ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
EQUIPMENT AND PROCUREMENT DIVISION
BID INVITATION

Bid Number: M-15-015P

Bid Opening Date: September 9, 2014 Time: 11:00 a.m.

BID OPENING LOCATION:	**MAIL TO:**	**DELIVER TO:**
AHTD Equipment and Procurement Division 11302 W. Baseline Road Little Rock, AR 72209	AHTD Equipment and Procurement Division P.O. Box 2261 Little Rock, AR 72203	AHTD Equipment and Procurement Division 11302 W. Baseline Road Little Rock, AR 72209

Sealed bids for furnishing the commodities and/or services described below, subject to the Conditions on Page 2 of this Bid Invitation will be received at the above-noted mail and delivery locations until the above-noted bid opening date and time, and then publicly opened at the above-noted bid opening location. **Bids must be submitted on this form, with attachments when appropriate, or bids will be rejected. Late bids and unsigned bids will not be considered.**

In compliance with this Bid Invitation and subject to all the Conditions thereof, the undersigned offers and agrees to furnish any and all items upon which prices are quoted, at the price set opposite each item.

Company Name:_____ Name (Type or Print):_____

Address:_____ Title:_____

_____ Phone:_____ Fax:_____

City:_____ State:_____ Zip:_____ E-mail Address:_____

Federal Tax ID or Social Security No.:_____ **Signature:**_____
Signature must be legible, original (not photocopied) and in ink.
Unsigned bids will be rejected.

1. Asbestos Abatement and Demolition located at U.S. Hwy. 412 (Springdale Northern Bypass), Benton County; as per attached work list for Tracts 80XR, 90X, 109X, 159X, 173X & 178X - Job 001966.

To meet the requirements of Arkansas State Highway and Transportation Department Specifications and Drawings attached to and made a part of this bid.

LUMP SUM_____

Tracts **must** be priced individually as listed on the Work List but bid will be awarded by the Lump Sum.

Additional tracts and/or structures may be added to this contract from this job.

Pricing for Additional Pay Items is requested on Page 4.
(Additional pay item pricing will be on an as needed basis and does not obligate the Department to award any additional tracts.)

PLEASE NOTATE THE MAILING AND DELIVERY LOCATIONS ABOVE TO ENSURE THE BID ARRIVES AT THE CORRECT LOCATION AND PRIOR TO TIME OF BID OPENING.

Contact for Technical Information: Joel Clark, Property Manager (501-569-2317)
Contacts for Bidding Information: Danny Keene (501-569-2674) or Chicita Pate (501-569-2675)

Bid price shall include all labor, materials, and equipment necessary to perform the work as specified, and shall further include all licenses, fees, permits, royalties, and all taxes. Bid price shall represent full compensation for completion of the work. This provision supersedes Condition 4 on page 2 of Bid Invitation. Payment will be made in accordance with Arkansas Highway & Transportation Department Standard Specifications and Applicable Special Provisions.

Bid Bond in the amount of 5% of total bid price required of all bidders at time of bid opening or bid will be rejected. **Personal and company checks are not acceptable as Bid Bonds.** See Condition 3 on page 2 of Bid Invitation.
Performance Bond only (no checks of any kind allowed) in the amount of 100% of total bid price will be required of successful bidder prior to providing goods/services. See Condition 3 on page 2 of Bid Invitation.

The successful bidder will be required to submit Notice of Intent (NOI) to ADEQ within 3 days after receipt of Purchase Order and to complete all work within forty-five (45) calendar days from the starting date on the NOI. Work not completed within this time frame shall result in the successful bidder being charged $120.00 per day until work is completed.

Name, Address, Phone No. of Disposal Site:_____

Bids and Specifications are available on-line by going to the AHTD Web Site – www.arkansashighways.com and clicking on "Commodities and Services Bids/Contracts Information". Tabulations will also be available at this site within 72 hours after bid opening. If you have any questions, call this office at 501-569-2667.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

STANDARD BID CONDITIONS

M-15-015P

1. **ACCEPTANCE AND REJECTION:** The Arkansas State Highway and Transportation Department (AHTD) reserves the right to reject any or all bids, to accept bids in whole or in part (unless otherwise indicated by bidder), to waive any informalities in bids received, to accept bids on materials or equipment with variations from specifications where efficiency of operation will not be impaired, and to award bids to best serve the interest of the State.

2. **PRICES:** Unless otherwise stated in the Bid Invitation, the following will apply: (1) unit prices shall be bid, (2) prices should be stated in units of quantity specified (feet, each, lbs., etc.), (3) prices must be F.O.B. destination specified in bid, (4) prices must be firm and not subject to escalation, (5) bid must be firm for acceptance for 30 days from bid opening date. In case of errors in extension, unit prices shall govern. Discounts from bid price will not be considered in making awards.

3. **BID BONDS AND PERFORMANCE BONDS**: If required, a **Bid Bond** in the form of a cashier's check, certified check, or surety bond issued by a surety company, in an amount stated in the Bid Invitation, must accompany bid. **Personal and company checks are not acceptable as Bid Bonds**. Failure to submit a Bid Bond as required will cause a bid to be rejected. The Bid Bond will be forfeited as liquidated damages if the successful bidder fails to provide a required Performance Bond within the period stipulated by AHTD or fails to honor their bid. When a bidder claims and can show clear and convincing evidence that a material mistake was made in the bid and was not the bid intended, the bidder may be permitted to withdraw their bid prior to award without forfeiture of bid bond. Cashier's checks and certified checks submitted as Bid Bonds will be returned to unsuccessful bidders; surety bonds will be retained. The successful bidder will be required to furnish a **Performance Bond** in an amount stated in the Bid Invitation and in the form of a cashier's check, certified check, or surety bond issued by a surety company, unless otherwise stated in the Bid Invitation, as a guarantee of delivery of goods/services in accordance with the specifications and within the time established in the bid. **Personal and company checks are not acceptable as Performance Bonds**. In some cases, a cashier's check or certified check submitted as a Bid Bond will be held as the Performance Bond of the successful bidder. Cashier's checks or certified checks submitted as Performance Bonds will be refunded shortly after payment has been made to the successful bidder for completion of all terms of the bid; surety bonds will be retained. Surety bonds must be issued by a surety company authorized to do business in Arkansas, and must be signed by a Resident Local Agent licensed by the Arkansas State Insurance Commissioner to represent that surety company. Resident Agent's Power-of-Attorney must accompany the surety bond. Certain bids involving labor will require Performance Bonds in the form of surety bonds only (no checks of any kind allowed). These bonds shall not only serve to guarantee the completion of the work, but also to guarantee the excellence of both workmanship and material until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions fulfilled. In such cases, the company issuing the surety bond must comply with all stipulations herein and must be named in the U. S. Treasury listing of companies holding Certificates of Authority as acceptable sureties on Federal Bonds and as acceptable reinsuring companies. Any excess between the face amount of the bond and the underwriting limitation of the bonding company shall be protected by reinsurance provided by an acceptable reinsuring company. Annual Bid and Performance Bonds on file with E & P Division must have sufficient unencumbered funds to meet current bonding requirements, or the bid will be rejected, unless the balance is submitted as set forth above, prior to bid opening.

4. **TAXES:** The AHTD is not exempt from Arkansas State Sales and Use Taxes, or local option city/county sales taxes, when applicable, and bidders are responsible to the State Revenue Department for such taxes. These taxes should not be included in bid prices, but where required by law, will be paid by the AHTD as an addition thereto, and should be added to the billing to the AHTD. The AHTD is exempt from Federal Excise Taxes on all commodities except motor fuels; and excise taxes should not be included in bid prices except for motor fuels. Where applicable, tax exemption certificates will be furnished by the AHTD.

5. **"ALL OR NONE" BIDS:** Bidders who wish to bid "All or None" on two or more items shall so stipulate on the face of bid sheet; otherwise, bid may be awarded on an individual item basis.

6. **SPECIFICATIONS:** Complete specifications should be attached for any substitution or alternate offered, or where amplification is necessary. Bidder's name must be placed on all attachments to the bid.

7. **EXCEPTIONS TO SPECIFICATIONS:** Any exceptions to the bid specifications must be stated in the bid. Any exceptions to manufacturer's published literature must be stated in the bid, or it will be assumed that bidder is bidding exactly as stated in the literature.

8. **BRAND NAME REFERENCES:** All brand name references in bid specifications refer to that commodity or its equivalent, unless otherwise stated in Bid Invitation. Bidder should state brand or trade name of item being bid, if such name exists.

9. **FREIGHT:** All freight charges should be included in bid price. Any change in common carrier rates authorized by the Interstate Commerce Commission will be adjusted if such change occurs after the bid opening date. Receipted common carrier bills that reflect ICC authorized rate changes must be furnished.

10. **SAMPLES, LITERATURE, DEMONSTRATIONS:** Samples and technical literature must be provided free of any charge within 14 days of AHTD request, and free demonstrations within 30 days, unless AHTD extends time. Failure to provide as requested within this period may cause bid to be rejected. Samples, literature and demonstrations must be substantially the same as the item(s) being bid, unless otherwise agreed to by AHTD. Samples that are not destroyed will be returned upon request at bidders expense. Samples from successful bidders may be retained for comparison with items actually furnished.

11. **GUARANTY:** Unless otherwise indicated in Bid Invitation, it is understood and agreed that any item offered or shipped on this bid shall be newly manufactured, latest model and design, and in first class condition; and that all containers shall be new, suitable for storage or shipment and in compliance with all applicable laws relating to construction, packaging, labeling and registration.

12. **BACKORDERS OR DELAY IN DELIVERY:** Backorders or failure to deliver within the time required may constitute default. Vendor must give written notice to the AHTD, as soon as possible, of the reason for any delay and the expected delivery date. The AHTD has the right to extend delivery if reasons appear valid. If reason or delivery date is not acceptable, vendor is in default.

13. **DEFAULT:** All commodities furnished will be subject to inspection and acceptance by AHTD after delivery. Default in promised delivery or failure to meet specifications authorizes the AHTD to cancel award or any portion of same, to reasonably purchase commodities or services elsewhere and to charge full increase, if any, in cost and handling to defaulting vendor. Applicable bonds may be forfeited.

14. **ETHICS:** *"It shall be a breach of ethical standards for a person to be retained, or to retain a person, to solicit or secure a State contract upon an agreement of understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies maintained by the contractor for the purpose of securing business."* (Arkansas Code, Annotated, Section 19-11-708).

ARKANSAS STATE HIGHWAY
AND TRANSPORTATION DEPARTMENT

NOTICE OF NONDISCRIMINATION

The Arkansas State Highway and Transportation (Department) complies with all civil rights provisions of federal statutes and related authorities that prohibit discrimination in programs and activities receiving federal financial assistance. Therefore the Department does not discriminate on the basis of race, sex, color, age, national origin, religion or disability, in the admission, access to and treatment in the Department's programs and activities, as well as the Department's hiring or employment practices. Complaints of alleged discrimination and inquiries regarding the Department's nondiscrimination policies may be directed to Joanna P. McFadden, Section Head - EEO/DBE (ADA/504/Title VI Coordinator), P. O. Box 2261, Little Rock, AR 72203, (501) 569-2298, (Voice/TTY 711), or the following email address: Joanna.Mcfadden@arkansashighways.com.

This notice is available from the ADA/504/Title VI Coordinator in large print, on audiotape and in Braille.

BIDDER:_____

ITEM NO.	DESCRIPTION	AMOUNT
1.	Asbestos Abatement	$_____ Square Foot
2.	Demolition	$_____ Square Foot
3.	Foundation	$_____ Linear Foot
4.	Foundation Slab	$_____ Square Foot
5.	Cap Well	$_____ Each
6.	Remove Septic System	$_____ Each
7.	Fencing	$_____ Linear Foot
8.	Basement	$_____ Square Foot

Job 001966
U. S. Hwy. 412
(Springdale Northern Bypass)
Benton County

Bid Requirements

Bid price shall include all insurance, taxes, permits, ADEQ notifications, license, labor, equipment, and material necessary to complete the work. Actual quantity of material to be removed may differ slightly from the estimated amount shown above. Bid price shall reflect actual quantity of material to be removed and bidders are strongly encouraged to inspect the premises prior to bidding to verify the quantity. All asbestos abatement/demolition work must be done according to the method and requirements contained in the **"SPECIAL PROVISIONS"** and work list which will be attached and made a part of the bid and contract.

Contractor shall comply with all state, local and federal laws associated with this work. All structures must be completely removed, including slabs, footings, foundations, private walkways, decks, basements, posts, poles, fences within Proposed Right of Way along with all debris. Determination of the extent of work necessary for complete removal of the structures is strictly the responsibility of the bidder. Basements **(if applicable)** will be removed, backfilled with suitable material and left level with the surrounding area. Water wells **(if applicable)** shall have equipment removed and casing securely covered for safety. Septic tanks **(if applicable)**, when in right of way, shall be pumped empty, removed, and void backfilled with suitable material. If septic tank is outside of right of way, contractor will cut the line to tank and cap the line just beyond the right of way line. Contractor will be required to comply with the provisions of "Appendix A" (Required Contract Provisions Federal-Aid Construction Contracts) that will be attached and made a part of the bid and contract.

It is understood that all combustible materials, construction material and all other rubbish, including shrubbery and trees which are cut or uprooted to facilitate operations, will be cleared from the premises by the contractor and, **in all other respects, the premises will be left in a generally level, safe, and sanitary condition, a condition in which it can be mowed and maintained safely**. The contractor shall endeavor to avoid unnecessary damage or destruction of trees, shrubs, and plants on the premises.

NOTE: CONTRACTOR MUST FILE TEN (10) DAY NOTICE WITH ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ); HOWEVER, BIDS SHOULD INCLUDE REGISTRATION FEE ON EACH PROJECT. Dumping of demolition waste materials shall be at a landfill permitted by the Arkansas Department of Environmental Quality (ADEQ) or at an un-permitted site approved by ADEQ. Contractor must call ONE CALL for location of other utilities at this job site.

In the event that utility service lines, meters, etc., are disconnected, destroyed or otherwise impaired in any way by reason of performance of this operation by the contractor, the contractor shall, at his own expense, be responsible for all replacement utility service in lieu of those affected. Contractor must call ONE CALL for location of other utilities at this job site

Contractor shall be required to hold a current license issued by the Arkansas Department of Environmental Quality for the removal of asbestos. For demolition, State law requires a contractor's license for jobs over $20,000.00. Changes in the scope of work must have prior approval by the Departments Property Manager in order to be eligible for payment.

ARKANSAS HIGHWAY &TRANSPORTATION DEPARTMENT
PROPERTY MANAGEMENT
ASBESTOS ABATEMENT AND DEMOLITION CONTRACT BID

Job 001966
U. S. Hwy. 412
(Springdale Northern Bypass)
Benton County
Tracts 80XR, 90X, 109X, 159X, 173X & 178X

Tract 80XR - 7022 W. Miller Rd. Springdale, AR	Unit Price	Extended Price
Asbestos Abatement:		
766 SF of Chrysotile in the floor areas of C, D, & E.	$ _____ /SF	$ _____
976 SF of Chrysotile in all interior ceilings	$ _____ /SF	$ _____
248 SF of Chrysotile in the walls of area B	$ _____ /SF	$ _____
Total Asbestos Abatement:		$ _____
Demolition:		
1,100 SF 1-S-F Dwelling	$ _____ /SF	$ _____
1,700 SF 2-S-F Barn	$ _____ /SF	$ _____
Septic System	$ _____ /EA	$ _____
Total Demolition:		$ _____
Total Demolition and Asbestos Abatement for 80XR:		**$** _____

Tract 90X – 8395 E. Wagon Wheel Rd Lowell, AR 72745	Unit Price	Extended Price
Asbestos Abatement:		
464 SF of Chrysotile in the floor areas of B & E.	$ _____ /SF	$ _____
Total Asbestos Abatement:		$ _____
Demolition:		
2,400 SF Dwelling	$ _____ /SF	$ _____
Septic System	$ _____ /EA	$ _____
Total Demolition:		$ _____
Total Demolition and Asbestos Abatement for 90X:		**$** _____

Tract 109X – 13016 S. Zion Rd Springdale, AR	Unit Price	Extended Price
No asbestos abatement necessary:		
Demolition:		

1,204 SF Mobile home	$	/SF	$	
552 SF Garage	$	/SF	$	
120 SF Out building	$	/SF	$	
Septic System	$	/EA	$	
Cap Well	$	/EA	$	
Total Demolition:			$	

Total Demolition and Asbestos Abatement for 109X: $ _____

Tract 159X – 804 Goad Springs Rd Unit Price Extended Price
Lowell, AR 72745

Asbestos Abatement:				
216 SF of Chrysotile in the Floor areas of A & D.	$	/SF	$	
640 SF of Chrysotile in the Ceiling areas of A,B,C,D,E, & F (All ceiling areas except G)	$	/SF	$	
1,632 SF of Chrysotile in the Wall areas of A,B,C,D,E, & F (All wall areas except G)	$	/SF	$	
Total Asbestos Abatement:			$	
Demolition:				
760 SF 1-S-F Dwelling	$	/SF	$	
620 SF 1-S-CB Building	$	/SF	$	
Septic System	$	/EA	$	
Total Demolition:			$	

Total Demolition and Asbestos Abatement: $ _____

Tract 173X – 1220 McMillan Place Unit Price Extended Price
Lowell, AR 72745

No asbestos abatement necessary:				
Demolition:				
2,530 SF 2-S-B/F Dwelling	$	/SF	$	
1,400 SF 1-S-M Shop (wood frame)	$	/SF	$	
Septic System	$	/EA	$	
Total Demolition:			$	

Total Demolition for 173X: $ _____

Tract 178 X, 7745 West Miller Road Unit Price Extended Price
Springdale, AR

Abate Approximately:				
3204 SF Chrysotile in the walls	$	/SF	$	

Total Abatement			$ _____
Demolition:			
1,986 SF 1-S-F Dwelling	$ _____	/SF	$ _____
1,288 SF Shed / Garage	$ _____	/SF	$ _____
36 SF Well House	$ _____	/SF	$ _____
Septic System	$ _____	/EA	$ _____
Cap Well	$ _____	/EA	$ _____
460 LF 3 rail wood fence	$ _____	/LF	$ _____
Total Demolition			$ _____
Total Abatement & Demolition Tract 178 X			$ _____
Total Lump Sum Price of Abatement and Demolition			$ _____

Note 1: Read "Demolition" and "Job Bid Requirements" for extent of Demolition Bid.

Note 2: This list is to be returned with bid and becomes part of the contract.

DEMOLITION: For contract bidding purposes, demolition per square foot includes removal of any and all improvements within the acquired proposed right of way. All structures must be completely removed, including but not limited to: slabs, footings, foundations, basements, posts, poles, decks, fences and all debris. The contractor must leave the work site in a safe and level condition.

Disclaimer:

Samples were collected from materials identified as Homogeneous Materials based upon visual inspection of the site. AHTD is not responsible for assumptions on homogeneity which prove to be incorrect. In addition, samples collected represent only that portion of the entire homogeneous material. AHTD is not responsible for materials not identified and sampled due to the restraints on accessibility of the material due to the type of construction and finish materials of the building. This report refers to the Site and Facility as it appeared on the day of the inspection. No warranties, expressed or implied, relate to the previous and or future conditions at the Site.

Analysis was performed by Crisp Analytical Laboratories, L.L.C., Carrollton, TX. Crisp Analytical Laboratories, L.L.C. is solely responsible for all analytical results contained in and referred to in this report.

PROPERTY MANAGEMENT
ASBESTOS ABATEMENT & DEMOLITION CONTRACT

Job 001966
U. S. Hwy. 412
(Springdale Northern Bypass)
Benton County
Tracts 80XR, 90X, 109X, 159X, 173X, 178X

Special Instructions

Directions to 80XR and 178X: Miller Road turns east at the intersection of West Miller and Grimsley Road. Miller Road is a gravel road once it turns from Grimsley Road. Tract 178X will be on the south side of West Miller Road approximately ¼ of a mile after the intersection of West Miller and Grimsley Road. Tract 80XR will be to the northeast of tract 178X. Tract 80XR has to be accessed through the property at 81X. The physical address of 81X is 7232 West Miller Road, Springdale AR, 72764. Please refer to the maps provided. There are two gates on the east side of 81XR; one is a metal farm gate and the other is a homemade barbwire gate. The contractor can use either gate to access 80XR. After entering one of the gates, turn left toward the center of the field. Drive northeast on the crest of the hill as indicated on the map.

There may be cattle in the field, so please shut the gates after each entry and exit.

Tract 90X: The contractor may have to remove one or two stumps at the edge of the driveway in order to navigate trucks and equipment. The contractors are encouraged to inspect the property prior to bidding.

Tract 109X: Tract 109X is very difficult to see from Zion Road due to the growth of vegetation on the property. The driveway is easier accessed traveling north on Zion Road. The well is located under the north end of the mobile home.

Tract 173XR: From Goad Springs Road, turn west on Burrell Place. Burrell will turn south. Stay straight at the curve onto Conrad Place. Tract 173XR will be at the end of the drive.

NOTICE TO CONTRACTORS
COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964
FOR
FEDERAL AID CONTRACTS
APPENDIX "A"

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(1) Compliance with Regulations: The contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

(2) Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

(3) Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor or work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

(4) Information and Reports: The contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Arkansas State Highway & Transportation Department or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the Arkansas State Highway & Transportation Department, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

(5) Sanctions for Noncompliance: In the event of the contractor's non-compliance with the nondiscrimination provisions of this contract, the Arkansas State Highway & Transportation Department shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

(a) Withholding of payments to the contractor under the contract until the contractor complies, and/or

(b) Cancellation, termination or suspension of the contract, in whole or in part.

(6) Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Arkansas State Highway & Transportation Department or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Arkansas State Highway & Transportation Department to enter into such litigation to protect the interests of the State, and, litigation to protect the interests of the United States.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
SPECIAL PROVISION

REMOVAL OF SHEET ROCK, WHICH CONTAINS ASBESTOS FROM BUILDINGS TO BE DEMOLISHED

GENERAL

The material which contains asbestos (ACM) has been identified in this building. This building must be demolished as part of the right-of-way clearing for the construction of the above-captioned job. Prior to demolition of these buildings, the ACM must be removed and disposed of in compliance with this special provision and the asbestos regulations promulgated by Arkansas Department of Environmental Quality (ADEQ) and the Environmental Protection Agency.

DESCRIPTION OF WORK:

All work performed under this special provision shall be in compliance with the Arkansas Asbestos Abatement Regulations promulgated by the Arkansas Department of Environmental Quality (ADEQ), as adopted pursuant to Part Two of the Arkansas Water and Air Pollution Act. (Date of Regulations: November 29, 1990)

Except as specified in this special provision, the contractor shall comply with all notification, record keeping, work procedure, containerization, storage, transportation, disposal and licensing requirements of the Arkansas Asbestos Abatement Regulations for the removal of ACM and applicable OSHA worker protection requirements (29 CFR, 1910 - Respiratory protection). Disposal and record keeping requirements of NESHAP - National Emission Standards for Hazardous Air Pollutants (40 CFR 61 Subpart M) shall also be incorporated into the project's work procedures and designated in the work plan of the asbestos abatement contractor.

The general work procedure shall include the removal of the ACM and any associated from the designated area in the identified buildings. Estimated quantities of material to be removed and disposed of are provided in the contract. The removal of the ACM must be conducted in a containment area, which includes polyethylene containment barrier walls. This containment area must also include the use of a negative air filtration system (HEPA filters) to create negative pressure as required by ADEQ regulations. The material shall be removed as required by ADEQ regulations with containerization, storage, transportation and disposal of the ACM accomplished according to ADEQ Asbestos regulations. Wet cleaning and HEPA filter vacuuming shall be repeated until no visible residuals are observed in the work area or until any remaining can be safely encapsulated. All records of the work performed and the disposal at an approved landfill (including the disposal receipt) shall be provided to the Arkansas Highway and Transportation Department within three working days of the completion of the contracted work.

All work shall be performed by a licensed asbestos contractor and by trained asbestos abatement workers as required by ADEQ. All appropriate worker protection rules for this removal of asbestos containing materials shall apply as per OSHA and ADEQ regulations.

A work plan and worker protection plan shall be provided to AHTD prior to the commencement of work for review and approval.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
SPECIAL PROVISION

REMOVAL OF FLOORING WHICH CONTAINS ASBESTOS FROM BUILDINGS TO BE DEMOLISHED

GENERAL

Floor covering which contains asbestos (ACM) has been identified in buildings to be demolished as part of the right-of-way clearing for the construction of the above captioned job. Prior to demolition of these buildings, the ACM must be removed and disposed of in compliance with this special provision and the asbestos regulations promulgated by Arkansas Department of Environmental Quality (ADEQ) and the Environmental Protection Agency.

DESCRIPTION OF WORK:

All work performed under this special provision shall be in compliance with the Arkansas Asbestos Abatement Regulations promulgated by the Arkansas Department of Environmental Quality (ADEQ), as adopted pursuant to Part Two of the Arkansas Water and Air Pollution Act. (Date of Regulations: November 29, 1990)

Except as specified in this special provision, the contractor shall comply with all notification, record keeping, work procedure, containerization, storage, transportation, disposal and licensing requirements of the Arkansas Asbestos Abatement Regulations for the removal of ACM and applicable OSHA worker protection requirements (29 CFR, 1910 - Respiratory protection). Disposal and record keeping requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 61 Subpart M) shall also be incorporated into the project's work procedures and designated in the work plan of the asbestos abatement contractor.

The general work procedure shall include the removal of the ACM and any associated mastic material from the designated area in the identified buildings. Estimated quantities of material to be removed and disposed of are provided in the contract. The removal of the ACM flooring must be conducted in a containment area, which includes polyethylene containment barrier walls. This containment area must also include the use of a negative air filtration system (HEPA filters) to create negative pressure as required by ADEQ regulations. The material shall be removed as required by ADEQ regulations with containerization, storage, transportation and disposal of the ACM accomplished according to ADEQ Asbestos regulations. Wet cleaning and HEPA filter vacuuming shall be repeated until no visible residuals are observed in the work area or until any remaining mastic can be safely encapsulated. All records of the work performed and the disposal at an approved landfill (including the disposal receipt) shall be provided to the Arkansas Highway and Transportation Department within three working days of the completion of the contracted work.

All work shall be performed by a licensed asbestos contractor and by trained asbestos abatement workers as required by ADEQ. All appropriate worker protection rules for this removal of asbestos containing flooring shall apply as per OSHA and ADEQ regulations.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

SPECIAL PROVISION

REMOVAL OF FLOOR COVERING MASTIC WHICH CONTAINS ASBESTOS FROM BUILDINGS TO BE DEMOLISHED

GENERAL:

Floor covering mastic which contains asbestos has been identified in a building to be demolished as part of the right-of-way clearing for the construction of the above captioned job. Prior to demolition of this building, the floor covering and associated mastic which contains asbestos must be removed and disposed of in compliance with this special provision and the asbestos regulations promulgated by Arkansas Department of Environmental Quality(ADEQ).

DESCRIPTION OF WORK:

All work performed under this special provision shall be in compliance with the Arkansas Asbestos Abatement Regulations promulgated by the Arkansas Department of Environmental Quality, as adopted pursuant to Part Two of the Arkansas Water and Air Pollution Act. (Date of Regulations: November 29, 1990)

Except as specified in this special provision, the contractor shall comply with all notification, record keeping, work procedure, containerization, storage, transportation, disposal and licensing requirements of the Arkansas Asbestos Abatement Regulations 21 for the removal of floor covering which contains asbestos and applicable OSHA worker protection requirements (29 CFR, 1910 - Respiratory protection). Disposal and record keeping requirements of NESHAP - National Emission Standards for Hazardous Air Pollutants (40 CFR 61 Subpart M) shall also be incorporated into the project's work procedures and designated in the work plan of the asbestos abatement contractor.

The general work procedure shall include the removal of the floor covering and all associated mastic material from the designated area in the identified building. The removal of the ACM mastic and flooring must be conducted in a containment area, which includes polyethylene containment barrier walls. This containment area must also include the use of a negative air filtration system (HEPA filters) to create negative pressure as required by ADEQ regulations. The material shall be removed as required by ADEQ regulations with containerization, storage, transportation and disposal of the ACM accomplished according to ADEQ Asbestos Regulations 21. Wet cleaning and HEPA vacuuming shall be repeated until no visible residuals are observed in the work area or until any remaining mastic can be safely encapsulated. All records of the work performed and the disposal at an approved landfill (including the disposal receipt) shall be provided to the Arkansas Highway and Transportation Department within two working days of the completion of the contracted work.

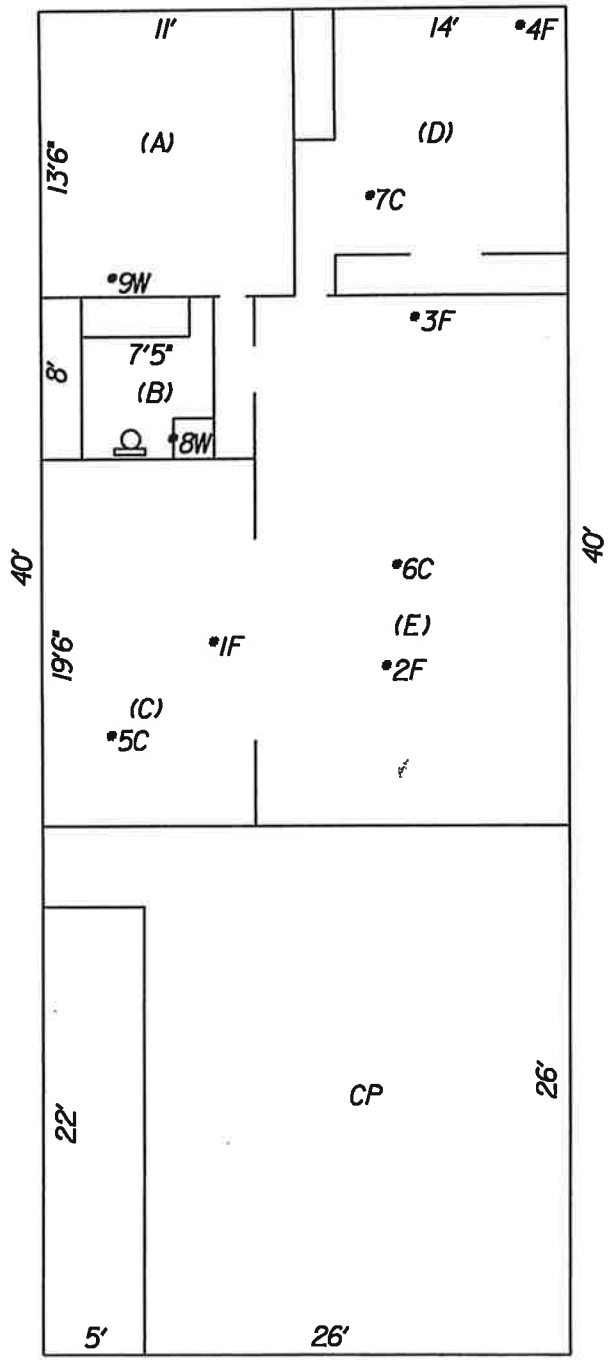
All work shall be performed by a licensed asbestos contractor and by trained asbestos abatement workers as required by ADEQ. All appropriate worker protection rules for this removal of asbestos containing flooring shall apply as per OSHA and ADEQ Regulations 21.

INSPECTION FLOOR PLAN

		PROPERTY LOCATION	INSPECTED BY
JOB:	001966	1-S-B Dwelling	Joel Clark (011518)
TRACT:	80 XR	7022 W. Miller Rd	Sherman Whittle (015689)
DATE:	7/15/2014	Springdale, AR	

Sample Number	Description/ Locaton	Sample Number	Description/ Location
#1	C) Floor	#11	
#2	E) Floor	#12	
#3	E) Floor	#13	
#4	D) Floor	#14	
#5	C) Ceiling	#15	
#6	E) Ceiling	#16	
#7	D) Ceiling	#17	
#8	B) Wall	#18	
#9	A) Wall	#19	
#10		#20	

Homogenous Areas:	
Roofing	Metal
Siding	Wood
Ceilings	ACDE (Texture); B Sheet Rock
Walls	Panelling
Floors (A, B) Linoleum,	CDE (9" Tile & Black Mastic



JOB 001966 Tract 80 XR

1-S-FRAME DWELLING

7022 W. MILLER RD.

SPRINGDALE, AR 1,100 SF

CA Labs

Crisp Analytical Laboratories, L.L.C.
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

CAL1407 5110

		CA Labs job	CAL#
Client Name:	AHTD		
Client Address:	P.O. Box 2261	Billing Address:	
	Room #705	(if different)	
	Little Rock, AR 72203-2261		
phone number:	501-569-2317 or 2318	P.O. # :	Job #001966, Tr. 80XR
fax number:		Project Name:	Tract 7022W. Miller Rd
Send Reports to:	Joeld.Clark@arkansashighways.com Sherman.whittle@arkansashighways.com	Project Number:	Job # Springdale Bypass

Total # Samples Submitted: 9	Total # Samples to be Analyzed: 9	Material Matrix: Air / **Bulk** / Water

Asbestos:*please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**PCM**: NIOSH 7400	Note TAT
AHERA	*4 hour*	Improved	4 hour	Allergen Particle:	24 hour
EPA Level II	8 hour	Interim	8 hour	tape/bulk/swab	2 days
Drinking Water	16 hour		16 hour	Cyclex-d cassettes	3 days
Wipe	24 hour	**AHERA**	24 hour	Air-o-cell cassettes	5-10 days
Micro-vac	2 days		2 days	Anderson cultures	Specify
NIOSH 7402	3 days	Point Count -	**3 days**	Bulk/swab cultures	Mold or
Chatfield Bulk	5 days	(NESHAPS)	5 days	Bacteria cultures	bacteria

Please indicate appropriate turn around time. (minimum turnaround - 3 Days for Lead TCLP and water)
Lead: *Circle analysis and TA time*

Sample Information:

Sample #:	Sample Location:	Sample Date/Time:	Sample Volume (L)
#1, 001966 TR 80XR	(C) Floor	7/15/2014	
#2, 001966 TR 80XR	(E) Floor	7/15/2014	
#3, 001966 TR 80XR	(E) Floor	7/15/2014	
#4, 001966 TR 80XR	(D) Floor	7/15/2014	
#5, 001966 TR 80XR	(C) Ceiling	7/15/2014	
#6, 001966 TR 80XR	(E) Ceiling	7/15/2014	
#7, 001966 TR 80XR	(D) Ceiling	7/15/2014	
#8, 001966 TR 80XR	(B) Wall	7/15/2014	
#9, 001966 TR 80XR	(A) Wall	7/15/2014	
#10			

Custody Information:

Samples relinquished: K Whittle 7/18/14 11:40 am
Signature / Date / Time

Samples received: Justin Eee 7/23/14 10:30 am
Signature / Date / Time

CA Labs
Dedicated to Quality

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Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Attn: Robert Pooler
Customer Project: Tr. 80XR, Tract 7022 W. Miller Rd.
Reference #: CAL14075110CB Date: 7/28/2014

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be delectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
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Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Overview of Project Sample Material Containing Asbestos

Customer Project: Tr. 80XR, Tract 7022 W. Miller Rd. **CA Labs Project #:** CAL14075110CB

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
#1, 001966 TR 80 XR	1-2	*black mastic*	***2% Chrysotile***	***black mastic***
#2, 001966 TR 80 XR	2-1	***(E) Floor/*** *tan thin floor tile*	***5% Chrysotile***	***tan thin floor tile***
	2-2	*black mastic*	***4% Chrysotile***	***off-white surfaced white compound***
#3, 001966 TR 80 XR	3-1	***(E) Floor/*** *tan thin floor tile*	***4% Chrysotile***	
	3-2	*black mastic*	***5% Chrysotile***	
#4, 001966 TR 80 XR	4-1	***(D) Floor/*** *tan thin floor tile*	***4% Chrysotile***	
	4-2	*black mastic*	***4% Chrysotile***	
#5, 001966 TR 80 XR	5-1	***(C) Ceiling/*** *off-white surfaced white compound*	***2% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235

AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Overview of Project Sample Material Containing Asbestos

Customer Project: Tr. 80XR, Tract 7022 W. Miller Rd. **CA Labs Project #:** CAL14075110CB

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
#6, 001966 TR 80 XR	6-1	***(E) Ceiling**/ off-white surfaced white compound*	***3% Chrysotile***	
#7, 001966 TR 80 XR	7-1	***(D) Ceiling**/ off-white surfaced white compound*	***3% Chrysotile***	
#8, 001966 TR 80 XR	8-1	***(B) Wall**/ off-white surfaced white compound*	***2% Chrysotile***	
#9, 001966 TR 80 XR	9-1	***(A) Wall**/ off-white surfaced white compound*	***2% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235

AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 80XR, Tract 7022 W. Miller Rd.
Turnaround Time:
3 Days

CA Labs Project #:
CAL14075110CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
#1, 001966 TR 80 XR		1-1	***(C) Floor/*** *off-white linoleum*	n	***None Detected***	29% ce	71% ot
		1-2	*black mastic*	y	***2% Chrysotile***		98% ma
#2, 001966 TR 80 XR		2-1	***(E) Floor/*** *tan thin floor tile*	y	***5% Chrysotile***		95% qu,ca
		2-2	*black mastic*	y	***4% Chrysotile***		96% ma
#3, 001966 TR 80 XR		3-1	***(E) Floor/*** *tan thin floor tile*	y	***4% Chrysotile***		96% qu,ca
		3-2	*black mastic*	y	***5% Chrysotile***		95% ma
#4, 001966 TR 80 XR		4-1	***(D) Floor/*** *tan thin floor tile*	y	***4% Chrysotile***		96% qu,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 80XR, Tract 7022 W. Miller Rd.
Turnaround Time:
3 Days

CA Labs Project #:
CAL14075110CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		4-2	*black mastic*	*y*	***4% Chrysotile***		96% ma
#5, 001966 TR 80 XR		*5-1*	***(C) Ceiling**/ off-white surfaced white compound*	*n*	***2% Chrysotile***		98% qu,mi,ca
		5-2	*white drywall with brown paper*	*n*	***None Detected***	29% ce	71% gy
#6, 001966 TR 80 XR		*6-1*	***(E) Ceiling**/ off-white surfaced white compound*	*n*	***3% Chrysotile***		97% qu,mi,ca
		6-2	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% gy
#7, 001966 TR 80 XR		*7-1*	***(D) Ceiling**/ off-white surfaced white compound*	*n*	***3% Chrysotile***		97% qu,mi,ca
		7-2	*white drywall with brown paper*	*y*	***None Detected***	32% ce	68% gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 80XR, Tract 7022 W. Miller Rd.
Turnaround Time:
3 Days

CA Labs Project #:
CAL14075110CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
#8, 001966 TR 80 XR			***(B) Wall/*** *off-white surfaced*				
		8-1	*white compound*	*n*	***2% Chrysotile***		98% qu,mi,ca
		8-2	*white drywall with brown paper*	*n*	***None Detected***	20% ce	80% gy
#9, 001966 TR 80 XR			***(A) Wall/*** *off-white surfaced*				
		9-1	*white compound*	*n*	***2% Chrysotile***		98% qu,ca
		9-2	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

Google earth

Tract 80XR
7022 W. Miller Rd.
Springdale, AR

Job 001966
U. S. Hwy. 412
(Springdale Northern Bypass)
Benton County

Tract 80XR

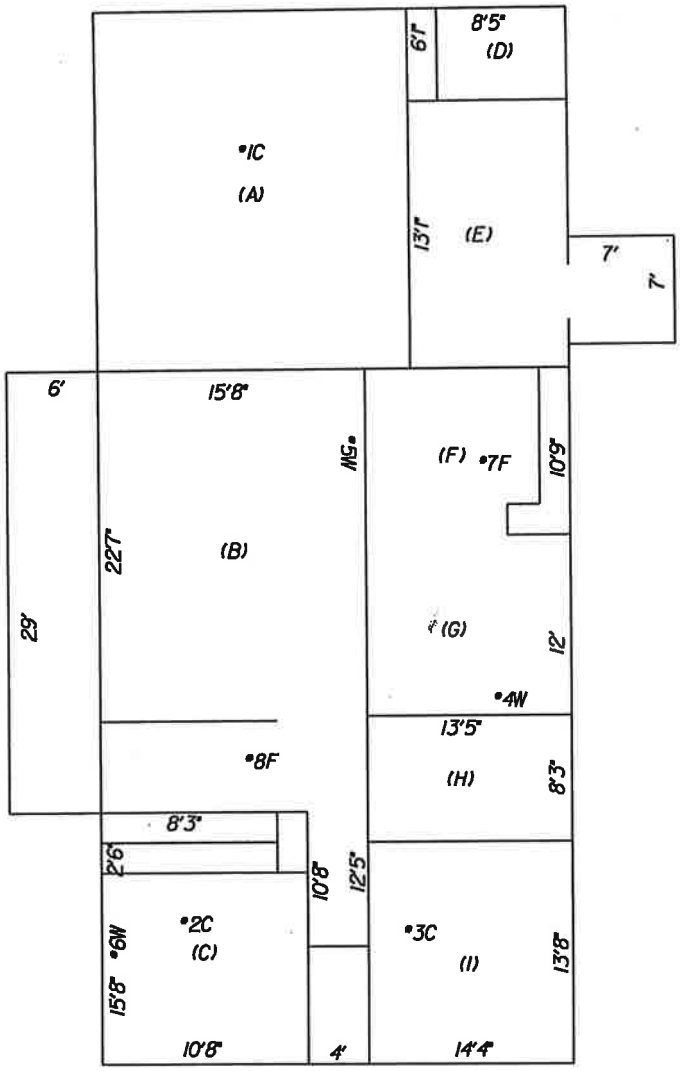
Job 001966
U. S. Hwy. 412
(Springdale Northern Bypass)
Benton County

Tract 80XR

JOB:	001966	PROPERTY LOCATION	INSPECTED BY
TRACT:	90 X	1-S-B Dwelling	Sherman Whittle (015689)
DATE:	7/15/2014	8395E. Wagon Wheel Road	Joel Clark (011518
		Lowell, AR 72745	

Sample Number	Description/ Locaton	Sample Number	Description/ Location
#1	A) Ceiling	#11	
#2	C) Ceiling	#12	
#3	I) Ceiling	#13	
#4	G) Wall	#14	
#5	B) Wall	#15	
#6	C) Wall	#16	
#7	E) Floor	#17	
#8	B) Floor	#18	
#9		#19	
#10		#20	

Homogenous Areas:	
Roofing	Shingles
Siding	Brick
Ceilings	Sprade on Sheet Rock
Walls	Panelling
Floors	A-D, I Carpet; B, D-H Linoleum



Job 001966 Tract 90X
1-S-B Dwelling
8395 E.Wagon Wheel Rd.
Lowell, AR 72745
Approx. 2,400 SF

CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

CAL1407511

Client Name:	AHTD	**CA Labs job**	**CAL#**
Client Address:	P.O. Box 2261	Billing Address:	
	Room #705	(if different)	
	Little Rock, AR 72203-2261		
phone number:	501-569-2317 or 2318	P.O. # :	Job # 001966, Tr. 90X
fax number:		Project Name:	Tract 8395 E. Wagon Wheel Rd
Send Reports to:	Joeld.Clark@arkansashighways.com Sherman.whittle@arkansashighways.com	Project Number:	Job # Springdale Bypass

Total # Samples Submitted: 8	**Total # Samples to be Analyzed: 8**	**Material Matrix:** Air / **Bulk** / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	**TA Time**	**PLM**	**TA Time**	**Optical / IAQ**	**TA Time**
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**PCM**: NIOSH 7400	Note TAT
AHERA	*4 hour*	Improved	4 hour	Allergen Particle:	24 hour
EPA Level II	8 hour	Interim	8 hour	tape/bulk/swab	2 days
Drinking Water	16 hour		16 hour	Cyclex-d cassettes	3 days
Wipe	24 hour	**AHERA**	24 hour	Air-o-cell cassettes	5-10 days
Micro-vac	2 days		2 days	Anderson cultures	Specify
NIOSH 7402	3 days	Point Count -	**3 days**	Bulk/swab cultures	Mold or
Chatfield Bulk	5 days	(NESHAPS)	5 days	Bacteria cultures	bacteria

Please indicate appropriate turn around time. (minimum turnaround - 3 Days for Lead TCLP and water)
Lead: *Circle analysis and TA time*

Sample Information:

Sample #:	Sample Location:	Sample Date/Time:	Sample Volume (L)
#1, 001966 TR 90X	(A) Ceiling	7/15/2014	
#2, 001966 TR 90X	(C) Ceiling	7/15/2014	
#3, 001966 TR 90X	(I) Ceiling	7/15/2014	
#4, 001966 TR 90X	(G) Wall	7/15/2014	
#5, 001966 TR 90X	(B) Wall	7/15/2014	
#6, 001966 TR 90X	(C) Wall	7/15/2014	
#7, 001966 TR 90X	(E) Floor	7/15/2014	
#8, 001966 TR 90X	(B) Floor	7/15/2014	
#9			
#10			

Custody Information:

Samples relinquished: SK Whittle 7/18/14 11:41 am
Signature / Date / Time

Samples received: Justin Ezz 7/23/14 10:30 am
Signature / Date / Time

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Attn: Robert Pooler
Customer Project: Tr. 90X, Tract 8395 E. Wagon Wheel Rd
Reference #: CAL1407511CB Date: 7/28/2014

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be delectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
Dedicated to Quality

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Fax 972-242-2798

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Overview of Project Sample Material Containing Asbestos

Customer Project: Tr. 90X, Tract 8395 E. Wagon Wheel Rd **CA Labs Project #:** CAL1407511CB

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
#7, 001966 TR 90X	7-1	***(E) Floor**/ tan linoleum*	***28% Chrysotile***	***tan linoleum***
#8, 001966 TR 90X	8-1	***(B) Floor**/ tan linoleum*	***27% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*
AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 90X, Tract 8395 E. Wagon Wheel Rd
Turnaround Time:
3 Days

CA Labs Project #:
CAL1407511CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
#1, 001966 TR 90X		1-1	***(A) Ceiling**/ white textured surfacing*	*y*	***None Detected***		100% qu,mi,ca
		1-2	*white compound (beneath tape)*	*y*	***None Detected***		100% qu,mi,ca
		1-3	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% gy
#2, 001966 TR 90X		2-1	***(C) Ceiling**/ white textured surfacing*	*y*	***None Detected***		100% qu,mi,ca
		2-2	*white compound (beneath tape)*	*y*	***None Detected***		100% qu,mi,ca
		2-3	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% gy
#3, 001966 TR 90X		3-1	***(I) Ceiling**/ white textured surfacing*	*y*	***None Detected***		100% qu,mi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 90X, Tract 8395 E. Wagon Wheel Rd
Turnaround Time:
3 Days

CA Labs Project #:
CAL1407511CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		3-2	*white compound (beneath tape)*	*y*	***None Detected***		100% qu,mi,ca
		3-3	*white drywall with brown paper*	*n*	***None Detected***	29% ce	71% gy
#4, 001966 TR 90X		*4-1*	***(G) Wall/** off-white surfaced white compound*	*n*	***None Detected***		100% qu,mi,ca
		4-2	*white compound (beneath tape)*	*y*	***None Detected***		100% qu,mi,ca
		4-3	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% gy
#5, 001966 TR 90X		*5-1*	***(B) Wall/** off-white surfaced white compound*	*n*	***None Detected***		100% qu,mi,ca
		5-2	*white compound (beneath tape)*	*y*	***None Detected***		100% qu,mi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
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3. Actinolite in association with Vermiculite
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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Baton Rouge, LA 70809
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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 90X, Tract 8395 E. Wagon Wheel Rd
Turnaround Time:
3 Days

CA Labs Project #:
CAL1407511CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		5-3	*white drywall with brown paper*	*n*	***None Detected***	29% ce	71% gy
#6, 001966 TR 90X		*6-1*	***(C) Wall**/ off-white surfaced white compound*	*n*	***None Detected***		100% qu,mi,ca
		6-2	*white compound (beneath tape)*	*y*	***None Detected***		100% qu,ca
		6-3	*white drywall with brown paper*	*n*	***None Detected***	29% ce	71% gy
#7, 001966 TR 90X		*7-1*	***(E) Floor**/ tan linoleum*	*n*	***28% Chrysotile***		72% ot
	4	*7-2*	*tan mastic*				
#8, 001966 TR 90X		*8-1*	***(B) Floor**/ tan linoleum*	*y*	***27% Chrysotile***		73% ot

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

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7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 90X, Tract 8395 E. Wagon Wheel Rd
Turnaround Time:
3 Days

CA Labs Project #:
CAL1407511CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
4		*8-2*	*tan mastic*				

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

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Technical Manager
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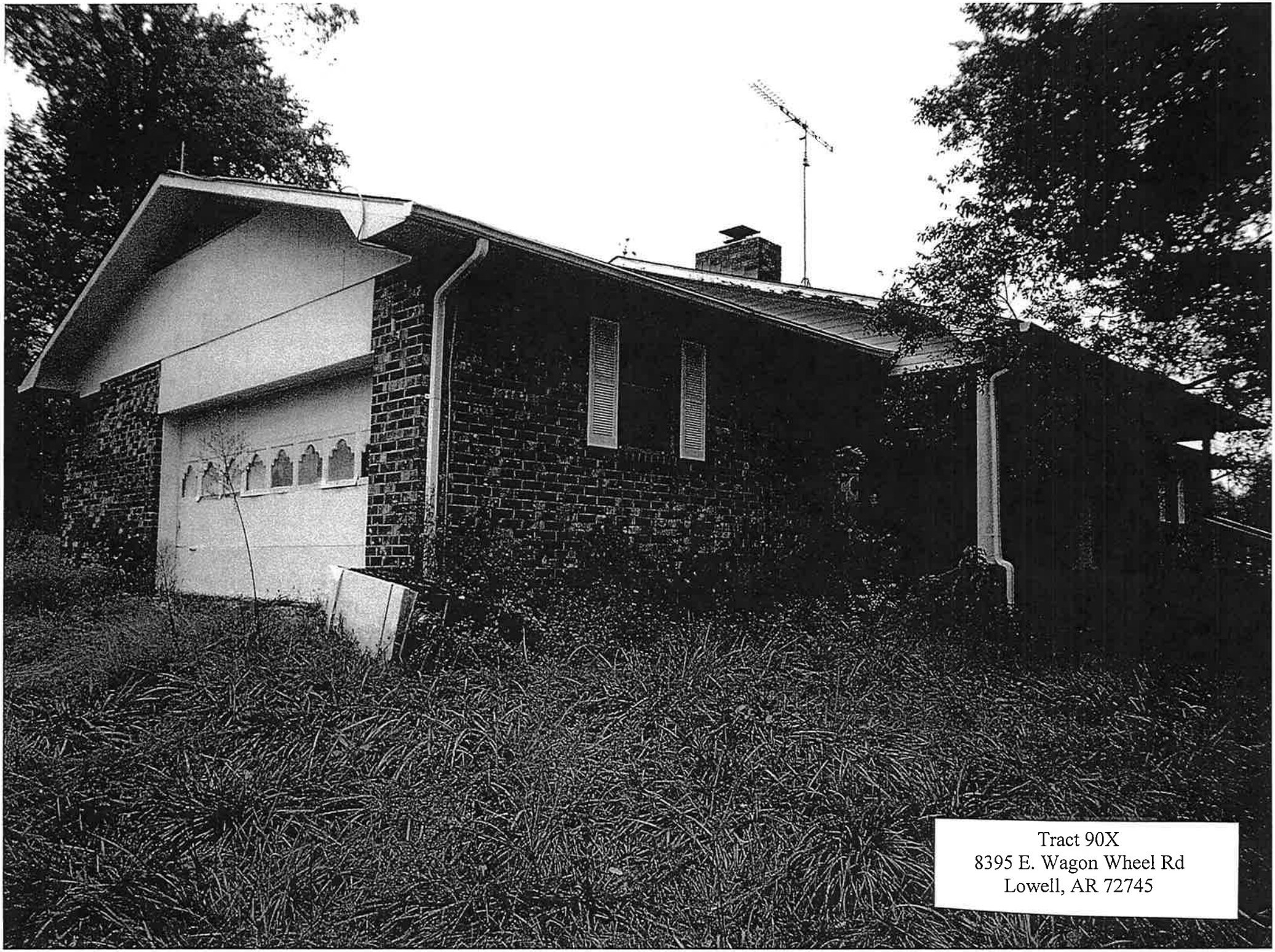
Google earth

miles 100
km 200

Tract 90X
8395 E. Wagon Wheel Rd
Lowell, AR 72745

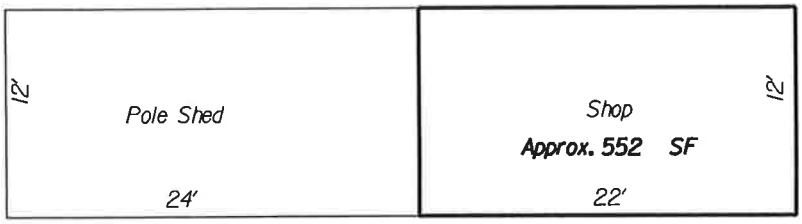

Tract 90X
8395 E. Wagon Wheel Rd
Lowell, AR 72745

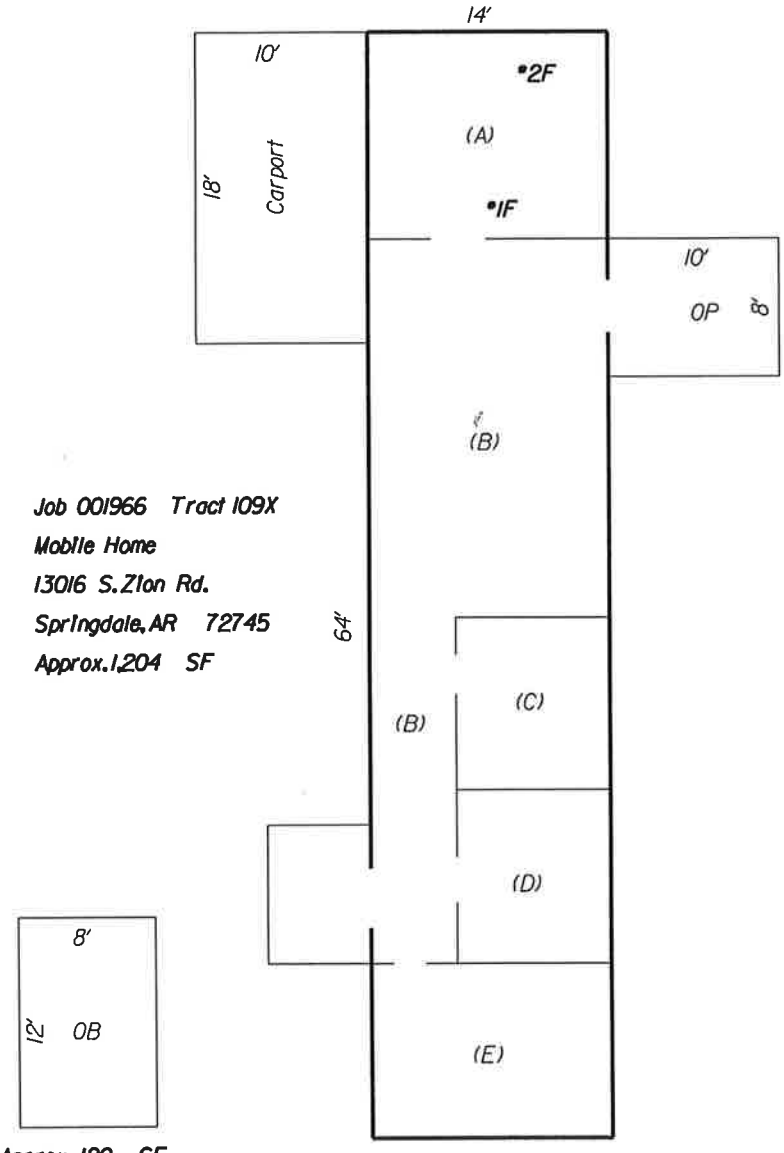

Tract 90X
8395 E. Wagon Wheel Rd
Lowell, AR 72745

		PROPERTY LOCATION	INSPECTED BY
JOB:	001966	Mobile Home	Sherman Whittle (015689)
TRACT:	109X	13016 S. Zion Rd	Joel Clark (011518)
DATE:	7/14/2014	Lowell, AR 72745	

Sample Number	Description/ Locaton	Sample Number	Description/ Location
#1	A) Floor	#11	
#2	A0 Floor	#12	
#3		#13	
#4		#14	
#5		#15	
#6		#16	
#7		#17	
#8		#18	
#9		#19	
#10		#20	

Homogenous Areas:	
Roofing	Metal
Siding	Metal
Ceilings	Masonite
Walls	Panelling
Floors	A) Linoleum
	B-E) Carpet/Wood





CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

CAL1407512

Client Name:	AHTD	**CA Labs job**	**CAL#**
Client Address:	P.O. Box 2261	Billing Address:	
	Room #705	(if different)	
	Little Rock, AR 72203-2261		
phone number:	501-569-2317 or 2318	P.O. # :	Job #001966, Tr. 109X
fax number:		Project Name:	Tract 13016 S. Zion Rd.
Send Reports to:	Joeld.Clark@arkansashighways.com Sherman.whittle@arkansashighways.com	Project Number:	Job # Springdale Bypass

Total # Samples Submitted: 2	**Total # Samples to be Analyzed: 2**	**Material Matrix:** Air / **Bulk** / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	**TA Time**	**PLM**	**TA Time**	**Optical / IAQ**	**TA Time**
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**PCM**: NIOSH 7400	Note TAT
AHERA	*4 hour*	Improved	4 hour	Allergen Particle:	24 hour
EPA Level II	8 hour	Interim	8 hour	tape/bulk/swab	2 days
Drinking Water	16 hour		16 hour	Cyclex-d cassettes	3 days
Wipe	24 hour	**AHERA**	24 hour	Air-o-cell cassettes	5-10 days
Micro-vac	2 days		2 days	Anderson cultures	Specify
NIOSH 7402	3 days	Point Count -	**3 days**	Bulk/swab cultures	Mold or
Chatfield Bulk	5 days	(NESHAPS)	5 days	Bacteria cultures	bacteria

Please indicate appropriate turn around time. (minimum turnaround - 3 Days for Lead TCLP and water)

Lead: *Circle analysis and TA time*

Sample Information:

Sample #:	Sample Location:	Sample Date/Time:	Sample Volume (L)
#1, 001966 Tr. 109X	(A) Floor	7/14/2014	
#2, 001966 Tr. 109X	(A) Floor	7/14/2014	
#3			
#4			
#5			
#6			
#7			
#8			
#9			
#10			

Custody Information:

Samples relinquished: SK Whittle 7/18/14 11:45 AM
Signature / Date / Time

Samples received: Justin Ezell 7/23/14 10:30
Signature / Date / Time

CA Labs
Dedicated to Quality

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Phone 225-751-5632
Fax 225-751-5634

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Attn: Robert Pooler
Customer Project: Tr. 109X, Tract 13016 S. Zion Rd.
Reference #: CAL14075112CB Date: 7/28/2014

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be delectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

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Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
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Overview of Project Sample Material Containing Asbestos

Customer Project: Tr. 109X, Tract 13016 S. Zion Rd. **CA Labs Project #:** CAL14075112CB

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235

AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
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or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
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Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 109X, Tract 13016 S. Zion Rd.
Turnaround Time:
3 Days

CA Labs Project #:
CAL14075112CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/14/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
#1, 001966 Tr. 109X			***(A) Floor/*** *tan linoleum with*				
		1-1	*gray backing*	*y*	***None Detected***	22% ce	78% qu,bi
		1-2	*tan mastic*	*y*	***None Detected***		100% gy,bi
#2, 001966 Tr. 109X			***(A) Floor/*** *tan linoleum with*				
		2-1	*gray backing*	*y*	***None Detected***	21% ce	79% qu,bi
		2-2	*tan mastic*	*y*	***None Detected***		100% gy,bi

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

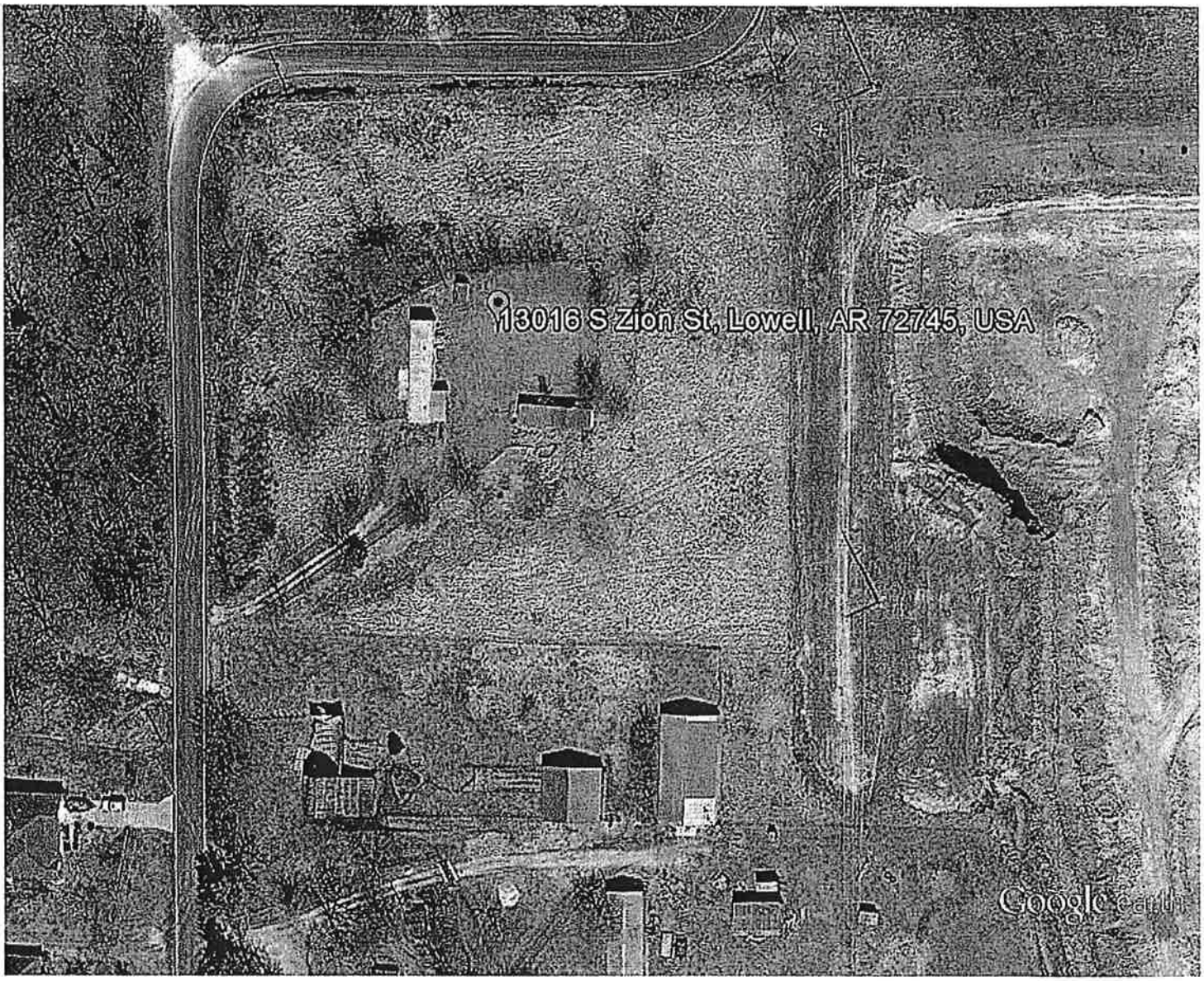
Approved Signatories:

Connor Vincent
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested



Google earth

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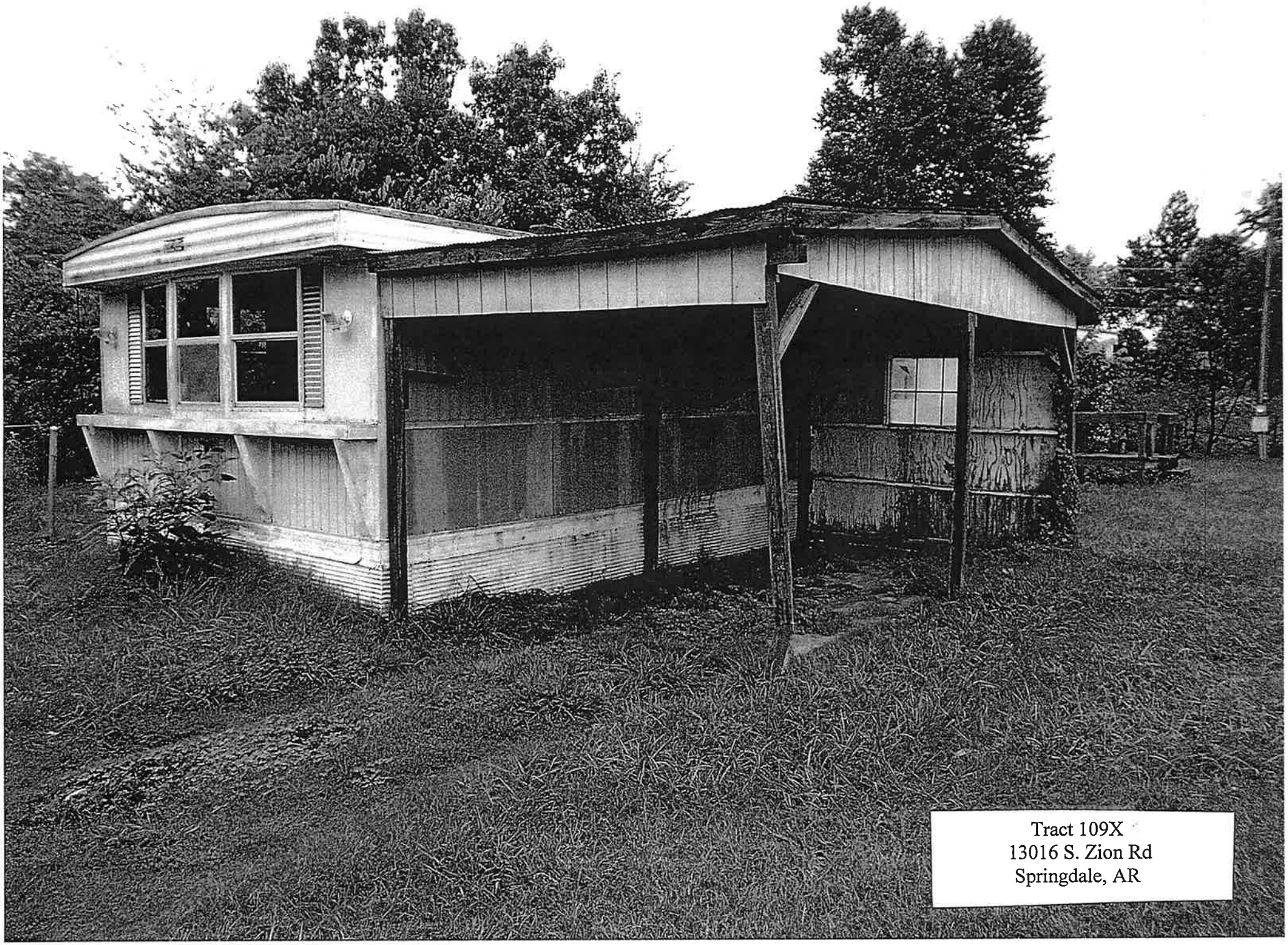
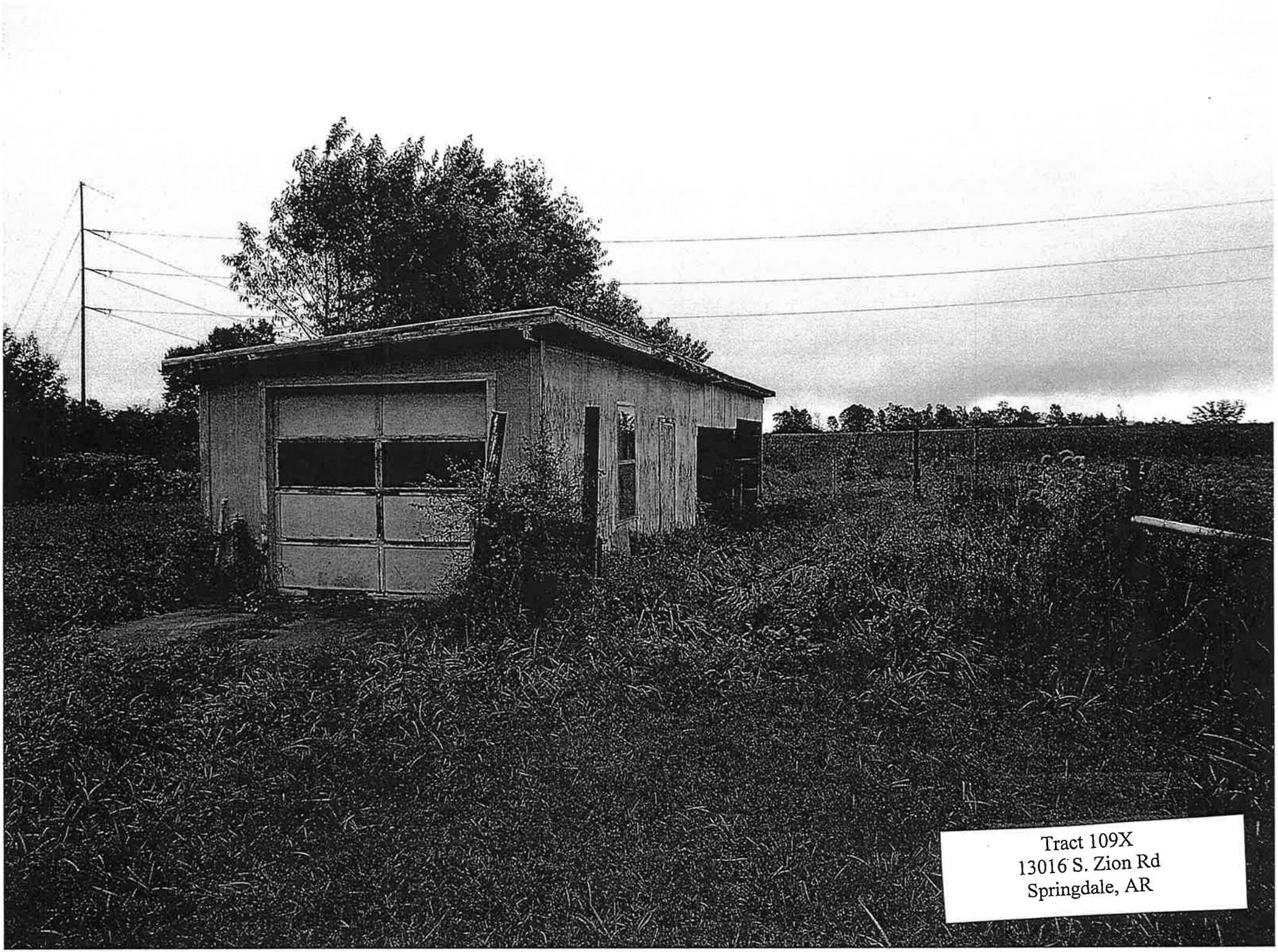
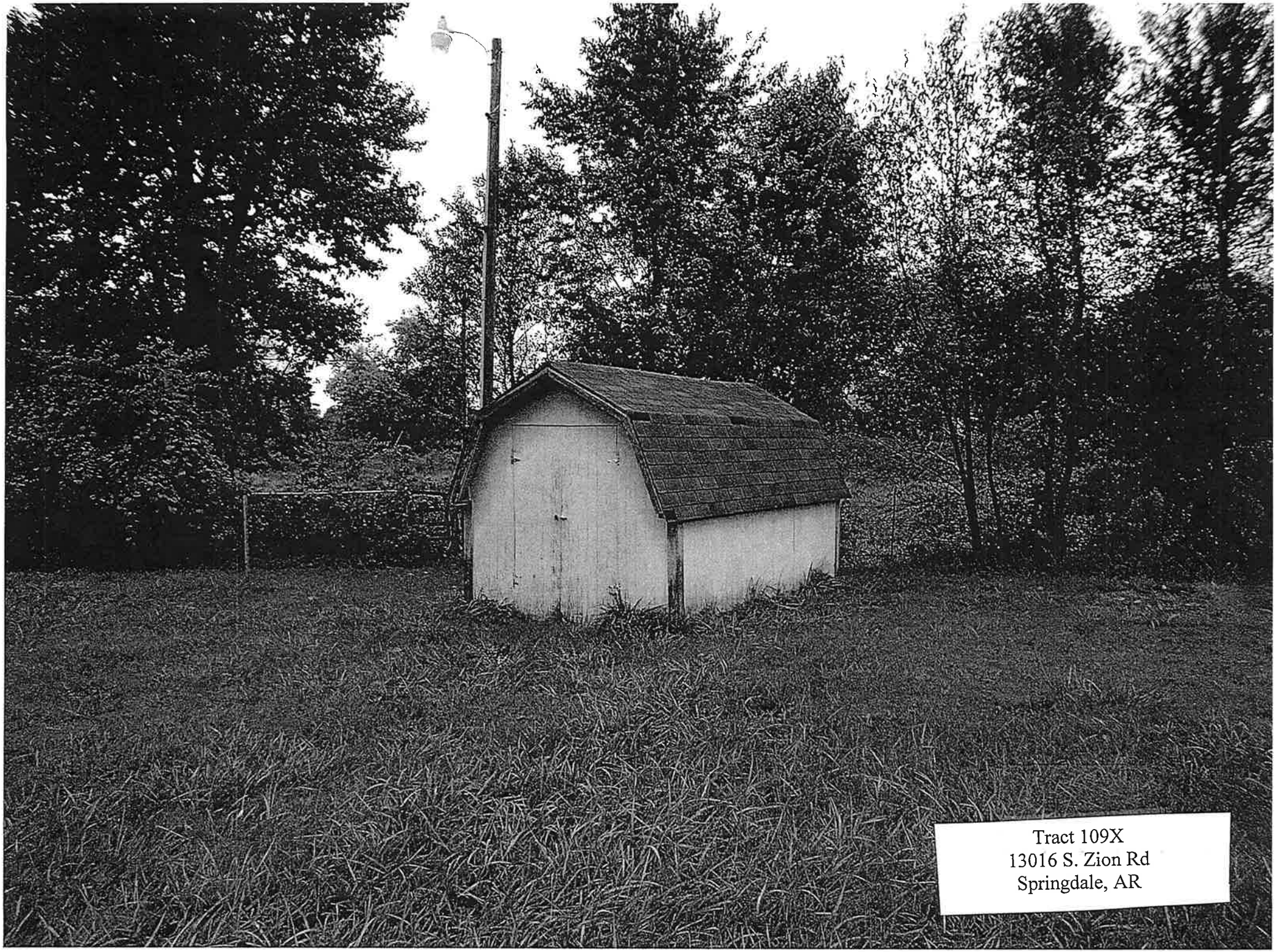
km 100

Tract 109X
13016 S. Zion Rd
Springdale, AR


Tract 109X
13016 S. Zion Rd
Springdale, AR


Tract 109X
13016 S. Zion Rd
Springdale, AR

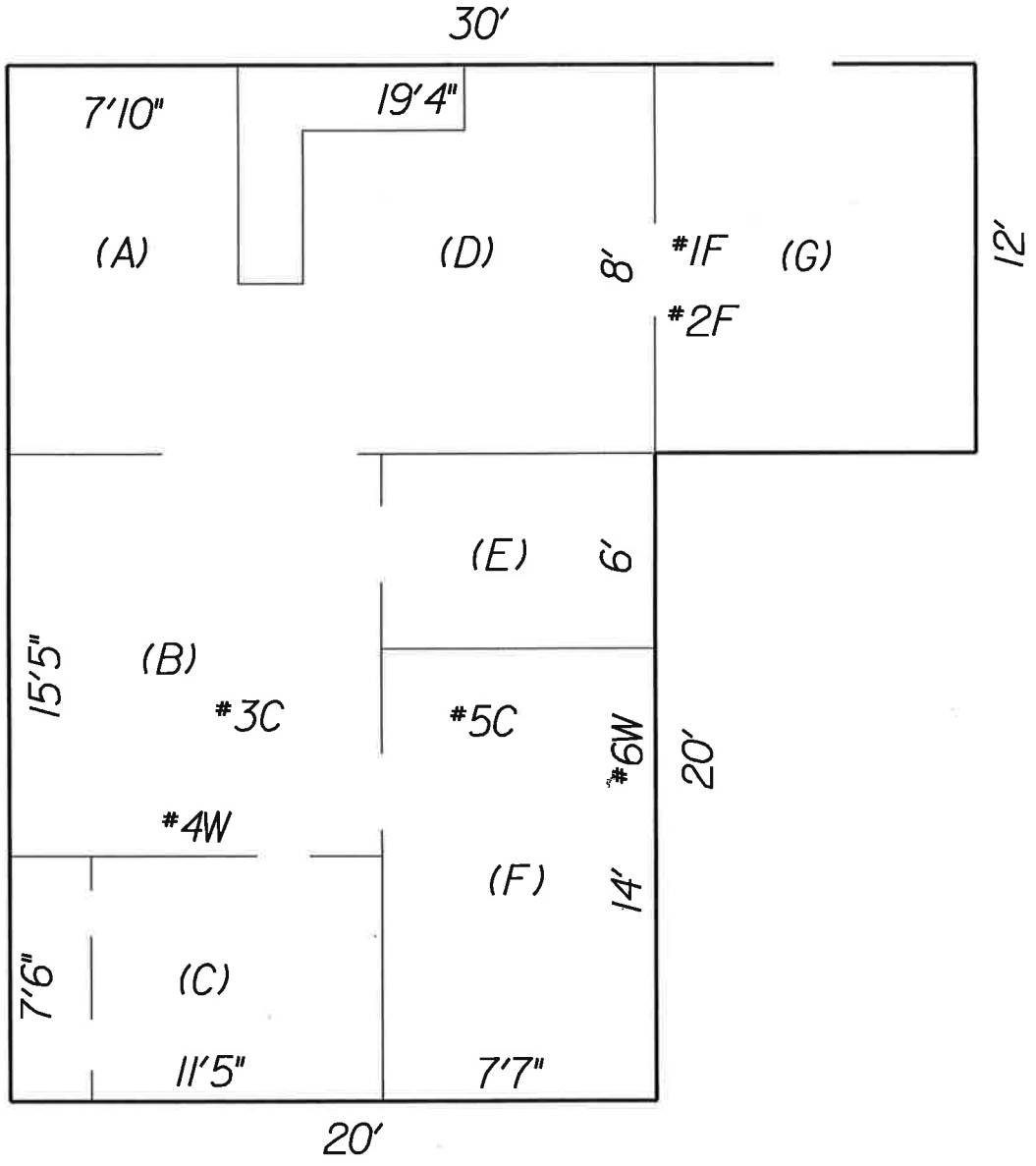

Tract 109X
13016 S. Zion Rd
Springdale, AR

INSPECTION FLOOR PLAN

		PROPERTY LOCATION	INSPECTED BY
JOB:	001966	1-S-F Dwelling	Sherman Whittle (015689)
TRACT:	159 X	804 Goad Springs Road	Joel Clark (011518)
DATE:	7/15/2014	Lowell, AR 72745	

Sample Number	Description/ Locaton	Sample Number	Description/ Location
#1	D) Floor	#11	
#2	D) Floor	#12	
#3	B) Ceiling	#13	
#4	B) Wall	#14	
#5	F) Ceiling	#15	
#6	F) Wall	#16	
#7		#17	
#8		#18	
#9		#19	
#10		#20	

Homogenous Areas:	
Roofing	Shingles
Siding	Vinyl/Manonite
Ceilings	Sheet Rock
Walls	BCEF) Sheet Rock under Panelling
	AD) Sheet Rock
Floors	AD) Tile; BCEF)Carpet/Wood
	G) Concrete Slab



Job 001966 Tract 109X

1-S-F Dwelling

804 Goad Springs Road

Lowell, AR 72745

Approx. 760 SF

CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

CAL1407513

Client Name:	AHTD	**CA Labs job**	**CAL#**
Client Address:	P.O. Box 2261	Billing Address:	
	Room #705	(if different)	
	Little Rock, AR 72203-2261		
phone number:	501-569-2317 or 2318	P.O. # :	Job # 001966, Tr. 159X
fax number:		Project Name:	Tract 804 Goad Springs Rd.
Send Reports to:	Joeld.Clark@arkansashighways.com Sherman.whittle@arkansashighways.com	Project Number:	Job # Springdale Bypass

Total # Samples Submitted: 6	**Total # Samples to be Analyzed: 6**	**Material Matrix:** Air / **Bulk** / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	**PLM**	TA Time	**Optical / IAQ**	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**PCM**: NIOSH 7400	Note TAT
AHERA	*4 hour*	Improved	4 hour	Allergen Particle:	24 hour
EPA Level II	8 hour	Interim	8 hour	tape/bulk/swab	2 days
Drinking Water	16 hour		16 hour	Cyelex-d cassettes	3 days
Wipe	24 hour	**AHERA**	24 hour	Air-o-cell cassettes	5-10 days
Micro-vac	2 days		2 days	Anderson cultures	Specify
NIOSH 7402	3 days	Point Count -	**3 days**	Bulk/swab cultures	Mold or
Chatfield Bulk	5 days	(NESHAPS)	5 days	Bacteria cultures	bacteria

Please indicate appropriate turn around time. (minimum turnaround = 3 Days for Lead TCLP and water)

Lead: *Circle analysis and TA time*

Sample Information:

Sample #:	Sample Location:	Sample Date/Time:	Sample Volume (L)
#1, 001966 Tr. 159X	(D) Floor	7/15/2014	
#2, 001966 Tr. 159X	(D) Floor	7/15/2014	
#3, 001966 Tr. 159X	(B) Ceiling	7/15/2014	
#4, 001966 Tr. 159X	(B) Wall	7/15/2014	
#5, 001966 Tr. 159X	(F) Ceiling	7/15/2014	
#6, 001966 Tr. 159X	(F) Wall	7/15/2014	
#7			
#8			
#9			
#10			

Custody Information:

Samples relinquished: JL Whittle 7/18/14 1145 am
Signature / Date / Time

Samples received: Justin Fox 7/21/14 10:30 am
Signature / Date / Time

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Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Attn: Robert Pooler
Customer Project: Tr. 159X, Tract 804 Goad Springs Rd
Reference #: CAL14075113CB Date: 7/28/2014

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be delectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235
AIHA LAP, LLC Laboratory #102929

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Fax 225-751-5634

Overview of Project Sample Material Containing Asbestos

Customer Project: Tr. 159X, Tract 804 Goad Springs Rd **CA Labs Project #:** CAL14075113CB

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
#2	2-3	*tan linoleum*	***23% Chrysotile***	***tan linoleum***
#3	3-1	***(B) Ceiling/*** *off-white textured surfacing*	***4% Chrysotile***	***off-white textured surfacing***
	3-2	*off-white compound (beneath tape)*	***2% Chrysotile***	***off-white compound (beneath tape)***
#4	4-1	***(B) Wall/*** *white surfaced off-white compound*	***2% Chrysotile***	***white surfaced off-white compound***
	4-2	*off-white compound (beneath tape)*	***2% Chrysotile***	***blue surfaced off-white compound***
#5	5-1	***(F) Ceiling/*** *off-white textured surfacing*	***4% Chrysotile***	
	5-2	*off-white compound (beneath tape)*	***2% Chrysotile***	
#6	6-1	***(F) Wall/*** *blue surfaced off-white compound*	***2% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Overview of Project Sample Material Containing Asbestos

Customer Project: Tr. 159X, Tract 804 Goad Springs Rd **CA Labs Project #:** CAL14075113CB

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
	6-2	*off-white compound (beneath tape)*	***2% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235
AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
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or - organic
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qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 159X, Tract 804 Goad Springs Rd
Turnaround Time:
3 Days

CA Labs Project #:
CAL14075113CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
#1		1-1	***(D) Floor/*** *tan self-adhesive flooring*	*y*	***None Detected***		100% qu,bi
		1-2	*tan mastic*	*y*	***None Detected***		100% gy,bi
#2		2-1	***(D) Floor/*** *off-white linoleum*	*y*	***None Detected***	21% ce	79% qu,bi
		2-2	*tan mastic*	*y*	***None Detected***		100% gy,bi
		2-3	*tan linoleum*	*y*	***23% Chrysotile***		77% qu,bi
	4	2-4	*tan mastic*				
#3		3-1	***(B) Ceiling/*** *off-white textured surfacing*	*y*	***4% Chrysotile***		96% qu,bi,ve,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Connor Vincent
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

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Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		3-2	*off-white compound (beneath tape)*	*y*	***2% Chrysotile***		98% mi,ca
		3-3	*white drywall with brown paper*	*n*	***None Detected***	20% ce	80% qu,gy
#4		4-1	***(B) Wall/*** *white surfaced off-white compound*	*n*	***2% Chrysotile***		98% mi,bi,ca
		4-2	*off-white compound (beneath tape)*	*y*	***2% Chrysotile***		98% mi,ca
		4-3	*white drywall with brown paper*	*n*	***None Detected***	23% ce	77% qu,gy
#5		5-1	***(F) Ceiling/*** *off-white textured surfacing*	*y*	***4% Chrysotile***		96% qu,bi,ve,ca
		5-2	*off-white compound (beneath tape)*	*y*	***2% Chrysotile***		98% mi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

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gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
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ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

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Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

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2. Fire Damage no significant fiber damages effecting fibrous percentages
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Turnaround Time:
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		5-3	*white drywall with brown paper*	*n*	***None Detected***	21% ce	79% qu,gy
#6		*6-1*	***(F) Wall**/ blue surfaced off-white compound*	*n*	***2% Chrysotile***		98% mi,bi,ca
		6-2	*off-white compound (beneath tape)*	*y*	***2% Chrysotile***		98% mi,ca
		6-3	*white drywall with brown paper*	*n*	***None Detected***	24% ce	76% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
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ma - matrix	qu - quartz	sy - synthetic	

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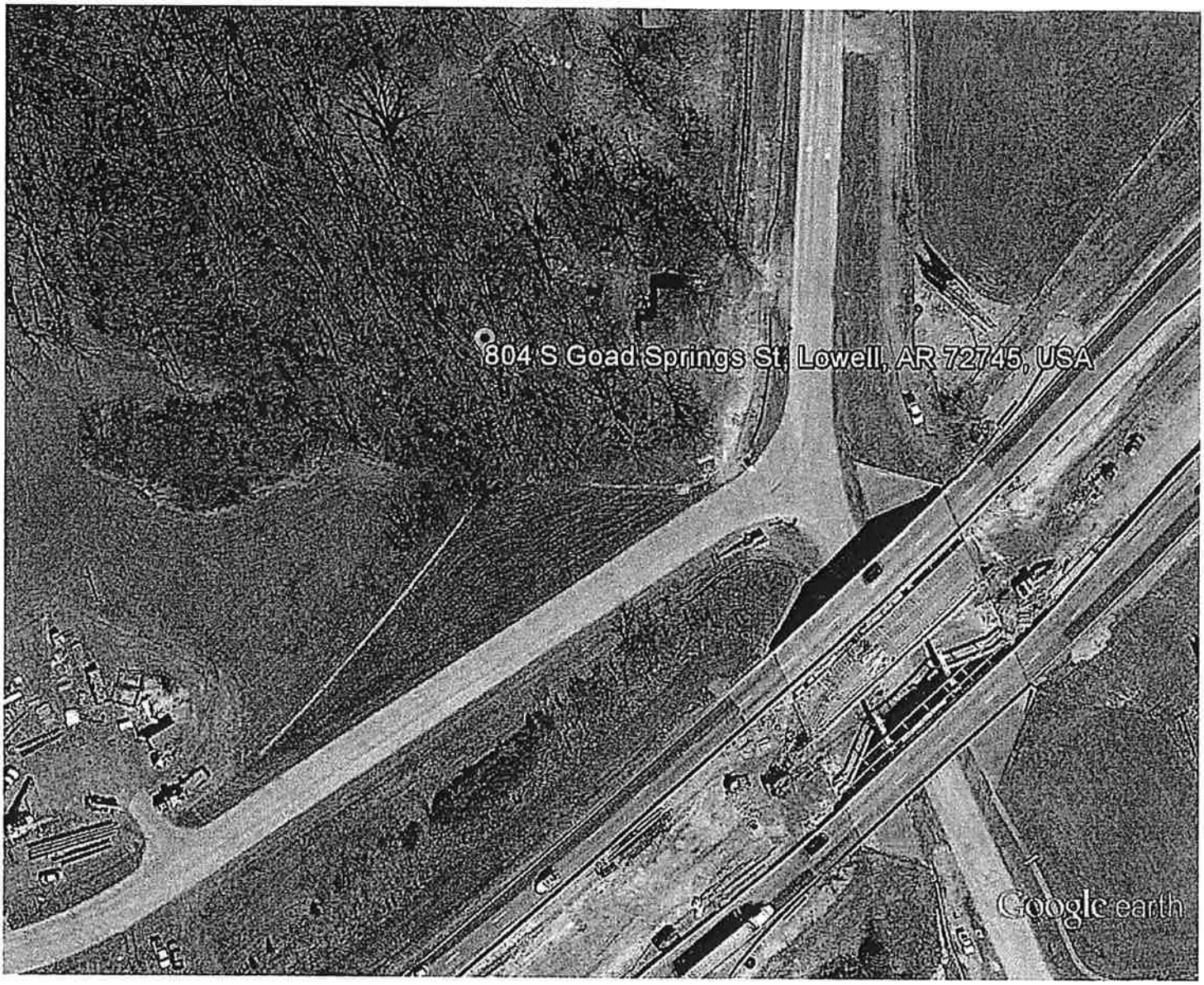

Google earth

miles 70
km 100

Tract 159X
804 Goad Springs Rd
Lowell, AR 72745


Tract 159X
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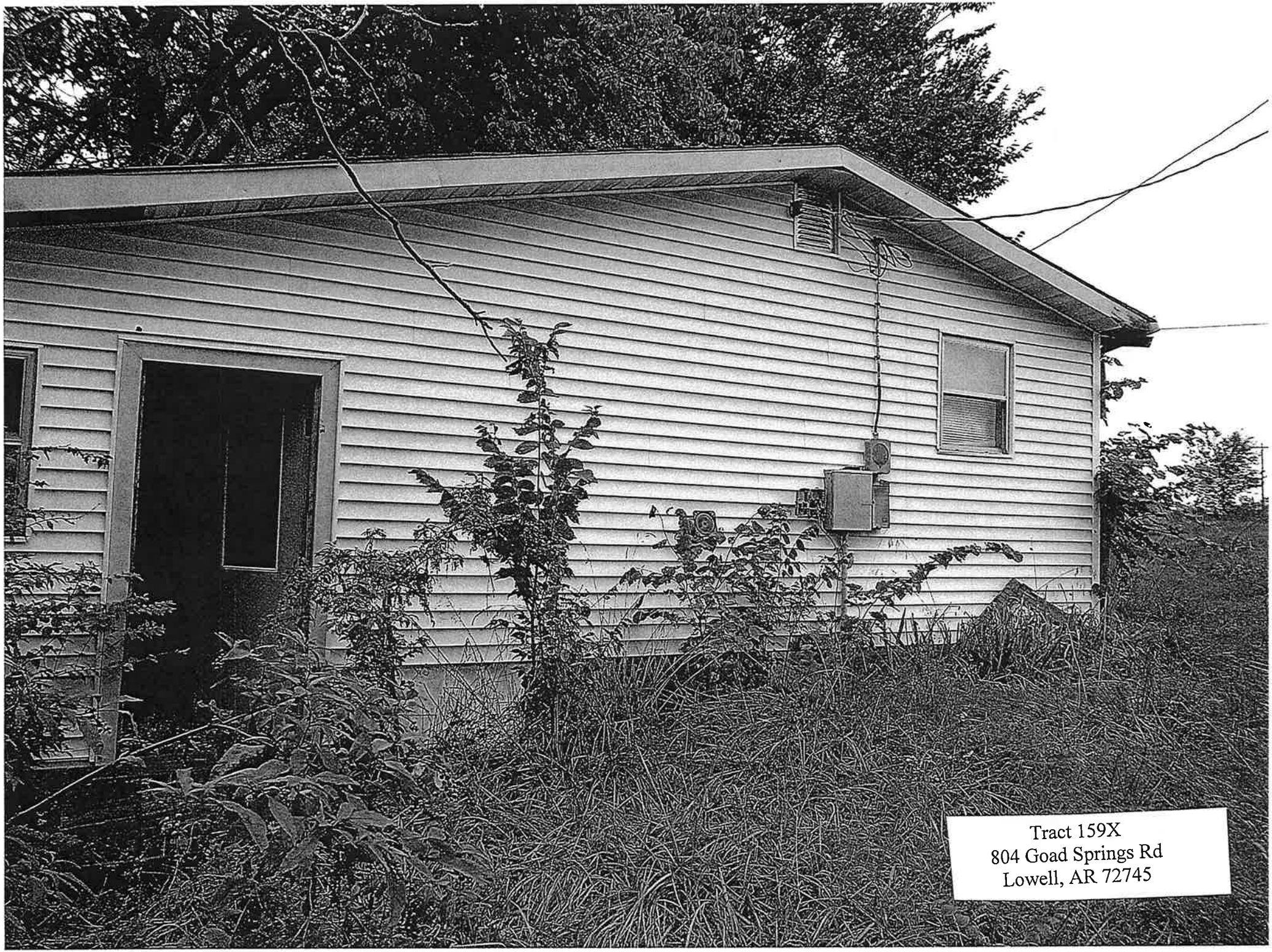
Lowell, AR 72745


Tract 159X
804 Goad Springs Rd
Lowell, AR 72745

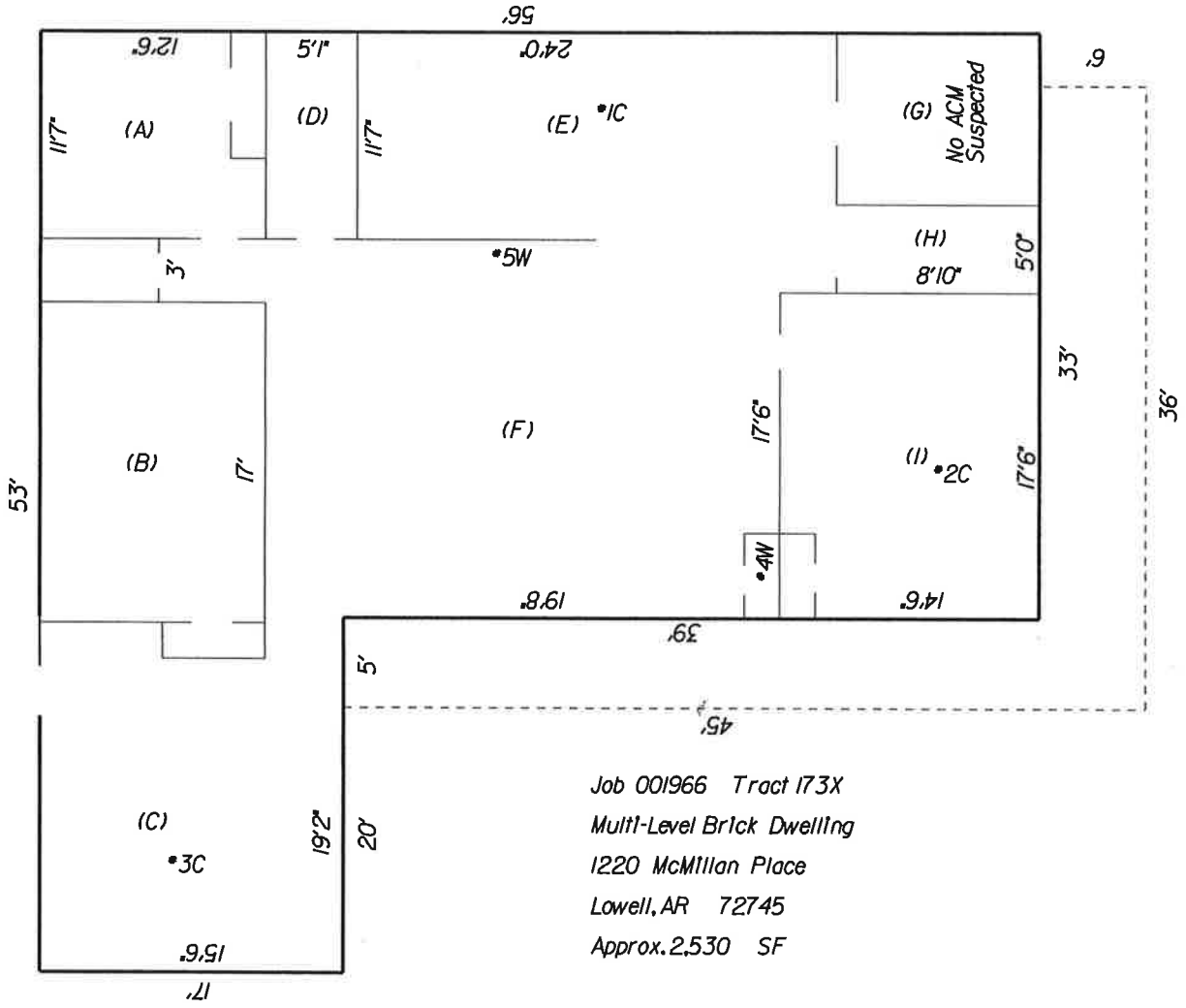

15.10.2013

INSPECTION FLOOR PLAN

JOB:	001966	PROPERTY LOCATION	INSPECTED BY
TRACT:	173 X	Multi-level Brick Dwelling	Sherman Whittle (015689)
DATE:	7/15/2014	1220 McMillan Place	Joel Clark (011518
		Lowell, AR 72745	

Sample Number	Description/ Locaton	Sample Number	Description/ Location
#1	E) Ceiling	#11	
#2	I) Ceiling	#12	
#3	C) Ceiling	#13	
#4	I) Wall	#14	
#5	F) Wall	#15	
#6		#16	
#7		#17	
#8		#18	
#9		#19	
#10		#20	

Homogenous Areas:	
Roofing	Shingles
Siding	Brick & Vinyl
Ceilings	Sheet Rock
Walls	Sheet Rock
Floors	B) Carpet/Wood
	A, C-I) Wood



CA Labs

Crisp Analytical Laboratories, L.L.C
1929 Old Denton Rd
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

CAL1407S114

Client Name:	AHTD	**CA Labs job**	**CAL#**
Client Address:	P.O. Box 2261	Billing Address:	
	Room #705	(if different)	
	Little Rock, AR 72203-2261		
phone number:	501-569-2317 or 2318	P.O. # :	Job # 001966, Tr. 173X
fax number:		Project Name:	Tract 1220 McMillian Pl.
Send Reports to:	Joeld.Clark@arkansashighways.com Sherman.whittle@arkansashighways.com	Project Number:	Job # Springdale Bypass

Total # Samples Submitted: 5	**Total # Samples to be Analyzed: 5**	**Material Matrix:** Air / **Bulk** / Water

Asbestos: *please call ahead for availability of all rush and/or after hours samples.*

TEM	**TA Time**	**PLM**	**TA Time**	**Optical / IAQ**	**TA Time**
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**PCM**: NIOSH 7400	Note TAT
AHERA	*4 hour*	Improved	4 hour	Allergen Particle:	24 hour
EPA Level II	8 hour	Interim	8 hour	tape/bulk/swab	2 days
Drinking Water	16 hour		16 hour	Cyclex-d cassettes	3 days
Wipe	24 hour	**AHERA**	24 hour	Air-o-cell cassettes	5-10 days
Micro-vac	2 days		2 days	Anderson cultures	Specify
NIOSH 7402	3 days	Point Count -	**3 days**	Bulk/swab cultures	Mold or
Chatfield Bulk	5 days	(NESHAPS)	5 days	Bacteria cultures	bacteria

Please indicate appropriate turn around time. (minimum turnaround - 3 Days for Lead TCLP and water)
Lead: *Circle analysis and TA time*

Sample Information:

Sample #:	Sample Location:	Sample Date/Time:	Sample Volume (L)
#1, 001966 Tr. 173X	(E) Ceiling	7/15/2014	
#2, 001966 Tr. 173X	(I) Ceiling	7/15/2014	
#3, 001966 Tr. 173X	(C) Ceiling	7/15/2014	
#4, 001966 Tr. 173X	(I) Wall	7/15/2014	
#5, 001966 Tr. 173X	(F) Wall	7/15/2014	
#6			
#7			
#8			
#9			
#10			

Custody Information:

Samples relinquished: SL Whittle 7/18/14 11:40 AM
Signature / Date / Time

Samples received: Justin Ezz 7/23/14 10:30 AM
Signature / Date / Time

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Attn: Robert Pooler
Customer Project: Tr. 173X, Tract 1220 McMillan Pl.
Reference #: CAL14075114CB Date: 7/28/2014

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be delectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Overview of Project Sample Material Containing Asbestos

Customer Project: Tr. 173X, Tract 1220 McMillan Pl. **CA Labs Project #:** CAL14075114CB

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types

No Asbestos Detected.

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235

AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 173X, Tract 1220 McMillan Pl.
Turnaround Time:
3 Days

CA Labs Project #:
CAL14075114CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
#1, 001966 Tr. 173X		1-1	***(E) Ceiling**/ off-white surfaced white compound*	n	***None Detected***		100% qu,mi,ca
		1-2	*white drywall with brown paper*	n	***None Detected***	21% ce	79% gy
#2, 001966 Tr. 173X		2-1	***(I) Ceiling**/ off-white surfaced white compound*	n	***None Detected***		100% qu,mi,ca
		2-2	*white drywall with brown paper*	n	***None Detected***	21% ce 1% fg	78% gy
#3, 001966 Tr. 173X		3-1	***(C) Ceiling**/ off-white surfaced white compound*	n	***None Detected***		100% qu,mi,ca
		3-2	*white drywall with brown paper*	n	***None Detected***	29% ce	71% gy
#4, 001966 Tr. 173X		4-1	***(I) Wall**/ off-white surfaced white compound*	n	***None Detected***		100% qu,mi,ca

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

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Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Tr. 173X, Tract 1220 McMillan Pl.
Turnaround Time:
3 Days

CA Labs Project #:
CAL14075114CB

Date: 7/28/2014
Samples Received: 7/23/14 10:30am
Date Of Sampling: 7/15/14
Purchase Order #: 001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
		4-2	*white drywall with brown paper*	*y*	***None Detected***	29% ce	71% gy
#5, 001966 Tr. 173X		*5-1*	***(F) Wall**/ off-white surfaced white compound*	*n*	***None Detected***		100% qu,mi,ca
		5-2	*white compound (beneath tape)*	*y*	***None Detected***		100% qu,mi,ca
		5-3	*white drywall with brown paper*	*n*	***None Detected***	29% ce	71% gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Leslie Crisp
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
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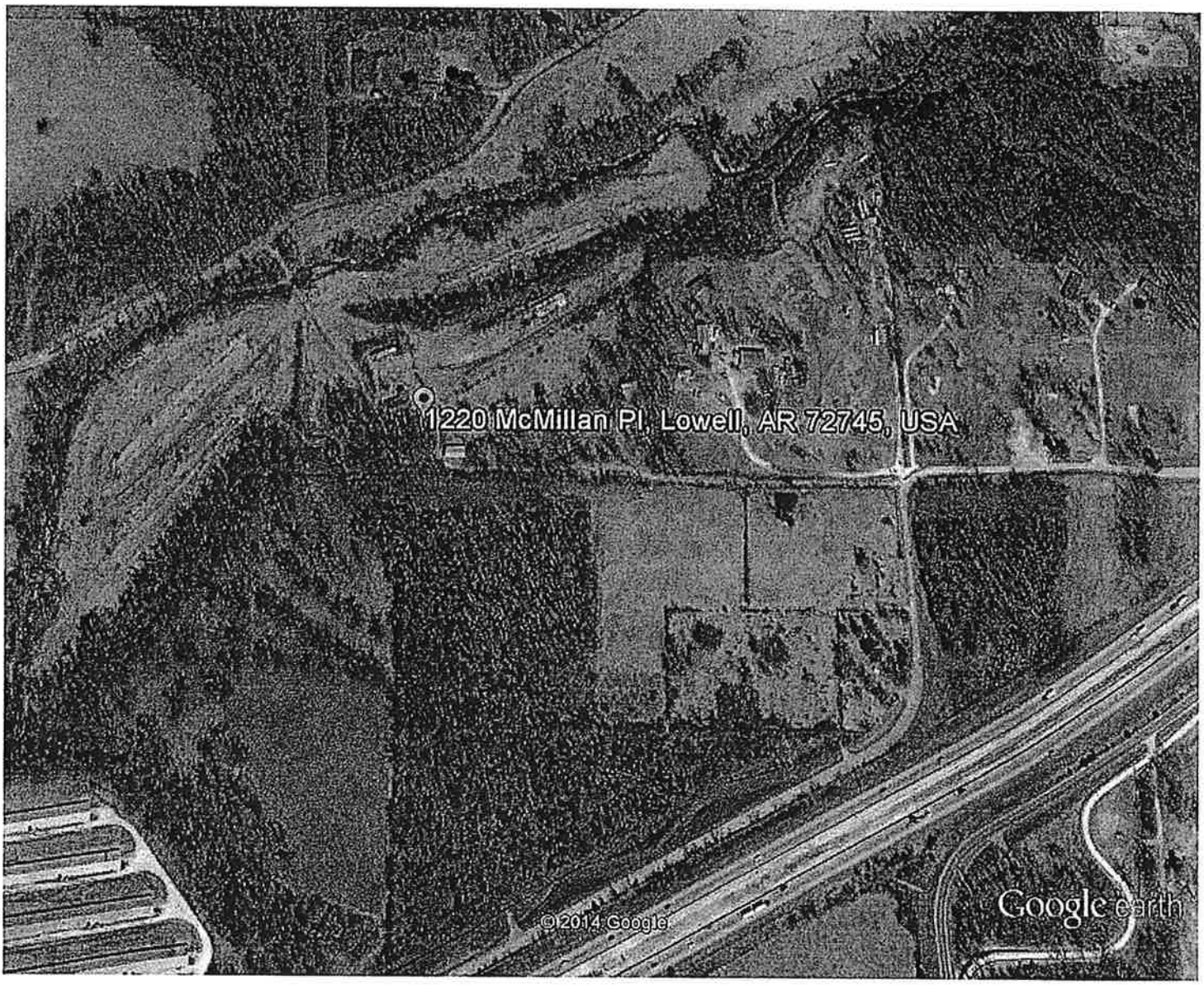
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested



Google earth

miles 200
km 400

Tract 173X
1220 McMillan Place
Lowell, AR 72745

Google earth

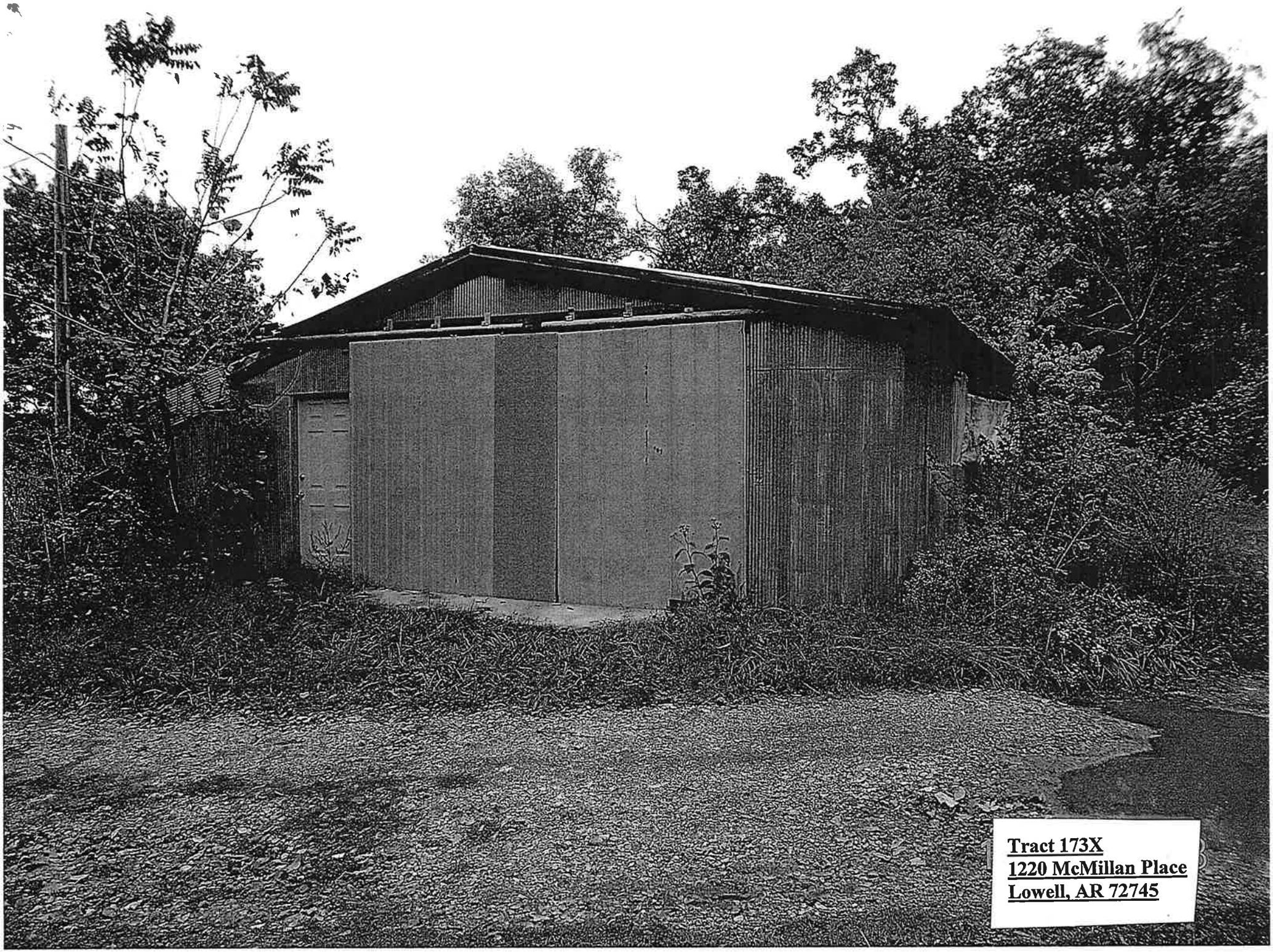
miles 100
km 100

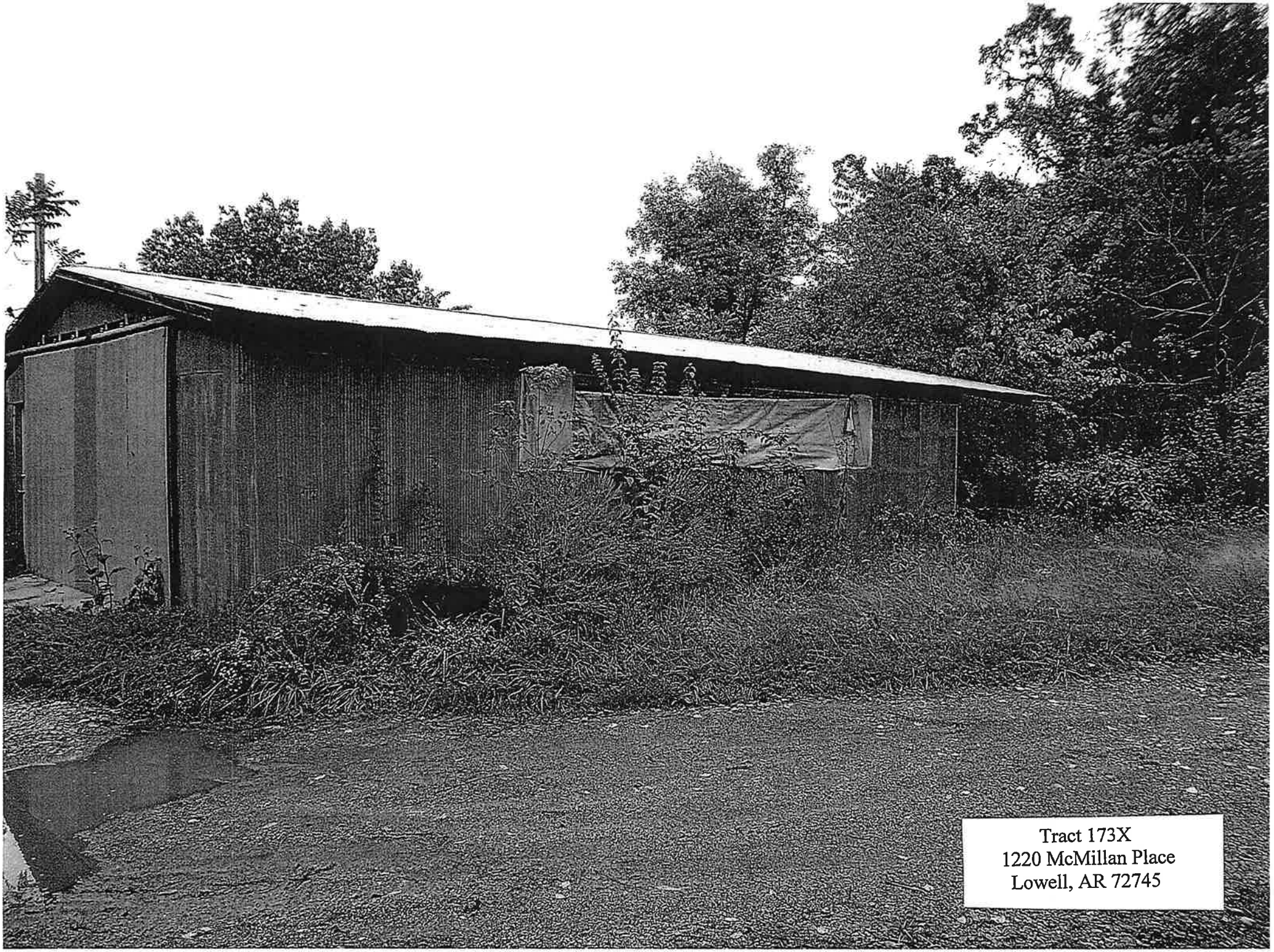
Tract 173X
1220 McMillan Place
Lowell, AR 72745

(Closer view)


Tract 173X
1220 McMillan Place
Lowell, AR 72745


15 10 2013


Tract 173X
1220 McMillan Place
Lowell, AR 72745

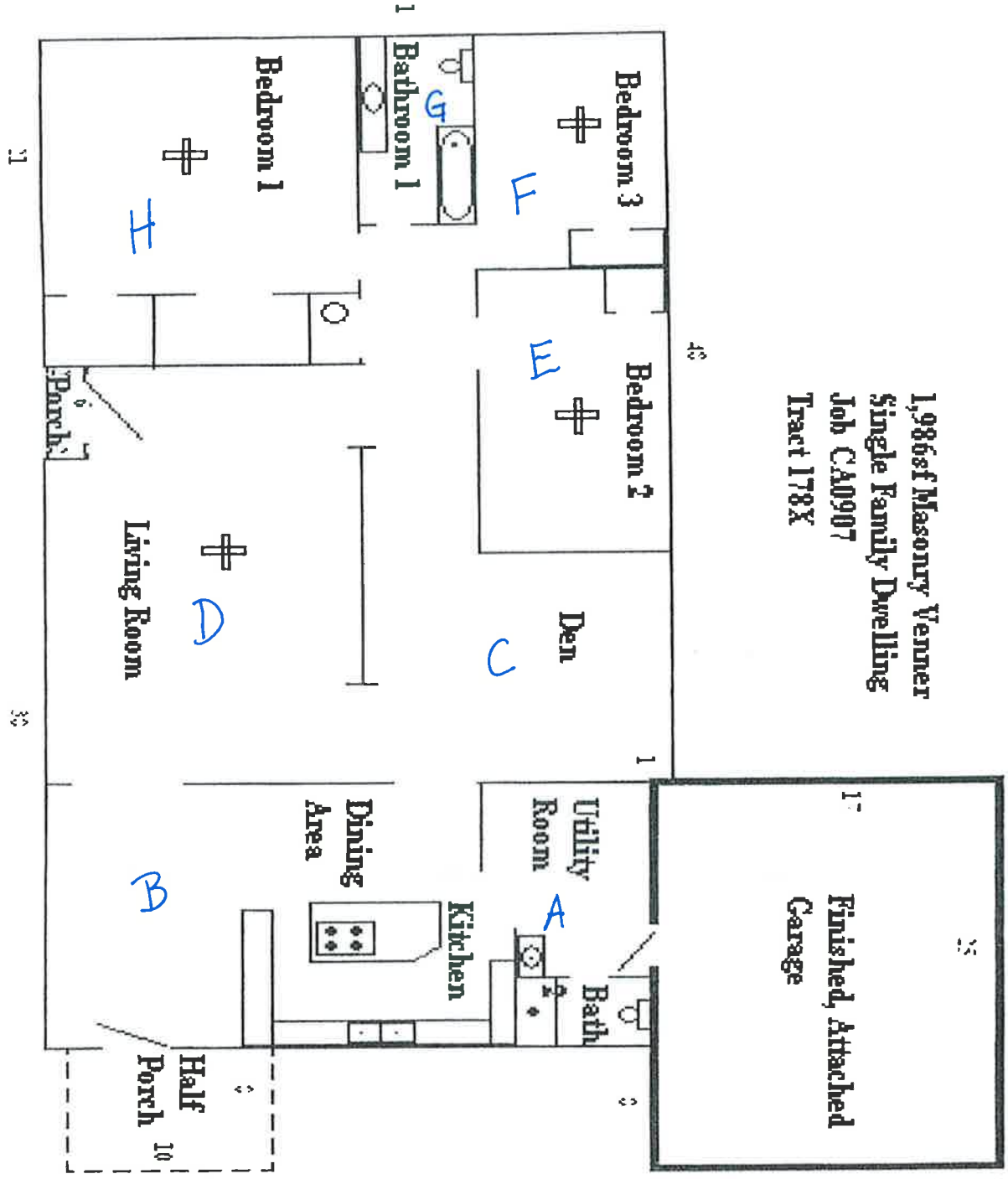

Tract 173X
1220 McMillan Place
Lowell, AR 72745

INSPECTION FLOOR PLAN

JOB:	001966	PROPERTY LOCATION	INSPECTED BY
TRACT:	178 X	1-S-Brick Dwelling	Joel Clark (001518)
DATE:	10/4/2013	7745 West Miller Road	
		Lowell, AR 72745	20 Yrs. Old

Sample Number	Description/ Locaton	Sample Number	Description/ Location
#1	B) Ceiling	#11	
#2	F) Ceiling	#12	
#3	H) Wall	#13	
#4	C) Wall	#14	
#5	A) Floor	#15	
#6	A) Floor	#16	
#7	G) Floor	#17	
#8	G) Floor	#18	
#9	Roof	#19	
#10		#20	

Homogenous Areas:	
Roofing	Composite Shingle
Siding	Brick
Ceilings	Sheet Rock;Fiber Tiles
Walls	Sheet Rock; Wood Paneling/Stud
Floors	Carpet/ Hardwood



CA Labs

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1929 Old Denton Rd.
Carrollton, TX 75006

Phone: 972-272-2754
Fax: 972-272-2798
Mobile: 214-564-8366

Chain of Custody

Client Name:	AHTD	CA Labs job	CAL# 13102414
Client Address:	P.O. Box 2261 Room #705 Little Rock, AR 72203-2261	Billing Address: (if different)	
phone number:	501-569-2317 or 2318	P.O. # :	Job # 001966
fax number:		Project Name:	Tract 178X 7745 West Miller Rd.
Send Reports to:	Joeld.Clark@arkansashighways.com Sherman.whittle@arkansashighways.com	Project Number:	Job # 001966 Springdale Bypass

Total # Samples Submitted: 9	Total # Samples to be Analyzed: 9	Material Matrix: Air / **Bulk** / Water

Asbestos:*please call ahead for availability of all rush and/or after hours samples.*

TEM	TA Time	PLM	TA Time	Optical / IAQ	TA Time
Circle analysis and TA time		*Circle analysis and TA time*	*2 hour*	**PCM**: NIOSH 7400	Note TAT
AHERA	*4 hour*	Improved	4 hour	Allergen Particle:	24 hour
EPA Level II	8 hour	Interim	8 hour	tape/bulk/swab	2 days
Drinking Water	16 hour		16 hour	Cyclex-d cassettes	3 days
Wipe	24 hour	**AHERA**	24 hour	Air-o-cell cassettes	5-10 days
Micro-vac	2 days		2 days	Anderson cultures	Specify
NIOSH 7402	3 days	Point Count -	**3 days**	Bulk/swab cultures	Mold or
Chatfield Bulk	5 days	(NESHAPS)	5 days	Bacteria cultures	bacteria

Please Indicate appropriate turn around time. (minimum turnaround - 3 Days for Lead TCLP and water)
Lead: *Circle analysis and TA time*

Sample Information:

Sample #:	Sample Location:	Sample Date/Time:	Sample Volume (L)
001966 Tr. 178X #1	Area (B) Ceiling	10/14/2013	
001966 Tr. 178X #2	Area (F) Ceiling	10/14/2013	
001966 Tr. 178X #3	Area (H) Wall	10/14/2013	
001966 Tr. 178X #4	Area (C) Wall	10/14/2013	
001966 Tr. 178X #5	Area (A) Floor	10/14/2013	
001966 Tr. 178X #6	Area (A) Floor	10/14/2013	
001966 Tr. 178X #7	Area (G) Floor	10/14/2013	
001966 Tr. 178X #8	Area (G) Floor	10/14/2013	
001966 Tr. 178X #9	Roofing	10/14/2013	
#10			

Custody Information:

Samples relinquished: Joel Clark 10/24/13 2:57pm — Signature / Date / Time

Samples received: 10/25/13 — Signature / Date / Time

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
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Carrollton, TX 75006
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CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Materials Characterization - Bulk Asbestos Analysis

Laboratory Analysis Report - Polarized Light

Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Attn: Robert Pooler
Customer Project: Job#001966 , Tract 178X 7745 West Miller Rd
Reference #: CAL131010214NT Date: 10/29/13

Analysis and Method

Summary of polarizing light microscopy (PLM / Stereomicroscopy bulk asbestos analysis) using the methods described in 40CFR Part 763 Appendix E to Subpart E (Interim and EPA 600 / R-93 / 116 (Improved). The sample is first viewed with the aid of stereomicroscopy. Numerous liquid slide preparations are created for analysis under the polarized microscope where identifications and quantifications are preformed. Calibrated liquid refractive oils are used as liquid mouting medium. These oils are used for identification (dispersion staining). A calibrated visual estimation is reported, should any asbestiform mineral be present. Other techniques such as acid washing are used in conjugation with refractive oils for detection of smaller quantities of asbestos. All asbestos percentages are based on calibrated visual estimation traceable to NIST standards for regulated of asbestos. Traceability to measurement and calibration is achieved by using known amounts and types of asbestos from standards where analyst and laboratory accuracy are measured. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 0.50% (well above the laboratory definition of trace).

Discussion

Vermiculite containing samples may have trace amounts of actinolite-tremolite, where not found be PLM should be analyzed using TEM methods and / or water separation techniques. Suspected actinolite/vermiculite presence will be indicated through the sample comment section of this report.

Fibrous talc containing samples may even contain a related asbestos fiber known as anthophyllite. Under certain conditions the same fiber may actually contain both talc and anthophyllite (a phenomenon called intergrowth). Again, TEM detection methods are recommended. CA Labs PLM report comments will denote suspected amounts of asbestiform anthophyllite with talc, where further analysis is recommended.

Some samples (floor tiles, surfacings, etc.) may contain fibers too small to be delectable by PLM analysis and should be analyzed by TEM bulk protocols.

A "trace asbestos" will be reported if the analyst observes far less than 1% asbestos. CA Labs defines "trace asbestos" as a few fibers detected by the analyst in several preparations and will indicate as such under these circumstances.

Quantification of <1% will actually be reported as <=1% (allowable variance close to 1% is high). Such results are ideal for point counting, and the technique is mandatory for friable samples (NESHAP, Nov. 1990 and clarification letter 8 May 1991) under 1% percent asbestos and the "trace asbestos". **In order to make all initial PLM reports issued from CA Labs NESHAP compliant, all <1% asbestos results (except floor tiles) will be point counted at no additional charge.**

Qualifications

CA Labs is accredited by the National Voluntary Accreditation Program (NVLAP) for selected test methods for airborne fiber analysis (TEM), and for bulk asbestos fiber analysis (PLM). CA Labs is also accredited by AIHA LAP, LLC. in the PLM asbestos field of testing for Industrial Hygiene. All analysts have a college degree in a natural science (geology, biology, or environmental science) or are recognized by a state professional board in one these disciplines .Extensive in-house training programs are used to augment education background of the analyst. The group leader of polarized light has received supplemental McCrone Research training for asbestos identification. Analysis performed at Crisp Analytical Labs, LLC 1929 Old Denton Road Carrollton, TX 75006

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235
AIHA LAP, LLC Laboratory #102929

CA Labs
Dedicated to Quality

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Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Overview of Project Sample Material Containing Asbestos

Customer Project: Job#001966 , Tract 178X 7745 West Miller Rd **CA Labs Project #:** CAL131010214NT

Sample #	Layer #	Analysts Physical Description of Subsample	Asbestos type / calibrated visual estimate percent	List of Affected Building Material Types
001966 Tr. 178X #3	3-1	***Area (H) Wall/*** *tan surfaced white compound*	***2% Chrysotile***	***tan surfaced white compound***
	3-2	*white compound (beneath tape)*	***2% Chrysotile***	***white compound (beneath tape)***
001966 Tr. 178X #4	4-1	***Area (C) Wall/*** *tan surfaced white compound*	***2% Chrysotile***	
	4-2	*white compound (beneath tape)*	***2% Chrysotile***	

Dallas NVLAP Lab Code 200349-0 TEM/PLM EPA H20 TX 01402 TDH 30-0235

AIHA LAP, LLC Laboratory #102929

Glossary of abbreviations (non-asbestos fibers and non-fibrous minerals):

ca - carbonate
gypsum - gypsum
bi - binder
or - organic
ma - matrix
mi - mica
ve - vermiculite
ot - other
pe - perlite
qu - quartz
fg - fiberglass
mw - mineral wool
wo - wollastinite
ta - talc
sy - synthetic
ce - cellulose
br - brucite
ka - kaolin (clay)
pa - palygorskite (clay)

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12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Job#001966 , Tract 178X 7745
West Miller Rd
Turnaround Time:
3 Day

CA Labs Project #:
CAL131010214NT

Date: 10/29/13
Samples Received: 10/25/13 10:30am
Date Of Sampling: 10/14/13
Purchase Order #: Job#001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
001966 Tr. 178X #1		1-1	***Area (B) Ceiling/*** *white surfaced white compound*	n	***None Detected***		100% mi,bi,ca
		1-2	*white drywall with brown paper*	n	***None Detected***	24% ce	76% qu,gy
001966 Tr. 178X #2		2-1	***Area (F) Ceiling/*** *white surfaced white compound*	n	***None Detected***		100% mi,bi,ca
		2-2	*white drywall with brown paper*	n	***None Detected***	20% ce	80% qu,gy
001966 Tr. 178X #3		3-1	***Area (H) Wall/*** *tan surfaced white compound*	n	***2% Chrysotile***		98% mi,bi,ca
		3-2	*white compound (beneath tape)*	y	***2% Chrysotile***		98% mi,ca
		3-3	*white drywall with brown paper*	n	***None Detected***	19% ce	81% qu,gy

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

Analysis Method: Interim (40CFR Part 763 Appendix E to Subpart E) / Improved (EPA-600 / R-93/116)
Preparation Method: HCL acid washing for carbonate based samples, chemical reduction for organically bound components, oil immersion for identification of asbestos types by dispersion attaining / becke line method.

ca - carbonate	mi - mica	fg - fiberglass	ce - cellulose
gypsum - gypsum	ve - vermiculite	mw - mineral wool	br - brucite
bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

Approved Signatories:

Keith Malone
Analyst

QAC
Leslie Crisp, P.G.

Technical Manager
Chad Lytle

1. Fire Damage significant fiber damage - reported percentages reflect unaltered fibers
2. Fire Damage no significant fiber damages effecting fibrous percentages
3. Actinolite in association with Vermiculite
4. Layer not analyzed - attached to previous positive layer and contamination is suspected
5. Not enough sample to analyze
6. Anthophyllite in association with Fibrous Talc
7. Contamination suspected from other building materials
8. Favorable scenario for water separation on vermiculite for possible analysis by another method
9. < 1% Result point counted positive
10. TEM analysis suggested

CA Labs
Dedicated to Quality

Crisp Analytical, L.L.C.
1929 Old Denton Road
Carrollton, TX 75006
Phone 972-242-2754
Fax 972-242-2798

CA Labs, L.L.C.
12232 Industriplex, Suite 32
Baton Rouge, LA 70809
Phone 225-751-5632
Fax 225-751-5634

Polarized Light Asbestiform Materials Characterization

Customer Info: **Attn:** Robert Pooler
Arkansas State Highway & Transportation Dept.
10324 I-30, Room 705
Little Rock, AR 72209

Phone # 501-569-2317
Fax # 501-569-2018

Customer Project:
Job#001966 , Tract 178X 7745
West Miller Rd
Turnaround Time:
3 Day

CA Labs Project #:
CAL131010214NT

Date: 10/29/13
Samples Received: 10/25/13 10:30am
Date Of Sampling: 10/14/13
Purchase Order #: Job#001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
001966 Tr. 178X #4		4-1	***Area (C) Wall/*** *tan surfaced white compound*	n	***2% Chrysotile***		98% mi,bi,ca
		4-2	*white compound (beneath tape)*	y	***2% Chrysotile***		98% mi,ca
		4-3	*white drywall with brown paper*	n	***None Detected***	22% ce	78% qu,gy
001966 Tr. 178X #5		5-1	***Area (F) Floor/*** *tan linoleum*	y	***None Detected***	23% ce	77% bi
		5-2	*tan mastic*	y	***None Detected***		100% mi,ma
001966 Tr. 178X #6		6-1	***Area (F) Floor/*** *tan linoleum*	y	***None Detected***	26% ce	74% bi
		6-2	*tan mastic*	y	***None Detected***		100% mi,ma

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

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bi - binder	ot -other	wo - wollastinite	ka - kaolin (clay)
or - organic	pe - perlite	ta - talc	pa - palygorskite (clay)
ma - matrix	qu - quartz	sy - synthetic	

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Technical Manager
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Job#001966 , Tract 178X 7745
West Miller Rd
Turnaround Time:
3 Day

CA Labs Project #:
CAL131010214NT

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Date Of Sampling: 10/14/13
Purchase Order #: Job#001966

Sample #	Comment	Layer #	Analysts Physical Description of Subsample	Homogeneous (Y/N)	Asbestos type / calibrated visual estimate percent	Non-asbestos fiber type / percent	Non-fibrous type / percent
001966 Tr. 178X #7		7-1	***Area (G) Floor**/ tan vinyl tile*	y	***None Detected***		100% bi
001966 Tr. 178X #8		8-1	***Area (G) Floor**/ tan and black patterned vinyl tile*	n	***None Detected***		100% bi
		8-2	*tan mastic*	y	***None Detected***		100% mi,ma
001966 Tr. 178X #9		9-1	***Roofing**/ black sealant*	y	***None Detected***		100% qu,bi
		9-2	*black shingle with brown gravel*	n	***None Detected***	21% fg	79% qu,ma

Dallas NVLAP Lab Code 200349-0 TEM/PLM *EPA H20 TX 01402* *TDH 30-0235*

AIHA LAP, LLC Laboratory #102929

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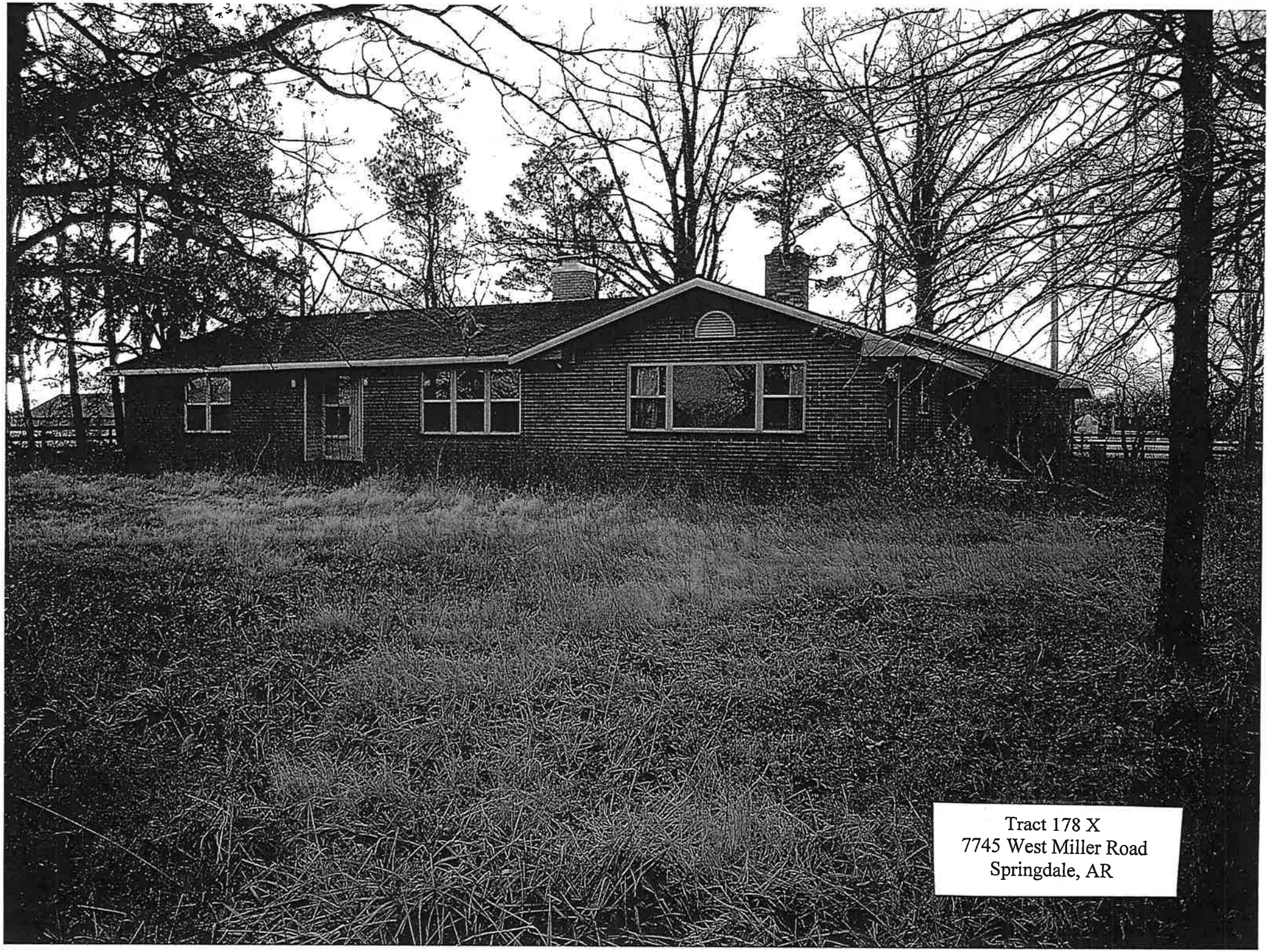
Google earth

miles 100
km 100

Tract 178 X
7745 West Miller Road
Springdale, AR


Tract 178 X
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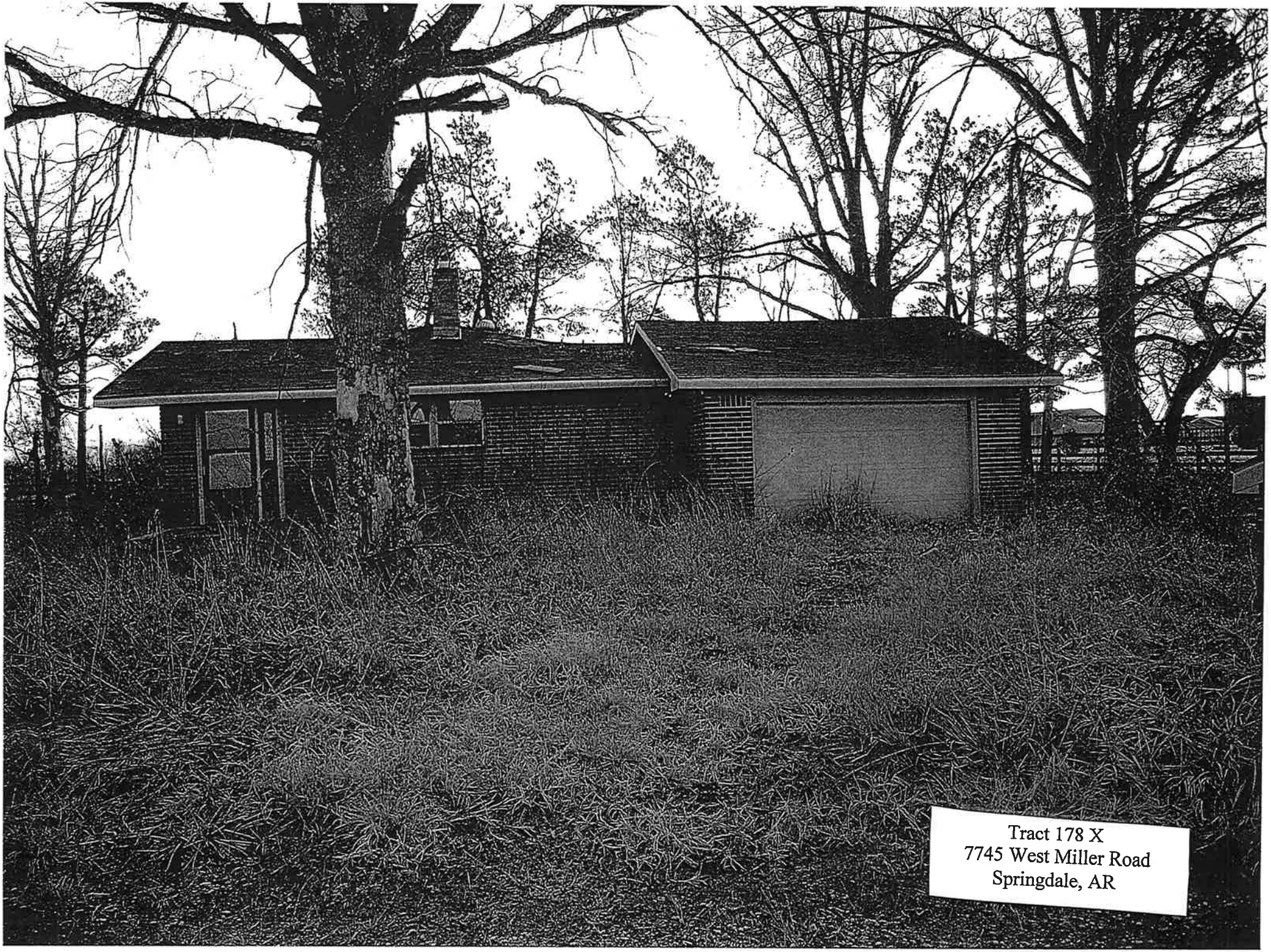
Springdale, AR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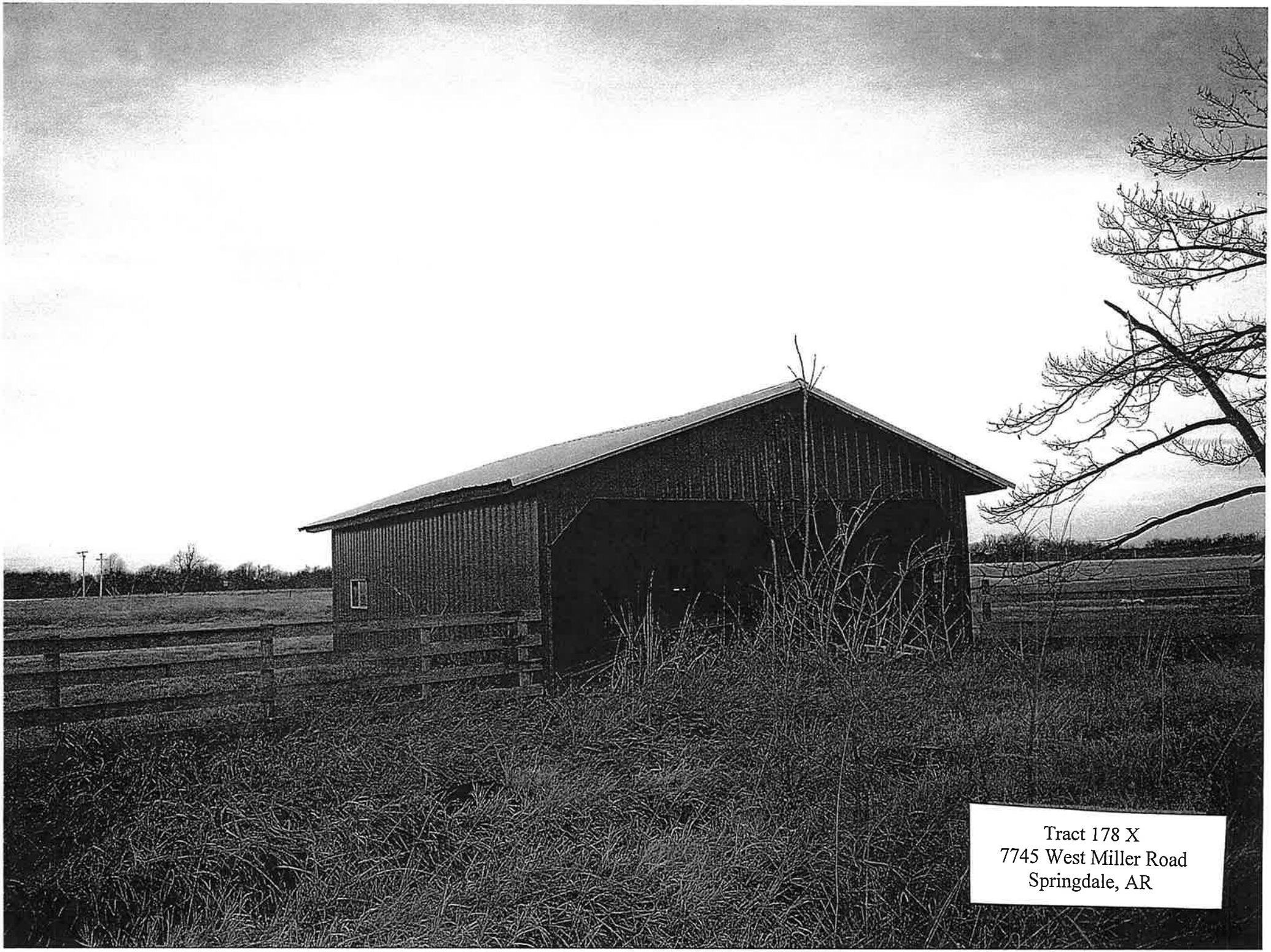
Springdale, AR


Tract 178 X
7745 West Miller Road
Springdale, AR

(001966)

STANDARD RIGHT OF WAY SIGNS AND SYMBOLS

- SECTION CORNER
- QUARTER CORNER
- QUARTER QUARTER CORNER
- SECTION CENTER
- STATE LINE OR CITY LIMITS
- COUNTY LINE
- TOWNSHIP LINE
- SECTION, 1/4,OR 1/16 LINE
- PROPERTY LINE
- EXISTING R/W LINE
- PROPOSED R/W LINE
- EXISTING CONTROL OF ACCESS
- PROPOSED CONTROL OF ACCESS
- PROPOSED R/W AND CONTROL OF ACCESS
- EXISTING R/W DIMENSION (FINE LINES)
- PROPOSED R/W DIMENSION (HEAVY LINES)
- TEMPORARY & PERMANENT EASEMENT LINE
- EXISTING BRIDGE OR SEPARATION STRUCTURE
- PROPOSED BRIDGE OR SEPARATION STRUCTURE
- EXISTING CULVERT
- RAILROAD
- PAVED ROADS
- GRAVEL ROAD
- DRIVEWAY
- FENCE
- CONSTRUCTION LIMITS-BASED ON DESIGN CROSS SECTION
- LEVEE
- TRAIL

- RESIDENTIAL AND COMMERCIAL BUILDING
- HEDGE ROW
- SMALL STREAM
- LARGE STREAM
- POND OR LAKE
- TELEPHONE POLES
- POWER POLES
- TRANSMISSION LINES
- TREES
- DECIDUOUS WOODS
- EVERGREEN WOODS
- SET AHTD R/W MONUMENT
- TEMPORARY EASEMENT POINT
- PERMANENT EASEMENT POINT
- EXISTING R/W POINT
- PROPERTY LINE POINT
- FOUND MONUMENT
- SURVEY CALCULATED POINT

"THIS IS A FULLY CONTROLLED ACCESS FACILITY"

STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

RIGHT OF WAY MAP

U.S. HIGHWAY 412

(SPRINGDALE NORTHERN BYPASS)

BENTON & WASHINGTON COUNTY

F.A.P: NH-9399(5)

ROUTE # SECTION #

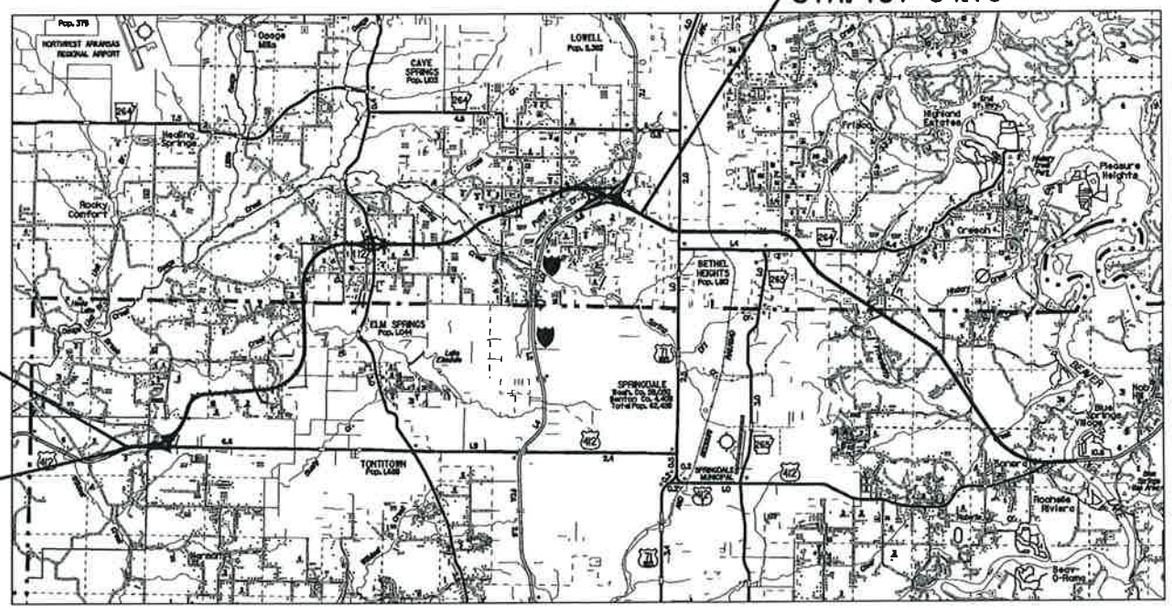
JOB 001966

LAYOUT
NOT TO SCALE

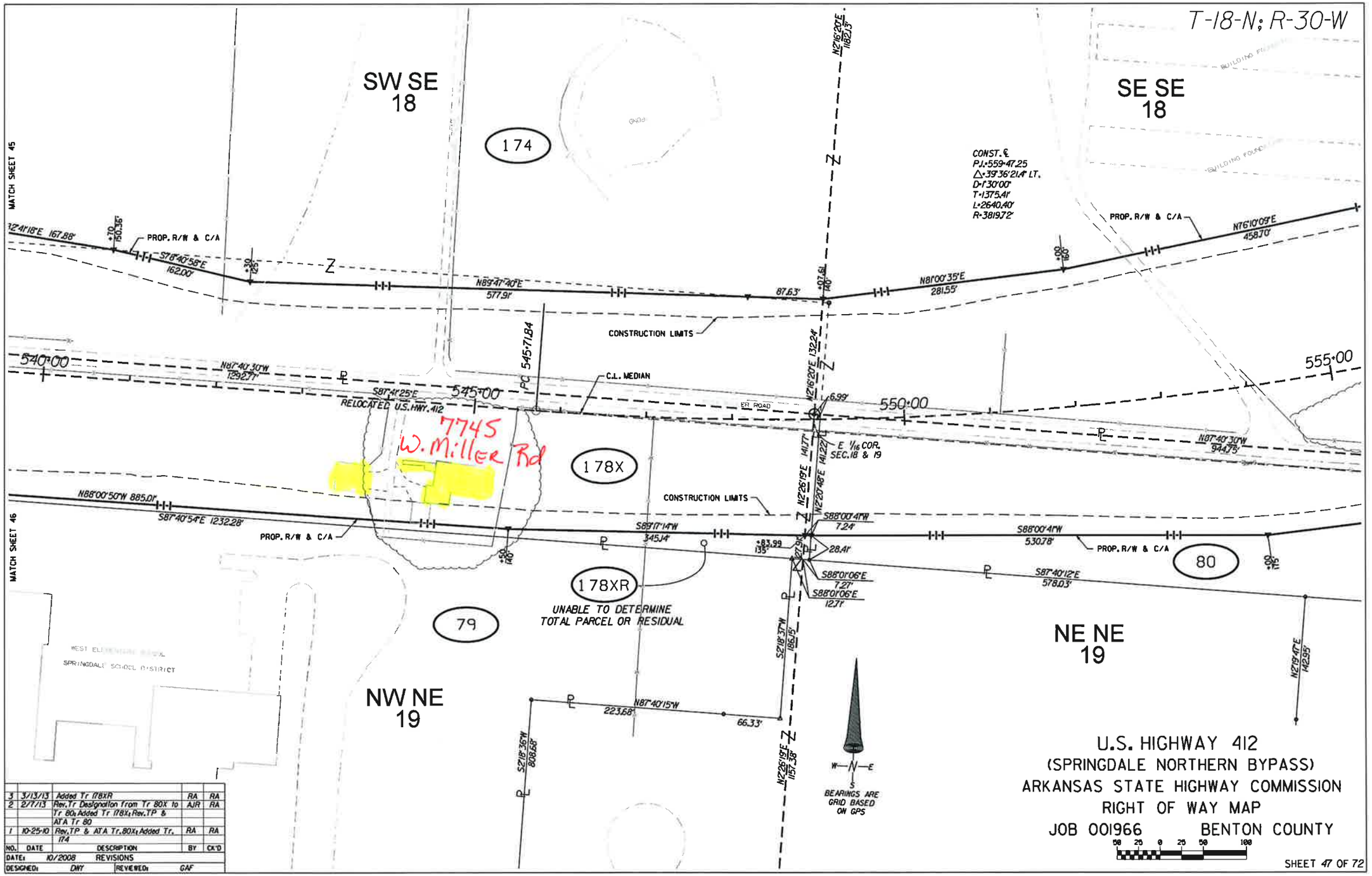
END CONST. JOB 001966
STA. 757+54.70

BEGIN R/W
ACQ. JOB 001966
STA. 152+58.55

BEGIN CONST.
JOB 001966
STA. 148+68.03

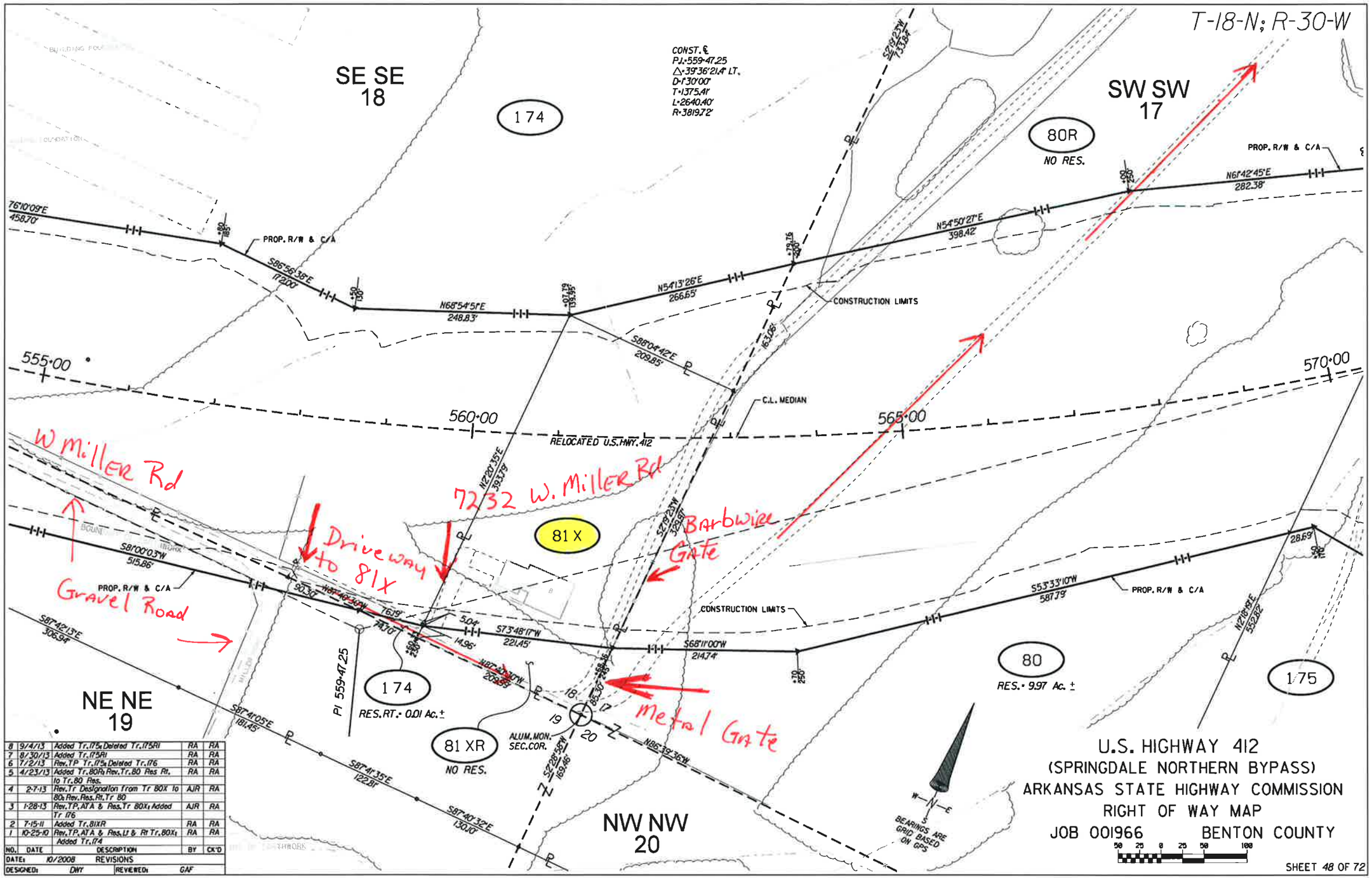


10/2008



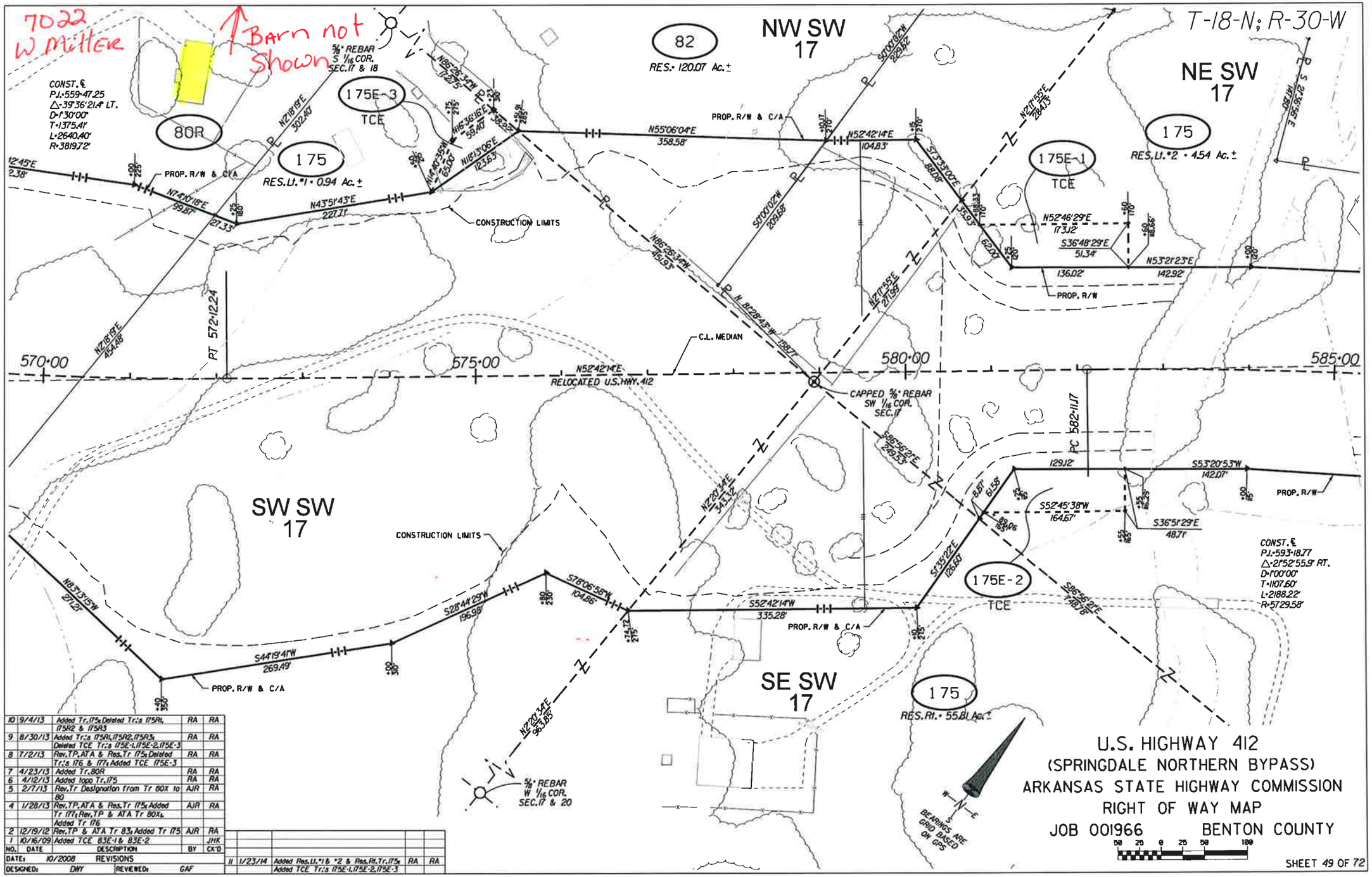
NO.	DATE	DESCRIPTION	BY	CK'D
3	3/13/13	Added Tr 178XR	RA	RA
2	2/7/13	Rev. Tr Designation from Tr 80X to Tr 80; Added Tr 178X; Rev. TP & ATA Tr 80	AJR	RA
1	10-25-10	Rev. TP & ATA Tr. 80X; Added Tr. 174	RA	RA

DATE: 10/2008 REVISIONS
DESIGNED: DMY REVIEWED: GAF

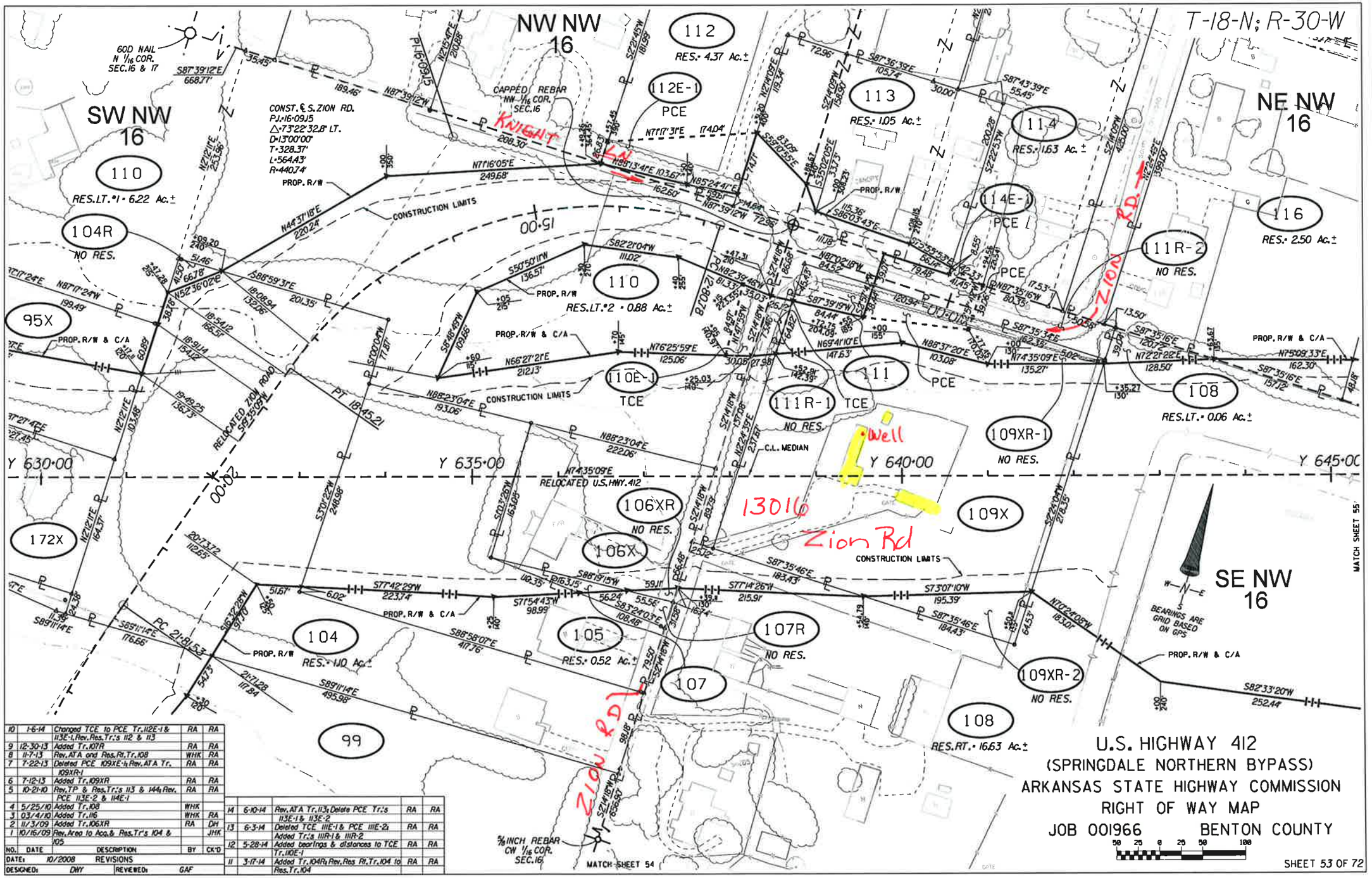


NO.	DATE	DESCRIPTION	BY	CK'D
8	9/4/13	Added Tr.175; Deleted Tr.175RI	RA	RA
7	8/30/13	Added Tr.175RI	RA	RA
6	7/2/13	Rev. TP Tr.175; Deleted Tr.176	RA	RA
5	4/23/13	Added Tr.80R; Rev. Tr.80 Res Rt. to Tr.80 Res.	RA	RA
4	2-7-13	Rev. Tr Designation from Tr 80X to 80; Rev. Res. Rt. Tr 80	AJR	RA
3	1-28-13	Rev. TP, AT A & Res. Tr 80X; Added Tr 176	AJR	RA
2	7-15-11	Added Tr. 81XR	RA	RA
1	10-25-10	Rev. TP, AT A & Res. Lt & Rt Tr. 80X; Added Tr. 174	RA	RA

DATE: 10/2008 REVISIONS
DESIGNED: DWT REVIEWED: GAF



NO.	DATE	DESCRIPTION	BY	CK'D
DATE:	10/2008	REVISIONS		
DESIGNED:	DMY	REVIEWED: GAF		
10	9/4/13	Added Tr.175, Deleted Tr.'s 175RI, 175R2 & 175R3	RA	RA
9	8/30/13	Added Tr.'s 175RI, 175R2, 175R3, Deleted TCE Tr.'s 175E-1, 175E-2, 175E-3	RA	RA
8	7/2/13	Rev. TP, ATA & Res. Tr 175, Deleted Tr.'s 176 & 177, Added TCE 175E-3	RA	RA
7	4/23/13	Added Tr. 80R	RA	RA
6	4/12/13	Added topo Tr. 175	RA	RA
5	2/7/13	Rev. Tr Designation from Tr 80X to 80	AJR	RA
4	1/28/13	Rev. TP, ATA & Res. Tr 175, Added Tr 177, Rev. TP & ATA Tr 80X, Added Tr 176	AJR	RA
2	12/19/12	Rev. TP & ATA Tr 83, Added Tr 175	AJR	RA
1	10/16/09	Added TCE 83E-1 & 83E-2		JHK
11	1/23/14	Added Res. LI.*1 & *2 & Res. RI. Tr. 175, Added TCE Tr.'s 175E-1, 175E-2, 175E-3	RA	RA



NO.	DATE	DESCRIPTION	BY	CK'D
10	1-6-14	Changed TCE to PCE Tr.112E-1 & 113E-1, Rev. Res. Tr.'s 112 & 113	RA	RA
9	12-30-13	Added Tr.107R	RA	RA
8	11-7-13	Rev. ATA and Res. Rt. Tr.108	WHK	RA
7	7-22-13	Deleted PCE 109XE-1, Rev. ATA Tr. 109XR-1	RA	RA
6	7-12-13	Added Tr.109XR	RA	RA
5	10-21-10	Rev. TP & Res. Tr.'s 113 & 114, Rev. PCE 113E-2 & 114E-1	RA	RA
4	5/25/10	Added Tr.108	WHK	
3	03/4/10	Added Tr.116	WHK	RA
2	11/3/09	Added Tr.106XR	RA	DH
1	10/16/09	Rev. Area to Acq. & Res. Tr's 104 & 105		JHK

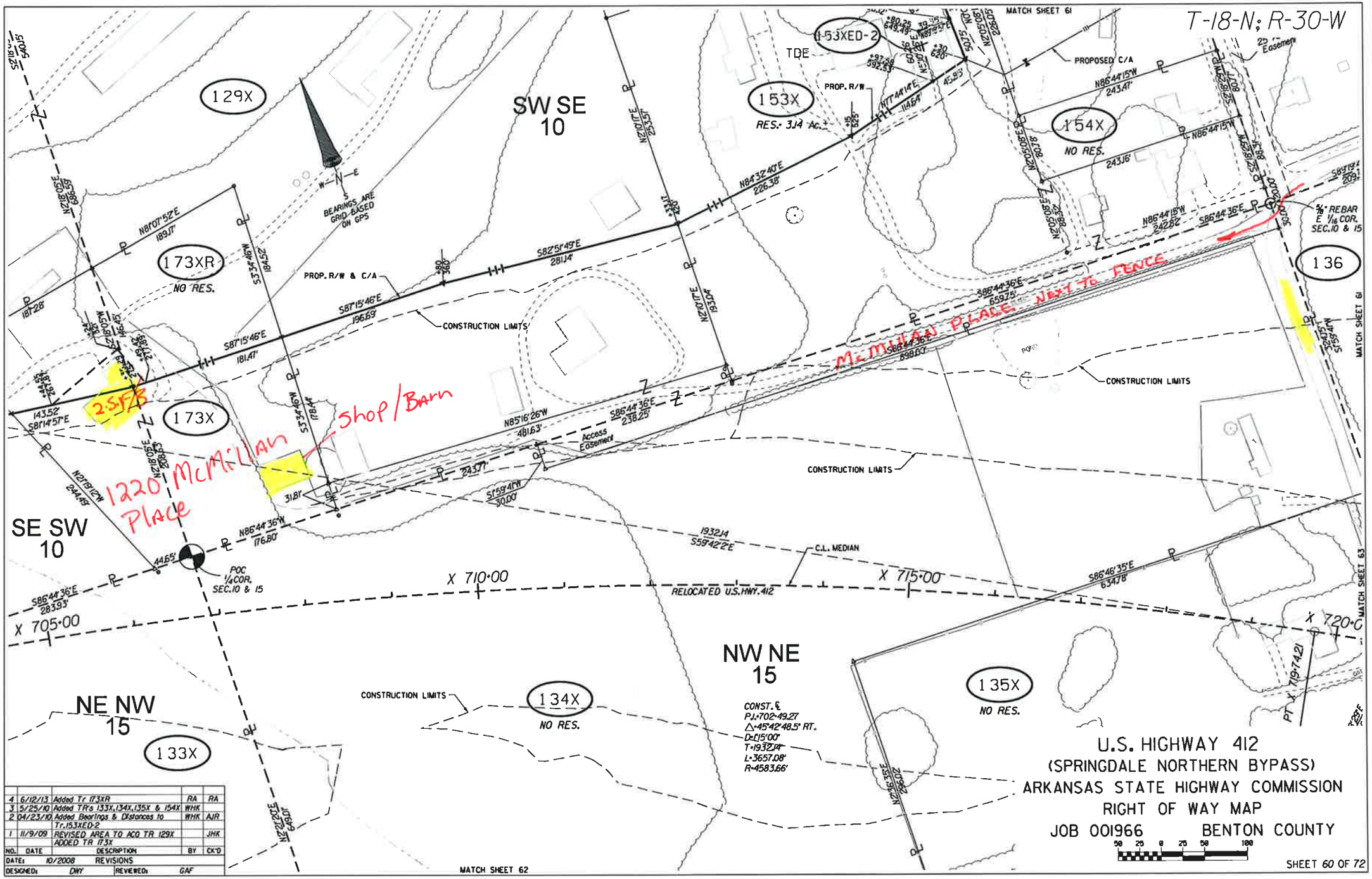
DATE: 10/2008 REVISIONS
DESIGNED: DWY REVIEWED: GAF

H	6-10-14	Rev. ATA Tr.113, Delete PCE Tr.'s 113E-1 & 113E-2	RA	RA
13	6-3-14	Deleted TCE 111E-1 & PCE 111E-2, Added Tr.'s 111R-1 & 111R-2	RA	RA
12	5-28-14	Added bearings & distances to TCE Tr.110E-1	RA	RA
11	3-17-14	Added Tr.104R, Rev. Res Rt. Tr.104 to Res. Tr.104	RA	RA

U.S. HIGHWAY 412
(SPRINGDALE NORTHERN BYPASS)
ARKANSAS STATE HIGHWAY COMMISSION
RIGHT OF WAY MAP
JOB 001966 BENTON COUNTY

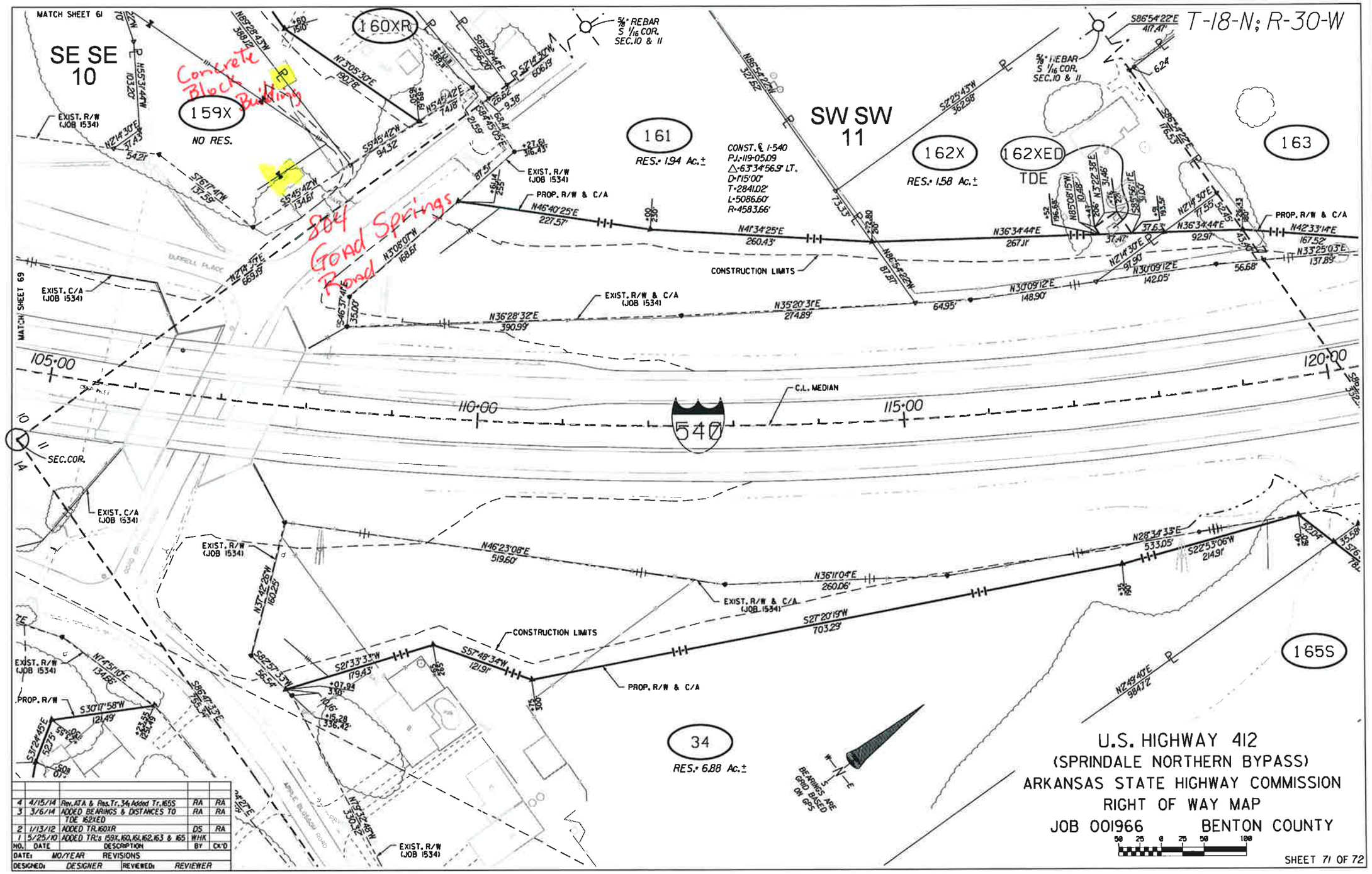
50 25 0 25 50 100

SHEET 53 OF 72



NO.	DATE	DESCRIPTION	BY	CK'D
4	6/12/13	Added Tr 173XR	RA	RA
3	5/25/10	Added TR's 133X, 134X, 135X & 154X	WHK	
2	04/23/10	Added Bearings & Distances to Tr. 153XED-2	WHK	AJR
1	11/9/09	REVISED AREA TO ACQ TR 129X ADDED TR 173X		JHK

DATE: 10/2008 REVISIONS
DESIGNED: DWY REVIEWED: GAF


T-18-N; R-30-W
MATCH SHEET 61
SE SE 10
SW SW 11
160XR
159X
NO RES.
Concrete Block Building
161
RES.= 1.94 Ac.±
162X
RES.= 1.58 Ac.±
162XED
TDE
163
165S
34
RES.= 6.88 Ac.±
CONST. ℄ I-540
PJ.=119-05.09
△=63°34'56.9" LT.
D=1°15'00"
T=2841.02'
L=5086.60'
R=4583.66'
5/8" REBAR
5 1/16 COR.
SEC.10 & 11
EXIST. R/W
(JOB 1534)
EXIST. C/A
(JOB 1534)
PROP. R/W & C/A
CONSTRUCTION LIMITS
EXIST. R/W & C/A
(JOB 1534)
C.L. MEDIAN
540
105·00
110·00
115·00
120·00
SEC.COR.
304 Goad Springs Road
MATCH SHEET 69
PROP. R/W
TDE
BEARINGS ARE GRID BASED ON GPS
U.S. HIGHWAY 412
(SPRINDALE NORTHERN BYPASS)
ARKANSAS STATE HIGHWAY COMMISSION
RIGHT OF WAY MAP
JOB 001966 BENTON COUNTY
50 25 0 25 50 100
SHEET 71 OF 72
4 4/15/14 Rev.ATA & Pass.Tr.34 Added Tr.165S RA RA
3 3/6/14 ADDED BEARINGS & DISTANCES TO TDE 162XED RA RA
2 1/13/12 ADDED TR.160XR DS RA
1 5/25/10 ADDED TR.'s 159X,160,161,162,163 & 165 WHK
NO. DATE DESCRIPTION BY CK'D
DATE: MO/YEAR REVISIONS
DESIGNED: DESIGNER REVIEWED: REVIEWER