EPOCH

WELL LOGGING, INC.

COMPANY	ARCO OIL and GAS COMPANY
WELL	Columbia County 31-34-65
FIELD	MIST
LOCATION	North 89°51'19" West 1779.79' South 0°08'41" West 886.17' from NE corner of Sec 34, T6N, R5W; W.B.&M.
COUNTY, STATE	Columbia, Oregon
API WELL INDEX NO.	
ELEVATION	[illegible].5' G.L. [illegible]2.5' K.B.
DATES	FROM 9-29-87 TO 10-4-87
DEPTHS	FROM 45' TO 2344'
SPUD DATE	9-29-87
DRILLING CONTRACTOR	Taylor Drilling Co. #4
MUD COMPANY	M-I Drilling Fluids Inc.
LOGGING GEOLOGISTS	Jeff Duval Bill Gilmour

ABBREVIATIONS

NB	BIT	MW	MUD WEIGHT
RRB	RERUN BIT	VIS	FUNNEL VISCOSITY
RTB	RE-TIP BIT	PV	PLASTIC VISCOSITY
CB	CORE BIT	YP	YIELD POINT
T.G.	TRIP GAS	FL	FLUID LOSS (cc/30 min)
S.G.	SURVEY GAS	CL	PPM CHLORIDE ION
W.G.	WIPER GAS	RM	MUD RESISTIVITY
C.G.	CONNECTION GAS	RMF	FILTRATE RESISTIVITY
WOB	WEIGHT ON BIT	LAT	LOGGED AFTER TRIP
RPM	ROTARY REV/MIN	NR	NO RETURNS
PP	PUMP PRESSURE	PR	POOR RETURNS
SPM	STROKES/MIN	MUD TYPE	Polymer

CASING RECORD

Size	At
13.375"	4[illegible]'
9.625"	472'

HOLE SIZE

Size	At
12.25"	4[illegible]'
8.5"	2344'

SAND / SANDSTONE	CLAY	LIMESTONE	CHERT: G GLASSY	X INTRUSIVE
SHALE	DIATOMITE	Z DOLOMITE	A ARGILLACEOUS	LIGNITE
SILTSTONE	CONGLOMERATE	V VOLCANICS	P PORCELANEOUS	MUDSTONE

OIL: BASED ON LIVE OIL IN UNWASHED CUTTINGS AND PERCENT STAINING AND FLUORESCENCE OF WASHED SAMPLES.

PENETRATION — ANALYSIS OF RETURNS — REMARKS

DRILL RATE (FT/HR) drilling data | DEPTH | LITHOLOGY | OIL: TRACE, STRONG TRACE, SHOW, STRONG SHOW | GAS — UNITS: DITCH — TOTAL GAS; CUTTINGS GAS; CALIBRATION 100 units = 2% methane by volume | CHROMATOGRAPH — PPM: METHANE C-1, ETHANE C-2, PROPANE C-3, BUTANES C-4, PENTANES C-5 | REMARKS: LITHOLOGIC DESCRIPTION, MUD PROPERTIES, SURVEYS, OTHER TEST DATA

Note: All colors are referenced to the GSA rock color chart.
--All carbides are 400gms unless otherwise noted.
-- All connection, survey, and carbide gases are reported as units above background; trip gas is reported as maximum gas units.

MW 8.5 VIS 48