

# HORIZON

WELL LOGGING

COMPANY: ENGRIN RESOURCES NORTHWEST

WELL: "Busch" 34-15-05 (Wormwood)

LOCATION: 448.655' North & 23552.05' West E of the SE corner of Section 15, Twp 16N, Rsw W. B. A.M.

ELEVATION: 515.5' - K.L. 515.5'

FIELD: Mist Field

COUNTY: Columbia County, Oregon

API NUMBER: IN-000-00329

SPUD DATE: June 6, 1998

LOGGING DATES: June 6 to June 11, 1998

LOGGING DEPTHS: 50' to 2576'

GEODELOGIST: Dave Higgins

COMPANY MAN: Rob Luras

CONTRACTOR: Taylor Drilling

RIG: #7

LOGGING GEOLOGISTS: Jim Eastes

Kirk Jones

BIT SIZE: 9.75" to 4.6"

6.75" to 2576'

CASING: 7" 13# - 9' 40#

MUD COMPANY: GDO Drilling Fluids

DRILLER: Kirk Elly

CALIBRATION: 25 METRE - 100 UNITS

ABBREVIATIONS

SYMBOLS

CO Circulate Out

LAT Logged After Trip

LAS Logged After Survey

CG Connection Gas

KC Kelly Cut gas

NG Nader Gas

TG Trip Gas

SG Survey Gas

MR Miper Run

CORE INTERVAL

HOB (100,000# full scale)

TRIP

PEBBLES >2mm

SAND

SANDSTONE

SILTSTONE

MUDSTONE

SHALE

MARL

CLAY

CHERT

LIGNITE

LIMESTONE

VOLCANICS

TUFF

BASALT

DRAIL RATE

LITHOLOGY

MINERAL

GASES

CHROMATOGRAPH

REMARKS

RDP

HOB

100K

PP-100

PPM-100

PPM-100