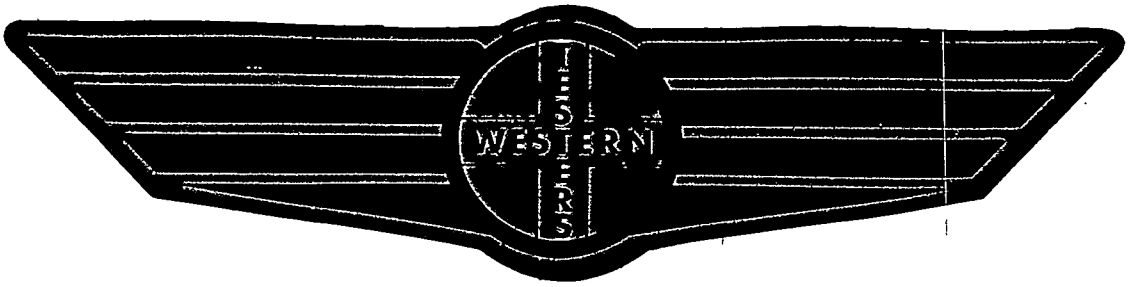
FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone 1-800-688-7021

COMPANY RITCHIE EXPLORATION, INC. LEASE & WELL NO. #1 SUNNY LEA SEC. 34 TWP. 8S RGE. 31W TEST NO. 1 DATE 10/30/92

DST REPORT

GENERAL INFORMATION

DATE	: 10/30/92	TICKET	: 19455
CUSTOMER	: RITCHIE EXPLORATION, INC.	LEASE	: SUNNY LEA
WELL	: 1 TEST: 1	GEOLOGIST	: KITT NOAH
ELEVATION	: 2984 KB	FORMATION	: TOR - LKC - TOP
SECTION	: 34	TOWNSHIP	: 8S
RANGE	: 31W COUNTY: THOMAS	STATE	: KS
GAUGE SN#	: 13547 RANGE : 4225	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3983.00 ft TO: 4042.00 ft TVD: 4042.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3986.0 ft 3989.0 ft
TEMPERATURE: 122.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	3963.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	59.0 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:	3978.0 ft	SIZE:	6.750 in
PACKER DEPTH:	3983.0 ft	SIZE:	6.750 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: MURFIN RIG 8		
MUD TYPE	: CHEMICAL	VISCOSITY :	47.00 cp
WEIGHT	: 9.400 ppg	WATER LOSS:	10.000 cc
CHLORIDES	: 2100 ppm		
JARS-MAKE	:	SERIAL NUMBER:	
DID WELL FLOW?	: NO	REVERSED OUT?:	NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK STEADY BLOW, 1/2 INCH IN WATER. FINAL FLOW PERIOD WEAK BLOW, 1/4 INCH IN WATER.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
15.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	60.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	0.2104 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.2104 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1930.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	42.00	42.00
INITIAL SHUT-IN	30.00		914.00
FINAL FLOW	30.00	42.00	42.00
FINAL SHUT-IN	30.00		841.00

FINAL HYDROSTATIC PRESSURE: 1930.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2023.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	64.00	52.00
INITIAL SHUT-IN	33.00		921.00
FINAL FLOW	30.00	56.00	56.00
FINAL SHUT-IN	36.00		855.00

FINAL HYDROSTATIC PRESSURE: 2001.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 10/30/92
CUSTOMER : RITCHIE EXPLORATION, INC.
WELL : 1 TEST: 1
ELEVATION: 2984 KB
SECTION : 34
RANGE : 31W COUNTY: THOMAS
GAUGE SN#: 13547 RANGE : 4225

TICKET : 19455
LEASE : SUNNY LEA
GEOLOGIST: KITT NOAH
FORMATION: TOR - LKC - TOP
TOWNSHIP : 8S
STATE : KS
CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	64.00	64.00
5.00	64.00	0.00
10.00	58.00	-6.00
15.00	55.00	-3.00
20.00	53.00	-2.00
25.00	52.00	-1.00
30.00	52.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	114.00	114.00	0.00
6.00	262.00	148.00	0.00
9.00	424.00	162.00	0.00
12.00	540.00	116.00	0.00
15.00	620.00	80.00	0.00
18.00	685.00	65.00	0.00
21.00	769.00	84.00	0.00
24.00	818.00	49.00	0.00
27.00	860.00	42.00	0.00
30.00	896.00	36.00	0.00
33.00	921.00	25.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P

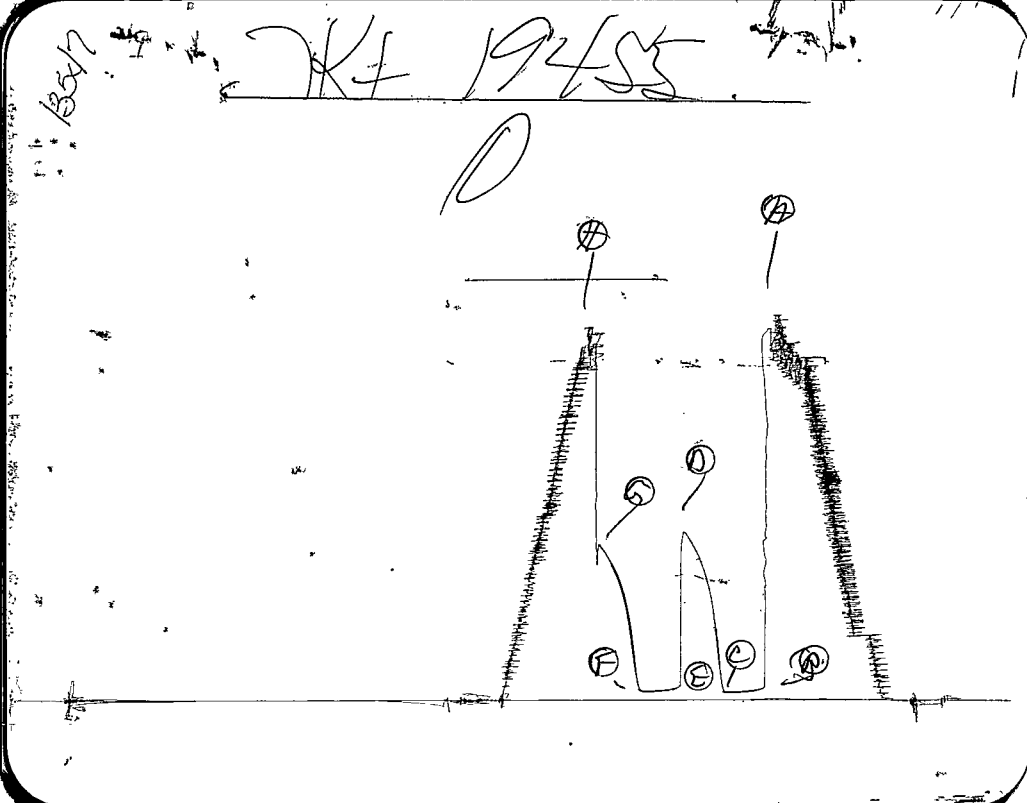
PRESSURE TRANSIENT REPORT (CONTINUED)

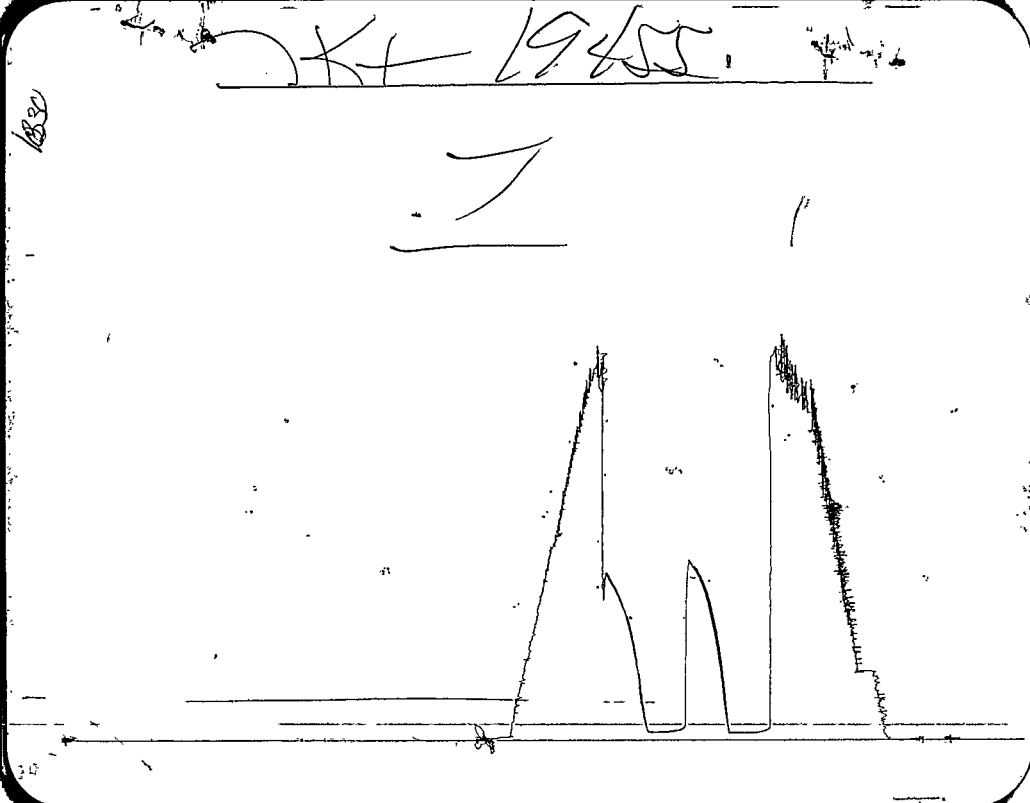
FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
0.00	56.00	56.00
5.00	56.00	0.00
10.00	56.00	0.00
15.00	56.00	0.00
20.00	56.00	0.00
25.00	56.00	0.00
30.00	56.00	0.00

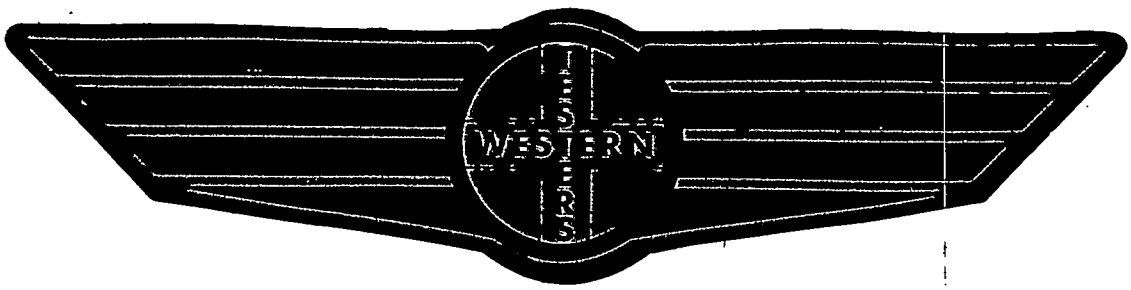
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	103.00	103.00	0.00
6.00	244.00	141.00	0.00
9.00	390.00	146.00	0.00
12.00	498.00	108.00	0.00
15.00	570.00	72.00	0.00
18.00	635.00	65.00	0.00
21.00	681.00	46.00	0.00
24.00	726.00	45.00	0.00
27.00	766.00	40.00	0.00
30.00	807.00	41.00	0.00
33.00	834.00	27.00	0.00
36.00	855.00	21.00	0.00


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FORMATION TEST REPORT



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P.O. Box 1599 Phone 1-800-688-7021

COMPANY RITCHIE EXPLORATION, INC. LEASE & WELL NO. #1 SUNNY LEA SEC. 34 TWP. 8S RGE. 31W TEST NO. 2 DATE 10/31/92

DST REPORT

GENERAL INFORMATION

DATE	: 10/31/92	TICKET	: 19456
CUSTOMER	: RITCHIE EXPLORATION, INC.	LEASE	: SUNNY LEA
WELL	: 1 TEST: 2	GEOLOGIST	: KITT NOAH
ELEVATION	: 2984 KB	FORMATION	: L KANSAS CITY -C&D
SECTION	: 34	TOWNSHIP	: 8S
RANGE	: 31S COUNTY: THOMAS	STATE	: KS
GAUGE SN#	: 10330 RANGE : 4000	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4042.00 ft TO: 4082.00 ft TVD: 4082.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 4045.0 ft 4048.0 ft
TEMPERATURE: 122.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	4022.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	40.0 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:	4037.0 ft	SIZE:	6.750 in
PACKER DEPTH:	4042.0 ft	SIZE:	6.750 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: MURFIN RIG 8		
MUD TYPE	: CHEMICAL	VISCOSITY :	47.00 cp
WEIGHT	: 9.400 ppg	WATER LOSS:	10.000 cc
CHLORIDES	: 2100 ppm		
JARS-MAKE	:	SERIAL NUMBER:	
DID WELL FLOW?	: NO	REVERSED OUT?	: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK STEADY BLOW, 1/2 INCH IN WATER. FINAL FLOW PERIOD WEAK BLOW, 1/4 INCH IN WATER.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
15.0	0.0	0.0	0.0	100.0	MUD W/A FEW SPOTS OF OIL
0.0	0.0	0.0	0.0	0.0	IN TOP OF TOOL-OIL < 1%

RATE INFORMATION

OIL VOLUME:	0.0000 STB		
GAS VOLUME:	0.0000 SCF	TOTAL FLOW TIME:	60.0000 min.
MUD VOLUME:	0.2104 STB	AVERAGE OIL RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB	AVERAGE WATER RATE:	0.0000 STB/D
TOTAL FLUID :	0.2104 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1941.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	30.00	30.00
INITIAL SHUT-IN	30.00		1260.00
FINAL FLOW	30.00	30.00	30.00
FINAL SHUT-IN	30.00		1230.00

FINAL HYDROSTATIC PRESSURE: 1931.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2024.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	32.00	34.00
INITIAL SHUT-IN	30.00		1273.00
FINAL FLOW	30.00	33.00	33.00
FINAL SHUT-IN	30.00		1243.00

FINAL HYDROSTATIC PRESSURE: 1991.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 10/31/92	TICKET	: 19456
CUSTOMER	: RITCHIE EXPLORATION, INC.	LEASE	: SUNNY LEA
WELL	: 1 TEST: 2	GEOLOGIST	: KITT NOAH
ELEVATION	: 2984 KB	FORMATION	: L KANSAS CITY -C&D
SECTION	: 34	TOWNSHIP	: 8S
RANGE	: 31S COUNTY: THOMAS	STATE	: KS
GAUGE SN#	: 10330 RANGE : 4000	CLOCK	: 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	32.00	32.00
5.00	32.00	0.00
10.00	32.00	0.00
15.00	32.00	0.00
20.00	32.00	0.00
25.00	33.00	1.00
30.00	34.00	1.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	39.00	39.00	0.00
6.00	150.00	111.00	0.00
9.00	427.00	277.00	0.00
12.00	747.00	320.00	0.00
15.00	937.00	190.00	0.00
18.00	1073.00	136.00	0.00
21.00	1175.00	102.00	0.00
24.00	1233.00	58.00	0.00
27.00	1258.00	25.00	0.00
30.00	1273.00	15.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	33.00	33.00

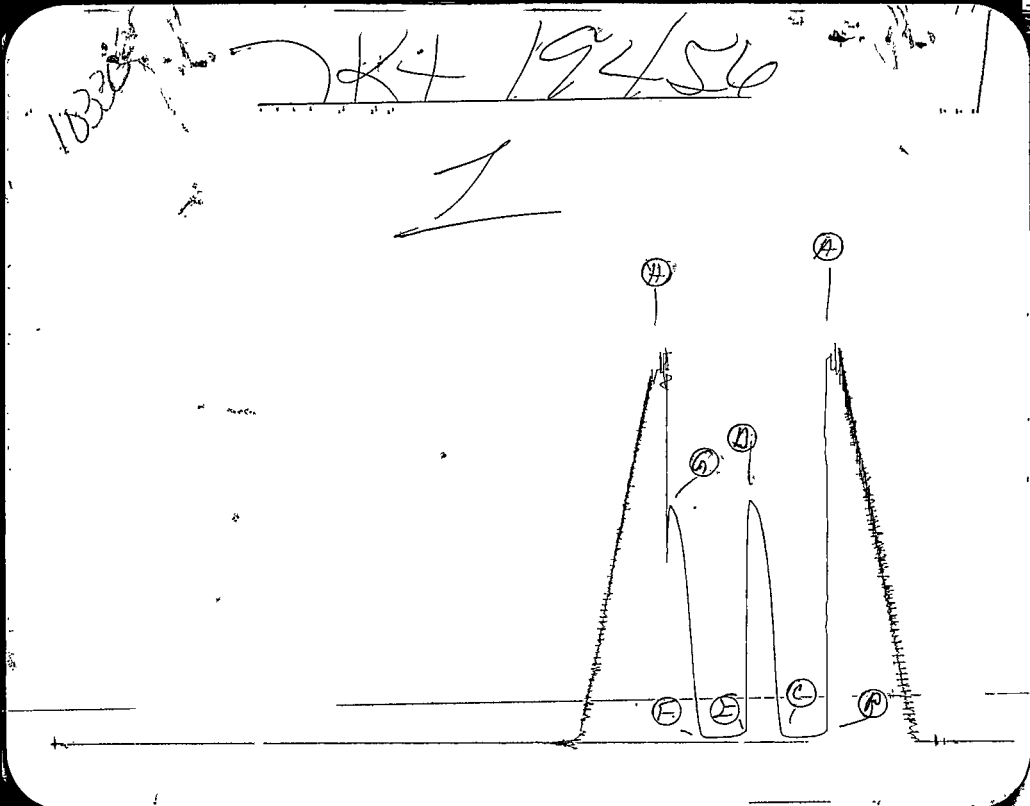
PRESSURE TRANSIENT REPORT (CONTINUED)

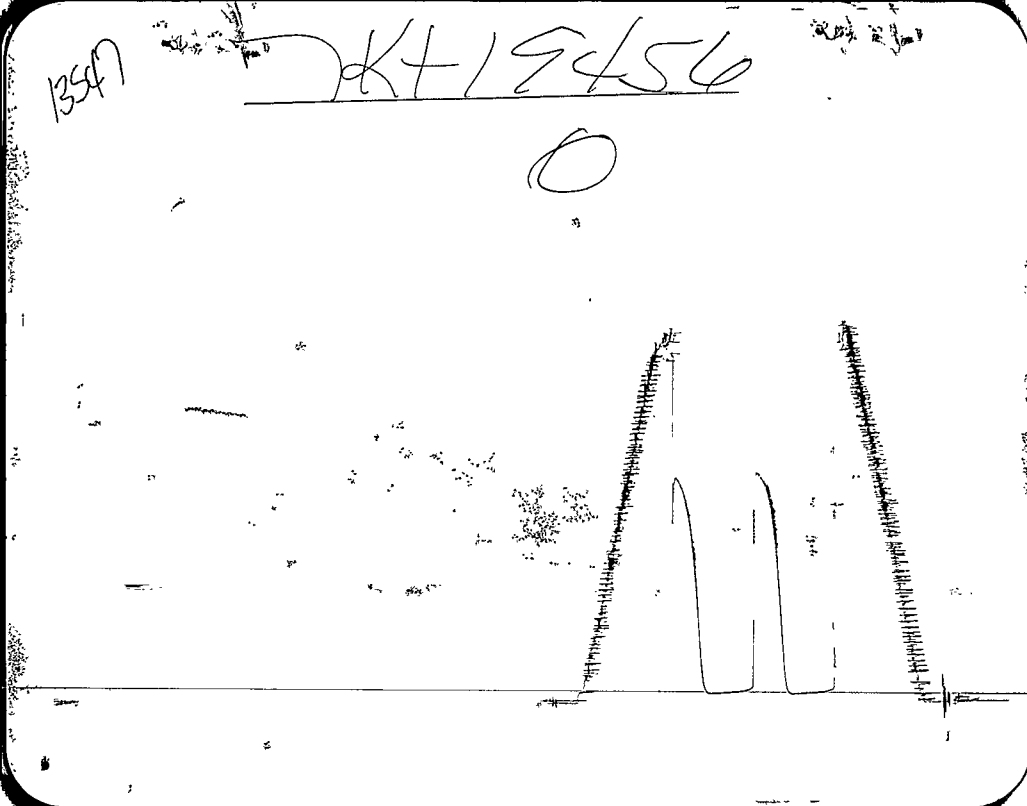
FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
5.00	33.00	0.00
10.00	33.00	0.00
15.00	33.00	0.00
20.00	33.00	0.00
25.00	33.00	0.00
30.00	33.00	0.00

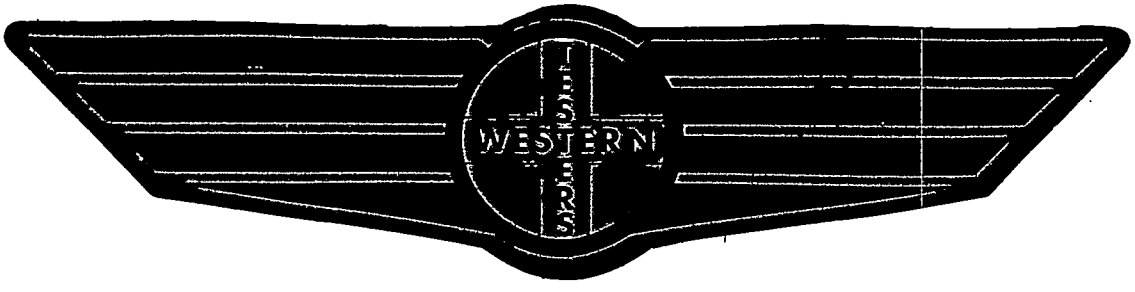
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	38.00	38.00	0.00
6.00	146.00	108.00	0.00
9.00	324.00	178.00	0.00
12.00	572.00	248.00	0.00
15.00	821.00	249.00	0.00
18.00	1022.00	201.00	0.00
21.00	1134.00	112.00	0.00
24.00	1204.00	70.00	0.00
27.00	1237.00	33.00	0.00
30.00	1243.00	6.00	0.00


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FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone **1-800-688-7021**

COMPANY RITCHIE EXPLORATION, INC. LEASE & WELL NO. #1 SUNNY LEA SEC. 34 TWP. 8S RGE. 31W TEST NO. 3 DATE 10/31/92

DST REPORT

GENERAL INFORMATION

DATE	: 10/31/92	TICKET	: 19457
CUSTOMER	: RITCHIE EXPLORATION, INC.	LEASE	: SUNNY LEA
WELL	: 1 TEST: 3	GEOLOGIST	: KITT NOAH
ELEVATION	: 2984 KB	FORMATION	: L KANSAS CITY -E&F
SECTION	: 34	TOWNSHIP	: 8S
RANGE	: 31S COUNTY: THOMAS	STATE	: KS
GAUGE SN#	: 10330 RANGE : 4000	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4080.00 ft TO: 4110.00 ft TVD: 4110.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 4083.0 ft 4086.0 ft
TEMPERATURE: 126.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	4060.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 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:	4075.0 ft	SIZE:	6.750 in
PACKER DEPTH:	4080.0 ft	SIZE:	6.750 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: MURFIN RIG 8		
MUD TYPE	: CHEMICAL	VISCOSITY :	44.00 cp
WEIGHT	: 9.400 ppg	WATER LOSS:	9.200 cc
CHLORIDES	: 1000 ppm		
JARS-MAKE	:	SERIAL NUMBER:	
DID WELL FLOW?	: NO	REVERSED OUT?:	NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW, BOTTOM OF BUCKET IN 25 MINUTES, MAX BLOW 18 INCH IN WATER. FINAL FLOW PERIOD STRONG BLOW, BOTTOM OF BUCKET IN 30

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment
MINUTES, MAX 15 INCH.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
1240.0	0.0	0.0	100.0	0.0	WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 52000 P.P.M.

RATE INFORMATION

OIL VOLUME:	0.0000 STB		
GAS VOLUME:	0.0000 SCF	TOTAL FLOW TIME:	85.0000 min.
MUD VOLUME:	0.0000 STB	AVERAGE OIL RATE:	0.0000 STB/D
WATER VOLUME:	17.3927 STB	AVERAGE WATER RATE:	294.6525 STB/D
TOTAL FLUID :	17.3927 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1991.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	71.00	325.00
INITIAL SHUT-IN	45.00		1170.00
FINAL FLOW	45.00	386.00	537.00
FINAL SHUT-IN	45.00		1149.00

FINAL HYDROSTATIC PRESSURE: 1991.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2050.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	99.00	329.00
INITIAL SHUT-IN	51.00		1183.00
FINAL FLOW	40.00	413.00	540.00
FINAL SHUT-IN	54.00		1161.00

FINAL HYDROSTATIC PRESSURE: 2009.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 10/31/92			TICKET	: 19457
CUSTOMER	: RITCHIE EXPLORATION, INC.			LEASE	: SUNNY LEA
WELL	: 1	TEST: 3		GEOLOGIST	: KITT NOAH
ELEVATION	: 2984 KB			FORMATION	: L KANSAS CITY -E&F
SECTION	: 34			TOWNSHIP	: 8S
RANGE	: 31S	COUNTY: THOMAS		STATE	: KS
GAUGE SN#	: 10330	RANGE : 4000		CLOCK	: 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	99.00	99.00
5.00	99.00	0.00
10.00	109.00	10.00
15.00	148.00	39.00
20.00	181.00	33.00
25.00	213.00	32.00
30.00	242.00	29.00
35.00	274.00	32.00
40.00	304.00	30.00
45.00	329.00	25.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	494.00	494.00	0.00
6.00	844.00	350.00	0.00
9.00	961.00	117.00	0.00
12.00	1029.00	68.00	0.00
15.00	1055.00	26.00	0.00
18.00	1078.00	23.00	0.00
21.00	1096.00	18.00	0.00
24.00	1109.00	13.00	0.00
27.00	1120.00	11.00	0.00
30.00	1132.00	12.00	0.00
33.00	1143.00	11.00	0.00
36.00	1154.00	11.00	0.00
39.00	1158.00	4.00	0.00
42.00	1167.00	9.00	0.00
45.00	1175.00	8.00	0.00
48.00	1178.00	3.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
51.00	1183.00	5.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	413.00	413.00
5.00	413.00	0.00
10.00	419.00	6.00
15.00	442.00	23.00
20.00	464.00	22.00
25.00	488.00	24.00
30.00	509.00	21.00
35.00	525.00	16.00
40.00	540.00	15.00

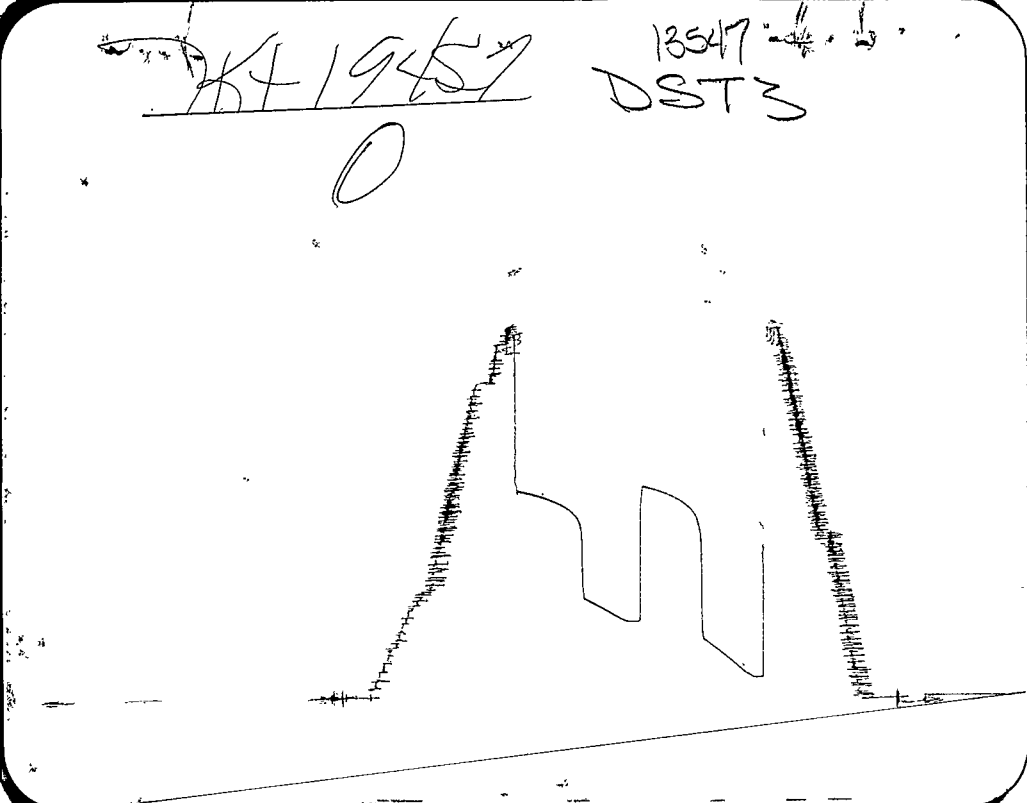
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	661.00	661.00	0.00
6.00	900.00	239.00	0.00
9.00	992.00	92.00	0.00
12.00	1030.00	38.00	0.00
15.00	1050.00	20.00	0.00
18.00	1064.00	14.00	0.00
21.00	1079.00	15.00	0.00
24.00	1087.00	8.00	0.00
27.00	1099.00	12.00	0.00
30.00	1107.00	8.00	0.00
33.00	1118.00	11.00	0.00
36.00	1126.00	8.00	0.00
39.00	1134.00	8.00	0.00
42.00	1140.00	6.00	0.00
45.00	1145.00	5.00	0.00
48.00	1151.00	6.00	0.00
51.00	1158.00	7.00	0.00
54.00	1161.00	3.00	0.00

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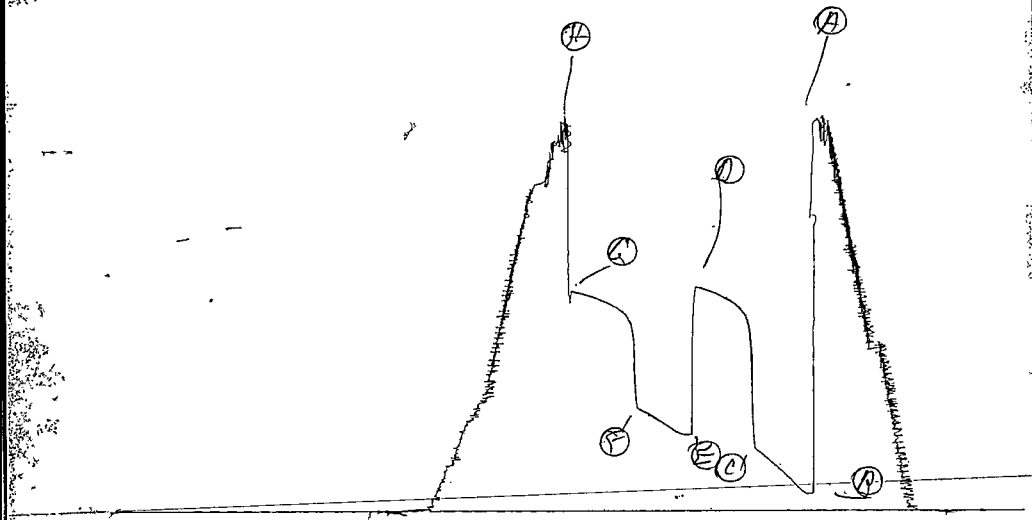


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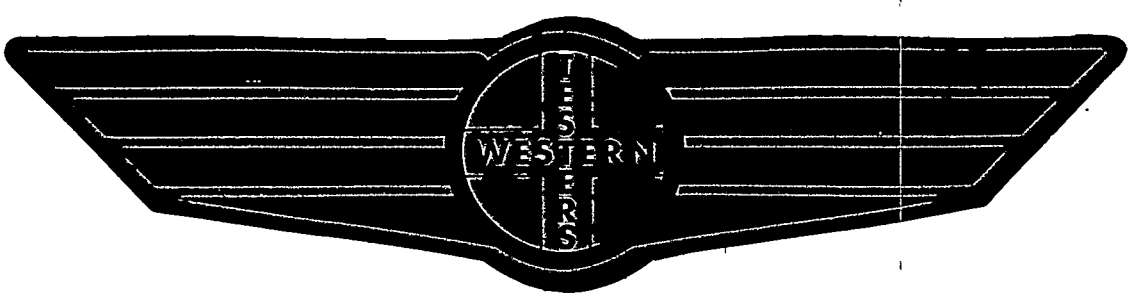
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FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone **1-800-688-7021**

COMPANY RITCHIE EXPLORATION, INC. LEASE & WELL NO. #1 SUNNY LEA SEC. 34 TWP. 8S RGE. 31WEST NO. 4 DATE 11/1/92

DST REPORT

GENERAL INFORMATION

DATE	: 11/1/92	TICKET	: 19458
CUSTOMER	: RITCHIE EXPLORATION, INC.	LEASE	: SUNNY LEA
WELL	: 1 TEST: 4	GEOLOGIST	: KITT NOAH
ELEVATION	: 2984 KB	FORMATION	: L KANSAS CITY
SECTION	: 34	TOWNSHIP	: 8S
RANGE	: 31S COUNTY: THOMAS	STATE	: KS
GAUGE SN#	: 10330 RANGE : 4000	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4141.00 ft TO: 4300.00 ft TVD: 4300.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 4144.0 ft 4147.0 ft
TEMPERATURE: 130.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	4121.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	159.0 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:	4136.0 ft	SIZE:	6.750 in
PACKER DEPTH:	4141.0 ft	SIZE:	6.750 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: MURFIN RIG 8		
MUD TYPE	: CHEMICAL	VISCOSITY :	44.00 cp
WEIGHT	: 9.400 ppg	WATER LOSS:	10.400 cc
CHLORIDES	: 1600 ppm		
JARS-MAKE	:	SERIAL NUMBER:	
DID WELL FLOW?	: NO	REVERSED OUT?	: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK BLOW, INCREASED TO 4 1/2 INCH IN WATER. FINAL FLOW PERIOD WEAK STEADY BLOW 1 INCH IN WATER.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
150.0	0.0	0.0	40.0	60.0	WATERY MUD
0.0	0.0	0.0	0.0	0.0	CHLORIDES 37000 P.P.M.

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	90.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	1.2624 STB	AVERAGE WATER RATE:	33.6633 STB/D
WATER VOLUME:	0.8416 STB		
TOTAL FLUID :	2.1040 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2032.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	30.00	30.00
INITIAL SHUT-IN	45.00		1349.00
FINAL FLOW	45.00	40.00	40.00
FINAL SHUT-IN	45.00		1339.00

FINAL HYDROSTATIC PRESSURE: 2001.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2091.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	38.00	45.00
INITIAL SHUT-IN	45.00		1356.00
FINAL FLOW	45.00	67.00	70.00
FINAL SHUT-IN	51.00		1338.00

FINAL HYDROSTATIC PRESSURE: 2039.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 11/1/92
CUSTOMER : RITCHIE EXPLORATION, INC.
WELL : 1 TEST: 4
ELEVATION: 2984 KB
SECTION : 34
RANGE : 31S COUNTY: THOMAS
GAUGE SN#: 10330 RANGE : 4000

TICKET : 19458
LEASE : SUNNY LEA
GEOLOGIST: KITT NOAH
FORMATION: L KANSAS CITY
TOWNSHIP : 8S
STATE : KS
CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	38.00	38.00
5.00	38.00	0.00
10.00	38.00	0.00
15.00	38.00	0.00
20.00	39.00	1.00
25.00	40.00	1.00
30.00	41.00	1.00
35.00	42.00	1.00
40.00	43.00	1.00
45.00	45.00	2.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	244.00	244.00	0.00
6.00	610.00	366.00	0.00
9.00	894.00	284.00	0.00
12.00	1114.00	220.00	0.00
15.00	1232.00	118.00	0.00
18.00	1283.00	51.00	0.00
21.00	1305.00	22.00	0.00
24.00	1320.00	15.00	0.00
27.00	1331.00	11.00	0.00
30.00	1338.00	7.00	0.00
33.00	1342.00	4.00	0.00
36.00	1347.00	5.00	0.00
39.00	1350.00	3.00	0.00
42.00	1353.00	3.00	0.00
45.00	1356.00	3.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

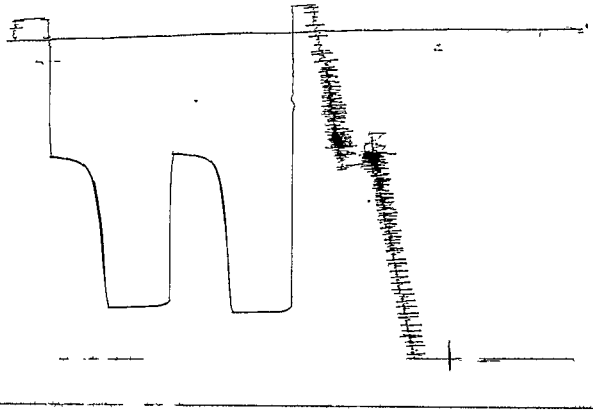
Time (min)	Pressure	Delta P
0.00	67.00	67.00
5.00	67.00	0.00
10.00	67.00	0.00
15.00	67.00	0.00
20.00	67.00	0.00
25.00	68.00	1.00
30.00	69.00	1.00
35.00	69.00	0.00
40.00	69.00	0.00
45.00	70.00	1.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	117.00	117.00	0.00
6.00	117.00	0.00	0.00
9.00	352.00	235.00	0.00
12.00	1023.00	671.00	0.00
15.00	1157.00	134.00	0.00
18.00	1224.00	67.00	0.00
21.00	1255.00	31.00	0.00
24.00	1283.00	28.00	0.00
27.00	1298.00	15.00	0.00
30.00	1308.00	10.00	0.00
33.00	1315.00	7.00	0.00
36.00	1321.00	6.00	0.00
39.00	1328.00	7.00	0.00
42.00	1330.00	2.00	0.00
45.00	1333.00	3.00	0.00
48.00	1335.00	2.00	0.00
51.00	1338.00	3.00	0.00

1547 DS44

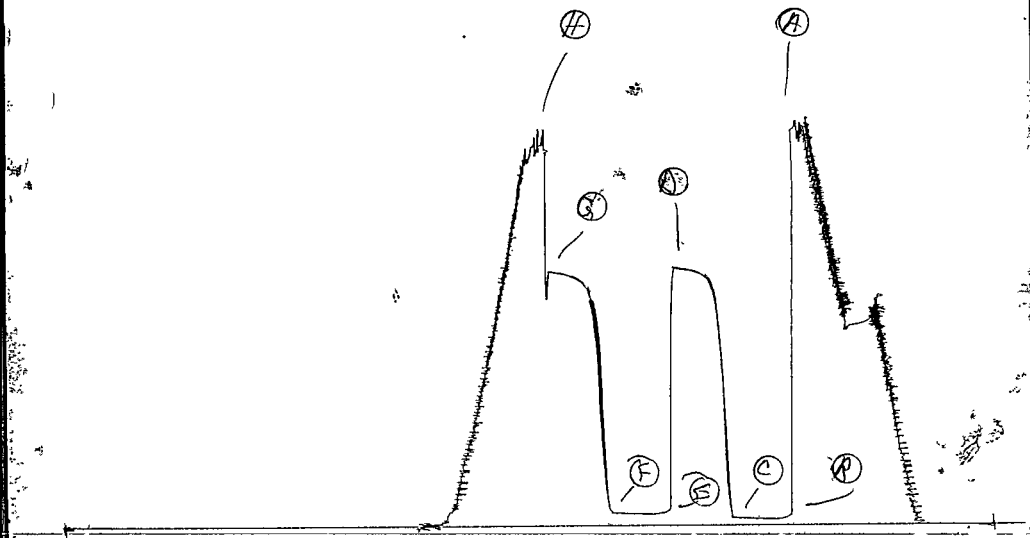
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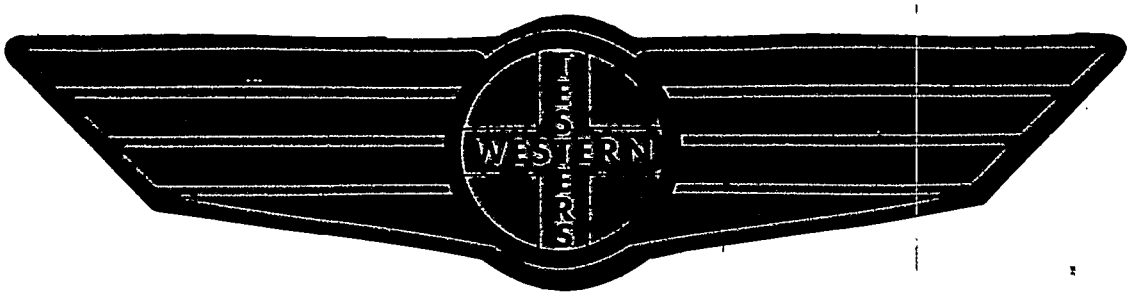
1630 DST 4

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FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone **1-800-688-7021**

COMPANY RITCHIE EXPLORATION, INC. LEASE & WELL NO. #1 SUNNY LEA SEC. 34 TWP. 8S RGE. 31W TEST NO. 5 DATE 11/3/92

DST REPORT

GENERAL INFORMATION

DATE	: 11/3/92	TICKET	: 19459
CUSTOMER	: RITCHIE EXPLORATION, INC.	LEASE	: SUNNY LEA
WELL	: 1 TEST: 5	GEOLOGIST	: KITT NOAH
ELEVATION	: 2984 KB	FORMATION	: ALTAMONT - PAWNEE
SECTION	: 34	TOWNSHIP	: 8S
RANGE	: 31S COUNTY: THOMAS	STATE	: KS
GAUGE SN#	: 10330 RANGE : 4000	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4313.00 ft TO: 4466.00 ft TVD: 4466.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 4316.0 ft 4319.0 ft
TEMPERATURE: 129.0

DRILL COLLAR LENGTH:	235.0 ft	I.D.:	2.200 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	4058.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	153.0 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:	4308.0 ft	SIZE:	6.750 in
PACKER DEPTH:	4313.0 ft	SIZE:	6.750 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON.	: MURFIN RIG 8		
MUD TYPE	: CHEMICAL	VISCOSITY :	41.00 cp
WEIGHT	: 9.400 ppg	WATER LOSS:	11.000 cc
CHLORIDES	: 1800 ppm		
JARS-MAKE	:	SERIAL NUMBER:	
DID WELL FLOW?	: NO	REVERSED OUT?:	NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK STEADY BLOW, 3/4 INCH IN WATER. FINAL FLOW PERIOD WEAK STEADY BLOW, 1/2 INCH IN WATER.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
20.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000 STB		
GAS VOLUME:	0.0000 SCF	TOTAL FLOW TIME:	55.0000 min.
MUD VOLUME:	0.0940 STB	AVERAGE OIL RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB	AVERAGE WATER RATE:	0.0000 STB/D
TOTAL FLUID :	0.0940 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2182.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	40.00	40.00
INITIAL SHUT-IN	30.00		406.00
FINAL FLOW	30.00	50.00	50.00
FINAL SHUT-IN	30.00		345.00

FINAL HYDROSTATIC PRESSURE: 2112.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2248.00

Description	Duration	p1	p End
INITIAL FLOW	25.00	48.00	48.00
INITIAL SHUT-IN	30.00		412.00
FINAL FLOW	30.00	53.00	53.00
FINAL SHUT-IN	33.00		345.00

FINAL HYDROSTATIC PRESSURE: 2152.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 11/3/92	TICKET	: 19459
CUSTOMER	: RITCHIE EXPLORATION, INC.	LEASE	: SUNNY LEA
WELL	: 1 TEST: 5	GEOLOGIST	: KITT NOAH
ELEVATION	: 2984 KB	FORMATION	: ALTAMONT - PAWNEE
SECTION	: 34	TOWNSHIP	: 8S
RANGE	: 31S COUNTY: THOMAS	STATE	: KS
GAUGE SN#	: 10330 RANGE : 4000	CLOCK	: 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	48.00	48.00
5.00	48.00	0.00
10.00	48.00	0.00
15.00	48.00	0.00
20.00	48.00	0.00
25.00	48.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	49.00	49.00	0.00
6.00	56.00	7.00	0.00
9.00	69.00	13.00	0.00
12.00	97.00	28.00	0.00
15.00	136.00	39.00	0.00
18.00	185.00	49.00	0.00
21.00	234.00	49.00	0.00
24.00	286.00	52.00	0.00
27.00	345.00	59.00	0.00
30.00	412.00	67.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	53.00	53.00
5.00	53.00	0.00

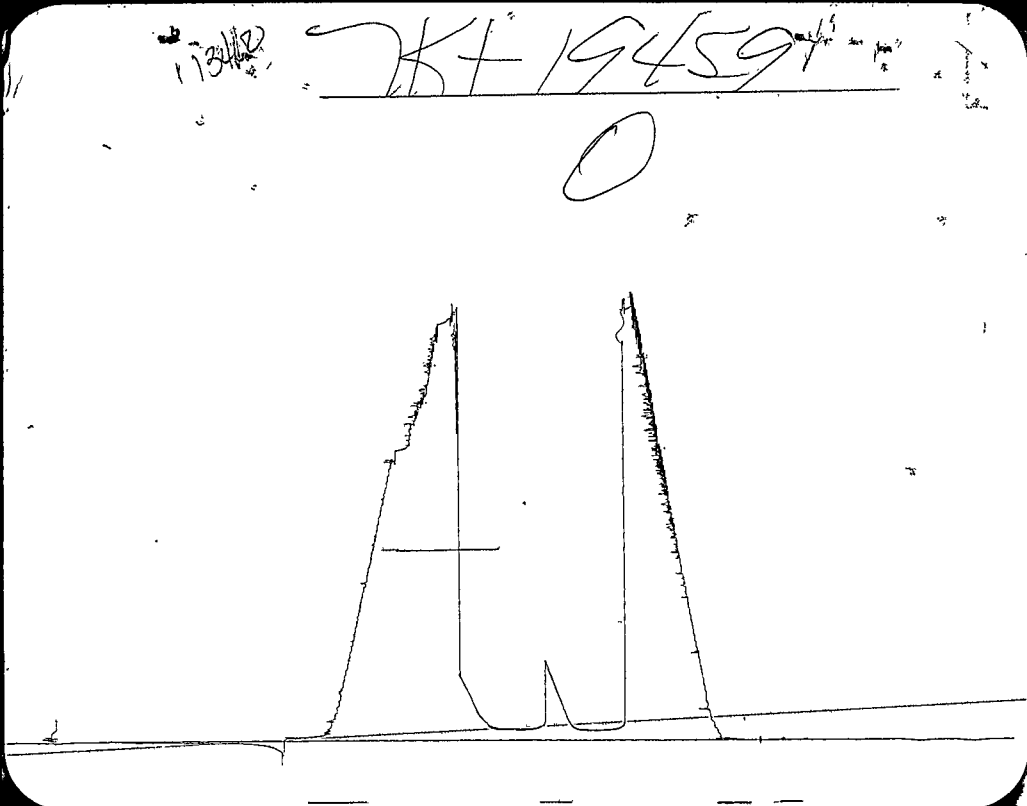
PRESSURE TRANSIENT REPORT (CONTINUED)

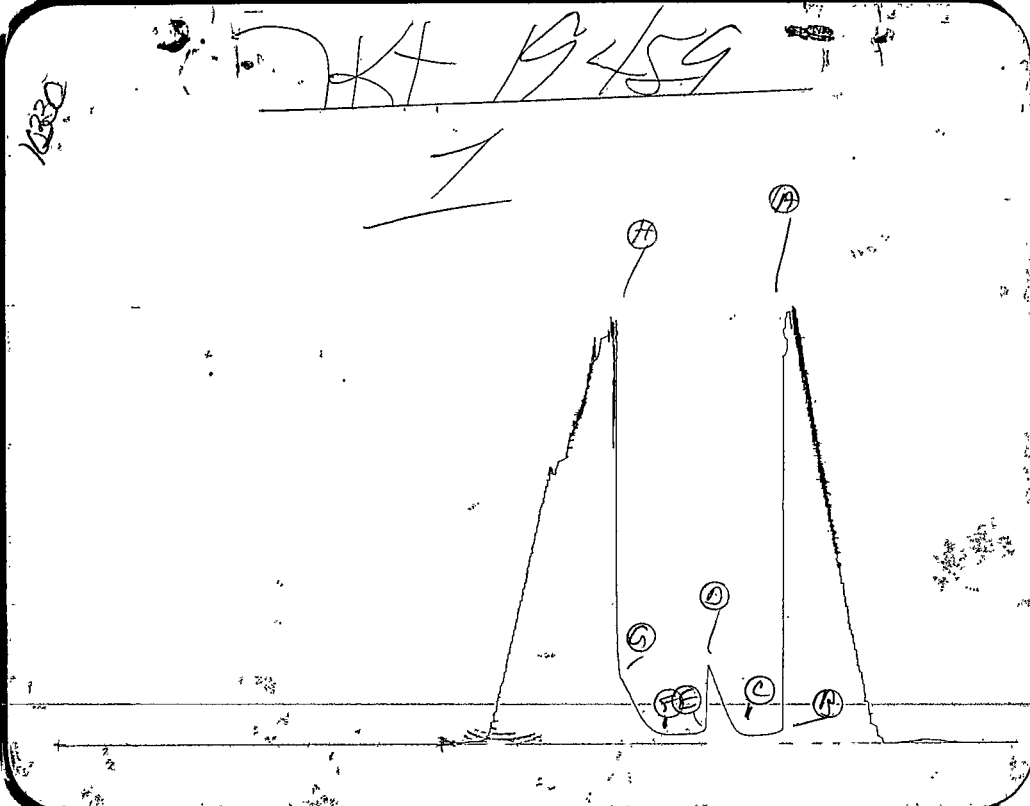
FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
10.00	53.00	0.00
15.00	53.00	0.00
20.00	53.00	0.00
25.00	53.00	0.00
30.00	53.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	56.00	56.00	0.00
6.00	62.00	6.00	0.00
9.00	73.00	11.00	0.00
12.00	91.00	18.00	0.00
15.00	113.00	22.00	0.00
18.00	140.00	27.00	0.00
21.00	180.00	40.00	0.00
24.00	222.00	42.00	0.00
27.00	268.00	46.00	0.00
30.00	301.00	33.00	0.00
33.00	345.00	44.00	0.00




A
A
B
C
D
E