C197

SHELL OIL COMPANY

1700 BROADWAY
DENVER, COLORADO 80202

Date November 8, 1971

Time 9:30 a.m.

To: J. Paul Storrs (2)
Regional Mining Supervisor
U.S.G.S.
Room 6029, Federal Bldg.
Denver, Colorado 80202

The Superior Oil Company
P. O. Box 1521
Houston, Texas 77001
Attention Mr. Ben Weichman

Gulf Mineral Resources Company
1780 South Bellaire Street
Denver, Colorado 80222
Attention Mr. Marshall Turner

Bell Petroleum Company
Suite 400, 700 Wilshire Blvd.
Los Angeles, California 90017
Attention Mr. Ralph J. Tingle

Subject: Daily Report - Core Hole Progress
Shell Oil Company
Government Core Hole 41X-9
NE NE Sec. 9, T1S, R97W, Rio Blanco County, Colorado

Present Depth: 3000 ft. Core Size: 3 1/2-inch

Present Operation: Preparing to log. Casing: 8 5/8 " @ 318 ft.

Anticipated T.D.: 3000 ft. Mud: Air-Mist

Rig Type: Model 90 Failing Stratmaster

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Coring, Testing, Logging and/or Geologic Data:

Core No.	Interval	Footage Cut	Footage Recovered	Field Description
42	2249-2309	60	60	Oil shale, with nahcolite nodules and thin beds.
43	2309-2369	60	60	Oil shale as above except 2320-30 radiating nahcolite crystalline mass.
44	2369-2429	60	60	Oil shale, with nahcolite nodules and thin beds.
45	2429-2489.	60	60	Oil shale, 2429-50 with nahcolite nodules.
46	2489-2549	60	59½	Oil shale, with nahcolite nodules and thin beds.

Core No.	Interval	Footage Cut	Footage Recovered	Field Description
47	2549-2609	60	59	Oil shale, with nahcolite nodules and thin beds, 2597½-2602 fine-grained nahcolite bed.
48	2609-2669	60	59	Oil shale, with nahcolite nodules and thin beds, 2658-63 fine-grained nahcolite bed.
49	2669-2697	28	20½	Oil shale, 2669-81 with nahcolite nodules.
50	2697-2730	33	32	Oil shale.
51	2730-2748	18	12	Oil shale.

Drilled to TD of 3000 feet (approximately 50 feet below Orange Marker).

Water Data

Depth (feet)	Water Produced During Operation
1398	130+ gpm while drilling, Conductivity 1650 micromhos TDS 1000 ppm (est), Temperature 67°F
1491	Conductivity 2000 micromhos TDS 1200 ppm (est), Temperature 70°F
1625	Conductivity 2200 micromhos TDS 1300 ppm (est), Temperature 70°F
1707	200 gpm (est) while drilling, Conductivity 2800 micromhos TDS 1700 ppm (est), Temperature 70°F
1800	250 gpm (est) while drilling, Conductivity 2600? micromhos TDS 1600? ppm (est), Temperature 70°F
1830	300 gpm (est) while drilling, Conductivity 5000 micromhos TDS 3000 ppm (est), Temperature 70°F
1906	350± gpm (est) while drilling, Conductivity 27,000 micromhos TDS 16,000 ppm (est), Temperature 76°F

Preliminary Aquifer Test Results

Cored to 2129
Ran in hole openended to 1000 feet
Pumped 3 hrs at 200 gpm
Recorded recovery for 2 hours
Transmissivity est at 1500 gpd/ft.
Static water level at 550 est.

Signed: [signature]
For: A. L. Brown
Manager Special Projects