

August 10, 2017

BOARD MATTER F-6

ACTION: Annual Reporting for Non-Exclusive Fossil Removal Permit
FRP-00331S – INFORMATIONAL ONLY

AUTHORITY: W.S. § 36-1-114; Board of Land Commissioners' Rules and
Regulations, Chapter 11, Section 14(d)

ANALYSIS:

The attached annual report for Non-Exclusive Fossil Removal Permit FRP-00331S is
submitted for Board of Land Commissioners' review:

<u>Lease</u>	<u>Applicant</u>	<u>Description</u>	<u>Acres</u>	<u>County</u>
FRP-00331	Sheridan College	T48N R83W Sec. 36 W2	320.00	Johnson

ANNUAL REPORT YEAR 2016

STATE OF WYOMING

**PALEONTOLOGY INVESTIGATION AT THE SHERIDAN COLLEGE DINOSAUR
QUARRY, JURASSIC MORRISON FORMATION, JOHNSON COUNTY, WYOMING**

REPORT OF ACTIVITES FOR THE YEAR 2016

AUTHORIZED UNDER SCIENTIFIC FOSSIL REMOVAL PERMIT NUMBER FRP-003315

BY

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STATE OF WYOMING
NONEXCULSIVE SCIENTIFIC FOSSIL REMOVAL
PERMIT NUMBER FRP-00331S
ANNUAL REPORT FOR 2016 FIELD SEASON

1. Under Provision 4:

The work planned for the field season of 2016 was conducted between May 15th and November 15th.

The person in immediate charge of this fossil collecting work is Michael J. Flynn, Curator of Geology, Science Museum, Sheridan College, Sheridan, Wyoming.

The paleontology work included excavation of new fossil specimens and offered Sheridan College credit for field geology and paleontology courses.

All fossil specimens located are documented and quarry mapped using the following methods:

- A. Global Positioning System (GPS) location of new fossil specimens.
- B. Quarry map as to Range and Township – Location of all specimens within the Quarry.
- C. On-going field mapping of Sheridan College Quarry with new specimens noted.

2. Under Provision 5 items 3 and 4:

Item 3

The planned excavation at Sheridan College Quarry – size is approximately 45 X 60 feet. At a depth of 3-5 feet within the past excavation site – Quarry #1. Quarry #2 will be closed. The excavation work at the fossil quarry will require about four field seasons.

Persons authorized to work at State Fossil Removal Permit No. FRP-00331S for field season 2016: The following authorized workers are students, faculty, and volunteers.

Michael Flynn, Curator of Geology, Science Museum
Matt DeDeo, Volunteer, Co-Manager – Sheridan College Dinosaur Quarry
Bill Matteson, Collection Manager, Science Museum
Randy Moses, Faculty, Volunteer, Sheridan College
Brian Flynn, Student
David Nickalarson, Geologist
Scott Nickerson, M.D., Volunteer
Sheila Flynn, RDH, Volunteer, Student
Josh Haireson, Student
Kathy Beagle, Volunteer, Student
Tom Johannismeyer, Faculty, Sheridan College
Austin Akers, Volunteer, Student

The permit site is a classic deposit of isolated dinosaurs and other vertebrates in paleostream channel deposits (overbank), in the Late Jurassic Morrison Formation. The quarry site is continuing to be a very important scientific and educational Jurassic locality in northern Wyoming.

Field research at Sheridan College Quarry notes that in the late Jurassic period about 145 million years ago, a winding river buried a number of dinosaur bones in the mudstone and sandstone of its channel. These river channel sediments would eventually be the site of the Sheridan College Quarry located on Wyoming State Trust Lands in Johnson County (W1/2 Section 36, 42N, 83W).

The age of the Morrison Formation at this quarry is late Kimmeridgian and early Portlandian.

The accomplishments at locality No. V-92067 (Fossil Quarry Number), Sheridan College Quarry Permit No. FRP-00331S, during the 2016 field season included expansion of the quarry to place in Quarry #1 to the south and north. Not many fossil finds were made due to lack of funding and manpower. Please see Fossil Removal Statement for the dinosaur specimens collected during the 2016 field season. Several trips were made to the quarry that included both young prospective scientists and faculty of Sheridan College.

Two Sheridan College field courses in paleontology and geology were offered to students at the State Fossil Quarry No. FRP-00331S, Johnson County, Wyoming. Also there is continued research in Jurassic paleontology, geology, stratigraphy, paleobiology, and paleoenvironments of the Late Jurassic Morrison Formation in Northern Wyoming.

Objectives for the 2017 Field Season:

1. Continue to utilize the fossil quarry which is located on the Wyoming State Trust Lands, for instruction of geology and paleontology college courses, which are open to all students.
2. Continue to expand the fossil quarry into potential fossil rich areas with the help of students and volunteers.
3. Collect data and expand on dinosaur track site located in permitted area to the northeast of Quarry #1.
4. All fossil specimens will be collected with tentative taxonomy and individual specimen numbers, photographically downloaded with the use of a digital camera and a GPS unit receiver. Each specimen will be field jacketed in plaster and felt cloth for removal and transported to Sheridan College Science Museum. Within the museum's laboratory, the specimens will be removed from their field plaster, soil matrix, and preserved using special hardeners and glues.
5. Promote field research within the Quarry No. FRP-00331S located within the W1/2 of Section 36, 42N, 83W, Johnson County, Wyoming.

APPENDIX

The following is a list of fossil specimens collected during the field season of 2016 at the Sheridan College Quarry, Locality Number V-92067, Johnson County, Wyoming.

Field Number	Identification	Element
	Marine Reptile	Vertebra

ROBINSON CANYON QUADRANGLE
WYOMING-JOHNSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

