EPOCH

WELL LOGGING, INC.

COMPANY	NAHAMA & WEAGANT ENERGY COMPANY
WELL	CEDAR POINT 14-26-6A
FIELD	MIST
LOCATION	1239.50' North and 214.50' West of the SW corner of Sec. 26, T6N, R3W, W.S.M.
COUNTY, STATE	Columbia, Oregon
API WELL INDEX NO.	
ELEVATION	KB: 1014.70 K.B.
DATES	FROM 9-5-91 TO 9-11-91
DEPTHS	FROM 4475'K.B. TO 2703'K.B.
SPUD DATE 9-5-91	
DRILLING CONTRACTOR	Taylor Drilling "L... Rig #"
MUD COMPANY	Drilling Fluids
LOGGING GEOLOGISTS	Jim Easton John Riddle

ABBREVIATIONS

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

CASING RECORD

16" cond. AT	30'K.B.
9.625" AT	2502'K.B.
AT	
AT	

HOLE SIZE

13.750"	30'-2502'K.B.
8.75"	AT 2502'K.B.
AT	
AT	
AT	

SD SAND/SANDSTONE · CL CLAY · SX LIMESTONE · T TUFF · LIGNITE
SH SHALE · DI DIATOMITE · V VOLCANICS · F FOSSIL · GL GLAUCONITE
ST SILTSTONE · CG CONGLOMERATE · B BASALT · M MARL · P PYRITE

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

PENETRATION

DRILL RATE (FT/HR)
drilling data

ANALYSIS OF RETURNS

OIL GAS — UNITS

DITCH — TOTAL GAS

CHROMATOGRAPH — PPM

CUTTINGS GAS

CALIBRATION 100 units = 1% methane by volume

Note: Methfree (a Arameco Minerals Product) was introduced to the quad on an accessory pump on a hidden sample loop.

Rare...1-5 counts; tr p (pyrite)
Occasional...6-20 counts
Common...21- 100 counts; ..... P
Abundant...present thru entire sample.

METHANE	C-1
ETHANE	C-2
PROPANE	C-3
BUTANES	C-4
PENTANES	C-5

REMARKS

LITHOLOGIC DESCRIPTION
MUD PROPERTIES
SURVEYS, OTHER TEST DATA

All colors are referenced to the GSA Rock Color Chart unless otherwise noted. Surveys, and wiper gases reported as units above background; trip gas reported as maximum units. All gas detection equipment is calibrated to SMGA Standards.

16" Cond set @ 25'

NSB #1, 13 3/4"
RERD #1)

9-6-91

WOB 6-8,000
RPM 80-100
SPM 45-55
TPM PF/S1

9.625" csg @ 2502

9-7-91
NB #2, 8.75"
HTC X3A
WOB 30,000
RPM 100

Pick up Motorhead
WOB 6,000
PP 550
SPM PF/S1

WOB 6-8,000
RPM 80-100
SPM PF/S1

WOB 6-8,000
RPM 80-100
SPM PF/S1

WOB 6-8,000
RPM 80-100
SPM PF/S1

WOB 30,000
RPM 100
SPM PF/S1

9-9-91

BOP Scale
WOB 30,000
RPM 100

WOB 15-30,000
RPM 80-100
SPM PF/S1

NSB #2

WOB 30,000
RPM 100
SPM PF/S1

9-10-91
NSB #2

WOB 8,000
RPM 80-100
SPM PF/S1

Rotate w/motor

No RPM

BOP Scale
WOB 30,000
RPM 100

Rotate w/motor

No RPM

Rotate w/motor

WOB 6-8,000
RPM 45-55 w motor
SPM PF/S1
WOB 27-32,000

NSB #2 drop Moderator
9-11-91

WOB 10-15,000
RPM 80-100
SPM PF/S1

BOP Scale
WOB 30,000
RPM 100
Tacr WOB 15,000

WOB 15-20,000
RPM 80-100
SPM PF/S1

WOB 30,000
RPM 100
SPM PF/S1

WOB 30,000
RPM 100
SPM PF/S1

WOB 30,000
RPM 100
SPM PF/S1

BOP Scale
WOB 30,000
RPM 80-100
SPM PF/S1
Tacr WOB 15,000

@ 9:20 pm, 9-11-91

No Discernible Ditch or Cuttings Gas

Intermittent tr Cuttings Gas

No Discernible Ditch Gas

No Discernible Ditch Gas

Bypassing Shakers

Bypassing Shakers

NOTE: Samples taken 7/corner of sand-trap give adequate representation of formation although finer sand and probably less well represented (washed over barrier).

Bypassing Shakers

Bypassing Shakers

Ditch and Cuttings Gas

Ditch and Cuttings Gas

NOTE: POOR @ 1520'. Top of sand-trap full of sand and clay. 2700'-500' sand-trap cleaned out. Pull moderator.

Ditch and Cuttings Gas

No GC's

Ditch and Cuttings Gas

No GC's

No GC's

No GC's