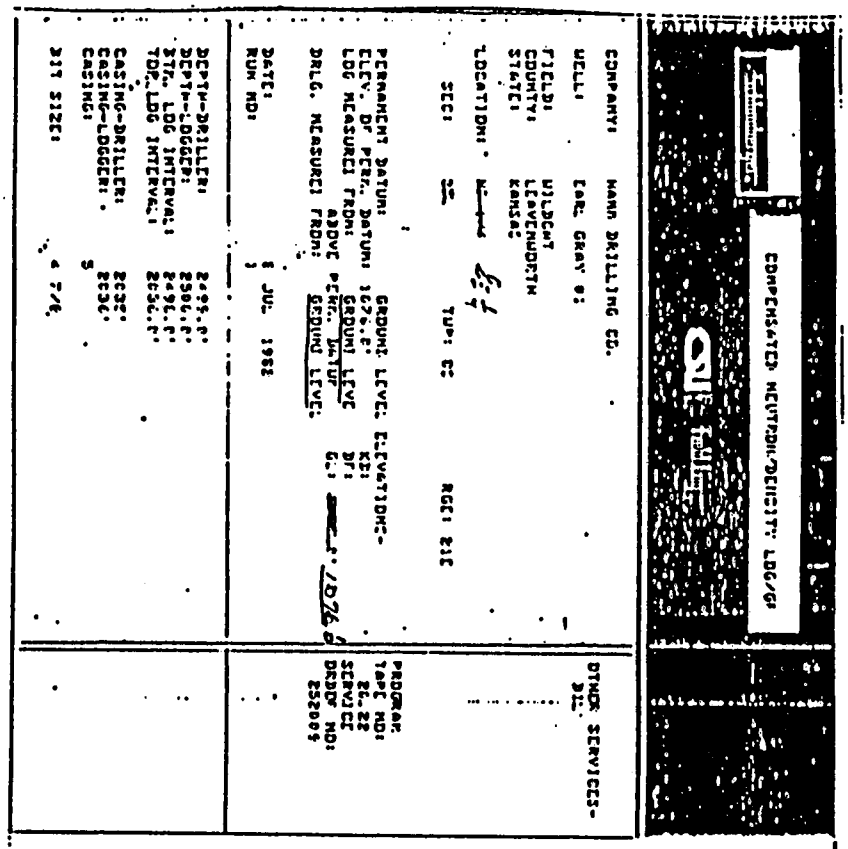

COMPANY: HANK DRILLING CO.

WELL: EARL GRAY #1

FIELD: WILDCAT
COUNTY: LEAVENWORTH
STATE: KANSAS

LOCATION: SEC 22 TWP 23 RGE 21E

PERMANENT DATUM: GROUND LEVEL ELEVATIONS-
ELEV. OF PERM. DATUM 1076.0' KB:
LOG MEASURED FROM: GROUND LEVEL DF:
ABOVE PERM. DATUM GL: 1076.0'
DRLG. MEASURED FROM: GROUND LEVEL

DATE: 8 JUL 1983
RUN NO: 1

DEPTH-DRILLER: 2495.0'
DEPTH-LOGGER: 2506.0'
BTM. LOG INTERVAL: 2496.0'
TOP LOG INTERVAL: 2050.0'

CASING-DRILLER: 8 5/8" @ 320'
CASING-LOGGER: 320'
CASING: 8

BIT SIZE: 6 3/4"

OTHER SERVICES-
NIL

PROGRAM
TAPE NO: 25-22
SERVICE ORDER NO: 252005

TYPE FLUID IN HOLE: FORMATION WATER
DENSITY:
VISCOSITY:
PH:
FLUID LOSS:
SOURCE OF SAMPLE: FLOWLINE
RM: 9.830 OHMM AT 76.0 DF
RMF: AT
RMC: AT
SOURCE RMF/RMC: /
RM AT BHT: 9.196 OHMM AT 90.0 DF
RMF AT BHT: AT 90.0 DF
RMC AT BHT: AT 90.0 DF

TIME CIRC. STOPPED:
TIME LOGGER ON BTM.: 0130

MAX. REC. TEMP: 90.0 DF

LOGGING UNIT NO: 8231
LOGGING UNIT LOC: WICHITA
RECORDED BY: K.C.SCHIELD
WITNESSED BY: R.SMITH

REMARKS:

CABLE PIG USING WATER IN MUD DATA AVAILABLE

EQUIPMENT NUMBERS-

PGS T 54	PGC G 332	FDH H 83	GSR J 6604
SFT 135 565	CHC A 2639	HSP F 1497	CHP AP 545
SGC JAA 1456	GSP U 124	HLH PC 1175	

FILE

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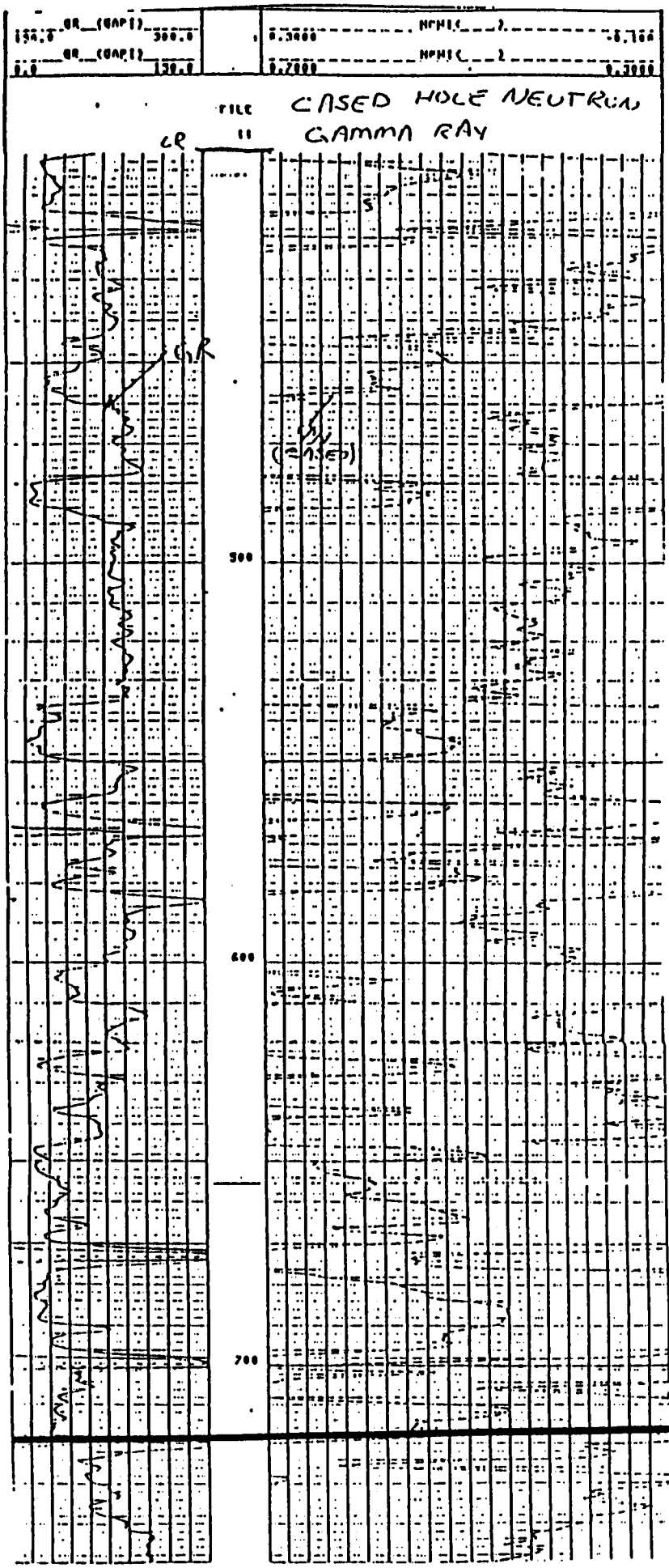
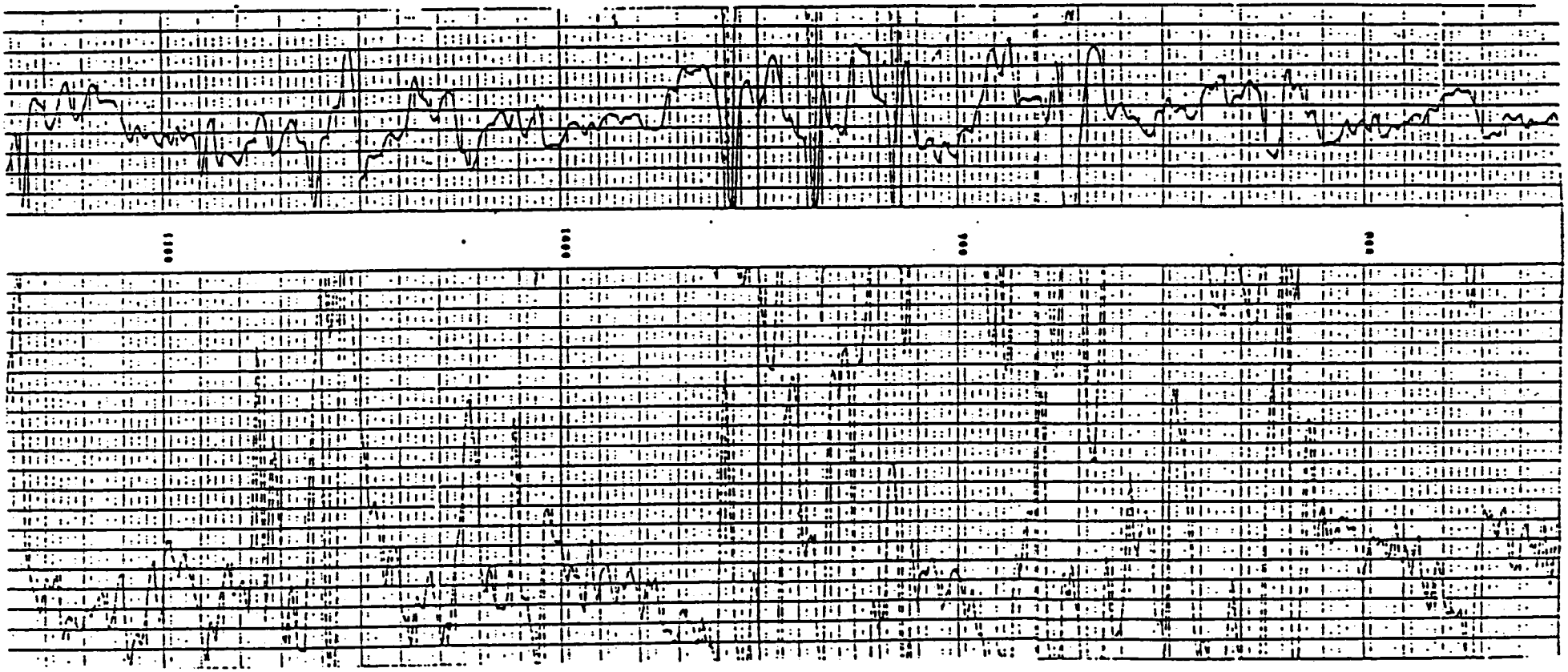
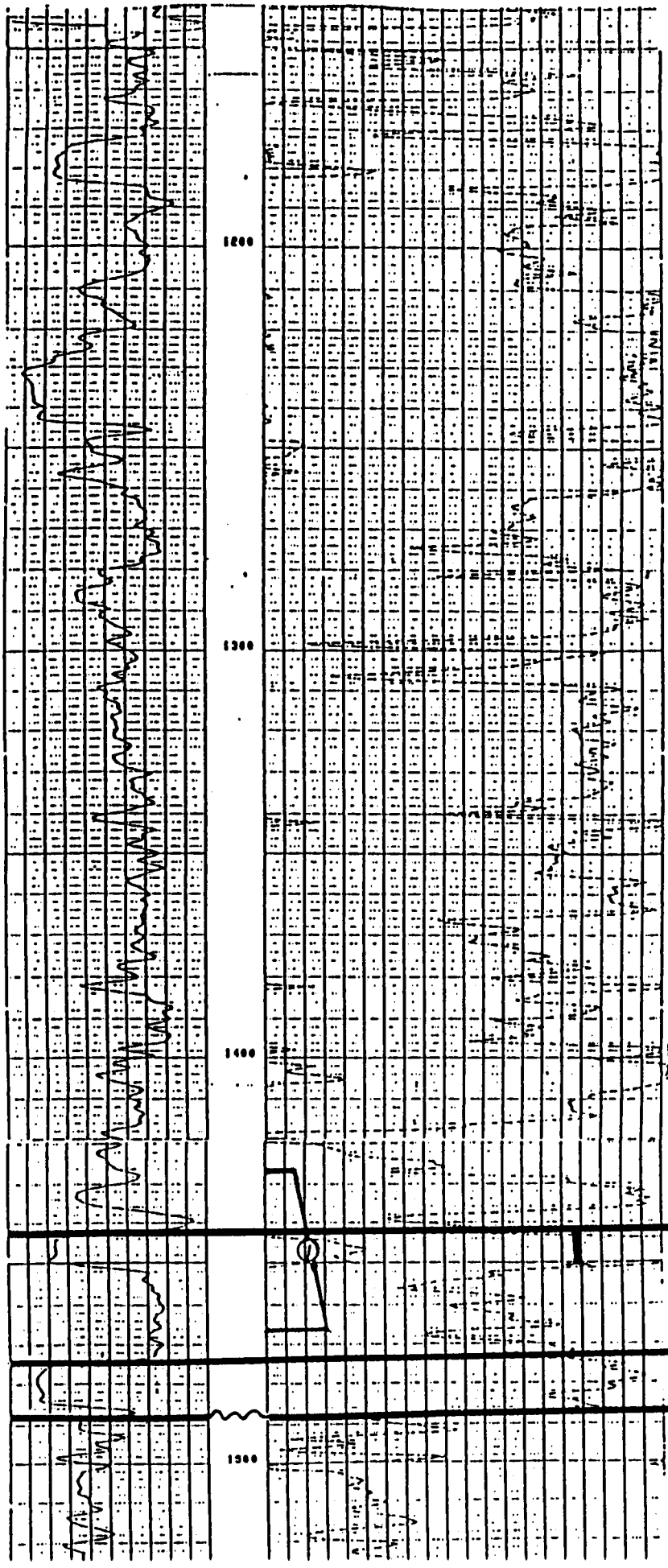
Fig. 11a



Drilled by rotary rig to 2035', cable tool rig 2035' to TD of 2500'

Base Kansas City 720' (+356')





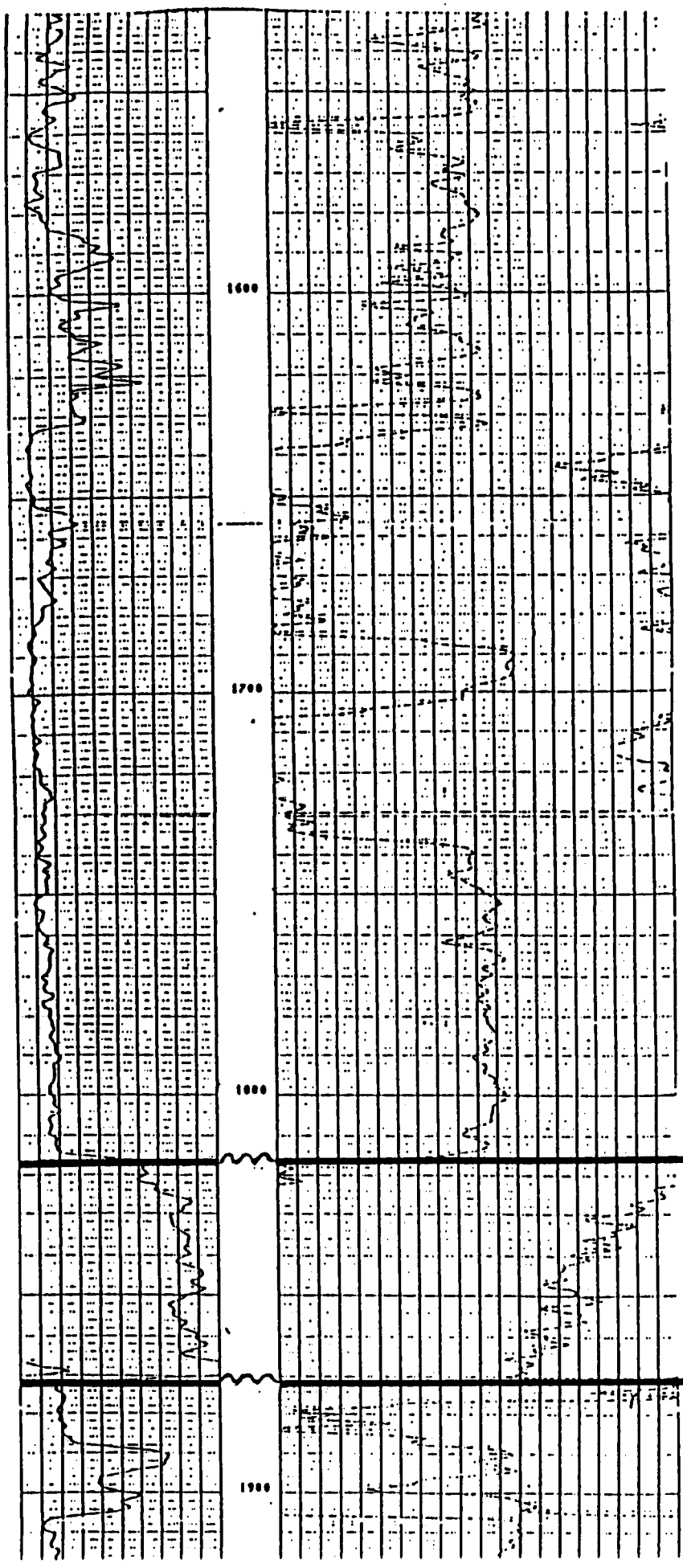
DST - 1 (McLouth Sand)
1426 - 67', 60x60x60x60 min
MSP - wk blow, died
Rec 25' drlg mud
IFP - 52 ISIP - 222
FFP - 52 FSIP - 222

McLouth Sand 1442' (-366')

Oil odor, free oil on spls

Burgess Sand 1474' (-398')

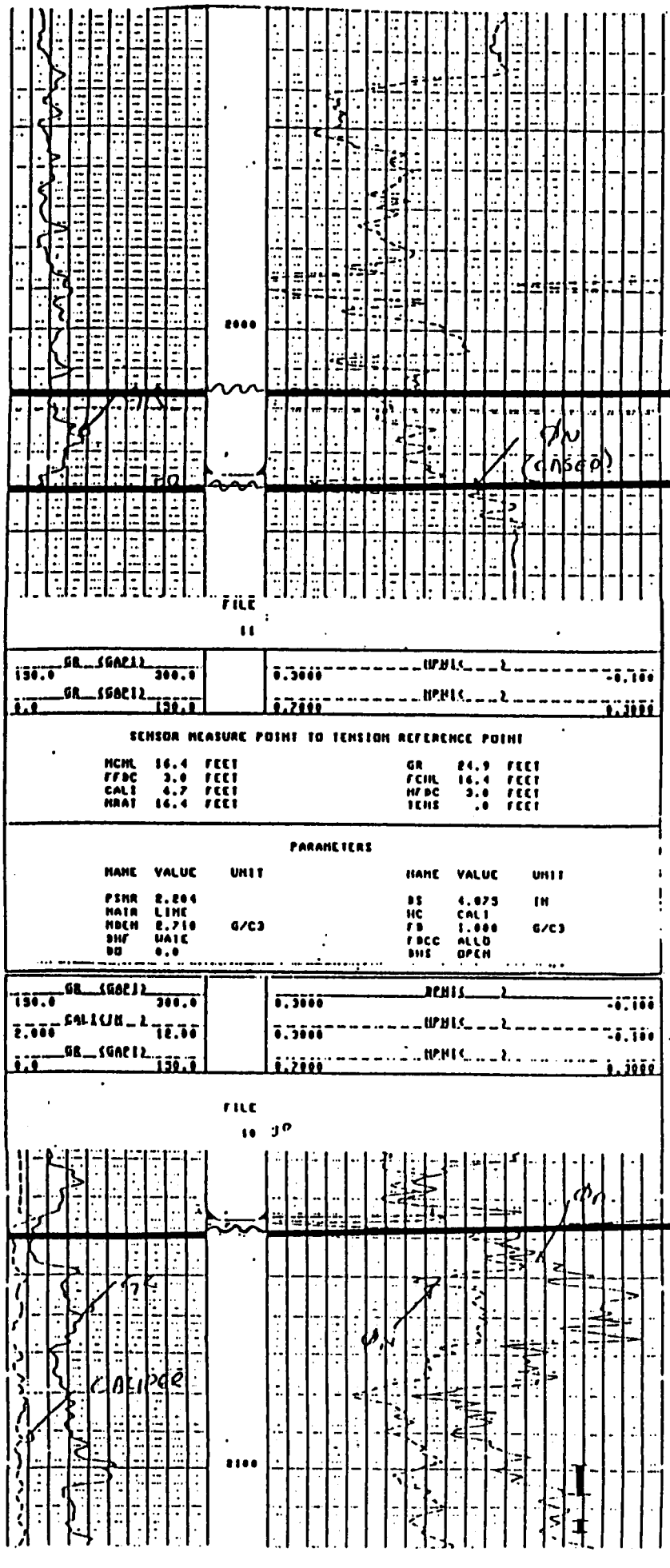
Mississippian 1488' (-412')



Chattanooga Shale 1816' (-740')

Hunton Limestone 1871' (-795')

At top of Hunton, bit dropped 29½', and circulation was lost. Drld dry to 2025', got stuck, got free, moved rig off hole



Moved rig back on hole several months later, deepened hole about 10', got stuck, got free, ran and set 5½" csg at 2035' with no open-hole logs. Cemented csg about 2 wks later; no CBL run. (Rainbow of oil on shale shaker reported while deepening.

Maquoketa Shale 2015' (-939)

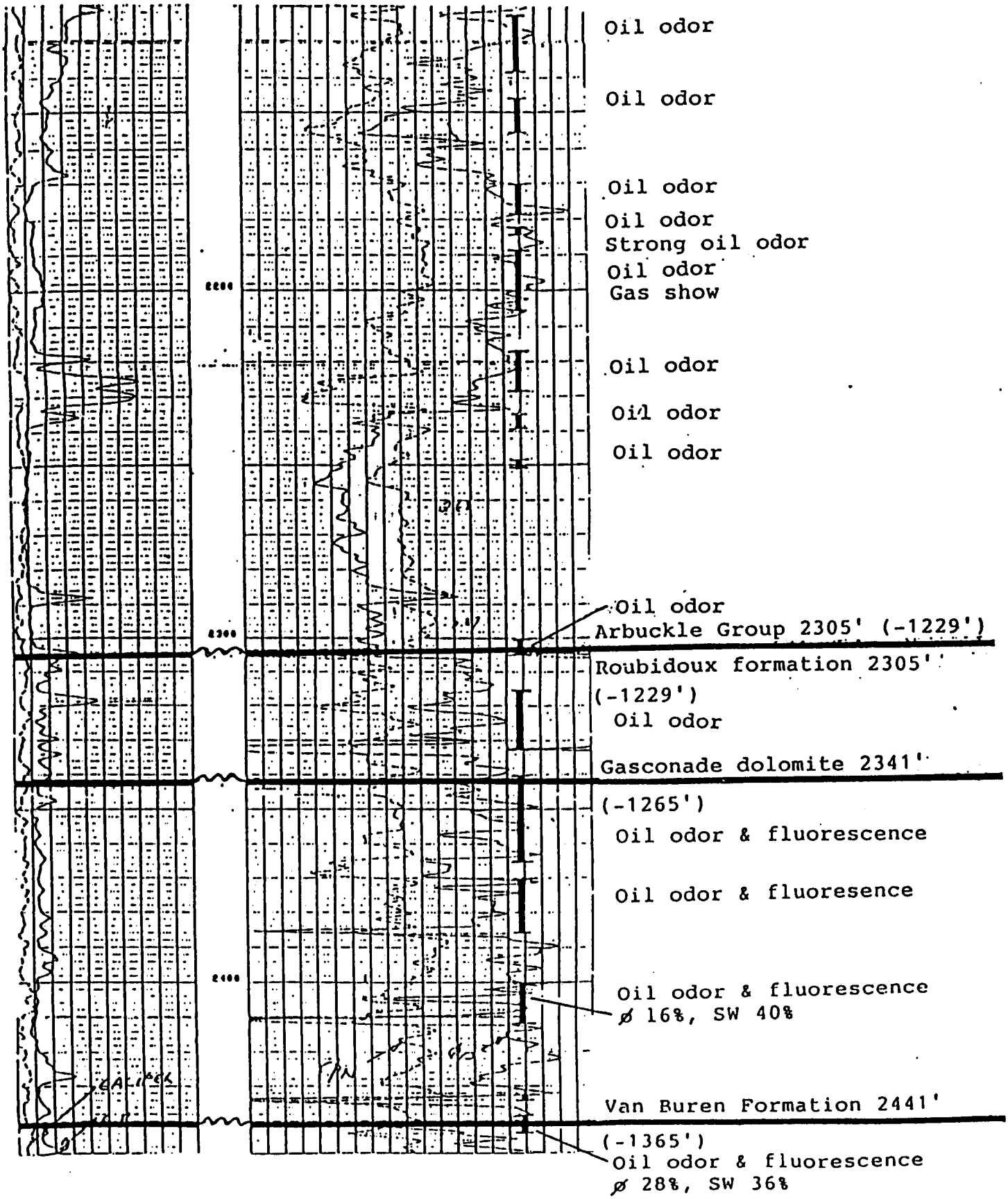
Viola Limesone 2039' (-963')

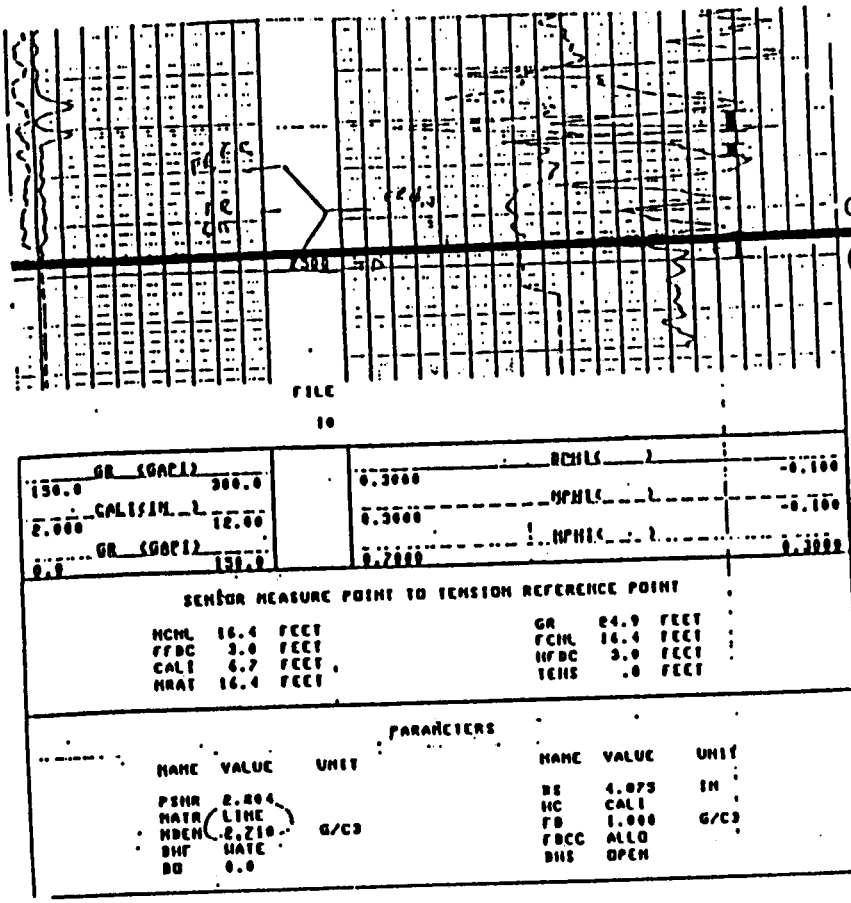
Drilled by cable tools 2035' - 2500'

Viola Limestone 2039' (-963')

Strong oil odor

Oil odor


Oil odor
Oil odor
Oil odor
Oil odor
Strong oil odor
Oil odor
Gas show
Oil odor
Oil odor
Oil odor
Oil odor
Arbuckle Group 2305' (-1229')
Roubidoux formation 2305'
(-1229')
Oil odor
Gasconade dolomite 2341'
(-1265')
Oil odor & fluorescence
Oil odor & fluoresence
Oil odor & fluorescence
ø 16%, SW 40%
Van Buren Formation 2441'
(-1365')
Oil odor & fluorescence
ø 28%, SW 36%

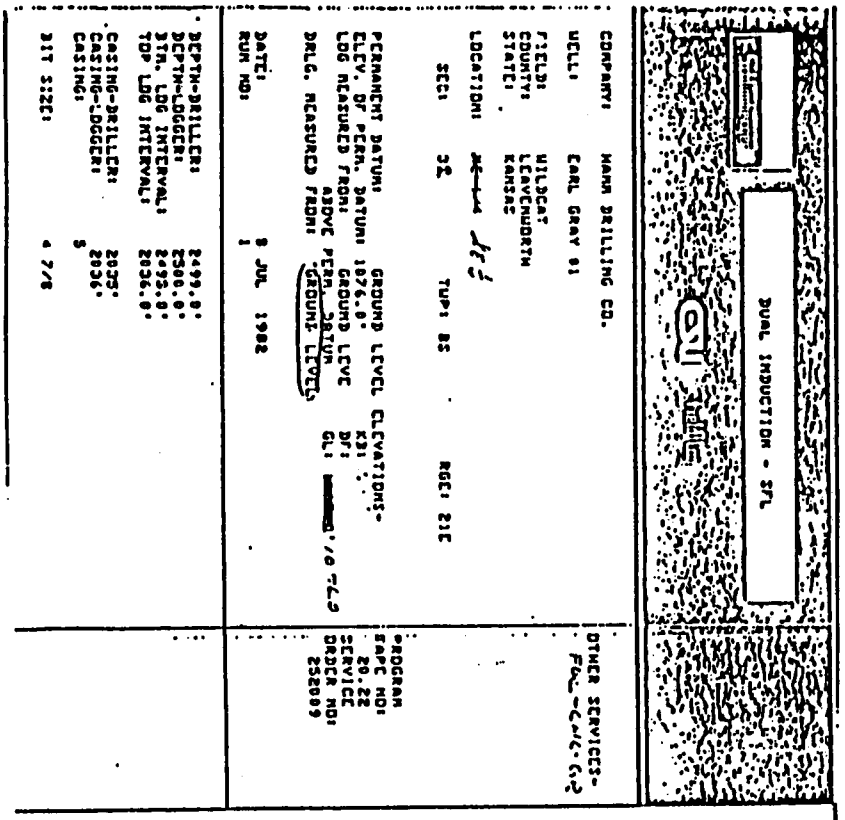


Oil odor & fluorescence
Oil odor & fluorescence

Gunter Sandstone 2496'

(-1420')

Strong oil odor, fluorescence, cut and stain.
C-1 through C-4 on chromatograph



COMPANY: HANN DRILLING CO.

WELL: EARL GRAY #1

FIELD: WILDCAT
COUNTY: LEAVENWORTH
STATE: KANSAS

LOCATION: [redacted] SEC: 32 TWP: 8S RGE: 21E

PERMANENT DATUM: GROUND LEVEL ELEVATIONS-
ELEV. OF PERM. DATUM: 1076.0' KB:
LOG MEASURED FROM: GROUND LEVE DF:
ABOVE PERM. DATUM GL: [redacted]
DRLG. MEASURED FROM: GROUND LEVEL

DATE: 9 JUL 1982
RUN NO: 1

DEPTH-DRILLER: 2499.0'
DEPTH-LOGGER: 2500.0'
BTM. LOG INTERVAL: 2493.0'
TOP LOG INTERVAL: 2036.0'

CASING-DRILLER: 2035'
CASING-LOGGER: 2036'
CASING: 8 5/8

BIT SIZE: 6 7/8

OTHER SERVICES-
FDC-CNL-GR

PROGRAM
EAPC NO: 20.22
SERVICE ORDER NO: 252069

DUAL INDUCTION - SFL

TYPE FLUID IN HOLE: FORMATION WATER
DENSITY:
VISCOSITY:
PH:
FLUID LOSS:
SOURCE OF SAMPLE: FLOWLINE
RM: 0.230 OHMM AT 76.0 DF
RMF: AT
RMC: AT
SOURCE RMF/RMC: /
RM AT BHT: 0.196 OHM AT 90.0 DF
RMF AT BHT: AT 90.0 DF
RMC AT BHT: AT 90.0 DF

TIME CIRC. STOPPED:
TIME LOGGED ON BTM.: 2:30

MAX. REC. TEMP: 90.0 DF

LOGGING UNIT NO: 8251
LOGGING UNIT LOC: WICHITA
RECORDED BY: K.C.DENFELD
WITNESSED BY: R.HANN

REMARKS:

CABLE RIG USING WATER NO MUD DATA AVAILABLE

EQUIPMENT NUMBERS-

DIS CA 164 DIC DA 1094 IEM DD 1293

FILE

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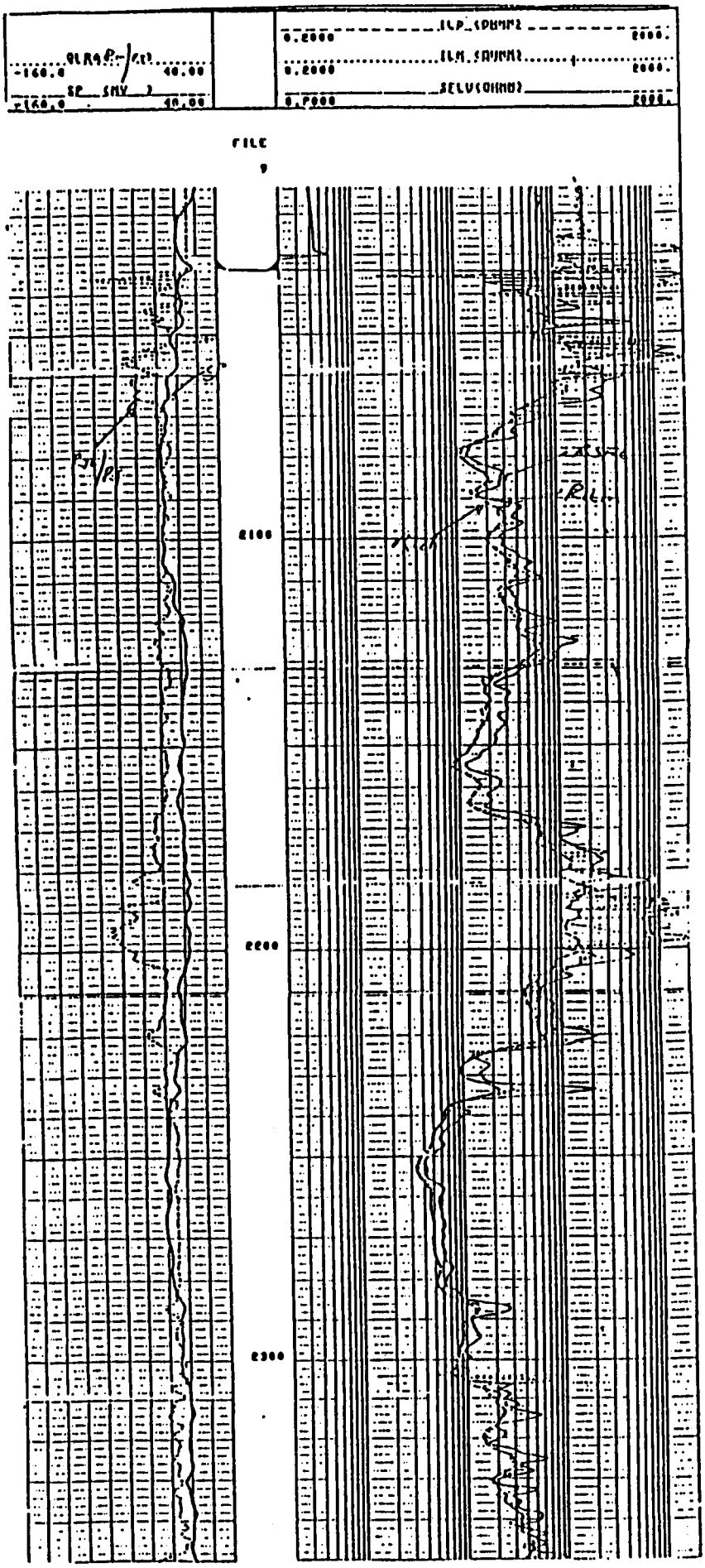
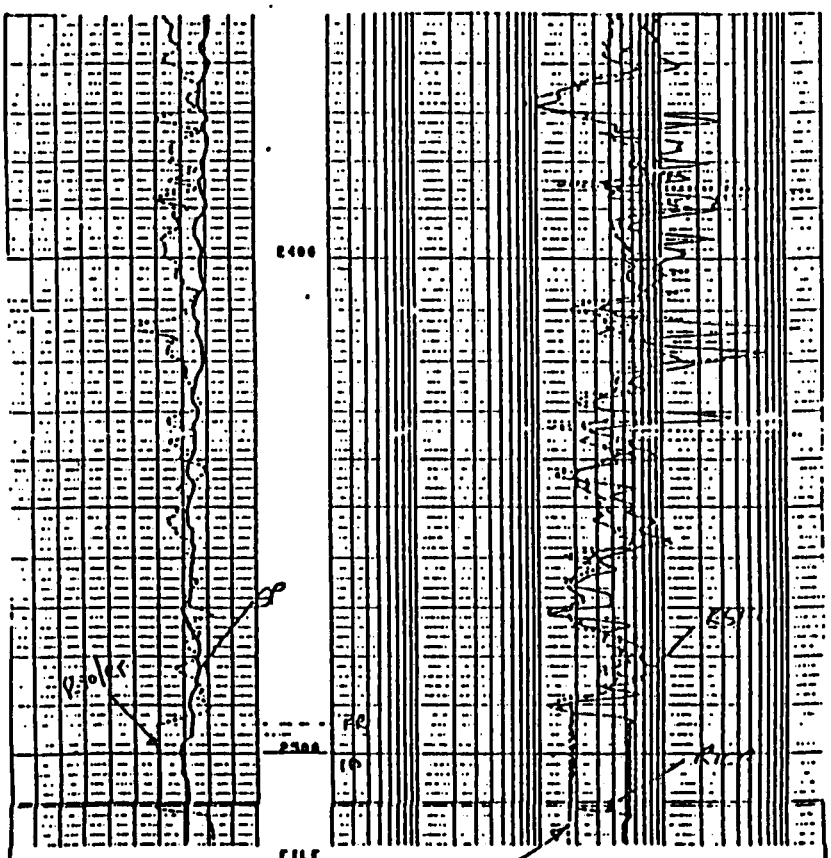
Fig. 11b


GLR(API-/GI)
-160.0
40.00
SP (MV)
-160.0
40.00
ILD (OHMM)
0.2000
2000.
ILM (OHMM)
0.2000
2000.
SFLU(OHMM)
0.2000
2000.
FILE
9
2100
2200
2300



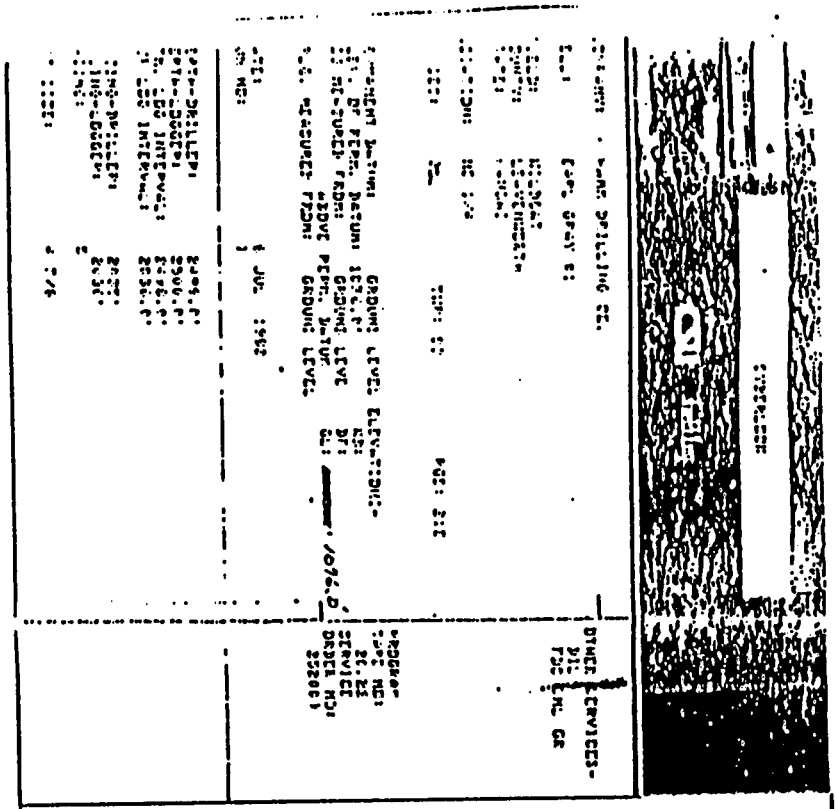
GLRAS ( )		ILD (OHMM)
-160.0 40.00		0.2000 2000.
SP (MV)		ILM (OHMM)
-160.0 40.00		0.2000 2000.
		SFLU(OHMM)
		0.2000 2000.

SENSOR MEASURE POINT TO TENSION REFERENCE POINT

SFL	3.9	FEET	ILD	6.9	FEET
SP	.0	FEET	ILM	3.3	FEET
TENS	.0	FEET	SPAR	.0	FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
RMF	0.1500		DI	4.075	IN
SBR	1.000	OHMM	RSEC	0.500	MMHO
BHS	OPEN		MSEC	9.300	MMHO
BD	8.0				



TYPE FLUID IN HOLE: FORMATION WATER
DENSITY:
VISCOSITY:
PH:
FLUID LOSS:
SOURCE OF SAMPLE: FLOWLINE
RM: 0.230 OHMM AT 74.0 DF
RMF: AT
RMC: AT
SOURCE RMF/RMC: /
RM AT BHT: 0.196 OHMM AT 99.0 DF
RMF AT BHT: AT 99.0 DF
RMC AT BHT: AT 99.0 DF

TIME CIRC. STOPPED:
TIME LOGGER ON BTM.: 0:30

MAX. REC. TEMP: 99.0 DF

LOGGING UNIT NO: 0251
LOGGING UNIT LOC: WICHITA
RECORDED BY: K.C.DEWBERRY
WITNESSED BY: P.HAHN

REMARKS:

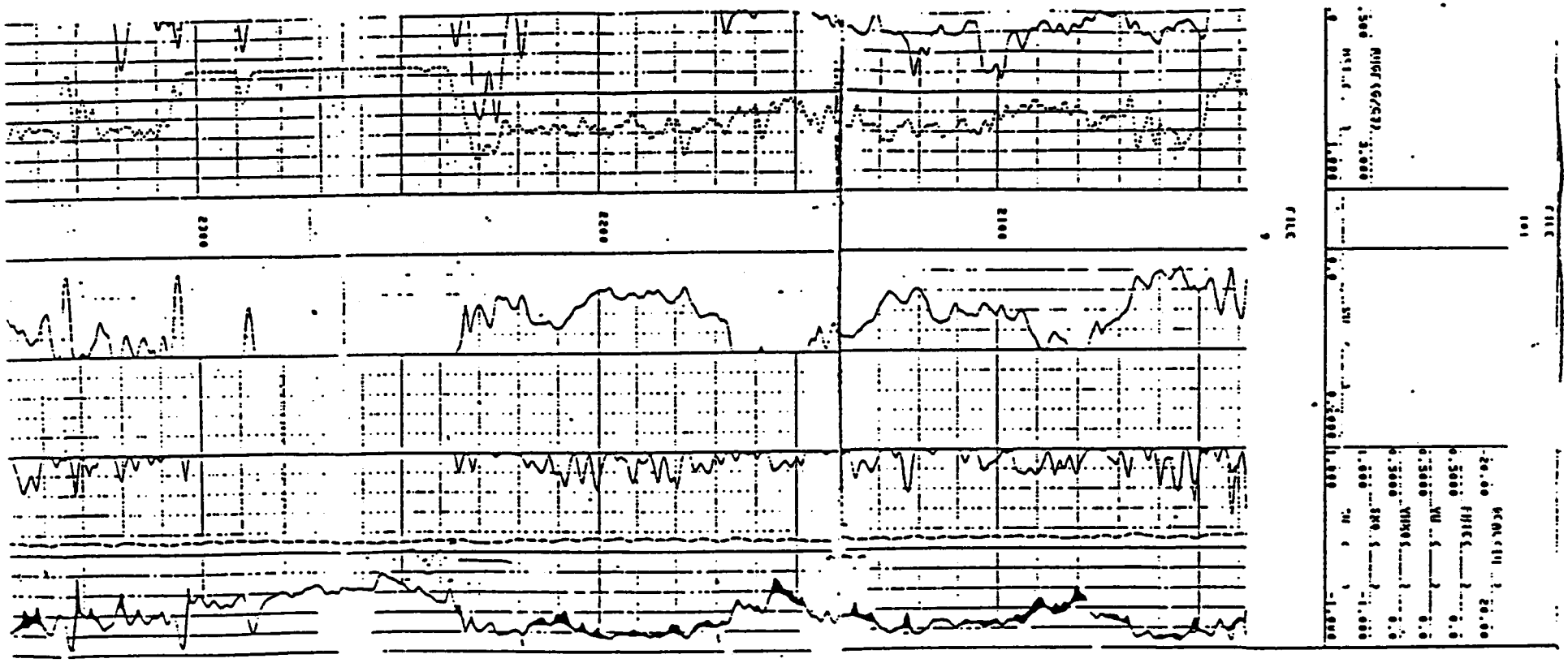
SAMPLE RIG USING WATER NO MUD DATA AVAILABLE

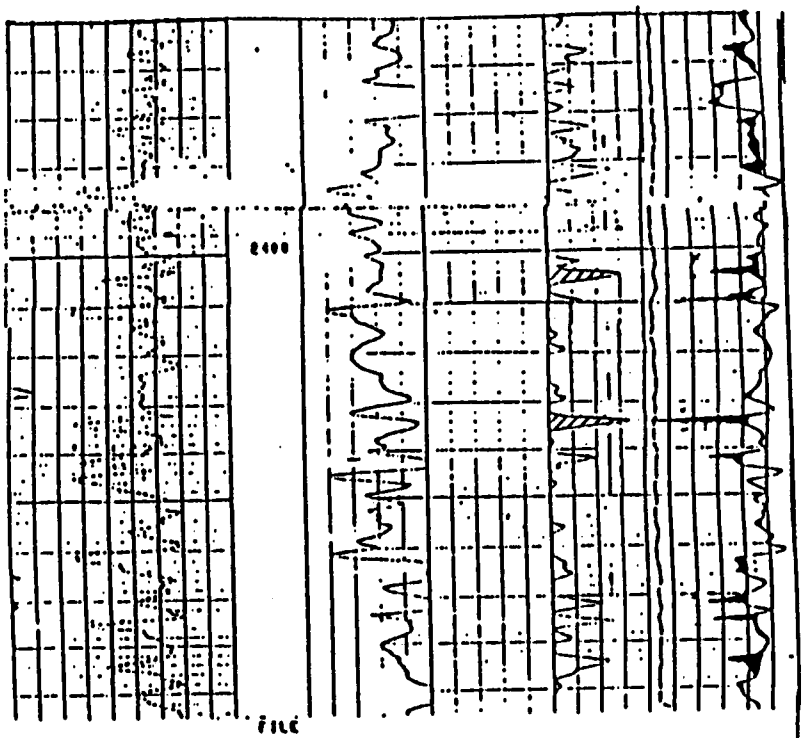
EQUIPMENT NUMBERS-

PGS P 54	PGC G 332	PRH H 93	GSR U 6594
SFI 136 563	CHC A 3630	HSR F 1437	CHP AB 565
SGC JAA 1456	GSR U 124	HLH PC 1175	

ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS AND WE CANNOT, AND DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATIONS, AND WE SHALL NOT, EXCEPT IN THE CASE OF GROSS OR WILLFUL NEGLIGENCE ON OUR PART, BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COSTS, DAMAGES OR EXPENSES INCURRED OR SUSTAINED BY ANYONE RESULTING FROM ANY INTERPRETATIONS MADE BY ANY OF OUR OFFICERS, AGENTS OR EMPLOYEES. THESE INTERPRETATIONS ARE ALSO SUBJECT TO OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

Fig. 11c





FILE

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
GULN	999.0	GAPI	DS	4.875	IN
ILIN	0.01000		DLLN	0.3500	
LSHD	DISA		MDET	MEDI	
GDSH	2.900	G/C3	FRIC	NONE	
DRUL	0.1500	G/C3	GDCL	0.0	G/C3
TPDM	0.700		TPFM	7.200	
FESX	DISA		TPSM	7.200	
POUT	LIME		FEPT	NONE	
RWB	0.1700	OHMM	FCAL	PRES	
TPSM	0.2000		RMF	0.0400	OHMM
SPSM	0.0	MV	MPCL	0.01000	
GRSM	115.0	GAPI	SPCL	-200.0	MV
PMAX	0.3600		GRCL	15.00	GAPI
SIMF	GR		MGSI	MCUT	
RKBF	PRES		MMUD	9.500	LB/G
BHT	110.0	DEGF	SOMI	ABSE	
RMF	0.2500		RILF	DISA	
MATR	LIME		MC	CALI	
MDEN	2.600	G/C3	FD	1.000	G/C3
BD	0.0		BHZ	OFCH	

PROSPECT EARL GRAY #1 KANSAS
Reserves & Economics

Drill Invest.	$36,751	Completion Invest.	$54,156
Carried to CSG.	25.00%	Carried to compl.	0.00%
Initial Invest.	$90,907	NO. OF WELLS	1
Future Invest.	$10,000	1st yr +/-	0
Total Invest.	$100,907	2nd yr +/-	0
PVdisc. 18%	$99,381	3rd yr +/-	0
W.I.	100.0000%	SEVR. TAX	0.05
R.I.	23.0000%	Opr cost/Well	750 /mo
O.R.R.I.	0.0000%	COST ESCL	1.05
OIL N.R.R.I.	77.0000%	PRICE ESCL	1.05
GAS N.R.R.I.	77.0000%	Prim well type	Oil

INIT. OIL PRICE	$17.50 /BBL	CRP 1st Yr	10
MAX. OIL PRICE	$34.65 /BBL	CRP 2nd Yr	0
INIT. GAS PRICE	$1.00 /MMBTU	CRP 3rd Yr	0
MAX GAS PRICE	$1.98 /MMBTU	DECLINE TYPE	CPD
MMBTU/MCF	1.3	DECLINE RATE	0.1
		INIT. RATE	10

	OIL	GAS
CRP 1st Yr	10	0
CRP 2nd Yr	0	0
CRP 3rd Yr	0	0
DECLINE TYPE	CPD	CPD
DECLINE RATE	0.1	0.1
INIT. RATE	10	0

YEAR	GROSS OIL-BBL	NET OIL-BBL	GROSS GAS-MCF	NET GAS-MCF	NET OIL REVENUE	NET GAS-REVENUE	TAXES SEVERENCE	OPERATING EXPENSES	NET CASH FLOW BFIT	CUM NCF BFIT
									(103,157)	(103,157)
1	3,650	2,811	0	0	$49,184	$0	$2,459	$9,000	$37,725	($65,433)
2	3,285	2,529	0	0	$46,479	$0	$2,324	$9,450	$34,705	($30,728)
3	2,957	2,277	0	0	$43,922	$0	$2,196	$9,923	$31,804	$1,076
4	2,661	2,049	0	0	$41,507	$0	$2,075	$10,419	$29,013	$30,088
5	2,395	1,844	0	0	$39,224	$0	$1,961	$10,940	$26,323	$56,411
6	2,155	1,660	0	0	$37,066	$0	$1,853	$11,487	$23,727	$80,138
7	1,940	1,494	0	0	$35,028	$0	$1,751	$12,061	$21,216	$101,353
8	1,746	1,344	0	0	$33,101	$0	$1,655	$12,664	$18,782	$120,136
9	1,571	1,210	0	0	$31,281	$0	$1,564	$13,297	$16,420	$136,555
10	1,414	1,089	0	0	$29,560	$0	$1,478	$13,962	$14,120	$150,675
11	1,273	980	0	0	$27,934	$0	$1,397	$14,660	$11,878	$162,553
12	1,145	882	0	0	$26,398	$0	$1,320	$15,393	$9,685	$172,238
13	1,031	794	0	0	$24,946	$0	$1,247	$16,163	$7,536	$179,774
14	928	714	0	0	$23,574	$0	$1,179	$16,971	$5,425	$185,199
15	835	643	0	0	$22,278	$0	$1,114	$17,819	$3,344	$188,543
TOTAL	29,985	22,310	0	0	$511,482	$0	$25,574	$194,207	$188,543	$188,543

ECONOMIC SUMMARY:

Payout, Months:	36.39
Internal Rate of Return,%	29%
$ Return/$ Invested	2.58
$ Profit/$ Invested:	1.58
Total Profit, $	$188,543
Economic Limit, Years	15
Econ. Oil Reserves, Net BBLS:	22,310
Econ. Gas Reserves, Net MCF:	0
Total Economic Reserves, Eq. B	22,310
Reserve Cost, $/Eq. BBL	4.52

PRESENT VALUE PROFILE, BFIT

DISCOUNT %	NET PV
0%	$188,543
5%	$115,854
6%	$104,995
10%	$69,986
12%	$56,449
14%	$44,923
16%	$35,057
18%	$26,570
20%	$19,235
30%	($5,521)

PROSPECT EARL GRAY #1 KANSAS
Reserves & Economics

Drill Invest.	$36,751	Completion Invest.	$54,156					OIL	GAS
Carried to CSG.	25.00%	Carried to compl.	0.00%				CRP 1st Yr	20	0
Initial Invest.	$90,907	NO. OF WELLS	1				CRP 2nd Yr	0	0
Future Invest.	$10,000	1st yr +/-	0				CRP 3rd Yr	0	0
Total Invest.	$100,907	2nd yr +/-	0				DECLINE TYPE	CPD	CPD
Prwise. 18%	$99,381	3rd yr +/-	0				DECLINE RATE	0.1	0.1
W.I.	100.0000%	SEVR. TAX	0.05	INIT. OIL PRICE	$17.50 /BBL		INIT. RATE	20	0
R.I.	23.0000%	Opr cost/Well	750 /mo	MAX. OIL PRICE	$34.65 /BBL				
O.R.R.I.	0.0000%	COST ESCL	1.05	INIT. GAS PRICE	$1.00 /MMBTU				
OIL N.R.R.I.	77.0000%	PRICE ESCL	1.05	MAX GAS PRICE	$1.98 /MMBTU				
GAS N.R.R.I.	77.0000%	Prim well type	Oil	MMBTU/MCF	1.3				

YEAR	GROSS OIL-BBL	NET OIL-BBL	GROSS GAS-MCF	NET GAS-MCF	NET OIL REVENUE	NET GAS-REVENUE	TAXES SEVERENCE	OPERATING EXPENSES	NET CASH FLOW BFIT	CUM NCF BFIT
									(103,157)	(103,157)
								$9,000	$84,449	($18,708)
1	7,300	5,621	0	0	$98,368	$0	$4,918	$9,450	$78,859	$60,151
2	6,570	5,059	0	0	$92,957	$0	$4,648	$9,923	$73,530	$133,681
3	5,913	4,553	0	0	$87,845	$0	$4,392	$10,419	$68,444	$202,125
4	5,322	4,098	0	0	$83,013	$0	$4,151	$10,940	$63,586	$265,711
5	4,790	3,688	0	0	$78,447	$0	$3,922	$11,487	$58,940	$324,650
6	4,311	3,319	0	0	$74,133	$0	$3,707	$12,061	$54,492	$379,142
7	3,880	2,987	0	0	$70,056	$0	$3,503	$12,664	$50,228	$429,371
8	3,492	2,689	0	0	$66,202	$0	$3,310	$13,297	$46,136	$475,507
9	3,142	2,420	0	0	$62,561	$0	$3,128	$13,962	$42,202	$517,709
10	2,828	2,178	0	0	$59,120	$0	$2,956	$14,660	$38,415	$556,125
11	2,545	1,960	0	0	$55,869	$0	$2,793	$15,393	$34,763	$590,888
12	2,291	1,764	0	0	$52,796	$0	$2,640	$16,163	$31,235	$622,123
13	2,062	1,588	0	0	$49,892	$0	$2,495	$16,971	$27,820	$649,943
14	1,856	1,429	0	0	$47,148	$0	$2,357	$17,819	$24,508	$674,451
15	1,670	1,286	0	0	$44,555	$0	$2,228			
TOTAL	57,920	44,637	0	0	$1,022,963	$0	$51,148	$194,207	$674,451	$674,451

ECONOMIC SUMMARY:

Payout, Months:	19.26
Internal Rate of Return,%:	77%
$ Return/$ Invested	6.87
$ Profit/$ Invested:	5.87
Total Profit, $	$674,451
Economic Limit, Years	15
Econ. Oil Reserves, Net BBLS:	44,637
Econ. Gas Reserves, Net MCF:	0
Total Economic Reserves, Eq. B	44,637
Reserve Cost, $/Eq. BBL	2.26

PRESENT VALUE PROFILE, BFIT

DISCOUNT %	NET PV
0%	$674,451
5%	$452,401
6%	$419,838
10%	$315,950
12%	$276,197
14%	$242,506
16%	$213,750
18%	$189,045
20%	$167,687
30%	$94,877

Fig. 12b

PROSPECT EARL GRAY #1 KANSAS
Reserves & Economics

Drill Invest.	$36,751	Completion Invest.	$54,156				
Carried to CSG.	25.00%	Carried to compl.	0.00%				
Initial Invest.	$90,907	NO. OF WELLS	1				
Future Invest.	$10,000	1st yr +/-	0				
Total Invest.	$100,907	2nd yr +/-	0				
Pvdisc. 18%	$99,381	3rd yr +/-	0				
W.I.	100.0000%	SEVR. TAX	0.05	INIT. OIL PRICE	$17.50 /BBL		OIL GAS
R.I.	23.0000%	Opr cost/Well	750 /mo	MAX. OIL PRICE	$34.65 /BBL	CRP 1st Yr	30 0
O.R.R.I.	0.0000%	COST ESCL	1.05	INIT. GAS PRICE	$1.00 /MMBTU	CRP 2nd Yr	0 0
OIL N.R.R.I.	77.0000%	PRICE ESCL	1.05	MAX GAS PRICE	$1.98 /MMBTU	CRP 3rd Yr	0 0
GAS N.R.R.I.	77.0000%	Prim well type Oil		MMBTU/MCF	1.3	DECLINE TYPE	CPD CPD
						DECLINE RATE	0.1 0.1
						INIT. RATE	30 0

YEAR	GROSS OIL-BBL	NET OIL-BBL	GROSS GAS-MCF	NET GAS-MCF	NET OIL REVENUE	NET GAS-REVENUE	TAXES SEVERENCE	OPERATING EXPENSES	NET CASH FLOW BFIT	CUM NCF BFIT
									(103,157)	(103,157)
1	10,950	8,432	0	0	$147,551	$0	$7,378	$9,000	$131,174	$28,016
2	9,855	7,588	0	0	$139,436	$0	$6,972	$9,450	$123,014	$151,030
3	8,870	6,830	0	0	$131,767	$0	$6,588	$9,923	$115,256	$266,287
4	7,983	6,147	0	0	$124,520	$0	$6,226	$10,419	$107,875	$374,162
5	7,184	5,532	0	0	$117,671	$0	$5,884	$10,940	$100,848	$475,010
6	6,466	4,979	0	0	$111,199	$0	$5,560	$11,487	$94,153	$569,163
7	5,819	4,481	0	0	$105,083	$0	$5,254	$12,061	$87,768	$656,931
8	5,237	4,033	0	0	$99,304	$0	$4,965	$12,664	$81,675	$738,606
9	4,714	3,629	0	0	$93,842	$0	$4,692	$13,297	$75,853	$814,458
10	4,242	3,267	0	0	$88,681	$0	$4,434	$13,962	$70,285	$884,743
11	3,818	2,940	0	0	$83,803	$0	$4,190	$14,660	$64,953	$949,696
12	3,436	2,646	0	0	$79,194	$0	$3,960	$15,393	$59,841	$1,009,537
13	3,093	2,381	0	0	$74,838	$0	$3,742	$16,163	$54,934	$1,064,471
14	2,783	2,143	0	0	$70,722	$0	$3,536	$16,971	$50,215	$1,114,687
15	2,505	1,929	0	0	$66,833	$0	$3,342	$17,819	$45,672	$1,160,358
TOTAL	86,955	66,955	0	0	$1,534,445	$0	$76,722	$194,207	$1,160,358	$1,160,358

ECONOMIC SUMMARY:

Payout, Months:	9.09
Internal Rate of Return,%	121%
$ Return/$ Invested	11.17
$ Profit/$ Invested:	10.17
Total Profit, $	$1,160,358
Economic Limit, Years	15
Econ. Oil Reserves, Net BBLS:	66,955
Econ. Gas Reserves, Net MCF:	0
Total Economic Reserves, Eq. B	66,955
Reserve Cost, $/Eq. BBL	1.51

PRESENT VALUE PROFILE, BFIT

DISCOUNT %	NET PV
0%	$1,160,358
5%	$788,919
6%	$734,681
10%	$561,914
12%	$495,946
14%	$440,089
16%	$392,443
18%	$351,519
20%	$316,140
30%	$195,276