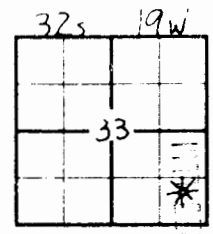


Computer Inventoried
 GEOLOGIC REPORT LOG
 15-033-20924

COMPANY American Warrior, Inc.
 WELL Nielson # 1-33
 FIELD Wildcat
 LOCATION 110's - E1/2 - SE - SE
 SEC. 33 TWP. 32s RGE. 19W
 COUNTY Comanche
 STATE Kansas

K C C



MAR 12 1998

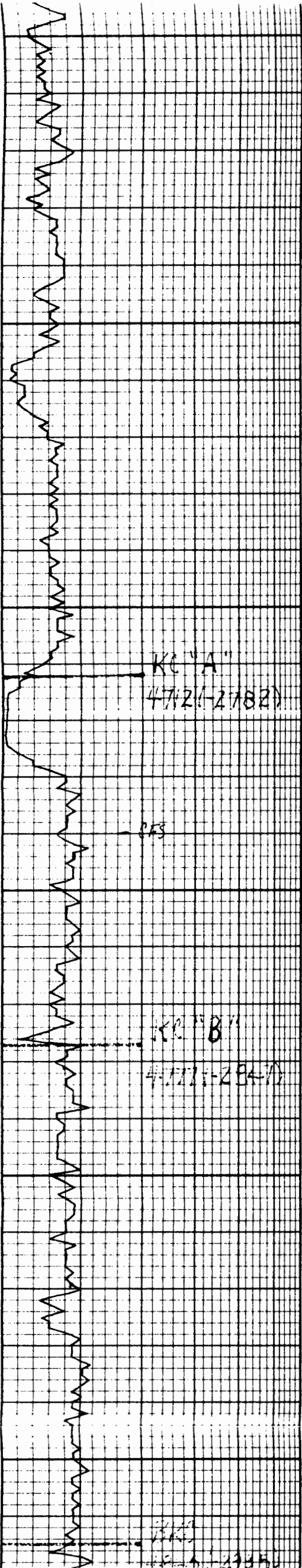
OPERATOR American Warrior, Inc.
 CONTRACTOR Duke Drilling Rig #7
 COMM: 128-97 COMP: 2-7-97
 CASING RECORD
 SURF: 650' - 8 5/8" PROD: 5400' - 5 1/2"
 TOTAL DEPTH DRILLERS: 5400 (-3470)
 TOTAL DEPTH LOG: 5397 (-3467)

PRODUCTION None
 ELEVATION KB 1936
 DF 0
 GL 917
 Drilling Measured From 1936 KB
 Samples Saved From 3900 To TD
 Drilling Time From 3900 To TD
 Samples Examined From 3900 To TD
 Geological Supervision From 3900 To Total Depth
 Well Site Geologist: Alan Downing
 Electrical Surveys: ROSEL
Dual Induction, Compensate
Density/Neutron, Sonic,
MicroLog.

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
HEEBNER	4178	4173	-2243	+1
Toronto	4199	4194	-2264	Flat
Lansing	4373	4368	-2438	-6
KC "A"	4712	4708	-2777	+6
KC "B"	4777	4772	-2842	+6
BKC	4865	4862	-2932	+4
Marmaton	4898	4894	-2965	+5
Lawnes	4963	4963	-3030	+2
Fort Scott	5003	5000	-3070	+4
Sherokee Sand	5015	5012	-3082	+4
Missourian	5095	5092	-3162	+14
NE Porosity	5176	5168	-3235	+2
2nd "	5224	5222	-3274	Flat
3rd "	5271	5265	-3335	+2

REFERENCE WELL FOR STRUCTURE A. J. + Fred. Per. 3.
Herd #1 NE-NE-NE SEC. 4-33-19W
Producing 3rd well - Fort Scott, Missourian.



4600

50

4700

50

4800

50

	Sh: grey - Brown.
	Ls: whi. f-subin, fair intxn & foss. Ns.
	Ls: Tan vt-micro xln w/much tan & chert v. DSE
	Sh: grey - Red.
	Ls: whi. f-xln fair intxn & sli. cherty to subin Ns.
	Ls: Tan f-xln w/much tan & chert all v. DSE
	Ls: lt. Brn. v-fxn wht-grey & chert.
	Sh: grey-
	Ls. whi. f-subin, good intxn & some sli. cherty to subin w/ lenses ss fgn. ss. cluster interbed. NSG - or fluor.
	Ls: Tan - lt. Brn. vt-micro xln & some interbed. whi. & chert.
	Ls: Tan v-fxn - micro xln w/much tan & chert.
	Ls: whi. v-fxn DSE, becoming cherty towards base.
	Sh: Black - carb.
D S T	Ls: Tan mxn, w/ v good intxn, fair ss + org. lt. Brn. str on edges. - fair fluor. Rare sfs. mostly str.
#	Ls: lt. Brn. vt-micro xln v. DSE becoming sli. subin in pt to cherty. - scatt. grey chert
1	Ls: grey v-fxn v. DSE
	Sh: grey - silicified
	Sh: Black - carb.
	Ls: Tan. lt. Brn. v-fxn, w/ much burnt org. & chert. v. foss.
	Ls: whi. f-xn, foss. fr. foss & Ns.
	Ls: whi. lt. Brn. foss. poor & some dolomite lenses Ns. sli. intxn &
	Sh: Black - v. Dark grey.
	Ls: whi. - lt. Brn v-fxn w/ fair foss. & intxn & Ns. sli. chert.
	Ls: Tan vt - micro xln, v. ss. poor & v DSE
	Ls: grey v-fxn, w/ much grey & chert all v. DSE
	Sh: Black - carb - v. silt.

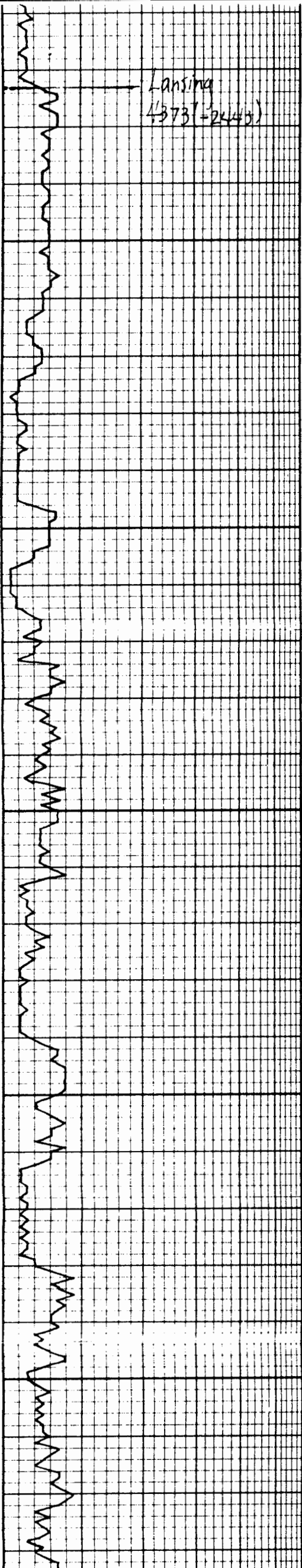
DST #.
 471 - 471
 51 - 51 - 51

Rec.
 1740' gas in
 248' gas cut
 w/ some:
 14% gas 10%
 46% H2O 30'

1627' H2O
 70,000 ch

IHP: 2166 #
 IFP: 186-634
 FFP: 721-1013
 SIP: 1746-174
 FHP: 2166 #
 Temp: 127° F

Vis. 47



Lansing
4373 (=2443)

4400

50

4500

50

4600

sh: v. Dnc qm - fissile, ss
clusters as above

Ls: wht. f-subaln, chalky
in part.

Ls: wht. vfxln, w/ much grey
mottled Ls: Ns. DSE

Ls: wht. cl. fxltn, good intxhd
good Flour, light sfo. light
str on edges

sh: Black - v. dark grey

Ls: wht. lt. Tan f. vfxln
v. good intxn of. paring sm.
wht. subaln to chky + wht.

Δ chert. No show gas or oil.

Ls: wht. fxltn, wht. spague
Δ chert.

sh: v. Dark grey - Black.

Ls: wht. fxltn, w/ good intxhd.
sfo. chky in edges. Ns.
chalky Flour.

Ls: wht. f. vfxln fine intxhd
sft dolomitic - Ns.

Ls: wht. lgr. Tan vfxln v. DSE
w/ scalt. lt. grey Δ chert.

Ls: wht. lt. Tan vfxln w/ scalt
Tan chert + Black shales.

Ls: lt. Brn. vfxln all v. DSE
w/ grey Δ chert.

Ls: lt. Brn. mxta dolomitic
rr. gd intxn + Ns

Ls: wht. f-mxta w/ good intxhd
sft. Flour. sm chky to subaln
wht. Ls. inter bedded.

Ls: Tan lt. Brn vfxln v. DSE

w/ Fragmented Fossils. spague
wht. Δ chert + segs. incursions
fine clusters

Ls: wht. lt. Tan fxltn, fair intxhd
w/ much chert to subaln Ns.

Ls: lt. grey vfxln, sft. foss.
v. DSE. Ns.

sh: Black - 1940

sh: grey - Brown.

Ls: wht. f-subaln, fair intxhd
foss. Ns.

Ls: Tan vfxln-micro xln w/ much
tan Δ chert v. DSE

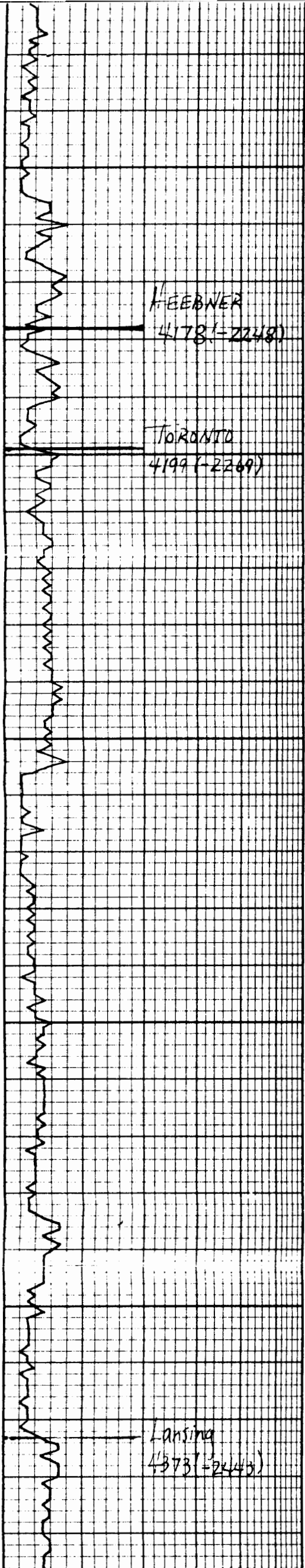
sh: grey - Red.

Ls: wht. fxltn fair intxn of
sft. chaly to subaln Ns.

Vis. 45
WT. 9.0

*
23 units
Perforat -ns
Before abando
4413-17'

Vis. 46
WT. 9.1



5

4200

50

4300

50

	fgry ss in smpls. Ns.
	Ls: grey tan w/ some -oss. fusulinids - Crinoid
	Sh black - "w/
	Ls: lt. tan f-v. xln f/ll v. DSE
	sh: v. dark grey - grey
	Ls: lt. Brn f-v. xln w/ fair ratxn & Ns. silt. scatt foss.
	sh: grey w/ much inbedded wht. - clear mgr ss clusters. v. good mgr. & Nsg. or flow.
	scatt silt stone throughout
	Ls: wht. f-m. xln, silt. sol w/ some wht- lt. gry & chert. DSE
	sh: grey - Red - tongue w/ much inbed. f-mgr ss clusters pyritic. v. good mgr. & some small Ls. Lenses wht v. xln w/ some fossil abundant.
	shale: gry w/ ss as above + scatt tan chert.
	ss: mgr. v. good inge o' clusters well sorted, glauconitic. Associated w/ thin Ls. lenses + shale Lenses
	gry. 80% ss. - all mature. clusters. Ls. v. xln orange foss.
	sh: grey, w/ ss s-ringers f-mgr. throughout. Nsgas
	sh: grey - platy. f-mgr ss. clusters - angular grains, immature Ns.
	sh: v. drk gry - fissile, ss clusters as above
	Ls: wht. f-subaln, chalky in part.
	Ls: wht. v. xln, w/ much gry

Vis: 43
WT: 9.0

Vis: 45
WT: 9.0+

DRILLING TIME IN MINUTES
PER FOOT
Rate of Penetration Decreases

5" 10" 15" 20" 25"



LOG 7710

DEPTH

LITHOLOGY

SAMPLE DESCRIPTIONS

SHOWS TO

REMARKS

31'

sh: predominantly grey
lt. gray v. fissile
w/ some inbed. ls. lenses
wht fine silt foss (crinoid stems)

vis. 45
wt. 8.7
wl. 11

sh: lt. grey - green, w/ some
chky wht ls.

ls: lt. gray v. in DSE, foss.
in pt. NS.

sh: grey - Brown.

ls: grey f. v. in all DSE

sh: grey - Brown.

sh: Black - carb

ss: v. gr well sorted clastics
MSG or sh, no cut sv
Foss.

sh: lt. Brown - green.

sh: Black - carb

sh: grey - mott grey ls: DSE

ss: v. gr Angular grains.
glauconite in pt NS. some
poorly sorted clastics like
pelitic cement. shaley intervals.

ls: wht f. subex

vis. 46
wt. 8.9
wl. 10.9

sh: grey - to drk grey
w/ some inbed wht ls
Bm - subex ls:

sh: grey - silty w/ some
f. gray ss in smpls.
NS.