

HORIZON

WELL LOGGING

711 St. Andrews Way
 Lospec, California 93436
 (805) 733-0972

COMPANY: ENERFIN RESOURCES NORTHWEST
 WELL: C.C. 41-06-65 RD#1 (Fishwhack)
 LOCATION: NE 1/4 of NE 1/4 of Sec 6, T6N, R5W, M5EM (50' S47deg3minSecE 1/2SW corner of Sec 32, T7N, R5W) GL 909' KB 919'

ELEVATION: 1121
 COUNTY: Columbia, Oregon
 SPUD DATE: December 11, 1998
 LOGGING DATES: Dec. 19 to 24, 1998
 AP NO.: 36-009-00340
 CD. GEOLOGIST: Dave Huggins
 CD. DRILL REP: Rob Lucas-Production Specialist
 CONTRACTOR: Taylor Drilling Inc.
 RIG: #7
 MUD COMPANY: GEO Drilling Fluids
 MUD TYPE: Cypan
 LOGGING GEOLOGIST: Bill Gilmore, Doug Milham

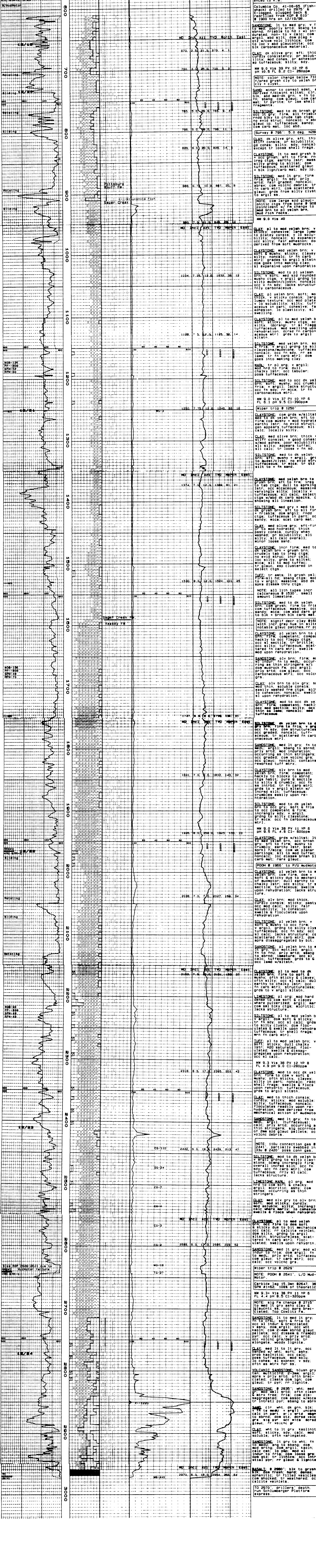
BIT SIZE: 9.875 in to 532'
 6.25 in to 2970'

CASING: 12 in to 20'
 7 in to 531'

CALIBRATION: 2% METHANE + 800 UNITS

ABBREVIATIONS	SYMBOLS
CO Circulate Out	PEBBLES >2mm
LAT Logged After Trip	SAND
CG Connection Gas	SANDSTONE
NG Miper Gas	SILTSTONE
TG Trip Gas	MUDSTONE
SG Survey Gas	SHALE
NR No Returns	WALR
NR New Bit	CLAY
NR Miper Run	LIGNITE
CORE INTERVAL	DOLOSTONE
NOB (100,000# full scale)	LIMESTONE
PP Pump Pressure	VOLCANICS
SPM Strokes per minute	TUFF
	BASALT

DRILL RATE	LITH	MINERAL	GASES	CHROMATOGRAPH	REMARKS
ROP 300 100K			DITCH GAS OFFSCALE CUTTINGS GAS OFFSCALE	METHANE ETHANE PROPANE PENTANE	DESCRIPTIONS SURVEYS MUD CHECKS MISCELLANEOUS



NOTE: Gas logs calibrated to SPEA standards, and described wet unless otherwise noted. Gas logs are on drillers' pipe tally & referenced to K.B.

Columbia Co. 41-06-65 (Fishwhack) well log back 6, E-logged, plugged back 6, 1900 hrs on 12/19/98.

SANDSTONE: lt to med gry, v fn to med poorly srted; abng to sbrnd; med silty; med sly; indurated, non- to v calc; com argill; med to sbrnd; med w/ com volc lithics; com to loc v abd glauconitic; occ blk carbonaceous material.

CLAY: dk olive gry; sft; thick curdy consistency; pr solubility; med cohes; med adhesion; sly; tuffaceous; sly; sdy.

MW 9.0 Vis 39 PV 12 YP 6 FL 10.5 FL 6.2 CI-280ppm

NOTE: color change below 710' / / green grayish clay to yellowish clay.

SAND: minor to congl sdrst, sd derived / / faint silty; cjr; med silty; med to med sly; indurated, non- to v calc; com argill; med to sbrnd; med w/ com volc lithics; com to loc v abd glauconitic; occ blk carbonaceous material.

SILTSTONE: med to dk shaly gry; occ lt gry; firm; sly friable; med silty; med to med sly; indurated, non- to v calc; com argill; med to sbrnd; med w/ com volc lithics; com to loc v abd glauconitic; occ blk carbonaceous material.

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