

FORMATION

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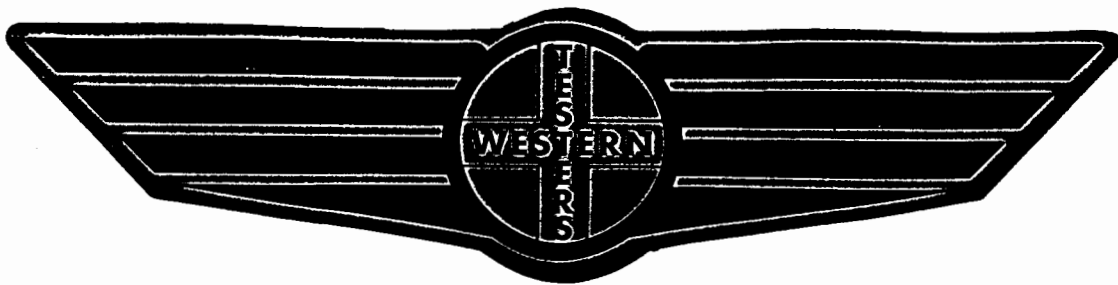
MAR 4 1994

TEST

REPORT

COMPANY HARRIS OIL & GAS COMPANY LEASE & WELL NO. #1-9 ROTH SEC. 9 TWP. 23S RGE. 34W TEST NO. 1 DATE 8/13/93

API#15-055-21234



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

DST REPORT

GENERAL INFORMATION

DATE : 8/13/93
CUSTOMER : HARRIS OIL & GAS COMPANY
WELL : #1-9 TEST: 1
ELEVATION: 2949 GL
SECTION : 9
RANGE : 34W COUNTY: FINNEY
GAUGE SN#: 3849 RANGE : 4200
TICKET : 19094
LEASE : ROTH
GEOLOGIST: FRANKLIN
FORMATION: LANSING D
TOWNSHIP : 23S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3901.00 ft TO: 3924.00 ft TVD: 3952.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3908.0 ft 3911.0 ft
TEMPERATURE: 104.0
DRILL COLLAR LENGTH: 558.0 ft I.D.: 2.250 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 3311.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 32.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 23.0 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: 3896.0 ft SIZE: 6.630 in
PACKER DEPTH: 3901.0 ft SIZE: 6.630 in
PACKER DEPTH: 3924.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : ALLEN RIG 5
MUD TYPE : CHEMICAL VISCOSITY : 38.00 cp
WEIGHT : 9.100 ppg WATER LOSS: 18.400 cc
CHLORIDES : 4100 ppm
JARS-MAKE : WTC SERIAL NUMBER: 402
DID WELL FLOW?: NO REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK TO STRONG BLOW - BOTTOM
OF BUCKET IN 4 MINUTES.
FINAL FLOW PERIOD WEAK TO STRONG BLOW IN 6 MINUTES

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

TAILPIPE 28' OF 5.5" TOTAL 28'

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	235 FT GAS ABOVE FLUID
425.0	100.0	0.0	0.0	0.0	CLEAN OIL
0.0	0.0	0.0	0.0	0.0	GRAVITY 33 @ 60 DEGREES F
180.0	27.0	38.0	27.0	8.0	MUD & WATER CUT GASSY OIL
720.0	0.0	0.0	100.0	0.0	SALTWATER
0.0	0.0	0.0	0.0	0.0	RW .17 @ 65 DEGREES F
0.0	0.0	0.0	0.0	0.0	CHLORIDES 43000 PPM

RATE INFORMATION

OIL VOLUME:	6.6429 STB	TOTAL FLOW TIME:	85.0000 min.
GAS VOLUME:	5.3870 SCF	AVERAGE OIL RATE:	114.2491 STB/D
MUD VOLUME:	0.2020 STB	AVERAGE WATER RATE:	98.2401 STB/D
WATER VOLUME:	5.6979 STB		
TOTAL FLUID :	12.5428 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1924.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	106.00	329.00
INITIAL SHUT-IN	60.00		1000.00
FINAL FLOW	60.00	363.00	564.00
FINAL SHUT-IN	120.00		1000.00

FINAL HYDROSTATIC PRESSURE: 1895.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1930.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	30.00	109.00	331.00
INITIAL SHUT-IN	57.00		1007.00
FINAL FLOW	55.00	378.00	566.00
FINAL SHUT-IN	117.00		1004.00

FINAL HYDROSTATIC PRESSURE: 1894.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 8/13/93	TICKET : 19094
CUSTOMER : HARRIS OIL & GAS COMPANY	LEASE : ROTH
WELL : #1-9 TEST: 1	GEOLOGIST: FRANKLIN
ELEVATION: 2949 GL	FORMATION: LANSING D
SECTION : 9	TOWNSHIP : 23S
RANGE : 34W COUNTY: FINNEY	STATE : KS
GAUGE SN#: 3849 RANGE : 4200	CLOCK : 12

INITIAL FLOW

<u>Time</u> (min)	<u>Pressure</u>	<u>Delta P</u>
0.00	109.00	109.00
5.00	142.00	33.00
10.00	212.00	70.00
15.00	263.00	51.00
20.00	289.00	26.00
25.00	312.00	23.00
30.00	331.00	19.00

INITIAL SHUT IN

<u>Time</u> (min)	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	824.00	824.00	0.00
6.00	891.00	67.00	0.00
9.00	916.00	25.00	0.00
12.00	939.00	23.00	0.00
15.00	953.00	14.00	0.00
18.00	963.00	10.00	0.00
21.00	974.00	11.00	0.00
24.00	982.00	8.00	0.00
27.00	986.00	4.00	0.00
30.00	990.00	4.00	0.00
33.00	993.00	3.00	0.00
36.00	996.00	3.00	0.00
39.00	998.00	2.00	0.00
42.00	1000.00	2.00	0.00
45.00	1002.00	2.00	0.00
48.00	1004.00	2.00	0.00
51.00	1005.00	1.00	0.00
54.00	1006.00	1.00	0.00
57.00	1007.00	1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	378.00	378.00
5.00	378.00	0.00
10.00	396.00	18.00
15.00	418.00	22.00
20.00	440.00	22.00
25.00	459.00	19.00
30.00	479.00	20.00
35.00	498.00	19.00
40.00	515.00	17.00
45.00	533.00	18.00
50.00	548.00	15.00
55.00	566.00	18.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	882.00	882.00	0.00
6.00	907.00	25.00	0.00
9.00	928.00	21.00	0.00
12.00	940.00	12.00	0.00
15.00	950.00	10.00	0.00
18.00	959.00	9.00	0.00
21.00	967.00	8.00	0.00
24.00	972.00	5.00	0.00
27.00	975.00	3.00	0.00
30.00	979.00	4.00	0.00
33.00	982.00	3.00	0.00
36.00	985.00	3.00	0.00
39.00	987.00	2.00	0.00
42.00	989.00	2.00	0.00
45.00	991.00	2.00	0.00
48.00	992.00	1.00	0.00
51.00	993.00	1.00	0.00
54.00	994.00	1.00	0.00
57.00	995.00	1.00	0.00
60.00	996.00	1.00	0.00
63.00	997.00	1.00	0.00
66.00	998.00	1.00	0.00
69.00	999.00	1.00	0.00
72.00	1000.00	1.00	0.00
75.00	1000.00	0.00	0.00
78.00	1001.00	1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
81.00	1001.00	0.00	0.00
84.00	1002.00	1.00	0.00
87.00	1002.00	0.00	0.00
90.00	1003.00	1.00	0.00
93.00	1003.00	0.00	0.00
96.00	1004.00	1.00	0.00
99.00	1004.00	0.00	0.00
102.00	1004.00	0.00	0.00
105.00	1004.00	0.00	0.00
108.00	1004.00	0.00	0.00
111.00	1004.00	0.00	0.00
114.00	1004.00	0.00	0.00
117.00	1004.00	0.00	0.00

FLUID SAMPLE REPORT

GENERAL INFORMATION

DATE : 8/13/93
CUSTOMER : HARRIS OIL & GAS COMPANY
WELL : #1-9 TEST: 1
ELEVATION: 2949 GL
SECTION : 9
RANGE : 34W COUNTY: FINNEY
GAUGE SN#: 3849 RANGE : 4200
TICKET : 19094
LEASE : ROTH
GEOLOGIST: FRANKLIN
FORMATION: LANSING D
TOWNSHIP : 23S
STATE : KS
CLOCK : 12

SAMPLE INFORMATION

PRESSURE IN SAMPLER: 88.00 PSIG BHT: 104.0 DEG F
TOTAL VOLUME OF SAMPLER: 3150.00 cc
TOTAL VOLUME OF SAMPLE: 2800.00 cc
OIL: 1300.00 cc
WATER: 1500.00 cc
MUD: 0.00 cc
GAS: 0.85 cc
OTHER: 0.00 cc

RESISTIVITY

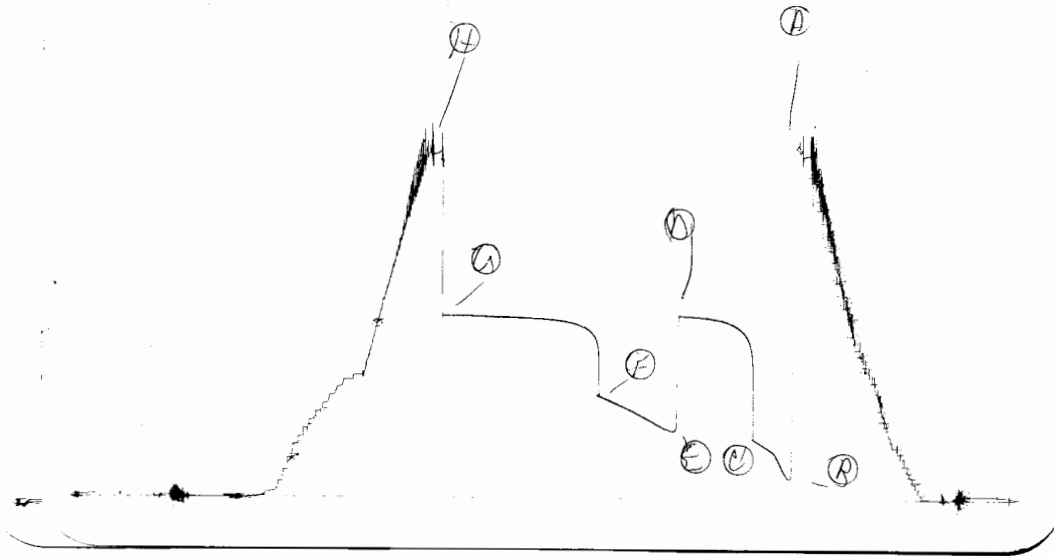
DRILLING MUD: .17 @ 65 DEGREES F CHLORIDE CONTENT: 43000.00 ppm
MUD PIT SAMPLE: 1.0 @ 60 DEGREES F CHLORIDE CONTENT: 7000.00 ppm
GAS/OIL RATIO: GRAVITY: 33 API @ 60 DEGREES F
WHERE WAS SAMPLE DRAINED: ON LOCATION
REMARKS:

KT19094

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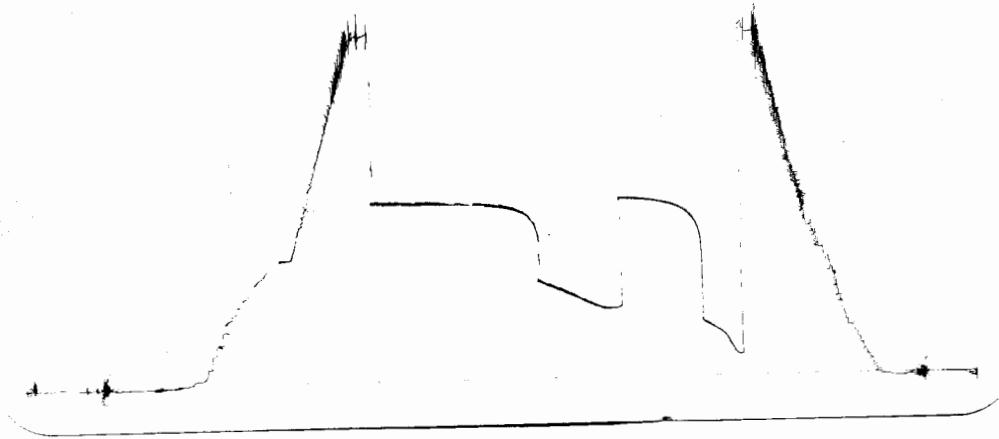
Inside Recorder

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Outside Recorder

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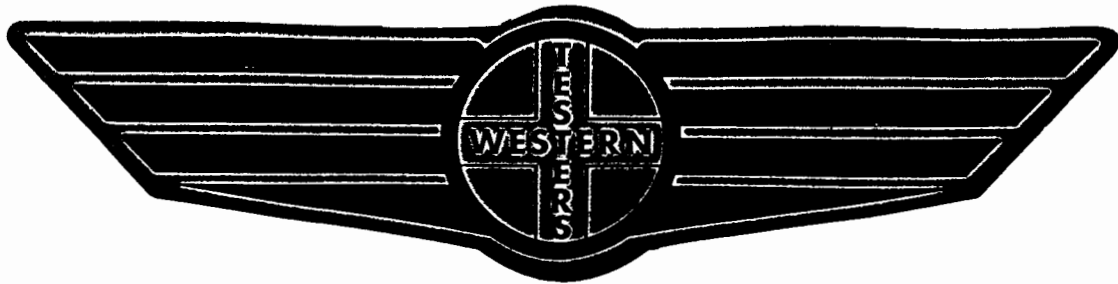
MAR 4 1994

TEST

REPORT

API # 15-055-21234

COMPANY HARRIS OIL & GAS COMPANY LEASE & WELL NO. #1-9 ROTH SEC. 9 TWP. 23S RGE. 34W TEST NO. 2 DATE 8/14/93



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1-800-688-7021

DST REPORT

GENERAL INFORMATION

DATE	: 8/14/93	TICKET	: 19095
CUSTOMER	: HARRIS OIL & GAS COMPANY	LEASE	: ROTH
WELL	: #1-9	TEST: 2	GEOLOGIST: FRANKLIN
ELEVATION	: 2949 GL	FORMATION	: LANSING H
SECTION	: 9	TOWNSHIP	: 23S
RANGE	: 34W	COUNTY: FINNEY	STATE : KS
GAUGE SN#	: 3849	RANGE : 4200	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	4030.00 ft	TO:	4065.00 ft	TVD:	4065.0 ft	
DEPTH OF SELECTIVE ZONE:					TEST TYPE:	OIL
DEPTH OF RECORDERS:	4052.0 ft	4055.0 ft				
TEMPERATURE:	107.0					
DRILL COLLAR LENGTH:	558.0 ft	I.D.:	2.250 in			
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in			
DRILL PIPE LENGTH :	3440.0 ft	I.D.:	3.800 in			
TEST TOOL LENGTH :	32.0 ft	TOOL SIZE :	5.500 in			
ANCHOR LENGTH :	35.0 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:	4025.0 ft	SIZE:	6.630 in			
PACKER DEPTH:	4030.0 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. :	ALLEN RIG 5	VISCOSITY :	42.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	14.400 cc
WEIGHT :	9.200 ppg	SERIAL NUMBER:	402
CHLORIDES :	3200 ppm	REVERSED OUT?:	NO
JARS-MAKE :	WTC		
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK TO STRONG BLOW - BOTTOM
OF BUCKET IN 6 MINUTES.
FINAL FLOW PERIOD SURFACE BLOW TO STRONG BLOW IN

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

12 MINUTES.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	50 FT GAS ABOVE FLUID
160.0	100.0	0.0	0.0	0.0	CLEAN OIL
0.0	0.0	0.0	0.0	0.0	26 GRAVITY @ 60 DEGREES F
350.0	43.0	14.0	23.0	20.0	MUD & WATER CUT GASSY OIL
500.0	0.0	0.0	100.0	0.0	SALTWATER
0.0	0.0	0.0	0.0	0.0	RW .24 @ 70 DEGREES F
0.0	0.0	0.0	0.0	0.0	CHLORIDES 27000 PPM

RATE INFORMATION

OIL VOLUME:	4.1280 STB	TOTAL FLOW TIME:	90.0000 min.
GAS VOLUME:	3.4438 SCF	AVERAGE OIL RATE:	75.1817 STB/D
MUD VOLUME:	0.8762 STB	AVERAGE WATER RATE:	60.3470 STB/D
WATER VOLUME:	3.4663 STB		
TOTAL FLUID :	8.4705 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1966.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	97.00	300.00
INITIAL SHUT-IN	60.00		1033.00
FINAL FLOW	60.00	325.00	455.00
FINAL SHUT-IN	120.00		1025.00

FINAL HYDROSTATIC PRESSURE: 1937.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1991.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	104.00	311.00
INITIAL SHUT-IN	57.00		1047.00
FINAL FLOW	60.00	346.00	463.00
FINAL SHUT-IN	120.00		1033.00
FINAL HYDROSTATIC PRESSURE:	1967.00		

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 8/14/93	TICKET : 19095
CUSTOMER : HARRIS OIL & GAS COMPANY	LEASE : ROTH
WELL : #1-9 TEST: 2	GEOLOGIST: FRANKLIN
ELEVATION: 2949 GL	FORMATION: LANSING H
SECTION : 9	TOWNSHIP : 23S
RANGE : 34W COUNTY: FINNEY	STATE : KS
GAUGE SN#: 3849 RANGE : 4200	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	104.00	104.00
5.00	134.00	30.00
10.00	184.00	50.00
15.00	243.00	59.00
20.00	285.00	42.00
25.00	300.00	15.00
30.00	311.00	11.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	784.00	784.00	0.00
6.00	854.00	70.00	0.00
9.00	892.00	38.00	0.00
12.00	921.00	29.00	0.00
15.00	941.00	20.00	0.00
18.00	959.00	18.00	0.00
21.00	972.00	13.00	0.00
24.00	982.00	10.00	0.00
27.00	994.00	12.00	0.00
30.00	1002.00	8.00	0.00
33.00	1008.00	6.00	0.00
36.00	1018.00	10.00	0.00
39.00	1023.00	5.00	0.00
42.00	1027.00	4.00	0.00
45.00	1031.00	4.00	0.00
48.00	1035.00	4.00	0.00
51.00	1039.00	4.00	0.00
54.00	1044.00	5.00	0.00
57.00	1047.00	3.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	346.00	346.00
5.00	346.00	0.00
10.00	354.00	8.00
15.00	365.00	11.00
20.00	377.00	12.00
25.00	390.00	13.00
30.00	403.00	13.00
35.00	414.00	11.00
40.00	427.00	13.00
45.00	439.00	12.00
50.00	450.00	11.00
55.00	459.00	9.00
60.00	463.00	4.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	767.00	767.00	0.00
6.00	816.00	49.00	0.00
9.00	848.00	32.00	0.00
12.00	871.00	23.00	0.00
15.00	887.00	16.00	0.00
18.00	903.00	16.00	0.00
21.00	917.00	14.00	0.00
24.00	926.00	9.00	0.00
27.00	935.00	9.00	0.00
30.00	945.00	10.00	0.00
33.00	952.00	7.00	0.00
36.00	956.00	4.00	0.00
39.00	961.00	5.00	0.00
42.00	967.00	6.00	0.00
45.00	972.00	5.00	0.00
48.00	976.00	4.00	0.00
51.00	980.00	4.00	0.00
54.00	984.00	4.00	0.00
57.00	989.00	5.00	0.00
60.00	994.00	5.00	0.00
63.00	997.00	3.00	0.00
66.00	1000.00	3.00	0.00
69.00	1002.00	2.00	0.00
72.00	1004.00	2.00	0.00
75.00	1006.00	2.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
78.00	1008.00	2.00	0.00
81.00	1010.00	2.00	0.00
84.00	1012.00	2.00	0.00
87.00	1015.00	3.00	0.00
90.00	1018.00	3.00	0.00
93.00	1020.00	2.00	0.00
96.00	1022.00	2.00	0.00
99.00	1024.00	2.00	0.00
102.00	1026.00	2.00	0.00
105.00	1028.00	2.00	0.00
108.00	1029.00	1.00	0.00
111.00	1030.00	1.00	0.00
114.00	1031.00	1.00	0.00
117.00	1032.00	1.00	0.00
120.00	1033.00	1.00	0.00

FLUID SAMPLE REPORT

GENERAL INFORMATION

DATE : 8/14/93
CUSTOMER : HARRIS OIL & GAS COMPANY
WELL : #1-9 TEST: 2
ELEVATION: 2949 GL
SECTION : 9
RANGE : 34W COUNTY: FINNEY
GAUGE SN#: 3849 RANGE : 4200
TICKET : 19095
LEASE : ROTH
GEOLOGIST: FRANKLIN
FORMATION: LANSING H
TOWNSHIP : 23S
STATE : KS
CLOCK : 12

SAMPLE INFORMATION

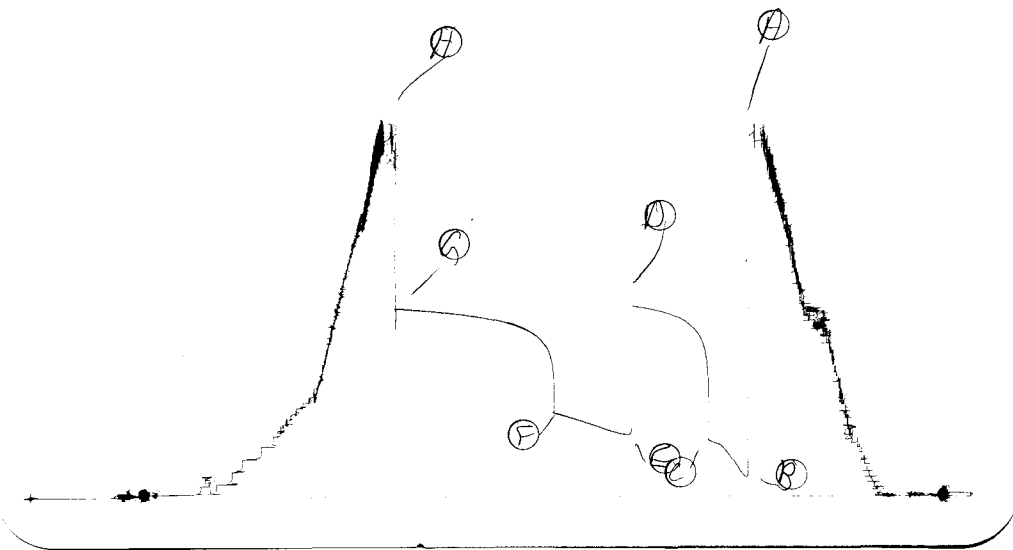
PRESSURE IN SAMPLER: 44.00 PSIG BHT: 107.0 DEG F
TOTAL VOLUME OF SAMPLER: 3150.00 cc
TOTAL VOLUME OF SAMPLE: 2900.00 cc
OIL: 522.00 cc
WATER: 2378.00 cc
MUD: 0.00 cc
GAS: 0.44 cc
OTHER: 0.00 cc

RESISTIVITY

DRILLING MUD: .24 @ 70 DEGREES F CHLORIDE CONTENT: 27000.00 ppm
MUD PIT SAMPLE: 1.2 @ 65 DEGREES F CHLORIDE CONTENT: 5300.00 ppm
GAS/OIL RATIO: GRAVITY: 26 API @ 60 DEGREES F
WHERE WAS SAMPLE DRAINED: ON LOCATION
REMARKS:

KT 19095 #3849 DST 2 2/

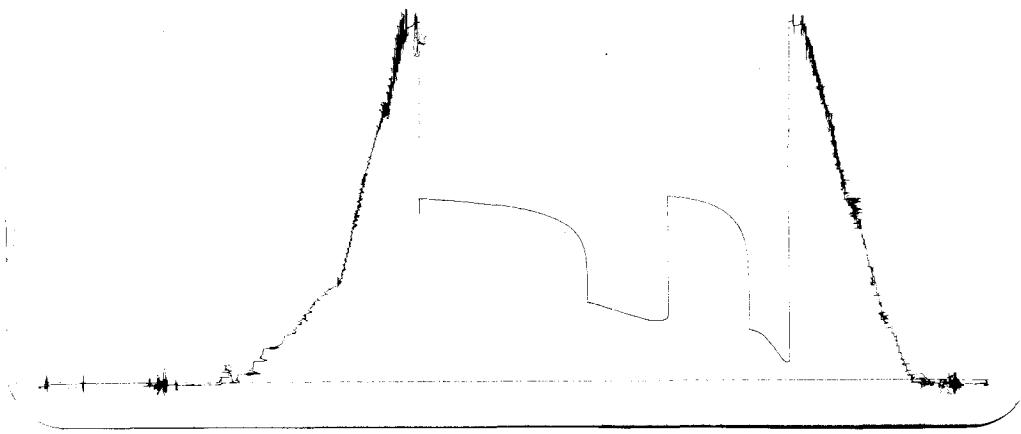
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Inside Recorder

KT 19095 2604 DST 2 2/

O



Outside Recorder

FORMATION

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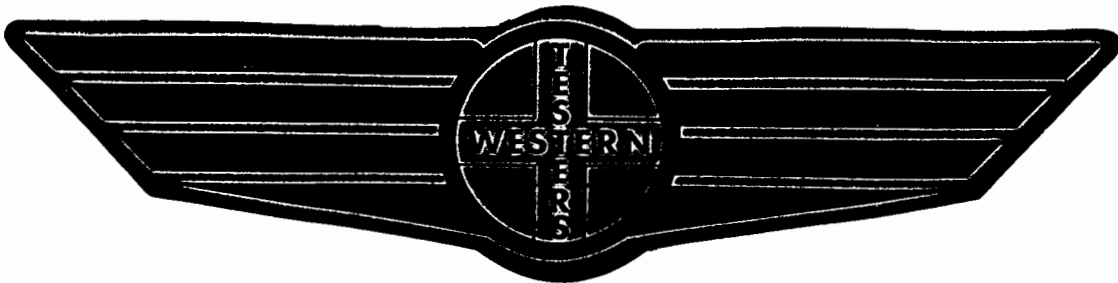
MAR 4 1994

TEST

REPORT

COMPANY HARRIS OIL & GAS COMPANY LEASE & WELL NO. #1-9 ROTH SEC. 9 TWP. 23S RGE. 34W TEST NO. 3 DATE 8/18/93

API#15-055-21234



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1-800-688-7021

DST REPORT

GENERAL INFORMATION

DATE : 8/18/93
CUSTOMER : HARRIS OIL & GAS COMPANY
WELL : #1-9 TEST: 3
ELEVATION: 2949 GL
SECTION : 9
RANGE : 34W COUNTY: FINNEY
GAUGE SN#: 3849 RANGE : 4200
TICKET : 19096
LEASE : ROTH
GEOLOGIST: ?
FORMATION: MORROW
TOWNSHIP : 23S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4595.00 ft TO: 4670.00 ft TVD: 4848.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 4660.0 ft 4663.0 ft
TEMPERATURE: 116.0
DRILL COLLAR LENGTH: 558.0 ft I.D.: 2.250 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 4005.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 32.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 75.0 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: 4590.0 ft SIZE: 6.630 in
PACKER DEPTH: 4595.0 ft SIZE: 6.630 in
PACKER DEPTH: 4670.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : ALLEN RIG 5
MUD TYPE : CHEMICAL VISCOSITY : 52.00 cp
WEIGHT : 9.200 ppg WATER LOSS: 8.000 cc
CHLORIDES : 2500 ppm
JARS-MAKE : WTC SERIAL NUMBER: 402
DID WELL FLOW?: NO REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK 1/2 INCH BLOW BUILT TO
4 1/2 INCHES IN 20 MINUTES. STABILIZED.
FINAL FLOW PERIOD VERY WEAK 1/4 INCHES IN BUCKET

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

DIED IN 45 MINUTES.
 TAILPIPE 156' OF 4.5"; 22' OF 5.5" TOTAL 178 FT.
 PLUGGING ACTION ON INITIAL & FINAL FLOW PERIODS.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
300.0	0.0	0.0	0.0	100.0	MUD W/A SCUM OF OIL

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:	1.4752	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	1.4752	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2307.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	89.00	142.00
INITIAL SHUT-IN	60.00		1167.00
FINAL FLOW	60.00	153.00	204.00
FINAL SHUT-IN	120.00		1167.00

FINAL HYDROSTATIC PRESSURE: 2286.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2315.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	30.00	104.00	155.00
INITIAL SHUT-IN	57.00		1180.00
FINAL FLOW	60.00	170.00	232.00
FINAL SHUT-IN	120.00		1182.00

FINAL HYDROSTATIC PRESSURE: 2292.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 8/18/93	TICKET : 19096
CUSTOMER : HARRIS OIL & GAS COMPANY	LEASE : ROTH
WELL : #1-9 TEST: 3	GEOLOGIST: ?
ELEVATION: 2949 GL	FORMATION: MORROW
SECTION : 9	TOWNSHIP : 23S
RANGE : 34W COUNTY: FINNEY	STATE : KS
GAUGE SN#: 3849 RANGE : 4200	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	104.00	104.00
5.00	106.00	2.00
10.00	143.00	37.00
15.00	160.00	17.00
20.00	153.00	-7.00
25.00	160.00	7.00
30.00	155.00	-5.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	500.00	500.00	0.00
6.00	766.00	266.00	0.00
9.00	902.00	136.00	0.00
12.00	989.00	87.00	0.00
15.00	1042.00	53.00	0.00
18.00	1071.00	29.00	0.00
21.00	1094.00	23.00	0.00
24.00	1111.00	17.00	0.00
27.00	1126.00	15.00	0.00
30.00	1133.00	7.00	0.00
33.00	1140.00	7.00	0.00
36.00	1149.00	9.00	0.00
39.00	1155.00	6.00	0.00
42.00	1159.00	4.00	0.00
45.00	1163.00	4.00	0.00
48.00	1169.00	6.00	0.00
51.00	1174.00	5.00	0.00
54.00	1178.00	4.00	0.00
57.00	1180.00	2.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	170.00	170.00
5.00	179.00	9.00
10.00	191.00	12.00
15.00	189.00	-2.00
20.00	201.00	12.00
25.00	200.00	-1.00
30.00	206.00	6.00
35.00	211.00	5.00
40.00	211.00	0.00
45.00	215.00	4.00
50.00	217.00	2.00
55.00	228.00	11.00
60.00	232.00	4.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	554.00	554.00	0.00
6.00	713.00	159.00	0.00
9.00	854.00	141.00	0.00
12.00	946.00	92.00	0.00
15.00	1004.00	58.00	0.00
18.00	1038.00	34.00	0.00
21.00	1067.00	29.00	0.00
24.00	1086.00	19.00	0.00
27.00	1098.00	12.00	0.00
30.00	1109.00	11.00	0.00
33.00	1117.00	8.00	0.00
36.00	1126.00	9.00	0.00
39.00	1130.00	4.00	0.00
42.00	1136.00	6.00	0.00
45.00	1140.00	4.00	0.00
48.00	1146.00	6.00	0.00
51.00	1151.00	5.00	0.00
54.00	1153.00	2.00	0.00
57.00	1155.00	2.00	0.00
60.00	1157.00	2.00	0.00
63.00	1159.00	2.00	0.00
66.00	1161.00	2.00	0.00
69.00	1163.00	2.00	0.00
72.00	1165.00	2.00	0.00
75.00	1167.00	2.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
78.00	1169.00	2.00	0.00
81.00	1170.00	1.00	0.00
84.00	1171.00	1.00	0.00
87.00	1172.00	1.00	0.00
90.00	1173.00	1.00	0.00
93.00	1174.00	1.00	0.00
96.00	1175.00	1.00	0.00
99.00	1176.00	1.00	0.00
102.00	1177.00	1.00	0.00
105.00	1178.00	1.00	0.00
108.00	1179.00	1.00	0.00
111.00	1180.00	1.00	0.00
114.00	1181.00	1.00	0.00
117.00	1182.00	1.00	0.00
120.00	1182.00	0.00	0.00

FLUID SAMPLE REPORT

GENERAL INFORMATION

DATE : 8/18/93
CUSTOMER : HARRIS OIL & GAS COMPANY
WELL : #1-9 TEST: 3
ELEVATION: 2949 GL
SECTION : 9
RANGE : 34W COUNTY: FINNEY
GAUGE SN#: 3849 RANGE : 4200
TICKET : 19096
LEASE : ROTH
GEOLOGIST: ?
FORMATION: MORROW
TOWNSHIP : 23S
STATE : KS
CLOCK : 12

SAMPLE INFORMATION

PRESSURE IN SAMPLER: 5.00 PSIG BHT: 116.0 DEG F
TOTAL VOLUME OF SAMPLER: 3150.00 cc
TOTAL VOLUME OF SAMPLE: 2750.00 cc
OIL: 0.00 cc
WATER: 0.00 cc
MUD: 2750.00 cc
GAS: 0.00 cc
OTHER: 0.00 cc

RESISTIVITY

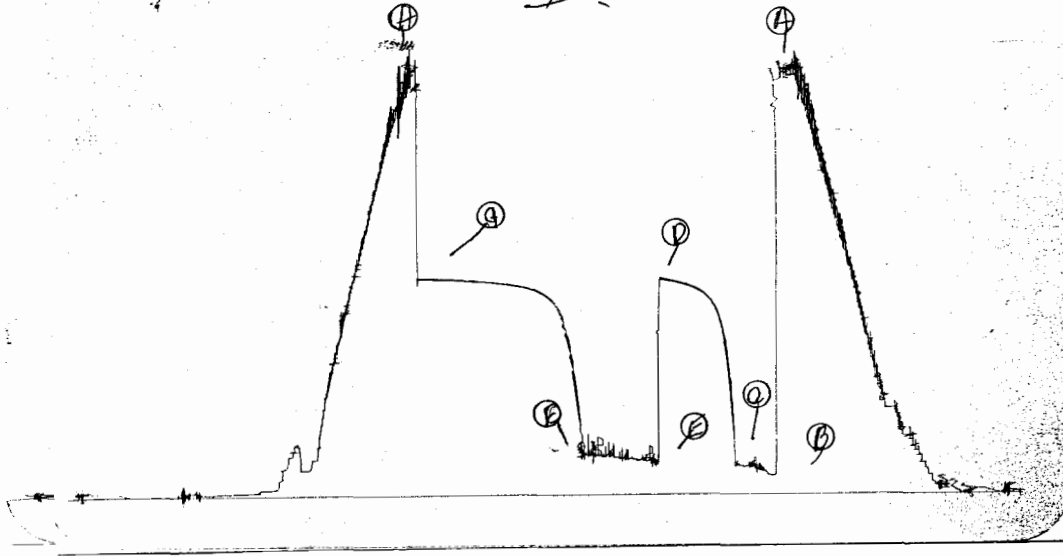
DRILLING MUD: 1.4 @ 60 DEGREES F CHLORIDE CONTENT: 4800.00 ppm
MUD PIT SAMPLE: 1.5 @ 65 DEGREES F CHLORIDE CONTENT: 4100.00 ppm
GAS/OIL RATIO: GRAVITY:
WHERE WAS SAMPLE DRAINED: ON LOCATION
REMARKS:

#2849 DST 3

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TK# 19096

I.



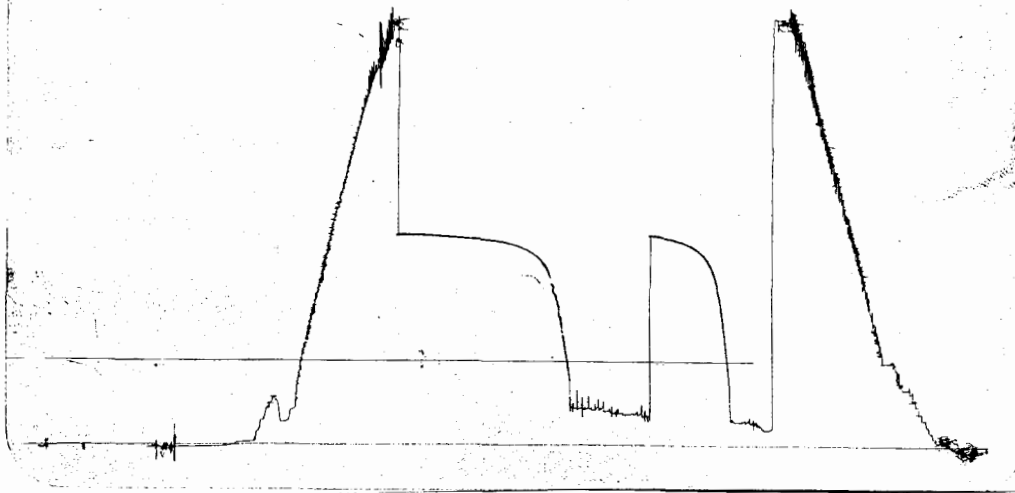
Inside Recorder

~~2604~~ DST 3

21

TK# 19096

O.



Outside Recorder

FORMATION

KCC

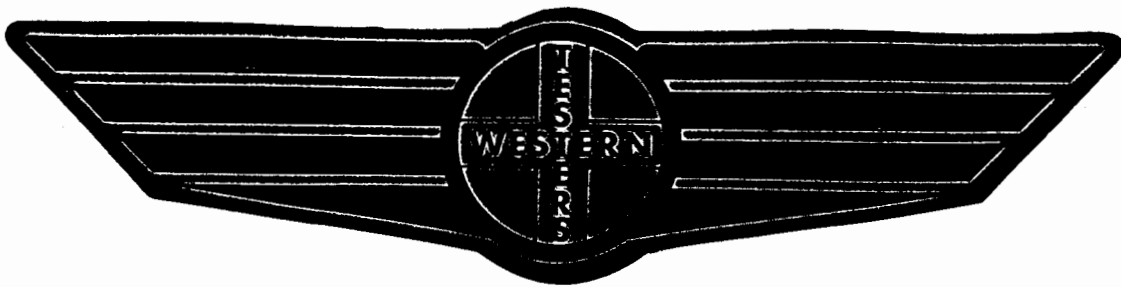
MAR 4 1994

TEST

REPORT

API#15-055-21234

COMPANY HARRIS OIL & GAS COMPANY LEASE & WELL NO. #1-9 ROTH SEC. 9 TWP. 23S RGE. 34W TEST NO. 4 DATE 8/19/93



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1-800-688-7021

DST REPORT

GENERAL INFORMATION

DATE : 8/19/93
CUSTOMER : HARRIS OIL & GAS COMPANY
WELL : #1-9 TEST: 4
ELEVATION: 2949 GL
SECTION : 9
RANGE : 34W COUNTY: FINNEY
GAUGE SN#: 3849 RANGE : 4200
TICKET : 19097
LEASE : ROTH
GEOLOGIST: ?
FORMATION: MARMATON
TOWNSHIP : 23S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4260.00 ft TO: 4318.00 ft TVD: 4848.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 4267.0 ft 4270.0 ft
TEMPERATURE: 112.0
DRILL COLLAR LENGTH: 558.0 ft I.D.: 2.250 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 3670.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 32.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 58.0 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: 4255.0 ft SIZE: 6.630 in
PACKER DEPTH: 4260.0 ft SIZE: 6.630 in
PACKER DEPTH: 4318.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : ALLEN RIG 5
MUD TYPE : CHEMICAL
WEIGHT : 8.900 ppg
CHLORIDES : 3200 ppm
JARS-MAKE : WTC
DID WELL FLOW?: NO
VISCOSITY : 50.00 cp
WATER LOSS: 9.600 cc
SERIAL NUMBER: 402
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK 1 INCH BLOW BUILT TO
BOTTOM OF BUCKET IN 17 MINUTES. FINAL FLOW PERIOD
SURFACE BLOW TO BOTTOM OF BUCKET IN 25 MINUTES.

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

TAIL PIPE 498' OF 4.5"; 32' OF 5.5" TOTAL 530 FT

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
410.0	0.0	5.0	26.0	69.0	SL GAS CUT WATERY MUD
375.0	0.0	0.0	100.0	0.0	SALTWATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 64000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	90.0000 min.
GAS VOLUME:	1.1465 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	2.8179 STB	AVERAGE WATER RATE:	91.5799 STB/D
WATER VOLUME:	2.9059 STB		
TOTAL FLUID :	5.7237 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2099.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	36.00	223.00
INITIAL SHUT-IN	60.00		953.00
FINAL FLOW	60.00	248.00	376.00
FINAL SHUT-IN	120.00		953.00

FINAL HYDROSTATIC PRESSURE: 2031.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2112.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	30.00	51.00	234.00
INITIAL SHUT-IN	60.00		965.00
FINAL FLOW	60.00	260.00	387.00
FINAL SHUT-IN	120.00		962.00

FINAL HYDROSTATIC PRESSURE: 2065.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 8/19/93	TICKET : 19097
CUSTOMER : HARRIS OIL & GAS COMPANY	LEASE : ROTH
WELL : #1-9	TEST: 4
ELEVATION: 2949 GL	GEOLOGIST: ?
SECTION : 9	FORMATION: MARMATON
RANGE : 34W	TOWNSHIP : 23S
COUNTY: FINNEY	STATE : KS
GAUGE SN#: 3849	RANGE : 4200
	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	51.00	51.00
5.00	72.00	21.00
10.00	117.00	45.00
15.00	153.00	36.00
20.00	183.00	30.00
25.00	217.00	34.00
30.00	234.00	17.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	858.00	858.00	0.00
6.00	916.00	58.00	0.00
9.00	929.00	13.00	0.00
12.00	937.00	8.00	0.00
15.00	944.00	7.00	0.00
18.00	950.00	6.00	0.00
21.00	952.00	2.00	0.00
24.00	953.00	1.00	0.00
27.00	954.00	1.00	0.00
30.00	955.00	1.00	0.00
33.00	956.00	1.00	0.00
36.00	957.00	1.00	0.00
39.00	958.00	1.00	0.00
42.00	959.00	1.00	0.00
45.00	960.00	1.00	0.00
48.00	961.00	1.00	0.00
51.00	962.00	1.00	0.00
54.00	963.00	1.00	0.00
57.00	964.00	1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

INITIAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
60.00	965.00	1.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	260.00	260.00
5.00	272.00	12.00
10.00	295.00	23.00
15.00	300.00	5.00
20.00	309.00	9.00
25.00	315.00	6.00
30.00	324.00	9.00
35.00	334.00	10.00
40.00	351.00	17.00
45.00	362.00	11.00
50.00	372.00	10.00
55.00	379.00	7.00
60.00	387.00	8.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	872.00	872.00	0.00
6.00	895.00	23.00	0.00
9.00	914.00	19.00	0.00
12.00	921.00	7.00	0.00
15.00	927.00	6.00	0.00
18.00	931.00	4.00	0.00
21.00	935.00	4.00	0.00
24.00	941.00	6.00	0.00
27.00	942.00	1.00	0.00
30.00	943.00	1.00	0.00
33.00	944.00	1.00	0.00
36.00	945.00	1.00	0.00
39.00	946.00	1.00	0.00
42.00	947.00	1.00	0.00
45.00	948.00	1.00	0.00
48.00	949.00	1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
51.00	950.00	1.00	0.00
54.00	951.00	1.00	0.00
57.00	952.00	1.00	0.00
60.00	952.00	0.00	0.00
63.00	953.00	1.00	0.00
66.00	954.00	1.00	0.00
69.00	954.00	0.00	0.00
72.00	955.00	1.00	0.00
75.00	955.00	0.00	0.00
78.00	956.00	1.00	0.00
81.00	956.00	0.00	0.00
84.00	957.00	1.00	0.00
87.00	957.00	0.00	0.00
90.00	958.00	1.00	0.00
93.00	958.00	0.00	0.00
96.00	959.00	1.00	0.00
99.00	959.00	0.00	0.00
102.00	960.00	1.00	0.00
105.00	960.00	0.00	0.00
108.00	961.00	1.00	0.00
111.00	961.00	0.00	0.00
114.00	962.00	1.00	0.00
117.00	962.00	0.00	0.00
120.00	962.00	0.00	0.00

FLUID SAMPLE REPORT

GENERAL INFORMATION

DATE : 8/19/93
CUSTOMER : HARRIS OIL & GAS COMPANY
WELL : #1-9 TEST: 4
ELEVATION: 2949 GL
SECTION : 9
RANGE : 34W COUNTY: FINNEY
GAUGE SN#: 3849 RANGE : 4200
TICKET : 19097
LEASE : ROTH
GEOLOGIST: ?
FORMATION: MARMATON
TOWNSHIP : 23S
STATE : KS
CLOCK : 12

SAMPLE INFORMATION

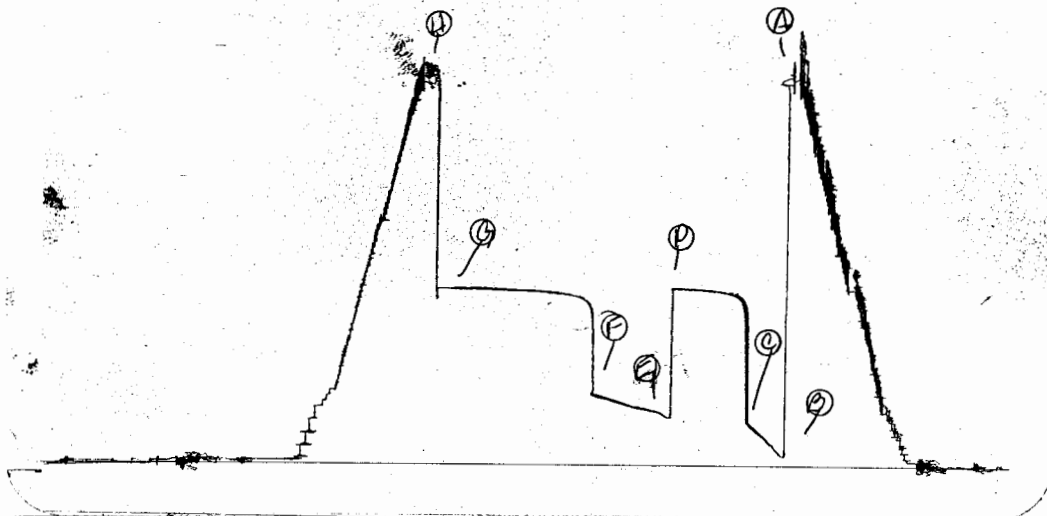
PRESSURE IN SAMPLER: 97.00 PSIG BHT: 112.0 DEG F
TOTAL VOLUME OF SAMPLER: 3150.00 cc
TOTAL VOLUME OF SAMPLE: 2900.00 cc
OIL: 0.00 cc
WATER: 2900.00 cc
MUD: 0.00 cc
GAS: 0.93 cc
OTHER: 0.00 cc

RESISTIVITY

DRILLING MUD: .12 @ 65 DEGREES F CHLORIDE CONTENT: 64000.00 ppm
MUD PIT SAMPLE: 1.1 @ 70 DEGREES F CHLORIDE CONTENT: 5300.00 ppm
GAS/OIL RATIO: GRAVITY:
WHERE WAS SAMPLE DRAINED: ON LOCATION
REMARKS:

#3849 DST4
21

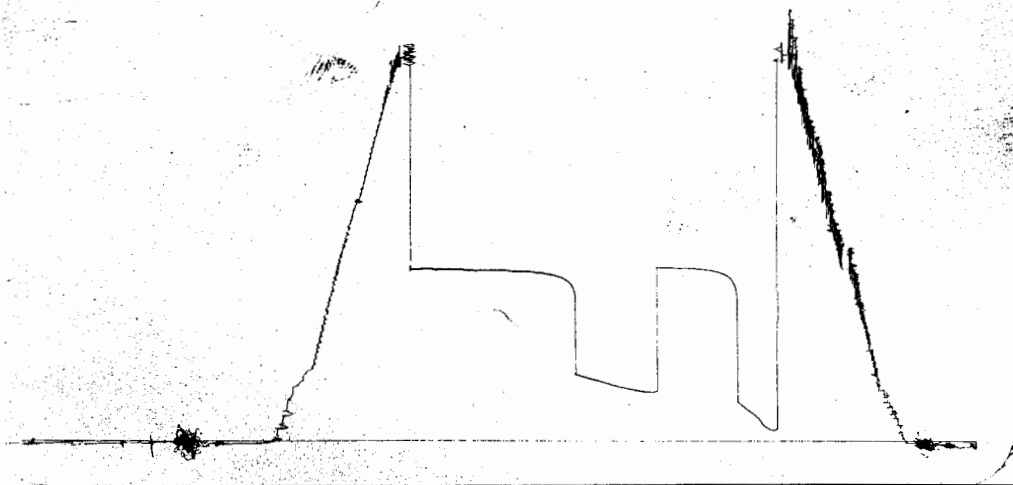
TK# 19097
I.



Inside Recorder

2604 DST4
21

TK# 19097
O.



Outside Recorder

KCC

MAR 4 1994

FORMATION TEST REPORT

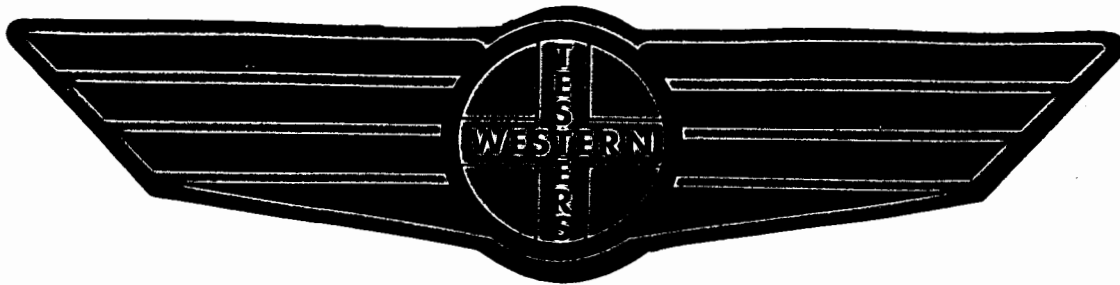
COMPANY BEREXCO, INC.

LEASE & WELL NO. #1-9 ROTH

SEC. 9 TWP 23S RGE. 34 TEST NO. 5

DATE 8/20/93

API#15-055-21234



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

DST REPORT

GENERAL INFORMATION

DATE : 8/20/93	TICKET : 19098
CUSTOMER : BEREXCO, INC.	LEASE : ROTH
WELL : #1-9 TEST: 5	GEOLOGIST: HASTINGS
ELEVATION: 2949 GL	FORMATION: LANSING UPPER H
SECTION : 9	TOWNSHIP : 23S
RANGE : 34W COUNTY: FINNEY	STATE : KS
GAUGE SN#: 3849 RANGE : 4200	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4022.00 ft	TO: 4052.00 ft	TVD: 4852.0 ft
DEPTH OF SELECTIVE ZONE: 4074	TEST TYPE: OIL	
DEPTH OF RECORDERS: 4034.0 ft	4037.0 ft	
TEMPERATURE: 106.0		
DRILL COLLAR LENGTH: 248.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH : 0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH : 3746.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 28.0 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: 4017.0 ft	SIZE:	6.630 in
PACKER DEPTH: 4022.0 ft	SIZE:	6.630 in
PACKER DEPTH: 4052.0 ft	SIZE:	6.630 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : ALLEN RIG 5	
MUD TYPE : CHEMICAL	VISCOSITY : 44.00 cp
WEIGHT : 9.200 ppg	WATER LOSS: 9.600 cc
CHLORIDES : 3200 ppm	
JARS-MAKE : WTC	SERIAL NUMBER: 402
DID WELL FLOW?: NO	REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK 1/4 INCH BLOW BUILT TO
9 INCHES IN BUCKET IN 15 MINUTES. FINAL FLOW
PERIOD SURFACE BLOW - BUILT TO STRONG BLOW -

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

BOTTOM OF BUCKET IN 24 MINUTES.
 TAILPIPE 22' OF 5.5" TOTAL 22 FT.
 HOOK SLID 3 TO 4 FT.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	70 FT GAS ABOVE FLUID
260.0	100.0	0.0	0.0	0.0	CLEAN OIL
0.0	0.0	0.0	0.0	0.0	26 GRAVITY @ 60 DEGREES F
230.0	5.0	7.0	23.0	65.0	SL OIL & GAS C/WATERY MUD
60.0	4.0	0.0	51.0	45.0	SL OIL C/MUDDY WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 12000 PPM

RATE INFORMATION

OIL VOLUME:	3.7343 STB	
GAS VOLUME:	0.5949 SCF	TOTAL FLOW TIME: 105.0000 min.
MUD VOLUME:	1.1166 STB	AVERAGE OIL RATE: 53.7555 STB/D
WATER VOLUME:	0.4986 STB	AVERAGE WATER RATE: 19.6096 STB/D
TOTAL FLUID :	5.3495 STB	

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2031.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	65.00	108.00
INITIAL SHUT-IN	30.00		979.00
FINAL FLOW	90.00	136.00	231.00
FINAL SHUT-IN	120.00		937.00

FINAL HYDROSTATIC PRESSURE: 1953.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2040.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	15.00	79.00	117.00
INITIAL SHUT-IN	30.00		992.00
FINAL FLOW	90.00	155.00	249.00
FINAL SHUT-IN	120.00		946.00

FINAL HYDROSTATIC PRESSURE: 1941.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 8/20/93	TICKET : 19098
CUSTOMER : BEREXCO, INC.	LEASE : ROTH
WELL : #1-9 TEST: 5	GEOLOGIST: HASTINGS
ELEVATION: 2949 GL	FORMATION: LANSING UPPER H
SECTION : 9	TOWNSHIP : 23S
RANGE : 34W COUNTY: FINNEY	STATE : KS
GAUGE SN#: 3849 RANGE : 4200	CLOCK : 12

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	79.00	79.00
5.00	83.00	4.00
10.00	106.00	23.00
15.00	117.00	11.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	718.00	718.00	0.00
6.00	843.00	125.00	0.00
9.00	893.00	50.00	0.00
12.00	918.00	25.00	0.00
15.00	941.00	23.00	0.00
18.00	958.00	17.00	0.00
21.00	971.00	13.00	0.00
24.00	979.00	8.00	0.00
27.00	990.00	11.00	0.00
30.00	992.00	2.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	155.00	155.00
5.00	149.00	-6.00
10.00	153.00	4.00
15.00	157.00	4.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
20.00	162.00	5.00
25.00	168.00	6.00
30.00	177.00	9.00
35.00	183.00	6.00
40.00	191.00	8.00
45.00	199.00	8.00
50.00	202.00	3.00
55.00	211.00	9.00
60.00	217.00	6.00
65.00	221.00	4.00
70.00	223.00	2.00
75.00	232.00	9.00
80.00	238.00	6.00
85.00	245.00	7.00
90.00	249.00	4.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	638.00	638.00	0.00
6.00	701.00	63.00	0.00
9.00	736.00	35.00	0.00
12.00	762.00	26.00	0.00
15.00	780.00	18.00	0.00
18.00	799.00	19.00	0.00
21.00	812.00	13.00	0.00
24.00	822.00	10.00	0.00
27.00	832.00	10.00	0.00
30.00	841.00	9.00	0.00
33.00	854.00	13.00	0.00
36.00	858.00	4.00	0.00
39.00	864.00	6.00	0.00
42.00	870.00	6.00	0.00
45.00	877.00	7.00	0.00
48.00	881.00	4.00	0.00
51.00	885.00	4.00	0.00
54.00	891.00	6.00	0.00
57.00	895.00	4.00	0.00
60.00	900.00	5.00	0.00
63.00	902.00	2.00	0.00
66.00	906.00	4.00	0.00
69.00	908.00	2.00	0.00

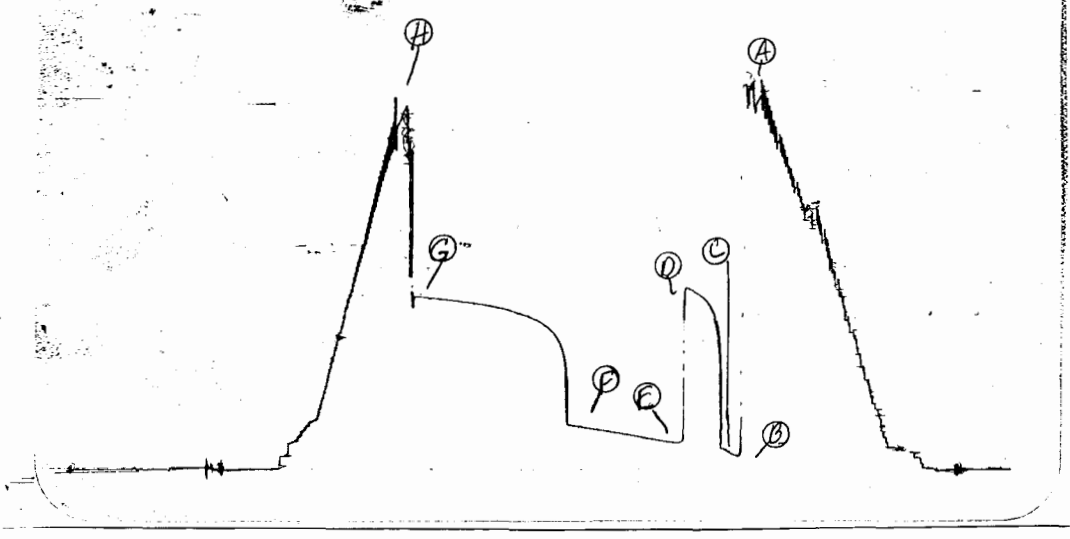
PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
72.00	914.00	6.00	0.00
75.00	917.00	3.00	0.00
78.00	921.00	4.00	0.00
81.00	923.00	2.00	0.00
84.00	925.00	2.00	0.00
87.00	927.00	2.00	0.00
90.00	929.00	2.00	0.00
93.00	931.00	2.00	0.00
96.00	933.00	2.00	0.00
99.00	935.00	2.00	0.00
102.00	937.00	2.00	0.00
105.00	939.00	2.00	0.00
108.00	941.00	2.00	0.00
111.00	943.00	2.00	0.00
114.00	944.00	1.00	0.00
117.00	945.00	1.00	0.00
120.00	946.00	1.00	0.00

~~3240~~ DST 5
#4

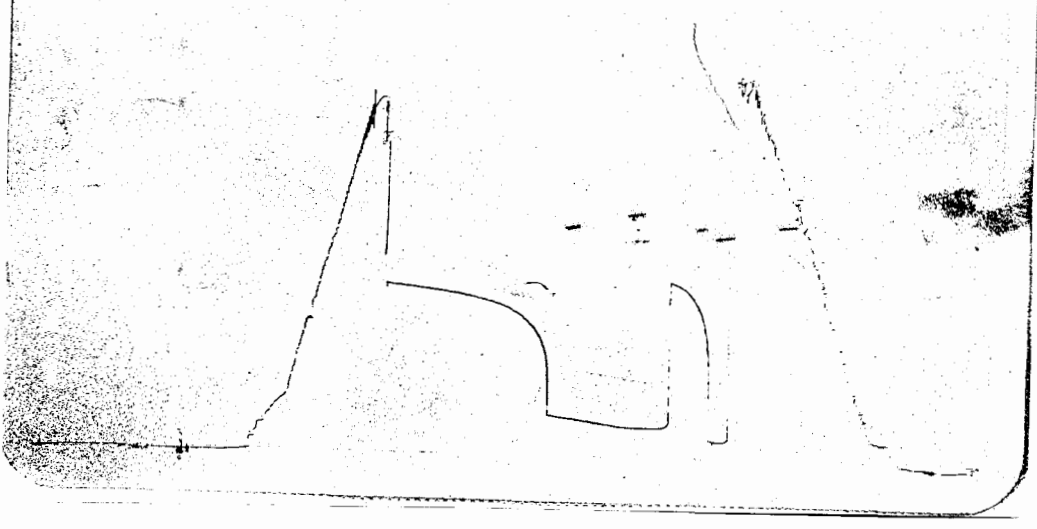
TR-# 19098
I.



Inside Recorder

204 DST 5
#4

TR-# 19098
O.



Outside Recorder