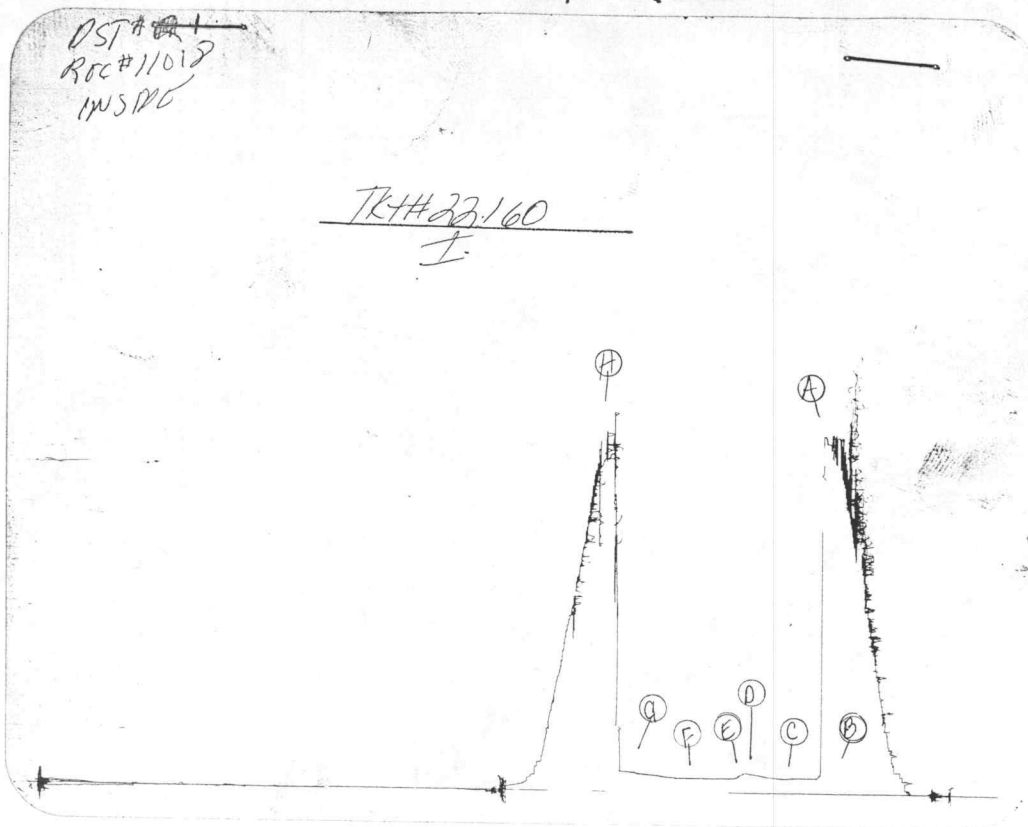
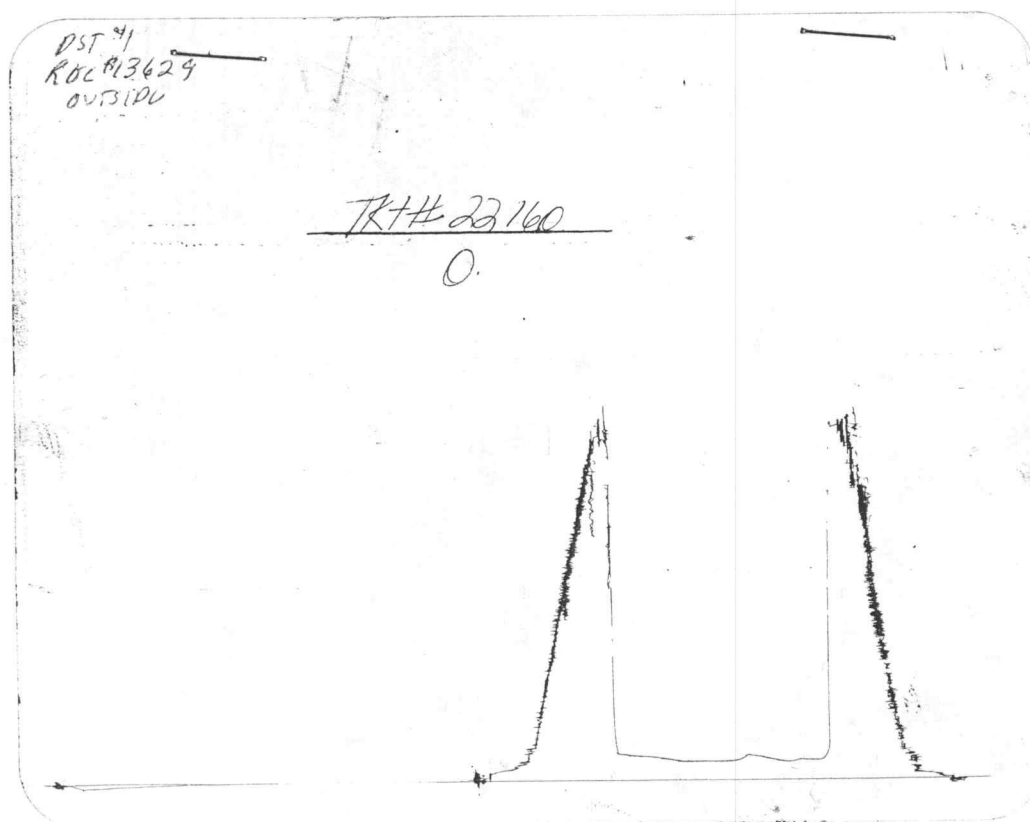




Inside Recorder



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE	: 11/19/95	TICKET	: 22160
CUSTOMER	: PINTAIL PETROLEUM, LTD	LEASE	: WERHAHN
WELL	: #1	TEST: 1	GEOLOGIST: ISERN
ELEVATION	: 1975 GR	FORMATION	: ARBUCKLE
SECTION	: 36	TOWNSHIP	: 19S
RANGE	: 16W	COUNTY: RUSH	STATE : KS
GAUGE SN#	: 11018	RANGE : 4425	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3592.00 ft	TO:	3665.00 ft	TVD:	3665.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3595.0 ft		3662.0 ft		
TEMPERATURE:	108.0				
DRILL COLLAR LENGTH:	250.0 ft	I.D.:		2.200 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3322.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	73.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	3587.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3592.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	MALLARD DRLG RIG 1	VISCOSITY :	50.00 cp
MUD TYPE :	STARCH	WATER LOSS:	10.400 cc
WEIGHT :	10.100 ppg		
CHLORIDES :	75000 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET
IN 30 SECONDS. FINAL FLOW PERIOD STRONG BLOW-
BOTTOM OF BUCKET IN 2 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	1400 FT GAS ABOVE FLUID
120.0	0.0	15.0	0.0	85.0	GAS CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	75.0000	min.
GAS VOLUME:	0.4752	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.4795	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.4795	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1990.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	71.00	71.00
INITIAL SHUT-IN	30.00		112.00
FINAL FLOW	45.00	75.00	77.00
FINAL SHUT-IN	45.00		112.00

FINAL HYDROSTATIC PRESSURE: 1968.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1993.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	104.00	89.00
INITIAL SHUT-IN	27.00		118.00
FINAL FLOW	45.00	107.00	87.00
FINAL SHUT-IN	45.00		124.00

FINAL HYDROSTATIC PRESSURE: 1956.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 11/19/95	TICKET : 22160
CUSTOMER : PINTAIL PETROLEUM, LTD	LEASE : WERHAHN
WELL : #1	GEOLOGIST: ISERN
ELEVATION: 1975 GR	FORMATION: ARBUCKLE
SECTION : 36	TOWNSHIP : 19S
RANGE : 16W	STATE : KS
GAUGE SN#: 11018	CLOCK : 12
COUNTY: RUSH	
RANGE : 4425	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	104.00	104.00
5.00	89.00	-15.00
10.00	89.00	0.00
15.00	91.00	2.00
20.00	87.00	-4.00
25.00	87.00	0.00
30.00	89.00	2.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	91.00	91.00	0.00
6.00	93.00	2.00	0.00
9.00	96.00	3.00	0.00
12.00	102.00	6.00	0.00
15.00	104.00	2.00	0.00
18.00	109.00	5.00	0.00
21.00	113.00	4.00	0.00
24.00	116.00	3.00	0.00
27.00	118.00	2.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	107.00	107.00
5.00	87.00	-20.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

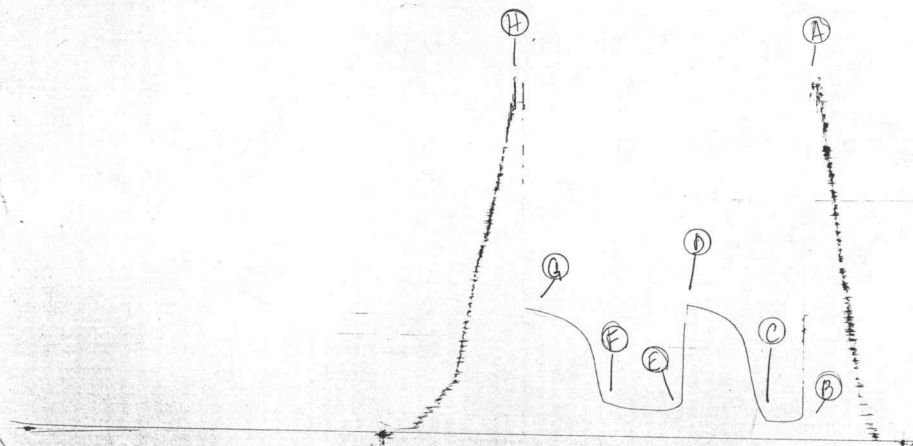
Time (min)	Pressure	Delta P
10.00	87.00	0.00
15.00	86.00	-1.00
20.00	86.00	0.00
25.00	87.00	1.00
30.00	87.00	0.00
35.00	87.00	0.00
40.00	87.00	0.00
45.00	87.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	88.00	88.00	0.00
6.00	89.00	1.00	0.00
9.00	91.00	2.00	0.00
12.00	96.00	5.00	0.00
15.00	98.00	2.00	0.00
18.00	100.00	2.00	0.00
21.00	104.00	4.00	0.00
24.00	106.00	2.00	0.00
27.00	108.00	2.00	0.00
30.00	111.00	3.00	0.00
33.00	113.00	2.00	0.00
36.00	117.00	4.00	0.00
39.00	120.00	3.00	0.00
42.00	122.00	2.00	0.00
45.00	124.00	2.00	0.00

DST #2
RUC #1018
INSIDE

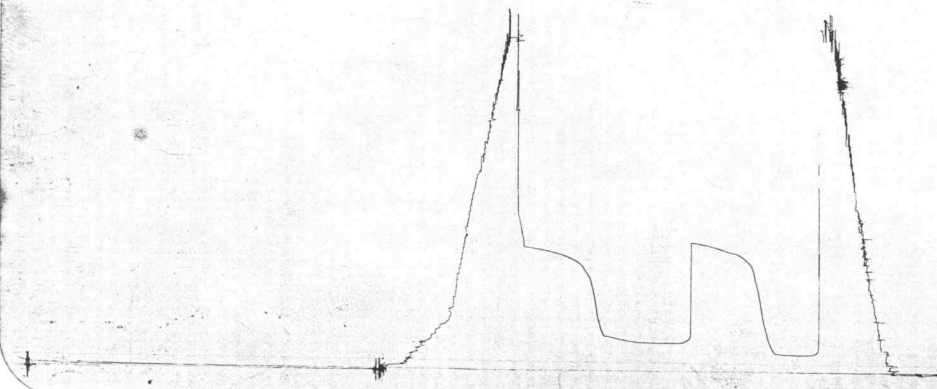
TK#22161
I



Inside Recorder

DST #2
RUC #13629
OUTSIDE

TK#22161
O



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE	: 11/20/95	TICKET	: 22161
CUSTOMER	: PINTAIL PETROLEUM, LTD	LEASE	: WERHAHN
WELL	: #1	TEST: 2	GEOLOGIST: ISERN
ELEVATION	: 1975 GR	FORMATION	: ARBUCKLE
SECTION	: 36	TOWNSHIP	: 19S
RANGE	: 16W	COUNTY: RUSH	STATE : KS
GAUGE SN#	: 11018	RANGE : 4425	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3666.00 ft	TO:	3715.00 ft	TVD:	3715.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3669.0 ft		3712.0 ft		
TEMPERATURE:	112.0				
DRILL COLLAR LENGTH:	250.0 ft	I.D.:	2.200 in		
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in		
DRILL PIPE LENGTH :	3396.0 ft	I.D.:	3.800 in		
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in		
ANCHOR LENGTH :	49.0 ft	ANCHOR SIZE:	5.500 in		
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in		
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH		
PACKER DEPTH:	3661.0 ft	SIZE:	6.630 in		
PACKER DEPTH:	3666.0 ft	SIZE:	6.630 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		

MUD INFORMATION

DRILLING CON. :	MALLARD DRLG RIG 1	VISCOSITY :	50.00 cp
MUD TYPE :	STARCH	WATER LOSS:	10.400 cc
WEIGHT :	9.700 ppg	SERIAL NUMBER:	
CHLORIDES :	50000 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET
IN 1 MINUTE. GAS TO SURFACE IN 16 MINUTES. FINAL
FLOW PERIOD STRONG BLOW -GAS TO SURFACE THROUGHOUT

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
180.0	5.0	35.0	0.0	60.0	GAS & OIL CUT MUD
180.0	3.0	25.0	10.0	62.0	SL OIL C/GAS & WTR C/MUD
120.0	0.0	15.0	75.0	10.0	GAS CUT MUD
0.0	0.0	0.0	0.0	0.0	W/OIL SCUM
0.0	0.0	0.0	0.0	0.0	CHLORIDES 34000 PPM

RATE INFORMATION

OIL VOLUME:	0.1656	STB		
GAS VOLUME:	7.2793	SCF		
MUD VOLUME:	2.3850	STB		
WATER VOLUME:	0.5544	STB		
TOTAL FLUID :	3.1050	STB		
			TOTAL FLOW TIME:	85.0000 min.
			AVERAGE OIL RATE:	31.6503 STB/D
			AVERAGE WATER RATE:	20.9519 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1933.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	78.00	93.00
INITIAL SHUT-IN	60.00		743.00
FINAL FLOW	60.00	133.00	182.00
FINAL SHUT-IN	60.00		705.00

FINAL HYDROSTATIC PRESSURE: 1890.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1952.00

Description	Duration	p1	p End
INITIAL FLOW	25.00	133.00	100.00
INITIAL SHUT-IN	60.00		761.00
FINAL FLOW	60.00	196.00	200.00
FINAL SHUT-IN	60.00		730.00

FINAL HYDROSTATIC PRESSURE: 1911.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 11/20/95	TICKET : 22161
CUSTOMER : PINTAIL PETROLEUM, LTD	LEASE : WERHAHN
WELL : #1	GEOLOGIST: ISERN
ELEVATION: 1975 GR	FORMATION: ARBUCKLE
SECTION : 36	TOWNSHIP : 19S
RANGE : 16W	STATE : KS
GAUGE SN#: 11018	CLOCK : 12
COUNTY: RUSH	
RANGE : 4425	

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
20 MIN	MERLA	0.375	15" WATER	13900 SCF/D
25 MIN	MERLA	0.375	25" WATER	17800 SCF/D
30 MIN	MERLA	0.375	28" WATER	18800 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	0.125	28" WATER	2790 SCF/D
20 MIN	MERLA	0.125	48" WATER	3660 SCF/D
30 MIN	MERLA	0.375	10" WATER	11300 SCF/D
40 MIN	MERLA	0.125	6" WATER	1290 SCF/D
50 MIN	MERLA	0.125	4" WATER	1060 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 11/20/95	TICKET	: 22161
CUSTOMER	: PINTAIL PETROLEUM, LTD	LEASE	: WERHAHN
WELL	: #1	GEOLOGIST	: ISERN
ELEVATION	: 1975 GR	FORMATION	: ARBUCKLE
SECTION	: 36	TOWNSHIP	: 19S
RANGE	: 16W	STATE	: KS
GAUGE SN#	: 11018	CLOCK	: 12
	COUNTY: RUSH		
	RANGE : 4425		

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	133.00	133.00
5.00	109.00	-24.00
10.00	100.00	-9.00
15.00	100.00	0.00
20.00	100.00	0.00
25.00	100.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	127.00	127.00	9.33
6.00	171.00	44.00	5.17
9.00	233.00	62.00	3.78
12.00	322.00	89.00	3.08
15.00	462.00	140.00	2.67
18.00	551.00	89.00	2.39
21.00	602.00	51.00	2.19
24.00	637.00	35.00	2.04
27.00	657.00	20.00	1.93
30.00	681.00	24.00	1.83
33.00	697.00	16.00	1.76
36.00	710.00	13.00	1.69
39.00	719.00	9.00	1.64
42.00	730.00	11.00	1.60
45.00	737.00	7.00	1.56
48.00	746.00	9.00	1.52
51.00	752.00	6.00	1.49
54.00	757.00	5.00	1.46
57.00	759.00	2.00	1.44
60.00	761.00	2.00	1.42

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

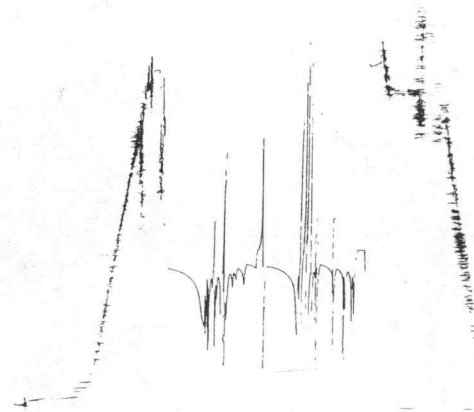
Time (min)	Pressure	Delta P
0.00	196.00	196.00
5.00	169.00	-27.00
10.00	158.00	-11.00
15.00	156.00	-2.00
20.00	156.00	0.00
25.00	157.00	1.00
30.00	159.00	2.00
35.00	161.00	2.00
40.00	164.00	3.00
45.00	171.00	7.00
50.00	182.00	11.00
55.00	193.00	11.00
60.00	200.00	7.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	260.00	260.00	21.00
6.00	384.00	124.00	11.00
9.00	487.00	103.00	7.67
12.00	549.00	62.00	6.00
15.00	582.00	33.00	5.00
18.00	608.00	26.00	4.33
21.00	628.00	20.00	3.86
24.00	646.00	18.00	3.50
27.00	659.00	13.00	3.22
30.00	673.00	14.00	3.00
33.00	682.00	9.00	2.82
36.00	690.00	8.00	2.67
39.00	697.00	7.00	2.54
42.00	706.00	9.00	2.43
45.00	710.00	4.00	2.33
48.00	717.00	7.00	2.25
51.00	721.00	4.00	2.18
54.00	725.00	4.00	2.11
57.00	728.00	3.00	2.05
60.00	730.00	2.00	2.00

DST #3
Roc #13629
Below STRADDLE

TK#22162
Below Straddle



Inside Recorder

Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE	: 11/20/95	TICKET	: 22162
CUSTOMER	: PINTAIL PETROLEUM, LTD	LEASE	: WERHAHN
WELL	: #1	TEST: 3	GEOLOGIST: ISERN
ELEVATION:	1975 GR	FORMATION:	ARBUCKLE
SECTION	: 36	TOWNSHIP	: 19S
RANGE	: 16W	STATE	: KS
GAUGE SN#:	11018	RANGE	: 4425
		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3670.00 ft	TO:	3706.00 ft	TVD:	3715.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3685.0 ft		3690.0 ft		
TEMPERATURE:	110.0				
DRILL COLLAR LENGTH:	250.0 ft	I.D.:		2.200 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3394.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	26.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	30.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	3665.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3670.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3706.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	MALLARD DRLG RIG 1	VISCOSITY :	42.00 cp
MUD TYPE :	STARCH	WATER LOSS:	10.400 cc
WEIGHT :	9.700 ppg		
CHLORIDES :	50000 ppm	SERIAL NUMBER:	12369
JARS-MAKE :	WTC	REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET
GAS TO SURFACE IN 23 MINUTES. FINAL FLOW PERIOD
STRONG BLOW - GAS TO SURFACE THROUGHOUT.

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

TOOL SLID APPROX 8 FT FROM BOTTOM.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
40.0	0.0	20.0	0.0	80.0	GASSY MUD
120.0	10.0	30.0	5.0	55.0	GAS & OIL C/WATERY MUD
60.0	2.0	30.0	15.0	55.0	VSL OIL C/GASSY WTR C/MUD
60.0	5.0	10.0	35.0	50.0	SL GAS & OIL C/WATERY MUD

RATE INFORMATION

OIL VOLUME:	0.0762	STB		
GAS VOLUME:	2.1092	SCF		
MUD VOLUME:	0.9807	STB		
WATER VOLUME:	0.1692	STB		
TOTAL FLUID :	1.2261	STB		
			TOTAL FLOW TIME:	65.0000 min.
			AVERAGE OIL RATE:	7.0649 STB/D
			AVERAGE WATER RATE:	11.8076 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1944.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	78.00	80.00
INITIAL SHUT-IN	45.00		776.00
FINAL FLOW	45.00	91.00	112.00
FINAL SHUT-IN	30.00		765.00

FINAL HYDROSTATIC PRESSURE: 1924.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1951.00

Description	Duration	p1	p End
INITIAL FLOW	25.00	113.00	87.00
INITIAL SHUT-IN	45.00		790.00
FINAL FLOW	40.00	124.00	116.00
FINAL SHUT-IN	30.00		779.00

FINAL HYDROSTATIC PRESSURE: 1934.00

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 11/20/95	TICKET : 22162
CUSTOMER : PINTAIL PETROLEUM, LTD	LEASE : WERHAHN
WELL : #1	GEOLOGIST: ISERN
ELEVATION: 1975 GR	FORMATION: ARBUCKLE
SECTION : 36	TOWNSHIP : 19S
RANGE : 16W	STATE : KS
GAUGE SN#: 11018	CLOCK : 12
COUNTY: RUSH	
RANGE : 4425	

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
30 MIN	MERLA	0.375	18" WATER	15100 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	0.375	10" WATER	11300 SCF/D
20 MIN	MERLA	0.375	15" WATER	13900 SCF/D
30 MIN	MERLA	0.375	13" WATER	12900 SCF/D

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 11/20/95	TICKET : 22162
CUSTOMER : PINTAIL PETROLEUM, LTD	LEASE : WERHAHN
WELL : #1	GEOLOGIST: ISERN
ELEVATION: 1975 GR	FORMATION: ARBUCKLE
SECTION : 36	TOWNSHIP : 19S
RANGE : 16W	STATE : KS
GAUGE SN#: 11018	CLOCK : 12
COUNTY: RUSH	
RANGE : 4425	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	113.00	113.00
5.00	93.00	-20.00
10.00	89.00	-4.00
15.00	89.00	0.00
20.00	87.00	-2.00
25.00	87.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	133.00	133.00	9.33
6.00	144.00	11.00	5.17
9.00	153.00	9.00	3.78
12.00	281.00	128.00	3.08
15.00	287.00	6.00	2.67
18.00	291.00	4.00	2.39
21.00	367.00	76.00	2.19
24.00	739.00	372.00	2.04
27.00	750.00	11.00	1.93
30.00	759.00	9.00	1.83
33.00	765.00	6.00	1.76
36.00	774.00	9.00	1.69
39.00	781.00	7.00	1.64
42.00	785.00	4.00	1.60
45.00	790.00	5.00	1.56

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

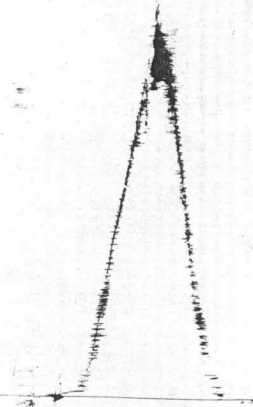
Time (min)	Pressure	Delta P
0.00	124.00	124.00
5.00	111.00	-13.00
10.00	111.00	0.00
15.00	111.00	0.00
20.00	112.00	1.00
25.00	113.00	1.00
30.00	114.00	1.00
35.00	115.00	1.00
40.00	116.00	1.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	233.00	233.00	14.33
6.00	569.00	336.00	7.67
9.00	684.00	115.00	5.44
12.00	721.00	37.00	4.33
15.00	743.00	22.00	3.67
18.00	752.00	9.00	3.22
21.00	763.00	11.00	2.90
24.00	768.00	5.00	2.67
27.00	774.00	6.00	2.48
30.00	779.00	5.00	2.33

~~DST #4~~
RSC #1161P
INSIDE

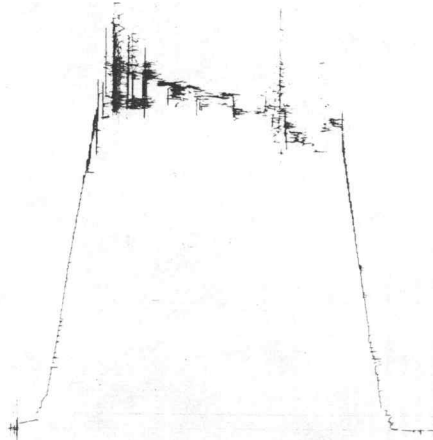
TK#22163
I.



Inside Recorder

~~DST #4~~
RSC #13124
OUTSIDE

TK#22163
O.



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE	: 11/21/95	TICKET	: 22163
CUSTOMER	: PINTAIL PETROLEUM, LTD	LEASE	: WERHAHN
WELL	: #1	TEST: 4	GEOLOGIST: ISERN
ELEVATION	: 1975 GR	FORMATION	: ARBUCKLE
SECTION	: 36	TOWNSHIP	: 19S
RANGE	: 16W	STATE	: KS
GAUGE SN#	: 11018	RANGE	: 4425
		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3713.00 ft	TO:	3735.00 ft	TVD:	3735.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3716.0 ft		3732.0 ft		
TEMPERATURE:	0.0				
DRILL COLLAR LENGTH:	250.0 ft	I.D.:		2.200 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3443.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	22.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	3708.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3713.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	MALLARD DRLG RIG 1	VISCOSITY :	48.00 cp
MUD TYPE :	STARCH	WATER LOSS:	12.000 cc
WEIGHT :	9.800 ppg		
CHLORIDES :	57000 ppm	SERIAL NUMBER:	
JARS-MAKE :		REVERSED OUT?:	NO
DID WELL FLOW?:	NO		

COMMENTS

Comment

MISRUN.
HIT BRIDGE 140 FT OFF BOTTOM- COULD NOT GET
THROUGH- CAME OUT OF HOLE.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
No Data Entered					

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	0.0000	SCF		
MUD VOLUME:	0.0000	STB		
WATER VOLUME:	0.0000	STB		
TOTAL FLUID :	0.0000	STB		
			TOTAL FLOW TIME: No Events Created	
			AVERAGE OIL RATE: 0.0000 STB/D	
			AVERAGE WATER RATE: 0.0000 STB/D	

FIELD TIME & PRESSURE INFORMATION

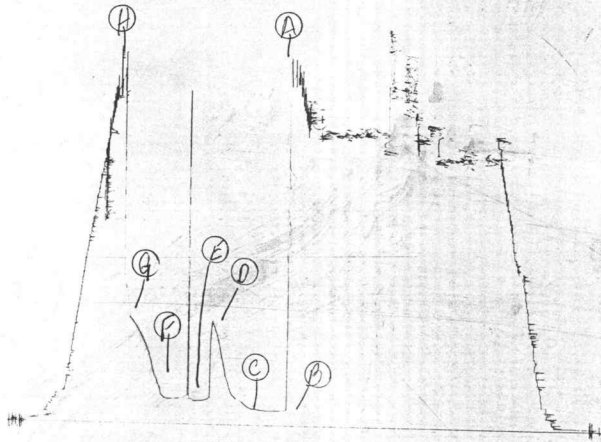
INITIAL HYDROSTATIC PRESSURE:	0.00		
Description	Duration	p1	p End
INITIAL FLOW	0.00	0.00	0.00
INITIAL SHUT-IN	0.00		0.00
FINAL FLOW	0.00	0.00	0.00
FINAL SHUT-IN	0.00		0.00
FINAL HYDROSTATIC PRESSURE:	0.00		

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE:	0.00		
Description	Duration	p1	p End
INITIAL FLOW	0.00	0.00	0.00
INITIAL SHUT-IN	0.00		0.00
FINAL HYDROSTATIC PRESSURE:	0.00		

DST #5
REC #11018
INSIDE

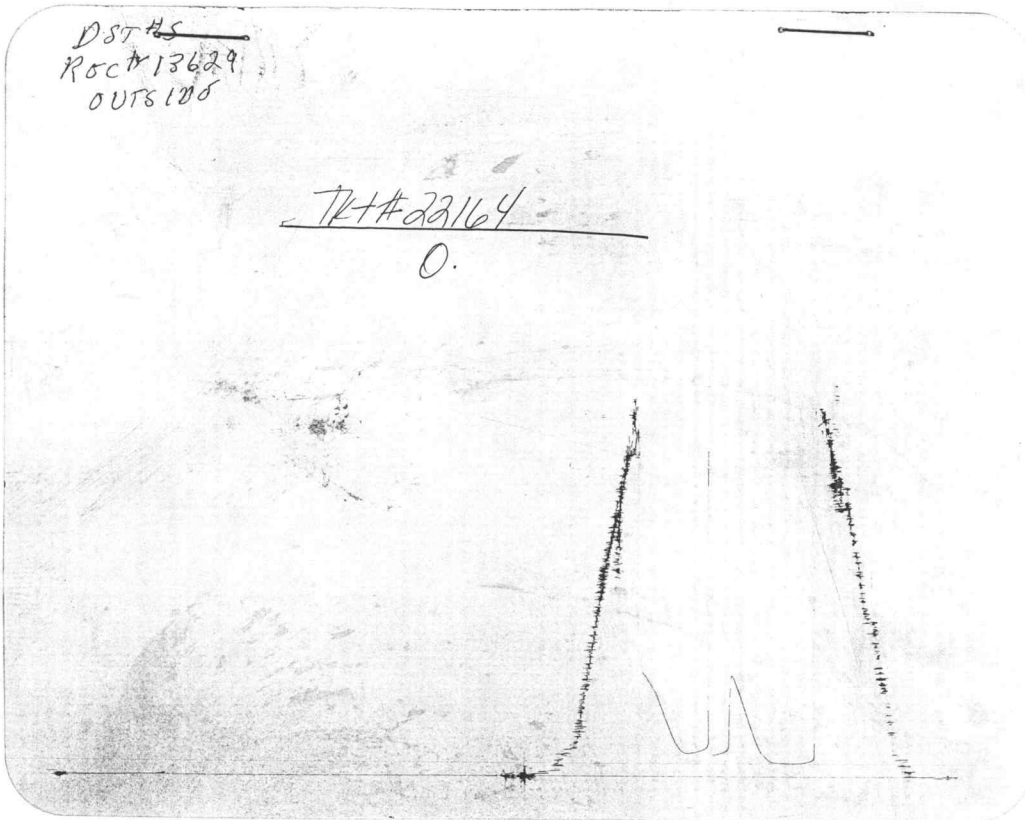
TRP # 22164
I.



Inside Recorder

DST #5
REC #13629
OUTSIDE

TRP # 22164
O.



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE	: 11/21/95	TICKET	: 22164
CUSTOMER	: PINTAIL PETROLEUM, LTD	LEASE	: WERHAHN
WELL	: #1	TEST: 5	GEOLOGIST: ISERN
ELEVATION	: 1975 GR	FORMATION	: ARBUCKLE
SECTION	: 36	TOWNSHIP	: 19S
RANGE	: 16W	COUNTY: RUSH	STATE : KS
GAUGE SN#	: 11018	RANGE : 4425	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3713.00 ft	TO:	3735.00 ft	TVD:	3735.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3716.0 ft		3732.0 ft		
TEMPERATURE:	110.0				
DRILL COLLAR LENGTH:	250.0 ft	I.D.:		2.200 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3443.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	22.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	3708.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3713.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	MALLARD DRLG RIG 1	VISCOSITY :	53.00 cp
MUD TYPE :	STARCH	WATER LOSS:	12.000 cc
WEIGHT :	9.200 ppg	SERIAL NUMBER:	
CHLORIDES :	57000 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BLOW 1.5 INCHES DECREAS-
ING TO SURFACE BLOW. FINAL FLOW PERIOD WEAK BLOW
DEAD IN 15 MINUTES. FLUSHED TOOL AND RECEIVED

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

WEAK BLOW - DEAD IN 10 MINUTES.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	100 FT GAS ABOVE FLUID
150.0	4.0	55.0	0.0	41.0	GASSY SL. OIL CUT MUD
120.0	5.0	10.0	15.0	70.0	GASSY SL OIL CUT WTRY MUD
0.0	0.0	0.0	0.0	0.0	CHLORIDES 22000 PPM

RATE INFORMATION

OIL VOLUME:	0.0639	STB	TOTAL FLOW TIME:	60.0000	min.
GAS VOLUME:	3.0706	SCF	AVERAGE OIL RATE:	12.6769	STB/D
MUD VOLUME:	0.7605	STB	AVERAGE WATER RATE:	9.1394	STB/D
WATER VOLUME:	0.0846	STB			
TOTAL FLUID :	0.9090	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1956.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	78.00	85.00
INITIAL SHUT-IN	30.00		580.00
FINAL FLOW	30.00	133.00	140.00
FINAL SHUT-IN	30.00		584.00

FINAL HYDROSTATIC PRESSURE: 1930.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1984.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	91.00	113.00
INITIAL SHUT-IN	27.00		600.00
FINAL FLOW	30.00	162.00	153.00
FINAL SHUT-IN	30.00		615.00

FINAL HYDROSTATIC PRESSURE: 1923.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 11/21/95	TICKET : 22164
CUSTOMER : PINTAIL PETROLEUM, LTD	LEASE : WERHAHN
WELL : #1	GEOLOGIST: ISERN
ELEVATION: 1975 GR	FORMATION: ARBUCKLE
SECTION : 36	TOWNSHIP : 19S
RANGE : 16W	STATE : KS
GAUGE SN#: 11018	CLOCK : 12
COUNTY: RUSH	
RANGE : 4425	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	91.00	91.00
5.00	91.00	0.00
10.00	91.00	0.00
15.00	91.00	0.00
20.00	93.00	2.00
25.00	98.00	5.00
30.00	113.00	15.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	136.00	136.00	0.00
6.00	151.00	15.00	0.00
9.00	162.00	11.00	0.00
12.00	207.00	45.00	0.00
15.00	273.00	66.00	0.00
18.00	382.00	109.00	0.00
21.00	493.00	111.00	0.00
24.00	564.00	71.00	0.00
27.00	600.00	36.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	162.00	162.00
5.00	140.00	-22.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
10.00	140.00	0.00
15.00	153.00	13.00
20.00	156.00	3.00
25.00	156.00	0.00
30.00	153.00	-3.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	162.00	162.00	0.00
6.00	224.00	62.00	0.00
9.00	291.00	67.00	0.00
12.00	376.00	85.00	0.00
15.00	449.00	73.00	0.00
18.00	500.00	51.00	0.00
21.00	542.00	42.00	0.00
24.00	580.00	38.00	0.00
27.00	608.00	28.00	0.00
30.00	615.00	7.00	0.00