



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT

White River Field Office

220 East Market St.

Meeker, Colorado 81641



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APR 05 2013

GRAND JUNCTION FIELD OFFICE  
DIVISION OF  
RECLAMATION MINING & SAFETY

In Reply Refer To:  
LCON05000  
COC-69166  
Oil Shale RD&D

APR 04 2013

Shell Frontier Oil & Gas Inc.  
Attn: Florentino Vuelvas  
3333 highway 6 South M1074A  
Houston, TX 77082-3101

Dear Mr. Vuelvas,

Our staff has reviewed your December 5, 2012, minor modification to the approved "Plan of Development for Research, Development and Demonstration Activities on Oil Shale Research, Development and Demonstration (RDD) Lease COC 69166 and Nahcolite Preference Right Sodium Lease C-0120057 Multi-Mineral RDD" requesting the addition of a long heater test (LHT). The modification is considered a minor change to Shell Frontier's approved Plan of Development and is approved with the following mitigation:

1. The operator is responsible for informing all persons who are associated with the project that they will be subject to prosecution for knowingly disturbing archaeological sites or for collecting artifacts.
2. If any archaeological materials are discovered as a result of operations under this authorization, activity in the vicinity of the discovery will cease, and the BLM WRFO Archaeologist will be notified immediately. Work may not resume at that location until approved by the AO. The operator will make every effort to protect the site from further impacts including looting, erosion, or other human or natural damage until BLM determines a treatment approach, and the treatment is completed. Unless previously determined in treatment plans or agreements, BLM will evaluate the cultural resources and, in consultation with the State Historic Preservation Office (SHPO), select the appropriate mitigation option within 48 hours of the discovery. The operator, under guidance of the BLM, will implement the mitigation in a timely manner. The process will be fully documented in reports, site forms, maps, drawings, and photographs. The BLM will forward documentation to the SHPO for review and concurrence.
3. Pursuant to 43 CFR 10.4(g), the operator must notify the AO, by telephone and written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), the operator must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

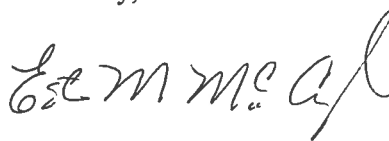
4. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
5. If any paleontological resources are discovered as a result of operations under this authorization, the operator or any of his agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.
6. Any excavations into the underlying native sedimentary stone must be monitored by a permitted paleontologist. The monitoring paleontologist must be present before the start of excavations that may impact bedrock.
7. All proposed activities shall be in accordance with Shell's approved "Plan of Development for Research, Development, and Demonstration Activities on Oil Shale Research, Development and Demonstration (RDD) Lease COC 69166 and Nahcolite Preference Right Sodium Lease C-0120057".

This action corresponds to the Colorado Division of Reclamation, Mining and Safety (CDRMS) Prospecting Permit P-2010-026.

Section 24 Addendum A of Oil Shale Research Development and Demonstration (R,D&D) Lease COC69166 requires the lessee to pay for costs of review and approval of plans of development or similar submissions. Please submit the cost recovery fee of \$747.68 within 30 days of receipt of this letter. Attached is a copy of the Fee Estimate for Case-by-Case Processing.

If there are any questions, please contact Paul Daggett, Mining Engineer at (970) 878-3819.

Sincerely,



for Kent E. Walter  
Field Manager

Attachments  
Fee Estimate for Case-by-Case Processing  
Long Heater Test Well Permits

cc



Charlie Beecham  
BLM Colorado State Office  
2850 Youngfield Street  
Lakewood, CO 80215-7076

Travis Marshall  
Grand Junction Field Office  
Colorado Division of Reclamation, Mining and Safety  
101 South 3<sup>rd</sup>, Suite 301  
Grand Junction, CO 81501