G — NORTHWEST — G' — SOUTHEAST

PAN AM — MOOSE CREEK UNIT No.1 — EL. 2930' KB — TD 7884' IN (volcanics) — T-18-S R-7 — OULKANA (A-4) ALASKA — NW, NE SEC. 20-T8S-R9E, CRM

2½ MI.

(41) CHESHNINA RIVER — VALDEZ (D-1) ALASKA — SE SEC. 20, NE SEC. 29-T12S-R6E AND NW SEC. 10-T13S-R6E, CRM

14 MI.

(43) NORTH OF KOTSINA RIVER — VALDEZ (C-1) ALASKA — NE, NE, SE SEC. 31-T15-R6E, CRM

10 MI.

(44) WEST UPPER SHEEP CREEK — 1/4 MILE WEST OF UPPER SHEEP CREEK SECTION — McCARTHY (C-8) ALASKA — NW SEC. 13-T23-R9E CRM

2 MI.

(45) LOWER SHEEP CREEK — ONE MILE SOUTH OF UPPER SHEEP CREEK SECTION — McCARTHY (C-8) ALASKA — C 3/4 NW SEC. 30-T23-R9E CRM

1 MI.

(46) UPPER SHEEP CREEK — NEAR THE HEAD OF SHEEP CREEK — McCARTHY (C-8) ALASKA — SE NW SEC. 19-T23-R9E CRM

3.75 MI.

(47) MacDOUGALL CREEK — BETWEEN BEDS & MACDOUGALL CREEKS — McCARTHY (C-8) ALASKA — E 1/2 W 1/2 SE SEC. 34-T4S-R9E, CRM; NW NE SEC. 3-T5S-R9E CRM

7 MI.

(48) TRAIL CREEK — NORTH SIDE OF TRAIL CREEK VALLEY EAST OF KUSKULANA RIVER — McCARTHY (C-8) ALASKA — SW SW SEC. 25-T3S-R9E CRM

4.5 MI.

(49) KUSKULANA PASS — TRIBUTARY OF CHOKOSNA RIVER — McCARTHY (C-7 & C-8) ALASKA — SW SW SEC. 4, NW NW, NE SW SEC. 9, SE SE SEC. 5, SW NW, SE NW, NE SW SEC. 6-T4S, R10W CRM

LOWER CRETACEOUS — NELCHINA FORMATION — WISCOMAN

LOWER JURASSIC — TALKEETNA FORMATION — SINEMURIAN?-PLIENSBACHIAN?-TOARCIAN

SMALL AMT OF GAS & SAG SWPW

ARBITRARILY PLACED APPROXIMATE BASE OF LIMESTONE-PALYNOLOGY

THIS LOWER ZONE POSSIBLY BELONGS IN (ALASTINA FM.)

MOSTLY VOLCANICLASTICS CONGLOM. (SLOG.,BM & VOLC MATL WEDGED-IN & MOSTLY VARICOLORED. ALTERED BASALT CORED AT BASE

Core No. 1 (1962-1968) Rec. 4' (Altered basalt)

Age Dated: Kal 130 - 18 my (Sundelin)

TRIASSIC PART OF McCARTHY FORMATION

AFTER GRANTZ, et al, 1966

ERODED SURFACE

BASE OF LIMESTONE MARKER BED

AFTER MOFFIT & MERTIE, 1923 AND MOFFIT, 1938

DISTRIBUTARY SYSTEM

MARKER BED

JURASSIC GRANODIORITE INTRUSIVE

AFTER GRANTZ, 1966

LOWER CRETACEOUS — NELCHINA FORMATION — UPPER SANDSTONE — LOWER SANDSTONE — WISCOMAN

LOWER JURASSIC—UPPER TRIASSIC — McCARTHY FM.

PART OF LOWER JURASSIC McCARTHY FM.

LEGEND

SHOW

- GOOD OIL, FREE OIL RECOVERY
- SLIGHT OIL
- GOOD GAS, MEASURABLE GAS RECOVERY
- SLIGHT GAS
- FRESH WATER
- SALT WATER

SOURCE ROCK DATA

- OIL
- OIL AND GAS
- GAS
- WET GAS (CONDENSATE)

GENERATING CAPABILITY RATING:
G1 = NON-SOURCE; F = POOR; E = FAIR
G2 = GOOD; (HYDROGENATION TYPE ?)
G3 = OIL; G3 = GAS; G3 = WET GAS (CONDENSATE)

ELEMENTAL ANALYSIS: CARBONIZATION
G1 = 0-1000 MICROMICROGRAMS PER METRES
G2 = 1000-2000 MICROMICROGRAMS PER METRES
G3 = 2000-3000 MICROMICROGRAMS PER METRES
GENERATION OR INCOMPLETE PURIFICATION OF SAMPLE DURING PREPARATION

VISUAL DETERMINATION: CARBONIZATION SCALE

KINGSBURY-KIMBLE-MARSHALL-BERRY-HOLMES (KKMBH) DATA
KAR: 140 ± 1.9M = POTASSIUM-ARGON DATE IN MILLION YEARS (MY)

indicates sample not for source rock analysis.

SAMPLE NUMBERING SYSTEM

1100 — CR 100 F △ — Suffix — Number — Prefix — 1200

Prefix: CR - Cooper River Basin Area
Number: 100 - Sample Number
Suffix: - Sample type as follows:
F - Fresh Rock
P - Polluting
OF - Oil-stained
W - Weathered
SR - Source Rock
C - Core

indicates samples not for source rock analysis.

LEGEND

SEDIMENTARY

- CONGLOMERATE
- SANDSTONE
- SILTSTONE
- SHALE, CLAYSTONE OR MUDSTONE
- COAL, SOLID CARBONACEOUS, CRUSHED
- LIMESTONE
- DOLOMITE
- CHERT BEDS
- CONGLOMERATIC SANDY SHALE
- SANDY SHALE
- CALCAREOUS SANDSTONE
- DOLOMITIC SANDSTONE
- VOLCANIC MATERIAL CONTAINING

VOLCANICLASTICS

- ASH (LT) OF MATERIAL CONGLOMERATE, SANDSTONE, SILTSTONE, ETC.
- TUFF
- WELDED TUFF
- BRECCIA OR AGGLOMERATE
- QUATERNARY - TERTIARY VOLCANIC FLOWS
- TRIASSIC VOLCANIC FLOWS
- PENNSYLVANIAN OR PERMO-PENN. VOLCANIC FLOWS

IGNEOUS

- INTRUSIVES
- EXTRUSIVES
- LAVA FLOWS

Amoco Production Company
INTERNATIONAL DIVISION
NORTHWEST DISTRICT
GEOLOGICAL REPORT NO. 101

GEOLOGY OF THE COPPER RIVER BASIN AREA ALASKA

NW-SE STRATIGRAPHIC CROSS SECTION G-G'
LOWER CRETACEOUS-NELCHINA FORMATION

By: J.D.Powell — Date: SEPT. 1976

Scale: Vert: 1" = 100' — Horiz: As Shown

Incl. No. 4

4