:**	5/1/2008 2:45:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-07A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	5/7/2008 2:47:48 PM
Arsenic	7.5	5.0		mg/Kg	1	5/7/2008 2:47:48 PM
Lead	63	10		mg/Kg	1	5/7/2008 2:47:48 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-RF-12+03
Lab Order:	0805051	**Collection Date:**	5/1/2008 4:25:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-08A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Lead	22	10		mg/Kg	1	5/7/2008 2:53:20 PM

Qualifiers:	ND - Not Detected at or above the PQL	PQL - Practical Quantitation Limit
	J - Analyte detected below quantitation limits	S - Spike Recovery outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	R - RPD outside accepted recovery limits
	* - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT:	Brown & Caldwell	**Client Sample ID:**	COT-DUP06
Lab Order:	0805051	**Collection Date:**	5/1/2008 12:00:00 PM
Project:	COT-Silverbell 134894		
Lab ID:	0805051-09A	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS-RCRA, TOTAL		**SW6010B**				Analyst: **RAD**
Antimony	ND	10		mg/Kg	1	5/7/2008 2:58:43 PM
Arsenic	7.8	5.0		mg/Kg	1	5/7/2008 2:58:43 PM
Lead	37	10		mg/Kg	1	5/7/2008 2:58:43 PM

Qualifiers:

ND - Not Detected at or above the PQL

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Turner Laboratories, Inc.

Date: *15-May-08*

CLIENT: Brown & Caldwell
Lab Order: 0805051
Project: COT-Silverbell 134894
Lab ID: 0805051-10A

Client Sample ID: EB0502085
Collection Date: 5/2/2008 9:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
ICP (TOTAL) METALS		**E200.7**				Analyst: **RAD**
Copper	ND	0.020		mg/L	1	5/8/2008 5:44:18 PM
GFAA METALS IN WATER		**E200.9**				Analyst: **RAD**
Antimony	ND	0.0048		mg/L	1	5/13/2008 1:47:00 PM
Arsenic	ND	0.0050		mg/L	1	5/8/2008 5:42:00 PM
Arsenic	ND	0.0050		mg/L	1	5/6/2008 5:23:00 PM
Lead	ND	0.0050		mg/L	1	5/7/2008 3:09:00 PM
Selenium	ND	0.0050		mg/L	1	5/9/2008 2:46:00 PM
Thallium	ND	0.0016		mg/L	1	5/14/2008 1:13:00 PM

Qualifiers:

ND - Not Detected at or above the PQL
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
PQL - Practical Quantitation Limit
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

TURNER LABORATORIES, INC.

SAMPLE CONTROL RECEIPT CHECKLIST

TURNER LABORATORIES INC.

Turner Laboratories W.O. #: 0805051

Received By: DW

Received Date/Time: 5-2-08 11:35

Delivered by: Client

1.	Shipping container/cooler in good condition?	☒ Yes	☐ No	☐ Not Present	
2.	Custody seals intact on sample bottles?	☐ Yes	☐ No	☒ Not Present	
3.	Chain of custody present?	☒ Yes	☐ No		
4.	COC signed when relinquished and received?	☒ Yes	☐ No		
5.	COC agrees with sample labels?	☒ Yes	☐ No		
6.	Samples in proper container/bottle?	☒ Yes	☐ No		
7.	Sample container intact?	☒ Yes	☐ No		
8.	Sufficient sample volume for requested tests?	☒ Yes	☐ No		
9.	Samples received within holding times?	☒ Yes	☐ No		
10.	VOA vials received with no headspace?	☐ Yes	☐ No	☒ No Vials	
11.	Bacti bottles received with appropriate headspace?	☐ Yes		☐ Above 100ml	
		☒ Not Applicable		☐ Below 100ml	

12. Temperature upon receipt? 1

13. Number of sample containers received? 10

Additional Comments:

TURNER LABORATORIES INC
2445 N. Coyote Drive, Suite 104
Tucson, Arizona 85745
(520) 882-5880
Fax: (520) 882-9788
www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 0805051 DATE 5-1-2008 PAGE 1 OF 1

PROJECT NAME COT-SILVERBELL # 134894
CONTACT NAME KEITH FRITZ
COMPANY NAME BROWN & CALDWELL
ADDRESS 110 S Church Ave Ste 2300
Tucson 85701 PHONE 624-5744 FAX
SAMPLER'S SIGNATURE MKMahal

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS	Base Neutrals 625/8270	Acids	Volatile Organics 624/524.2/8260	TTHMS	HAA5	Pesticides 8081	PCB's 8082	Total Petroleum Hydrocarbons IR(8015A2)	Oil and Grease Grav. 1664A	VOA	TCLP Analysis Semi-VOA	Pest/Herb.	Metals TCLP	Total	Dissolved	Priority Pollutants	Total	Cyanide Amen.	WAD	SDWA-INORGANICS PRIMARY	SECONDARY	MPN	Coliform	Colilert	pH	COD	TSS	BOD	TOTAL Pb	TOTAL Sb, As	TOTAL Cu
COT-EB042408SL	4-24-08	0815		WIPE	1																											X			
COT-RF-01+03	5-1-08	1330		SL	1																											X			
COT-RF-04+06	↓	1340		↓	1																											X			
COT-RF-03+06		1345			1																											X	X		
COT-RF-06+06		1350			1																											X	X		
COT-RF-05+06		1630			1																											X			
COT-RF-07+06		1445			1																											X	X		
COT-RF-12+03		1625			1																											X			
COT-DUP#6	↓	1200		↓	1																											X	X		
EB050209S	5-2-08	0950		WW	1																											X	X	X	

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

1. RELINQUISHED BY:
MKMahal
Signature
Michele Mahal
Printed Name
Brown + Caldwell
Firm
5-2-08 1135
Date/Time

2. RECEIVED BY:
Signature
Printed Name
Firm
Date/Time

TURNAROUND REQUIREMENTS:
X Standard (approx. 10 days)*
___ Next Day ___ 2 Day ___ 5 Day*
___ Fax Preliminary Results
Requested Report Date ___
* Working Days

REPORT REQUIREMENTS:
___ I. Routine Report
X II. Report (includes DUP, MS, MSD, as required, may be charged as samples)
___ III. Date Validation Report (Includes All Raw Data) Add 10% to invoice

INVOICE INFORMATION:
Account ___ Y ___ N
P.O. # ___
Bill to: ___

SAMPLE RECEIPT:
Total Containers 10
Temperature 1
X Wet Ice ☐ Blue Ice

3. RELINQUISHED BY:
Signature
Printed Name
Firm
Date/Time

4. RECEIVED BY:
Signature
Printed Name
TURNER LABORATORIES, INC.
Firm
5-2-08 11:35
Date/Time

* LEGEND
ST = STORMWATER
SL = SOIL
SD = SOLID
SG = SLUDGE
WW = WASTEWATER
GW = GROUNDWATER
DW = DRINKING WATER

SPECIAL INSTRUCTIONS/COMMENTS:
Compliance Analysis: ☐ Yes ☐ No
ADEQ Forms: ☐ Yes ☐ No
Mail ADEQ Forms: ☐ Yes ☐ No

DISTRIBUTION: WHITE - return to originator PINK - retained by originator See back of pink copy for general terms and conditions/limits of liability.

TURNER LABORATORIES, INC.

QC SUMMARY REPORT

LEVEL II

Turner Work Order No.: 0805051
Client: Brown and Caldwell
Project: COT-Silverbell 134894

Turner Laboratories, Inc.

Date: *27-May-08*

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.7** Units: **mg/L** Analysis Date: **5/8/2008 2:22:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080508A** SeqNo: **624715**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	0.003									
Chromium	ND	0.03									
Copper	ND	0.02									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/6/2008 1:03:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080506A** SeqNo: **623485**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.005									

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/7/2008 11:18:00 AM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080507A** SeqNo: **624248**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.005									

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/8/2008 2:30:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080508A** SeqNo: **624571**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.005									

Sample ID: **MB-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/13/2008 12:22:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080513A** SeqNo: **625240**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.0048									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-10648** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 12:59:05 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623696**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	20									
Arsenic	ND	10									
Lead	ND	20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0805050-01AMS** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:21:24 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623700**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	142.5	10	50	105.9	73.2	75	125	0			S

Sample ID: **0805050-01AMSD** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:25:39 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623701**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	152.2	10	50	105.9	92.6	75	125	142.5	6.58	20	

Sample ID: **0805051-05AMS** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:39:52 PM** Prep Date: **5/5/2008**
Client ID: **COT-RF-06+06** Run ID: **ICP_080507A** SeqNo: **623703**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	11.08	10	50	0	22.2	75	125	0			S
Arsenic	47.7	5	50	7.117	81.2	75	125	0			
Lead	55.43	10	50	21.15	68.6	75	125	0			S

Sample ID: **0805051-05AMSD** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:44:49 PM** Prep Date: **5/5/2008**
Client ID: **COT-RF-06+06** Run ID: **ICP_080507A** SeqNo: **623704**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	11.67	10	50	0	23.3	75	125	11.08	5.19	20	S
Arsenic	48.28	5	50	7.117	82.3	75	125	47.7	1.21	20	
Lead	58.62	10	50	21.15	74.9	75	125	55.43	5.58	20	S

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.7** Units: **mg/L** Analysis Date: **5/8/2008 2:26:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080508A** SeqNo: **624716**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.04448	0.003	0.05	0	89	85	115	0			
Chromium	0.1872	0.03	0.2	0	93.6	85	115	0			
Copper	0.2751	0.02	0.25	0	110	85	115	0			

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.7** Units: **mg/L** Analysis Date: **5/8/2008 2:31:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080508A** SeqNo: **624717**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	0.04425	0.003	0.05	0	88.5	85	115	0.04448	0.518	20	
Chromium	0.1865	0.03	0.2	0	93.2	85	115	0.1872	0.375	20	
Copper	0.2737	0.02	0.25	0	109	85	115	0.2751	0.51	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/6/2008 1:10:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080506A** SeqNo: **623486**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.009737	0.005	0.01	0	97.4	85	115	0			

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/6/2008 1:16:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080506A** SeqNo: **623487**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.009712	0.005	0.01	0	97.1	85	115	0.009737	0.257	20	

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/7/2008 11:39:00 AM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080507A** SeqNo: **624249**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.01032	0.005	0.01	0	103	85	115	0			

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/7/2008 11:46:00 AM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080507A** SeqNo: **624250**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.0103	0.005	0.01	0	103	85	115	0.01032	0.194	20	

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/8/2008 2:37:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080508A** SeqNo: **624572**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0107	0.005	0.01	0	107	85	115	0			*

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/8/2008 2:43:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080508A** SeqNo: **624573**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.01041	0.005	0.01	0	104	85	115	0.0107	2.75	20	

Sample ID: **LCS-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/13/2008 12:29:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080513A** SeqNo: **625241**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.009153	0.0048	0.01	0	91.5	85	115	0			*

Sample ID: **LCSD-10645** Batch ID: **10645** Test Code: **E200.9** Units: **mg/L** Analysis Date: **5/13/2008 12:36:00 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **GFAA_SIMAA_080513A** SeqNo: **625242**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.009579	0.0048	0.01	0	95.8	85	115	0.009153	4.55	20	*

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Brown & Caldwell
Work Order: 0805051
Project: COT-Silverbell 134894

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS-10648** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:03:19 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623697**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	91.99	20	100	0	92	80	120	0			
Arsenic	104.8	10	100	0	105	80	120	0			
Lead	102.3	20	100	0	102	80	120	0			

Sample ID: **LCSD-10648** Batch ID: **10648** Test Code: **SW6010B** Units: **mg/Kg** Analysis Date: **5/7/2008 1:07:43 PM** Prep Date: **5/5/2008**
Client ID: Run ID: **ICP_080507A** SeqNo: **623698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	93.23	20	100	0	93.2	80	120	91.99	1.35	20	
Arsenic	105.2	10	100	0	105	80	120	104.8	0.405	20	
Lead	103.7	20	100	0	104	80	120	102.3	1.39	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

APPENDIX D

Work Plan

WORK PLAN
SILVERBELL FIRING RANGE
OPERATIONS AND MAINTENANCE

Prepared for

City of Tucson, Environmental Services

March 25, 2008

WORK PLAN
SILVERBELL FIRING RANGE OPERATIONS AND MAINTENANCE
TUCSON, ARIZONA

Prepared for
City of Tucson, Environmental Services
100 N Stone Avenue, 2nd Floor
Tucson, Arizona 85701

March 25, 2008

Brown and Caldwell Project #: 134894

BROWN AND CALDWELL
110 S. Church Avenue, Suite 2300
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Appendix A Site Health and Safety Plan

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LIST OF ACRONYMS

A.R.S.	Arizona Revised Statutes
ADEQ	Arizona Department of Environmental Quality
ADHS	Arizona Department of Health Services
AZPDES	Arizona Pollutant Discharge Elimination System
BCC	Brown and Caldwell Constructors
COC	Contaminants of concern
CY	Cubic yards
LCS	Laboratory control sample
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
MS/MSD	Matrix spike/matrix spike duplicate
MT^2	Metals Treatment Technologies
NOI	Notice of Intent
NOT	Notice of Termination
O&M	Operation and Maintenance
QA/QC	Quality assurance/quality control
PQL	Practical quantitation limits
RCRA	Resource Conservation and Recovery Act
RPD	Relative percent difference
rSRL	Residential soil remediation level
SRL	Soil remediation level
SSHP	Site Safety and Health Plan
SWPPP	Storm Water Pollution Prevention Plan
TC	Toxicity characteristic
TCLP	Toxicity characteristic leaching procedure
USEPA	United States Environmental Protection Agency
WP	Work Plan

1. INTRODUCTION

This Work Plan (WP) describes the procedures to be implemented during the operation and maintenance (O&M) activities at the Silverbell Firing Range (Site). The Site is located at 3200 North Silverbell Road in Tucson, Arizona (Figure 1). The City of Tucson retained Brown and Caldwell Constructors (BCC) to remove soil impacted with metals associated with the shooting range. Brown and Caldwell Constructors has contracted Metals Treatment Technologies (MT2) to perform soil excavation, metal separation and recycling, soil stabilization, treatment confirmation analyses, waste transportation and disposal, and site restoration as part of range operations and maintenance functions. This WP provides details for the activities including implementation of soil and air sampling procedures, documentation of maintenance activities, and preparation of a final report.

1.1 Site Description and Project Background

The City of Tucson (City) has owned the property since 1930, and originally contained a wastewater treatment plant. In 1953, the City closed and converted part of the wastewater plant into an armory. The target storage and tower for the firing range were erected in 1954. The shooting range has remained relatively unchanged. However, a backstop systems consisting of metal plates and a conveyor were removed in 1990.

A lead reclamation event was conducted in mid-1990 (after conveyor system disassembly) in which the soil backstop was excavated and screened. The shooting lanes and range floor were also screened for metals removal. The reclamation event resulted in 24 tons of projectiles and screened soil, which were sold to a smelter. No lead reclamation has occurred since. A soil berm currently acts as a backstop.

The area of the shooting range is approximately 200 feet (ft) by 150 ft. The northern half of the shooting range is covered by a shade structure standing approximately 15 ft high. The two berms (primary and secondary) are located directly to the north of the shooting range. The primary berm extends from the base of the shooting range to approximately 20 ft. high. The secondary berm located north of the primary berm extending from its top, is approximately 30 ft. wide by 300 ft. long and 20 ft. high. The armory is located in the southeast corner of the shooting range.

1.2 Project Objectives

The objectives of the O&M project are:

- Conduct baseline soil sampling of the range floor and the primary and secondary impact berms.
- Reclaim metals from on-site soils and remove soils with elevated concentrations of lead and other metals to minimize risk to human health and impacts to the environment.
- Evaluate the armory building surfaces for elevated lead concentrations.
- Minimize environmental restrictions to potential future redevelopment of the property.

1.3 Scope of Work

The scope of work of the O&M activities includes the implementation of the following tasks:

- Utility clearance for all areas where excavation may occur;
- Coordination and participation in City's preconstruction meetings;

- Collect baseline samples and perform exploratory excavations to evaluate the basal soil within the secondary berm;
- Delineate impacted areas and perform excavation, treatment and disposal operations;
- Conduct soil confirmation sampling after maintenance activities are complete to confirm that the concentration of remaining metals are below their respective residential soil remediation levels (rSRLs); and,
- Collect wipe samples from armory building surfaces.

2. OPERATION AND MAINTENANCE ACTIVITIES

To accomplish the project objectives, BCC will implement the O & M scope of work activities listed in Section 1.3. The following sections describe each activity.

2.1 Baseline Soil Sampling

After all areas are cleared for utilities, baseline sampling will be conducted within the range floor, the primary and secondary berms.

Brown and Caldwell Constructors will subdivide the range floor into four quadrants: northeast (NE), southeast (SE), southwest (SW) and northwest (NW). BCC will collect and analyze a composite soil sample from each quadrant of the range floor. Each sample will be composited from four subsamples to be collected from a depth of 2 to 4 inches below the existing soil surface of each quadrant. The four composite samples will be analyzed for total lead.

The primary berm will be subdivided into five 40-foot long sections: west (W), west-central (WC), central (C), east-central (EC), and east (E). BCC will collect a composite sample from each section. Each sample will be composited from four subsamples collected at a spacing of every 10 feet. The subsamples will be collected using a pick hammer and/or trowel from a depth of 12 to 18 inches beneath the berm surface. The five composite samples will be analyzed for total lead.

Similarly, the secondary berm will also be subdivided into five 60-foot long sections. BCC will collect a composite sample from each section. Each sample will be composited from four subsamples collected at a spacing of every 12 feet. The subsamples will be collected using a pick hammer and/or trowel from a depth of 12 to 18 inches beneath the berm surface. The five composite samples will be analyzed for total lead.

Additionally, two samples from each set of the range floor, primary berm, and secondary berm will be analyzed for total antimony, arsenic, and copper.

To characterize the basal soil within the secondary berm, BCC will direct MT2 to excavate three trenches along the width (cross-section) of the secondary berm. Two of the trenches will be completed at locations coincident with the outer edges of the primary berm, with a third trench to occur in the middle of the secondary berm. BCC will collect a total of nine composite samples to evaluate the basal layer of the secondary berm. From each of the trench locations one composite sample will be collected from 6 to 12 inches from the base of the berm; one from 18 to 24 inches from the base of the berm; and one from 30 to 36 inches from the base of the berm. For each trench, three samples will be collected from each depth and composited into one sample. All samples will be analyzed for total lead, antimony, arsenic and copper. The samples will be requested for 24-hour turnaround from Turner Laboratories. Additional sampling may be required if initial results do not adequately delineate the boundaries of impacted soil.

The analytical results obtained from the baseline samples will be evaluated to delineate areas of the Site containing lead and/or other metal concentrations in soil above their respective rSRLs. Lead is identified as the primary contaminant of concern (COC), since it typically comprises approximately 85% of the mass of projectiles. Other metals, such as antimony, arsenic, copper, tin and zinc, are also associated with small arms ammunition; however, the rSRL for tin and zinc are sufficiently high to eliminate these metals as contaminants of concern. The rSRLs for lead, antimony, arsenic and copper are 400 milligram per kilogram (mg/Kg), 31 mg/Kg, 10 mg/Kg, and 3,100 mg/Kg, respectively.

2.2 Maintenance Operations

Based on the results of the baseline sampling, BCC will direct MT2 to excavate, stockpile, treat as necessary, transport and dispose of all soil areas identified as containing concentration of metals above their respective rSRLs. Prior to removal actions, BCC and/or MT2 will obtain all applicable permits, and submit all necessary documents to the State or local authorities. This will include acquiring a permit and connection for potable water that may be necessary for dust control.

MT2 will decontaminate all equipment prior to arrival on-site and prior to performing the initial excavation. Any steam cleaning water and soil debris will be collected in a temporary decontamination pad constructed or provided on-site.

BCC estimates that approximately 500 cubic yards (CY) of impacted soil will require excavation from the range floor and the primary berm. From the secondary berm, approximately 5,000 CY of overburden soil will require removal to allow excavation of the impacted soil horizon at the base of the berm. The overburden soil will be stockpiled separately from the impacted soil horizon. BCC estimates that approximately 500 CY of impacted soil will require excavation from the base of the secondary berm.

Following excavation of impacted soils, BCC will collect confirmation samples from the newly exposed surfaces to confirm that the excavation has removed all impacted soil. Based on the excavation confirmation sampling results, additional impacted areas may be excavated.

The estimated 1,000 CY of impacted soil will be screened and subjected to fragment recovery for metal reclamation. The screened impacted soil will then be treated to stabilize the leachability of metals and render the material non-hazardous.

2.3 Treatment Process

The method of treatment for the impacted soil is chemical stabilization. The reagent used to remediate the lead impacted soil is EcoBond®, which is a phosphate-based stabilizing agent that chemically bonds with the lead and other metals when mixed with the soil. MT2 will perform the soil treatment and BCC personnel will perform treatment confirmation sampling. The treatment goal is the Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic (TC) limit for various metals (e.g., 5.0 milligrams per liter [mg/L] for lead) that are present in the soil. Based on previous, similar remediation projects by MT2, maintenance requirements are driven by the presence of lead; other metals are present in lesser concentrations and are nonetheless stabilized by contact with EcoBond®.

The EcoBond® will be delivered by trucks and placed on the treatment area in small, manageable piles. Treatment will be performed in approximately 12- to 18-inch lifts. EcoBond® pellets will be dispersed over the surface of the area to be treated, mixed into the soil using an excavator or dozer with rippers, and further mixed with a front-end loader to ensure adequate dispersion. A water truck will be on hand to spray the area during mixing to keep fugitive dust emissions to a minimum. The addition of water also expedites the bonding process.

Following mixing, the treated material will be placed in 100 CY stockpiles, and a five-point composite confirmation sample will be collected from each 100-CY treated stockpile. The treatment confirmation samples will be submitted for analysis of Toxicity Characteristic Leaching Procedure (TCLP) lead. Once results verify the treatment goal is met (TCLP lead less than 5.0 mg/L), disposal activities can be initiated. Upon completion of the treatment and excavation process, BCC will collect confirmation soil samples from the base of the excavated soils.

2.4 Soil Confirmation Sampling

Brown and Caldwell Constructors will confirm the successful removal of lead-impacted soil with levels greater than rSRLs through confirmatory soil sampling of surfaces remaining after excavation. A total of 28 confirmation soil samples will be collected: 12 from the ranger floor (3 per quadrant); eight samples from the primary berm; and eight from the secondary berm. Each of the 28 confirmation soil samples will be analyzed for total lead. Additionally, 10 of the samples will be analyzed for total antimony, arsenic and copper.

To confirm that the approximately 5,000 CY of overburden soil from the secondary berm is not impacted by heavy metals, BCC will collect 10 composite samples (one for every 500 CY) from the stockpiled overburden soil. The 10 composite samples from the overburden of the secondary berm will be analyzed for total lead, antimony, arsenic, and copper.

2.5 Lead Wipe Samples

Associated with the soil confirmation sampling activities, BCC will also collect up to six wipe samples from inside the armory building located in the southeast corner of the range floor. All samples will be analyzed for total lead at an Arizona certified laboratory.

2.6 Dust Control

MT2 will obtain a dust control permit from Pima County Air Quality Department for earthmoving activities that will be conducted at the Site. The procedural requirements specified in the associated dust control plan will be conducted on the Site to reduce fugitive dust emissions.

2.7 Storm Water Management

Activities described in this WP involve construction-related activities regulated under the Arizona Pollutant Discharge Elimination System (AZPDES) Program for Discharges from Construction Activities (General Permit). Accordingly, preparation and issuance of a Notice of Intent (NOI) pursuant to the project-specific General Permit is required prior to execution of the O&M activities provided in this WP. Because the proposed discharge from the O&M activities will be classified as a "Routine Discharge" under Part II.B.4 of the General Permit, the NOI must be submitted to Arizona Department of Environmental Quality (ADEQ) within two business days prior to any construction activity. A Storm Water Pollution Prevention Plan (SWPPP) will be developed for this project and will be maintained on Site. Additionally, a copy of the General Permit No. AZCON-23076, issued February 26, 2007, must be maintained in the construction field office. Upon completion of the remediation and removal of stockpiled soils, storm water controls will be removed and a notice of termination (NOT) will be provided to ADEQ.

2.8 Air Monitoring

During O&M activities, BCC will perform perimeter air monitoring and MT2 will perform worker area monitoring. The purpose of air monitoring is to identify and quantify airborne contaminants to verify the level of worker protection and evaluate potential off-site impacts. Air monitoring will be performed using air sampling pumps and particulate monitors (Mini-Ram) as summarized below:

- Baseline air monitoring, using the Mini-Ram, will be performed every morning prior to the start of O&M activities.
- Real-time measurements will be made as near as feasible to the breathing zone of workers with the greatest exposure potential in each active work area.

- Perimeter air monitoring will be performed at scheduled intervals (approximately every 30 minutes) during O&M activities using a Mini-Ram.
- Data obtained from the data-logging Mini-Ram and the analyses of the air samples will be used to establish a correlation of lead concentration to dust volume.

The potential generation of lead-containing fugitive dust emissions during O&M activities will be minimized using dust control procedures, personnel decontamination, and worker and perimeter air monitoring to verify the adequacy of control measures.

3. SAMPLING AND LABORATORY ANALYSIS

This section identifies specific requirements or procedures related to sampling equipment, sample containers, sample storage/transportation, field documentation, decontamination, and field quality assurance/quality control (QA/QC) that will be followed. These requirements are procedures are necessary to generate data of sufficient quality. U.S. Environmental Protection Agency (USEPA, 2002) notes that the quality of data is a function of (1) the appropriateness and accuracy of the sample collection and handling method; (2) the quality and the appropriateness of the laboratory analysis; and (3) the representativeness of the data with respect to the object of the study. These three factors will be addressed in the following manner:

- The appropriateness and accuracy of the sample collection and handling methods have been addressed by the incorporation of methods that are consistent with state and federal guidance. The methods address a wide range of issues, including steps required to collect uncontaminated samples, to preserve samples, to maintain chain-of-custody documentation, and to ensure that samples are analyzed within specified holding times.
- The quality and appropriateness of laboratory analysis have been addressed by the incorporation of approved analytical methods and appropriate data validation procedures. Consistent with the needs relative to the quality and appropriateness of the analysis, the WP reflects the level of analysis commensurate with the purpose of the data. For analysis that will be used to support O&M decisions, regulatory methods will be employed by laboratories approved by Arizona Department of Health Services (ADHS) for the method being used, and the laboratory results will be subject to a data validation process.
- The representativeness of the data, with respect to the object of the study, is a function of the two factors discussed above and may be especially dependent on the design of the sampling program. The sampling approach described in the WP is intended to generate representative data relative to particular data objectives.

The sampling and analysis activities described in the following sections address samples collected to demonstrate that the treatment of the impacted soil is completed where the TCLP lead concentratons, at a minimum, are less than 5.0 mg/L, and to confirm that the concentration of COCs remaining in the surface soil after O&M do not exceed their respective rSRLs.

3.1 Sampling Rationale and Frequency

Treatment confirmation composite samples will be collected from each 100-CY stockpile of treated material and analyzed for TCLP lead to confirm that lead is not present at concentrations exceeding the TC criteria of 5 mg/L. Each composite sample will consist of four sub-samples collected at various locations from the stockpile. The four sub-samples will be collected at a minimum depth of 12 inches beneath the surface of the stockpile. The sample collection procedure and analytical requirements for these composite samples are provided in Section 3.2.

Confirmatory surface soil samples will be collected from the Site to demonstrate that remaining soils do not contain COCs at concentrations in excess of their respective residential SRLs. Following completion of treatment activities, these samples will be collected from the range floor, primary berm, and secondary berm.

3.2 Soil Sample Collection Procedure

3.2.1 Baseline Sampling

Baseline composite samples from the range floor, primary and secondary berms will be collected using the following procedures:

- Prior to sampling, new nitrile gloves will be worn to prevent cross-contamination.
- Each sub-sample will be collected from the specified locations of the range floor, primary and secondary berms, using a disposable polyethylene scoop or similar.
- A laboratory-supplied 4-ounce glass jar will be filled with soil material from each sub-sample location. The soil will then be placed into a clean 1-gallon plastic sealable bag.
- Soil from each sub-sample will be thoroughly mixed to generate a homogenized material. The 4-ounce glass jar will then be filled with the homogenized material to comprise the composite sample.
- Each sample container will be properly labeled, logged onto chain-of-custody and field sampling forms, placed in sealable plastic bags, and stored with ice in an insulated container maintained at 4 degrees Celsius (°C) until submitted to the laboratory for analyses.

Specific identification to be used for the samples will conform to the following naming convention:

For baseline composite samples collected from each quadrant of the range floor, the sample identification will be **COT-BRF-SW/NW/NE/SE**, where COT stands for City of Tucson, BRF refers to baseline sample from range floor, and SW/NW/NE/SE is a two letter designation of the quadrant where the sample was collected.

For baseline composite samples collected from the primary berm, the sample identification will be **COT-BPB-E/EC/C/WC/W**, where COT stands for City of Tucson, BPB refers to baseline sample from primary berm, and E/EC/C/WC/W is a two letter designation of the segment of the berm where the composite sample was collected.

For baseline composite samples collected from the near surface of the secondary berm, the sample identification will be **COT-BSB-NS-E/EC/C/WC/W**, where BSB refers to baseline sample from the secondary berm, NS refers to near surface, and E/EC/C/WC/W is a two letter designation of the segment of the berm where the composite sample was collected.

For baseline composite samples collected from the basal soil of the secondary berm, the sample identification will be **COT-BSB-BS-W/C/E-##**, where BS refers to basal soil, W/C/E refers to the trench from which the composite sample was collected (west, central or east), and ## refers to the depth in inches at which the sample was collected.

Dates and times of collection for each sample will be noted on the container label, the field notes, and the chain-of-custody. The required documentation of each sample will be recorded in the field notes, as applicable.

The baseline composite samples will be analyzed for total lead and/or antimony, arsenic and copper, using USEPA Test Method 6010B.

3.2.2 Treatment Confirmation Sampling

Treatment confirmation composite samples will be collected from each 100-CY stockpile of treated material using the following procedures:

- Prior to sampling, new nitrile gloves will be worn to sample each treated stockpile, to prevent cross-contamination.
- A total of four sub-samples will be collected from various locations of the stockpile at a depth of 12 inches, using a disposable polyethylene scoop or similar.
- A laboratory-supplied 4-ounce glass jar will be filled with soil material from each sub-sample location. The soil will then be placed into a clean 1-gallon plastic sealable bag.
- Soil from each sub-sample will be thoroughly mixed to generate a homogenized material. The 4-ounce glass jar will then be filled with the homogenized material to comprise the composite sample.
- Each sample container will be properly labeled, logged onto chain-of-custody and field sampling forms, placed in sealable plastic bags, and stored with ice in an insulated container maintained at 4 °C until submitted to the laboratory for analyses.

Specific identification to be used for the samples will conform to the following naming convention: **COT-TSP#-MMDD-##**, in sequential order for each stockpile sampled where TSP# stands for "Treated Stockpile number," MM is the two-digit month, DD is the two-digit day, and ## is the sequential number of the sample collected.

Dates and times of collection for each sample will be noted on the container label, the field notes, and the chain-of-custody. The required documentation of each sample will be recorded in the field notes, as applicable.

Treated stockpile composite samples will be analyzed for TCLP lead using USEPA Test Methods 1311 and 6010B.

3.2.3 Surface Soil Confirmation Sampling

Surface soil confirmation samples will be collected using the following procedures:

- Prior to sampling, new disposable nitrile gloves will be worn at each new sampling location to prevent cross-contamination.
- Confirmation samples will be collected from a depth of 0 to 3 inches using disposable polyethylene scoops.
- Using the sampling tool, the top layer of topsoil, vegetation, roots, pebbles, and/or debris will be removed from the sampling area.
- A laboratory-provided 4-ounce glass jar will then be filled with soil material from each sample location.
- Each sample container will be properly labeled, logged onto a chain-of-custody and field sampling forms, placed in sealable bags, and stored with ice in an insulated container maintained at 4 °C until submitted to a laboratory for analyses.

The naming convention will be:

COT-RF/PB/SB-##, where COT stands for City of Tucson, followed by the appropriate two letter location designation (RF for range floor, PB for primary berm, and SB for secondary berm), followed by the numeric identification for each sample location.

The dates and times of collection for each sample will also be noted on the container label, the field notes, and the chain-of-custody. The required documentation of each sample will be recorded in the field notes, as applicable.

The soil confirmation samples will be analyzed for total lead and/or arsenic, antimony, and copper by USEPA Test Method 6010.

3.2.4 Overburden Stockpile Confirmation Sampling

Overburden stockpile confirmation composite samples will be collected for every 500-CY of material using the following procedures:

- Prior to sampling, new nitrile gloves will be worn to sample each treated stockpile, to prevent cross-contamination.
- A total of four sub-samples will be collected from various locations of each 500-CY stockpile at a depth of 12 inches, using a disposable polyethylene scoop or similar.
- A laboratory-supplied 4-ounce glass jar will be filled with soil material from each sub-sample location. The soil will then be placed into a clean 1-gallon plastic sealable bag.
- Soil from each sub-sample will be thoroughly mixed to generate a homogenized material. The 4-ounce glass jar will then be filled with the homogenized material to comprise the composite sample.
- Each sample container will be properly labeled, logged onto chain-of-custody and field sampling forms, placed in sealable plastic bags, and stored with ice in an insulated container maintained at 4 ^{o}C until submitted to the laboratory for analyses.

Specific identification to be used for the samples will conform to the following naming convention: **COT-OSP#-MMDD-##**, in sequential order for each stockpile sampled where OSP# stands for "Overburden Stockpile number," MM is the two-digit month, DD is the two-digit day, and ## is the sequential number of the sample collected.

Dates and times of collection for each sample will be noted on the container label, the field notes, and the chain-of-custody. The required documentation of each sample will be recorded in the field notes, as applicable.

The overburden stockpile confirmation samples will be analyzed for total lead, antimony, arsenic and copper using USEPA Test Method 6010.

3.2.5 Lead Wipe Sampling

BCC will collect a total of six lead wipe samples from the armory building using a sampling gauze and a 10 centimeter-square (cm^2) template using the following procedure:

- Sample location will be identified randomly from the interior of the building.
- The template will be placed flat against the surface at the selected sample location.
- The gauze will be used to wipe the area on the surface exposed by the template in ascending horizontal strokes.
- The gauze will then be placed in a 4 ounce glass jar and labeled. The sample will then be stored in a sealable plastic bag, and stored with ice in an insulated container maintained at 4 ^{o}C until submitted to the laboratory for analyses.
- The template will be cleaned and dried between each use.

Specific identification to be used for the samples will conform to the following naming convention: **COT-AB-MMDD**-##, in sequential order for each random location sampled where AB stands for "Armory Building," MM is the two-digit month, DD is the two-digit day, and ## is the sequential number of the sample collected.

Dates and times of collection for each sample will be noted on the container label, the field notes, and the chain-of-custody. The required documentation of each sample will be recorded in the field notes, as applicable. Samples will be submitted to the laboratory for analysis of total lead using USEPA Test Method 6010.

3.3 Quality Assurance/Quality Control

Field QA/QC samples to be collected during the project will consist of duplicate samples to assess laboratory precision. Duplicate samples will be collected at a frequency of one per 10 field samples collected. Duplicate samples will be collected in the same manner as original samples and will include fictitious sample identifications. The field sample log will properly identify and correlate the duplicate sample to the original. Analyses of the duplicate samples will be the same as the analyses for the primary sample.

The analytical laboratory will prepare and analyze several types of QA/QC samples, including method blanks, laboratory control samples (LCS), surrogate spike analyses, matrix spike/matrix spike duplicate (MS/MSD) samples, and check standards.

3.4 Data Verification and Validation

The verification and validation of data generated during this O&M effort will be performed in a manner that is consistent with industry standards. Upon receipt of complete and final analytical reports from the laboratory, BCC will perform review on 100 percent of the soil confirmation sample results.

At a minimum, the following activities will be performed:

- comparison of primary and field duplicate samples analytical results
- evaluation of detections in blank samples
- evaluation of matrix spike recoveries
- evaluation of laboratory control samples
- evaluation of surrogate spike analyses

The acceptance criteria to be applied during evaluation of the analytical data are provided below:

- Comparison of primary and field duplicate samples analytical results. The relative percent difference (RPD) for each analyte should be +/- 50 percent.
- Evaluation of detections in blank samples. No analytes should be detected in the method blanks at concentrations greater than their respective practical quantitation limits (PQLs).
- Evaluation of matrix spike recoveries. The recovery rate should be between 75 and 125 percent.
- Evaluation of laboratory control samples (LCS). The RPD between the LCS and the laboratory control sample duplicate (LCSD) should not exceed 20 percent.

4. COMMUNITY INVOLVEMENT PLAN

The Community Involvement Plan is intended to establish the means by which the public will be informed of project activities, as well as to provide opportunity for public comment. It is prepared to comply with the requirements of Arizona Revised Statutes (A.R.S.) § 49-176.A.2.

A general public notice will be distributed to property owners located within the Site proximity that may incur potential impacts either by dust or noise from the work area. This notice will be delivered by either direct mailing or door hangings, and will be in the form of a fact sheet containing the following information:

- Names and telephone numbers of one or more persons who may be contacted for information regarding the O&M. The names most likely to be selected include, Richard Byrd (City) and Keith Fritz (BCC).
- Descriptions of the nature of and type of environmental O & M activities described in this WP, and the anticipated schedule of field activities.

In addition to the above notice, signs will be located at one or more prominent locations along the perimeter of the Site, indicating the availability of a fact sheet and including the names and telephone numbers of persons who may be contacted for information regarding the site.

5. SITE SAFETY AND HEALTH PLAN

The Site Safety and Health Plan (SSHP) describes the emergency procedures, the potential chemical, physical, and biological hazards that could be encountered at the Site, and the recommended protective equipment and monitoring requirements to be implemented during the O & M project to ensure the health and safety of workers and the public. The SSHP is included in Appendix A.

6. SCHEDULE

The proposed O&M activities are expected to have an overall duration of approximately 2 weeks. Work will begin with mobilization commencement of O & M activities during the week of April 14, 2008. Work will begin each day at 7:00 AM. Depending upon the progress, work will stop each day at approximately 5:00 PM.

7. REFERENCES

USEPA, December 2002. *EPA Guidance for Quality Assurance Project Plans.* USEPA/QA/G-5, EPA/600/R-98/018.

APPENDIX A

Site Health and Safety Plan

Health and Safety Plan for Operations and Maintenance activities at the Silverbell Firing Range

REVISION 1 – April 7, 2008

3200 North Silverbell Road

Tucson, Arizona

March 14, 2008

BC Project Number: 134894

Prepared by:

BROWN AND CALDWELL

110 South Church Avenue, Suite 2300

Tucson, Arizona 85701

Prepared for:

City of Tucson – Environmental Services

201 North Stone Avenue, 2nd Floor

Tucson, Arizona 85701

Approval Page

This Health and Safety Plan (HASP) has been prepared and reviewed by the following Brown and Caldwell (BC) personnel for use at: City of Tucson Silverbell Firing Range (134894).

	Name	Signature	Title	Date
Prepared By:	Michele Mahal		Scientist I	
Reviewed By:	Michele Mahal		Site Safety Officer	
Reviewed By:	Keith Fritz		Project Manager	
Reviewed By:	Doug Rosco		Regional Safety Unit Manager	04-07-08
Effective Dates:	April 7, 2008	through	April 7, 2009	

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Appendix E Incident Investigation Form
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CRITICAL PROJECT INFORMATION

Primary Known Compound of Concern: Lead, Arsenic, Antimony, Copper

Minimum Level of Respiratory Protection: ☒ Level D ☐ Level C

PPE: Hard hat, steel toe safety boots, reflective vest, safety glasses, nitrile gloves (for sample collection)

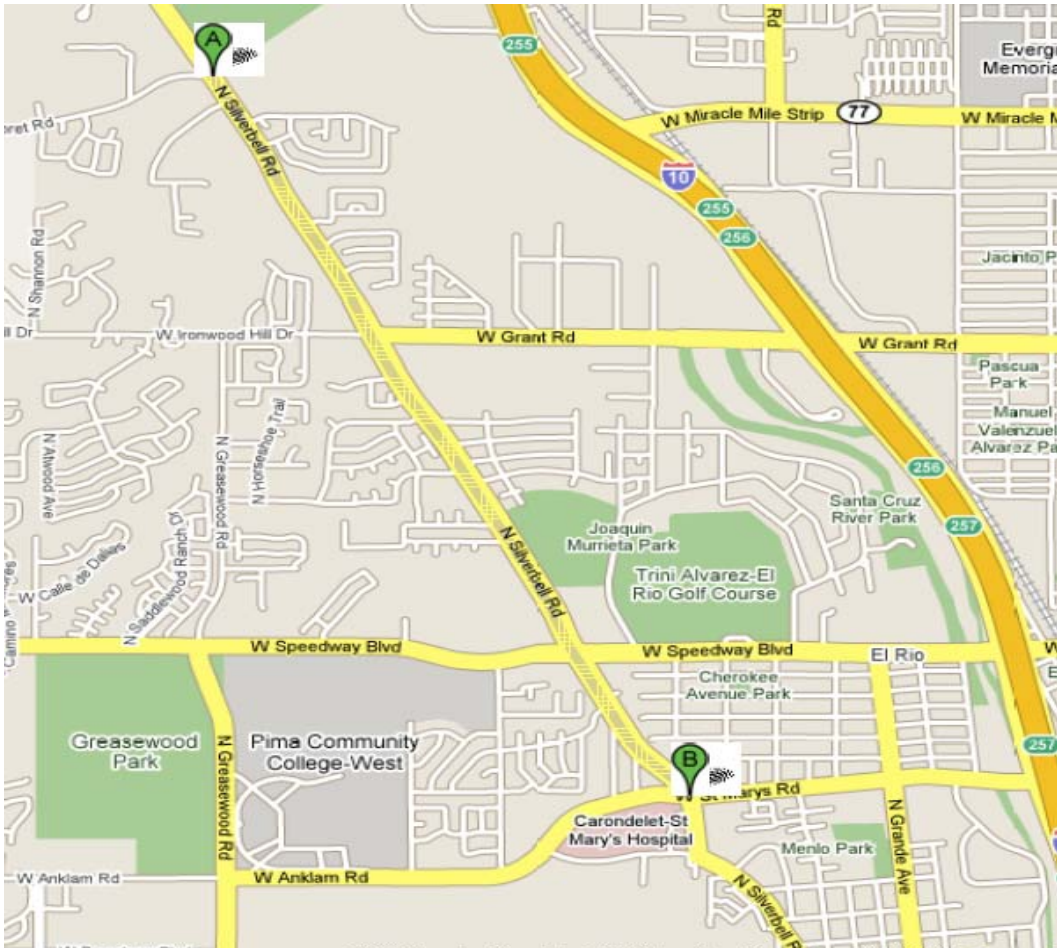
SEE SECTION 10 FOR SITE EMERGENCY CONTINGENCY PROCEDURES
Do not endanger your own life. Survey the situation before taking any action.

BC Office Telephone	**520-624-5744**
Site Location Address	**3200 N. Silverbell Road Tucson, Arizona**

EMERGENCY PHONE NUMBERS: In the event of emergency, contact the Project Manager and/or Regional Safety Unit Manager.

Emergency Services (Ambulance, Fire, Police)	**911**
Poison Control	**(800) 876-4766 or (800) 222-1222**
Hospital Name	**St. Mary's Hospital**
Hospital Phone Number	(520) 872-3000
BC Project Manager (PM; Keith Fritz)	**Office: 520-918-2321 Cell: 520-429-3783**
BC Site Safety Officer (SSO; Michele Mahal)	**Office: 520-918-2322 Cell: 520-668-4965**
BC Regional Safety Unit Manager (Doug Rosco)	**Office: 303-239-5410 Cell: 303-994-9675**
Corporate Risk Management	**Property Loss Blythe Buetzow: (925) 210-2470 Injury Angela Hernandez: (925) 210-2218**
Subcontractor Contact (Mark Pokorny, MT2)	**Office: 1-303-456-6977 Cell: 303-994-4948**
Client Contact (Richard Byrd)	**Office: 520-837-3710 Cell: 520-712-2335**
OTHER CONTACT(s) Randy Bauer – BC	**Office: 620-567-3560**

HOSPITAL LOCATION MAP



HOSPITAL DIRECTIONS:

3200 N Silverbell Rd
Tucson, AZ 85745

Drive: 2.7 mi – about 5 mins

1. Head **southeast** on **N Silverbell Rd** toward **W Goret Rd**
2. Sharp **right** at **W St Marys Rd**

1601 W St Marys Rd
Tucson, AZ 85745

HOSPITAL INFORMATION:

St. Mary's Hospital
1601 W St. Marys Rd
Tucson, Arizona 85745

Phone: 520-872-3000

EMERGENCY FIRST AID PROCEDURES

THE RESPONDER SHOULD HAVE APPROPRIATE TRAINING TO ADMINISTER FIRST AID OR CPR

1. Survey the situation. Do not endanger your own life. DO NOT ENTER A CONFINED SPACE TO RESCUE SOMEONE WHO HAS BEEN OVERCOME. ENSURE ALL PROTOCOLS ARE FOLLOWED INCLUDING THAT A STANDBY PERSON IS PRESENT. IF APPLICABLE, REVIEW MSDSs TO EVALUATE RESPONSE ACTIONS FOR CHEMICAL EXPOSURES.
2. Call 911 (if available) or the fire department **IMMEDIATELY**. Explain the physical injury, chemical exposure, fire, or release.
3. Decontaminate the victim if it can be done without delaying life-saving procedures or causing further injury to the victim.
4. If the victim's condition appears to be non-critical, but seems to be more severe than minor cuts, he/she should be transported to the nearest hospital by the SSO or designated personnel: let the doctor assume the responsibility for determining the severity and extent of the injury. If the condition is obviously serious, contact emergency medical services (EMS) for transport or appropriate actions.

Notify the PM and Regional Safety Unit Manager immediately and complete the appropriate incident investigation reports as soon as possible.

STOP BLEEDING AND CPR GUIDELINES	
To Stop Bleeding	**CPR**
1. Give medical statement by indicating you are trained in 1st Aid. 2. Assure: airway, breathing and circulation. 3. Use **DIRECT PRESSURE** over the wound with clean dressing or your hand (use non-permeable gloves). Direct pressure will control most bleeding. 4. Bleeding from an artery or several injury sites may require **DIRECT PRESSURE** on a **PRESSURE POINT**. Use pressure points for 30 -60 seconds to help control severe bleeding. 5. Continue primary care and seek medical aid as needed.	1. Give medical statement by indicating you are trained in CPR. 2. Arousal: Check for consciousness. 3. Call out for help, either call 911 yourself or instruct someone else to do so. It is very important to call for emergency assistance prior to initiating CPR. 4. Open airway with chin-lift. 5. Look, listen and feel for breathing. 6. If breathing is absent, give 2 slow, full rescue breaths. 7. Look, listen and feel for breathing. 8. If breathing is absent, initiate CPR; 30 compressions for each two breaths. 9. If an automated external defibrillator (AED) is available, use it in accordance with the AED instructions.

1. INTRODUCTION

Brown and Caldwell (BC) has prepared this Health and Safety Plan (HASP) for use during the operations and maintenance (O & M) activities to be conducted at the City of Tucson Silverbell Firing Range located at 3200 North Silverbell Road in Tucson, Arizona ("the Site"). Activities conducted under BC's direction at the Site will be in compliance with applicable Occupational Safety and Health Administration (OSHA) regulations, particularly those in Title 29 of the Code of Federal Regulations, Part 1910.120 (29 CFR 1910.120), and other applicable federal, state, and local laws, regulations, and statutes. A copy of this HASP will be kept on site during scheduled field activities.

This HASP addresses the identified hazards associated with planned field activities at the Site. It presents the minimum health and safety requirements for establishing and maintaining a safe working environment during the course of work. In the event of conflicting requirements, the procedures or practices that provide the highest degree of personnel protection will be implemented. If scheduled activities change or if site conditions encountered during the course of the work are found to differ substantially from those anticipated, the Regional Safety Unit Manager and Project Manager will be informed immediately upon discovery, and appropriate changes will be made to this HASP.

BC's health and safety programs and procedures, including medical monitoring, respiratory protection, injury and illness prevention, hazard communication, and personal protective equipment (PPE), are documented in the BC Health & Safety Manual. The Health & Safety Manual is readily accessible to BC employees via the BC Pipeline. These health and safety procedures are incorporated herein by reference, and BC employees will adhere to the procedures specified in the manual.

BC's HASP has been prepared specifically for this project and is intended to address health and safety issues solely with respect to the activities of BC's own employees at the site. A copy of BC's HASP may be provided to subcontractors in an effort to help them identify expected conditions at the site and general site hazards. The subcontractor shall remain responsible for identifying and evaluating hazards at the site as they pertain to their activities and for taking appropriate precautions. For example, BC's HASP does not address specific hazards associated with tasks and equipment that are particular to the subcontractor's scope of work and site activities (e.g., operation of a drill rig, excavator, crane or other equipment). Subcontractors are not to rely on BC's HASP to identify all hazards that may be present at the Site.

Subcontractors are responsible for developing, maintaining, and implementing their own health and safety programs, policies, procedures and equipment as necessary to protect their workers, and others, from their activities. Subcontractors shall operate equipment in accordance with their standard operating procedures as well as manufacturer's specifications. Any project monitoring activities conducted by BC at the Site shall not in any way relieve subcontractors of their critical obligation to monitor their operations and employees for the determination of exposure to hazards that may be present at the Site and to provide required guidance and protection. If requested,

subcontractors will provide BC with a copy of their own HASP for this project or other health and safety program documents for review.

1.1 Site History

Since 1930, the City of Tucson has owned the property where the Silverbell shooting range is located. In 1953, the City converted part of a closed wastewater plant into the armory, and the tower and target storage buildings were constructed in 1954. The layout of the range has remained largely unchanged since construction. However, a backstop systems consisting of metal plates and a conveyor were removed in 1990.

A lead reclamation event was conducted in mid 1990 (after conveyor system disassembly) in which the soil backstop was excavated and screened. The shooting lanes and range floor were also cleaned of metals. The reclamation event resulted in 24 tons of projectiles and screened soil, which were sold to a smelter. No lead reclamation has occurred since. A soil berm currently acts as a backstop.

1.2 Site Description

The property consists of the range floor with a primary and secondary berm at one end. The secondary berm is approximately 285 feet in length and estimated as approximately 20 feet high and 8 – 10 feet in width. Law enforcement personnel use the range for static firing handgun qualification. The range has been used by the Tucson Police Department, the U.S. Border Patrol, and more recently, Homeland Security. Training by the U.S. Border Patrol and Homeland Security has increased since September 11, 2001.

1.3 Scope of Work

The scope of work as described in the proposal submitted by Brown and Caldwell on October 22, 2007 to the City of Tucson includes tasks associated with soil sampling, oversight for operations and maintenance, waste transportation, and disposal activities at the Site and includes:

- Utility clearance and preconstruction meetings associated with the movement of soil associated with the secondary berm.
- Baseline sample collection of the secondary berm.
- O & M oversight for removal of defined areas of the secondary berm.
- Soil confirmation sampling of basal soil following excavation of secondary berm.
- Lead wipe samples will be collected from inside armory building located at the southeast corner of the site.

2. KEY BC PROJECT PERSONNEL AND RESPONSIBILITES

Keith Fritz is the Project Manager (PM). Doug Rosco is the Regional Safety Unit Manager (RSUM). Michele Mahal is has been designated as the BC Site Safety Officer (SSO) for this project. The BC project field staff have completed 40 hours of comprehensive health and safety training, which meets the requirements of 29 CFR 1910.120.

The responsibilities of key BC project personnel are presented below.

2.1 Project Manager

The PM is responsible for evaluating hazards anticipated at the Site and working with designated field staff and the RSUM to prepare this HASP to address the identified hazards. The PM is also responsible for the following.

- Informing project participants of safety and health hazards identified at the Site
- Providing a copy of this HASP to BC project participants and a copy to each BC subcontractor prior to the start of field activities.
- Ensuring that the BC project team is adequately trained and perform safety briefings in accordance with this HASP.
- Providing the resources necessary for maintaining a safe and healthy work environment for BC personnel.
- Communicating project safety concerns to the RSUM for determining corrective actions.

2.2 Site Safety Officer

The SSO has on-Site responsibility for verifying that BC team members, including subcontractors, comply with the provisions of this HASP. The SSO has the authority to monitor and correct health and safety issues as noted on-Site. The SSO is responsible for the following.

- Reporting unforeseen or unsafe conditions or work practices at the Site to the PM or RSUM.
- Stopping operations that threaten the health and safety of BC field team or members of the surrounding community.
- Monitoring the safety performance of Site personnel to evaluate the effectiveness of health and safety procedures.
- Performing air monitoring, as necessary, as prescribed in this HASP.
- Documenting field team compliance with this HASP by completing the appropriate BC forms contained in the Appendices of this document.
- Conducting daily tailgate safety meetings and assuring that project personnel understand the requirements of this HASP (as documented by each BC field team member's signature on the Signature Page).

- Limiting access to BC work areas on the Site to BC field team members and authorized personnel.
- Enforcing the "buddy system" as appropriate for Site activities.
- Performing periodic inspections to evaluate safety practices at the Site.
- Identifying the location and route to nearby medical facility and emergency contact information and coordinating appropriate responses in the event of emergency.

2.3 Regional Safety Unit Manager

The RSUM is responsible for final review and modification of this HASP. Modifications to this HASP that result in less protective measures than those specified may not be employed by the PM or SSO without the approval of the RSUM. In addition, the RSUM has the following responsibilities.

- Developing and coordinating the overall BC health and safety program.
- Advising the PM and SSO on matters relating to health and safety on this project.
- Recommending appropriate safeguards and procedures.
- Modifying this HASP, if necessary, and approving changes in health and safety procedures at the Site.

2.4 BC Team Members

BC employees and subcontractors are responsible for familiarizing themselves with health and safety aspects of the project and for conducting their activities in a safe manner. This includes attending site briefings, communicating health and safety observations and concerns to the SSO, maintaining current medical and training status and maintaining and using proper tools, equipment and PPE. Proper work practices are part of ensuring a safe and healthful working environment. Safe work practices are essential and it is the responsibility of BC employees and team members to follow safe work practices when conducting scheduled activities. Safe work practices to be employed during the entire duration of fieldwork include, but are not limited to, the following.

- Following the provisions of this HASP, company health and safety procedures and regulatory requirements.
- Reviewing safety-related information from other parties (i.e., client or contractors) as it relates to BC's activities.
- Inspecting personal protective equipment (PPE) before on-site use, using only intact protective clothing and related gear, and changing suits, gloves, etc. if they are damaged or beyond their useful service life.
- Set up, assemble, and check out all equipment and tools for integrity and proper function before starting work activities.
- Assisting in and evaluating the effectiveness of Site procedures (including decontamination) for personnel, protective equipment, sampling equipment and containers, and heavy equipment and vehicles.
- Practice the "buddy system" as appropriate for site activities.

- Do not use faulty or suspect equipment.
- Do not use hands to wipe sweat away from face. Use a clean towel or paper towels.
- Practice contamination avoidance whenever possible.
- Do not smoke, eat, drink, or apply cosmetics while in chemically-affected areas of the site or before proper decontamination.
- Wash hands, face and arms before taking rest and lunch breaks and before leaving the site and the end of the workday.
- Check in and out with the SSO upon arrival and departure from the site.
- Perform decontamination procedures as specified in this HASP.
- Notify the SSO immediately if there is an incident that causes an injury, illness or property loss. Incidents that could have resulted in injury, illness or property loss (close call) will also be reported to the SSO.
- Do no approach or enter an area where a hazardous environment (i.e., oxygen deficiency, toxic or explosive) may exist without employing necessary engineering controls, proper PPE and appropriate support personnel.
- Use respirators correctly and as required for the Site; check the fit of the respirator with a negative or positive pressure test; do not wear respirator with facial hair or other conditions that prevent a face-to-facepiece seal.
- Confined spaces will not be entered without appropriate evaluation, equipment, training and support personnel.

2.5 Subcontractors

Subcontractor personnel are expected to comply fully with subcontractor's HASP and to observe the minimum safety guidelines applicable to their activities which may be identified in the BC HASP. Failure to do so may result in the removal of the subcontractor or any of the subcontractor's workers from the job site.

3. HAZARD ANALYSIS

Hazards at the Site may include physical hazards, chemical hazards or biological hazards. Each type of identified hazard is addressed in the following sections. Hazards that are the specialty of a subcontractor (i.e., operation of a drill rig or excavator) are not addressed in this HASP. Subcontractors are responsible for identifying potential hazards associated with their activities and implementing proper controls.

3.1 Chemical Hazards

Exposure pathways of concern for chemical compounds that may be present at the Site are inhalation of airborne contaminants, direct skin contact with contaminated materials, and incidental ingestion of affected media. Wearing protective equipment and following decontamination procedures listed in Section 7 can minimize dermal contact and incidental ingestion. To minimize inhalation hazards, dust or vapor control measures will be implemented, where necessary, and action levels will be observed during scheduled activities. Site-specific action levels and air monitoring requirements are presented in Section 5.

Known or Suspected Compounds	Source (soil/water/sludge, etc.)	Known Concentration Range (ppm, mg/kg, mg/l)	
		Lowest	Highest
Lead	Soil associated with a firing range	NA	NA
Antimony	Soil associated with a firing range	NA	NA
Arsenic	Soil associated with a firing range	NA	NA
Copper	Soil associated with a firing range	NA	NA

Chemical descriptions of chemicals of concern, including health effects and exposure limits, are presented in the following paragraphs. Each chemical description includes physical and odor recognition characteristics, the health effects associated with exposure, and exposure limits expressed as an 8-hour time-weighted average (TWA). Provided are federal OSHA (OSHA) permissible exposure limits (PELs; located in 29 CFR 1910.1000); California OSHA (Cal/OSHA) PELs (located in 8 CCR 5155); and the American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit values (TLVs). For sites outside California, Cal/OSHA PELs are included as an additional reference.

ANTIMONY

Antimony is a silvery-gray, lustrous metal. It is a moderate fire and explosion hazard in the forms of dust and vapor when exposed to heat and flame. Antimony can react violently with acids, halogens and oxidants. Short-term exposure to antimony can cause

gastrointestinal pain, cough, loss of appetite, itching, skin eruptions, and irritation of the eyes, nose, and throat.

- The OSHA PEL is listed as 0.5 mg/m3.
- The Cal/OSHA PEL is listed as 0.5 mg/m3.
- The TLV is listed as 0.5 mg/m3.

ARSENIC

Metallic arsenic is most commonly a gray, brittle, crystalline solid. It can also be in a black or yellow amorphous form. Arsenic is also commonly found in its volatile white trioxide form. Arsenic is used in several insecticides, herbicides, defoliants, desiccants, and rodenticides and appears in a variety of forms. It is also used in tanning, pigment production, glass manufacturing, wood preservation, and anti-fouling coatings. Arsenic is classified as a known carcinogen.

Short-term exposure to arsenic can cause marked irritation of the stomach and intestines with nausea, vomiting, and diarrhea. In severe cases the vomiting and stools are bloody and the exposed individual goes into collapse and shock with weak, rapid pulse, cold sweats, coma, and death. Inorganic arsenicals are more toxic than organic arsenicals, and the trivalent form is more toxic than the pentavalent form. Acute arsenic poisoning usually results from ingestion exposures. Blood cell changes, blood vessel damage, and impaired nerve function can also result from chronic arsenic ingestion. Other effects include skin changes, irritation of the throat, increased risk of cancer of the liver, bladder, kidney, and lung.

- The OSHA PEL is listed as 0.01 mg/m3 for inorganic forms of arsenic and 0.5 mg/m3 for organic forms.
- The Cal/OSHA PEL is listed as 0.01 mg/m3 for inorganic forms of arsenic and 0.2 mg/m3 for organic forms.
- The TLV is listed as 0.01 mg/m3 for arsenic and inorganic arsenic compounds.

COPPER

In its elemental form, copper is a common metal with a distinct reddish color. Human systemic effects by ingestion include nausea and vomiting. In animals, inhalation of copper dust has caused hemolysis of the red blood cells, deposition of hemofuscin in the liver and pancreas, and injury to the lung cells. Short-term exposure to copper dust can cause a feeling of illness similar to the common cold with sensations of chills and stuffiness of the head. Small copper particles may enter the eye and cause irritation, discoloration, and damage.

- The OSHA PEL is listed as 0.1 mg/m3 for copper as a fume, and 1.0 mg/m3 for dust.

- The Cal/OSHA PEL is listed as 0.1 mg/m3 for copper as a fume, and 1.0 mg/m3 for dust.
- The TLV is listed as 0.2 mg/m3 for copper as a fume, and 1.0 mg/m3 for dust.

LEAD

Lead (inorganic) is a bluish-white, silver or gray odorless solid. Short-term exposure to lead can cause decreased appetite, insomnia, headache, muscle and joint pain, colic, and constipation. Considerable data exist on the effects of lead exposure in humans. It is a poison by ingestion and a suspected human carcinogen of the lungs and kidneys. There are data to suggest that lead is a mutagen and can cause reproductive effects. Human systemic effects by ingestion and inhalation (the two routes of absorption) include loss of appetite, anemia, malaise, insomnia, headache, irritability, muscle and joint pains, tremors, flaccid paralysis without anesthesia, hallucinations and distorted perceptions, muscle weakness, gastritis, and liver changes. Recent experimental evidence suggests that blood levels of lead below 10 μg/dl (micrograms per deciliter) can have the effect of diminishing the IQ scores of children.

- The OSHA PEL is listed as 0.05 mg/m3 and the OSHA PEL for tetraethyl lead and tetramethyl lead is listed as 0.075 mg/m3.
- The Cal/OSHA PEL for elemental lead is listed as 0.05 mg/m3 and the Cal/OSHA PEL for tetraethyl lead and tetramethyl lead is listed as 0.075 mg/m3.
- The TLV for elemental lead is listed as 0.05 mg/m3, the TLV for tetraethyl lead is 0.1 mg/m3 and the TLV for tetramethyl lead is 0.15 mg/m3.

Note: Published exposure limits designate a skin notation indicating that dermal contact (to organic forms) can contribute to the overall exposure.

3.2 Hazard Communication

In accordance with the Hazard Communication standard, material safety data sheets (MSDSs) will be maintained on site for chemical products used by BC personnel at the Site (i.e., spray paint, PVC cement, etc.). Subcontractors will be responsible for maintaining MSDSs for chemical products they bring on Site. In addition, containers will be clearly labeled in English to indicate their contents and appropriate hazard warnings. Please note that labeling containers includes, but is not limited to, any waste, used PPE, and/or decontamination materials collected.

3.3 Opening Wells and Well Vaults

Direct-reading instrumentation specified in Section 5 will be used to monitor any work in a well vault at the site where VOCs are a concern. The well vault will be opened carefully with the BC employee staying upwind as much as possible and then left open for a minimum of three minutes to allow the vault to vent. If the well cap is then removed, allow another three minutes for the well head to vent before proceeding. Please note that if there are other established protocols that differ

from 3 minutes; the more protective time increment will be followed. Personnel should stay upwind as much as possible while working in and around the vault.

When removing a well cap, personnel will remain upwind as much as possible and will carefully remove the cap by opening it away from them in order to minimize the likelihood of exposure to vapors. Personnel will wait a minimum of three minutes to allow the well to vent before proceeding.

3.4 Physical Hazards

The following physical hazards, as marked below, have been identified and may be encountered during scheduled field activities.

- ☒ Slips, Trips and Falls
- ☒ Heavy Equipment
- ☒ Excavations
- ☒ Noise
- ☒ Overhead Utilities
- ☐ Electrical Equipment
- ☐ Confined Spaces
- ☐ Sharp Objects/Cutting
- ☐ Elevated Platforms
- ☐ Traffic
- ☐ Arc Flash Protection
- ☐ Building Collapse
- ☐ Housekeeping
- ☐ Materials and Equipment Handling - Lifting
- ☐ Drilling
- ☒ Underground Utilities
- ☒ Equipment Refueling
- ☐ Lockout/Tagout
- ☐ Fire
- ☐ Cutting Acetate Sleeves
- ☐ Ladder Use
- ☒ Driving
- ☐ Boating Safety
- ☐ Personal Safety – Urban Setting

Actions to be taken to protect against the hazards identified are provided in the sections below.

3.4.1 Slip, Trips and Falls

Slipping hazards may exist due to uneven terrain, wet or slick surfaces, leaks or spills. Tripping hazards may be present from elevation changes, debris, poor housekeeping or tools and equipment. Some specific hazards may include: climbing/descending ladders, scaffolding, berms or curbing. Collectively, these types of injuries account for nearly 50 percent of all occupational injuries and accepted disabling claims. Prevention requires attention and alertness on the part of each worker, following and enforcing proper procedures, including good housekeeping practices, and wearing appropriate protective equipment.

3.4.2 Housekeeping

Personnel shall maintain a clean and orderly work environment. Make sure that all materials stored in tiers are stacked, racked, blocked, interlocked, or secured to prevent sliding, falling, collapse, or overturning. Keep aisles and passageways clear and in good repair to provide for free and safe movement of employees and material-handling equipment. Do not allow materials to accumulate to a degree that it creates a safety or fire hazard.

During construction activities, scrap and form lumber with protruding nails and other items shall be kept clear from work areas, passageways, and stairs. Combustible scrap and debris shall be removed at regular intervals. Safe means must be provided to facilitate removal of debris.

Containers must be provided for collecting and separating waste, used rags and other debris. Containers used for garbage and other oily flammable or hazardous waste such as caustics, acids, harmless dusts, etc., must be separated and equipped with covers. Garbage and other waste shall be disposed of at frequent and regular intervals.

3.4.3 Heavy Equipment

Equipment, including earth-moving equipment, drill rigs, or other heavy machinery, will be operated in compliance with the manufacturer's instructions, specifications, and limitations, as well as any applicable regulations. The operator is responsible for inspecting the equipment prior to use each work shift to verify that it is functioning properly and safely.

The following precautions should be observed whenever heavy equipment is in use.

- PPE, including steel-toed boots, safety glasses, high visibility vests, and hard hats must be worn.
- Personnel must be aware of the location and operation of heavy equipment and take precautions to avoid getting in the way of its operation. Workers must never assume that the equipment operator sees them; eye contact and hand signals should be used to inform the operator of the worker's intent.
- Personnel should not walk directly in back of, or to the side of, heavy equipment without the operator's knowledge. Workers should avoid entering the swing radius of equipment and be aware of potential pinch points.
- Nonessential personnel will be kept out of the work area.

3.4.4 Materials and Equipment Handling - Lifting

The movement and handling of equipment and materials on the Site pose a risk to workers in the form of muscle strains and minor injuries. These injuries can be avoided by using safe handling practices, proper lifting techniques, and proper personal safety equipment such as steel-toed boots and sturdy work gloves. Where practical, mechanical devices will be utilized to assist in the movement of equipment and materials. Workers will not attempt to move heavy objects by themselves without using appropriate mechanical aids such as drum dollies or hydraulic lift gates.

Proper lifting techniques include the following.

- Lift with the strength of your knees, not your back.
- Firmly plant your feet approximately shoulder-width apart.
- Turn your whole body, don't bent or twist at the waist.
- Be sure that the path is clear of obstructions or tripping hazards; avoid carrying objects that will obstruct your vision.
- Use caution when holding an object from the bottom to prevent crushing of the hands or fingers when lowering.

3.4.5 Excavations

A competent person who is capable of identifying existing and predictable hazards in the surroundings, or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them, will be present during excavation activities.

The atmosphere will be tested in excavations, before employees are permitted to enter and begin work, greater than 4 feet in depth or where oxygen deficiency or toxic or flammable gases are likely to be present. The atmosphere shall be ventilated and re-tested until flammable gas concentrations less than 5 percent of the lower explosive limit (LEL) and site-specific action levels are obtained. Worker entry will not be allowed if the oxygen concentration is less than 20 percent. In addition, a safe means of access and egress (i.e., a ladder, stairs or ramp) must be provided so that no more than 25 feet of lateral travel is required by employees.

Workers will not enter unstable excavations or excavations greater than 5 feet in depth without appropriate protective systems such as benching, sloping, or shoring. If shoring or shielding systems are not used, side slopes will not be steeper than 1½:1 without written confirmation from the competent person that slope is safe for the soil conditions. Excavations will be constructed in accordance with the OSHA Excavation Safety Standard (29CFR1926 Subpart P).

The competent person will inspect excavations daily. If there is evidence that a cave-in or slide is possible, work will cease until the necessary safeguards have been taken. Excavated material will be placed far enough from the edge of the excavation (a minimum of 2 feet) so that it does not fall back into the opening or affect the integrity of the sidewall. At the end of each day's activities, open excavations will be clearly marked and secured to prevent nearby workers or unauthorized personnel from entering them. Remote sampling techniques will be the preferred method of sample collection in excavations.

3.4.6 Drilling

During all drilling activities, the operator must ensure that the appropriate level of protection and appropriate safety procedures are utilized. The operator will verify that equipment "kill switches" are functioning properly at the start of each day's use. Hard hats, steel-toed boots, and ear and eye protection will be required at all times when working around drill rigs. The proximity of underground and overhead utilities must be identified before any drilling is attempted. The rig may not be moved with the mast in the upright position.

Workers can effectively manage hazards associated with working around heavy equipment if a constant awareness of these hazards is maintained. These hazards include the risk of becoming physically entangled in rotating machinery, slipping and falling, impact injury to eyes, head and body, and injury from machinery operations. Never work or walk on piles of well casings. Make sure all high-pressure lines and hoses have whip checks attached. Constant visual or verbal contact with the equipment operator will facilitate such awareness.

3.4.7 Noise

Noise may result primarily from the operation of heavy equipment, process machinery or other mechanical equipment. Hearing protection with the appropriate noise reduction rating (NRR) shall be worn in areas with high noise levels. A good rule of thumb to determine if hearing protection is needed is the inability to have a conversation at arms length without raising voice levels. If loud noise is present or normal conversation becomes difficult, hearing protection in the form of ear plugs, or equivalent, will be required.

3.4.8 Underground Utilities

Reasonable efforts will be made to identify the location(s) of underground utilities (e.g., pipes, electrical conductors, fuel lines, and water and sewer lines) before intrusive soil work is performed. The state underground utility notification authority (e.g., USA, Dig Alert, Blue Stake, etc.) will be contacted prior to the start of intrusive field activities in accordance with local notification requirements. In areas not evaluated or serviced by the underground utility notification authority, and a reasonable potential for underground utilities exists, one or more of the following techniques will be employed to determine the location of subsurface structures.

- Contracting the services of a qualified private utility locator.
- Having a survey of the subject area conducted by staff trained in the use of subsurface utility locating equipment.
- Subsurface testing (i.e., hand digging or potholing) to the expected depth of probable utilities (not less than 5 feet).

If utilities cannot be located or if unlocated utilities are suspected to be present, subsurface activities (i.e., borings, excavation) should not be conducted before the location(s) or absence of underground utilities is confirmed.

Typical subsurface location marks are as follows.

- Red – electrical
- Yellow – gas/oil/steam
- Blue – water
- Green – sanitary/storm drains/culverts
- Orange – communications
- White – proposed excavation or boring

Intrusive work should be limited to the area 3.3 feet (1 meter) on either side of the location marks. In some special cases such as fiber optics and high-pressure pipelines this area should be expanded to 16.5 feet (5 meters) on either side of the utility.

3.4.9 Overhead Utilities

If work is to be conducted in the vicinity of overhead electrical utilities, the owner of the overhead line will be contacted to determine the maximum voltage. Any overhead utility will be considered to

be energized unless and until the person owning or operating such line verifies that the line is not energized, and the line is visibly grounded at the work site.

Workers will not perform work in proximity to energized high-voltage lines (including scaffolding, well drilling, pile driving, or hoisting equipment) until danger from accidental contact with high-voltage lines has been effectively guarded against.

Equipment with articulated upright booms or masts are not permitted to operate within 15 feet of an overhead utility line (less than 50kV) while the boom is in the upright position. For transmission lines in excess of 50kV, an additional distance of 4 inches for each 10 kV over 50kV will be used.

3.4.10 Equipment Refueling

Care shall be exercised while refueling generators, pumps, vehicles, and other equipment to prevent fire and spills. Personnel shall eliminate static electricity by grounding themselves (touching metal) prior to using refueling hoses and or containers of petroleum liquids. Items being refueled shall be grounded or be located on the ground and not on a trailer, work bench or inside a truck bed. Equipment that is hot must be allowed to cool prior to refueling. Spill response materials shall be available when conducting refueling operations.

3.4.11 Electrical Hazards

Electrical equipment to be used during field activities will be suitably grounded and insulated. Ground-fault circuit interrupters (GFCI), or equivalent, will be used with electrical equipment to reduce the potential for serious electrical shock. Electrical equipment including batteries, generators, panels and extension cords shall be kept dry during use. Extension cords may not be used as a permanent means of providing power and will be removed from service if they are worn, frayed, or if the grounding prong is missing.

Extension cord precautions include the following.

- Be aware of exposed or bare wires, especially on metal grating. Warning*: Electrical contact with metal can cause fatal electrocution.*
- Prior to use, inspect cords for exposed or bare wires, worn or frayed cords, and incorrect splices. Splices are permitted, but there must be insulation equal to the cable, including flexibility.
- Cables and extension cords in passageways, steps or any area where there may be foot traffic should be secured so as to not create a tripping hazard. Overhead cables and extension cords shall be rigged to a height greater than 6 feet.
- Shield extension cords that must run across driveways or areas where vehicle traffic is present.
- Do not run cords across doorways or windows where they can be frayed or cut by a closed door or window.
- Do not run wires through wet or puddled areas.
- Flexible cord sets that are used on construction sites or in damp locations shall be of hard usage or extra hard usage type.

Observation of energized machinery will take place from a safe distance. Only qualified personnel will remove guards, hatch covers, or other security devices if necessary. Equipment lockout procedures and an appropriate facility work permit requirements will be followed. Lockout/tagout procedures will be conducted before activities begin on or near energized or mechanical equipment that may pose a hazard to site personnel. Workers conducting the operation will positively isolate the piece of equipment, lock/tag the energy source, and verify effectiveness of the isolation. Only employees who perform the lockout/tagout procedure may remove their own tags/locks. Employees shall complete lockout/tagout training before initiating this procedure.

Only qualified personnel will remove covers of electrical equipment to expose energized electrical parts. Entering electrical rooms/vaults or areas with live exposed electrical part by BC employees shall be permitted only when accompanied by a qualified personnel after notification and approval of the appropriate facility personnel.

3.4.12 Lockout/Tagout

Lockout/tagout (LO/TO) procedures in accordance with 29 CFR 1910.147 will be performed before activities begin on or near energized or mechanical equipment that may pose a hazard to site personnel. The purpose of the lockout/tagout (LO/TO) system is to safeguard exposure from machinery, energized electrical circuits, piping under pressure, or any type of energy source from unexpected energization or start up that could at cause harm to an individual. Workers conducting the operation will positively isolate the piece of equipment, lock/tag the energy source, and verify effectiveness of the isolation. Only employees who perform the lockout/tagout procedure may remove their own tags/locks. Employees must be thoroughly trained before initiating this procedure.

Whenever multiple personnel (or multiple employers are working on the same worksite) are to be engaged in activities requiring LO/TO, employees/employers shall inform each other of their activities and coordinate their respective LO/TO procedures. Whenever a group lockout/tagout procedure must be performed, they shall utilize a procedure that affords the same level of protection as that provided by the implementation of a personal lockout or tagout device. Group LO/TO devices shall meet the requirements of 29 CFR 1910.145(f)(3).

Basic Lockout/Tagout Procedures

1. Each person will maintain their own lock, key, and lockout device so that no one else can remove the lock.
2. Always notify the operator when work is to be done.
3. Use your own lock to lock out electrical power. Attach a tag or sign to the power disconnect to indicate that maintenance work is in progress. Use the wording "Do Not Operate."
4. Bleed all pressure from pneumatic, hydraulic, or other fluid lines, or safely isolate them from the area where work is being done.
5. Drain contents of lines or tanks as needed. Lock valves open or closed to prevent buildup of pressure.
6. Ground electrical systems as needed.

7. Secure any device under tension or compression so as to prevent accidental movement. Move suspended parts that could drop or cycle to a safe position and block, clamp, or chain them in place.
8. Verify (test) that the mechanism had been isolated from the source of energy.
9. Ensure that all workers remove their individual locks after work is completed. The last worker should remove the locking devices.
10. Ensure that the last person double-checks that all is clear and safe before start-up.

Portable Equipment

Portable electrical equipment such as hand drills, computers, and power saws that use plug type connectors must be unplugged prior to any task that may expose the employee to energized portions of the equipment. Removal of the plug from the power source, such as the generator or wall socket, may be combined with a tagout system, particularly if the plug is at a distance from the equipment being repaired.

3.4.13 Confined Spaces

Entry into confined spaces will be conducted in strict accordance with 29 CFR 1910.146. Confined spaces will be evaluated prior to entry to determine if hazards are present that could pose a risk to entrants. Before workers may enter a permit-required confined space, a pre-entry checklist and entry permit must be completed by the PM or SSO, approved by the RSUM and, all requirements for entry must be met.

Confined spaces may be described as having, but not being limited to, the following characteristics:

- is large enough to permit an employee to enter and perform work; and
- has limited or restricted means of entry and exit; and
- is not equipped, designed, or intended for continuous human occupancy.

If there is any serious health and safety hazard present in the confined space is considered a permit-required confined space (permit space). A permit-space is a confined space that has one or more of the following characteristics:

- contains or has the potential to contain a hazardous atmosphere; or
- contains or has the potential to contain a material with the potential to engulf or entrap an employee; or
- is so configured that an employee may become trapped, disoriented, or asphyxiated by wall configurations or floors that taper to smaller cross sections; or
- contains any other established safety or health hazard (examples may include sources of energy, moving parts or thermal considerations).

All fluid, electrical, and steam lines and other sources of energy that could harm entrants must be completely isolated before entry. The following atmospheric conditions must be met before entry is permissible (air monitoring may be necessary to verify these conditions are met):

- flammable vapor or dust must be at a concentration less than 5 percent of the lower explosive limit (LEL); and

- oxygen must be at a concentration greater than 20 percent and less than 22 percent; and
- hydrogen sulfide concentration must be less than 5 parts per million (ppm); and
- toxic substances must be at a concentration less than their respective permissible exposure limits or specified action limits.

In addition, the following roles must be designated before entry into permit-required confined spaces is allowed: Entry Supervisor; Attendant; and Authorized Entrant(s). Confined space entry for each project also requires training for the project team on written operating procedures, including the use of the Confined Space Pre-Entry Checklist and Confined Space Entry Permit forms.

BC employees are ***not*** trained in rescue services. Such services are to be arranged locally, prior to entry operations, by the PM. Rescue services can typically be provided by the local fire department or contracted service provider.

3.4.14 Fire/Explosion

Site workers should have an increased awareness concerning fire and explosion hazards whenever working with or near flammable materials, especially when performing any activity that may generate sparks, flame, or other source of ignition. Intrinsically safe equipment is required when working in or near environments with the potential for an explosive or flammable atmosphere. The SSO will verify facility requirements for a "hot work" permit before activities that may serve as a source of ignition are conducted.

Flammable materials will be kept away from sources of ignition. In the event of fire, work will cease, the area will be evacuated, and the local fire response team will be notified immediately. Only trained, experienced fire fighters should attempt to extinguish substantial fires at the Site. Site personnel should not attempt to fight fires, unless properly trained and equipped to do so. A fully charged ABC dry chemical fire extinguisher will be readily available for use during all scheduled activities at the Site.

3.4.15 Sharp Objects/Cutting Utensils

Frequently field tasks require the cutting of items such as rope, packaging or containers. Care should be exercised in using knives and/or cutting implements while performing such cutting tasks. Personnel should cut down and away from their body and other personnel. The item being cut should be braced or secured from movement while cutting. When slicing open acetate liners, such as those utilized in direct push drilling, personnel should use a hook blade cutting implement designed for this task versus a straight blade knife.

3.4.16 Cutting Acetate Sample Sleeves

The cutting of acetate sleeves presents a potential hazard to sampling personnel. By following proper procedures, the risk associated with this activity can be effectively minimized. To remove the soil sample the acetate liner must be cut with a bladed tool or knife. Knives are more frequently the source of disabling injuries than any other hand tool. The principal hazard in the use of knives is

the hand slipping from the handle onto the blade or the blade strikes another part of the body. To prevent this, the following safety procedures should be followed.

- Provide a safety blade holder with a retraction spring on a track where blade mounts. Use a hook type linoleum blade which has a reduced cutting edge. When the hook of the blade is cutting the acetate liner it keeps the blade extended. If the blade breaks or the operator's hand slips the blade automatically retractions into the handle of the safety blade holder.
- Replace blades when they become dull. If material becomes hard to cut the blade is dull.
- Wear leather cut-resistant (such as Kevlar) gloves.
- Wear safety glasses.
- The cutting stroke should be away from the body. If that is not possible, then the hands and body should be in the clear.
- Provide an angle iron device to place the liner in when cutting. This gives a holder for the liner.
- If you drop the knife just let it fall to the ground and DO NOT try to catch it.
- If you lay the knife down make sure the blade is retracted into the holder or the knife is placed in a protective holder.

3.4.17 Elevated Platforms

When working at heights that expose employees to falls greater than 6 feet, especially on sloping roofs and elevated platforms, the requirements of 29 CFR 1926.502 shall be observed. In such instances, a safety harness shall be worn and the lanyard secured at a level not lower than the employee's waist, limiting the free-fall distance to a maximum of 6 feet.

Elevated work platforms shall be constructed, used, and maintained in accordance with Subpart L of the OSHA Construction Safety Orders. Scaffolds and hoisting lines shall be inspected daily by a competent person to verify the integrity of the components. If a material is determined to be defective, it may not be used for any purpose and will be replaced immediately.

A standard railing shall consist of top rail, intermediate rail, toe board, and post. It shall have a vertical height of approximately 42 inches (±3 inches) from the top surface of the top rail to the floor, platform, runway, or ramp. The top rail shall have a smooth surface throughout. The intermediate rail shall be set half way between the top rail and the floor, platform, runway, or ramp.

A cover of standard strength and construction that is secured against accidental displacement shall guard floor holes, hatchways, or any other openings into which a person can walk. When the cover is not in place, the openings shall be guarded with a standard railing (equipped with a toe board) on all exposed sides. Any cover on floor openings shall be properly labeled or stenciled with letters at least one inch high or greater stating "OPENING – DO NOT REMOVE".

Personal Fall Protection Equipment

Full body harness is the only acceptable means of fall arrest for personnel working over surfaces greater than six feet in height. A Fall Arrest System consisting of safety harness and anchor lanyard must be worn by anyone working on elevated surfaces that lack "general" fall protection such as railings, etc.

Lanyards must be tied off at a point above the worker's head and to a firm structure or a portion thereof designed to hold a weight of 5,000 lbs. Only hooks with locking snaps that operate in "as new" condition will be used. These hooks are also referred to as "double action lanyard hooks".

When other possible means of fall protection (railings, etc.) are not available, individuals working at heights of less than 6 feet must tie-off if there is danger of impalement, especially if the impalement hazard cannot be mitigated in accordance with OSHA standards.

All workers must perform routine inspection of belts/harnesses and lanyards prior to their use. The employer shall conduct regular inspections (every three months) of all fall protection equipment. In addition, there shall be an inspection of all workers' personal tools and equipment prior to the employees using them on the job.

Lanyards are to be used for tie-off purposes only, and damaged belts, harnesses, and lanyards must be retired and discarded.

3.4.18 Ladder Use

Ladders are to be maintained in good condition at all times, with tight joints, hardware, and fittings securely attached, and moveable parts freely operating without binding or undo play. Defective ladders must be "tagged" out of service. Safety "feet" shall be kept in good condition. Ladders are to be visually inspected for possible signs of damage or defects daily, before each use.

Where possible, portable straight rung ladders shall be set up so that the horizontal distance from the top support to the foot of the ladder is ¼ of the working length of the ladder. The ladder shall be secured by tying it off to a firm point, or held in place by another worker while in use. If the ladder is used to gain access to a roof or platform, the side rails shall extend at least 3 feet beyond the point of support at the edge of the roof or platform.

Step ladders shall always be set up properly, so that they are in the "A" frame position, level and with all four feet on firm ground, and fully opened with the spreaders locked in place. Personnel are forbidden to stand on the top cap or on the last step of a step ladder, or to stand on the hinged back of a step ladder. A step ladder shall never be used at a straight ladder.

3.4.19 Traffic

Vehicular traffic presents opportunities for serious injury to persons or property. Traffic may consist of street traffic or motor vehicles operated by facility employees or visitors to the Site. Workers and other pedestrians are clearly at risk during periods of heavy traffic. Risk from motor vehicle operations may be minimized by good operating practices and alertness, and care on the part of workers and pedestrians.

Site personnel will wear high-visibility traffic safety vests whenever activities are conducted in areas of heavy traffic. Work vehicles will be arranged to be used as a barrier between site workers and nearby traffic. If required by local ordinances or site location, a traffic control plan will be developed implemented.

It is important to be conscious of all vehicular traffic that may be present during conduct of field operations. Use caution tape, barricades, or safety cones to denote the boundaries of the work area

and to alert vehicle operators to the presence of operations which are non-routine to them. Be careful when exiting the work area and especially when walking out from between parked vehicles to avoid vehicular traffic.

Never turn your Back on Traffic. When working in or near a roadway, walk and work with your face to the oncoming traffic. If you must turn your back to traffic, have a coworker watch oncoming traffic for you.

Vehicle and Worksite Position. Whenever possible, place a vehicle between your worksite and oncoming traffic. Not only is the vehicle a large, visible warning sign, but if an oncoming car should fail to yield or deviate, the parked vehicle, rather than your body, would absorb the first impact of a crash. Turn the wheels so that if the vehicle were struck, it would swing away from the worksite. Even though the vehicle would protect you in a crash, it might be knocked several feet backward. Always leave some room between the rear of the vehicle and the work area.

Use of Signs and Cones to Direct Traffic. Traffic signs and cones are used to inform drivers and direct traffic away from and around you. Cones and signs are only effective if they give oncoming drivers enough time to react and make it clear how traffic should react.

Cone Positioning. The most common coning situation is setting a taper of cones that creates a visual barrier for oncoming motorists and gradually closes a lane.

The position of the taper depends on the road width, position and size of the work area, and also on the characteristics of the traffic.

3.4.20 Driving

A lot of driving is required to get to, from, and between project Sites. Safe vehicle maintenance and operation must be a priority. It requires knowledge of directions to (and conditions of) the Site in advance, careful exiting and merging into traffic, anticipating the unexpected, remaining alert to one's physical and mental condition, resisting distractions such as cell phone use, other car activities and contacting assistance when needed. Report all vehicle accidents/incidents to BC's Risk Manager.

3.4.21 Arc Flash Protection

An arc flash is a short circuit through the air when insulation or isolation between electrified conductors is breached or can no longer withstand the applied voltage, an arc flash occurs. Statistics show that there are 5 to 10 arc flash explosions a day near electrical equipment that result in hospitalization of a burn victim. An arc flash can be caused by common occurrences such as dropping tools, accidental contact with electrical systems, and build up of dirt or corrosion.

The temperature of an arc can reach more than 35,000 F as it creates a brilliant flash of light and a loud noise. Concentrated energy explodes outward from the electrical equipment, spreading hot gases, melting metal, causing death or severe burns, and creating pressure waves that can damage hearing or brain function and a flash that can damage eyesight. The fast-moving pressure wave also can send loose material such as pieces of equipment, metal tools, and other objects flying, injuring anyone standing nearby.

Regulations require the calculation of the "flash protection boundary" inside which qualified workers must be protected when working. This boundary is an imaginary sphere surrounding the potential arc point, "within which a person could receive a second-degree burn if an electrical arc flash were to occur," according to the National Fire Protection Association (NFPA) 70E standard. Brown and Caldwell's Health and Safety Manual gives direction of when and where to establish this boundary.

BC's Electrical Safety/Arc Flash Policy provides information and instruction for BC employees who work on or near energized power circuits, electrical distribution equipment, electrical utilization equipment and those who inspect energized equipment, where a phase-to-ground or phase-to-phase short or fault occurrence may cause an Arc Flash event.

BC employees shall comply with BC Health and Safety Requirements Manual # 207 – Lockout/Tagout and treat electrical equipment and circuits as energized until:

1. Lock-Out / Tag-Out protection is in place and the equipment or circuit has been tested to verify "no voltage" present, by a trained and qualified electrical worker, or
2. The equipment or circuit has been physically isolated from every power source, tested, and clearly labeled.

For those BC employees involved with **energized electrical work** (i.e. design verification, equipment check-out, or start-up adjustments), the following ordered approach shall be used:

1. BC employees shall seek to have a trained and qualified electrical worker perform all energized electrical hands-on work (i.e. switching, metering, testing, etc.) while BC employees remain outside the flash protection boundary.
2. BC employees that closely supervise work within the flash protection boundary shall first receive approval from the Project Manager and Site Safety Officer (SSO).
3. Prior to performing this work, the Project Manager (PM) shall ensure that a Field Work Safety Plan (FWSP) is prepared and approved by the PM, the employee's manager, the SSO, and cognizant Health and Safety Manager.
4. Only "qualified BC employees" shall enter the flash protection boundary wearing the proper Personal Protective Equipment (PPE) and only for Hazard/Risk Categories 0-2 – see the 'Warning' section below. BC personnel shall acquire the proper PPE from the SSO and/or RSUM.

WARNING

Qualified BC personnel are limited to work in Hazard/Risk Categories 0-2, and therefore only require PPE meeting the requirements of Hazard/Risk Categories 0-2.

Only qualified electricians shall conduct work categorized as a Hazard/Risk Category of 3 or 4.

Qualified BC personnel are NOT to cross a flash protection boundary which involves a Hazard/Risk Category 3 or 4 situation.

BC employees and management shall review the **Health and Safety Manual #513 – Arc Flash** for detailed requirements.

Questions concerning this policy should be directed to the BC Office Electrical Engineering Manager and to the RSUM.

Definitions

Energized Electrical Work. Work performed on or near energized electrical systems or equipment with exposed components operating at 50volts or greater. Electrical system testing, thought to be de-energized, but not yet proven to be (for example, a LO/TO effectiveness check).

Flash Protection Boundary. The distance from energized exposed electrical equipment at which an unprotected person will receive a curable burn: 2nd degree burn or blistering. Work performed inside this boundary requires that the person be a "qualified person" and the use of Personal Protective Equipment (PPE) to protect against arc flash burns.

Newly installed/serviced electrical equipment may contain an Arc Flash Label that will identify the energy, hazard category and PPE requirements associated with the equipment. For all other unlabeled equipment, where the specific flash protection boundary (energy, hazard category, and applicable PPE) is not established or cannot be established first (prior to live electrical exposure), BC personnel shall maintain a 4-foot minimum observation distance (BC prefers 10 feet) from the exposed (i.e. doors open, covers off) live electrical equipment. In the event that the 4-foot minimum distance must be crossed, BC personnel shall don PPE appropriate for Hazard/Risk Category 2.

Qualified BC Employee. A person with the training and experience having knowledge of energized electrical equipment hazards from an operational standpoint and from the safety training standpoint.

Educational credentials alone do not make a person qualified. Determination of qualification shall be established by the employee's supervisor or other designated knowledgeable management representative.

3.4.22 Boating Safety

Boating or similar activities on aerated water treatment ponds and/or tanks by BC personnel is not permitted. The aeration process affects the buoyancy of the liquid and therefore boats can not consistently stay afloat.

Performing work activities from a boat can present unique hazards to employees. The following guidelines can help mitigate the risk. The boat can become unstable if the weight in it is excessive or loaded improperly. Too much weight will reduce maneuverability and freeboard (the height of the boat sides above the water) and can increase the risk of sinking.

When boarding the boat, the operator must be sure that the boat is secure. With one hand on the boat, each employee should quickly lower themselves straight down into the center of the boat. A United States Coast Guard (USCG) certified personal floatation device will be worn by each BC employee in the boat. In addition, other USCG-required items (i.e., throwable cushion, retrieval line, etc.) will be present on the boat. To move around in a boat, one should step along the fore-and-aft centerline of the boat while the boat is held in place along the pier.

Do not board the boat while carrying equipment, rather first board the craft and then have someone hand in the equipment or place the equipment in the boat prior to launch The amount and location

of weight is critical and can reduce the risk of capsizing. Weight should be kept towards the middle or centerline of the boat, both fore-and-aft and side-to-side, also the weight should be kept low to the bottom of the boat to reduce the center of gravity.

It is not anticipated that waves of substantial size will be encountered, however, if a wave approaches the boat, steer the bow towards the oncoming wave. Overloading the boat increases draw and the potential for swamping. Watercraft must be operated within the boat manufacturers weight limits.

Should the boat capsize, Brown and Caldwell personnel shall abandon the boat and return to shore as quickly as possible. It is important that the employees attempt to remove themselves from the water as soon as possible, and get inside and call for help. Hypothermia (cold stress) is a significant risk for anyone involved in a boating accident due to the rapid conduction of body heat by cold water. Wet or dry suits are recommended for cold weather/cold water (less than 45° F) operations.

3.4.23 Building Collapse

Buildings collapse for a variety of reasons. Natural phenomena such as earthquakes, hurricanes, floods, mudslides, avalanches, and storms are the usual cause for building collapses. Vacant buildings may be at risk for collapse since maintenance-related activities have been often neglected thus resulting in structural damage.

Project personnel should attempt to answer the following questions whenever working near suspect building structures.

- Are there any vacant buildings present on site?
- Will it be necessary to enter or work next to the vacant building(s)?
- Are there any apparent hazards including external damage, falling objects, sticky doors, structural instability, or possible asbestos and/or lead paint?
    - External damage may include, but not necessarily be limited to, foundation cracks, damaged or missing porch roofs and overhangs supports, gaps between steps and the structure, missing supports or portions of walls, and "washed away" ground.
    - Falling objects may include, but not necessarily be limited to, building cornices, gutters, bricks, and roofs/roofing materials.
- Be aware that when entering a building, if the door sticks at the top it could mean the ceiling is ready to fall. If you force the door open, stand outside the doorway clear of falling debris.
- Has the building(s) been inspected by a qualified professional and deemed safe for entry?
- Are there any viable alternatives for conducting work that preclude the need to enter or work next to the suspect building(s)?

If you have any concerns about entering the building after answering the above questions, speak with the PM immediately. The client will need to be informed that a proper building inspection or engineering controls may be needed before work can be performed.

If you don't feel safe entering a building, then notify the PM and RSUM and stay outside the building at an appropriate distance to avoid falling debris.

3.4.24 Personal Safety - Urban Setting

Working in a distressed neighborhood may present hazards associated with street violence or other crime. In these situations, mental preparation before going to the Site and awareness while on Site are of key importance. If in doubt, always ask Site or client personnel about the safety of a neighborhood. Forethought should be given to arranging to work during daylight hours if possible. Take advantage of any Site security measures (monitoring cameras, security guards) and investigate such measures prior to the field work. Once in the field, work in parties of two or more and stay within view of the general public. Keep a charged cell phone nearby or on your person at all times. Become familiar with your location so you can effectively communicate it over the phone.

In addition to these basic principals, the following is a list of common personal safety rules that apply not only to work at the Site, but to general safety practices while in the field and also between work shifts.

- If at all possible, work/travel in groups. Do not venture out alone.
- Be alert. Notice who passes you and who's behind you. Maintain distance between yourself and strangers. Know where you are, and note potential exit paths.
- If work has paused do not appear slack or distracted. Do not sit in a vehicle with the doors unlocked.
- Walk in well-lighted areas. Don't walk close to bushes, alleys, and so on. In dark or deserted neighborhoods, walk down the middle of the street (be alert to vehicle traffic).
- If a car pulls up slowly, or the occupants of the vehicle bother you, cross the street and walk or run in the other direction. If you are pursued, dial 911.
- If you feel someone is following you, turn around and check. Proceed to the nearest lighted house or place of business.
- Don't overburden yourself with bags or packages, which might impede running or taking care of yourself.
- Be aware of loose clothing, packs/purses and hair. These give an assailant an easier method of grabbing and controlling you. Wear unrestrictive clothing for ease of movement (but not overly loose).
- Carry a non-weapon personal safety device (such as a whistle, panic button, or key light) - anything that could visually or audibly draw attention to your location.
- What you carry in your hand(s) is important. Valuables make you a potential target. Items such as a hand auger or tool may help you be perceived as a less-than-inviting victim.
- Carry as little cash as possible.
- Hold your purse tightly, close to your body. Keep your wallet in a front or in a buttoned, hip pocket. When at a fixed location, lock your valuable items away and out of site (i.e., in a trunk).
- Be careful when people stop you for directions or information. Always reply from a distance; never get too close to a stranger' car.
- If you feel that you are in danger, don't be afraid to scream and run.
    - toss wallet/keys away from direction of escape

- don't attach car keys to house keys
- leave large valuables (purse, laptop) locked and hidden in the vehicle.

3.5 Natural Phenomena

Natural phenomena such as weather-related emergencies and acts of nature can affect employees' safety. Natural phenomena can occur with little or no warning. If an emergency situation arises as a result of natural phenomena, adhere to the contingency procedures outlined in Section 10. The following natural phenomena have been identified and may be encountered during scheduled field activities.

- ☒ Sunburn
- ☐ Cold Stress
- ☐ Hurricanes
- ☐ Earthquakes
- ☒ Heat Stress
- ☒ Lightening/Electrical Storms
- ☒ Tornados and Strong/Straight Line Winds

3.5.1 Sunburn

Working outdoors with the skin unprotected for extended periods of time can cause sunburn to the skin. Excessive exposure to sunlight is associated with the development of skin cancer. Field staff should take precautions to prevent sunburn by using sunscreen lotion and/or wearing hats and long-sleeved garments.

3.5.2 Heat Stress

Adverse climate conditions, primarily heat, are important considerations in planning and conducting site operations. Heat-related illnesses range from heat fatigue to heat stroke, with heat stroke being the most serious condition. The effects of ambient temperature can cause physical discomfort, loss of efficiency, and personal injury, and can increase the probability of accidents. In particular, protective clothing that decreases the body's ventilation can be an important factor leading to heat-related illnesses.

To reduce the possibility of heat-related illness, workers should drink plenty of fluids and establish a work schedule that will provide sufficient rest periods for cooling down. Personnel shall maintain an adequate supply of non-caffeinated drinking fluids on site for personal hydration. Workers should be aware of signs and symptoms of heat-related illnesses, as well as first aid for these conditions. These are summarized in the table below.

Condition	Signs	Symptoms	Response
Heat Rash or Prickly Heat	Red rash on skin.	Intense itching and inflammation.	Increase fluid intake and observe affected worker.
Heat Cramps	Heavy sweating, lack of muscle coordination.	Muscle spasms, and pain in hands, feet, or abdomen.	Increase fluid uptake and rest periods. Closely observe affected worker for more serious symptoms.

Condition	Signs	Symptoms	Response
Heat Exhaustion	Heavy sweating; pale, cool, moist skin; lack of coordination; fainting.	Weakness, headache, dizziness, nausea.	Remove worker to a cool, shady area. Administer fluids and allow worker to rest until fully recovered. Increase rest periods and closely observe worker for additional signs of heat exhaustion. If symptoms of heat exhaustion recur, treat as above and release worker from the day's activities after he/she has fully recovered.
Heat Stroke	Red, hot, dry skin; disorientation; unconsciousness	Lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse.	Immediately contact emergency medical services by dialing emergency medical services. Remove the victim to a cool, shady location and observe for signs of shock. Attempt to comfort and cool the victim by administering small amounts of cool water (if conscious), loosening clothing, and placing cool compresses at locations where major arteries occur close to the body's surface (neck, underarms, and groin areas). Carefully follow instructions given by emergency medical services until help arrives.

3.5.3 Cold Stress

Workers performing activities during winter and spring months may encounter extremely cold temperatures, as well as conditions of snow and ice, making activities in the field difficult. Adequate cold weather gear, especially head and foot wear, is required under these conditions. Workers should be aware of signs and symptoms of hypothermia and frostbite, as well as first aid for these conditions. These are summarized in the table below.

Condition	Signs	Symptoms	Response
Hypothermia	Confusion, slurred speech, slow movement.	Sleepiness, confusion, warm feeling.	Remove subject to a non-exposed, warm area, such as truck cab; give warm fluids; warm body core; remove outer and wet clothing and wrap torso in blankets with hot water bottle or other heat source. Get medical attention immediately.
Frostbite	Reddish area on skin, frozen skin.	Numbness or lack of feeling on exposed skin.	Place affected extremity in warm, not hot, water, or wrap in warm towels. Get medical attention.
Trench Foot	Swelling and/or blisters of the feet	Tingling/itching sensation; burning; pain in the feet	Remove wet/constrictive clothing and shoes. Gently dry and warm feet with slight elevation. Seek medical attention.

3.5.4 Lightning/Electrical Storms

Lightning can be unpredictable and may strike many miles in front of, or behind, a thunderstorm. Workers will therefore cease field operations at the **first** sign of a thunderstorm and suspend activities until at least 30 minutes after the last observed occurrence of lightning or thunder. For purposes of this HASP, signs of a thunderstorm will include any visible lightning or audible thunder.

In the event of a thunderstorm, field personnel will take the following actions.

- Get inside a permanent building structure (not a shed or canopy) or fully enclosed metal vehicle (not a convertible or camper shell) with the windows fully up.
- If in a house or building, do not use the telephone or any electrical appliance that's connected to the building's electrical wiring.

- Stay away from tall isolated objects, such as trees, drill rigs, telephone poles, or flag poles.
- Avoid large open areas, such as fields or parking lots, where a person is the relatively highest object.
- Stay away from lakes, ponds, railroad tracks, fences, and other objects that could transmit current from a distant lightning strike.
- If caught out in the open without time to escape or find shelter, seek a low area (if time permits), crouch down, and bend forward holding the ankles. Tuck the head so that it's not the highest part of the body, without letting it touch the ground. Under no circumstances lay down.

If a person struck by lightning contact emergency medical services, even if he/she appears only stunned or otherwise unhurt as medical attention may still be needed. Check for burns, especially at fingers and toes, and areas next to buckles and jewelry.

3.5.5 Hurricanes

The key to responding to hurricane conditions is being informed. Before taking to the roads to leave for or from a jobsite during suspect hurricane conditions, listen to the radio for current and forecast conditions. Know what the weather reports mean by "watch" and "warning." A hurricane watch means hurricane conditions are possible in the specified area of the watch, usually within 36 hours. A hurricane warning indicates hurricane conditions are expected in the specified area of the warning, usually within 24 hours.

If watch or warning conditions exist, employees will communicate with the project manager to determine the appropriate course of action. Travel to or from work is not recommended if the employee will travel in the vicinity of a hurricane warning area. Restrictions on travel during hurricane watches are largely dependent on the actual weather conditions at the time. Employees are discouraged from driving during weather conditions where visibility and vehicle control are severely limited.

For long term projects with temporary or permanent office area, keep an emergency preparedness kit consisting of, but not limited to:

- Current project/office contacts list - how to reach folks in an emergency
- Blankets
- Flashlights
- Radio (operated by batteries)
- Batteries for flashlight and radio (note: batteries should be replaced annually to assure freshness)
- Water (unless there is a water bubbler that can be used with no electricity)
- Snack crackers, dried fruit, etc. - a source of food that won't go bad.

3.5.6 Tornados and Strong/Straight Line Winds

Tornados and strong or straight line winds are potentially dangerous weather conditions because both have the ability to generate on very short notice (in some cases under one hour from clear

weather conditions). Tornados and strong or straight line winds both have the same warning properties and recommendations. If a tornado "watch" is issued for your area, it means that a tornado is "possible". If a tornado "warning" is issued, it means that a tornado has actually been spotted, or is strongly indicated on radar, and it is time to go to a safe shelter immediately.

Be alert to what is happening outside, but do not place yourself in jeopardy by standing next to windows. Some common observations during a tornado include: a sickly greenish or greenish-black color to the sky; if there is a watch or warning announced or posted; an abrupt fall of hail (however, hail can occur in the absence of a tornado); a strange quiet that occurs within or shortly after a thunderstorm; clouds moving by very fast, especially in a rotating pattern or converging toward one area of the sky; a sound like a waterfall or rushing air at first, but turning into a roar as it comes closer (the sound of a tornado has been likened to that of both railroad trains and jets); debris dropping from the sky; an obvious "funnel-shaped" cloud that is rotating; or debris such as branches or leaves being pulled upwards, even if no funnel cloud is visible.

During a tornado warning or tornado occurrence, each employee is instructed to do the following:

- Proceed to interior rooms and halls on the lowest floor ***(do not use an elevator to exit an upper floor)***. Avoid halls that open to the outside in any direction. If there are no interior hallways, avoid those that open to the southwest, south, or west, since that is usually the direction from which the tornado will come.
- Stay away from glass, both windows and doors. Crouch down, and make as small a "target" as possible. If you have something with which to cover your head, do so, otherwise, use your hands.
- Exercise extreme caution when leaving your area of shelter. Be aware of potential hazards (i.e., natural gas smell, smoke, fire). In the event these hazards are encountered in your area of shelter, immediately evacuate the shelter. If the building/shelter has been damaged by a tornado, do not flush the toilets, as the sewer lines may have been damaged.
- If you are traveling in an automobile and can see a tornado, do not stay in your car and try to outrun a tornado. If possible, stop the car and enter the nearest business and seek shelter.
- If you are outside and it is not possible to get inside, seek a low lying ditch, culvert, etc. and keep your body as low to the ground and as braced as possible.

3.5.7 Earthquakes

Earthquakes strike suddenly, violently, and without warning. If your project is located near a fault line, earthquakes are an unpredictable possibility. For long term projects with temporary or permanent office area, keep an emergency preparedness kit consisting of, but not limited to:

- Current project/office contacts list - how to reach folks in an emergency
- Blankets
- Flashlights
- Radio (operated by batteries)
- Batteries for flashlight and radio (note: batteries should be replaced as needed to assure freshness)
- Water (unless there is a water bubbler that can be used with no electricity)

- Snack crackers, dried fruit, etc. - a source of food that won't go bad.

This kit is meant to serve as overnight survival in the event that it becomes unsafe to leave the project site. The kit's contents should be suited to meet the size and needs of your project.

If you feel the earth shaking, consider the following tips:

- Drop down; take cover under a desk or table and hold on.
- Stay indoors until the shaking stops and you are sure it is safe to exit.
- Stay away from bookcases, shelves, or anything that could fall on you.
- Stay away from windows.
- If inside a building, expect fire alarms and sprinklers to go off during the quake.
- If you are outdoors, find a clear spot away from buildings, trees, and power lines. Drop to the ground and cover your head.

If you are in a car, slow down and drive to a clear place, preferably away from power lines. Stay in the car until the shaking stops.

3.6 Biological Hazards

The following biological hazards have been identified and may be encountered during scheduled field activities.

- ☐ Bloodborne Pathogens/Sanitary Waste
- ☒ Rodents and Mammals
- ☒ Reptiles/Snakes
- ☒ Venomous Insects
- ☐ Mosquitoes
- ☐ Fire Ants
- ☒ Spiders/Scorpions
- ☐ Ticks
- ☐ Poisonous Plants

If any biological hazards are identified at the Site, workers in the area will immediately notify the SSO and nearby personnel.

3.6.1 Bloodborne Pathogens/Sanitary Waste

Potential exposure to bloodborne pathogens may occur during some work activities (e.g., sewer video surveys or source sampling), rendering first aid or CPR. Direct contact is an important route of exposure for bloodborne pathogens due to puncture injuries, contact with abraded skin, or contact with areas such as the eyes, without appropriate protection. While very few organisms can enter the body through normal intact skin, direct contact with sewage, blood and body fluids is to be avoided. Site personnel should thoroughly wash their hands and face before eating, drinking or smoking and before leaving the work site.

Exposure controls and Universal Precautions are required at suspect locations, in order to prevent contact with blood or other potentially infectious materials as specified in Brown and Caldwell's *Bloodborne Pathogens Program*. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual. A Hepatitis B vaccination will be offered to BC personnel before the person participates in a task where direct exposure to potentially infectious materials is a possibility (i.e., first aid or CPR). For personnel who have potential exposure to sanitary wastes, a current tetanus/diphtheria inoculation or booster is recommended.

3.6.2 Rodents/Mammals

Animals may potentially carry the rabies virus or disease causing agents. Do not attempt to feed or touch animals. Feces from some small mammals may contain diseases such as Hanta Virus. Avoid generating dust in the vicinity of rodent feces. In addition, animals such as dogs or wild predators (i.e., cougars or coyotes) may pose an attack hazard. Persons should slowly back away in a non-threatening manner if an encounter with a threatening animal occurs. In order to avoid such encounters, use the buddy system and make noise when working in areas where such animals may be present.

3.6.3 Reptiles/Snakes

The primary reptiles of concern are venomous snakes (rattlesnake, water moccasin, and copperhead). Avoid contact and areas that may harbor snake populations including high grass, shrubs, and crevices. In the event of a bite, immobilize the affected area and contact emergency medical services. If more than 30 minutes from emergency care, apply bandage wrap two to four inches above the bite (**note**: bandage should be loose enough to slip your finger underneath).

Wear shoes and heavy pants when walking and hiking in areas where snakes are likely found. Do not reach into rocky cracks, under logs, or large rocks. Even if a snake looks dead, do not touch it. A snake can still bite up to one hour after its death. Do not get near or tease a snake. Snakes are shy creatures and generally will not attack unless bothered.

Diamond Back Rattle Snake

Diamond backs are large snakes. They have a row of dark diamonds down the back and a rattle on their tail. These snakes have cat-like eyes and a pit between their nostril and eye. Eastern diamond backs like pine flat woods and scrub areas where palmetto thickets and gopher tortoise burrows are found. These snakes travel during the day and hide at night.

Timber Rattle Snake

Timber rattle snakes have a reddish-brown stripe running down the center of their back and black crossbands. Their tails are solid black with a rattle. These snakes have cat-like eyes and a pit between their nostril and eye. Timber rattlers live in damp river beds, pine flat woods, swamps, and cane thickets.

Pygmy Rattle Snake

These small snakes are light to dark grey in color. They have a tiny rattle. Pygmy rattle snakes have cat-like eyes and a pit between their nostril and eye. These snakes are found in lowland pine flat

woods, prairies, around lakes, ponds, and swamps. Pygmy rattlers are aggressive and will strike anything within striking range.

Cottonmouth (Water Moccasin)

Young cottonmouths are often mistaken for copperheads because of their reddish-brown crossbands. As these snakes age, their cross bands darken until they become almost solid black. Cottonmouths live near water sources like lakes, streams, rivers, ponds, and swamps. When threatened, cottonmouths may coil and open their mouths as though ready to bite. The white inside of the mouth is what gives this snake its name, "cottonmouth".

Copperhead

Copperheads have dark coppery red-brown hourglass crossbands on a lighter brown color. The top of the head is covered with large plate-like scales. Copperheads have cat-like eyes and a pit between their nostril and eye. These snakes live in rocky, wooded areas and low, wet swampy areas. Copperheads are sluggish and rarely bite, unless stepped on or touched.

Coral Snake

The body of this snake is ringed with black, yellow and red bands. (Remember: Red on yellow can kill a fellow. Red on black, venom lack.) The head of a coral snake is black, while the tail is black and yellow.

3.6.4 Venomous Insects

Common examples include bees, fire ants and wasps. Avoid contact with insects and their hives. If stung, remove the stinger by gently scraping it out of the skin (do not use tweezers). If the worker is stung by an insect, immediately apply an ice pack to the affected area and wash area with soap and water and apply antiseptic. If an allergic reaction occurs, contact emergency medical services for appropriate treatment. Seek medical attention immediately if you are allergic to venomous stings such as bees or if anaphylaxis symptoms are present.

3.6.5 Mosquitoes

Mosquitoes may transmit diseases such as West Nile Virus. Symptoms of West Nile Virus include: fever, headache, tiredness, body aches, and occasional rash. Avoid mosquito bites by wearing long sleeved shirt and long pants. Apply insect repellent to clothes and/or skin (if FDA approved for topical use). Report any dead birds in the area to local health officials. Mosquitoes are most active from dusk to dawn.

3.6.6 Fire Ants

Red and Black Fire Ants are capable of inflecting numerous stings (7 to 9) per ant in a matter of seconds, and large numbers of fire ants will typically attack at the same time. Fire ants are very aggressive and will sting simply upon coming in contact with skin. Individuals who are allergic to bees should carry bee sting kits when there is the potential to come in contact with fire ants. Fire ants are predominantly located in the southern United States.

The best way to avoid fire ants is to avoid disturbing their mounds. Fire ant mounds are typically constructed in disturbed habitats such as open fields, along roadsides, lawns, and many other open sunny areas. The mounds are constructed of dirt and/or other organic materials. Mounds are typically 10" to 24" in diameter and approximately 18" in height. If you disturb a mound, get away from the mound immediately.

Fire ant stings typically leave tiny red blisters and sometimes white pustules. Symptoms of stings include blistering, burning, swelling, pain, and irritation of the affected area. Recommended treatment consists of antihistamines along with topical antibiotic cream. Anaphylaxis symptoms such as shortness of breath, discomfort, lowered heart rate, etc. may also accompany fire ant stings. Seek medical attention immediately if you are allergic to venomous stings such as bees or if anaphylaxis symptoms are present.

3.6.7 Spiders/Scorpions

The black widow and brown recluse spiders are the most venomous. Avoid contact with spiders and scorpions and areas where they may hide. They favor dark hiding places. Inspect clothing and shoes before getting dressed. Wear gloves and safety shoes when working with lumbar, rocks, inspecting buildings, etc. Signs and symptoms of bites include: headache, cramping pain/muscle rigidity, rash and/or itching, nausea, dizziness, vomiting, weakness or paralysis, and convulsions or shock. Wash bite area with soap and water and apply antibiotic cream. Contact emergency medical services if allergic reaction or severe symptoms occur.

3.6.8 Ticks

Deer ticks may carry and transmit Lyme disease to humans. Signs of Lyme disease include a reddish "bulls-eye" around the affected area approximately a week after the bite. Symptoms include headache, fever, and muscle/joint pain. Persons suspecting infection should contact a health professional. Whenever possible avoid areas likely to be infested with ticks during the spring and summer months.

Wear light-colored clothing so ticks can be easily spotted and removed. Wear long sleeves and pants and tuck pant legs into boots or socks. Apply insect repellents to clothing and skin (if FDA approved for topical application). Persons with long hair should tie their hair back to minimize the potential for ticks to nestle in the scalp.

Personnel should self perform tick checks once daily field work is completed. If a tick is embedded in the skin, use tweezers to grasp the tick's head (near the skin) and pull straight out. Consider saving the removed tick for laboratory analysis.

3.6.9 Poisonous Plants

Common examples include poison ivy, poison oak and poison sumac. Avoid contact. Long-sleeved shirts and pants will allow some protection against inadvertent contact. If contact occurs, immediately wash the affected area thoroughly with soap and water. If an allergic reaction occurs, seek the care of a medical professional.

Poison Ivy is a trailing or climbing woody vine or a shrub-like plant with leaves that are each divided into three broad, pointed leaflets. The leaflets are commonly dark glossy green on top and slightly hairy underneath. They produce small yellowish or greenish flowers followed by berry-like drupes.

Poison Oak is a member of the same family as poison ivy and has a very similar appearance. Poison oak has leaves divided into three leaflets and generally has three to seven distinct lobes. Typically they are a shrubby type plant that can grow to eight feet in height, or sometimes can be a climbing plant.

The best way to prevent exposure is the ability to recognize these plants. Conduct an initial survey of the area to determine if the plants are present in the work area, and avoid contact with them.

If plants are located and work must be conducted in that area, have the plants removed if possible. If this is not possible, wear long sleeved shirts, gloves, and a heavy material type pants. Remember not to touch contaminated clothing. There are products available that can be applied to exposed skin, (similar to sunscreen products) prior to working around the plants. Tyvek suits may be another option used at the wearer's discretion to keep poisonous plant oils from getting on clothing. Please note that using Tyvek suits may increase the risk of heat stress conditions so extra precautions should be taken such as more frequent breaks and drinking plenty of fluids.

4. PERSONAL PROTECTIVE EQUIPMENT

The purpose of PPE is to protect employees from hazards and potential hazards they are likely to encounter during site activities. The amount and type of PPE used will be based on the nature of the hazard encountered of anticipated. Respiratory protection will be utilized when an airborne hazard has been identified using real-time air monitoring devices, or as a precautionary measure in areas designated by the RSUM or SSO.

Dermal protection, primarily in the form of chemical-resistant gloves and coveralls, will be worn whenever contact with chemically affected materials (e.g., soil, groundwater, sludge) is anticipated, without regard to the level of respiratory protection required.

On the basis of the hazards identified for this project, the following levels of personal protective equipment (PPE) will be required and used. Changes to the specified levels of PPE will not be made without the approval of the SSO after consultation with the RSUM.

4.1 Conditions Requiring Level D Protection

In general, site activities will commence in Level D PPE unless otherwise specified, or if the SSO determines on site that a higher level of PPE is required. Air monitoring of employee breathing zones will be routinely conducted using real-time air monitoring devices to determine if upgrading to Level C PPE is necessary. Level D PPE will be permitted as long as air monitoring data indicate that airborne concentrations of chemicals of concern are maintained below the site-specific action levels defined in Section 5.2. Level A or B PPE is not anticipated and is therefore not addressed in this plan. If Level A or B PPE is necessary, this HASP will be revised to reflect changes as appropriate.

It is important to note that dermal protection is required whenever contact with chemically-affected materials is anticipated. The following equipment is specified as the minimum PPE required to conduct activities at the Site.

- Work shirt and long pants
- ANSI- or ASTM-approved steel-toed boots or safety shoes.
- ANSI-approved safety glasses
- ANSI-approved hard hat

Other personal protection readily available for use, if necessary, includes the following items.

- Outer nitrile gloves (11 mil or thicker) and inner nitrile surgical gloves when direct contact with chemically affected soils or groundwater is anticipated (nitrile surgical gloves may be used for collecting or classifying samples as long as they are removed and disposed of immediately after each sampling event).
- Chemical-resistant clothing (e.g., Tyvek or polycoated Tyvek coveralls) when contact with chemically affected soils or groundwater is anticipated.

- Safety shoes/boots with protective overboots or knee-high PVC polyblend boots when direct contact with chemically affected soils is anticipated.
- Hearing protection.
- Sturdy work gloves.
- High-visibility traffic safety vest.

Work will cease and PPE upgraded if action levels specified in Section 5.2 are exceeded. The RSUM will be notified whenever PPE is upgraded or downgraded.

4.2 Conditions Requiring Level C Protection

If air monitoring indicates that the site-specific action levels defined in Section 5.2 are exceeded, workers in the affected area(s) will upgrade PPE to Level C. In addition to the protective equipment specified for Level D, Level C also includes the following items.

- NIOSH-approved half- or full-face air-purifying respirator (APR) equipped with appropriate cartridges (reference Section 5.2). Note: safety glasses are not required when wearing a full-face APR.
- Outer nitrile gloves (11 mil or thicker) and inner nitrile surgical gloves when direct contact with chemically affected soils or groundwater is anticipated (nitrile surgical gloves may be used for collecting or classifying samples as long as they are removed and disposed of immediately after each sampling event).
- Chemical-resistant clothing (e.g., Tyvek or polycoated Tyvek coveralls) when contact with chemically affected soils or groundwater is anticipated.
- Safety shoes/boots with protective overboots or knee-high PVC polyblend boots when direct contact with chemically affected soils is anticipated.
- Hearing protection.
- Sturdy work gloves.

Respirators will be stored in clean containers (i.e., self-sealing bag) when not in use. Respirator cartridges will be replaced in accordance with the following change-out schedule.

Type of Cartridge	Cartridge Change-out Schedule
Particulate (i.e., HEPA)	At least weekly or sooner the employee detects an increase in breathing resistance. This will occur as the filter becomes loaded with particulate matter.
Sorbent (i.e., organic vapor)	At the end of each day's use or sooner if the employee detects an abnormal odor or other indicator.

Personnel who wear air-purifying respirators must be trained in their use and must have successfully passed either a qualitative or quantitative respirator fit test, and medical evaluation within the last 12 months in accordance with and 29 CFR 1910.134.

4.3 Stop Work Conditions

If air monitoring indicates that the site-specific action levels defined in Section 5.2 are exceeded, activities will cease, and personnel must evacuate the designated Exclusion Zone. The PM and RSUM will be contacted immediately.

Work will also cease if unanticipated conditions or materials are encountered or if an imminent danger is identified. The SSO will immediately contact the RSUM for consultation.

5. AIR MONITORING PLAN

Real-time air monitoring devices will be used to analyze airborne contaminant concentrations approximately every 15 minutes in the workers' breathing zones while workers are in the designated Exclusion Zone, or when task or exposure conditions change (whichever frequency is less). If elevated concentrations are indicated, the monitoring frequency will be increased, as appropriate.

Background concentrations will be determined at the beginning of each work shift by collecting several instrument readings upwind of the scheduled activities. Alternatively, background levels can be determined by collecting readings from a nearby (upwind) area that can reasonably be considered unaffected by Site activities.

Real-time measurements will be made as near as feasible to the breathing zone of the worker with the greatest exposure potential in each active work area. If authorized by the RSUM, real time measurements may cease being taken when enough historical data is generated to warrant its cessation. Air monitoring will be reinstated if potential exposure conditions change.

The equipment will be calibrated daily, and the results will be recorded on BC's Air Monitoring Form. The results of air monitoring will also be recorded on the Air Monitoring Form and will be retained in the project files following completion of field activities. A copy of the Air Monitoring Form is located in Appendix A.

5.1 Monitoring Instruments

On-site worker exposure to airborne contaminants will be monitored during intrusive site activities. A miniature real-time aerosol monitor (mini-RAM or equivalent) will be used to monitor exposure to airborne dusts. The SSO, or designee, will perform routine monitoring during site operations to evaluate concentrations of airborne dusts in employee breathing zones. If airborne dusts are detected above predetermined action levels specified in Section 5.2, the procedures found in Section 4 of this HASP will be followed.

5.2 Site Specific Action Levels

The following action levels were developed for exposure monitoring with real-time air monitoring instruments. Air monitoring data will determine the required respiratory protection levels at the Site during scheduled intrusive activities. The action levels are based on sustained readings indicated by the instrument(s). Air monitoring will be performed and recorded at up to 15-minute intervals.

If elevated concentrations are indicated, the monitoring frequency will be increased, as appropriate. If during this time, sustained measurements are observed, the following actions will be instituted, and the PM and RSUM will be notified. For purposes of this HASP, sustained readings are defined as the average airborne concentration maintained for a period of one (1) minute above established background levels.

DUST

Activity	Action Level	Level of Respiratory Protection
Invasive Activities (i.e. excavation)	< 0.1 mg/m^3 above background (dust)	Level D: No respiratory protection required.
	$\geq$ 0.1 mg/m^3 above background (dust)	Cease operations and evacuate work area. Contact RSUM and PM immediately.

6. SITE CONTROL MEASURES

The SSO will conduct a safety inspection of the work site before each day's activities begin to verify compliance with the requirements of the HASP. Results of the first day's inspection will be documented on the Site Safety Checklist. A copy of the checklist is included in Appendix B. Thereafter, the SSO should document unsafe conditions or acts, along with corrective action, in the project field log book.

Procedures must be followed to maintain site control so that persons who may be unaware of site conditions are not exposed to hazards. The work area will be barricaded by tape, warning signs, or other appropriate means. Site equipment or machinery will be secured and stored safely.

Access to the specified work area will be limited to authorized personnel. Only BC employees and designated BC subcontracted personnel, as well as designated employees of the client, will be admitted to the work site. Personnel entering the work area are required to sign the signature page of this HASP, indicating they have read and accepted the health and safety practices outlined in this plan.

In some instances it may be necessary to define established work zones: an Exclusion Zone, a Contamination Reduction Zone, and a Support Zone. Work zones may be established based on the extent of anticipated contamination, projected work activities, and the presence or absence of non-project personnel. The physical dimensions and applicability of work zones will be determined for each area based on the nature of job activity and hazards present. Within these zones, prescribed operations will commence using appropriate PPE. Movement between zones will be controlled at checkpoints.

Considerable judgment is needed to maintain a safe working area for each zone, balanced against practical work considerations. Physical and topographical barriers may constrain ideal locations. Field measurements combined with climatic conditions may, in part, determine the control zone distances. Even when work is performed in an area that does not require the use of chemical-resistant clothing, work zone procedures may still be necessary to limit the movement of personnel and retain adequate site control.

Personnel entering the designated Exclusion Zone should exit at the same location. There must be an alternate exit established for emergency situations. In all instances, worker safety will take precedence over decontamination procedures. If decontamination of personnel is necessary, exiting the Site will include the decontamination procedures described in the following section.

7. DECONTAMINATION PROCEDURES

Decontamination will take place in the decontamination area identified on-Site. Workers, PPE, sampling equipment, and heavy equipment leaving the exclusion area will be inspected to determine the level of decontamination necessary to prevent the spread of potentially hazardous materials. Unnecessary equipment and support vehicles are to be left outside the designated Exclusion Zone so that decontamination will not be necessary.

Despite protective procedures, personnel may come in contact with potentially hazardous compounds while performing work tasks. If so, decontamination needs to take place using an Alconox or TSP wash, followed by a rinse with clean water. Standard decontamination procedures for levels C and D are as follows.

- equipment drop
- boot cover and outer glove wash and rinse
- boot cover and outer glove removal
- suit removal
- safety boot wash and rinse
- inner glove wash and rinse
- respirator removal
- inner glove removal
- field wash of hands and face

Site workers should employ only applicable steps in accordance with level of PPE worn and extent of contamination present. The SSO shall maintain adequate quantities of clean water to be used for personal decontamination (i.e., field wash of hands and face) whenever a suitable washing facility is not located in the immediate vicinity of the work area.

Disposable items will be disposed of in an appropriate container. Wash and rinse water generated from decontamination activities will be handled and disposed of properly. Non-disposable items (i.e., respirators) may need to be cleaned or sanitized before reuse. Each site worker is responsible for the maintenance, decontamination, and sanitizing of their own PPE.

Used equipment may be decontaminated as follows.

- Remove adhered materials (i.e., dirt or mud) to increase the effectiveness of the decontamination process.
- An Alconox or TSP and water solution may be used to wash the equipment.
- The equipment will then be rinsed with clean water until it is determined clean.

Each person must follow these procedures to reduce the potential for transferring chemically affected materials off site.

8. TRAINING REQUIREMENTS

BC Site personnel, including subcontractors and visitors conducting work in controlled areas of the Site, must have completed the appropriate training as required by 29 CFR 1910.120. In addition, the SSO will have completed the 8-hour Site Supervisor course, have current training in first aid and CPR, and any additional training appropriate to the level of site hazards. Further site-specific training will be conducted by the SSO prior to the initiation of project activities. This training will include, but will not necessarily be limited to, emergency procedures, site control, personnel responsibilities, and the provisions of this HASP. Each employee will document that they have been briefed on the hazards identified at the site and that they have read and understand the requirements of this HASP by signing the H&S Plan Acknowledgement Form attached as Appendix C.

A daily morning briefing to cover safety procedures and contingency plans in the event of an emergency is to be included with a discussion of the day's activities. These daily meetings will be recorded on the Daily Tailgate Safety Meeting Form. A copy of the Daily Tailgate Safety Meeting Form is included in Appendix D.

9. MEDICAL SURVEILLANCE REQUIREMENTS

BC Site personnel, including subcontractors and site visitors, who will or may work in an area designated as an exclusion zone must have fulfilled the appropriate medical monitoring requirements in accordance with 29 CFR 1910.120(f). Each individual entering an exclusion zone must have successfully completed an annual surveillance examination and/or an initial baseline examination within the last 12 months.

Medical surveillance is conducted as a routine program for BC field staff in accordance with the requirements of 29 CFR 1910.120(f). There will not be any special medical tests or examinations required for staff involved in this project.

A Hepatitis B vaccination will be offered to BC personnel before the person participates in a task where direct exposure to potentially infectious materials is a possibility (i.e., first aid or CPR). For personnel who have potential exposure to sanitary wastes, a current tetanus/diphtheria inoculation or booster is recommended.

10. CONTINGENCY PROCEDURES

Minimum emergency equipment maintained on site will include a fully charged ABC dry chemical fire extinguisher, an adequately stocked first aid kit, and an emergency eyewash station (when corrosive chemicals are present). In addition, employees will consider maintaining the personal emergency supply items listed in Section 3: Natural Phenomena, as appropriate.

In the event of an emergency, site personnel will signal distress with three blasts of a horn (a vehicle horn will be sufficient), or other predetermined signal. Communication signals, such as hand signals, must be established where communication equipment is not feasible or in areas of loud noise.

It is the SSO's duty to evaluate the seriousness of the situation and to notify appropriate authorities. The first part of this plan contains emergency telephone numbers as well as directions to the hospital. Nearby telephone access must be identified and available to communicate with local authorities. If a nearby telephone is not available, a cellular telephone will be maintained on site during work activities. The operation of the cellular phone will be verified to ensure that a signal can be achieved at the work location.

The SSO, or designee, should contact local emergency services in the event of an emergency. After emergency services are notified, the PM and RSUM will be notified of the situation as soon as possible. If personal injury, property damage or equipment damage occurs, the PM and BC Risk Manager will be contacted as soon as practicable. An Accident/Incident Investigation Report will be completed within 24 hours by the SSO, or other designated person. A copy of the Accident/Incident Investigation Report is included in Appendix E.

At projects conducted at mining facilities, incident reporting requirements differ from OSHA standards. Site-specific MSHA reporting requirements must be addressed in conjunction with the RSUM and PM.

10.1 Injury or Illness

If an exposure or injury occurs, work will be temporarily halted until an assessment can be made to determine it is safe to continue work. The SSO, in consultation with the RSUM, will make the decision regarding the safety of continuing work. The SSO will conduct an investigation to determine the cause of the incident and steps to be taken to prevent recurrence

In the event of an injury, the extent and nature of the victim's injuries will be assessed and first aid/CPR will be rendered as appropriate. If necessary, emergency services will be contacted or the individual may be transported to the nearby medical center. The mode of transportation and the eventual destination will be based on the nature and extent of the injury. A hospital route map is presented at the front of this HASP.

In the event of a life-threatening emergency, the injured person will be given immediate first aid and emergency medical services will be contacted by dialing the number listed in the Critical Project Information section at the beginning of this plan. The individual rendering first aid will follow directions given by emergency medical personnel via telephone.

10.2 Vehicle Collision or Property Damage

If a vehicle collision or property damage event occurs, the SSO, or designee, will contact the BC Risk Manager for appropriate action.

10.3 Fire

In the event of fire, the alarm will be sounded and Site personnel will evacuate to a safe location (preferably upwind). The SSO, or designee, should contact the local fire department immediately by dialing 911. When the fire department arrives, the SSO, or designated representative, will advise the commanding officer of the location and nature of the fire nature, and identification of hazardous materials on site. Only trained, experienced fire fighters should attempt to extinguish substantial fires at the Site. Site personnel should not attempt to fight fires, unless properly trained and equipped to do so. Site personnel should not attempt to fight a fire if it poses a risk to their personal safety.

Note that smoking is not permitted in controlled areas (i.e., exclusion or contamination reduction zones), near flammable or combustible materials, or in areas designated by the facility as non-smoking areas.

10.4 Underground Utilities

In the event that an underground conduit is damaged during subsurface work, mechanized equipment will immediately be shut off and personnel will evacuate the area until the nature of the piping can be determined. Depending on the nature of the broken conduit (e.g., natural gas, water, or electricity), the appropriate local utility will be contacted.

10.5 Site Evacuation

The SSO will designate evacuation routes and refuge areas to be used in the event of a Site emergency. Site personnel will stay upwind from vapors or smoke and upgradient from spills. If workers are in an Exclusion or Contamination Reduction Zone at the start of an emergency, they should exit through the established decontamination corridors, if possible. If evacuation cannot be done through an established decontamination area, site personnel will go to the nearest safe location and remove chemically-affected clothing there or, if possible, leave it near the Exclusion Zone. Personnel will assemble at the predetermined refuge following evacuation and decontamination. The SSO, or designated representative, will count and identify site personnel to verify that all have been evacuated safely.

10.6 Spill of Hazardous Materials

If a hazardous material spill occurs, site personnel should locate the source of the spill and determine the hazard to the health and safety of site workers and the public. Attempts to stop or reduce the flow should only be performed if it can be done without risk to personnel.

Isolate the spill area and do not allow entry by unauthorized personnel. De-energize sources of ignition within 100 feet of the spill, including vehicle engines. Should a spill be of the nature or extent that it cannot be safely contained, or poses an imminent threat to human health or the environment, an emergency cleanup contractor will be called out as soon as possible. Spill containment measures listed below are examples of responses to spills.

- Right or rotate containers to stop the flow of liquids. This step may be accomplished as soon as the spill or leak occurs, providing it is safe to do so.
- Sorbent pads, booms, or adjacent soil may be used to dike or berm materials, subject to flow, and to solidify liquids.
- Sorbent pads, soil, or booms, if used, must be placed in appropriate containers after use, pending disposal.
- Contaminated tools and equipment shall be collected for subsequent cleaning or disposal.

11. DOCUMENTATION

The implementation of the HASP must be documented on the appropriate forms (see appendices) to verify employee participation and protection. In addition, the regulatory requirements must be met for recordkeeping on training, medical surveillance, injuries and illnesses, exposure monitoring, health risk information, and respirator fit-tests. Documentation of each BC employee's health and safety records is maintained by the Health and Safety Data Manager in Walnut Creek, California.

Health and safety documentation and forms completed, as specified by this plan, are to be retained in the project file.

Other relevant project-specific health and safety documents, such as MSDSs or client-specified procedures, will be attached to this HASP in Appendix F.

APPENDIX A

Air Monitoring Form

BROWN AND CALDWELL

Air Monitoring Form

Page ____ of ____

Instructions: Complete this form immediately prior to project start.

Name of Project/Site: City of Tucson Shooting Range	Project No: 134894
Project/Site Location: 3200 N Silverbell Road, Tucson, Arizona	
Employee Performing Air Monitoring: (Print and Sign):	Date:

Photo Ionization/Flame Ionization Detectors (PIDs/FIDs)

☐ PID ☐ FID	Manufacturer:	Model:	Serial #:
Initial Calibration Reading:		End-of-Use Calibration Reading:	
Calibration Standard/Concentration:			

Mini-RAM Dust Monitor

Manufacturer:	Model:	Serial #:
Zeroed in Z-Bag? ☐ Yes ☐ No		

Monitoring Data

Time	Location and Activity	PID/FID (ppm)	Mini-RAM (mg/m³)	Time	Location and Activity	PID/FID (ppm)	Mini-RAM (mg/m³)

APPENDIX B

Site Safety Checklist

BROWN AND CALDWELL

Site Safety Checklist

Instructions: Complete this form immediately prior to project start.

Name of Project/Site: City of Tucson Shooting Range	Project No: 134894
Project/Site Location: 3200 N Silverbell Road, Tucson, Arizona	
Employee Completing Checklist: (Print and Sign):	Date:

Yes	No	N/A		Yes	No	N/A	
☐	☐	☐	Written Health and Safety (H&S) Plan is on site?	☐	☐	☐	Respirators are available, properly cleaned, and stored?
☐	☐	☐	Addenda to the H&S Plan are documented on site?	☐	☐	☐	Overhead utilities do not present a hazard to equipt./personnel?
☐	☐	☐	H&S Plan information matches conditions/activities at the site?	☐	☐	☐	Traffic control measures have been implemented?
☐	☐	☐	H&S Plan read/signed by all site personnel, including visitors?	☐	☐	☐	Trenches and excavations are safe for entry?
☐	☐	☐	Daily tailgate H&S meetings have been held/documented?	☐	☐	☐	Soil Spoils are at least 2 feet from the edge of the excavation?
☐	☐	☐	Site personnel have required training and medical?	☐	☐	☐	Emergency/FA equipt. is on site as described in the H&S Plan?
☐	☐	☐	Air monitoring is performed/documented per the H&S Plan?	☐	☐	☐	Drinking water is readily available?
☐	☐	☐	Air monitoring equipment has been calibrated daily?	☐	☐	☐	Phone is readily available for emergency use?
☐	☐	☐	Site zones are set up and observed where appropriate?	☐	☐	☐	Utility locator has cleared subject locations?
☐	☐	☐	Access to the work area limited to authorized personnel?	☐	☐	☐	Proper drum and material handling techniques are used?
☐	☐	☐	Decontamination procedures followed/match the H&S Plan?	☐	☐	☐	Waste containers/drums are labeled appropriately?
☐	☐	☐	Decontamination stations (incl. hand/face wash) are set up and used?	☐	☐	☐	Ext. cords are grounded/protected from water/vehicle traffic?
☐	☐	☐	PPE used matches H&S Plan requirements?	☐	☐	☐	Tools and equipment are in good working order?
☐	☐	☐	Hearing protection used where appropriate?	☐	☐	☐	GFCIs used for portable electrical tools and equipment?

Notes

(All "no" answers must be addressed and corrected immediately. Note additional health and safety observations here):

APPENDIX C

H&S Plan Acknowledgement Form

H&S Plan Acknowledgement Form

Instructions: Complete this form immediately prior to project start or as new personnel join the project.

Name of Project/Site: City of Tucson Shooting Range	Project No: 134894
Project/Site Location: 3200 N Silverbell Road, Tucson, Arizona	
Employee Performing Briefing: (Print and Sign):	Date:

Employee Acknowledgement:

The following signatures indicate that these personnel have read and/or been briefed on this Health and Safety (H&S) Plan and understand the potential hazards/controls for the work to be performed.

Important Notice to Subcontractor(s):

Subcontractors are responsible for developing, maintaining, and implementing their own health and safety programs, policies, procedures and equipment as necessary to protect their workers, and others, from their activities. Subcontractors shall operate equipment in accordance with their standard operating procedures as well as manufacturer's specifications. Any project monitoring activities conducted by BC at the Site shall not in any way relieve subcontractors of their critical obligation to monitor their operations and employees for the determination of exposure to hazards that may be present at the Site and to provide required guidance and protection. If requested, subcontractors will provide BC with a copy of their own H&S Plan for this project or other health and safety program documents for review.

BC's Health and Safety Plan has been prepared specifically for this project and is intended to address health and safety issues solely with respect to the activities of BC's own employees at the site. A copy of BC's H&S Plan may be provided to subcontractors in an effort to help them identify expected conditions at the site and general site hazards. The subcontractor shall remain responsible for identifying and evaluating hazards at the site as they pertain to their activities and for taking appropriate precautions. For example, BC's H&S Plan does not address specific hazards associated with tasks and equipment that are particular to the subcontractor's scope of work and site activities. (e.g., operation of a drill rig, excavator, crane or other equipment). Subcontractors are not to rely on BC's H&S Plan to identify all hazards that may be present at the Site. Subcontractor personnel are expected to comply fully with subcontractor's Health and Safety Plan and to observe the minimum safety guidelines applicable to their activities which may be identified in the BC H&S Plan. Failure to do so may result in the removal of the subcontractor or any of the subcontractor's workers from the job site.

Print	Sign	Date	Print	Sign	Date

APPENDIX D

Daily Tailgate Meeting Form

BROWN AND CALDWELL

Daily Tailgate Meeting Form

Name of Project/Site: City of Tucson Shooting Range	Project No: 134894
Project/Site Location: 3200 N Silverbell Road, Tucson, Arizona	
Employee Completing Form: (Print and Sign):	Date:

Employee Acknowledgement:

The following signatures indicate that these personnel have read and/or been briefed on this Health and Safety (H&S) Plan and understand the potential hazards/controls for the work to be performed.

Important Notice to Subcontractor(s):

Subcontractors are responsible for developing, maintaining, and implementing their own health and safety programs, policies, procedures and equipment as necessary to protect their workers, and others, from their activities. Subcontractors shall operate equipment in accordance with their standard operating procedures as well as manufacturer's specifications. Any project monitoring activities conducted by BC at the Site shall not in any way relieve subcontractors of their critical obligation to monitor their operations and employees for the determination of exposure to hazards that may be present at the Site and to provide required guidance and protection. If requested, subcontractors will provide BC with a copy of their own H&S Plan for this project or other health and safety program documents for review.

BC's Health and Safety Plan has been prepared specifically for this project and is intended to address health and safety issues solely with respect to the activities of BC's own employees at the site. A copy of BC's H&S Plan may be provided to subcontractors in an effort to help them identify expected conditions at the site and general site hazards. The subcontractor shall remain responsible for identifying and evaluating hazards at the site as they pertain to their activities and for taking appropriate precautions. For example, BC's H&S Plan does not address specific hazards associated with tasks and equipment that are particular to the subcontractor's scope of work and site activities. (e.g., operation of a drill rig, excavator, crane or other equipment). Subcontractors are not to rely on BC's H&S Plan to identify all hazards that may be present at the Site. Subcontractor personnel are expected to comply fully with subcontractor's Health and Safety Plan and to observe the minimum safety guidelines applicable to their activities which may be identified in the BC H&S Plan. Failure to do so may result in the removal of the subcontractor or any of the subcontractor's workers from the job site.

Print	Sign	Date	Print	Sign	Date

Plan of the Day

(Describe the activities that are planned to be performed today)

Potential Hazards and Topics Discussed

(Describe the potential hazards and controls that may be associated with planned activities)

☐ Electrical ☐ Chemical ☐ Biological ☐ Physical ☐ Other (specify):

APPENDIX E

Incident Investigation Report

BROWN AND CALDWELL

Incident Investigation Report

Instructions:

If an accident or incident occurs, complete all applicable information in this form, make a copy for your records, and immediately forward the original to the office Health and Safety Coordinator (HSC). If fields are not applicable, indicate with "N/A". Use separate sheet(s) if necessary and attach sketches, photographs, or other information that may be helpful in understanding how the accident/incident occurred.
HSC – Review and enter report into the BC Online Safety Observation and Incident Reporting System within 3 workdays of receipt. File original in appropriate office health and safety file.

NOTE:

This report is important – please take the time necessary to properly complete it. Incomplete reports will be forwarded to appropriate management for review and action.

General Information

Date of Accident/Incident	Time of Accident/Incident:	Date Accident/Incident Reported:	To Whom:
Exact Location of Accident/Incident (Street, City, State):			BC Office:
Name Project:			Project Number:
Employee Completing the Investigation (Print and Sign):			Date:

Injured/Ill Employee/Property Damage Information

Employee Name:	Employee No.	Department:	Phone Number:
Job Title:		Manager's Name and Phone Number:	
Nature of Injury/Illness (laceration, contusion, strain, etc.):		Body Part Affected (arm, leg, head, hand, etc.):	
Describe Property Damage and Estimate Loss :			

Description of Accident/Incident

Describe the accident sequentially, beginning with the initiating event, and followed by secondary and tertiary events. End with the nature and extent of injury/damage. Name any object or substance and tell how they were included. Examples: 1) Employee was pulling utility cart that was loaded with wastepaper from office area to hallway. Wheel of utility cart caught against door casing. Bags of heavy wastepaper that were in cart fell to end of cart. Cart tipped over onto foot of employee. Right foot was crushed between utility cart and door casing, resulting in severe contusion to right foot of employee. 2) Employee was driving rental car from office to project site. Car struck icy section of road. Employee lost control of vehicle, which skidded across road into concrete abutment on side of road. Accident resulted in damage to right fender, tire, headlight, and grill.

BROWN AND CALDWELL

Incident Investigation Report

Analysis of Accident Causes

Immediate Causes - Substandard Actions

What substandard actions caused or could have caused the accident/incident? State the actions on the part of the employee or others that contributed to the occurrence of the accident/incident. Examples: 1) Employee overloaded the utility cart with wastepaper. 2) Employee exceeded safe speed on icy road, and was inattentive to hazard.

Codes (check all that apply)

- ☐ 1. Operating equipment without authority
- ☐ 2. Failure to warn
- ☐ 3. Failure to secure
- ☐ 4. Operating at improper speed
- ☐ 5. Making safety devices inoperable
- ☐ 6. Removing safety devices
- ☐ 7. Using defective equipment
- ☐ 8. Using equipment improperly
- ☐ 9. Failure to use PPE properly
- ☐ 10. Improper loading
- ☐ 11. Improper placement
- ☐ 12. Improper lifting
- ☐ 13. Improper position for task
- ☐ 14. Servicing equipment in operation
- ☐ 15. Horseplay
- ☐ 16. Alcohol or drug influence
- ☐ 17. Other (specify)

Immediate Causes - Substandard Conditions

What substandard conditions caused or could have caused the accident/incident? State the conditions that existed at the time of the accident (the specific control factors that were or may have been the direct or immediate cause or causes of the accident). Examples: 1) Wheel of utility cart was worn and would not roll properly; utility cart was overloaded with wastepaper. 2) Road was covered with icy spots; weather was foggy.

Codes (check all that apply)

- ☐ 1. Inadequate guards or barriers
- ☐ 2. Inadequate or improper PPE
- ☐ 3. Defective tools, equipment, or materials
- ☐ 4. Congestion or restricted action
- ☐ 5. Inadequate earning system
- ☐ 6. Fire and explosion hazards
- ☐ 7. Poor housekeeping
- ☐ 8. Noise exposures
- ☐ 9. Radiation exposures
- ☐ 10. High or low temperature exposures
- ☐ 11. Inadequate or excess illumination
- ☐ 12. Inadequate ventilation
- ☐ 13. Hazardous environ. conditions (vapors, dusts, etc.)
- ☐ 14. Other (specify)

Basic Causes - Personal and Job Factors

What personal and/or job factors caused or could have caused the accident/incident? State the influencing factors or underlying causes, either conditions or actions or both, that contributed to the accident/incident. Examples: 1) Employee had not been instructed in overloading hazards. 2) Employee had not been trained in driving under winter conditions; company has no driver training program.

Codes (check all that apply)

Personal Factors

- ☐ 1. Inadequate capability ☐ 2. Lack of knowledge ☐ 3. Lack of skill ☐ 4. Improper motivation
- ☐ 5. Other (specify):_____

Job Factors

- ☐ 1. Inadequate leadership/supervision ☐ 2. Inadequate engineering ☐ 3. Inadequate purchasing ☐ 4. Inadequate maintenance ☐ 5. Inadequate tools/equipment
- ☐ 6. Inadequate work standards/procedures ☐ 7. Inadequate Wear and tear ☐ 8. Abuse or misuse
- ☐ 9. Other (specify):

Remedial Actions

Describe the actions <u>taken</u> or <u>planned</u> to prevent recurrence of accident/incident - provide the implementation date and person responsible for any planned corrective action.. Examples: 1) Wheels of utility cart were replaced with larger size wheels; all carts were inspected for safe operation; employees were instructed in overloading hazards. 2) All project personnel were instructed at the safety training meeting on driving under hazardous conditions; driver training program will be implemented.

Codes (check all that apply)

Job Factors

- ☐ 1. Reinstruction of personnel involved ☐ 2. Reprimand of personnel involved ☐ 3. Temporary/permanent reassignment of personnel ☐ 4. Action to improve clean-up
- ☐ 5. Equipment repair or replacement ☐ 6. Improve design ☐ 7. Improve construction ☐ 8. Improve PPE ☐ 9. Install of safety guard or device ☐ 10. Work method change
- ☐ 11. Order use of safer materials ☐ 12. Regional Safety Unit Manager Review
- ☐ 13. Other (specify):

APPENDIX F

Miscellaneous Health and Safety Information

APPENDIX B

Air Monitoring Plan

AIR MONITORING PLAN

This section describes the general concepts of an air monitoring program and specifies the activities that will take place during the project.

The purpose of air monitoring is to identify and quantify airborne contaminants in order to verify and determine the level of worker protection and evaluate potential community exposures. Initial screening for identification is often qualitative, but the determination of its concentration must await subsequent testing. Two principal approaches are available for identifying and/or quantifying airborne contaminants to include the use of on-site direct-reading chemical monitoring instruments and laboratory analysis of air samples obtained by gas sampling bags, collection media, or wet-scrubber collection methods.

Identification of potential hazards in the hazard analysis portion of the Site Safety and Health Plan (SSHP) indicated initial and/or ongoing monitoring for worker assessment of exposure to lead. The potential generation of lead-containing dust during excavation will be minimized using dust control procedures, personnel decontamination, and worker and perimeter air monitoring to verify the adequacy of control measures.

A conservative assumption of 7,000 mg/kg for lead in soil, able to become entrained and airborne, will be used for action limit calculation purposes. Additionally, soil around intrusive and dust generating (i.e. dirt roads) activities will be kept moist at all times. Worker and perimeter locations will receive representative sampling using pre-calibrated sampling pumps with air inlets located in the breathing zone and at perimeter locations. The pumps will be operated continuously during fieldwork activities. The filter cassettes will be collected at the end of each fieldwork day. Background air samples will be collected prior to the start of work and sample collection for the first 2-3 days of work will be analyzed on a rush turn around basis. The cassettes will be shipped together with field blanks under chain-of-custody procedure to an American Industrial Hygiene Association (AIHA) accredited laboratory for lead analysis.

AIR MONITORING LOCATION & FREQUENCY

Prior to entering an exclusion zone, all field personnel will, at a minimum, utilize the level of protection outlined in this Plan. Periodic confirmatory air sampling will be performed to ensure that field personnel are not exposed to airborne contaminant concentrations in excess of action levels.

It is the responsibility of each contractor to determine the personnel exposure for their employees. Each contractor is expected to perform initial monitoring of their employees who are or may reasonably be expected to be exposed to airborne concentrations at or above the action levels. After the initial determinations have been made, sampling shall be of such frequency and pattern as to represent with reasonable accuracy the levels of exposure of their employees.

Baseline

Baseline (background) monitoring will be accomplished by conducting a north, south, east, and west sampling walk of the exclusion zone perimeter. Both the time-weighted lead in air samples and the Personal Data Ram (Mini-Ram) will be used, when appropriate, and all results will be documented.

Monitoring of Active Work Areas

During the period of active work in any exclusion zone, real time monitoring and indirect monitoring will be performed by or under the direction of the Site Safety Officer (SSO), or designated representative, in each active work area as deemed necessary. Real-time measurements will be made as near as feasible to the breathing zone of the worker with the greatest exposure potential in each active work area. Any concentration above the action levels will be reported to the SSO and action taken. At a minimum, real time

measurements will be taken every 15 minutes, or when task or exposure conditions change (whichever frequency is less). Real time measurements will cease being taken when enough historical data is generated to warrant its cessation (i.e. one full week of monitoring). All indirect sampling media will be analyzed by an AIHA-accredited laboratory.

Table 1 summarizes the air monitoring requirements and action levels. Also shown in Table 1 is an action plan in the event an action level is exceeded.

Table B-1. SITE WORKER AIR MONITORING

TEST METHOD/ EQUIPMENT	EXPOSURE LIMITS*		ACTION LEVEL	ACTION PLAN
	OSHA PEL	ACGIH TLV		
Inorganic Lead Compounds				
NIOSH Method 7300; with air monitoring pumps and filters	0.05 mg/m3	0.05 mg/m3	a. <0.03 mg/m3 b. 0.03 < and > 0.3 mg/m3 c. > 0.3 mg/m3	a. Continue Work and Monitoring b. Upgrade to Level C and continue to monitor. Check with H&S Manager for additional measures needed. c. Suspend work; evaluate source and mitigation measures.
Nuisance Dust				
a. Direct-reading, Mini Ram	Total 15 mg/m3 Respirable 5.0 mg/m3	Inhalable 10 mg/m3 Respirable 3.0 mg/m3	<0.5 mg/m3 b. 0.5 < and >1.0 mg/m3 c. >1.0 mg/m3	a. Continue Work and Monitoring b. Upgrade to Level C and continue to monitor c. Suspend work; evaluate source and mitigation measures.

* Exposure limits established by the Occupational Safety and Health Administration (OSHA) and Threshold Limit Values published by the American Conference of Governmental Industrial Hygienist, 1997.

Perimeter Monitoring

During all Site activities and whenever an upgrade to Level C is necessary, the perimeter of the work zone closest to the off-site receptors will be monitored according to the following list of initial and/or ongoing monitoring for community exposure assessment (Table 2). At a minimum, two off-site locations should be monitored as part of the perimeter monitoring program.

TABLE B-2. PERIMETER AIR MONITORING

TEST METHOD/EQUIPMENT	ACTION LEVEL	ACTION PLAN
Inorganic Lead Compounds		
NIOSH Method 7082; with air monitoring pumps and filters	a. At or below background* b. Above background*	a. Continue Work and Monitoring b. Suspend work; evaluate source and mitigation measures.
Nuisance Dust		
a. Direct-reading, Mini Ram	a. <0.15 mg/m3 above background*	a. Continue Work and Monitoring
b. NIOSH Method 500; with air monitoring pumps and filters	b.> 0.15 mg/m3 above background*	b. Suspend work; evaluate source and mitigation measures

* - Dust control measures will be used to ensure baseline offsite lead levels do not exceed NAAQS standards.

In addition to the requirements listed above, a continuous dust monitoring meter will be placed on the fence, just north of the 50,000-cubic yard stockpile and south of the second house from the right. This monitor will provide data logger information on continuous monitoring for comparison to real samples of lead. A real-world correlation can then be made between the amount of dust and concentration of lead at any given time.

Calibration of Monitoring Equipment

It is essential that each piece of hazardous waste site monitoring equipment be calibrated on a routine basis. This assures that a given monitoring instrument is both working and working with reasonable degree of accuracy. This procedure outlines required calibration frequencies and techniques. The manufacturers' instruction manual should always be available for specific calibration procedures and other information.

Frequency of Calibration

The following instruments must be calibrated before use:

- Air Sampling Pumps (various flow rates)
- Aerosol/Particulate Monitor

Calibration Techniques

Air Sampling Pumps

The flow rate of air sampling pumps must be calibrated within a range depending upon the chemical of concern and the collection medium for the sample. Calibration is achieved by connecting the hose assembly with collection medium attached, to a calibrator (e.g., MiniBuck) and observing the flow rate. A set screw or knob is then turned until the flow rate is within the desired range.

Refer to the National Institute for Occupational Safety and Health (NIOSH) Manual of Analytical Methods for the prescribed flow rates and sampling media for the targeted concern, if needed.

Aerosol/Particulate Monitors

Some particulate monitors must be factory recalibrated, however they should be zeroed daily.

Periodic Instrument Response Checks

It is important that each piece of monitoring equipment be checked occasionally during its use to determine that it is responding to contaminants. These "response checks" are the key to providing confidence to the user that the instrument is at least functioning and responding to contaminants.

APPENDIX Z

CD – PDF version of Entire Report

ARIZONA DEPARTMENT
OF
ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov

Janice K. Brewer
Governor

Patrick J. Cunningham
Acting Director

April 20, 2009

VRP 09:178

Mr. Hector Martinez
City Manager's Office
City of Tucson
PO Box 27210
Tucson, Arizona 85726-7210

RE: No Further Action Determination for Lead, Antimony, Arsenic, and Copper in Soil
Silverbell Firing Range, Tucson, AZ
Site Code: 509810-00

Dear Martinez:

The Arizona Department of Environmental Quality (ADEQ) Voluntary Remediation Program (VRP) hereby grants the City of Tucson (COT) City Manager's Office a No Further Action (NFA) determination for soil in the area (see map) which is located at the Silverbell Firing Range in Tucson, Arizona. ADEQ has determined the Site has met all the requirements specified in Arizona Revised Statute (A.R.S.) §49-181 for lead, antimony, arsenic, and copper, for which COT has requested an NFA. The NFA determination is based on remedial activities and results from confirmation soil sampling detailed in the following documents:

- *Silverbell Firing Range Operations & Maintenance Final Report*, May 2008
- *Operations & Maintenance Report Silverbell Firing Range*, August 15, 2008
- *Request for No Further Action*, February 11, 2009
- Revised No Further Action Boundary Map, March 4, 2009

Please note the NFA is granted with the limitations described at A.R.S. §49-181(E) and A.R.S. §49-181(F) and does not address any other area of land, groundwater or any other contaminants.

The NFA determination is based on the following:

1. Of the eight Primary Berm Clearance Samples, 100% were sampled for lead and 38% of the samples (three samples) were sampled for arsenic, antimony, and copper. Of the five samples collected for lead only, one sample had lead exceedence which was characterized to below the residential Soil Remediation Level (SRL) with a confirmation sample collected in the same location after additional excavation activities were conducted.

Of the three samples collected for all four metals, none of the samples contained copper or arsenic exceedences. Two of the samples contained lead exceedences. One of these samples also contained an antimony exceedence. This antimony exceedence, as well as the lead exceedences, were characterized to below the residential SRLs in deeper confirmation samples.

2. Of the eight Secondary Berm Clearance Samples collected, 100% were sampled for lead and 38% of the samples (three samples) were sampled for arsenic, antimony, and copper. Of the five samples collected for lead only, none of the samples had lead exceedences. Of the three samples collected for all four metals, none of the samples contained copper or arsenic exceedences. One sample contained a lead and antimony exceedence. The lead and antimony exceedences were characterized to below the residential SRLs in a deeper sample.

3. Of the 12 (twelve) Range Floor Clearance Samples collected, 100% were sampled for lead and 33% of the samples (four samples) were sampled for arsenic, antimony, and copper. Of the eight samples collected for lead only, four had lead exceedences which were characterized with confirmation samples collected in the same location after additional excavation activities were conducted. Of the four samples collected for all four metals, none of the samples contained copper exceedences. Three samples contained lead, antimony, and arsenic exceedences. All three of these samples were characterized to below the residential SRLs in a deeper samples.

4. Based on this information, the VRP determined that enough spatial representation exists to consider the firing range floor and berms sufficiently characterized to below the residential SRLs (and applicable Groundwater Protection Levels) for arsenic, antimony, lead, and copper.

5. COT published the Public Notice for a Request for No Further Action Determination in the Arizona Daily Star on March 8, 2009, commencing the 30-day public comment period required by A.R.S. §49-176. The notice period concluded on April 9, 2009 with no public comments received.

Pursuant to A.R.S. §49-181(F), a NFA determination under this section means that no further action shall be taken by the Department under this title to remediate or require remediation of the Site or portion of the site covered by the NFA determination, unless the NFA determination is rescinded or amended pursuant to A.R.S. § 49-181(E). An NFA determination does not release or discharge any person from liability for a release of contaminants not covered by the work plan approved pursuant to A.R.S. §49-177 or outside the boundary of the Site or portion of the site covered by the determination. An NFA determination shall not preclude the Director from obtaining access to the area covered by the determination under this section or any other law.

Pursuant to A.R.S. §49-181(E), the Department may rescind or amend the NFA determination for any of the following reasons: 1) On discovery of new information that would result in the potential denial of an NFA request; 2) Information originally submitted to the Director was

inaccurate, misleading or incomplete; 3) The reopening of an investigation or the taking of a remedial action is necessary to respond to a release or the threat of a release of a contaminant that may present an imminent and substantial danger to the public health or welfare or the environment. Pursuant to A.R.S. §49-184, the ADEQ reserves the right to recover penalties or to take any action authorized by law for any violation of A.R.S. Title 49.

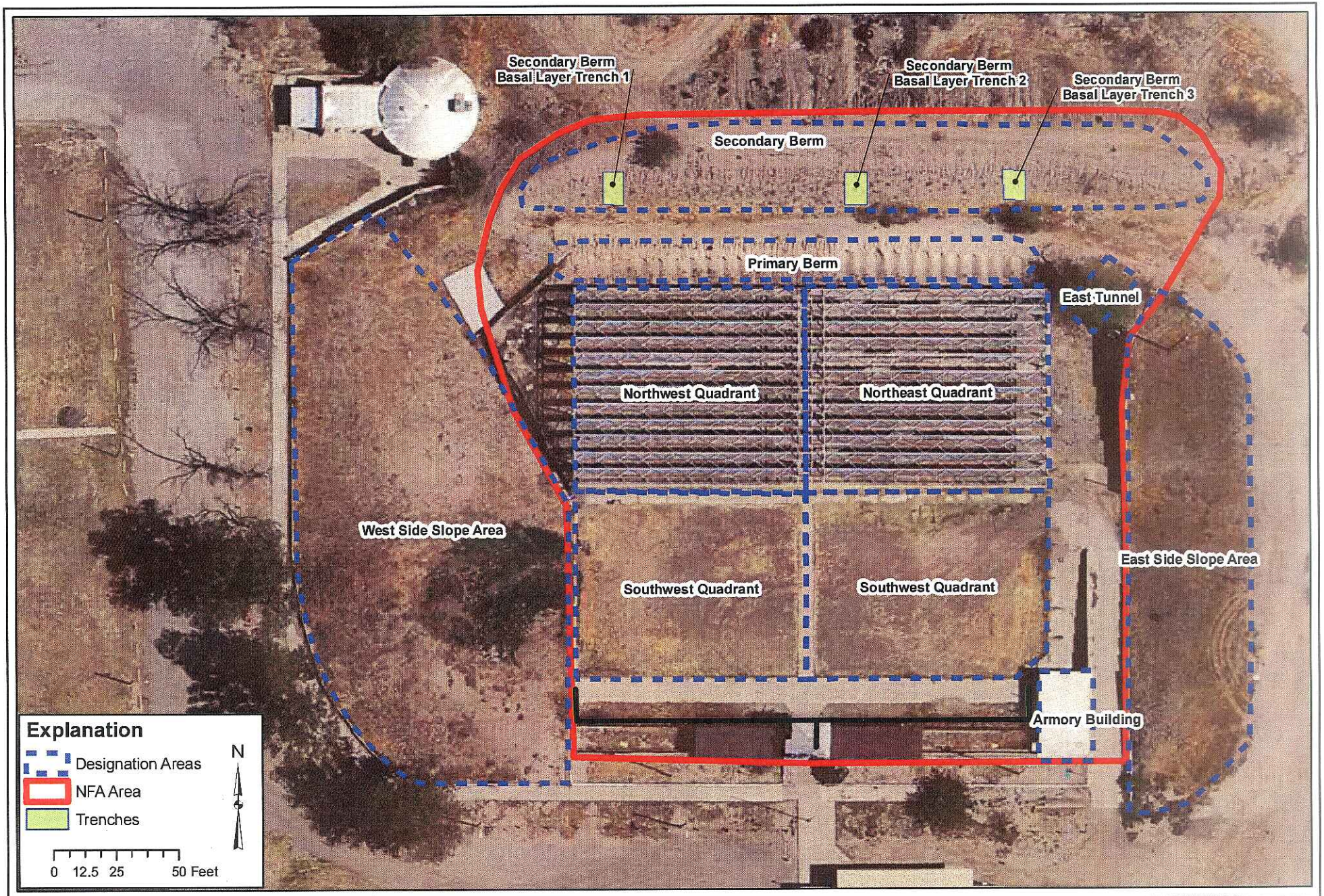
If you have any questions, please contact me at (602) 771-4229.

Respectfully,

Thomas DiDomizio, Acting Unit Manager
Voluntary Remediation Program
Waste Programs Division

Attachment: Figure - No Further Action Boundary

cc: Ms. Nancy Petersen, Deputy Director, City of Tucson Environmental Services
Mr. Richard Byrd, Senior Hydrologist, City of Tucson Environmental Services



CITY OF TUCSON
ENVIRONMENTAL SERVICES

No Further Action Soil Boundary Area Map
Silverbell Firing Range
VRP Site Code 509810-00
February 2009

Drawn By:	LE
Checked:	RB
Approved:	RB
Date:	3/3/2009
File:	See Below

J:\GIS\Silverbell\2008\FireRangeNFA.mxd

Order Number: T10416 Second Amendment **Escrow Officer: Pamela Neal at (520) 344-9930**

Fidelity National Title Insurance Company

COMMITMENT FOR TITLE INSURANCE

Issued by

Fidelity National Title Insurance Company

Fidelity National Title Insurance Company, a California corporation ("Company"), for a valuable consideration, commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the Proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest in the land described or referred to in Schedule A, upon payment of the premiums and charges and compliance with the Requirements; all subject to the provisions of Schedules A and B and to the Conditions of this Commitment.

This Commitment shall be effective only when the identity of the Proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A by the Company.

All liability and obligation under this Commitment shall cease and terminate 90 days after the Effective Date or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue the policy or policies is not the fault of the Company.

The Company will provide a sample of the policy form upon request.

IN WITNESS WHEREOF, Fidelity National Title Insurance Company has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A.

Countersigned:

Authorized Signatory

FIDELITY NATIONAL TITLE INSURANCE COMPANY

SEAL

By: President

Attest: Secretary

CONDITIONS

1. The term mortgage, when used herein, shall include deed of trust, trust deed, or other security instrument.

2. If the proposed Insured has or acquired actual knowledge of any defect, lien, encumbrance, adverse claim or other matter affecting the estate or interest or mortgage thereon covered by this Commitment other than those shown in Schedule B hereof, and shall fail to disclose such knowledge to the Company in writing, the Company shall be relieved from liability for any loss or damage resulting from any act of reliance hereon to the extent the Company is prejudiced by failure to so disclose such knowledge. If the proposed Insured shall disclose such knowledge to the Company, or if the Company otherwise acquires actual knowledge of any such defect, lien, encumbrance, adverse claim or other matter, the Company at its option may amend Schedule B of this Commitment accordingly, but such amendment shall not relieve the Company from liability previously incurred pursuant to paragraph 3 of these Conditions.

3. Liability of the Company under this Commitment shall be only to the named proposed Insured and such parties included under the definition of Insured in the form of policy or policies committed for and only for actual loss incurred in reliance hereon in undertaking in good faith (a) to comply with the requirements hereof, or (b) to eliminate exceptions shown in Schedule B, or (c) to acquire or create the estate or interest or mortgage thereon covered by this Commitment. In no event shall such liability exceed the amount stated in Schedule A for the policy or policies committed for and such liability is subject to the insuring provisions and Conditions and the Exclusions from Coverage of the form of policy or policies committed for in favor of the proposed Insured which are hereby incorporated by reference and are made a part of this Commitment except as expressly modified herein.

4. This Commitment is a contract to issue one or more title insurance policies and is not an abstract of title or a report of the condition of title. Any action or actions or rights of action that the proposed Insured may have or may bring against the Company arising out of the status of the title to the estate or interest or the status of the mortgage thereon covered by this Commitment must be based on and are subject to the provisions of this Commitment.

5. *The policy to be issued contains an arbitration clause. All arbitrable matters when the Amount of Insurance is $2,000,000 or less shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. You may review a copy of the arbitration rules at <http://www.alta.org/>.*

Order Number: T10416 Second Amendment **Escrow Officer: Pamela Neal at (520) 344-9930**

Fidelity National Title Insurance Company

We recognize and respect the privacy expectations of today's consumers and the requirements of applicable federal and state privacy laws. We believe that making you aware of how we use your non-public personal information ("Personal Information"), and to whom it is disclosed, will form the basis for a relationship of trust between us and the public that we serve. This Privacy Statement provides that explanation. We reserve the right to change this Privacy Statement from time to time consistent with applicable privacy laws.

In the course of our business, we may collect Personal Information about you from the following sources:

- From applications or other forms we receive from you or your authorized representative;
- From your transactions with, or from the services being performed by, us, our affiliates, or others;
- From our internet web sites;
- From the public records maintained by governmental entities that we either obtain directly from those entities, or from our affiliates or others; and
- From consumers or other reporting agencies.

Our Policies Regarding the Protection of the Confidentiality and Security of Your Personal Information

We maintain physical, electronic and procedural safeguards to protect your Personal Information from unauthorized access or intrusion. We limit access to the Personal Information only to those employees who need such access in connection with providing products or services to you or for other legitimate business purposes.

Our Policies and Practices Regarding the Sharing of Your Personal Information

We may share your Personal Information with our affiliates, such as insurance companies, agents, and other real estate settlement service providers. We also may disclose your Personal Information:

- to agents, brokers or representatives to provide you with services you have requested;
- to third-party contractors or service providers who provide services or perform marketing or other functions on our behalf; and
- to others with whom we enter into joint marketing agreements for the products or services that we believe you may find of interest.

In addition we will disclose your Personal Information when you direct or give us permission, when we are required by law to do so, or when we suspect fraudulent or criminal activities. We also may disclose your Personal Information when otherwise permitted by applicable privacy laws such as, for example, when disclosure is needed to enforce our rights arising out of any agreement, transaction or relationship with you.

One of the important responsibilities of some of our affiliated companies is to record documents in the public domain. Such documents may contain your Personal Information.

Right to Access Your Personal Information and Ability To Correct Errors Or Request Changes Or Deletion

Certain states afford you the right to access your Personal Information and, under certain circumstances, to find out to whom your Personal Information has been disclosed. Also, certain states afford you the right to request corrections, amendment or deletion of your Personal Information. We reserve the right, where permitted by law, to charge a reasonable fee to cover the costs incurred in responding to such requests.

All requests must be made in writing to the following address:

Privacy Compliance Officer

Chicago Title Insurance Company

601 Riverside Avenue, 12th Floor

Jacksonville, FL 32204

Multiple Products or Service

If we provide you with more than one financial product or service, you may receive more than one privacy notice from us. We apologize for any inconvenience this may cause you.

Order Number: T10416 Second Amendment **Escrow Officer: Pamela Neal at (520) 344-9930**

METRO TITLE AGENCY OF AZ

PRIVACY POLICY

We Are Committed to Safeguarding Customer Information
In order to better serve your needs now and in the future, we may ask you to provide us with certain information. We understand that you may be concerned about what we will do with such information – particularly any personal or financial information. We agree that you have a right to know how we will utilize the personal information you provide to us. Therefore, we have adopted this Privacy Policy to govern the use and handling of your personal information.

Applicability
This Privacy Policy governs our use of the information which you provide to us. It does not govern the manner in which we may use information we have obtained from any other source, such as information obtained from a public record or from another person or entity.

Types of Information
Depending on which of our services you are utilizing, the types of nonpublic personal information that we may collect include:

- Information we receive from you on applications, forms and in other communications to us, whether in writing, in person, but telephone or any other means;
- Information about your transaction with us, our affiliated companies, or other; and
- Information we receive a consumer reporting agency.

Use of Information
We request information from you for our own legitimate business purposes and not for the benefit of any non affiliated party. Therefore, we will not release your information to non affiliated parties except: (1) as necessary for us to provide the product or service you have requested of us; or (2) as permitted by law. We may. However, store such information indefinitely, including the period after which any customer relationship has ceased. Such information may be used for any internal purposes, such as quality control efforts or customer analysis. We may also provide all of the types of nonpublic information listed above to one or more of our affiliated companies. Such affiliated companies include financial service providers, such as title insurers, property and casualty insurers, and trust and investment advisory companies, or companies involved in real estate services, such as appraisal companies, home warranty companies, and escrow companies. Furthermore, we may also provide all the information we collect as described above, to companies that perform marketing services on our behalf, on behalf of our affiliated companies, or to other financial institutions with whom we or our affiliated companies, or to other financial institutions with whom we or our affiliated companies have joint marketing agreements.

Former Customers
Even if you are no longer our customer, our Privacy Policy will continue to apply to you.

Confidentiality and Security
We will use our best efforts to ensure that no unauthorized parties have access to any of your information. We restrict access to nonpublic personal information about you to those individuals and entities who need to know that information to provide products or services to you. We will use our best efforts to train and oversee our employees and agents to ensure that your information will be handled responsibly and in accordance with this Privacy Policy. We currently maintain physical, electronic, and procedural safeguards that comply with federal regulations to guard you nonpublic personal information.

METRO TITLE AGENCY OF AZ

SCHEDULE A

Order Number: **T10416**

1. Effective date: **May 12, 2009 at 7:45 AM**

2. Policy or Policies to be issued: Amount of Insurance
   (a) 2006 A.L.T.A. Owners
   Owner's Premium

   Propose Insured:

   Amount of Insurance
   (b) 2006 A.L.T.A. Extended Loan **$16,500,000.00**
   Loan Premium **$18,756.50**

   Endorsements:

   Endorsement Premium(s) $**$0.00**

   Proposed Insured:
   Wells Fargo Bank, N.A.

   (c) Leasehold $

   Proposed Insured:

3. The estate or interest in the land described or referred to in this Commitment and covered herein is:
   FEE SIMPLE

4. Title to the estate or interest in said land is at the effective date hereof vested in:
   City of Tucson, a municipal corporation

5. The land referred to in this Commitment is in the State of Arizona, County of Pima and is described as follows:

   See attached Exhibit "A"

   Purported Address:
   4 golf courses, fire training academy
   Tucson, AZ 85701

THIS COMMITMENT IS INVAILD UNLESS SCHEDULE B AND COVER ARE ATTACHED

This Commitment may be subject to a Cancellation Fee

Exhibit "A"

Community Services Building
PARCEL I:

A parcel of land lying within Lots 4 and 5 of Rio Nuevo North Resubdivision, Lots 1 thru 19 and Common Area "A", a subdivision of Pima County, Arizona, according to the plat of record in the office of the Pima County Recorder in Book 41 of Maps and Plats at page 39, described as follows:

BEGINNING at the Northernmost point of said Lot 5;

THENCE S 65°58'10" E (S 65°46'19" E record) along the Southwest right-of-way line of Bonita Avenue, a distance of 24.29 feet (24.27 feet record);

THENCE along a non-tangent curve to the right, along said right-of-way line, having a radial bearing of S 24°14'24" W, a central angle of 56°52'38" and a radius of 374.00 feet (measured and record), a distance of 371.27 feet to the TRUE POINT OF BEGINNING;

THENCE continue along said curve to the right having a central angle of 02°04'56" and a radius of 374.00 feet (measured and record), a distance of 13.59 feet;

THENCE S 06°48'34" E, (S 06°49'39" E record) along the West right-of-way line of Bonita Avenue, a distance of 114.89 feet (114.87 feet Record);

THENCE along a curve to the right having a central angle of 94°35'56" (94°37'01" record) and a radius of 25.00 feet (measured and record), a distance of 41.28 feet (measured and record) to a point on the North right-of-way line of Commerce Park Loop;

THENCE S 87°47'22" W (measured and record) along said right-of-way, a distance of 308.36 feet (308.30 feet record);

THENCE S 85°48'59" W (S 85°48'14" W record) along said right-of-way, a distance of 65.24 feet (65.31 feet record) to the Southwest corner of said Lot 5;

THENCE N 04°12'29" W (N 04°11'46" W record) along the West line of said Lot 5, a distance of 204.26 feet to the Southwest corner of that parcel of land as described in Docket 8320 at page 1014, filed in the of the office of the Pima County Recorder;

THENCE N 85°48'14" E (measured and record) along the South line of said parcel, a distance of 12.00 feet (measured and record);

THENCE N 04°12'29" W (N 04°11'46" W record) along the East line of said parcel, a distance of 63.39 feet;

THENCE N 90°00'00" E, a distance of 169.85 feet;

THENCE S 35°00'00" E, a distance of 78.28 feet;

THENCE S 69°12'48" E a distance of 88.88 feet;

THENCE N 90°00'00" E, a distance of 91.40 feet to the TRUE PLACE OF BEGINNING;

PARCEL II:

All of Lot 6 and that portion of Lot 5 of Rio Nuevo North Resubdivision, a subdivision of Pima County, Arizona, according to the plat of record in the office of the Pima County Recorder in Book 41 of Maps and Plats at page 39, described as follows:

BEGINNING at a point on the Westerly line of said Lot 5 which is N 04°11'46" W, 204.26 feet from the Southwest corner of said Lot 5;

THENCE N 85°48'14" E, 12.00 feet;

THENCE N 04°11'46" W, 100.96 feet;

THENCE N 25°31'13" E, 87.45 feet;

THENCE N 64°28'47" W, 12.00 feet to the Northwesterly line of said Lot 5;

THENCE S 25°31'13" W, 90.63 feet; to the most Westerly corner of said Lot 5;

THENCE S 04°11'46" E along the Westerly line of said Lot 5 a distance of 104.14 feet to the POINT OF BEGINNING.

Police Dorms
PARCEL III:
A part of the West half of Section 6 in Township 16 South, Range 15 East of the Gila and Salt River Meridian, Pima County, Arizona, described as follows:

BEGINNING at the point of intersection of Blaze Loop and Fire Chief Road;

THENCE North 89° 38' 07.' East a distance of 372.55 feet along the centerline of Fire Chief Road to a point, said point being the intersection of Fire Chief Road and Range Road;

THENCE South 00° 21' 53" West, a distance of 679.50 feet;

THENCE North 89°38' 07" West,a distance of 372.55 feet;

THENCE North 00° 21' 53" East, a distance of 679.50 feet to the POINT BEGINNING;

TOGETHER WITH a twenty four foot wide easement for access divided equally along the centerline of Fire Chief Road described as follows:

BEGINNING at the point of intersection of Blaze Loop and Fire Chief Road;

THENCE North 89 38' 07" West a distance of 992.76 feet to the Wilmot Road public right-of-way as recorded in Docket 9919 at page 314 on June 22, 1994 at the Pima County Recorder's Office, Pima County, Arizona

Fire Station No. 6
PARCEL IV:
All that portion of Government Lot 7 in Section 6, Township 16 South, Range 15 East, Gila and Salt River Meridian, State of Arizona, County of Pirna, described as follows:

COMMENCING at a 98" Rebar tagged "PE 5 178", monumenting the East One-Quarter comer of Section 1, Township 16 South, Range 14 East;

THENCE South 00° 21' 53" West along the line common to said Sections 1 and 6, 9.90 feet;

THENCE South 89° 38' 07" East, at a right angle to said Section Line, 75.00 feet to a point on the East fight of Way Line of Wilmot Road as shown in Book 8 of Road Maps at page 42 in the office of the Pima County Recorder, said point being THE POINT OF BEGINNING;

THENCE South 00° 21' 53" West, along said East right-of-way line, 327.00 feet;

THENCE South 89° 55' 31" East, 400.00 feet;

THENCE North 00° 21' 53" East, 327.00 feet;

THENCE North 89° 55' 31" West, 400.00 feet to THE POINT OF BEGINNING.

Randolph Golf Course
PARCEL V:
The East Half of Section 16, Township 14 South, Range 14 East of the Gila and Salt River Base and Meridian, Pima County, Arizona;
EXCEPTING THEREFROM any portion lying within the dedicated rights-of-way for 22nd Street, Alvernon Way, Broadway Blvd., Randolph Way and Camino Campestre, as said rights-of-way now exists; and
FURTHER EXCEPTING therefrom the following described two (2) Parcels of land:
Parcel A:
That portion conveyed to Pima County by instrument recorded in Docket 6061 at page 936, records of Pima County, Arizona.
Parcel B:
A parcel of land lying within the Northeast quarter of Section 16, Township 14 South, Range 14 East of the Gila and Salt River Base and Meridian, Pima County, Arizona, described as follows;
BEGINNING at a 2" brass cap survey monument in a casting, stamped C.O.T., RLS 12214, being the Northeast corner of said Section 16;
THENCE S00° 06' 30" W, along the east line of the Northeast quarter of said Section 16, also known as the Fernald Section Line, a distance of 294.30 feet;
THENCE N89° S3' 30" W, perpendicular to the East line of the Northeast Quarter of said Section 16, a distance of 130.75 feet to a 5/8" rebar tagged RLS 25086 and the POINT OF BEGINNING;

THENCE S00° 16' 56" W, a distance of 1059.54 feet to a 5/8" rebar tagged RLS 25086;
THENCE S89° 35' 56" W, a distance of 115.33 feet to a 5/8" rebar tagged RLS 25086;
THENCE N00° 38' 25" E, a distance of 102.70 feet to a 5/8" rebar tagged RLS 25086;
THENCE N89° 16' 12" W, a distance of 8.64 feet to a point falling within a body of water, no monument set;
THENCE N11° 32' 40" W, a distance of 120.85 feet to a 5/8" rebar tagged RLS 25086;
THENCE N89° 14' 07" W, a distance of 141.57 feet to a 5/8" rebar tagged RLS 25086;
THENCE N03° 32' 13" W, a distance of 46.85 feet to a 5/8" rebar tagged RLS 25086;
THENCE N89° 52' 05" W, a distance of 92.00 feet to a 5/8" rebar tagged RLS 25086;
THENCE N01° 52' 27" E ,a distance of 111.17 feet to a 5/8" rebar tagged RLS 25086;
THENCE S89° 45' 14" W, a distance of 75.59 feet to a 5/8" rebar tagged RLS 25086;
THENCE N00° 33' 26" W, a distance of 227.14 feet to a 5/8" rebar tagged RLS 25086;
THENCE N28° 55' 31" W, a distance of 114.58 feet to a 5/8" rebar tagged RLS 25086;
THENCE N12° 39' 16" W, a distance of 202.12 feet to a 5/8" rebar tagged RLS 25086;
THENCE N00° 08' 03" E, a distance of 177.21 feet to a 5/8" rebar tagged RLS 25086;
THENCE N89° 02' 01" W, a distance of 45.88 feet to a 5/8" rebar tagged RLS 25086;
THENCE N00° 37' 33" E, a distance of 130.64 feet to a 5/8" rebar tagged RLS 25086;
THENCE S88° 29' 12" E, a distance of 433.09 feet to a 5/8" rebar tagged RLS 25086;
THENCE S73° 21' 53" E, a distance of 26.32 feet to a 5/8" rebar tagged RLS 25086;
THENCE S89° 44' 42" E, a distance of 116.52 feet to a 5/8" rebar tagged RLS 25086;
THENCE S00° 29' 02" W, a distance of 133.04 feet to a 5/8" rebar tagged RLS 25086;
THENCE S87° 53' 16" E, a distance of 33.03 feet to the POINT OF BEGINNING; and

Randolph Golf Course - Exception #3

FURTHER EXCEPT all that portion of the Southeast Quarter of Section 16, Township 14 South, Range 14 East, Gila and Salt River Base and Meridian, Pima County, Arizona described as follows:

BEGINNING at the Southeast corner of said Section16, being a 2 inch brass survey monument, as established by Pima County Highway Department, said monument bearing South 89 degrees 33 minutes 20 seconds West, a distance of 32.17 feet, more or less, from a brass plate in concrete;

THENCE South 89 degrees 33 minutes 20 seconds West, along the South line of said Section, 400.06 feet;

THENCE North 00 degrees 03 minutes 46 seconds East, parallel to the East line of said Section, 70.00 feet to a point on the North line of Twenty Second Street as it existed on 9/15/1999, said point being the TRUE POINT OF BEGINNING;

THENCE North 00 degrees 42 minutes 06 seconds West, a distance of 118.13 feet;

THENCE North 40 degrees 05 minutes 19 seconds West, a distance of 113.48 feet;

THENCE North 19 degrees 48 minutes 42 seconds West, a distance of 68.20 feet;

THENCE North 02 degrees 47 minutes 59 seconds West, a distance of 40.05 feet;

THENCE North 00 degrees 17 minutes 43 seconds West, a distance of 320.01 feet;

THENCE North 04 degrees 57 minutes 41 seconds West, a distance of 91.35 feet;

THENCE North 26 degrees 02 minutes 26 seconds East, a distance of 67.25 feet;

THENCE South 63 degrees 57 minutes 34 seconds East, a distance of 86.12 feet;

THENCE North 89 degrees 55 minutes 07 seconds East, a distance of 322.95 feet;

THENCE South 00 degrees 03 minutes 42 seconds West, along the west line of Alvernon Way as it existed on 9/15/1999, a distance of 715.15 feet;

THENCE along a curve to the left, concave to the Northwest having a radius of 25.00 feet, an arc length of 39.06 feet to a point on the north line of 22nd Street as it existed on 9/15/1999;

THENCE South 89 degrees 34 minutes 43 seconds West, a distance of 295.27 feet to the TRUE POINT OF BEGINNING.

Silverbell Golf Course
PARCEL VI:
All that portion of Section 28 and Section 29 in Township 13 South, Range 13 East, of the Gila and Salt River Base and Meridian, Pima County, Arizona, more particularly described as follows:
COMMENCING at a 1-1/2" lead cap pipe, being the Southwest corner of said Section 28 and the Southeast corner of said Section 29;
THENCE N90° 00' 00" E along the South line of the Southwest 1/4 of said Section 28, a distance of 2638.21 feet to the South Quarter corner of said Section 28, being a 2-1/2" open pipe;
THENCE N24° 07' 06" E, a distance of 328.45 feet to a 1/2" rebar tagged L.S. 25086 and the POINT OF BEGINNING;
THENCE N32° 24' 31" W, a distance of 2990.45 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S61° 09' 44" W, a distance of 522.52 feet to a 1/2" rebar tagged L.S. 25086;
THENCE N36° 19' 49" W, a distance of 1020.64 feet to a 1/2" rebar tagged L.S. 25086;
THENCE N37° 17' 42" W, a distance of 576.10 feet to a 1/2" rebar tagged L.S. 25086;
THENCE N56° 03' 53" E, a distance of 377.04 feet to a 1/2" rebar tagged L.S. 25086;
THENCE N88° 43' 17" E, a distance of 58.23 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S32° 20' 36" E, a distance of 523.97 feet to a 1/2" rebar tagged L.S. 25086;
THENCE N58° 17' 23" E, a distanceo of 562.68 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S58° 06' 11" E, a distance of 192.29 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S68° 49' 56" E, a distance of 159.33 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S71° 04' 59" E, a distance of 170.18 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S75° 29' 58" E, a distance of 384.59 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S75° 49' 33" E, a distance of 684.95 feet to a 1/2" rebar tagged L.S. 25086;
THENCE N54° 34' 03" E, a distance of 49.28 feet to a concrete nail tagged L.S. 25086,
THENCE S81° 32' 17" E, a distance of 87.86 feet to a concrete nail tagged L.S. 25086;
THENCE S74° 42' 09" E, a distance of 92.30 feet to a concrete nail tagged L.S. 25086;
THENCE S71° 45' 37" E, a distance of 86.71 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S33° 02' 05" E, a distance of 54.32 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S75° 51' 04" E, a distance of 667.50 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S65° 26' 38" E, a distance of 120.68 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S58° 51' 07" E, a distance of 132.18 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S32° 28' 23" E, a distance of 101.60 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S39° 29' 45" E, a distance of 100.41 feet to a 1/2" rebar tagged L.S. 25086;

THENCE S34° 28' 17" E, a distance of 99.49 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S27° 17' 02" E, a distance of 94.40 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S21° 07' 13" E, a distance of 116.39 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S13° 31' 00" E, a distance of 548.10 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S22° 40' 17" E, a distance of 146.87 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S13° 26' 01" E, a distance of 120.79 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S03° 40' 48" E, a distance of 40.30 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S03° 31' 49" E, a distance of 58.97 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S16° 24' 29" E, a distance of 317.50 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S21° 24' 04" E, a distance of 277.85 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S24° 41' 06" E, a distance of 408.50 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S27° 43' 19" E, a distance of 438.16 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S72° 36' 03" W, a distance of 403.37 feet to a 1/2" rebar tagged L.S. 25086;
THENCE N78° 56' 38" W, a distance of 930.24 feet to a 1/2" rebar tagged L.S. 25086;
THENCE S71° 23' 38" W, a distance of 593.55 feet to the POINT OF BEGINNING.

El Rio Golf Course
PARCEL VII:
All that portion of El Rio Golf Course as it currently exists and being situated within a portion of Sections 2, 3, 10, and 11 of Township 14 South, Range 13 East, Gila and Salt River Base and Meridian, Pima County, Arizona, and being more particularly described as follows:
BEGINNING at the common corner of said Section 2, 3, 10, and 11;
THENCE S 88° 31' 55" E 231.93 feet to a point on the Northerly right-of-way line of Speedway Boulevard and TRUE POINT OF BEGINNING;
THENCE N 00° 06' 43" W 980.46 feet to a point;
THENCE N 62° 10' 08" E 86.46 feet to the Southwest corner of Lot 86 as shown on the plat map of El Rio Estates, recorded in Book 7 of Maps and Plats at Page 43, records of Pima County Recorder's Office;
THENCE N 16° 52' 10" E 916.93 feet (calculated) (917.10 feet record);
THENCE N 46° 00' 29" W 656.01 feet;
THENCE S 78° 05' 27" W 821.72 feet;
THENCE S 70° 53' 57" W 302.12 feet (calculated) (301.80 feet record);
THENCE S 22° 18' 18" E 208.08 feet (calculated) (207.70 feet record);
THENCE S 83° 34' 30" W 803.97 feet;
THENCE S 09° 03' 28" W along that portion of the Easterly right-of-way line of El Rio Drive as shown on said plat map of El Rio Estates a distance of 544.04 feet to a point of curvature;
THENCE Southeasterly along said right-of-way curve concave to the East, having a central angle of 35° 47' 43", a radius of 100 feet and an arc length of 62.47 feet to a point of tangency;
THENCE continuing along said Easterly right-of-way line S 26° 44' 15" E 349.20 feet to a point of curvature;
THENCE Southwesterly along said curve concave to the West, having a central angle of 65° 54' 18", a radius of 208.65 feet and an arc length of 240.00 feet to a point of reverse curvature;
THENCE Southeasterly along said curve concave to the East, having a central angle of 64° 50' 18", a radius of 128.65 feet and an arc length of 145.59 feet to a point of tangency on said Easterly right-of-way line of El Rio Drive;
THENCE S 25° 40' 15" E 626.33 feet to a point on the Northerly right-of-way line of Speedway Boulevard as described in Docket 8076 at Page 2857, records of Pima County Recorder's Office;
THENCE N 89° 37' 47" E along said right-of-way line 284.94 feet;
THENCE N 88° 26' 56" E 970.49 feet;
THENCE N 89° 37' 47" E 906.47 feet to the TRUE POINT OF BEGINNING.

Fred Enke Golf Course
PARCEL VIII:
The Southeast Quarter, West Half, Northeast Quarter, Southeast Quarter of the Northeast Quarter, South Half of the South Half of the Northeast Quarter of the Northeast Quarter, East Half of the Northwest Quarter, South Half of the North Half of the Southwest Quarter of the Northwest Quarter, South Half of the Southwest Quarter of the Northwest Quarter, North Half of the Northwest Quarter of the Southwest Quarter, and the Northwest Quarter of the Northeast Quarter of the Southwest Quarter all in Section 33, Township 14 South, Range 15 East of the Gila and Salt River Base and Meridian, Pima County, Arizona; EXCEPTING THEREFROM the Northernmost, Easternmost, Southernmost and Westernmost 75 feet for roadway purposes.

SCHEDULE B
Section 1

REQUIREMENTS

The following are the requirements to be complied with:

Item (a) Payment to or for the account of the grantors or mortgagors of the full consideration for the estate or interest to be insured.

Item (b) Proper instrument(s) creating the estate or interest to be insured must be executed and duly filed for record.

TO-WIT:

NOTICE TO APPLICANT: The land covered herein may be serviced by districts, service companies and/or municipalities, which assess charges for water, sewer, electricity and any other utilities, etc. which are not covered by this report or insured under a title insurance policy.

NOTE: If the applicant desires copies of the documents underlying any exception to coverage shown herein, the Company will furnish the same request, if available, either with or without charge as appears appropriate.

NOTE: Any matter in dispute between you and the Company may be subject to arbitration as an alternative to court action pursuant to the Title Insurance Rules of the American Arbitration Association, a copy of which is available on request from the Company. Any decision reached by arbitration shall be binding upon both you and the Company. The arbitration award may include attorney's fees if allowed by state law and may be entered as a judgment in any court of proper jurisdiction.

1. Approval by all parties of the legal description to be insured herein.

2. Approval by the Legal Department of the Company of this Commitment prior to close of escrow and issuance of policy. The right is reserved to make additional exceptions and/or requirements upon review.

3. Record Termination of Leases with Bank Trust National Association as disclosed by Memorandum of Leases recorded in Docket 11073 at page 438 and amended in Docket 12377 at page 4648.

4. Record Termination of Leases with U.S. Bank Trust National Association as disclosed by Memorandum of Leases recorded in Docket 11274 at page 995 and amended in Docket 12254 at page 1399 and re-recorded in Docket 12350 at page 1055.

5. Record Termination of Leases with U.S. Bank Trust National Association as disclosed by Memorandum of Leases recorded in Docket 11307 at page 698.

6. Record Termination of Leases with Wells Fargo Bank, N.A. as disclosed by Memorandum of Leases recorded in Docket 12237 at page 5286.

7. Record Memorandum of Lease.

NOTE: Taxes for the full year 2008 are exempt:
Tax Parcel Number: 116-19-360D9 - Parcel I
Tax Parcel Number: 116-19-360A6 - Parcel II
Tax Parcel Number: 305-03-004B - Parcels III and IV/with other property
Tax Parcel Number: 126-20-001C3 - Parcel V/with other property
Tax Parcel Number: 103-09-061A9 - Portion of Parcel VI
Tax Parcel Number: 103-08-001Q8 - Portion of Parcel VI
Tax Parcel Number: 103-10-001C7 - Portion of Parcel VI
Tax Parcel Number: 115-22-002A2 - Portion of Parcel VII
Tax Parcel Number: 115-22-13209 - Portion of Parcel VII
Tax Parcel Number: 136-29-003A3 - Parcel VIII

THE UNDERWRITER DESIGNATED FOR THIS FILE SHALL BE FIDELITY NATIONAL TITLE

PLEASE DIRECT ANY TITLE INQUIRES TO Marianne Bourdeau at (520) 344-9930

END OF SCHEDULE B – Section 1

SCHEDULE B
Section 2

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys fees or expenses) that arise by reason of:

Schedule B of the policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a Public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, of claims thereof, that are not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.
6. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.
7. Defects, liens, encumbrances, adverse claims or other matters, in any, created, first appearing in the Public Records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires of record for the value the estate or interest or mortgage thereon covered by this Commitment.

8. Taxes for the full year 2009, a lien, not yet due or payable.

9. EASEMENTS, conditions, restrictions and/or reservations as shown on the recorded plat(s) of said subdivision.

10. Easements, conditions, restrictions and/or reservations as shown on the recorded plat(s) of said subdivision.

11. Reservations or exceptions in Patents or in Acts authorizing the issuance thereof.

12. Water rights, claims or title to water, and agreements, covenants, conditions or rights incident thereto, whether or not shown by the public records. This exception is not limited by reason of the disclosure of any matter relating to Water Rights as may be set forth elsewhere in Schedule B.

13. Any adverse claim to any portion of said land which has been created by artificial means or which is accretion, alluvion, dereliction or avulsion.

14. Any adverse claim based upon the assertion that said land, an any portion thereof, is now or at anytime has been included within navigable river, slough or other navigable body of water.

15. Easement(s) and rights incident thereto as set forth in Book 64 of Miscellaneous Records at pages 460, 472, 479 and 485, Book 77 of Deeds at page 114 and in Book 79 of Deeds at page 613.

16. Easement(s) and rights incident thereto as set forth in Book 67 of Miscellaneous Records at page 267.

17. Any private rights or easements existing prior to abandonment on, under and across those portions of land lying within the road, street or alley abandoned by Resolution or Ordinance recorded in Book 75 of Miscellaneous Records at page 292.

18. Easement(s) and rights incident thereto as set forth in Book 110 of Miscellaneous Records at page 338.

19. Easement(s) and rights incident thereto as set forth in Docket 109 at page 526.

20. Easement(s) and rights incident thereto as set forth in Docket 210 at page 389.

21. Any private rights or easements existing prior to abandonment on, under and across those portions of land lying within the road, street or alley abandoned by Resolution or Ordinance recorded in Docket 621 at page 198.

22. Easement(s) and rights incident thereto as set forth in Docket 650 at point 202.

23. Easement(s) and rights incident thereto as set forth in Docket 904 at page 9.

24. Rights of the public in and to the use of said land for park and recreational purposes and for that portion described in Resolution recorded in Docket 1191 at page 316.

25. Easement(s) and rights incident thereto as set forth in Docket 1524 at page 353.

26. Easement(s) and rights incident thereto as set forth in Docket 1528 at page 24.

27. Easement(s) and rights incident thereto as set forth in 1748 at page 42.

28. Easement(s) and rights incident thereto as set forth in Docket 1823 at page 480.

29. Easement(s) and rights incident thereto as set forth in Docket 1894 at page 261.

30. Easement(s) and rights incident thereto as set forth in Docket 2177 at page 317.

31. Easement(s) and rights incident thereto as set forth in Docket 2188 at page 170.

32. Easement(s) and rights incident thereto as set forth in Docket 2230 at page 210.

33. Easement(s) and rights incident thereto as set forth in Docket 2295 at pages 238 and 240.

34. COVENANTS, CONDITIONS, RESTRICTIONS, easements, assessments, liabilities and/or obligations recorded in Docket 2304 at page 174.

NOTE: This exception omits any covenant, condition or restriction based on race, color, religion, sex, handicap, familial status or national origin as provided in 42 U.S.C. Section 3604, unless and only to the extent that the covenant (a) is not in violation of state or federal law, (b) is exempt under 42 U.S.C. Section 3607, or relates to a handicap but does not discriminate against handicapped people.

35. Easement(s) and rights incident thereto as set forth in Docket 2318 at page 384.

36. Easement(s) and rights incident thereto as set forth in Docket 2636 at page 291.

37. Easement(s) and rights incident thereto as set forth in Docket 2647 at page 51.

38. Easement(s) and rights incident thereto as set forth in Docket 2682 at page 266.

39.. Easement(s) and rights incident thereto as set forth in Docket 2800 at page 257 and in Docket 3053 at page 14.

40. Easement(s) and rights incident thereto as set forth in 2983 at page 168.

41. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreements as set forth in Docket 3080 at page 77, Docket 4689 at page 728, Docket 4868 at page 108, Docket 5096 at page 755 and in Docket 6636 at page 470.

42. Easement(s) and rights incident thereto as set forth in Docket 3329 at page 135, Docket 3371 at page 130 and in Docket 3397 at page 61.

43. Easement(s) and rights incident thereto as set forth in Docket 4221 at page 437.

44. Easement(s) and rights incident thereto as set forth in 4246 at page 363.

45. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreement as set forth in Docket 5545 at page 706.

46. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Electric Power Line Right-of-way License Agreement with Tucson Gas and Electric Company as set forth in Docket 5576 at page 688.

47. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreement with Tucson Gas and Electric Company as set forth in Docket 5582 at page 968 and re-recorded in Docket 5634 at page 845.

48. Easement(s) and rights incident thereto as set forth in Docket 5713 at page 933.

49. Easement(s) and rights incident thereto as set forth in 5754 at page 867.

50. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreement with Tucson Gas and Electric Company as set forth in Docket 5796 at page 955.

51. Easement(s) and rights incident thereto as set forth in 5796 at page 959.

52. Easement(s) and rights incident thereto as set forth in Docket 6061 at page 936.

53. Matters as set forth in survey recorded in Book 7 of Land Surveys at page 33 thereof.

54. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Rio Nuevo Redevelopment Project recorded 6111 at page 1226, Docket 7416 at pages 704 and 741 and in Docket 7951 at page 1478.

55. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Natural Gas Right-of-way License Agreement as set forth in Docket 6236 at page 665.

56. Easement(s) and rights incident thereto as set forth in Docket 6376 at page 923.

57. Easement(s) and rights incident thereto as set forth in Docket 6525 at page 719.

58. Easement(s) and rights incident thereto as set forth in Docket 6879 at page 865.

59. Easement(s) for ingress, egress, utilities and rights incident thereto as set forth in Docket 6926 at page 413.

60. Easement(s) and rights incident thereto as set forth in 6926 at pages 416 and 417.

61. Easement(s) and rights incident thereto as set forth in 7040 at page 651.

62. Easement(s) and rights incident thereto as set forth in 7434 at page 817.

63. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreements as set forth in Docket 7606 at page 972 and in Docket 9166 at page 527.

64. Easement(s) and rights incident thereto as set forth in Docket 7875 at page 1372.

65. Easement(s) and rights incident thereto as set forth in Docket 7888 at page 842.

66. COVENANTS, CONDITIONS, RESTRICTIONS, easements, assessments, liabilities and/or obligations recorded in Docket 8074 at page 2621 and amended in Docket 8505 at page 1215, which, among other things, provides for the Downtown Commerce Owners' Association

NOTE: This exception omits any covenant, condition or restriction based on race, color, religion, sex, handicap, familial status or national origin as provided in 42 U.S.C. Section 3604, unless and only to the extent that the covenant (a) is not in violation of state or federal law, (b) is exempt under 42 U.S.C. Section 3607, or relates to a handicap but does not discriminate against handicapped people.

67. Easement(s) and rights incident thereto as set forth in Docket 8133 at page 1886.

68. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License Agreement as set forth in Docket 8296 at page 1582.

69. Easement(s) and rights incident thereto as set forth in Docket 8328 at page 1043.

70. Easement(s) and rights incident thereto as set forth in Docket 8399 at page 2093.

71 Easement(s) and rights incident thereto as set forth in Docket 8320 at page 1010.

72. COVENANTS, CONDITIONS, RESTRICTIONS, easements, assessments, liabilities and/or obligations recorded in Docket 8320 at page 1013.

NOTE: This exception omits any covenant, condition or restriction based on race, color, religion, sex, handicap, familial status or national origin as provided in 42 U.S.C. Section 3604, unless and only to the extent that the covenant (a) is not in violation of state or federal law, (b) is exempt under 42 U.S.C. Section 3607, or relates to a handicap but does not discriminate against handicapped people.

73. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreement as set forth in Docket 8576 at page 1048.

74. Ordinance No. 7142 with the City of Tucson as set forth in Docket 8664 at page 282.

75. Easement(s) and rights incident thereto as set forth in 8664 at page 291.

76. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and use Agreement with Tucson Electric Power Company as set forth in Docket 8720 at page 1296.

77. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreement with Tucson Electric Power Company as set forth in Docket 8984 at page 809 and re-recorded in Docket 9028 at page 893.

78. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreement with Tucson Electric Power Company as set forth in Docket 9104 at page 941.

79. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License and Use Agreement as set forth in Docket 9580 at page 712.

80. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Non-Exclusive rofw License to Qwest Communications Corporation as set forth in Docket 9654 at page 604.

81. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Utility Service Agreements with Tucson Electric Power Company as set forth in Docket 10049 at page 467, Docket 10150 at page 865 and in Docket 10153 at page 355 and re-recorded in Docket 10223 at page 740.

82. Certificate of Grandfathered Groundwater Right as set forth in Docket 10199 at page 750.

83. Ordinance No. 8714 as recorded in Docket 10326 at page 1939.

84. Sewer Easement and rights incident thereto as recorded in Docket 10326 at page 1946.

85. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Utility Service Agreements with Tucson Electric Power Company recorded in Docket 10333 at page 427, Docket 10427 at page 678 and in Docket 10510 at page 1643.

86. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in License with Pima County, Arizona as set forth in Docket 10546 at page 523.

87. Easement(s) to Tucson Electric Power Company and rights incident thereto as set forth in Docket 10571 at page 657.

88. Easement(s) to Qwest Communications Corporation and rights incident thereto as set forth in Docket 10624 at page 1504.

89. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Intergovernmental Agreement between City of Tucson and Pima Community College District For Joint Development and Use of Lincoln Park William Clements Center as set forth in Docket 10653 at page 238 and re-recorded in Docket 10685 at page 741.

90. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Utility Service Agreement as set forth in Docket 10901 at page 730 and in Docket 10939 at page 1290.

91. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Common Area Maintenance Agreement as set forth in Docket 11053 at page 1561.

92. COVENANTS, CONDITIONS, RESTRICTIONS, easements, assessments, liabilities and/or obligations recorded in Docket 11053 at page 1577.

NOTE: This exception omits any covenant, condition or restriction based on race, color, religion, sex, handicap, familial status or national origin as provided in 42 U.S.C. Section 3604, unless and only to the extent that the covenant (a) is not in violation of state or federal law, (b) is exempt under 42 U.S.C. Section 3607, or relates to a handicap but does not discriminate against handicapped people.

93. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Joint Use and Maintenance Agreement as set forth in Docket 11056 at page 1132.

94. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Notice of Voluntary Environmental Mitigation Use Restrictions By Owner(s) as set forth in Docket 10646 at page 2258.

95. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Utility Service Agreements as set forth in Docket 11136 at page 887, Docket 11219 at page 1307, Docket 11227 at page 1103, Docket 11617 at page 1756, Docket 11649 at page 1664, Docket 11752 at page 1641, Docket 11837 at page 2934, Docket 11850 at page 2567 and in Docket 11855 at page 1271.

96. Resolution Nos. 12058 and 11775, relating to redevelopment as set forth in Docket 11277 at pages 1723 and 1727.

97. Easement(s) for the benefit of the City of Tucson as set forth in Docket 11582 at page 721 and in Docket 11863 at page 1457.

98. Easement(s) to Pima County and rights incident thereto as set forth in Docket 11863 at page 1476.

99. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Utility Service Agreements as set forth in Docket 11870 at page 919, Docket 11927 at page 1692 and in Docket 12082 at page 19699.

100. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Tucson Water Reclaimed Water User Agreements recorded in Docket 12256 at pages 1362, 1366, 1374, 1380 and 1382.

101. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Easement and Agreement for the Placement of a Sewer Line as set forth in Docket 12256 at page 1457 and re-recorded in Docket 12942 at page 69.

102. Easement(s) for the benefit of the City of Tucson and rights incident thereto as set forth in Docket 12478 at page 2714.

103. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Utility Service Agreements as set forth in Docket 12375 at page 1044 and in Docket 12674 at page 207.

104. Certificate of Grandfathered Groundwater Right as set forth in Docket 12692 at page 2218.

105. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Slope and Access Easement as recorded in Docket 12837 at page 5296.

106. Construction, Drainage and Maintenance Easement and rights incident thereto as set forth in Docket 12983 at page 111.

107. Sewer Easement and rights incident thereto as set forth in Docket 12983 at page 116.

108. Ordinance No. 2008-24 relating to general obligation and sewer revenue bond projects as set forth in Docket 13279 at page 705.

109. Terms, conditions, restrictions, easements, liabilities and/or obligations as set forth in Utility Service Agreement as set forth in Docket 13373 at page 1888.

110. Any facts, rights, interests or claims which are not shown by the public records, but which are not shown by the public records, but chich could be ascertained by making inquiry of the adjacent land owners and those in possession thereof.

111. Terms, conditions, restrictions, easements, liabilities, obligations and rights incident thereto as set forth in an unrecorded Lease, dated May 2009, by and between:

Lessor: City of Tucson, a municipal Corporation
Lessee: Wells Fargo Bank, N.A.
Recorded:
Docket:
Page:

112. UCC Financing Statement with Banc of America Leasing and Capital, L.L.C. Recorded March 11,

2009 in Docket 13512 at page 3210.

END OF SCHEDULE B – Section 2