11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY: Used motor oil is a possible skin cancer hazard based on tests in laboratory animals and has been identified as a possible carcinogen by IARC.

NTP: NDA

IARC MONOGRAPHS: NDA

OSHA REGULATED: NDA

TERATOGENIC: NDA

MUTAGENIC: NDA

12. ECOLOGICAL INFORMATION

No Data Available.

13. DISPOSAL CONSIDERATIONS

Material may be absorbed into an appropriate absorbent material. Dispose of in accordance with all local, county, state, and federal regulations. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurized, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

14. TRANSPORTATION INFORMATION

NAME OF CONTENTS: N/A

REPORTABLE QUANTITY: NDA

CONSTITUENTS: No hazardous substances at regulated levels

HAZARD CLASS: Not regulated.

UN/NA NUMBER: NDA

POISON INHALATION HAZARD: NDA

EMERGENCY RESPONSE NUMBER: (800) 424-9300 ConUS or (202) 483-7616 collect in Hawaii & Alaska.

15. REGULATORY INFORMATION

This product contains a proprietary zinc compound, which is subject to the reporting requirements of SARA 313 and 40 CFR 372.

Originally prepared by: Unocal Refining & Marketing Division, MSDS Coordinator, 7 May 1991.

Material Safety Data Sheet

Effective Date of Issue: JANUARY 5th 2009

1. Identification of the substance/preparation and company undertaking

Material Name : To4 50w Transmission Oil
Uses : Transmission Oil
Product Code : TO450w
Manufacturer/Supplier : Aztec Oils Ltd
29-33 Intake Rd
Bolsover
Chesterfield
S44 6BB
United Kingdom
Telephone : + 44(0)1246 823007
Fax : + 44(0) 1246 823014
Email : enq@aztecoils.co.uk
Emergency Telephone Number : +44(0)1246 823007

2. Hazard Identification

EC Classification : Not classified as dangerous under EC criteria

Health Hazards : Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/ folliculitis. Used oil may contain harmful impurities.

Signs & Symptoms : Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the kin of exposed areas.
Ingestion may result in nausea, vomiting and/or diarrhoea.

Safety Hazards : Not classified as flammable but will burn.

Environmental Hazards : Not classified as dangerous for the environment.

3. Composition/Information on Ingredients.

Preparation Description : Highly refined mineral oils & additives.
Hazardous Components

Chemical Identity	CAS	EINECS	Symbol(s)	R-phrase(s)	Conc.
Zinc alkyl Dithiophosphate	68649-42-3	272-028-3	Xi, N	R38; R41; R51/53	<2.40%

Additional Information: the highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346. Refer to chapter 16 for full text of EC R-phrases.

4. First Aid Measures

General Information	: Not expected to be a health hazard when used under normal conditions.
Inhalation	: No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
Skin contact	: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical advice.
Eye Contact	: Flush eyes with copious quantities of water. If persistent Irritation occurs, obtain medical attention.
Ingestion	: In general no treatment is necessary unless large quantities are Swallowed, however, get medical advice.
Advice to Physician	: treat symptomatically.

5. Fire Fighting Measures

Clear fire area of all non-emergency personnel.

Specific Hazards	: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and Inorganic compounds.

Suitable Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media: Do not use water in a jet.

Protective Equipment for Fire-fighters: Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. Accidental Release Measures

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material safety Data Sheet. See Chapter 13 for information on disposal. Observe all relevant local and international regulations.

Protective measures	: Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth or other appropriate barriers.
Clean up Methods	: Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as a clay, sand or other suitable material and dispose of properly.
Additional Advice	: Local authorities should be advised if significant spillages Cannot be contained.

7. Handling and Storage:

General Precautions	: Use local exhaust ventilation if there is a risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
Handling	: Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment used.
Storage	: Keep container tightly closed and in a cool, well ventilated place. Use properly labelled and closable containers. Storage Temperature: 0-50oC / 32-122oF The storage of this product may be subject to the Control of Pollution (Oil Storage) (England) Regulations. Further guidance maybe obtained from the local environmental agency office.
Recommended Materials	: For containers or container linings, use mild steel or high Density polyethylene.
Unsuitable Materials	: PVC.
Additional Information	: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion. Exposure to this product should be reduced as low as reasonably practicable. Reference should be made to The Health & Safety Executive's publication "COSHH Essentials"

8. Exposure Control / Personal Protection:

Occupational Exposure Limits

Exposure Controls	: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
Personal Protective Equipment	: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE supplier.
Respiratory Protection	: No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to

avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours (boiling point >65oC(149oF) meeting EN141.

Hand Protection : Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended

Eye Protection : Wear safety glasses or full face shield if splashes are likely to occur. Approved to EU Standard EN166.

Protective Clothing : Skin protection not ordinarily required beyond standard issue work clothes.

Monitoring Methods : Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Environmental Exposure Controls : Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. Physical and Chemical Properties

Appearance	: Amber. Liquid
Odour	: Slight Hydrocarbon
pH	:Data not available
Initial Boiling Point and Boiling Range	: >280oC/536oF estimated values.
Pour Point	: Typical -18oC/0oF
Flash Point	: Typical 242oC/468oF (COC)
Upper/lower Flammability or explosion limits	: Typical 1-10% (V) based on mineral oil)
Auto-ignition temperature	: > 320oC/608oF
Vapour pressure	: <0.5 Pa at 20oC/68oF (estimated values)
Density	: Typical 890 kg/m3 at 15oC/59oF

Water solubility	: Negligible
n-octanol/water partition coefficient (log Pow)	: >6 (based on information on similar products)
Kinematic viscosity	: Typical 168 mm2/s at 40oC/104oF
Vapour density (air=1)	: >1 (estimated value(s))
Evaporation rate (nBuAc=1)	: Data not available

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10. Stability and Reactivity

Stability	: Stable
Conditions to avoid	: Extremes of temperature and direct sunlight
Materials to avoid	: Strong oxidising agents.
Hazardous Decomposition Products	: Hazardous decomposition products are not expected to form during normal storage.

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11 Toxicological Information

Basis for Assessment	: Information given is based on data on the components and the toxicology of similar products.
Acute Oral Toxicity	: Expected to be of low toxicity: LD50>5000 mg/kg, Rat
Acute Dermal Toxicity	: Expected to be of low toxicity: LD50>5000 mg/kg, Rabbit
Acute Inhalation Toxicity	: Not considered to be an inhalation hazard under normal conditions of use.
Skin Irritation	: Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
Eye Irritation	: Expected to be slightly irritating
Respiratory	: Inhalation of vapours or mists may cause irritation.
Sensitisation	: Not expected to be a skin sensitiser.
Repeated Dose Toxicity	: Not expected to be a hazard
Mutagenicity	: Not considered a mutagenic hazard
Carcinogenicity	: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer(IARC). Other components are not known to be associated with carcinogenic effects.
Reproductive and Development Toxicity	: Not expected to be a hazard.
Additional Information	: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. Continuous contact with used engine oils has caused skin cancer in animal tests.

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12. Ecological Information

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity	: Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50> 100mg/l (to aaquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentration less than 1mg/l.
Mobility	: Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
Persistence/degradability	: Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
Bioaccumulation	: Contains components with the potential to bio accumulate.
Other Adverse Effects	: Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photo-chemical ozone creation potential or global warming potential.

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13. Disposal Conditions:

Material Disposal	: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
Container Disposal	: Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
Local Legislation	: Disposal should be in accordance with applicable regional, national, and local laws and regulations. EU Waste Disposal Code (EWC): 13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils. classification of waste is always the responsibility of the end user.

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14. Transport Information

ADR
This material is not classified as dangerous under ADR regulations.

RID
This material is not classified as dangerous under RID regulations.

ADNR
This material is not classified as dangerous under ADNR regulations.

IMDG
This material is not classified as dangerous under IMDG regulations

IATA(Country variations may apply)
This material is not classified as dangerous under IATA regulations.

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15. Regulatory Information

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

EC Classification	: Not classified as dangerous under EC criteria.
EC Symbols	: No Hazard Symbol required
EC Risk Phrases	: Not classified
EC Safety Phrases	: Not classified
EINECS	: All components listed or polymer exempt.
TSCA	: All components listed

Other Information

Environmental Protection Act 1990 (as amended). Health & Safety at Work Act 1974. Consumer Protection Act 1987. Control of Pollution Act 1974. Environmental Act 1995. Factories Act 1961. Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations. Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. Control of Substances Hazardous to Health Regulations 1994 (as amended). Road Traffic (Carriage of Dangerous Substances in Packages) Regulations. Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations. Road Traffic (Carriage of Dangerous Substances in Road Tankers in Tank Containers) Regulations. Road Traffic (Training of Drivers of Vehicles Carrying Dangerous Goods) Regulations. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations. Health and safety (First Aid) Regulations 1981. Personal Protective Equipment (EC directive) Regulations 1992. Personal Protective Equipment at Work Regulations 1992.

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16. Other Information

R-phrase(s)

	Not classified
R38	Irritating to skin
R41	Risk of serious damage to eyes
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

MSDS Version No	2.0
MSDS Effective Date	05/01/2009
MSDS Regulation	Regulation 1907/2006/EC
MSDS Distribution	The information in this document should be made available to all who may handle the product.
Disclaimer	This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Material Safety Data Sheet

Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Chevron Rykon® Premium Oil

Product Use: Hydraulic Oil

Product Number(s): CPS232950, CPS232952, CPS255678, CPS255679

Synonyms: Chevron Rykon® Premium Oil ISO 100, Chevron Rykon® Premium Oil ISO 32, Chevron Rykon® Premium Oil ISO 46, Chevron Rykon® Premium Oil ISO 68

Company Identification

ChevronTexaco Global Lubricants
6001 Bollinger Canyon Rd.
San Ramon, CA 94583
United States of America
www.chevron-lubricants.com

Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

Health Emergency

ChevronTexaco Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

Product Information

email : lubemsds@chevrontexaco.com
Product Information: (800) LUBE TEK
MSDS Requests: (800) 414-6737

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	80 - 100 %weight

SECTION 3 HAZARDS IDENTIFICATION

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

SECTION 4 FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Note to Physicians: In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

SECTION 5 FIRE FIGHTING MEASURES

Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

FLAMMABLE PROPERTIES:

Flashpoint: (Cleveland Open Cup) 144 °C (291 °F) (Min)

Autoignition: No Data Available

Flammability (Explosive) Limits (% by volume in air): Lower: Not Applicable Upper: Not Applicable

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

Respiratory Protection: No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Highly refined mineral oil	(C15 - C50)	ACGIH	5 mg/m3	10 mg/m3	—
Highly refined mineral oil	(C15 - C50)	OSHA Z-1	5 mg/m3	—	—

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Colorless to yellow
Physical State: Liquid
Odor: Petroleum odor
pH: Not Applicable
Vapor Pressure: <0.01 mmHg @ 37.8 °C (100 °F)
Vapor Density (Air = 1): >1
Boiling Point: >260°C (500°F)
Solubility: Soluble in hydrocarbons; insoluble in water
Freezing Point: Not Applicable
Specific Gravity: 0.86 - 0.87 @ 15.6°C (60.1°F) / 15.6°C (60.1°F)
Viscosity: 13.5 cSt @ 40°C (104°F) (Min)

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Incompatibility With Other Materials: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Hazardous Decomposition Products: None known (None expected)
Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS

Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.
Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.
Skin Sensitization: No product toxicology data available.
Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.
Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.
Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

ENVIRONMENTAL FATE

This material is not expected to be readily biodegradable.

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Description: PETROLEUM LUBRICATING OIL
IMO/IMDG Shipping Description: PETROLEUM LUBRICATING OIL
ICAO/IATA Shipping Description: PETROLEUM LUBRICATING OIL

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES: 1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=PA RTK

No components of this material were found on the regulatory lists above.

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), KECI (Korea), PICCS (Philippines), TSCA (United States).

NEW JERSEY RTK CLASSIFICATION:

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Hydraulic oil)

WHMIS CLASSIFICATION:

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health: 0 Flammability: 1 Reactivity: 0

HMIS RATINGS: Health: 1 Flammability: 1 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

LABEL RECOMMENDATION:

Label Category : INDUSTRIAL OIL 1

REVISION STATEMENT: This revision updates the following sections of this Material Safety Data Sheet: 1-16

Revision Date: 09/14/2004

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value
TWA - Time Weighted Average
STEL - Short-term Exposure Limit
PEL - Permissible Exposure Limit
CAS - Chemical Abstract Service Number
ACGIH - American Conference of Government Industrial Hygienists
IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute
MSDS - Material Safety Data Sheet
CVX - ChevronTexaco
NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)
NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer
OSHA - Occupational Safety and Health Administration

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the ChevronTexaco Energy Research & Technology Company, 100 Chevron Way, Richmond, California 94802.

Material Safety Data Sheet

24-Hour Emergency Telephone Numbers
HEALTH : Chevron Emergency Information Center (800) 231-0623 or (510) 231-0623
TRANSPORTATION : CHEMTREC (800) 424-9300 or (703) 527-3887
Emergency Information Centers are located in the U.S.A. International collect calls accepted.

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

TEXACO Havoline DEX-COOL Extended Life Anti-Freeze/Coolant

Product Number(s): CPS227994

Company Identification
ChevronTexaco Global Lubricants
6001 Bollinger Canyon Road
San Ramon, CA 94583

Product Information
Product Information: 800-LUBE-TEK
email : lubemsds@chevron.com

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Ethylene Glycol	107-21-1	80 - 96.99 %weight
Diethylene glycol	111-46-6	1 - 4.99 %weight
Potassium 2-ethylhexanoate	3164-85-0	1 - 4.99 %weight
Water	7732-18-5	1 - 2.99 %weight

SECTION 3 HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW

Orange liquid. Mild odor.

- HARMFUL OR FATAL IF SWALLOWED
- CAUSES EYE IRRITATION
- MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS BASED ON ANIMAL DATA
- POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL THAT MAY CAUSE BIRTH DEFECTS BASED ON ANIMAL DATA
- MAY CAUSE DAMAGE TO:
- KIDNEY

****

IMMEDIATE HEALTH EFFECTS
Eye: Contact with the eyes causes irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision.
Skin: Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.
Ingestion: Toxic; may be harmful or fatal if swallowed.
Inhalation: The vapor or fumes from this material may cause respiratory irritation. Symptoms of

respiratory irritation may include coughing and difficulty breathing.

DELAYED OR OTHER HEALTH EFFECTS:
Reproduction and Birth Defects: May cause adverse reproductive effects based on animal data. Contains material that may be harmful to the developing fetus based on animal data.

Target Organs: Repeated ingestion of this material may cause damage to the following organ(s) based on animal data. Kidney

See Section 11 for additional information. Risk depends on duration and level of exposure.

SECTION 4 FIRST AID MEASURES

Eye: Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get medical attention if irritation persists.
Skin: To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.
Ingestion: If swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.
Inhalation: Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

SECTION 5 FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:
OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

NFPA RATINGS: Health: 2 Flammability: 1 Reactivity: 0

FLAMMABLE PROPERTIES:
Flashpoint: (Pensky-Martens Closed Cup) 260 °F (127 °C)
Autoignition: 752 °F (400 °C)
Flammability (Explosive) Limits (% by volume in air): Lower: 3.2 Upper:

EXTINGUISHING MEDIA: Dry Chemical, CO2, AFFF Foam or alcohol resistant foam.

PROTECTION OF FIRE FIGHTERS:
Fire Fighting Instructions: This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Potassium .

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.
Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove

contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.
Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: Wash thoroughly after handling. Do not get in eyes. Do not breathe vapor or fumes.
General Handling Information: Do not taste or swallow antifreeze or solution. Keep out of the reach of children and animals.
Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.
General Storage Information: Do not store in open or unlabeled containers.
Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:
Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT
Eye/Face Protection: Wear eye protection such as safety glasses, chemical goggles, or faceshields if engineering controls or work practices are not adequate to prevent eye contact.
Skin Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: Natural rubber, Neoprene, Nitrile Rubber, Polyvinyl Chloride (PVC or Vinyl).
Respiratory Protection: Determine if airborne concentrations are below the recommended exposure limits. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material, such as: Air-Purifying Respirator for Organic Vapors, Dusts and Mists. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not

provide adequate protection.

Occupational Exposure Limits:

Component	Limit	TWA	STEL	Ceiling	Notation
Ethylene Glycol	ACGIH_TLV			100 mg/m3	
Ethylene Glycol	OSHA_PEL			125 mg/m3	

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Orange liquid. Mild odor.
pH: 8 - 8.6
Vapor Pressure: <0.01 mmHg @ 20 °C
Vapor Density (Air = 1): 2.1
Boiling Point: 228 °F (109 C) (Typical)
Solubility: Miscible
Freezing Point: -34 °F (-37 C)
Melting Point: NDA
Specific Gravity: 1.12 @ 15.6 °C / 15.6 °C
Viscosity: 8 cSt @ 40 °C

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Incompatibility With Other Materials: May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Hazardous Decomposition Products: Aldehydes (Elevated temperatures)
Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS
Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.
Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.
Skin Sensitization: No product toxicology data available.
Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.
Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.
Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

ADDITIONAL TOXICOLOGY INFORMATION:
This product contains ethylene glycol (EG). The toxicity of EG via inhalation or skin contact is expected to be slight at room temperature. The estimated oral lethal dose is about 100 cc (3.3 oz.) for an adult human. Ethylene glycol is oxidized to oxalic acid which results in the deposition of calcium oxalate crystals mainly in the brain and kidneys. Early signs and symptoms of EG poisoning may resemble those of alcohol intoxication. Later, the victim may experience nausea, vomiting, weakness, abdominal and muscle pain, difficulty in breathing and decreased urine output. When EG was heated above the boiling point of water, vapors formed which reportedly caused unconsciousness, increased lymphocyte count,

and a rapid, jerky movement of the eyes in persons chronically exposed. When EG was administered orally to pregnant rats and mice, there was an increase in fetal deaths and birth defects. Some of these effects occurred at doses that had no toxic effects on the mothers. We are not aware of any reports that EG causes reproductive toxicity in human beings.

This product contains diethylene glycol (DEG). The estimated oral lethal dose is about 50 cc (1.6 oz) for an adult human. DEG has caused the following effects in laboratory animals: liver abnormalities, kidney damage and blood abnormalities. It has been suggested as a cause of the following effects in humans: liver abnormalities, kidney damage, lung damage and central nervous system damage.

2-Ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet. When administered to pregnant rats by gavage or in drinking water, 2-EXA caused teratogenicity (birth defects) and delayed postnatal development of the pups. Additionally, 2-EXA impaired female fertility in rats. Birth defects were seen in the offspring of mice who were administered sodium 2-ethylhexanoate via intraperitoneal injection during pregnancy.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY
The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

ENVIRONMENTAL FATE
This material is expected to be readily biodegradable.

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Name: NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR
DOT Hazard Class: NOT APPLICABLE
DOT Identification Number: NOT APPLICABLE
DOT Packing Group: NOT APPLICABLE

SECTION 15 REGULATORY INFORMATION

SARA 311/312 CATEGORIES:

1.	Immediate (Acute) Health Effects:	YES
2.	Delayed (Chronic) Health Effects:	YES
3.	Fire Hazard:	NO
4.	Sudden Release of Pressure Hazard:	NO
5.	Reactivity Hazard:	NO

REGULATORY LISTS SEARCHED:

4_I1=IARC Group 1	12=TSCA Section 8(a) PAIR	21=TSCA Section 5(a)
4_I2A=IARC Group 2A	13=TSCA Section 8(d)	25=CAA Section 112 HAPs
4_I2B=IARC Group 2B	15=SARA Section 313	26=CWA Section 311
05=NTP Carcinogen	16=CA Proposition 65	28=CWA Section 307
06=OSHA Carcinogen	17=MA RTK	30=RCRA Waste P-List
09=TSCA 12(b)	18=NJ RTK	31=RCRA Waste U-List
10=TSCA Section 4	19=DOT Marine Pollutant	32=RCRA Appendix VIII
11=TSCA Section 8(a) CAIR	20=PA RTK	

The following components of this material are found on the regulatory lists indicated.

Diethylene glycol	25
Ethylene Glycol	15, 17, 18, 20, 25

CERCLA REPORTABLE QUANTITIES(RQ)/SARA 302 THRESHOLD PLANNING QUANTITIES(TPQ):

Component	Component RQ	Component TPQ	Product RQ
Ethylene Glycol	5000 lbs	None	5440 lbs

CHEMICAL INVENTORIES:

AUSTRALIA: All the components of this material are listed on the Australian Inventory of Chemical Substances (AICS).

PEOPLE'S REPUBLIC OF CHINA: All the components of this product are listed on the draft Inventory of Existing Chemical Substances in China.

EUROPEAN UNION: All the components of this material are in compliance with the EU Seventh Amendment Directive 92/32/EEC.

KOREA: All the components of this product are on the Existing Chemicals List (ECL) in Korea.

PHILIPPINES: All the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

NEW JERSEY RTK CLASSIFICATION:

Refer to components listed in Section 2.

WHMIS CLASSIFICATION:

Class D, Division 1, Subdivision B: Toxic Material -
Acute Lethality
Class D, Division 2, Subdivision A: Very Toxic Material -
Chronic Toxic Effects
Reproductive Toxicity
Teratogenicity and Embryotoxicity
Class D, Division 2, Subdivision B: Toxic Material -
Skin or Eye Irritation

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health: 2 Flammability: 1 Reactivity: 0
HMIS RATINGS: Health: 2* Flammability: 1 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT: This revision updates Section 1 (Product Identification), Section 2 (Composition/Ingredient Information), Section 5 (Fire Fighting Measures), Section 11 (Toxicological Information), and Section 15 (Regulatory Information).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV	-	Threshold Limit Value	TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit	PEL	-	Permissible Exposure Limit
			CAS	-	Chemical Abstract Service Number
NDA	-	No Data Available	NA	-	Not Applicable
<=	-	Less Than or Equal To	>=	-	Greater Than or Equal To

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1).

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

Regulatory Office

April 30, 2009

Project Name: Five crossings of unnamed tributaries to Mill Creek for installation of new culverts providing access for Arbuckle Aggregates quarry expansion, all in Mill Creek Quarry, near Mill Creek, Johnston County, Oklahoma.

Regulatory Office File Tracking Permit ID Number: 2009-273

Corps POC: Mr. Timothy Hartsfield, 918-669-7237

Mr. Geoffrey A. Canty, PhD
EST, Inc.
3201 South Berry Road
Norman, Oklahoma 73072

Dear Mr. Canty:

Regarding the proposed project please reference your initial correspondence dated March 12, 2009; and additional later geographic location information furnished electronically.

Please review the enclosed Nationwide Permit (NWP) concerning your proposed placement of dredged or fill material into aquatic areas. Provided you comply with all the terms and conditions therein, the project may proceed at any time. If you cannot comply with the conditions of the NWP, please reply.

This NWP is scheduled to expire on March 18, 2012. It is incumbent on you to remain informed of changes to the NWP. The Corps will issue a public notice announcing the changes as they occur. Furthermore, if you commence, or are under contract to commence, the activity before the date the NWP is modified or revoked, you will have 12 months from the date of the modification or revocation to complete the activity under the present terms and conditions of this NWP.

Sincerely,

T. HARTSFIELD

For David A. Manning
Chief, Regulatory Office

Enclosure

ALL REQUIRED FORMS MUST BE SUBMITTED TO THE FOLLOWING ADDRESS:

MR. TIMOTHY HARTSFIELD
REGULATORY PROJECT MANAGER
REGULATORY OFFICE
TULSA DISTRICT CORPS OF ENGINEERS
DEPARTMENT OF THE ARMY
MAIL ROUTING CODE "CESWT-RO"
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128

PERMITTEE CONSTRUCTION SCHEDULE WORKSHEET

* MAIL TO ADDRESS ON REVERSE WITHIN 30 DAYS OF "DATE OF ISSUANCE"

PERMIT NO.: 09-273

REGULATORY PROJECT MANAGER: MR. HARTSFIELD

PERMITTEE NAME:

DATE OF ISSUANCE:

----------(fold here so that address shows on outside)--------

Please provide the following information:

Anticipated/Known Construction Start Date: _____

Anticipated Completion Date: _____

I have read and understand the obligations and requirements of this authorization.

_____ _____

SIGNATURE OF PERMITTEE DATE

----------(fold here and tape closed)----------

(FOR AGENCY USE ONLY - DO NOT WRITE BELOW THIS LINE)

RECEIVED IN CESWT-RO: _____

INSPECTION NEEDED: Y / N

CONSTRUCTION INSPECTION SCHEDULED: _____

FINAL INSPECTION SCHEDULED: _____

PERMITTEE COMPLIANCE CERTIFICATION

Upon completion of the activity authorized by this permit and any mitigation required by this permit, sign and complete this certification form and return it to the address on the reverse side within 30 days of completion of the work.

PERMIT NO.: 09-273

REGULATORY PROJECT MANAGER: MR. HARTSFIELD

PERMITTEE NAME:

DATE OF ISSUANCE:

----------(fold here so that address shows on outside)--------

(Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.)

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

_____ _____

SIGNATURE OF PERMITTEE DATE

DATE WORK COMPLETED: _____

----------(fold here and tape closed)----------

(FOR AGENCY USE ONLY - DO NOT WRITE BELOW THIS LINE)

RECEIVED IN CESWT-RO: _____

INSPECTION NEEDED: Y / N

FINAL INSPECTION SCHEDULED: _____

Oklahoma Department of Transportation
Division Three
P.O. Box 549
Ada, OK 74820

Office (580)332-1526
Fax: (580)332-0261

December 14, 2009

Mr. Pete Dawson
Arbuckle Aggregates
6831 Ash Street
Frisco, TX 75034

Re: ***SH 7 Utility Crossing Request***
Arbuckle Aggregates – Mill Creek Quarry
Johnston County

Mr. Dawson:

I am writing in response to your letter requesting approval to cross under State Highway 7 in Johnston County. After careful consideration and research we concluded that conditional approval will be granted if certain assurance can be met through submittal of site specific engineering plans and appropriate permit applications. These are discussed in more detail below.

Waterline Crossing:
Your request for up to four water lines under the highway can be approved once you determine the exact location and the type and number of pipes that will be crossing under the road. Utility line crossings are common along highways but installation needs to follow established protocols. A Utility Crossing application (Form M4 5/2009) should be submitted along with a construction plan and profile sheet. Once the permit application and the engineering plans are received, the permitting process should be straight forward.

Tunnel Crossing:
Your proposal for a tunnel under the highway was considered, but because of the uncertainty associated with the project, a bridge would be a better alternative. Spanning across the area you are proposing to tunnel under would eliminate several issues of concern including slumping, settling, and rock integrity. Your mining equipment and a conveyor system would be allowed to pass under the bridge. Obviously, the bridge design would have to meet ODOT specifications along with other considerations and approvals. When you are ready to cross under the road, please contact my office to discuss this issue further.

If you have any questions or comments, please feel free to contact me at (580) 332-1526.

Sincerely,

Paul Rachel, P.E.
Division Engineer

cc: Director of Operations

SECTION 404 PERMIT APPLICATION FORM

DATE: 05-7-2010

Project No.:	6000848			**Facility:**	Mill Creek Quarry	**County, Near:**	Johnston, Town of Mill Creek
Description:	Low water crossings associated with a proposed limestone quarry						
Construction Dates:	December 2010						

Sta. or Str. No.	Location			Waterbody	Type	Description		Excavation		Fill		Notes
	Latitude	Longitude	Legal			Existing Structure	New Structure	CY (M^3)	Area acre (ha)	CY (M^3)	Area acre (ha)	
			T1S, R4EIM									
F	34° 27' 17.79"N	96° 50' 41.74"W	NWNWSW Sect 24	Unnamed Tributary of Mill Creek	LWC	None	3- 4' x 100' steel pipes; packed crushed stone and riprap	0	0	-	0.057	1, 2
G	34° 27' 13.59"N	96° 50' 41.66"W	SWNWSW Sect 24	Unnamed Tributary of Mill Creek	RRC	None	3- 4' x 100' steel pipes; packed crushed stone and riprap	0	0	-	0.057	1, 2
H	34° 27' 43.42"N	96° 50' 39.22"W	NWNWNW Sect 24	Unnamed Tributary of Mill Creek	RRC	None	3- 4' x 100' steel pipes; packed crushed stone and riprap	0	0	-	0.057	1, 2

Types: BP--Bank Protection, CC--Channel Change, Chan--Channel Work, D--Detour, RCB--Reinforced Concrete Box, SB--Span Bridge, Wet--Wetlands, WR--Work Road, Misc --Miscellaneous LWC-Low Water Crossing, RRC--Railroad Crossing

Notes:

1. Refer to attached diagram for general location.
2. Ordinary high water determined in field; approximately 2.5' x 25'

NEPA Approval: CE: _____ FONSI/EA: _____ EIS: _____ Date: _____ Pending: _____ NA: XXX

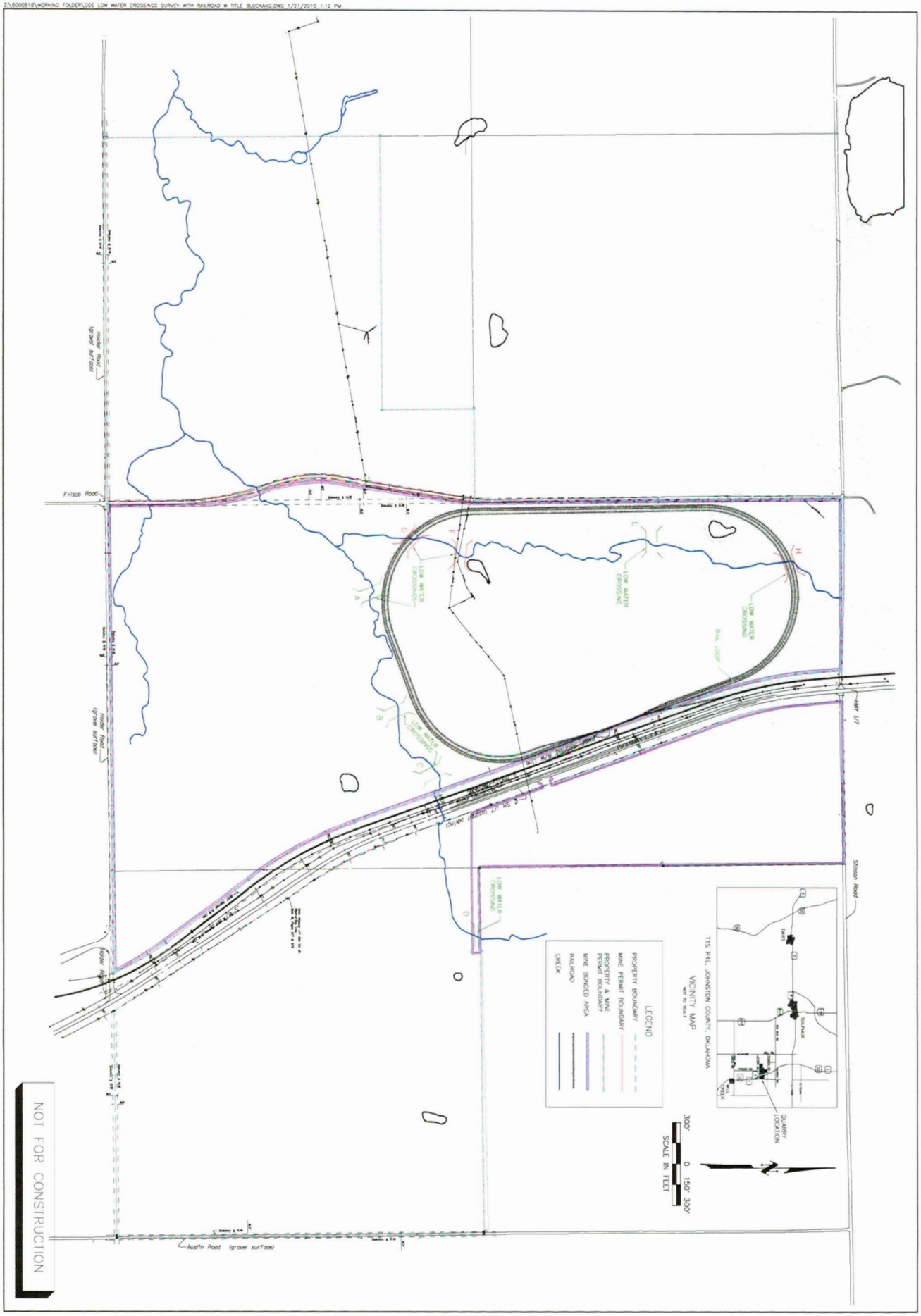
Applicant: Name: Arbuckle Aggregates, LLC; Mr. Pete Dawson Phone No.: (972) 335-4510

Address: 5020 Tennyson Parkway, Suite 101, Plano, TX 75024

Application Prepared By: Name: Geoff Canty, EST, Inc. Phone No.: (405) 307-8378

Processing Agent: 3201 S. Berry Rd Norman OK 73072

Z:\6000818\WORKING FOLDER\COE LOW WATER CROSSINGS SURVEY WITH RAILROAD w TITLE BLOCKAKG.DWG 1/21/2010 1:12 PM



NOT FOR CONSTRUCTION

DESIGNED BY	DAC
DRAWN BY	AKG
CHECKED BY	---
APPROVED BY	PD
DATE	01/22/2010
SCALE	NOT TO SCALE
PROJECT NUMBER	6000848.000
SHEET	1 REV

ARBUCKLE AGGREGATES, LLC
MILL CREEK QUARRY
LOW WATER CROSSING PLAN
JOHNSTON COUNTY, OKLAHOMA

EST
3201 S. BERRY ROAD
NORMAN, OK 73072
(405) 307-8378
CA# 3639 (PE/LS)
EXP. DATE 6/30/10

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D

Application

APPLICATION FOR A PERMIT TO USE SURFACE OR STREAM WATER

OKLAHOMA WATER RESOURCES BOARD
3800 N. CLASSEN BLVD.
OKLAHOMA CITY, OK 73118 (405) 530-8800
website: www.owrb.ok.gov

Office Use Only

Application No. _____ Type of Permit_____
Stream System Code_____Reservoir Code_____
Hydrologic Unit Code_____

FILING FEE MUST ACCOMPANY APPLICATION

Amount applied for	Fee
0 - 320 acre-feet	$190.00
321 - 640 acre-feet	$300.00
641 - 1500 acre-feet	$375.00
Over 1500 acre-feet	$375.00

Plus $150.00 for each 500 acre-feet (or any increment thereof) over 1500 acre-feet.
(Maximum Fee $3,000.00)

1. NAME AND ADDRESS

a. Print the applicant's full name and mailing address, complete with zip code. If the applicant is a corporation, use the name and business address of the corporation.

Applicant Name Arbuckle Aggregates, LLC **Phone** (214) 733 - 7165
FAX# (214) 239 - 4799

Address 5020 Tennyson Parkway

City Plano State TX Zip 75024

b. If the contact during the application process is someone other than the applicant listed above, print the name and mailing address of the contact person.

Contact Name Pete Dawson, President **Phone** (214) 733 - 7165
FAX# (214) 239 - 4799

Address 5020 Tennyson Parkway

City Plano State TX Zip 75024

2. TYPE OF SURFACE WATER PERMIT REQUESTED (Check one)

☒ **Regular Permit** - authorizes diversion and use of water on a year-round basis.
☐ **Seasonal Permit** - authorizes diversion and use of water for specified time periods during the calendar year.
☐ **Term Permit** - valid for a term of years and does not vest the holder with any permanent right.
(Provide ending date for term permit _____).

DATE OF RECEIPT OF APPLICATION
(FOR OFFICE USE ONLY)

OKLAHOMA WATER RESOURCES BOARD
Planning & Management Division

APPLICATION FOR A PERMIT TO USE SURFACE OR STREAM WATER

"HANCOCK PROPERTY"
(33-T1S-R4E)

Prepared for:

ARBUCKLE AGGREGATES, LLC
MILL CREEK QUARRY

Prepared by:

3201 South Berry Road
Norman, OK 73072

Submitted:
May 2010

Application #_____

3. AMOUNT OF WATER TO BE APPROPRIATED

State total amount of water applied for in acre-feet per calendar year. One acre-foot of water will cover one acre of land one foot deep and is equal to 325,851 U.S. gallons. The diversion rate is the maximum rate of withdrawal, in gallons per minute, of water from the pond, lake, spring or other definite stream.

Application is made to take and use 101 acre-feet of surface water annually at a rate not to exceed 5,000 gallons per minute.

4. PURPOSE(S) FOR WHICH WATER WILL BE USED

a. List the purpose or purposes for which the water would be used if the permit is granted and list the number of acre-feet for each purpose. Be sure that the sum of the amounts listed below equals the total acre-feet in #3 above. If the water is to be used to irrigate crops, list IRRIGATION as the purpose and list the sum total acre-feet for all crops.

OFFICE USE ONLY
SIC CODES

101 acre-feet of water will be used for Mining Use & Industrial Use

0 acre-feet of water will be used for _____

0 acre-feet of water will be used for _____

0 acre-feet of water will be used for _____

b. *If the water requested is for irrigation purpose, state the total number of acres that will be irrigated. The land to be irrigated must be shown on plat(s) attached to the application. The amount of water requested should be based on types of crops to be grown and cropping patterns proposed. The Board will use appropriate publications and information the applicant submits in determining amount of water needed.*

0 acres of land are proposed to be irrigated. The proposed crops are NA

_____.

5. DIVERSION(S) OF WATER: Source, Location and Method of Diversion

a. If the water is to be used in a pond, lake or reservoir and will not be pumped or moved from one location to another, check here. ☐

b. For each diversion point, state the amount of water, in acre-feet, to be diverted annually and give the legal description to the nearest ten (10)-acre tract. Also show the point(s) of diversion on the plat, as shown on the sample provided. If you are applying for more than one diversion point, then a photocopy of Section 5 shall be filled out completely for each additional diversion point and attached to the application. If the water is to be used in a pond, lake or reservoir and will not be pumped or moved from one location to another, then use the location of the dam or spillway as the point of diversion.

101 acre-feet of water will be diverted from:

SE 1/4 of SE 1/4 of SE 1/4 of Sec. 33 Twp. 1 N ☐ S ☒ Rge. E EIM ☒ WIM ☐ ECM ☐ in Murray County

(1) *If the water will be taken from a stream or spring, enter the stream or spring name. If the stream or spring is unnamed, enter as tributary of a named stream, such as "Unnamed tributary of Wolf Creek."*

Direct diversion from stream: NA
Name of Stream

Application _____

(2) *If the water will be taken from a Soil Conservation Service (S.C.S.) Detention Reservoir, enter the number of the site and the watershed name:*

S.C.S. Site No. NA Watershed Name NA

(3) *If the water will be taken from some other public or private reservoir, enter the name of the stream dammed and name of the reservoir if available. If the stream is unnamed, enter it as a tributary of a named stream, such as "Unnamed tributary of Wolf Creek."*

Name of reservoir Private reservoir-no official name- Hancock Pond (33-T1S-R4E) on Unnamed Tributary to Mill Creek
Name of Stream

Reservoir is ☒ Existing (Date completed Unknown) ☐ Under Construction ☐ Planned

Storage of the reservoir: TBD acre-feet Average water depth: TBD

Surface acres: <3 Yield: 101 ac-ft (assumed)

(4) *Method of Diversion:*
If by gravity, enter the size and carrying capacity of the main canal or conduit and the size of headgate.
If by pump, enter the size, type and number of pumps, kind and horsepower of engine or motor, inlet and outlet size and the maximum capacity of each pump, in gallons per minute.

Method of diversion will be by: ☐ Gravity _____
Size, etc.
☒ Pump Exact pump details will be determined at the time of installation
Size, Type of pump, etc.

(5) Do you own or lease the land on which the point of diversion will be located? ☒ Yes ☐ No *If available, attach a copy of the deed, lease, etc. showing the right to use the point of diversion. If not available, the permit, if issued, will contain a condition requiring submittal of a copy of the right before water use begins.* See attached

(6) Will water lines cross public right-of-ways or another landowner's property? ☒ Yes ☐ No *If yes, attach a copy of the easement. If not available, the permit, if issued, will contain a condition requiring submittal of a copy of the easement before water use begins.*

6. LEGAL DESCRIPTION OF AREA OF USE

a. *Describe the legal description of the area of use below. Please do not use lots or blocks but convert to the nearest legal description. Also show this area on a plat as shown on the sample attached. Your local ASCS or NRCS office may provide you with an aerial photograph of your land.* ***(Municipal and rural water entities refer to #8 below).***

130	acres	1/4	1/4 of Sec. 23	Twp. 1	N ☐ S ☒	Range 4	EIM ☒ WIM ☐ ECM ☐	of Johnston County
452.78	acres	1/4	1/4 of Sec. 24	Twp. 1	N ☐ S ☒	Range 4	EIM ☒ WIM ☐ ECM ☐	of Johnston County
0	acres	1/4	1/4 of Sec.	Twp.	N ☐ S ☐	Range	EIM ☐ WIM ☐ ECM ☐	of County
0	acres	1/4	1/4 of Sec.	Twp.	N ☐ S ☐	Range	EIM ☐ WIM ☐ ECM ☐	of County

b. FOR IRRIGATION ONLY Do you own or lease this land? ☐ Yes ☐ No *If yes, attach a copy of the deed or lease. If no, application should be made by the owner or the permit, if issued, will require that a deed or lease be submitted before use of water begins.*

Application_____

7. PLATS A plat must be completed and submitted with the application showing the following:

a. *The information requested in items 4b, 5 and 6 of this form.*
b. *The appropriate location and extent of the proposed storage and diversion works.*
c. *The location of the headgate, intake, pumping plant and point of diversion.*
d. *The course and name of river, stream or other source of water.*
e. *The position and area of all lakes, reservoirs or basins intended to be used or created, and the water lines thereof (if known); and*
f. *All other ditches, canals, conduits, laterals, lakes or reservoirs (or other works or improvements affected) which the proposed works will intersect, or with which connection will be made.*

8. JUSTIFICATION OF PRESENT AND FUTURE NEED

a. ***Irrigation*** *- Completion of #4b. serves as justification of need for amounts requested for irrigation for common*
b. *crops grown in Oklahoma.*
b. ***Municipal and rural water entities*** *- Submit population projection figures and all other methodologies, calculations, and additional information used to determine amount of water requested. Submit a map of the municipal or rural water entity boundaries or service areas and the water line locations. The map must show points of reference or scale.*
c. ***Industrial, Commercial and Agriculture (non-irrigation)*** *- Submit methodology, calculations, and additional information used to determine amount of water requested.*

SIGNATURES The application must be signed as follows:

a. *If the applicant is an individual, the application shall be signed by the applicant, or his duly appointed agent who shall present evidence of authority to act as agent with the application.*
b. *A joint application shall be signed by each applicant or his duly authorized agent, provided that a joint application by husband and wife may be signed by either party. (Joint applicants are required to select one among them to act for and represent the others in dealing with the Board.)*
c. *If the application is by a partnership, the applicant shall be designated by the firm name followed by the word "a Partnership," and the application shall be signed by each of the general partners or, if signed by one partner or other agent, a written statement of that person's authorization to make the application, signed by the other parties in interest, shall be attached to the application.*
d. *In the case of an estate or guardianship, the application shall be signed by the duly appointed guardian or representative of the estate, and a certified copy of the letters issued by the court shall be attached to the application.*
e. *In the case of a water district, count, municipality, etc., the application shall be signed by a duly authorized official, and a certified copy of the resolution or other authorization to make the application shall be attached.*
f. *In the case of a private corporation, the application shall be signed by a duly authorized person and , if not attested by the secretary or assistant secretary, a copy of the authorization shall be attached to the application;*

An attorney duly licensed to practice law in Oklahoma may sign an application for an applicant he or she represents. The Oklahoma Bar Association number must be indicated.

Subscribed and sworn before me

this _____ day of _____ 20___

_____
Notary

My commission expires on: _____
(seal)

I swear and verify that the above information is true and accurate to the best of my knowledge, and that I will comply with all applicable laws and regulations of the State of Oklahoma.

_____
Signature of Applicant

_____
Print Name

_____
Title (if applicable)

Application #_____

APPLICATION SUBMISSION AND PROCESSING

To be deemed complete, the submitted application must include:

a. *The appropriate filing fee.*
b. *The original application, typed or printed in ink, signed and notarized.*
c. *Plat(s) showing the information requested in items #4b, #5, #6, #7 and #8 above and as otherwise instructed on this form.*
d. *Deed(s), lease(s), and / or letter(s) of consent, if available.*

When the application is deemed complete, you will receive instructions about publishing notice of the application in a newspaper. If a proper protest to your application is received, a hearing will be scheduled. After the protest period and hearing if required, the application will be presented to the Board for consideration. Application processing time is about 90 days. You may apply for a provisional temporary permit which is effective for up to 90 days if you have an immediate need for water.

If you believe that within the first seven (7) years after issuance of your permit you will not be able to use the full amount of water applied for, please contact Board staff.

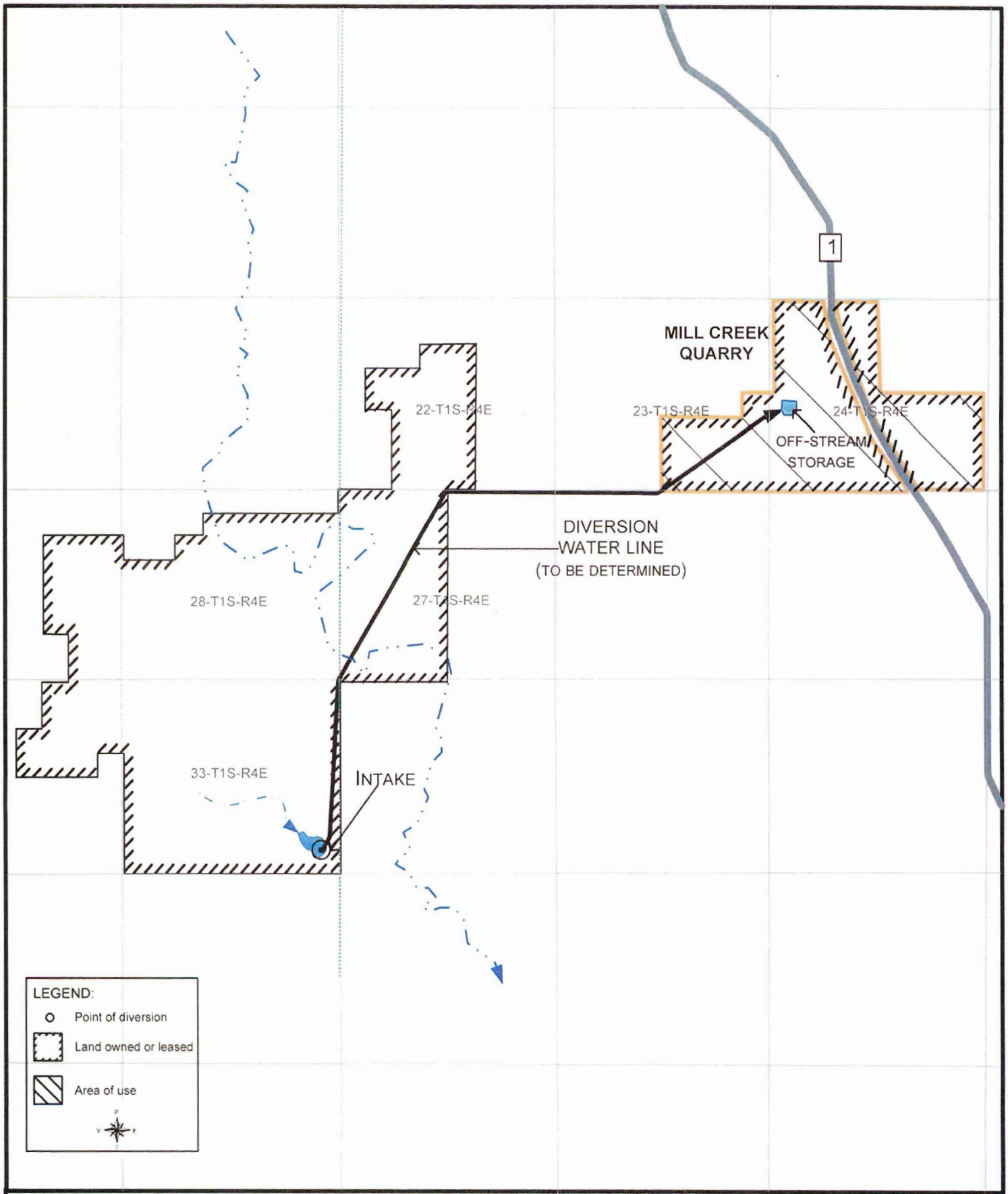
Please Note: Oklahoma Administrative Code 785:20-3-9 states:

(a) "Upon filing of an application that is defective as to form or unsatisfactory as to feasibility or safety of the plan or as to the showing of the ability of the applicant to carry the construction to completion, the Board shall advise applicant of the correction, amendments, or changes required, and sixty (60) days from the date the Board so advises shall be allowed for the filing thereof. {82:105.10]"

(c) "Any corrected application filed after the time allowed in (a) of this Section shall be treated in all respects as a new application on the date of its refilling [82:105.10] and the original priority date of filing shall be lost."

(d) "If an application does not correct an application or publish notice as instructed by the Board, and no further proceedings are initiated by the applicant for six months or more after last contact with the Board, the application shall be deemed withdrawn. The Board shall provide notice to the applicant that the application has been deemed withdrawn."

Figures & Diagrams



EST, Inc.
GENERAL LOCATION MAP
Arbuckle Aggregates, LLC – Mill Creek Quarry
Mill Creek, Johnston County, Oklahoma

Date: 05/05/2010
Scale: not to scale
Drawn By: DDS
Project #: 6000793

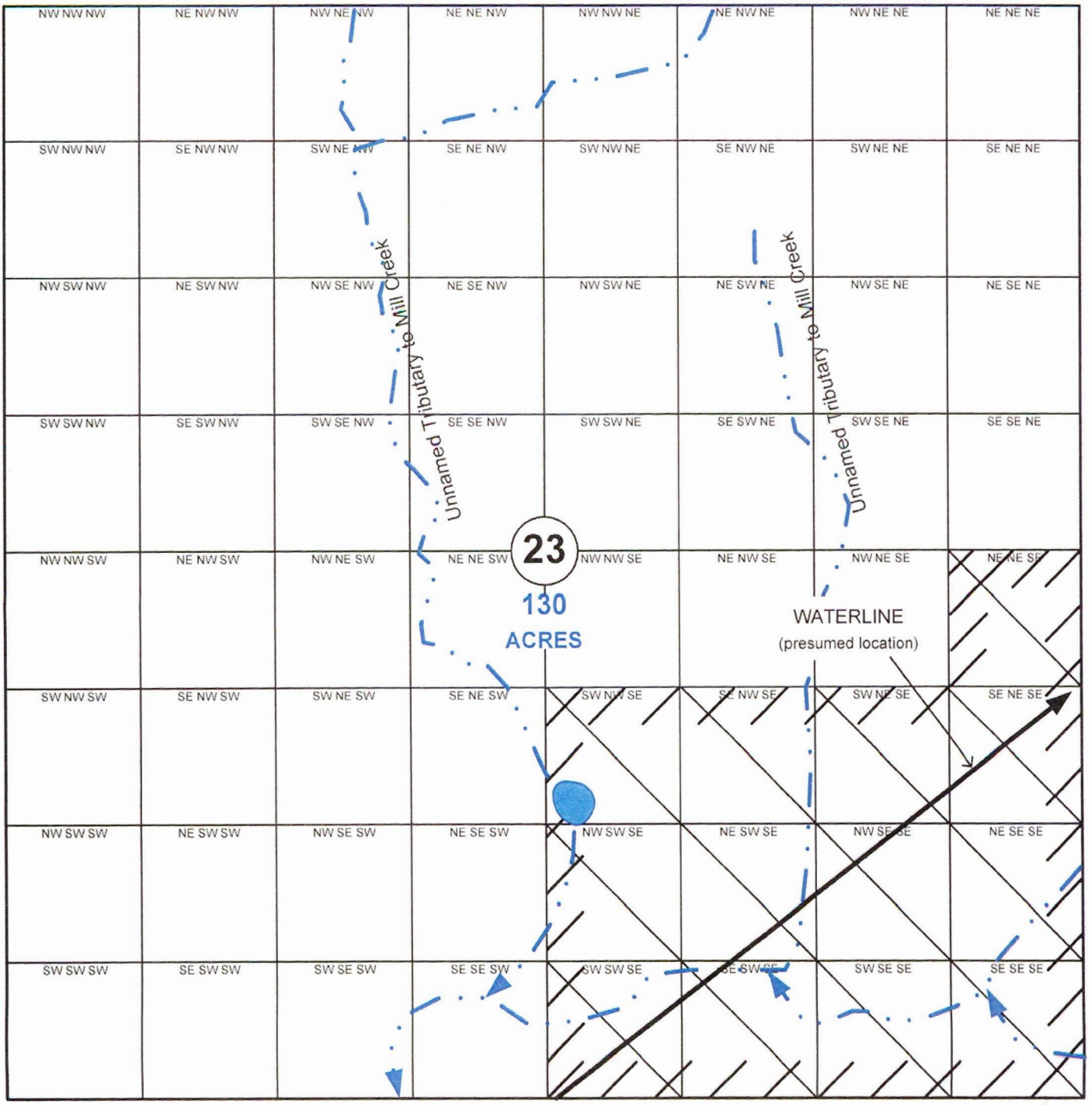
FIGURE 1

Oklahoma Water Resources Board
Application Plat

Applicant Name: Arbuckle Aggregates, LLC

Stream Water Application #: _____

Stream System Code: _____ **(office use only)**



LEGEND:

- Point of diversion
- Land owned or leased
- Area of use

Section 23 Twp. 1 ☐N ☒S Rge. 4 ☒EIM ☐WIM ☐ECM County JOHNSTON

Prepared by: _____ Date: _____

Signature

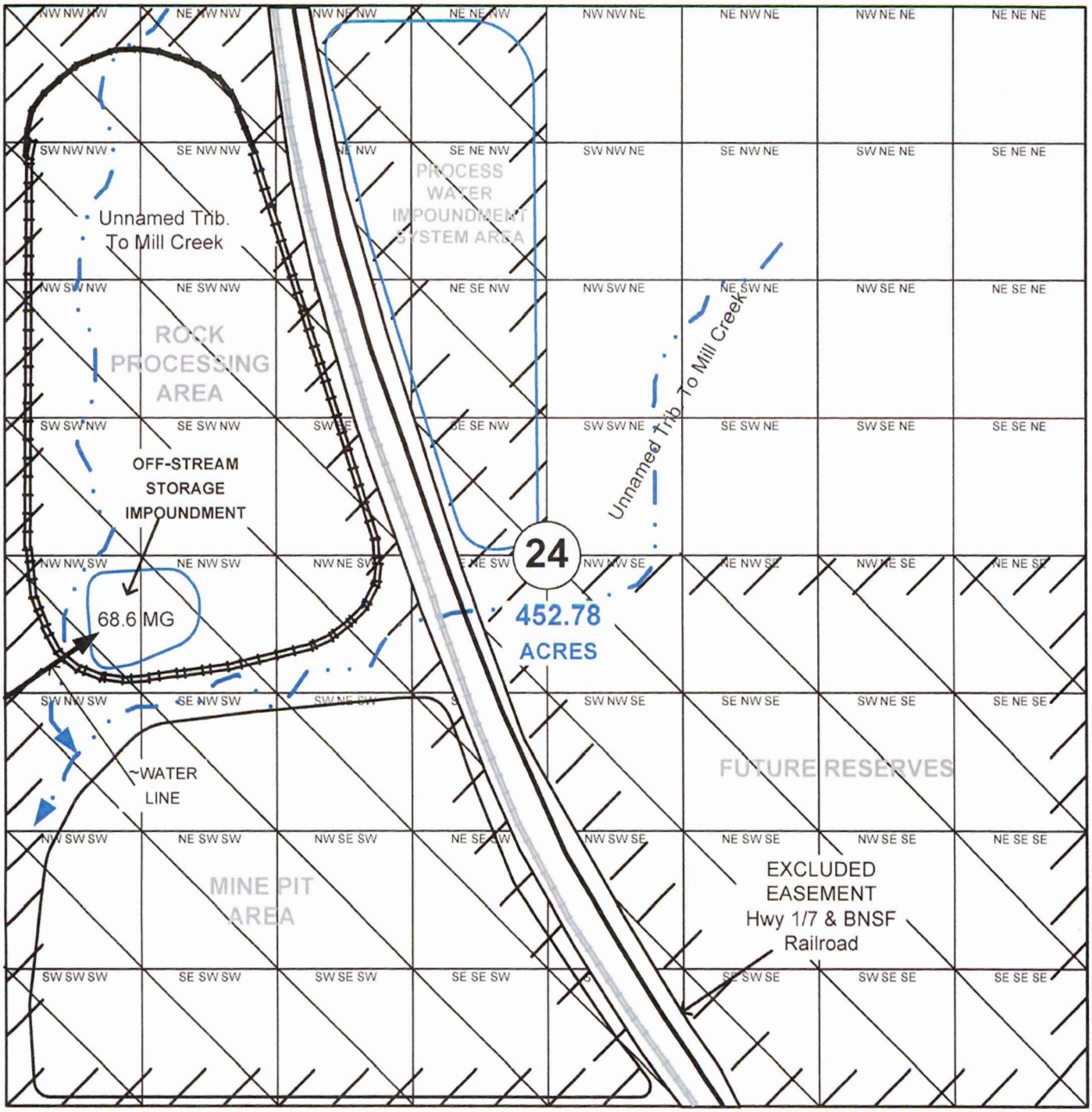
Title: Environmental Consultant

Oklahoma Water Resources Board
Application Plat

Applicant Name: Arbuckle Aggregates, LLC

Stream Water Application #: _____

Stream System Code: _____ **(office use only)**



LEGEND:
- Point of diversion
- Land owned or leased
- Area of use

Section 24 Twp. 1 ☐N ☒S Rge. 4 ☒EIM ☐WIM ☐ECM County JOHNSTON

Prepared by: _____ Date: _____

Signature

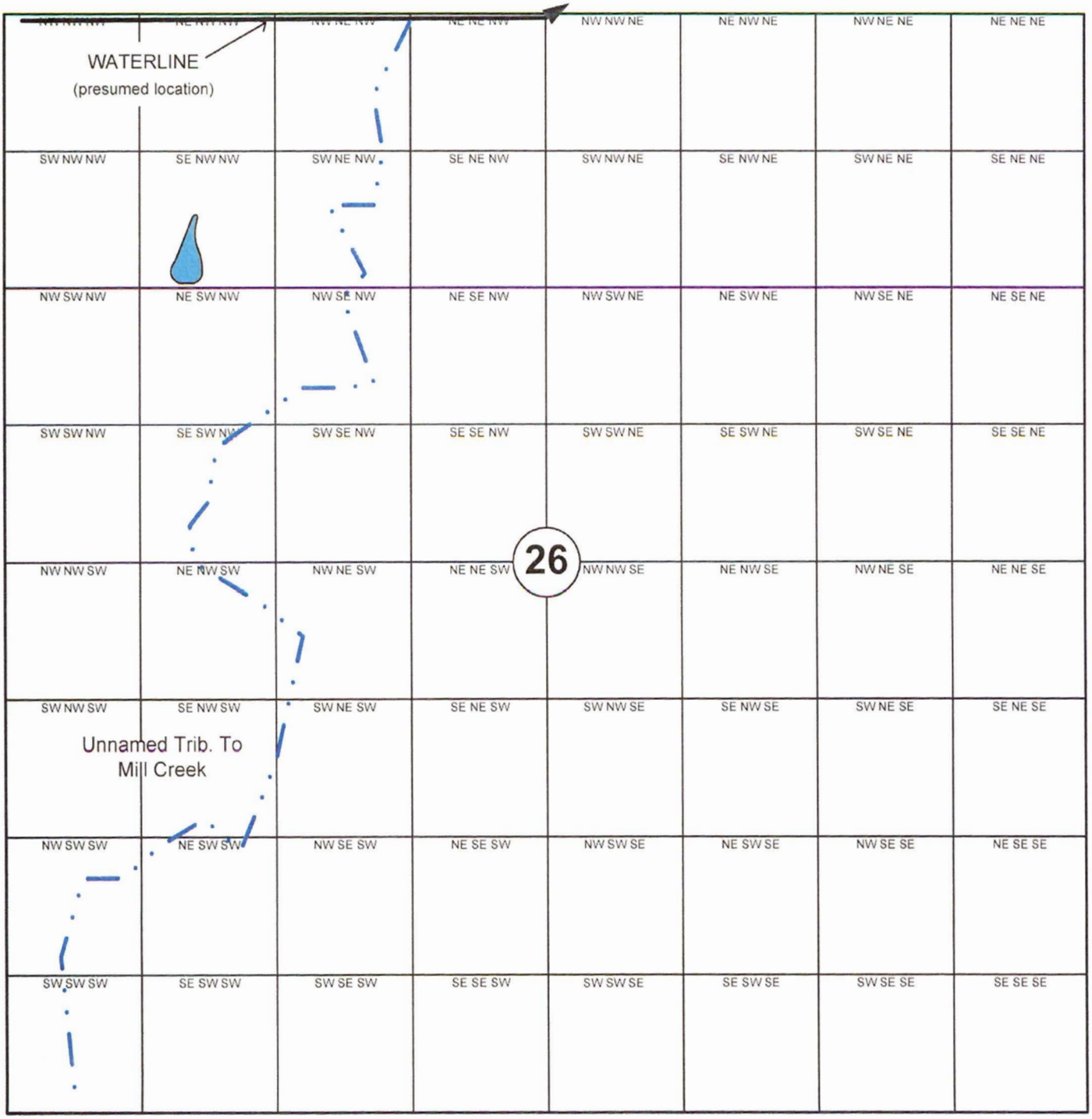
Title: Environmental Consultant

Oklahoma Water Resources Board
Application Plat

Applicant Name: Arbuckle Aggregates, LLC

Stream Water Application #: _____

Stream System Code: _____ **(office use only)**



LEGEND:

- Point of diversion
- Land owned or leased
- Area of use

Section 26 Twp. 1 ☐N ☒S Rge. 4 ☒EIM ☐WIM ☐ECM County Johnston

Prepared by: _____ Date: _____

Signature

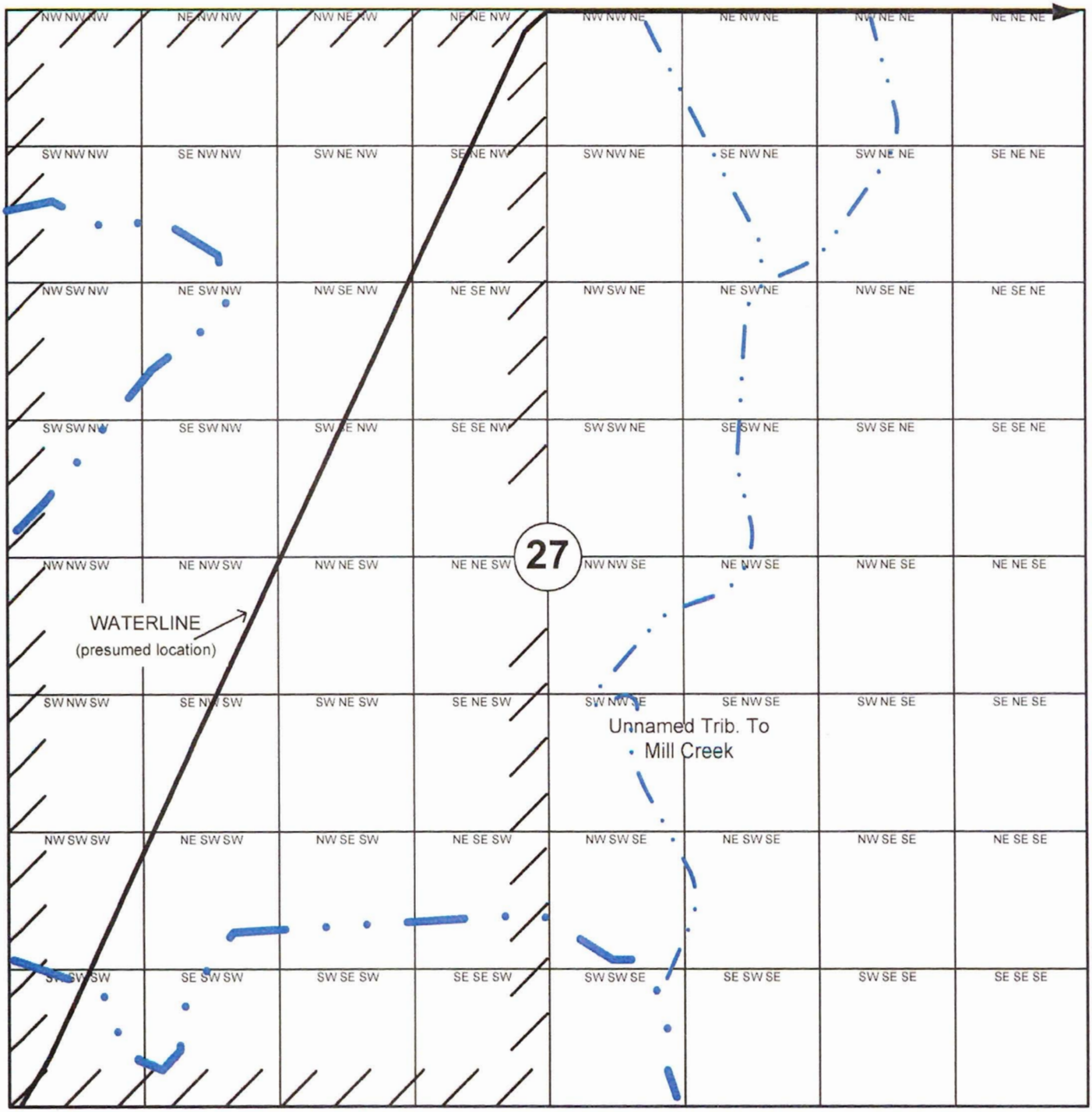
Title: Environmental Consultant

Oklahoma Water Resources Board
Application Plat

Applicant Name: Arbuckle Aggregates, LLC

Stream Water Application #: _____

Stream System Code: _____ **(office use only)**



LEGEND:

- Point of diversion
- Land owned or leased
- Area of use

Section 27 Twp. 1 ☐N ☒S Rge. 4 ☒EIM ☐WIM ☐ECM County Johnston

Prepared by: _____ Date: _____

Signature

Title: Environmental Consultant

Oklahoma Water Resources Board
Application Plat

Applicant Name: Arbuckle Aggregates, LLC

Stream Water Application #: _____

Stream System Code: _____ **(office use only)**

LEGEND:

- Point of diversion
- Land owned or leased
- Area of use

Section 33 Twp. 1 ☐N ☒S Rge. 4 ☒EIM ☐WIM ☐ECM County Murray

Prepared by: _____ Date: _____

Signature

Title: Environmental Consultant

Legal & Plat Summary

ATTACHMENT FOR SURFACE WATER APPLICATION
LEGAL & PLAT SUMMARY

Applicant: Arbuckle Aggregates, LLC.

Arbuckle owned property consists of approximately 582.78 acres, more or less, in parts of Sections 23 and 24 T1S R4E as described below:

All that part of the SE¼ NW¼ lying and being situated East of the St. Louis, Oklahoma, and Southern Railway, of Section 24-T1S-R4EIM. And all that part of the S½ of Section 24 T1S-R4EIM, lying East of the Right-of-Way of the St. Louis and San Francisco Railway Co.

All that part of the E½ of the SW¼ and all that part of the W½ of the SE¼, lying and being West of the right-of-way of the St. Louis, Oklahoma and Southern Railway Company, in Section 24-T1S-R4EIM.

The W½ of the SW¼ and all that part of the S½ of the NW¼, lying and being West of the right-of-way of the St. Louis, Oklahoma, and Southern Railway Company, all in Section 24-T1S-R4EIM.

The S½ of the SE¼ and the S½ of the N½ of the SE¼ and the NE¼ of the NE¼ of the SE¼ of Section 23-T1S-R4EIM.

All that part of the SE ¼ NW ¼ lying and being situated East of the St. Louis, Oklahoma, and Southern Railway, of Section 24-T1S-R4EIM. AND ALL that part of the S ½ of Section 24, lying East of the right-of-way of the St. Louis and San Francisco Railway Co in T1S, R4EIM.

All that part of the N½ of NW¼ of Section 24-T1S-R4EIM, Johnston County, Oklahoma, lying west of the St. Louis & San Francisco railway right-of-way, less and except all oil, gas and other minerals. Said property further described as follows: a tract of land in the N½ of the NW ¼ of Section 24-T1S-R4EIM, Johnston County, Oklahoma described as follows: beginning at the northwest corner of said N½ of the NW¼; thence S 89°59'43" E along the north line thereof, 1246.15 feet to a point on the west right-of-way line of the Burlington Northern and Santa Fe Railroad; thence southeasterly along said right -of-way line on the following courses; S 03°37'23" E, 207.37 feet, southeasterly on a curve to the left, having a radius of 2914.79 feet with an arc length of 790.57 feet and a chord bearing of S 11°23'36" E whose chord length is 788.15 feet; thence S 19°09'48" E, 364.62 feet to a point on the south line of said N½ of NW¼ ; thence S 89° 59'31" W along said south line, 1535.28 feet to the southwest corner of said N½ of NW¼; thence N 00°01 '40" E along the west line thereof, 1324.31 feet to the point of beginning.

All that part of the N½ of NW ¼ of Section 24T-T1S-R4EIM, Johnston County, Oklahoma, lying east of the St. Louis and San Francisco Railway right-of-way, less and except all oil, gas and other minerals. Less and except: that strip of right -of-way lying between the east right-of-way line of the Burlington Northern and Santa Fe Railroad, and the east right-of-way line of Highway 1/7 as shown on State of Oklahoma Highway Plans for federal aid project number F-366(3). Said property further described as follows: A tract of land in the N ½ of the NW ¼ of Section 24-T1S-R4EIM, Johnston County, Oklahoma, described as follows: beginning at the northeast corner of said N½ of NW ¼, thence S 00°01'33" W along the east line thereof, 1323.72 feet to a point on the south line of said N½ of NW¼; thence S 89°59'31" W along said south line 882.43 feet to a point on the east right-of-way line of State Highway 1/7; thence northwesterly along said right-of-way line on the following courses: N 19°09'48" W, 437.57 feet; northwesterly on a curve to the right having a radius of 2704.79 feet with an arc length of 733.62 feet and a chord bearing of N 11°23'36" W, whose chord length is 731.37 feet; N 03°37'23" W 194.06 feet to the north line of said N½ of NW¼; thence S 89°59'43" E along the north line thereof, 1183.40 feet to the point of beginning.

I-2010-000153 Book 0979 Pg 213
01/21/2010 10:56 am Pg 0213-0216
Fee: $ 19.00 Doc. $ 0.00
David Thompson - Murray County Clerk
State of Oklahoma

MEMORANDUM OF WATER LEASE

STATE OF OKLAHOMA §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF MURRAY §

1405 501

By Water Lease dated October 28, 2010, Byron Hancock, ("Lessor"), and Arbuckle Aggregates, LLC, whose mailing address is 6831 Ash Street, Frisco, Texas 75034 ("Lessee"), entered into that certain Water Lease (the "Lease") covering and pertaining to the water rights owned by Lessor on the land set forth and described in Exhibit "A," which is attached hereto and made a part hereof for all purposes.

The Lease is incorporated by reference herein for all purposes to the same extent as if it had been set forth in its entirety in this Memorandum. A complete copy of the Lease is on file in the offices of Lessee at 6831 Ash Street, Frisco, Texas 75034.

For consideration paid by Lessee, the receipt of which is hereby acknowledged by the Lessor, the Lessor granted to Lessee the exclusive right to investigate, explore, prospect, drill, pump water to produce, save, take care of, treat, transport and own water from the land covered by the Lease, subject to the compliance by the Lessee with the terms and provisions contained therein. The effective date of the Lease is October 28, 2009. Subject to the other provisions of the Lease, the primary term of the Lease is for a term of ten (10) years. Lessee has the option to extend the Lease for four (4) additional ten (10) year terms.

This Memorandum of Water Lease is to be filed for record in, the office of the Murray County Clerk and is intended, for all purposes, to be full and complete notice of the Lease to all persons and entities.

This Memorandum may be executed in multiple counterparts, each of which shall constitute an original and all of which, when construed together, shall constitute but one and the same instrument. The executed signature and acknowledgement pages of each counterpart may be joined together with a single copy of the body hereof for recording purposes.

DATED this 21st day of January, 2010, but effective as of the effective date of the Lease.

Lessor: Byron Hancock
Byron Hancock

Lessee:
Peter Dawson, President
Arbuckle Aggregates, LLC

COUNTY CLERK
MURRAY COUNTY, OK

I-2010-000153 Book 0979 Pg 214
01/21/2010 10:56 am Pg 0213-0216
Fee $ 19.00 Doc $ 0.00
David Thompson - Murray County Clerk
State of Oklahoma

STATE OF OKLAHOMA §
§
COUNTY OF MURRAY §

Before me, the undersigned notary public registered in the State of Oklahoma, on the 21 day of January, 2010 personally appeared Byron Hancock, known to be the identical person who executed the foregoing instrument and acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My commission expires: Sept 28, 2013
#01015153

[STAMP]

Malinda Gray Snowden
Notary Public

I-2010-000153 Book 0979 Pg 215
01/21/2010 10:56 am Pg 0213-0216
Fee $ 19.00 Doc: $ 0.00
David Thompson - Murray County Clerk
State of Oklahoma

STATE OF OKLAHOMA §
§
COUNTY OF MURRAY §

Before me, the undersigned notary public registered in the State of Oklahoma, on the 21 day of January, 2010 personally appeared Peter Dawson, the President and authorized representative of Arbuckle Aggregates, LLC, known to be the identical person who executed the foregoing instrument and acknowledged to me that he executed the same in his capacity as President and authorized representative, as his free and voluntary act and deed for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My commission expires: Sept 28, 2013
#01015153

[STAMP]

Melinda Gay Snowden
Notary Public

I-2010-000153 Book 0979 Pg: 216
01/21/2010 10:56 am Pg 0213-0216
Fee: $ 19.00 Doc: $ 0.00
David Thompson - Murray County Clerk
State of Oklahoma

Exhibit "A"

The S/2 of the SW/4 of the NW/4, and SE/4 of NW/4, and the SE/4 of the NE/4 of NW/4, and the S/2 of NE/4, and S/2 of NE/4 of NE/4, and S/2 of NW/4 of NE/4, and S/2 of Section 28, and the SE/4 of NE/4, and E/2 of SW/4 of NE/4, and NE/4 of SE/4, and E/2 of NW/4 of SE/4, and SE/4 of SE/4 of Section 29, and NE/4 of NE/4, and E/2 of NW/4 of NE/4, and N/2 of SE/4 of NE/4, and the SW/4 of SE/4 of NE/4, and SW/4 of NE/4 of Section 32, and all of Section 33, all in Township 1 South, Range 4 East, Murray County, Oklahoma, and containing 1,440 acres more or less.

Justification of Need

ATTACHMENT FOR STREAM WATER APPLICATION
JUSTIFICATION OF PRESENT & FUTURE USE

Applicant: Arbuckle Aggregates, LLC,
Mill Creek Quarry,
Hancock Pond (33-T1S-R4E)

Amount of Water to be Appropriated = 101 acre-feet per year
Maximum Withdrawal Rate = 5,000 gpm

Estimated Annual Production = 500,000 tons per year[1]
Estimated Consumptive Water Use = 135 gallons per ton[2]
Amount of Water Requested = annual production x average estimated water need
= 500,000 tpy x 135 gpt
= **207** or ~**210 acre-feet per year**

Withdrawal from this source would theoretically meet 48% of the near-term water needs of the Mill Creek Quarry.

---

[1] Near-term production is estimated at 500,000 tons per year.

[2] Estimated consumptive water use is 135 gallons per ton of product produced. Estimate based on annual limestone production and water use for an adjacent quarry with similar processes, operating conditions, geology, and design. The average estimate was based on published information including Oklahoma Department of Mines annual production records and Oklahoma Water Resources Board water use reports.

OKLAHOMA WATER RESOURCES BOARD
Planning & Management Division

APPLICATION FOR A PERMIT TO USE SURFACE OR STREAM WATER

"UNNAMED TRIBUTARY TO MILL CREEK" (23-T1S-R4E)

Prepared for:

ARBUCKLE AGGREGATES, LLC
MILL CREEK QUARRY

Prepared by:

3201 South Berry Road
Norman, OK 73072

Submitted:
May 2010

Application

APPLICATION FOR A PERMIT TO USE SURFACE OR STREAM WATER

OKLAHOMA WATER RESOURCES BOARD
3800 N. CLASSEN BLVD.
OKLAHOMA CITY, OK 73118 (405) 530-8800
website: www.owrb.ok.gov

Office Use Only

Application No. _____ Type of Permit_____
Stream System Code_____Reservoir Code_____
Hydrologic Unit Code_____

FILING FEE MUST ACCOMPANY APPLICATION

Amount applied for	Fee
0 - 320 acre-feet	$190.00
321 - 640 acre-feet	$300.00
641 - 1500 acre-feet	$375.00
Over 1500 acre-feet	$375.00

Plus $150.00 for each 500 acre-feet (or any increment thereof) over 1500 acre-feet.
(Maximum Fee $3,000.00)

1. NAME AND ADDRESS

a. Print the applicant's full name and mailing address, complete with zip code. If the applicant is a corporation, use the name and business address of the corporation.

Applicant Name Arbuckle Aggregates, LLC **Phone** (214) 733 - 7165
FAX# (214) 239 - 4799

Address 5020 Tennyson Parkway

City Plano State TX Zip 75024

b. If the contact during the application process is someone other than the applicant listed above, print the name and mailing address of the contact person.

Contact Name Pete Dawson, President **Phone** (214) 733 - 7165
FAX# (214) 239 - 4799

Address 5020 Tennyson Parkway

City Plano State TX Zip 75024

2. TYPE OF SURFACE WATER PERMIT REQUESTED (Check one)

☒ **Regular Permit** - authorizes diversion and use of water on a year-round basis.
☐ **Seasonal Permit** - authorizes diversion and use of water for specified time periods during the calendar year.
☐ **Term Permit** - valid for a term of years and does not vest the holder with any permanent right.
(Provide ending date for term permit _____).

DATE OF RECEIPT OF APPLICATION
(FOR OFFICE USE ONLY)

3. AMOUNT OF WATER TO BE APPROPRIATED

State total amount of water applied for in acre-feet per calendar year. One acre-foot of water will cover one acre of land one foot deep and is equal to 325,851 U.S. *gallons. The diversion rate is the maximum rate of withdrawal, in gallons per minute, of water from the pond, lake, spring or other definite stream.*

Application is made to take and use 210 acre-feet of surface water annually at a rate not to exceed 5,000 gallons per minute.

4. PURPOSE(S) FOR WHICH WATER WILL BE USED

a. List the purpose or purposes for which the water would be used if the permit is granted and list the number of acre-feet for each purpose. Be sure that the sum of the amounts listed below equals the total acre-feet in #3 above. If the water is to be used to irrigate crops, list IRRIGATION as the purpose and list the sum total acre-feet for all crops.

OFFICE USE ONLY
SIC CODES

210 acre-feet of water will be used for Mining Use & Industrial Use

0 acre-feet of water will be used for _____

0 acre-feet of water will be used for _____

0 acre-feet of water will be used for _____

b. *If the water requested is for irrigation purpose, state the total number of acres that will be irrigated. The land to be irrigated must be shown on plat(s) attached to the application. The amount of water requested should be based on types of crops to be grown and cropping patterns proposed. The Board will use appropriate publications and information the applicant submits in determining amount of water needed.*

0 acres of land are proposed to be irrigated. The proposed crops are NA

_____.

5. DIVERSION(S) OF WATER: Source, Location and Method of Diversion

a. If the water is to be used in a pond, lake or reservoir and will not be pumped or moved from one location to another, check here. ☐

b. For each diversion point, state the amount of water, in acre-feet, to be diverted annually and give the legal description to the nearest ten (10)-acre tract. Also show the point(s) of diversion on the plat, as shown on the sample provided. If you are applying for more than one diversion point, then a photocopy of Section 5 shall be filled out completely for each additional diversion point and attached to the application. If the water is to be used in a pond, lake or reservoir and will not be pumped or moved from one location to another, then use the location of the dam or spillway as the point of diversion.

210 acre-feet of water will be diverted from:

SW 1/4 of NW 1/4 of SE 1/4 of Sec. 23 Twp. 1 N ☐ S ☒ Rge. E EIM ☒ WIM ☐ ECM ☐ in Johnston County

(1) *If the water will be taken from a stream or spring, enter the stream or spring name. If the stream or spring is unnamed, enter as tributary of a named stream, such as "Unnamed tributary of Wolf Creek."*

Direct diversion from stream: Unnamed Tributary to Mill Creek
Name of Stream

(2) *If the water will be taken from a Soil Conservation Service (S.C.S.) Detention Reservoir, enter the number of the site and the watershed name:*

S.C.S. Site No. NA Watershed Name NA

(3) *If the water will be taken from some other public or private reservoir, enter the name of the stream dammed and name of the reservoir if available. If the stream is unnamed, enter it as a tributary of a named stream, such as "Unnamed tributary of Wolf Creek."*

Name of reservoir NA on _____
Name of Stream

Reservoir is ☐ Existing (Date completed _____) ☐ Under Construction ☐ Planned

Storage of the reservoir: _____ acre-feet Average water depth: _____

Surface acres: _____ Yield: _____

(4) *Method of Diversion:*
If by gravity, enter the size and carrying capacity of the main canal or conduit and the size of headgate.
If by pump, enter the size, type and number of pumps, kind and horsepower of engine or motor, inlet and outlet size and the maximum capacity of each pump, in gallons per minute.

Method of diversion will be by: ☐ Gravity _____
Size, etc.
☒ Pump Exact pump details will be determined at the time of installation
Size, Type of pump, etc.

(5) Do you own or lease the land on which the point of diversion will be located? ☒ Yes ☐ No *If available, attach a copy of the deed, lease, etc. showing the right to use the point of diversion. If not available, the permit, if issued, will contain a condition requiring submittal of a copy of the right before water use begins.* See attached

(6) Will water lines cross public right-of-ways or another landowner's property? ☒ Yes ☐ No *If yes, attach a copy of the easement. If not available, the permit, if issued, will contain a condition requiring submittal of a copy of the easement before water use begins.*

6. LEGAL DESCRIPTION OF AREA OF USE

a. *Describe the legal description of the area of use below. Please do not use lots or blocks but convert to the nearest legal description. Also show this area on a plat as shown on the sample attached. Your local ASCS or NRCS office may provide you with an aerial photograph of your land.* ***(Municipal and rural water entities refer to #8 below).***

130	acres ____	1/4 ____	1/4 of Sec. 23	Twp. 1	N ☐ S ☒	Range 4	EIM ☒ WIM ☐ ECM ☐ of Johnston County
452.78	acres ____	1/4 ____	1/4 of Sec. 24	Twp. 1	N ☐ S ☒	Range 4	EIM ☒ WIM ☐ ECM ☐ of Johnston County
0	acres ____	1/4 ____	1/4 of Sec. ____	Twp. ____	N ☐ S ☐	Range ____	EIM ☐ WIM ☐ ECM ☐ of ____ County
0	acres ____	1/4 ____	1/4 of Sec. ____	Twp. ____	N ☐ S ☐	Range ____	EIM ☐ WIM ☐ ECM ☐ of ____ County

b. FOR IRRIGATION ONLY Do you own or lease this land? ☐ Yes ☐ No *If yes, attach a copy of the deed or lease. If no, application should be made by the owner or the permit, if issued, will require that a deed or lease be submitted before use of water begins.*

Application_____

7. **PLATS A plat must be completed and submitted with the application showing the following:**
   a. *The information requested in items 4b, 5 and 6 of this form.*
   b. *The appropriate location and extent of the proposed storage and diversion works.*
   c. *The location of the headgate, intake, pumping plant and point of diversion.*
   d. *The course and name of river, stream or other source of water.*
   e. *The position and area of all lakes, reservoirs or basins intended to be used or created, and the water lines thereof (if known); and*
   f. *All other ditches, canals, conduits, laterals, lakes or reservoirs (or other works or improvements affected) which the proposed works will intersect, or with which connection will be made.*

8. **JUSTIFICATION OF PRESENT AND FUTURE NEED**
   a. ***Irrigation*** *- Completion of #4b. serves as justification of need for amounts requested for irrigation for common*
   b. *crops grown in Oklahoma.*
   b. ***Municipal and rural water entities*** *- Submit population projection figures and all other methodologies, calculations, and additional information used to determine amount of water requested. Submit a map of the municipal or rural water entity boundaries or service areas and the water line locations. The map must show points of reference or scale.*
   c. ***Industrial, Commercial and Agriculture (non-irrigation)*** *- Submit methodology, calculations, and additional information used to determine amount of water requested.*

SIGNATURES The application must be signed as follows:
   a. *If the applicant is an individual, the application shall be signed by the applicant, or his duly appointed agent who shall present evidence of authority to act as agent with the application.*
   b. *A joint application shall be signed by each applicant or his duly authorized agent, provided that a joint application by husband and wife may be signed by either party. (Joint applicants are required to select one among them to act for and represent the others in dealing with the Board.)*
   c. *If the application is by a partnership, the applicant shall be designated by the firm name followed by the word "a Partnership," and the application shall be signed by each of the general partners or, if signed by one partner or other agent, a written statement of that person's authorization to make the application, signed by the other parties in interest, shall be attached to the application.*
   d. *In the case of an estate or guardianship, the application shall be signed by the duly appointed guardian or representative of the estate, and a certified copy of the letters issued by the court shall be attached to the application.*
   e. *In the case of a water district, count, municipality, etc., the application shall be signed by a duly authorized official, and a certified copy of the resolution or other authorization to make the application shall be attached.*
   f. *In the case of a private corporation, the application shall be signed by a duly authorized person and , if not attested by the secretary or assistant secretary, a copy of the authorization shall be attached to the application;*

An attorney duly licensed to practice law in Oklahoma may sign an application for an applicant he or she represents. The Oklahoma Bar Association number must be indicated.

Subscribed and sworn before me

this _____ day of _____ 20___

_____
Notary

My commission expires on: _____
(seal)

I swear and verify that the above information is true and accurate to the best of my knowledge, and that I will comply with all applicable laws and regulations of the State of Oklahoma.

_____
Signature of Applicant

_____
Print Name

_____
Title (if applicable)

Application #_____

APPLICATION SUBMISSION AND PROCESSING

To be deemed complete, the submitted application must include:

a. *The appropriate filing fee.*
b. *The original application, typed or printed in ink, signed and notarized.*
c. *Plat(s) showing the information requested in items #4b, #5, #6, #7 and #8 above and as otherwise instructed on this form.*
d. *Deed(s), lease(s), and / or letter(s) of consent, if available.*

When the application is deemed complete, you will receive instructions about publishing notice of the application in a newspaper. If a proper protest to your application is received, a hearing will be scheduled. After the protest period and hearing if required, the application will be presented to the Board for consideration. Application processing time is about 90 days. You may apply for a provisional temporary permit which is effective for up to 90 days if you have an immediate need for water.

If you believe that within the first seven (7) years after issuance of your permit you will not be able to use the full amount of water applied for, please contact Board staff.

Please Note: Oklahoma Administrative Code 785:20-3-9 states:

(a) "Upon filing of an application that is defective as to form or unsatisfactory as to feasibility or safety of the plan or as to the showing of the ability of the applicant to carry the construction to completion, the Board shall advise applicant of the correction, amendments, or changes required, and sixty (60) days from the date the Board so advises shall be allowed for the filing thereof. {82:105.10]"

(c) "Any corrected application filed after the time allowed in (a) of this Section shall be treated in all respects as a new application on the date of its refilling [82:105.10] and the original priority date of filing shall be lost."

(d) "If an application does not correct an application or publish notice as instructed by the Board, and no further proceedings are initiated by the applicant for six months or more after last contact with the Board, the application shall be deemed withdrawn. The Board shall provide notice to the applicant that the application has been deemed withdrawn."

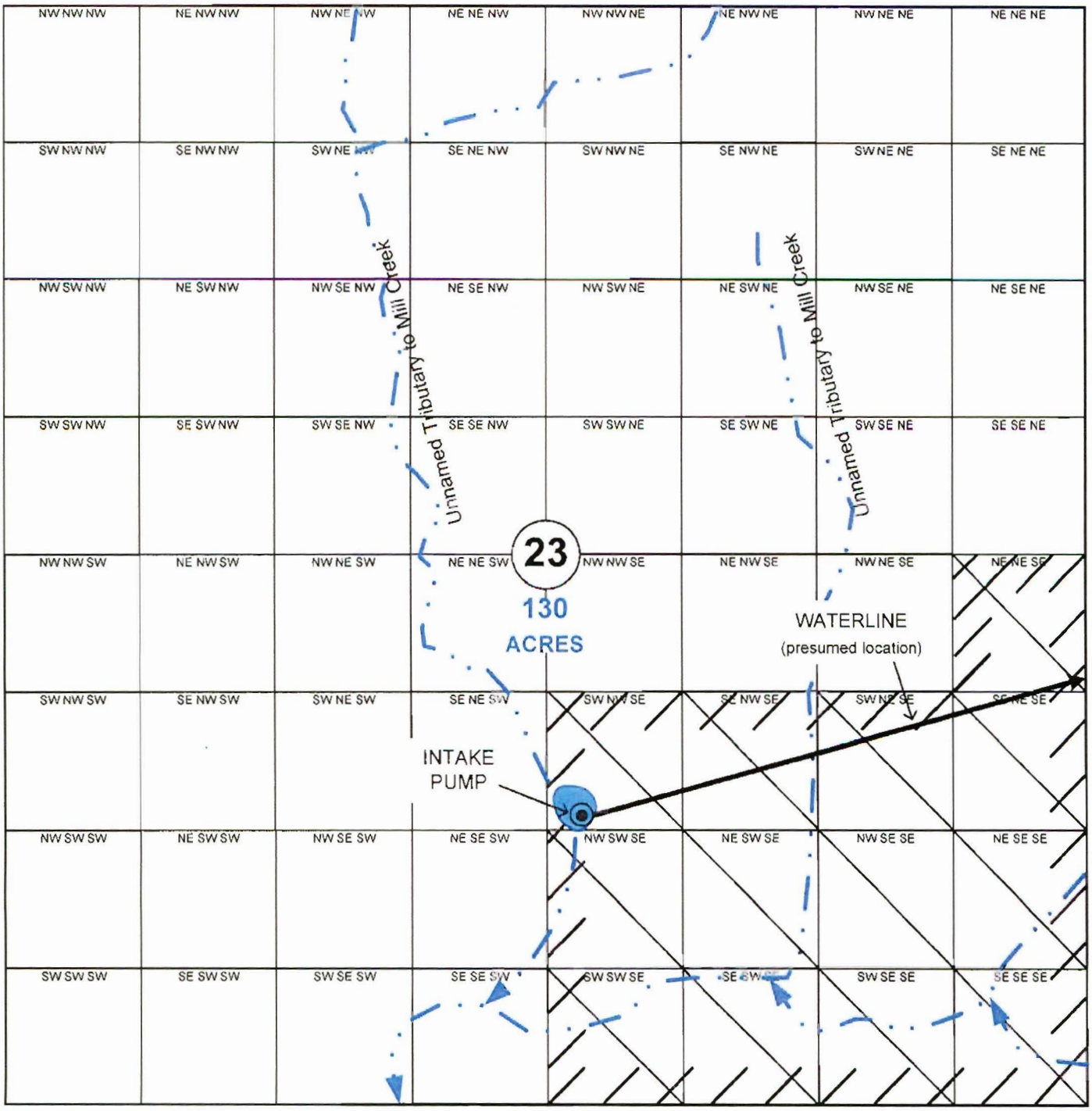
Figures & Diagrams

Oklahoma Water Resources Board
Application Plat

Applicant Name: Arbuckle Aggregates, LLC

Stream Water Application #: _____

Stream System Code: _____ **(office use only)**



LEGEND:
- ● Point of diversion
- Land owned or leased
- Area of use

Section 23 Twp. 1 ☐N ☒S Rge. 4 ☒EIM ☐WIM ☐ECM County JOHNSTON

Prepared by: _____ Date: _____

Signature

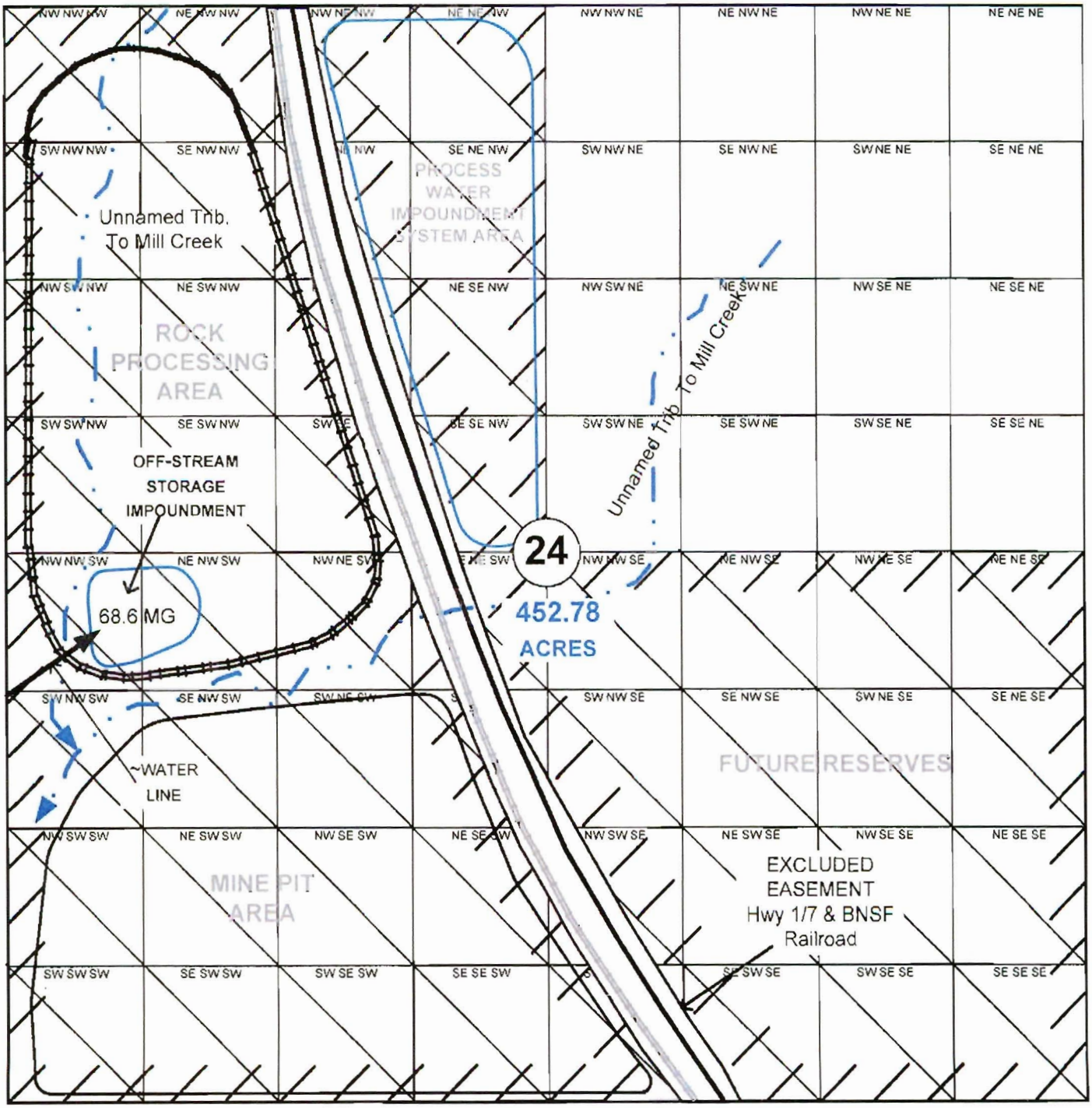
Title: Environmental Consultant

Oklahoma Water Resources Board
Application Plat

Applicant Name: Arbuckle Aggregates, LLC

Stream Water Application #: _____

Stream System Code: _____ **(office use only)**



LEGEND:
- Point of diversion
- Land owned or leased
- Area of use

Section 24 Twp. 1 ☐N ☒S Rge. 4 ☒EIM ☐WIM ☐ECM County JOHNSTON

Prepared by: _____ Date: _____

Signature

Title: Environmental Consultant

Legal & Plat Summary

All that part of the N½ of NW ¼ of Section 24T-T1S-R4EIM, Johnston County, Oklahoma, lying east of the St. Louis and San Francisco Railway right-of-way, less and except all oil, gas and other minerals. Less and except: that strip of right -of-way lying between the east right-of-way line of the Burlington Northern and Santa Fe Railroad, and the east right-of-way line of Highway 1/7 as shown on State of Oklahoma Highway Plans for federal aid project number F-366(3). Said property further described as follows: A tract of land in the N ½ of the NW ¼ of Section 24-T1S-R4EIM, Johnston County, Oklahoma, described as follows: beginning at the northeast corner of said N½ of NW ¼, thence S 00°01'33" W along the east line thereof, 1323.72 feet to a point on the south line of said N½ of NW¼; thence S 89°59'31" W along said south line 882.43 feet to a point on the east right-of-way line of State Highway 1/7; thence northwesterly along said right-of-way line on the following courses: N 19°09'48" W, 437.57 feet; northwesterly on a curve to the right having a radius of 2704.79 feet with an arc length of 733.62 feet and a chord bearing of N 11°23'36" W, whose chord length is 731.37 feet; N 03°37'23" W 194.06 feet to the north line of said N½ of NW¼; thence S 89°59'43" E along the north line thereof, 1183.40 feet to the point of beginning.

Justification of Need

ATTACHMENT FOR STREAM WATER APPLICATION
JUSTIFICATION OF PRESENT & FUTURE USE

Applicant: Arbuckle Aggregates, LLC,
Mill Creek Quarry,
Unnamed Tributary to Mill Creek (23-T1S-R4E)

Amount of Water to be Appropriated = 210 acre-feet per year
Maximum Withdrawal Rate = 5,000 gpm

Estimated Annual Production = 500,000 tons per year[1]
Estimated Consumptive Water Use = 135 gallons per ton[2]
Amount of Water Requested = annual production x average estimated water need
= 500,000 tpy x 135 gpt
= **207** or **~210 acre-feet per year**

Withdrawal from this source would theoretically meet 100% of the near-term water needs of the Mill Creek Quarry.

---

[1] Near-term production is estimated at 500,000 tons per year.

[2] Estimated consumptive water use is 135 gallons per ton of product produced. Estimate based on annual limestone production and water use for an adjacent quarry with similar processes, operating conditions, geology, and design. The average estimate was based on published information including Oklahoma Department of Mines annual production records and Oklahoma Water Resources Board water use reports.

State of Oklahoma
Department of Mines
2915 N. Classen Blvd Suite 213
Oklahoma City, OK 73106-5406

Blasting Plan

Company: **Arbuckle Aggregates, LLC**

County: Johnston

Date: May 7, 2010

Operation: Mill Creek Quarry

Location: 3 miles north of Mill Creek, Oklahoma

Legal Description: Parts of Sections 23 & 24 T1S, R4EIM

Business Office: 5020 Tennyson Parkway, Plano, TX 75024

Blaster:	**Blaster State #**
Norman Wells	1043
James Luckinbill	880
Joey Wells	1372
Tod Lamb	1181
David Martin	1496

Time of Blasting: All blasting shall be conducted between sunrise and sunset. It is Arbuckle Aggregates' desire and intent that blasting shall be conducted to prevent injury to any person or damage to any property. It is also out intent to comply with all regulations set forth under 460-10-31-6 (Blasting and use of Explosives) of the State of Oklahoma, Department of Mines, Non-Coal Surface Mining and Reclamation Rules and Regulations. In compliance with Section 460: 10-31-6, the following Blasting Plan is submitted.

Abbreviation of Rules:

460: 10-31-6 (1): Type of explosive used: Packaged blasting agents (ANFO, Emulsion blends), Cast Primers, NG cap sensitive products, detonating cord, Non-electric detonators, electric blasting caps, electronic blasting cap.

460: 10-31-6 (1) Appropriate Amount of Explosives: A seismograph will be used to ensure vibrations are within regulated limits at the nearest inhabited building.

460: 10-31-6 (2) Description of Procedure: Each pattern will be examined prior to starting to load the shot to determine what products will be brought to load the shot. Signs are then posted and control of blast pattern is taken by the Blaster-in-Charge to make sure proper distance from mining equipment is controlled.

460: 10-31-6 (2) Plans for Recording and Retention: All products are recorded on shot reports, that also show shot time, date, location, and shot number of lbs./cyd., lbs./tons, lbs./delay, and scaled distance for the nearest inhabited structure. Also drill depths, shot measurements to determine area. Records are maintained for a minimum of three years.

460: 10-31-6 (3) Blast Warning: At time of blast, Blaster-in-Charge will notify the Production Foreman that the shot is ready to blast. At this time the pit will be cleared of equipment and personnel, and roadblocks put into place to prevent unauthorized entry. A final check is made when warning is given: "One Siren Blast". The first siren will sound 5 minutes prior to detonating the shot. The second siren will take place 1 minute to blast. The Blaster-in-Charge will detonate the blast. The roadblock remains until the blaster clears the shot.

460:10-31-8(b) All Clear Warning: The all clear siren will be sounded for two five second blasts once the Blaster-in-Charge gives the authorization.

460: 10-31-7 Control Procedures for Blasting Site: Blasting signs are posted around blast patterns with barricading to block unauthorized entry. No mining or quarrying activity will be allowed within a 50-foot radius of shot pattern being loaded. Traffic on surrounding county roads will be blocked as needed.

Submitted by: Area Manager Oklahoma
Tod Lamb

Blasting Plan Attachment:

1. List all buildings on the proposed permit area and adjacent area and indicate their current use.

Building:	Use:
Scale house (proposed)	Weighing of trucks
Shop (proposed)	Equipment maintenance
Residence, on property, west of Frisco Road	Inhabited (Mr. Holder)
Residence, adjacent property to west	Inhabited (Mr. Runyan)
Residence, adjacent property to northeast	Inhabited (Mr. Blackburn)
Scale house/office (Martin Marietta)	Weighing of trucks & quarry management

2. a Indicate which of the following structures and/or easements for such structures are located within the proposed permit area.

xx	Electric transmission lines	xx	Oil, gas, or water wells
	Gas or oil pipelines	xx	Railroads
	Water or sewer pipelines		Telephone cable/lines

b. Show the location of all structures indicated above on location map.

c. Describe the measures to be taken to minimize damage, destruction, or disruption of services provided by any of the above structures.

The measures described on the preceding page under the Abbreviation of Rules will provide adequate protection for the structures indicated in 1 and 2a.

Buckley Powder Co.
A Dyno Nobel Distributor

42 Inverness Drive East Englewood, Colorado 80112 USA Telephone: 303 790 7007 Fax: 303 790 7033

DYNO
Dyno Nobel

State of Oklahoma
Department of Mines
2915 N. Classen Blvd Suite 213
Oklahoma City, OK 73106-5406

Blasting Plan

Company: Arbuckle Aggregates, LLC

County: Johnston

Date: March 27, 2009

Operation: Mill Creek Quarry

Location: 3 miles north of Mill Creek, Oklahoma

Legal Description: Parts of Sections 23 & 24 T1S, R4EIM

Business Office: PO Box 957, 6831 Ash St. Frisco, Texas 75034

Blaster:	Blaster State #
Frank Smith	1413
Tim Stephenson	0943
Ricky Buchanan	1457
James Marion	1272
Willis Hughes	1573
James Marion	1272

Buckley Powder Co.
A Dyno Nobel Distributor

42 Inverness Drive East Englewood, Colorado 80112 USA Telephone: 303 790 7007 Fax: 303 790 7033

DYNO
Dyno Nobel

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Buckley Powder Co.
A Dyno Nobel Distributor

42 Inverness Drive East Englewood, Colorado 80112 USA Telephone: 303 790 7007 Fax: 303 790 7033

DYNO
Dyno Nobel

460: 10-31-7 Control Procedures for Blasting Site: Blasting signs are posted around blast patterns with barricading to block unauthorized entry. No mining or quarrying activity will be allowed within a 50-foot radius of shot pattern being loaded. Traffic on surrounding county roads will be blocked as needed.

Submitted by: Steve Buckley
President - Buckley Powder Co

Blasting Plan Attachment:

1. List all buildings on the proposed permit area and adjacent area and indicate their current use.

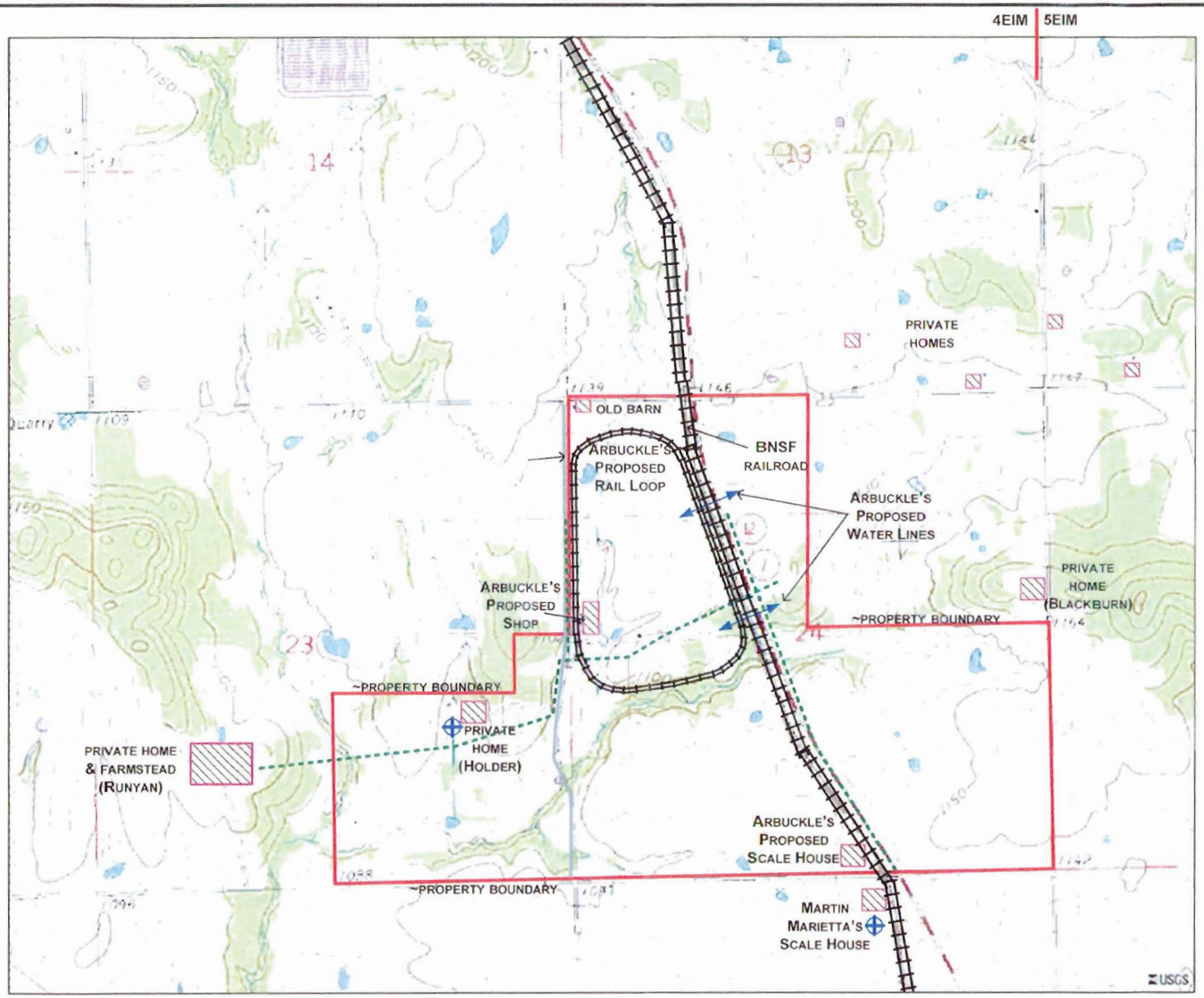
Building:	Use:
Scale house (proposed)	Weighing of trucks
Shop (proposed)	Equipment maintenance
House, west of Frisco Road	Inhabited
Scale house/office (Martin Marietta)	Weighing of trucks & quarry management

2. a Indicate which of the following structures and/or easements for such structures are located within the proposed permit area.

_x_ Electric transmission lines	__x__ Oil, gas, or water wells
____ Gas or oil pipelines	__x__ Railroads
__x__ Water or sewer pipelines	____ Telephone cable/lines

b. Show the location of all structures indicated above on location map.

c. Describe the measures to be taken to minimize damage, destruction, or disruption of services provided by any of the above structures.



WATERLINE | RAILROAD | POWERLINE | DOMESTIC WATER WELL | STRUCTURE(S)

Date:	5/7/2010
Version:	001
Scale:	Not to Scale
Drawn By:	DDS/AJC
Project #:	6000818

EST

BLASTING PLAN SCHEMATIC
Arbuckle Aggregates, LLC – Mill Creek Quarry
Mill Creek, Oklahoma 74856

Figure 1

SECTION 404 PERMIT APPLICATION FORM

DATE: 05-7-2010

Project No.:	6000848			**Facility:**	Mill Creek Quarry	**County, Near:**	Johnston, Town of Mill Creek
Description:	Low water crossings associated with a proposed limestone quarry						
Construction Dates:	December 2010						

Sta. or Str. No.	Location			Waterbody	Type	Description		Excavation		Fill		Notes
	Latitude	Longitude	Legal			Existing Structure	New Structure	CY (M^3)	Area acre (ha)	CY (M^3)	Area acre (ha)	
			T1S, R4EIM									
F	34° 27' 17.79"N	96° 50' 41.74"W	NWNWSW Sect 24	Unnamed Tributary of Mill Creek	LWC	None	3- 4' x 100' steel pipes; packed crushed stone and riprap	0	0	-	0.057	1, 2
G	34° 27' 13.59"N	96° 50' 41.66"W	SWNWSW Sect 24	Unnamed Tributary of Mill Creek	RRC	None	3- 4' x 100' steel pipes; packed crushed stone and riprap	0	0	-	0.057	1, 2
H	34° 27' 43.42"N	96° 50' 39.22"W	NWNWNW Sect 24	Unnamed Tributary of Mill Creek	RRC	None	3- 4' x 100' steel pipes; packed crushed stone and riprap	0	0	-	0.057	1, 2

Types: BP--Bank Protection, CC--Channel Change, Chan--Channel Work, D--Detour, RCB--Reinforced Concrete Box, SB--Span Bridge, Wet--Wetlands, WR--Work Road, Misc --Miscellaneous LWC-Low Water Crossing, RRC--Railroad Crossing

Notes:

1. Refer to attached diagram for general location.
2. Ordinary high water determined in field; approximately 2.5' deep x 25' wide

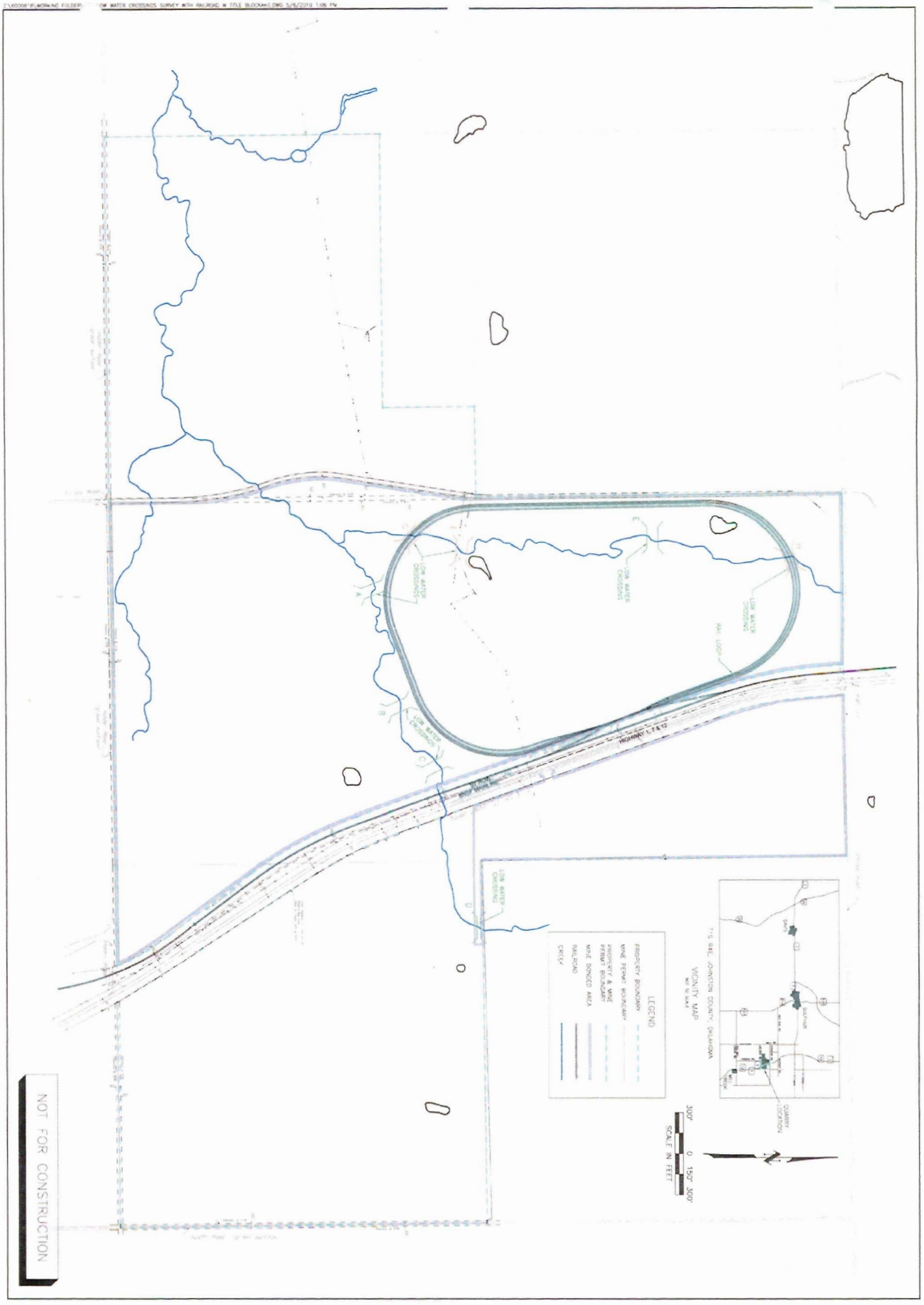
NEPA Approval: CE: _____ FONSI/EA: _____ EIS: _____ Date: _____ Pending: _____ NA: XXX

Applicant: Name: Arbuckle Aggregates, LLC; Mr. Pete Dawson Phone No.: (972) 335-4510

Address: 5020 Tennyson Parkway, Plano, TX 75024

Application Prepared By: Name: Geoff Canty, EST, Inc. Phone No.: (405) 307-8378

Processing Agent: 3201 S. Berry Rd Norman OK 73072



FINAL

SHEET T REV

PROJECT NUMBER 6000848.000

SCALE NOT TO SCALE

DATE 06/27/2010

DESIGNED BY DAC

DRAWN BY AKG

CHECKED BY ...

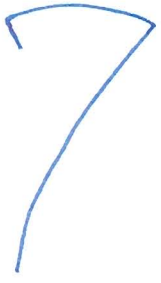
APPROVED BY PB

ARBUCKLE AGGREGATES, LLC
MILL CREEK QUARRY
LOW WATER CROSSING PLAN
JOHNSTON COUNTY, OKLAHOMA

ARBUCKLE AGGREGATES LLC

EST
3201 S. BERRY ROAD
NORMAN, OK 73072
(405) 307-8378
CA# 3639 (PE/LS)
EXP. DATE 6/30/10

NO	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D



STATE OF OKLAHOMA
DEPARTMENT OF MINES
2915 N. Classen Blvd., Suite 213
Oklahoma City, OK 73106
405/427-3859 FAX 405/424-4932

OKLAHOMA APPLICATION FOR A NON-COAL MINING PERMIT
NON-COAL OPERATOR'S RECLAMATION PLAN
(Section 4)

PERMIT NO. _____

DATE May 7, 2010

NAME OF COMPANY Arbuckle Aggregates, LLC

MINE NAME OR NO. Mill Creek Quarry

Reclamation plan to cover 575 acres during the period of 2010 to Life of Mine

Total estimated acres to be affected by permit 575 acres.

Plan covers (A) acres under previous permit(s) not reclaimed and released;
(B) additional acres to be affected under permit being applied for;
(C) new operation - number of acres that will be affected and
(D) operation purchased from previous owner.

If the same use and plan will not apply to all acreage alike, designate use and plan by letter(s) (A, B, C, D) and give acreage. Acreage must agree with acres applied for on permit.

GENERAL RECLAMATION PLAN
USE OF LAND WHEN RECLAMATION IS COMPLETED:
(Check one or more; show acreage; use letter designation above).

	USE	EST. ACREAGE			USE	EST. ACREAGE
	1. Pasture				2. Farm Land	
	3. Forest			C	4. Water Reservoir	~104
	5. Recreation			C	6. Industrial	~147
	7. Residential		Explain:			
C	8. Other	~324	Explain:	Mixed-use agriculture and recreational land		
	9. None		Explain:			

WHAT WILL YOU DO TO MAKE LAND USABLE FOR PURPOSE STATED ABOVE? (Check one or more).

xxx 1. Fill xxx 2. Level xxx 3. Grade – approximate date of grading (If unknown, show as unknown) Unknown

_____ 4. Other (Explain) _____

xxx 5. Plant grass _____ 6. Sprig or sod grass _____ 7. Set out trees

_____ 8. Build dam _____ 9. Stock with fish _____ 10. Stock with game

_____ 11. None (Explain) _____

Does the mineral seam contain acid-forming materials? _____ Yes xxx No
If yes, please complete Question #3 of the Attachment forms.

Reclamation Attachments and Narratives addressing each and every issue as outlined in the Rules & Regulations must be part of your Reclamation Plan and attached to this form.

RECLAMATION PLAN ATTACHMENT

(1) **RE-VEGETATION PLAN:** Describe the plan for re-vegetation or other surface treatment of affected area(s). The re-vegetation plan shall include but not limited to the following: ***Each item must be addressed or plan will be returned. 460:10-15-3 (6)***

(A). Planned soil tests:

For disturbed areas that will be returned to mixed-use agriculture or stabilized with vegetation, soil testing will be performed to determine nutrient availability and need. After final grading is complete, soil tests will be conducted prior to planting. The type and number of tests will follow NRCS, or OSU Extension recommendations/guidance documents, or other applicable resources.

(B). Site preparation and fertilization:

Areas that will be returned to mixed-use agriculture or stabilized with vegetation will be prepared prior to planting. Activities may include grading, tilling, disking, etc. Preparation will follow NRCS or OSU Extension recommendations/guidance documents or other applicable resources.

Given the anticipated post-mining soil conditions, fertilization may be required to support plant life. A fertilization plan (including rates, type, and timing, etc.) will be developed based on the results of the soil tests, plant species selected, soil type, and accepted fertilization practices. Fertilizing will follow NRCS or OSU Extension recommendations/guidance documents, or other applicable resources.

(C). Seed and Plant selection:

Species selection will be determined by considering topography, soil type, soil moisture, nutrients, soil chemistry, and post-reclamation use. Some areas may be planted with a native mix of grass and/or forbs species or recommended exotic species (e.g., Bermuda grass). Other areas may be planted with species used by wildlife. Erosive slopes or dry areas may be planted with grasses and forbs recommended for mine site reclamation. Species selection will follow NRCS or OSU Extension recommendations/guidance documents, or other applicable resources.

(D). Rate of seeding or amount of planting per acre:

OSU Extension recommends 5-10 lbs/ac of Bermuda seed or 10-16 lbs/ac for native species. Actual rates may be adjusted during the reclamation phase to account for planting method, species selected, availability of seed, etc. Rate of seeding or planting will follow NRCS or OSU Extension recommendations/guidance documents, or other applicable resources.

(E). Are there other surface treatments that will be performed to the affected land during reclamation? _____yes, __xxx__no.

If yes please explain:

None

(2) Describe method to prevent or eliminate conditions that could be hazardous to animal or fish life in or adjacent to the permit area.

While operating, the facility will adhere to federal, state and local regulations governing air, water, wastes, and hazardous substances—this greatly reduces the impact on wildlife in the future. During the reclamation process an erosion and water management plan will be developed to minimize potential impacts to aquatic life and water quality. Mining pits (or parts of) will be graded to allow reasonably safe ingress and egress for wildlife while being structurally stable. Berms, buffers or some type of barrier may be employed to restrict access to hazardous slopes.

3) Provide, as a separate document, a closure plan of the mine and permitted facilities to prevent a release of contaminants for being harmful to the environment. **A closure plan is not necessary for all mines**, but is required where the possibility exist for (a) acid-forming materials handling or drainage; (b) Chemically treated tailings or stockpiles (excludes fertilizer or lime for re-vegetation purposes).

No acid forming materials are anticipated on site and no tailings or stockpiles will be chemically treated. Consequently, a closure was not prepared.

(4) Method of control and disposal of mine waste, rock, mineral scrap, tailings, slimes, and other material directly connected with the mining, cleaning, and preparation of mineral substances mined and includes all waste materials deposited on or in the permit area from any source.

Crushed stone products will be produced at this facility. Overburden, fines or off-spec materials will either be sold as product or used during the reclamation phase for grading and stabilization purposes.

(5) Method of reclaiming settling and/or sediment ponds.

All permitted process water impoundments will follow proper DEQ closure protocols as specific in OAC 616. The closure process will be overseen by a DEQ Water Quality engineer. Overburden, fines and other materials will be used, as needed, to grade and/or close-out the impoundments. Process water impoundments may be kept open as water features or reclaimed for industrial use.

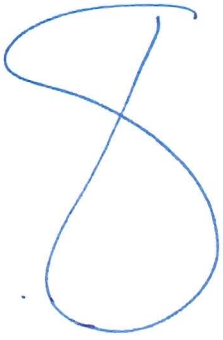
(6) For final reclamation, submit information about practices to provide for safety to persons and to adjoining property in all excavations. Identify area of potential danger and appropriate safety provisions. These provisions can include but are not limited to setbacks, fencing, signs, benching, guardrails and boulders.

Direct access to the site as a whole will be restricted by fences, signage, locking gates and berms or other barriers. These practices will discourage and prevent access to hazardous slopes and water features. Fencing, berms, boulders and/or other barriers will be used where the mining pit is adjacent to roads. Lateral support and set-backs are designed to provide structural stability and access restriction. Quarried areas will be designed to allow people the ability to access the pit or water feature in the event of an emergency.

(7) Identify structures (e.g. buildings, roads) that are proposed to remain as part of the final reclamation.

During the reclamation phase the property will be developed to support mixed landuses including, but not limited to, agricultural, commercial, industrial, and recreational uses. Structures, travel ways, piping, buildings, rail lines, processing equipment or other items may remain to support future landuse.

In general, the Plant and Stockpile Areas may be developed for future industrial or commercial uses. Process Water Impoundment Areas may be closed-out and/or converted to stock or recreational water features, if possible, or they may be converted to commercial or industrial uses. Future Reserve Areas will remain as is if no mining occurs. However, if mined they may be reclaimed as water features and/or some other land use (e.g., agriculture, commercial, recreation, industrial, etc.) Some travel ways and low water crossings will remain after reclamation to allow for site access. Refer to the Reclamation Map for additional information.



STATEMENT OF CERTIFICATION

I, (Company Official) Pete Dawson Certify that the (Company, Corporation, Individual(s) Arbuckle Aggregates, LLC has the right and power by Legal Estate owned to mine the land for which this application is made. We hereby certify that all details contained in this Permit Application are true and correct to the best of knowledge. We fully understand that any willful misrepresentation of facts will be cause for permit revocation.

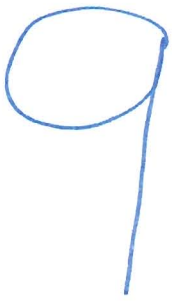
Signature of Company Official _____ Position President

Subscribed and sworn to before me this 6th day of May 20 10

My Commission expires 4/8/14 Notary Public _____

MENDY A. MCCANN
Notary Public, State of Texas
My Commission Expires
April 08, 2014

Note: THIS APPLICATION MUST BE SIGNED AND NOTARIZED. ALL QUESTIONS MUST BE ADDRESSED AND ALL REQUIRED DOCUMENTS AND INFORMATION PROVIDED BEFORE THIS APPLICATION CAN BE CONSIDERED COMPLETE. ATTACH ADDITIONAL SHEETS AS NEEDED.



STATE OF OKLAHOMA
DEPARTMENT OF MINES
2915 North Classen Blvd., Ste. 213
Oklahoma City, OK 73106
405/427-3859

RETURN WITH APPLICATION

NON-COAL LOCATION MAP

The Mining Lands Reclamation Act, 45 O.S. 1981 §721-728

Period Of: **2010** to **Life of Mine**

If, for any reason whatever, you stop operating at the location you show here, notify the Department of Mines immediately as your liability continues in effect until; the Department is notified and/or completed reclamation is approved.

COMPANY **Arbuckle Aggregates, LLC**

MINERAL TO BE MINED **Limestone, Dolomite, Shale, Sand, Gravel, Clay & Soil**

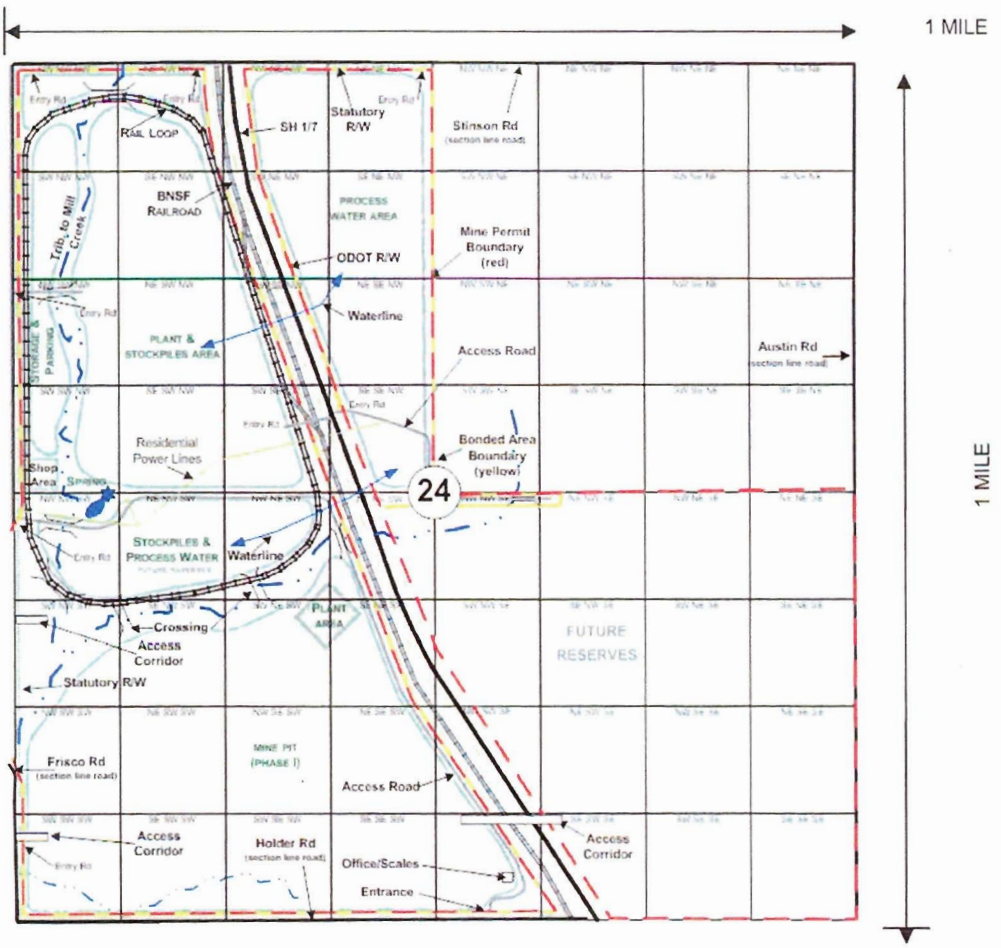
ACRES THIS SECTION TO BE COVERED BY PERMIT & BOND **447 Permit; 300 Bonded**

TOTAL ACRES TO BE COVERED BY PERMIT **575**

SECTION **24** TOWNSHIP **1S** RANGE **4EIM** COUNTY **JOHNSTON**

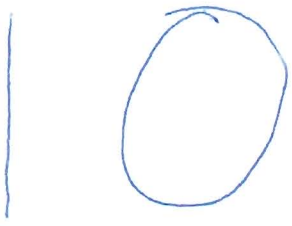
One Section divided into 10-acre tracts,

PLOT LOCATION as accurately as possible on map.



NOTE: PLOT ALL TRANSMISSION LINES (gas, water, electric, etc.) in accordance with HB 1735 of 1982

Note: The mine permit area starts at the statutory right of way or as designated.



STATE OF OKLAHOMA
DEPARTMENT OF MINES
2915 North Classen Blvd., Ste. 213
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RETURN WITH APPLICATION

NON-COAL LOCATION MAP

The Mining Lands Reclamation Act, 45 O.S. 1981 §721-728

Period Of: **2010** to **Life of Mine**

If, for any reason whatever, you stop operating at the location you show here, notify the Department of Mines immediately as your liability continues in effect until; the Department is notified and/or completed reclamation is approved.

COMPANY **Arbuckle Aggregates, LLC**

MINERAL TO BE MINED **Limestone, Dolomite, Shale, Sand, Gravel, Clay & Soil**

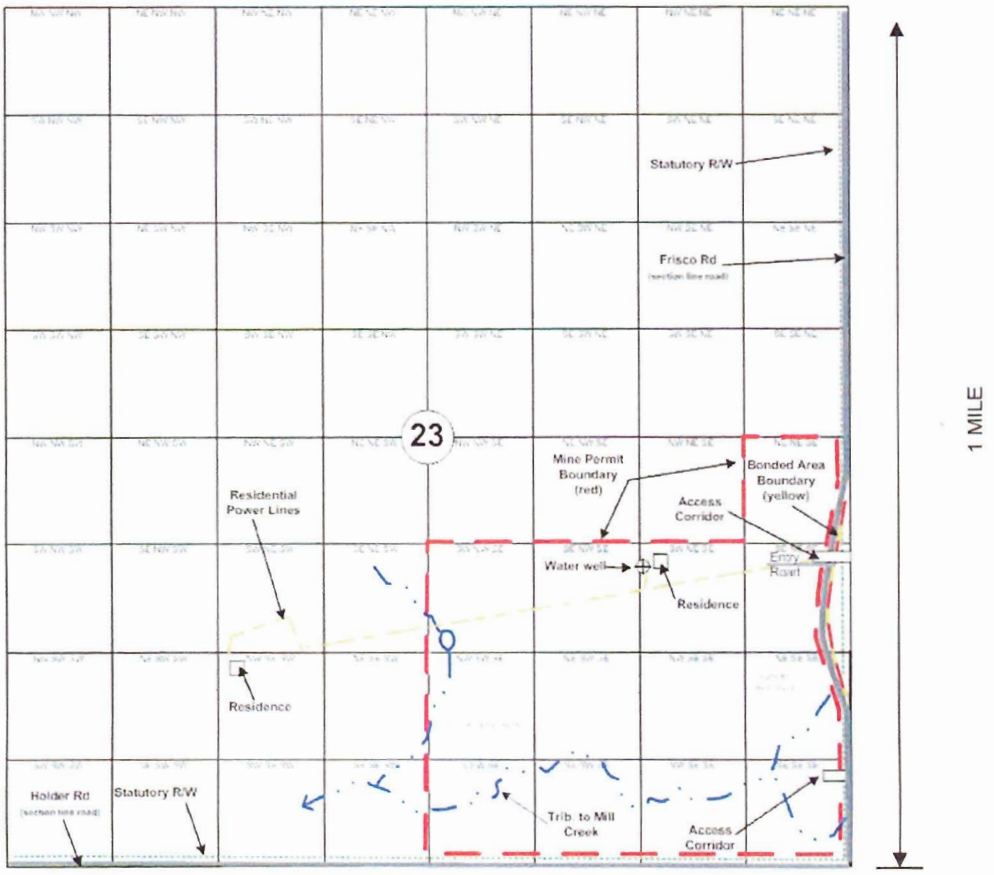
ACRES THIS SECTION TO BE COVERED BY PERMIT & BOND **128 Permit; 5 Bonded**

TOTAL ACRES TO BE COVERED BY PERMIT **575**

SECTION **23** TOWNSHIP **1S** RANGE **4EIM** COUNTY **JOHNSTON**

One Section divided into 10-acre tracts, 1 MILE

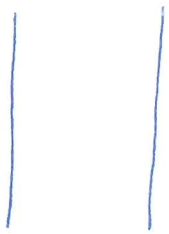
PLOT LOCATION as accurately as possible on map.

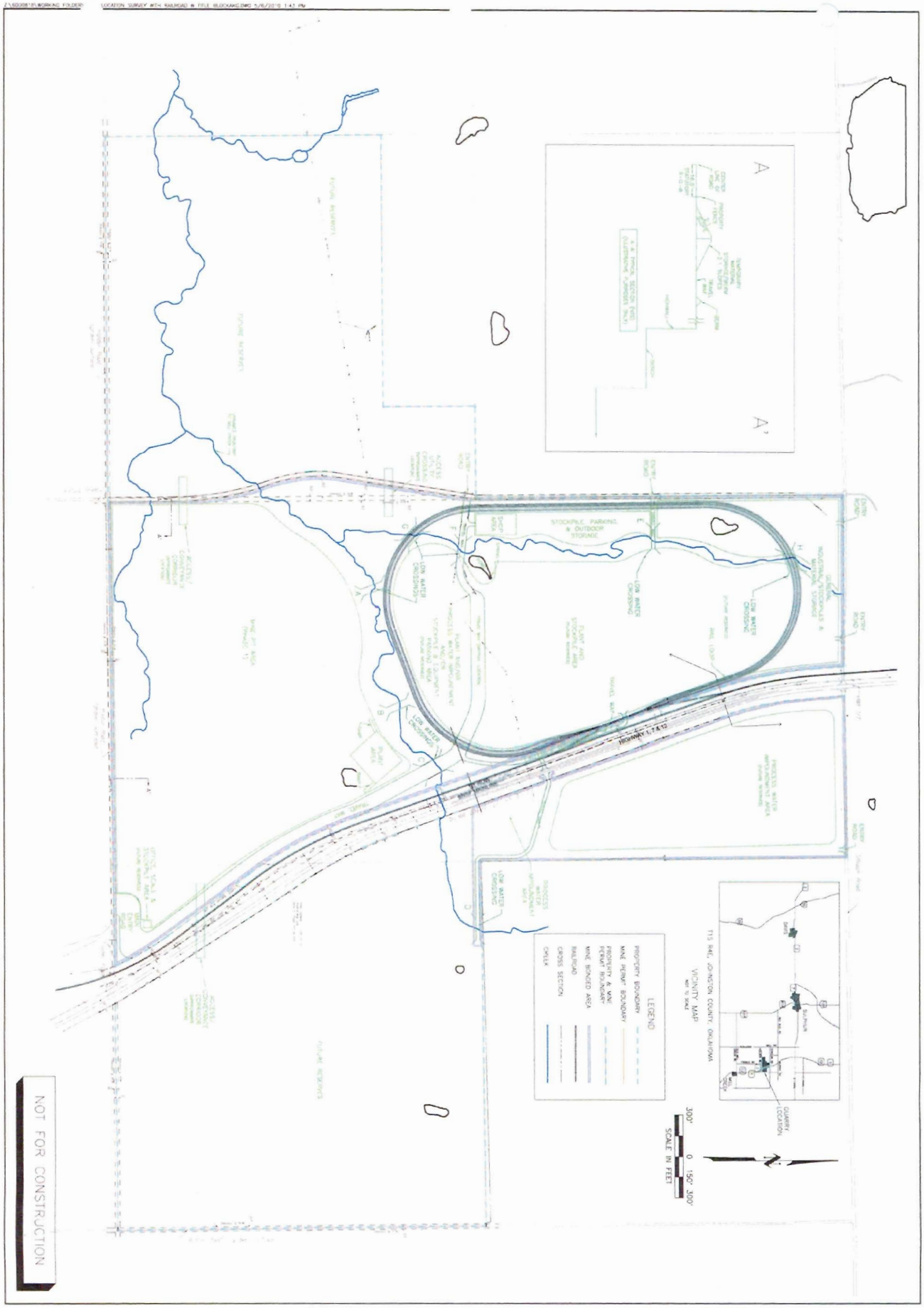


N

NOTE: PLOT ALL TRANSMISSION LINES (gas, water, electric, etc.) in accordance with HB 1735 of 1982

Note: The mine permit area starts at the statutory right of way or as designated.





NOT FOR CONSTRUCTION

FINAL

DATE 05/07/2010
SCALE 1" = 150'
PROJECT NUMBER 6000818.000
SHEET 1 REV

DESIGNED BY: DRAWN BY: AAG
CHECKED BY: -
APPROVED BY: PIB

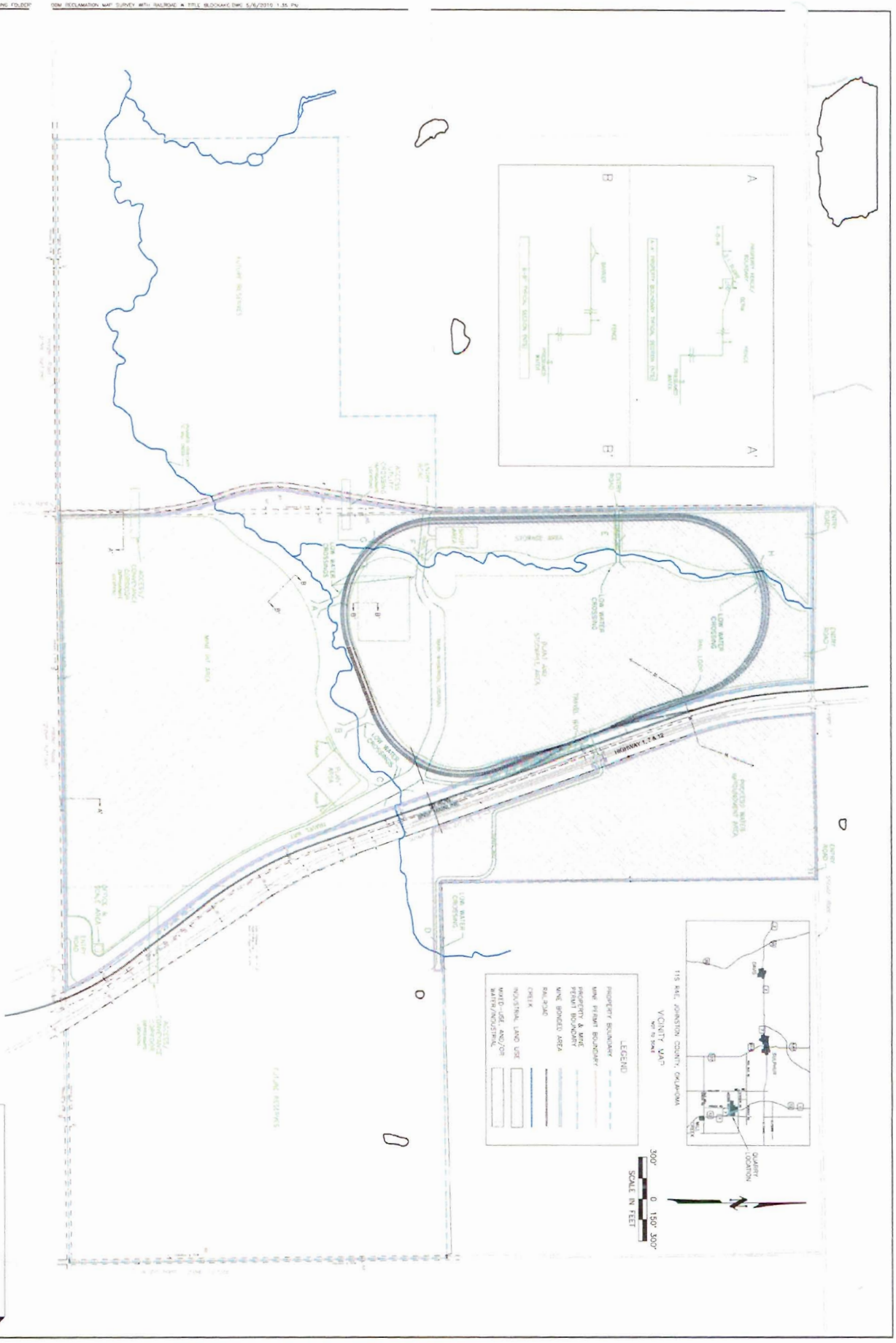
ARBUCKLE AGGREGATES, LLC
MILL CREEK QUARRY
ODM LOCATION MAP
JOHNSTON COUNTY, OKLAHOMA

ARBUCKLE AGGREGATES LLC

EST
3201 S. BERRY ROAD
NORMAN, OK 73072
(405) 307-8378
CA# 3639 (PE/LS)
EXP. DATE 6/30/10

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D

12



NOT FOR CONSTRUCTION

FINAL

DATE: 05/07/2010
SCALE: 1" = 300'
PROJECT NUMBER: 6000818.000
SHEET: REV.

DESIGNED BY: CAC
DRAWN BY: AKG
CHECKED BY: --
APPROVED BY: --

ARBUCKLE AGGREGATES, LLC
MILL CREEK QUARRY
ODM RECLAMATION MAP
JOHNSTON COUNTY, OKLAHOMA

ARBUCKLE AGGREGATES LLC

EST
3201 S. BERRY ROAD
NORMAN, OK 73072
(405) 307-8378
CA# 3639 (PE/LS)
EXP. DATE 6/30/10

NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D

EST, Inc.
3201 S. BERRY ROAD
NORMAN, OK 73072
(405) 307-8378

ARVEST BANK
86-1297/1031

VOID AFTER 90 DAYS

25230

CHECK DATE

May 6, 2010

PAY

One Hundred Seventy Five and 00/100 Dollars

AMOUNT

$175.00

TO

Oklahoma Department of Mines
2915 N. Classen Blvd.
Suite 213
Oklahoma City OK 73106

Security features. Details on back.

⑈025230⑈ ⑆103112976⑆ 000605338 1⑈

EST, INC.

25230

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
6000818 NonCoal Fee	1/20/10	2338	175.00	0.00	0.00	175.00
Oklahoma Department of Mines CHECKING 25 2100		Totals	175.00	0.00	0.00	175.00

RECEIVED
MAY 07 2010
DEPT. OF MINES