R 99 W

R 98 W

T 1 S

T 2 S

Proposed 160-Ac R&D Tract

SHELL FIELD OFFICES

NSI PLANT

DUCK CREEK SYNCLINE

ANTICINAL ROSE

YELLOW CREEK DRAINAGE BASIN

PICEANCE CREEK DRAINAGE BASIN

Limit of Saline Zone

County Road 82

County Road 84

County Road 85

County Road 86

County Road 87

County Road 88

County Road 91

County Road 93

County Road 94

Creek Spring Gulch

Black Sulphur Creek

Box Elder

Stake Springs Draw

Ryan Gulch

Duck Creek

Gulch

Sulphur Creek

LEGEND

- Water Course
- Facility
- Proposed 160-Ac R&D Tract
- Core Hole Locations
- Structure Contour of Top of R7 Contour Interval = 100 ft
- Surface Syncline Axis
- Surface Anticline Axis
- Limit of Saline Zone

Resource R7-R2 Interval

Overburden	870 Ft.
Thickness	1,020 Ft.
Oil Grade	26.5 Gallons/Ton
Nahcolite Content	~ 0.3 %
Dawsonite Content	~ 5.0 %

CORRELATION OF MAP UNITS

Qal	Holocene	QUATERNARY
Tub		
Tgh		
Tuk	Eocene	TERTIARY
Tw Tw		
Tgh		
Tuk		

DESCRIPTION OF MAP UNITS

Qal — ALLUVIUM (HOLOCENE)
Silt, sand, and gravel, of flood plains and alluvial fans in the larger valleys. Flood-plain deposits are mostly grey, buff, and brown silt and sand. Alluvial fan deposits consist of angular boulders and pebbles of sandstone and marlstone mixed with silt and sand derived from nearby hilly terrain. Thin alluvial deposits in the upland tributaries were only locally mapped; although such deposits are extensive, they are difficult to recognize. Thickness 0-100 ft (0-30 m).

UINTA FORMATION (EOCENE)

Tuu — Unit 6
Ledge-forming buff- and brown-weathering sandstone and interbedded siltstone. Thickness 250 ft (76m).

Tul — Unit 5
Dominantly buff-weathering silty marlstone. Thickness 150-300 ft (46-91 m).

Tuk — Unit 4
Buff- and brown-weathering ledge-forming sandstone. Unit grades laterally into the unnamed tongue of the Green River Formation south of Little Duck Creek, however, remnants are mapped locally. Thickness 0-200 ft (0-61 m).

GREEN RIVER FORMATION (EOCENE)

Tgh — Black Sulphur Tongue
Light gray to white weathering silty marlstone. Thickness 20-40 ft (6-12 m).

Tgtu — Thirteenmile Creek Tongue
Upper part- light gray to white-weathering marlstone. The unit locally contains thin ledge-forming porous ostracod-charophyte-bearing limestone. The unit contains a few thin oil-shale beds. Present only in the northern part of the Wolf Ridge Quadrangle. Thickness 40-80 ft (12-18 m).

Tgte — Thirteenmile Creek Tongue equivalent
Locally a Thirteenmile Creek equivalent mapped seperately where it overlies an unnamed tongue of the Green River Formation.

Tgu — Unnamed tongue
Light gray-weathering silty marlstone which may be equivalent to the Yellow Creek Tongue and Dry Fork Tongue north of the Wolf Creek Quadrangle boundary. Thickness 0-200 ft (0-61 m).

- Geologic Contact
- Geologic Contact, approximate
- Fault, dashed where inferred; dotted where concealed. U, upthrown side; D, downthrown side.
- Paved Road
- Gravel Road

5,000ft 0 5,000ft
1,500m 0 1,500m
Scale 1: 50,000

EXHIBIT G

GEOLOGY MAP

OIL SHALE TEST PROJECT

File: 3235\task 45\PlanOO\final\Feb 06\Ex Gology Feb 2006