

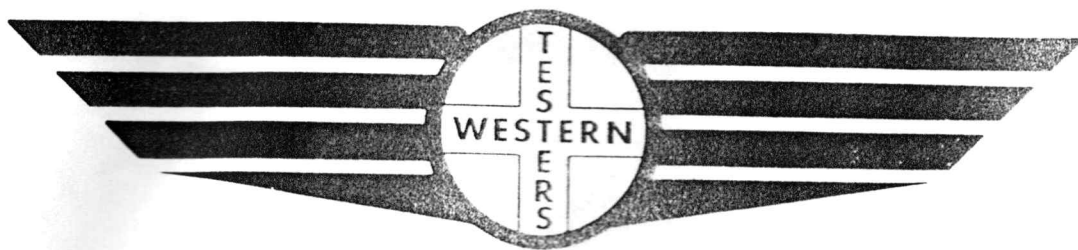
FORMATION

TEST

REPORT

LEASE & WELL NO. #1-16 TOLAND

SEC. 16 TWP. 31S RGE. 33W TEST NO. 1 DATE 9/23/86



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	9-23-86	TICKET	:	10709
CUSTOMER	:	GLOBAL NATURAL RESOURCES	LEASE	:	TOLAND
WELL	:	#1-16	TEST:	:	1
ELEVATION	:	2903	GEOLOGIST	:	D. FISHBONE
SECTION	:	16	FORMATION	:	LANSING
RANGE	:	33W	COUNTY	:	SEWARD
GAUGE SN#	:	6233	RANGE	:	4000
			STATE	:	KS
			CLOCK	:	12

INTERVAL FROM	:	4601	TO	:	4613	TOTAL DEPTH	:	4613
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4596	SIZE	:	6.75			
PACKER DEPTH	:	4601	SIZE	:	6.75			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	BEREDCO #5			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	48
WEIGHT	:	8.8	WATER LOSS (CC)	:	9.8
CHLORIDES (PPM)	:	950			
JARS-MAKE	:	WTC	SERIAL NUMBER	:	414
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	610	FT	I.D. inch	:	2.20
WEIGHT PIPE LENGTH	:	0	FT	I.D. inch	:	0.00
DRILL PIPE LENGTH	:	3957	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	34	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	12	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5XH

BLOW COMMENT #1 : STRONG BLOW OFF BOTTOM OF
BLOW COMMENT #2 : BUCKET IN 15" ON INITIAL FLOW PERIOD.
BLOW COMMENT #3 : STRONG BLOW OFF BOTTOM OF BUCKET
BLOW COMMENT #4 : IN 20" ON FINAL FLOW PERIOD.

RECOVERED : 90 FT OF: MUDDY WATER FEW OIL SPTS
RECOVERED : 0 FT OF: 90% M; 10%WTR;
RECOVERED : 0 FT OF: LESS THAN 1% OIL
RECOVERED : 990 FT OF: WATER

Total Barrels Fluid = 9.46
Total Fluid Prod Rate = 151.36 BFPD
Indicated Oil Rate = 0.07 BOPD
Indicated Wtr Rate = 140.01 BOPD
Corrected Oil Rate = 166.06 BOPD
Corrected Wtr Rate = %331778.88 BOPD

REMARK 1 :
REMARK 2 : CHLORIDES 95000 PPM
REMARK 3 : R.W. ON REC. WATER .1 AT 80 DEGRESS F.
REMARK 4 :

SET PACKER(S) : 9:40AM
WELL TEMPERATURE : 119
INITIAL HYDROSTATIC PRESSURE (A) 2275
INITIAL FLOW PERIOD MIN: 30 (B) 114 PSI TO (C) : 351
INITIAL CLOSED IN PERIOD MIN: 60 (D) 1346
FINAL FLOW PERIOD MIN: 60 (E) 388 PSI TO (F) : 558
FINAL CLOSED IN PERIOD MIN: 120 (G) 1335
FINAL HYDROSTATIC PRESSURE (H) 2239

TIME STARTED OFF BOTTOM : 2:10 PM

FLUID SAMPLE REPORT

Date : 9-23-86

Ticket No. : 10709

Company : GLOBAL NATURAL RESOURCES

Well Name & No. : TOLAND #1-16

DST No. 1

County : SEWARD

State : KS

Sampler No. : 111

Test Interval : 4601-4613

=====

Pressure in Sampler 500 PSIG BHT 119 Deg F

Total Volume of Sampler : 3150 cc

Total Volume of Sample : 3100 cc

Oil: cc

Water: 3100 cc

Mud: cc

Gas: cu ft

Other: cc

=====

RESITIVITY

Water .1 @ 80 Deg F Chloride Content 95000 ppm

Mud Pit Sample .7 @ 80 Deg F Chloride Content 950 ppm

Gas/Oil Ratio Gravity API @ Deg F

Where was sample drained RIG

Remarks:

WESTERN TESTING CO. INC.
WICHITA KANSAS

Pressure Transient Report

COMPANY : GLOBAL NATURAL RESOURCES
RIG : SEWARD-KS
FIELD : TOLAND
WELL : #1-16
DATE : 9-23-86
GAUGE NO : 6233

OPERATIONAL COMMENTS

R.W. ON WTR REC. .1 AT 80 DEGREES F.
CHLORIDES 95000 PPM

COMPANY : GLOBAL NATURAL RESOURCES FIELD : TOLAND
WELL : #1-16 JOB # : 10709
GAUGE # : 6233 DEPTH : 4613
DATE : 23/ 9/86 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	9:40: 0	0.000	114.000	48.33	0.000
2	9:45: 0	0.083	148.000	48.33	34.000
3	9:50: 0	0.167	195.000	48.33	47.000
4	9:55: 0	0.250	246.000	48.33	51.000
5	10: 0: 0	0.333	297.000	48.33	51.000
6	11: 5: 0	0.417	332.000	48.33	35.000
7	11:10: 0	0.500	351.000	48.33	19.000
8	11:13: 0	0.550	1100.000	48.33	749.000
9	11:16: 0	0.600	1203.000	48.33	103.000
10	11:19: 0	0.650	1245.000	48.33	42.000
11	11:22: 0	0.700	1266.000	48.33	21.000
12	11:25: 0	0.750	1281.000	48.33	15.000
13	11:28: 0	0.800	1292.000	48.33	11.000
14	11:31: 0	0.850	1302.000	48.33	10.000
15	11:34: 0	0.900	1310.000	48.33	8.000
16	11:37: 0	0.950	1314.000	48.33	4.000
17	11:40: 0	1.000	1320.000	48.33	6.000
18	11:43: 0	1.050	1323.000	48.33	3.000
19	11:46: 0	1.100	1325.000	48.33	2.000
20	11:49: 0	1.150	1329.000	48.33	4.000
21	11:52: 0	1.200	1331.000	48.33	2.000
22	11:55: 0	1.250	1335.000	48.33	4.000
23	11:58: 0	1.300	1338.000	48.33	3.000
24	12: 1: 0	1.350	1340.000	48.33	2.000
25	12: 4: 0	1.400	1342.000	48.33	2.000
26	12: 7: 0	1.450	1344.000	48.33	2.000
27	12:10: 0	1.500	1346.000	48.33	2.000
28	12:11: 0	1.517	388.000	48.33	-958.000
29	12:15: 0	1.583	388.000	48.33	0.000
30	12:20: 0	1.667	400.000	48.33	12.000
31	12:25: 0	1.750	416.000	48.33	16.000
32	12:30: 0	1.833	436.000	48.33	20.000
33	12:35: 0	1.917	452.000	48.33	16.000
34	12:40: 0	2.000	467.000	48.33	15.000
35	12:45: 0	2.083	484.000	48.33	17.000
36	12:50: 0	2.167	502.000	48.33	18.000
37	12:55: 0	2.250	519.000	48.33	17.000
38	13: 0: 0	2.333	532.000	48.33	13.000
39	14: 5: 0	2.417	547.000	48.33	15.000
40	14:10: 0	2.500	558.000	48.33	11.000
41	14:13: 0	2.550	1148.000	48.33	590.000
42	14:16: 0	2.600	1205.000	48.33	57.000
43	14:19: 0	2.650	1227.000	48.33	22.000
44	14:22: 0	2.700	1244.000	48.33	17.000
45	14:25: 0	2.750	1256.000	48.33	12.000
46	14:28: 0	2.800	1265.000	48.33	9.000
47	14:31: 0	2.850	1274.000	48.33	9.000
48	14:34: 0	2.900	1279.000	48.33	5.000
49	14:37: 0	2.950	1284.000	48.33	5.000
50	14:40: 0	3.000	1291.000	48.33	7.000
51	14:43: 0	3.050	1296.000	48.33	5.000
52	14:46: 0	3.100	1300.000	48.33	4.000

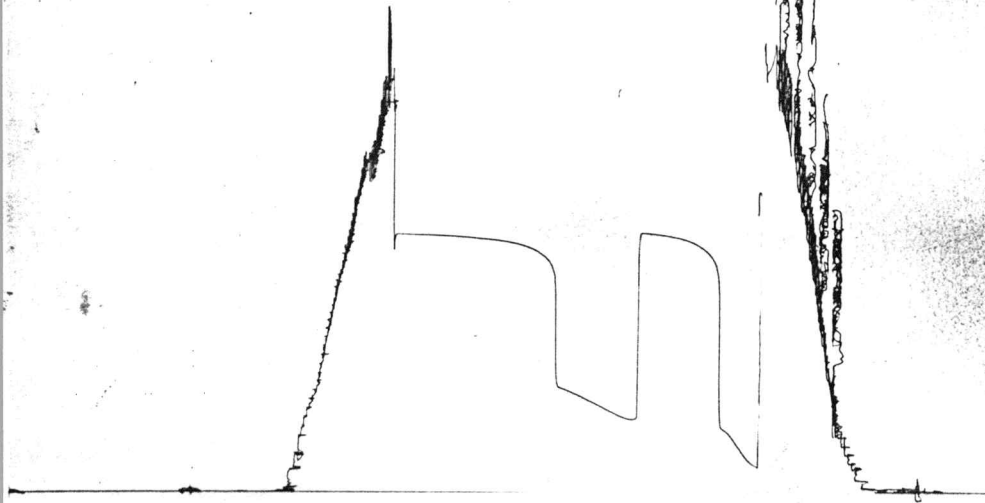
COMPANY : GLOBAL NATURAL RESOURCES FIELD : TOLAND
 WELL : #1-16 JOB # : 10709
 GAUGE # : 6233 DEPTH : 4613
 DATE : 23/ 9/86 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	14:49: 0	3.150	1303.000	48.33	3.000
54	14:52: 0	3.200	1306.000	48.33	3.000
55	14:55: 0	3.250	1309.000	48.33	3.000
56	14:58: 0	3.300	1312.000	48.33	3.000
57	15: 1: 0	3.350	1315.000	48.33	3.000
58	15: 4: 0	3.400	1317.000	48.33	2.000
59	15: 7: 0	3.450	1318.000	48.33	1.000
60	15:10: 0	3.500	1319.000	48.33	1.000
61	15:13: 0	3.550	1320.000	48.33	1.000
62	15:16: 0	3.600	1321.000	48.33	1.000
63	15:19: 0	3.650	1322.000	48.33	1.000
64	15:22: 0	3.700	1323.000	48.33	1.000
65	15:25: 0	3.750	1324.000	48.33	1.000
66	15:28: 0	3.800	1325.000	48.33	1.000
67	15:31: 0	3.850	1326.000	48.33	1.000
68	15:34: 0	3.900	1327.000	48.33	1.000
69	15:37: 0	3.950	1328.000	48.33	1.000
70	15:40: 0	4.000	1329.000	48.33	1.000
71	15:43: 0	4.050	1330.000	48.33	1.000
72	15:46: 0	4.100	1331.000	48.33	1.000
73	15:49: 0	4.150	1332.000	48.33	1.000
74	15:52: 0	4.200	1333.000	48.33	1.000
75	15:55: 0	4.250	1334.000	48.33	1.000
76	15:58: 0	4.300	1335.000	48.33	1.000
77	16: 1: 0	4.350	1335.000	48.33	0.000
78	16: 4: 0	4.400	1335.000	48.33	0.000
79	16: 7: 0	4.450	1335.000	48.33	0.000
80	16:10: 0	4.500	1335.000	48.33	0.000

WESTERN TESTING CO. INC.

13400

TKT 10709
O



6233

KT 10709

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(H)

(A)

(G)

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(E)

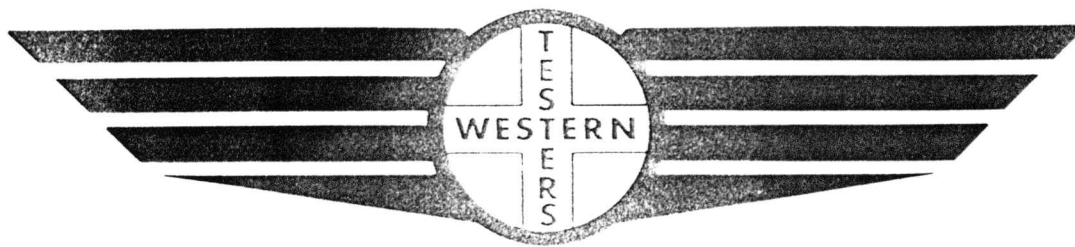
(C)

(B)

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY

GLOBAL NATURAL RESOURCES

LEASE & WELL NO. #1-16 TOLAND

SEC. 16 TWP. 31S RGE. 33WEST NO. 2 DATE 9/24/86

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	9-24-86	TICKET	:	10711
CUSTOMER	:	GLOBAL NATURAL RESOURCES	LEASE	:	TOLAND
WELL	:	#1-16 TEST: 2	GEOLOGIST	:	D. FISHBONE
ELEVATION	:	2902	FORMATION	:	LANSING
SECTION	:	16	TOWNSHIP	:	31S
RANGE	:	33W	STATE	:	KS
GAUGE SN#	:	6233	CLOCK	:	12
		COUNTY :	SEWARD		
		RANGE :	4000		

INTERVAL FROM	:	4750	TO	:	4762	TOTAL DEPTH	:	4762
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4745	SIZE	:	6.75			
PACKER DEPTH	:	4750	SIZE	:	6.75			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	BEREDCO #5			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	44
WEIGHT	:	8.9	WATER LOSS (CC)	:	10.0
CHLORIDES (PPM)	:	1500			
JARS-MAKE	:	WTC	SERIAL NUMBER	:	414
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	610	FT	I.D. inch	:	2.20
WEIGHT PIPE LENGTH	:	0	FT	I.D. inch	:	0.00
DRILL PIPE LENGTH	:	4106	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	34	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	12	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5XH

BLOW COMMENT #1 : WEAK BLOW 2" IN WTR
BLOW COMMENT #2 : ON INITIAL FLOW PERIOD.
BLOW COMMENT #3 : WEAK BLOW 1/2" IN WTR
BLOW COMMENT #4 : ON FINAL FLOW PERIOD.

WESTERN TESTING CO. INC.
WICHITA KANSAS

Pressure Transient Report

COMPANY : GLOBAL NATURAL RESOURCES
RIG : SEWARD-KS
FIELD : TOLAND
WELL : #1-16
DATE : 9-24-86
GAUGE NO : 6233

OPERATIONAL COMMENTS

PLUGGING ACTION ON INITIAL FLOW PERIOD.
CHLORIDES 90000 PPM
R.W. WTR RECOVER .15 AT 80 DEGREES F.

RECOVERED : 10 FT OF: MUD
RECOVERED : 180 FT OF: MDDY WTR 90%WTR 10%M

Total Barrels Fluid = 0.89
Total Fluid Prod Rate = 14.29 BFPD
Indicated Wtr Rate = 12.86 BWPD

REMARK 1 : PLUGGING ACTION ON INITIAL FLOW PERIOD.

REMARK 2 : CHLORIDES 90000 PPM

REMARK 3 : R.W. WATER RECOVER .15 AT 80 DEGREES F.

REMARK 4 :

SET PACKER(S) : 11:10 AM

TIME STARTED OFF BOTTOM : 3:40 PM

WELL TEMPERATURE : 123

INITIAL HYDROSTATIC PRESSURE

(A) 2245

INITIAL FLOW PERIOD MIN: 30

(B) 57 PSI TO (C) : 90

INITIAL CLOSED IN PERIOD MIN: 63

(D) 1427

FINAL FLOW PERIOD MIN: 60

(E) 107 PSI TO (F) : 133

FINAL CLOSED IN PERIOD MIN: 123

(G) 1423

FINAL HYDROSTATIC PRESSURE

(H) 2209

COMPANY : GLOBAL NATURAL RESOURCES

FIELD : TOLAND

WELL : #1-16

JOB # : 10711

GAUGE # : 6233

DEPTH : 4762

DATE : 24/ 9/86

TEST : PLUGGING ACTION ON INITIAL FLO

W PERIOD.

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	11:10: 0	0.000	57.000	50.56	0.000
2	11:15: 0	0.083	66.000	50.56	9.000
3	11:20: 0	0.167	134.000	50.56	68.000
4	11:25: 0	0.250	81.000	50.56	-53.000
5	11:30: 0	0.333	98.000	50.56	17.000
6	11:35: 0	0.417	91.000	50.56	-7.000
7	11:40: 0	0.500	90.000	50.56	-1.000
8	11:43: 0	0.550	640.000	50.56	550.000
9	11:46: 0	0.600	1169.000	50.56	529.000
10	11:49: 0	0.650	1287.000	50.56	118.000
11	11:52: 0	0.700	1329.000	50.56	42.000
12	11:55: 0	0.750	1354.000	50.56	25.000
13	11:58: 0	0.800	1360.000	50.56	6.000
14	12: 1: 0	0.850	1381.000	50.56	21.000
15	12: 4: 0	0.900	1389.000	50.56	8.000
16	12: 7: 0	0.950	1396.000	50.56	7.000
17	12:10: 0	1.000	1403.000	50.56	7.000
18	12:13: 0	1.050	1407.000	50.56	4.000
19	12:16: 0	1.100	1412.000	50.56	5.000
20	12:19: 0	1.150	1415.000	50.56	3.000
21	12:22: 0	1.200	1419.000	50.56	4.000
22	12:25: 0	1.250	1421.000	50.56	2.000
23	12:28: 0	1.300	1422.000	50.56	1.000
24	12:31: 0	1.350	1423.000	50.56	1.000
25	12:34: 0	1.400	1424.000	50.56	1.000
26	12:37: 0	1.450	1425.000	50.56	1.000
27	12:40: 0	1.500	1426.000	50.56	1.000
28	12:43: 0	1.550	1427.000	50.56	1.000
29	12:44: 0	1.567	107.000	50.56	-1320.000
30	12:48: 0	1.633	107.000	50.56	0.000
31	12:53: 0	1.717	107.000	50.56	0.000
32	12:58: 0	1.800	108.000	50.56	1.000
33	13: 3: 0	1.883	112.000	50.56	4.000
34	13: 8: 0	1.967	116.000	50.56	4.000
35	13:13: 0	2.050	117.000	50.56	1.000
36	13:18: 0	2.133	119.000	50.56	2.000
37	13:23: 0	2.217	123.000	50.56	4.000
38	13:28: 0	2.300	126.000	50.56	3.000
39	13:33: 0	2.383	129.000	50.56	3.000
40	13:38: 0	2.467	130.000	50.56	1.000
41	13:43: 0	2.550	133.000	50.56	3.000
42	13:46: 0	2.600	461.000	50.56	328.000
43	13:49: 0	2.650	973.000	50.56	512.000
44	13:52: 0	2.700	1263.000	50.56	290.000
45	13:55: 0	2.750	1312.000	50.56	49.000
46	13:58: 0	2.800	1340.000	50.56	28.000
47	14: 1: 0	2.850	1356.000	50.56	16.000
48	14: 4: 0	2.900	1366.000	50.56	10.000
49	14: 7: 0	2.950	1374.000	50.56	8.000
50	14:10: 0	3.000	1379.000	50.56	5.000
51	14:13: 0	3.050	1383.000	50.56	4.000
52	14:16: 0	3.100	1387.000	50.56	4.000

COMPANY : GLOBAL NATURAL RESOURCES

FIELD : TOLAND

WELL : #1-16

JOB # : 10711

GAUGE # : 6233

DEPTH : 4762

DATE : 24/ 9/86

TEST : PLUGGING ACTION ON INITIAL FLO

W PERIOD.

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	14:19: 0	3.150	1391.000	50.56	4.000
54	14:22: 0	3.200	1395.000	50.56	4.000
55	14:25: 0	3.250	1399.000	50.56	4.000
56	14:28: 0	3.300	1401.000	50.56	2.000
57	14:31: 0	3.350	1403.000	50.56	2.000
58	14:34: 0	3.400	1405.000	50.56	2.000
59	14:37: 0	3.450	1407.000	50.56	2.000
60	14:40: 0	3.500	1409.000	50.56	2.000
61	14:43: 0	3.550	1410.000	50.56	1.000
62	14:46: 0	3.600	1411.000	50.56	1.000
63	14:49: 0	3.650	1412.000	50.56	1.000
64	14:52: 0	3.700	1413.000	50.56	1.000
65	14:55: 0	3.750	1414.000	50.56	1.000
66	14:58: 0	3.800	1415.000	50.56	1.000
67	15: 1: 0	3.850	1416.000	50.56	1.000
68	15: 4: 0	3.900	1417.000	50.56	1.000
69	15: 7: 0	3.950	1417.000	50.56	0.000
70	15:10: 0	4.000	1417.000	50.56	0.000
71	15:13: 0	4.050	1417.000	50.56	0.000
72	15:16: 0	4.100	1418.000	50.56	1.000
73	15:19: 0	4.150	1419.000	50.56	1.000
74	15:22: 0	4.200	1420.000	50.56	1.000
75	15:25: 0	4.250	1421.000	50.56	1.000
76	15:28: 0	4.300	1422.000	50.56	1.000
77	15:31: 0	4.350	1423.000	50.56	1.000
78	15:34: 0	4.400	1423.000	50.56	0.000
79	15:37: 0	4.450	1423.000	50.56	0.000
80	15:40: 0	4.500	1423.000	50.56	0.000
81	15:43: 0	4.550	1423.000	50.56	0.000
82	15:46: 0	4.600	1423.000	50.56	0.000

WESTERN TESTING CO. INC.

FLUID SAMPLE REPORT

Date : 9-24-86

Ticket No. : 10711

Company : GLOBAL NATURAL RESOURCES

Well Name & No. : TOLAND #1-16

DST No. 2

County : SEWARD

State : KS

Sampler No. : 111

Test Interval : 4750-4762

Pressure in Sampler 100 PSIG BHT 123 Deg F

Total Volume of Sampler : 3150 cc

Total Volume of Sample : 2900 cc

Oil: cc

Water: 2900 cc

Mud: TRACE cc

Gas: cu ft

Other: cc

RESITIVITY

Water .15 @ 80 Deg F Chloride Content 90000 ppm

Mud Pit Sample .9 @ 80 Deg F Chloride Content 1300 ppm

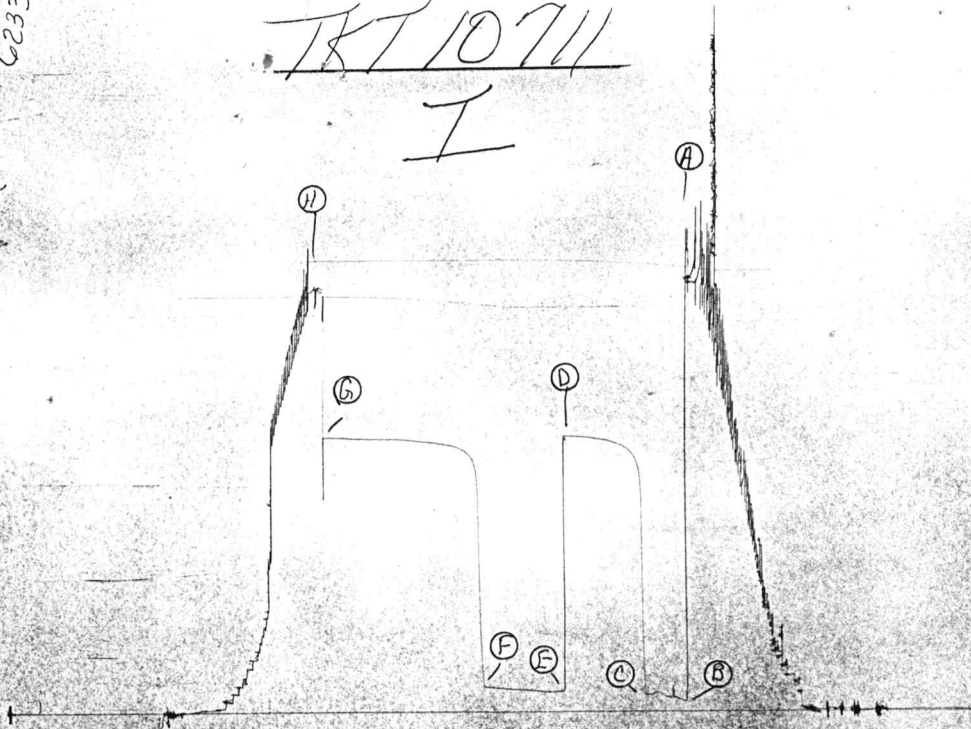
Gas/Oil Ratio Gravity API @ Deg F

Where was sample drained

Remarks: SAMPLE DRAINED AT RIG

6233

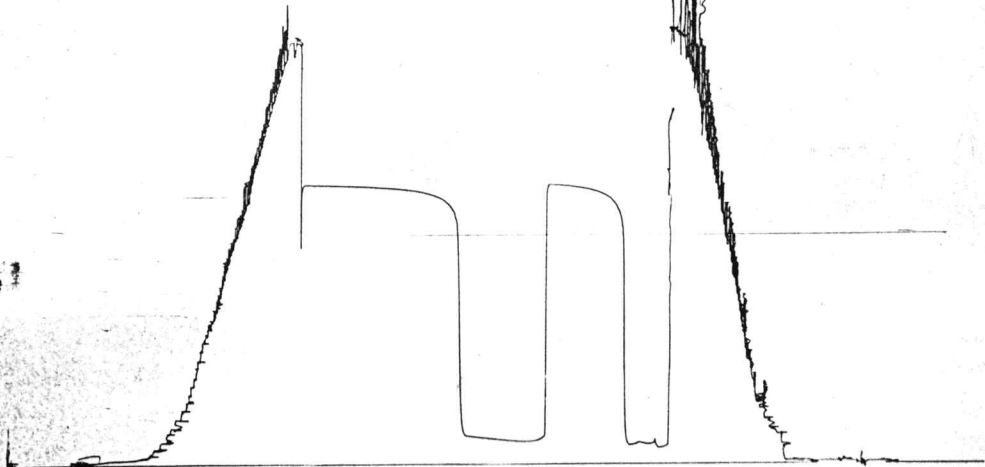
TKT 10711
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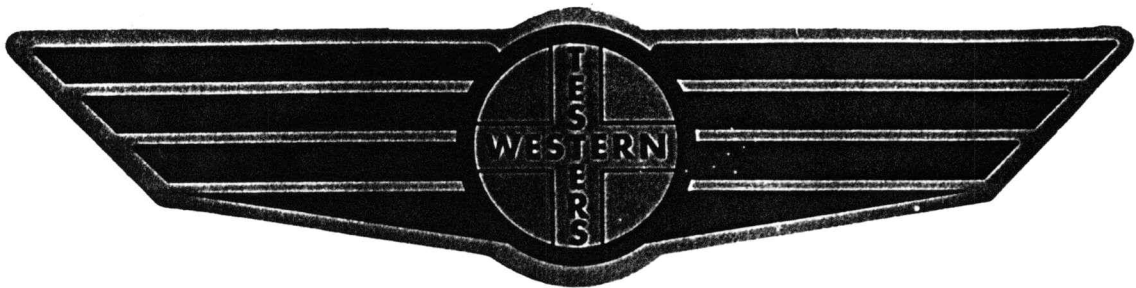
1340

TKT 10711

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY GLOBAL NATURAL RESOURCES
LEASE & WELL NO. #1-16 TOLAND
SEC. 16 TWP. 31S RGE. 33W TEST NO. 3
DATE 9/27/86

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	9-27-86	TICKET	:	10712
CUSTOMER	:	GLOBAL NATURAL RESOURCES	LEASE	:	TOLAND
WELL	:	#1-16 TEST: 3	GEOLOGIST	:	J.M. HEDRICK
ELEVATION	:	2902	FORMATION	:	MARROW
SECTION	:	16	TOWNSHIP	:	31S
RANGE	:	33W	STATE	:	KANSAS
GAUGE SN#	:	6233	CLOCK	:	12
		COUNTY :	SEWARD		
		RANGE :	4000		

INTERVAL FROM	:	5387	TO	:	5415	TOTAL DEPTH	:	5415
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	5382	SIZE	:	6.75			
PACKER DEPTH	:	5387	SIZE	:	6.75			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	BEREDCO RIG #5			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	48
WEIGHT	:	8.8	WATER LOSS (CC)	:	7.5
CHLORIDES (PPM)	:	1600			
JARS-MAKE	:	WTC	SERIAL NUMBER	:	420
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	610	FT	I.D. inch	:	2.20
WEIGHT PIPE LENGTH	:	0	FT	I.D. inch	:	0.00
DRILL PIPE LENGTH	:	4743	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	34	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	28	FT	ANCHOR SIZE	:	5.50
SURFACE CHOKE SIZE	:	.75	IN	BOTTOM CHOKE SIZE	:	.75
MAIN HOLE SIZE	:	7.875	IN	TOOL JOINT SIZE	:	4.5 XH

BLOW COMMENT #1	:	STRONG BLOW OFF BOTTOM OF BUCKET IN 10 MINUTES
BLOW COMMENT #2	:	ON THE INITIAL FLOW.
BLOW COMMENT #3	:	STRONG BLOW OFF BOTTOM OF BUCKET IN 1 MINUTE ON
BLOW COMMENT #4	:	THE FINAL FLOW.

WESTERN TESTING CO. INC.
WICHITA KANSAS

Pressure Transient Report

COMPANY : GLOBAL NATURAL RESOURCES
RIG : SEWARD-KANSAS
FIELD : TOLAND
WELL : #1-16
DATE : 9-27-86
GAUGE NO : 6233

OPERATIONAL COMMENTS

COULD NOT SEE OR SMELL ANY GAS IN PIPE.
CHLORIDES: 2000 PPM
FLUID SAMPLER PLUGGED OFF-WOULD NOT DRAIN.

RECOVERED : 60 FT OF: MUD WITH FEW OIL SPOTS-LESS.
RECOVERED : 0 FT OF: THAN 1% OIL

Total Barrels Fluid = 0.28
Total Fluid Prod Rate = 4.51 BFPD
Indicated Oil Rate = 0.30 BOPD
Indicated Wtr Rate = 4.06 BWPD
Corrected Oil Rate = 0.59 BOPD
Corrected Wtr Rate = 8.03 BWPD

REMARK 1 :
REMARK 2 : COULD NOT SEE OR SMELL ANY GAS IN PIPE.
REMARK 3 : CHLORIDES: 2000 PPM
REMARK 4 : FLUID SAMPLER PLUGGED OFF-WOULD NOT DRAIN.

SET PACKER(S) : 2:30 AM TIME STARTED OFF BOTTOM : 7:00 AM
WELL TEMPERATURE : 130
INITIAL HYDROSTATIC PRESSURE (A) 2656
INITIAL FLOW PERIOD MIN: 30 (B) 40 PSI TO (C) : 40
INITIAL CLOSED IN PERIOD MIN: 60 (D) 659
FINAL FLOW PERIOD MIN: 60 (E) 43 PSI TO (F) : 43
FINAL CLOSED IN PERIOD MIN: 120 (G) 766
FINAL HYDROSTATIC PRESSURE (H) 2540

COMPANY : GLOBAL NATURAL RESOURCES FIELD : TOLAND
WELL : #1-16 JOB # : 10712
GAUGE # : 6233 DEPTH : 5415
DATE : 27/ 9/86 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	2:30: 0	0.000	40.000	54.44	0.000
2	2:35: 0	0.083	40.000	54.44	0.000
3	2:40: 0	0.167	40.000	54.44	0.000
4	2:45: 0	0.250	40.000	54.44	0.000
5	2:50: 0	0.333	40.000	54.44	0.000
6	2:55: 0	0.417	40.000	54.44	0.000
7	3: 0: 0	0.500	40.000	54.44	0.000
8	3: 3: 0	0.550	67.000	54.44	27.000
9	3: 6: 0	0.600	105.000	54.44	38.000
10	3: 9: 0	0.650	146.000	54.44	41.000
11	3:12: 0	0.700	184.000	54.44	38.000
12	3:15: 0	0.750	221.000	54.44	37.000
13	3:18: 0	0.800	256.000	54.44	35.000
14	3:21: 0	0.850	290.000	54.44	34.000
15	3:24: 0	0.900	327.000	54.44	37.000
16	3:27: 0	0.950	357.000	54.44	30.000
17	3:30: 0	1.000	388.000	54.44	31.000
18	3:33: 0	1.050	418.000	54.44	30.000
19	3:36: 0	1.100	450.000	54.44	32.000
20	3:39: 0	1.150	482.000	54.44	32.000
21	3:42: 0	1.200	511.000	54.44	29.000
22	3:45: 0	1.250	537.000	54.44	26.000
23	3:48: 0	1.300	563.000	54.44	26.000
24	3:51: 0	1.350	587.000	54.44	24.000
25	3:54: 0	1.400	611.000	54.44	24.000
26	3:57: 0	1.450	634.000	54.44	23.000
27	4: 0: 0	1.500	659.000	54.44	25.000
28	4: 1: 0	1.517	43.000	54.44	-616.000
29	4: 5: 0	1.583	43.000	54.44	0.000
30	4:10: 0	1.667	43.000	54.44	0.000
31	4:15: 0	1.750	43.000	54.44	0.000
32	4:20: 0	1.833	43.000	54.44	0.000
33	4:25: 0	1.917	43.000	54.44	0.000
34	4:30: 0	2.000	43.000	54.44	0.000
35	4:35: 0	2.083	43.000	54.44	0.000
36	4:40: 0	2.167	43.000	54.44	0.000
37	4:45: 0	2.250	43.000	54.44	0.000
38	4:50: 0	2.333	43.000	54.44	0.000
39	4:55: 0	2.417	43.000	54.44	0.000
40	5: 0: 0	2.500	43.000	54.44	0.000
41	5: 3: 0	2.550	50.000	54.44	7.000
42	5: 6: 0	2.600	73.000	54.44	23.000
43	5: 9: 0	2.650	93.000	54.44	20.000
44	5:12: 0	2.700	113.000	54.44	20.000
45	5:15: 0	2.750	137.000	54.44	24.000
46	5:18: 0	2.800	158.000	54.44	21.000
47	5:21: 0	2.850	180.000	54.44	22.000
48	5:24: 0	2.900	203.000	54.44	23.000
49	5:27: 0	2.950	221.000	54.44	18.000
50	5:30: 0	3.000	239.000	54.44	18.000
51	5:33: 0	3.050	261.000	54.44	22.000
52	5:36: 0	3.100	282.000	54.44	21.000

COMPANY : GLOBAL NATURAL RESOURCES FIELD : TOLAND
 WELL : #1-16 JOB # : 10712
 GAUGE # : 6233 DEPTH : 5415
 DATE : 27/ 9/86 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	5:39: 0	3.150	300.000	54.44	18.000
54	5:42: 0	3.200	322.000	54.44	22.000
55	5:45: 0	3.250	341.000	54.44	19.000
56	5:48: 0	3.300	363.000	54.44	22.000
57	5:51: 0	3.350	383.000	54.44	20.000
58	5:54: 0	3.400	402.000	54.44	19.000
59	5:57: 0	3.450	418.000	54.44	16.000
60	6: 0: 0	3.500	440.000	54.44	22.000
61	6: 3: 0	3.550	460.000	54.44	20.000
62	6: 6: 0	3.600	480.000	54.44	20.000
63	6: 9: 0	3.650	497.000	54.44	17.000
64	6:12: 0	3.700	514.000	54.44	17.000
65	6:15: 0	3.750	530.000	54.44	16.000
66	6:18: 0	3.800	548.000	54.44	18.000
67	6:21: 0	3.850	564.000	54.44	16.000
68	6:24: 0	3.900	580.000	54.44	16.000
69	6:27: 0	3.950	597.000	54.44	17.000
70	6:30: 0	4.000	614.000	54.44	17.000
71	6:33: 0	4.050	631.000	54.44	17.000
72	6:36: 0	4.100	647.000	54.44	16.000
73	6:39: 0	4.150	665.000	54.44	18.000
74	6:42: 0	4.200	679.000	54.44	14.000
75	6:45: 0	4.250	694.000	54.44	15.000
76	6:48: 0	4.300	711.000	54.44	17.000
77	6:51: 0	4.350	729.000	54.44	18.000
78	6:54: 0	4.400	743.000	54.44	14.000
79	6:57: 0	4.450	758.000	54.44	15.000
80	7: 0: 0	4.500	766.000	54.44	8.000

WESTERN TESTING CO. INC.

6233

JK # 10712

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(A)

(B)

(C)

(D)

(E)

(F)

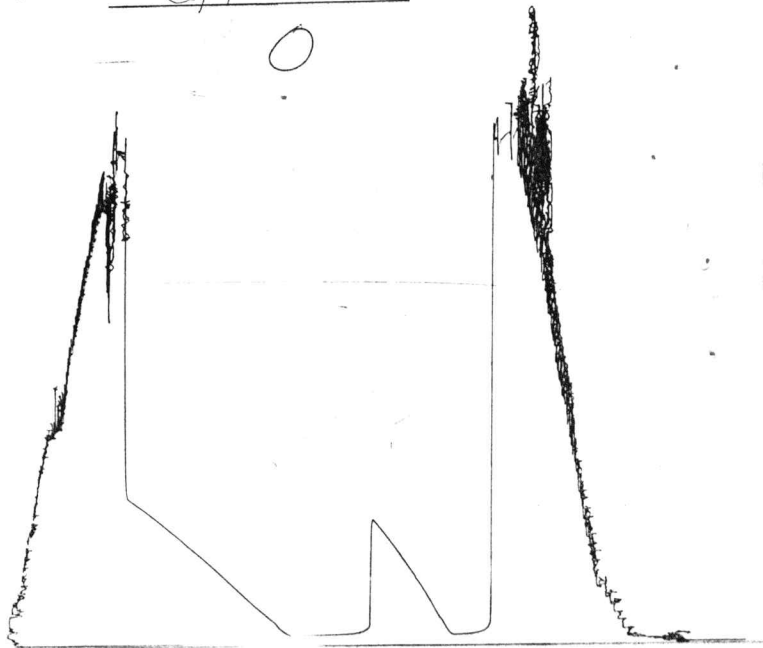
(G)

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13460

SK #10712

0

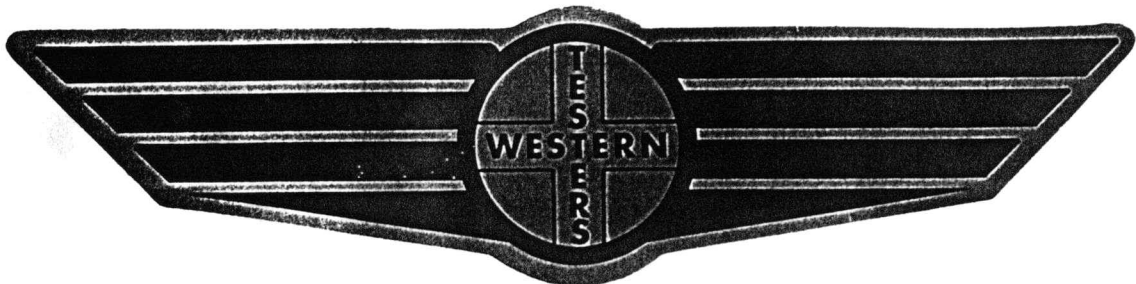


Test #3

FORMATION

TEST

REPORT



Home Office:

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Phone (316) 262-5861

COMPANY GLOBAL NATURAL RESOURCES LEASE & WELL NO. #1-16 TOLAND SEC. 16 TWP. 31SRGE. 33W TEST NO. 4 DATE 9/27/86

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	: 9-27-86	TICKET	: 10713
CUSTOMER	: GLOBAL NATURAL RESOURCES	LEASE	: TOLAND
WELL	: #1-16 TEST: 4	GEOLOGIST	: DAVID F???
ELEVATION	: 2902	FORMATION	: MORROW
SECTION	: 16	TOWNSHIP	: 31S
RANGE	: 33W	STATE	: KANSAS
GAUGE SN#	: 6233	CLOCK	: 12
	COUNTY : SEWARD		
	RANGE : 4000		

INTERVAL FROM	: 5389	TO	: 5415	TOTAL DEPTH	: 5415
DEPTH OF SELECTIVE ZONE	:				
PACKER DEPTH	: 5384	SIZE	: 6.75		
PACKER DEPTH	: 5389	SIZE	: 6.75		
PACKER DEPTH	:	SIZE	:		
PACKER DEPTH	:	SIZE	:		

DRILLING CON.	: BEREDCO RIG #5		
MUD TYPE	: CHEMICAL	VISCOSITY	: 52
WEIGHT	: 8.7	WATER LOSS (CC)	: 7.4
CHLORIDES (PPM)	: 2100		
JARS-MAKE	: WTC	SERIAL NUMBER	: 420
DID WELL FLOW ?	: NO	REVERSED OUT ?	: NO

DRILL COLLAR LENGTH	: 610	FT	I.D. inch	: 2.20
WEIGHT PIPE LENGTH	: 0	FT	I.D. inch	: 0.00
DRILL PIPE LENGTH	: 4745	FT	I.D. inch	: 3.80
TEST TOOL LENGTH	: 34	FT	TOOL SIZE	: 5.50
ANCHOR LENGTH	: 26	FT	ANCHOR SIZE	: 5.50
SURFACE CHOKE SIZE	: .75	IN	BOTTOM CHOKE SIZE	: .75
MAIN HOLE SIZE	: 7.875	IN	TOOL JOINT SIZE	: 4.5 XH

BLOW COMMENT #1 : INITIAL FLOW-FAIR BLOW-4 INCHES IN WATER.
BLOW COMMENT #2 : FINAL FLOW-NO BLOW.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 0 FT OF:

Total Barrels Fluid = 0.00

Total Fluid Prod Rate = 0.00 BFPD

REMARK 1 : HAD TROUBLE GETTING PACKER SEAT ON THE INITIAL FLOW. SLID TOOL 6 FEET TO BOTTOM-TOOL PLUGGED- JARRED LOOSE. NO FLUID SAMPLER BECAUSE TOOL PLUGGED OFF.

REMARK 2 :

REMARK 3 :

REMARK 4 :

SET PACKER(S) : 6:35 PM

TIME STARTED OFF BOTTOM : 9:50 PM

WELL TEMPERATURE : 0

INITIAL HYDROSTATIC PRESSURE

(A) 2636

INITIAL FLOW PERIOD MIN: 0

(B) 0 PSI TO (C) : 0

INITIAL CLOSED IN PERIOD MIN: 0

(D) 0

FINAL FLOW PERIOD MIN: 0

(E) 0 PSI TO (F) : 0

FINAL CLOSED IN PERIOD MIN: 0

(G) 0

FINAL HYDROSTATIC PRESSURE

(H) 2536



Fluid Sample Report

Date Sept 27, 1986 Ticket No. #10713
 Company Global Natural Resources
 Well Name & No. Toland #1 DST No. 4
 County Seward State KS
 Sampler No. _____ Test Interval 5389 - 5415

Pressure in Sampler _____ PSIG BHT _____ OF

Total Volume of Sampler _____ cc.

Total Volume of Sample: _____ cc.

Oil: _____ cc.

Water: _____ cc.

Mud: _____ cc.

Gas: _____ cu. ft.

Other: _____

Resistivity

Water: _____ @ _____ of Chloride Content _____ ppm.

Mud Pit Sample _____ @ _____ of Chloride Content _____ ppm.

Gas/Oil Ratio _____ Gravity _____ °API @ _____ OF

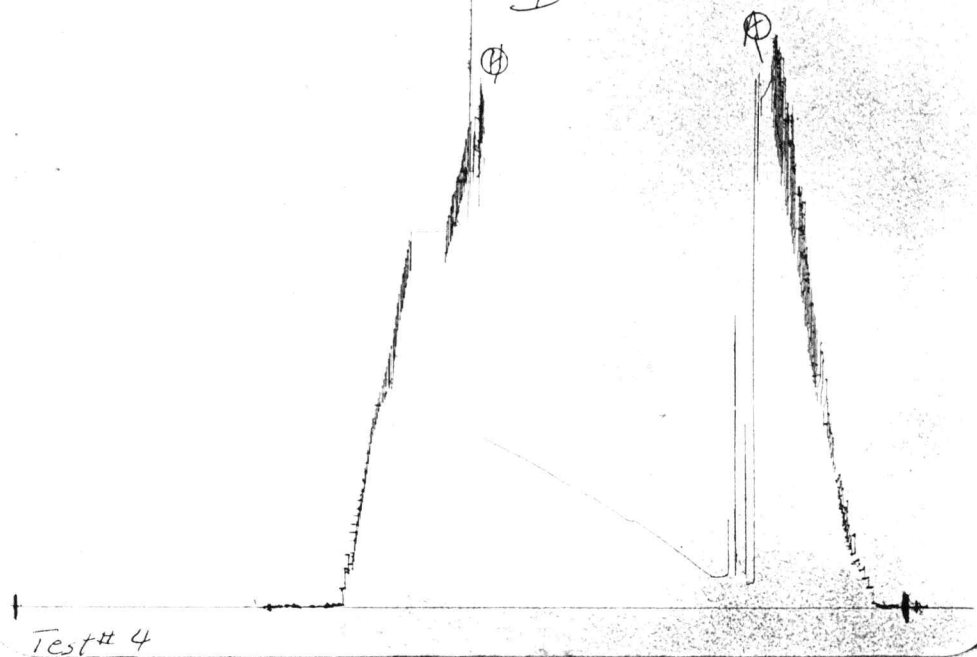
Where was sample drained Rig

Remarks: Tool plugged off

6233

SP # 10713

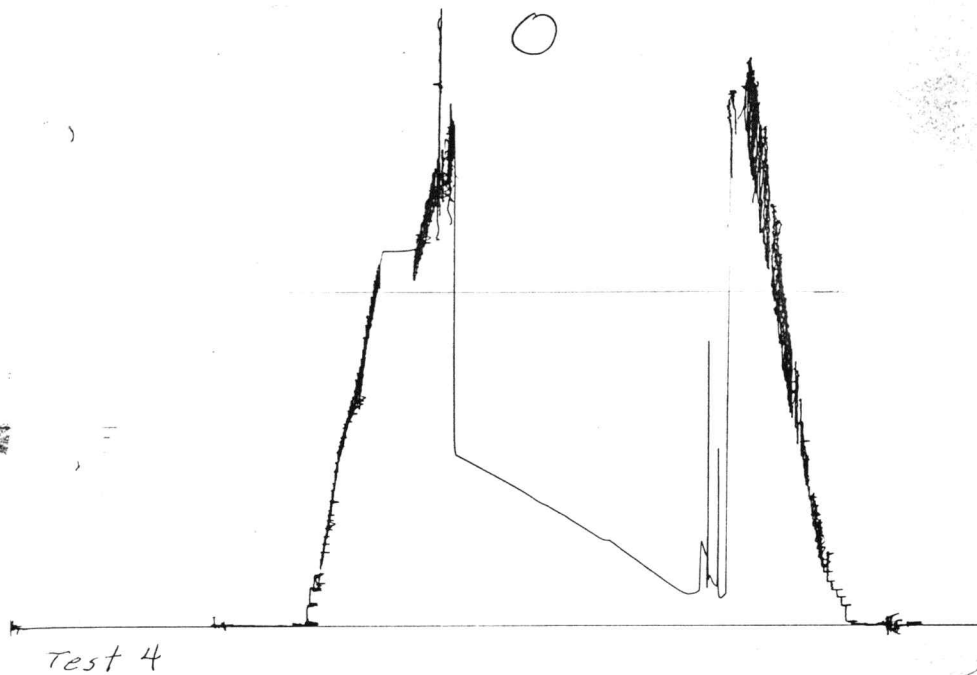
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SP # 10713

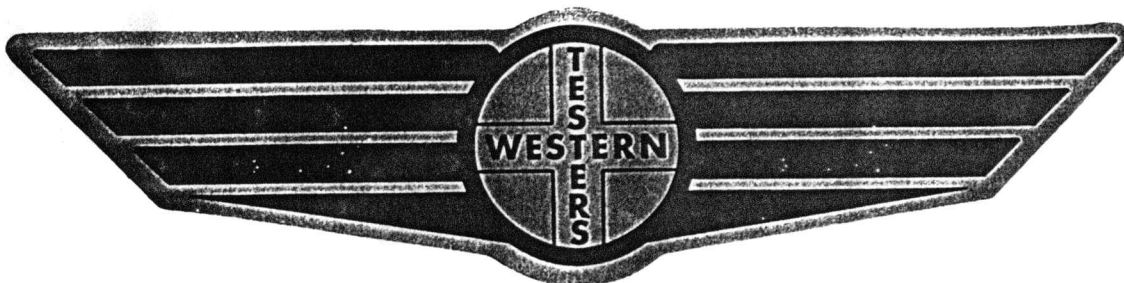
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY GLOBAL NATURAL RESOURCES LEASE & WELL NO. #1-16 TOLAND SEC. 16 TWP. 31SRGE. 33W TEST NO. 5 DATE 9/28/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	: 9-28-86	TICKET	: 10715
CUSTOMER	: GLOBAL NATURAL RESOURCES	LEASE	: TOLAND
WELL	: #1-16 TEST: 5	GEOLOGIST	: DAVID F??
ELEVATION	: 2902	FORMATION	: MORROW
SECTION	: 16	TOWNSHIP	: 31S
RANGE	: 33W	STATE	: KANSAS
GAUGE SN#	: 13400	CLOCK	: 12
COUNTY	: SEWARD		
RANGE	: 3950		

INTERVAL FROM	: 5315	TO	: 5415	TOTAL DEPTH	: 5415
DEPTH OF SELECTIVE ZONE	:				
PACKER DEPTH	: 5310	SIZE	: 6.75		
PACKER DEPTH	: 5315	SIZE	: 6.75		
PACKER DEPTH	:	SIZE	:		
PACKER DEPTH	:	SIZE	:		

DRILLING CON.	: BEREDCO RIG #5		
MUD TYPE	: CHEMICAL	VISCOSITY	: 52
WEIGHT	: 8.7	WATER LOSS (CC)	: 7.4
CHLORIDES (PPM)	: 3100		
JARS-MAKE	: WTC	SERIAL NUMBER	: 420
DID WELL FLOW ?	: NO	REVERSED OUT ?	: NO

DRILL COLLAR LENGTH	: 549 FT	I.D. inch	: 2.20
WEIGHT PIPE LENGTH	: 0 FT	I.D. inch	: 0.00
DRILL PIPE LENGTH	: 4732 FT	I.D. inch	: 3.80
TEST TOOL LENGTH	: 34 FT	TOOL SIZE	: 5.50
ANCHOR LENGTH	: 100 FT	ANCHOR SIZE	: 5.50
SURFACE CHOKE SIZE	: .75 IN	BOTTOM CHOKE SIZE	: .75
MAIN HOLE SIZE	: 7.875 IN	TOOL JOINT SIZE	: 4.5 XH

BLOW COMMENT #1 : GAS TO SURFACE IN 5 MINUTES ON THE INITIAL FLOW.
BLOW COMMENT #2 : GAS TO SURFACE ON THE FINAL FLOW. SEE ATTACHED
BLOW COMMENT #3 : FLOW CHART.
BLOW COMMENT #4 :

RECOVERED : 5 FT OF: MUD

Total Barrels Fluid = 0.02
Total Fluid Prod Rate = 0.38 BFPD
Indicated Wtr Rate = 0.34 BWPD

REMARK 1 :

REMARK 2 : CHLORIDES: 37000 PPM

REMARK 3 :

REMARK 4 :

SET PACKER(S) : 11:10 AM

TIME STARTED OFF BOTTOM : 3:40 PM

WELL TEMPERATURE : 128

INITIAL HYDROSTATIC PRESSURE

(A) 2532

INITIAL FLOW PERIOD MIN: 30

(B) 203 PSI TO (C) : 189

INITIAL CLOSED IN PERIOD MIN: 60

(D) 1640

FINAL FLOW PERIOD MIN: 60

(E) 176 PSI TO (F) : 165

FINAL CLOSED IN PERIOD MIN: 120

(G) 1628

FINAL HYDROSTATIC PRESSURE

(H) 2468

FLUID SAMPLE REPORT

Date : 9-28-86

Ticket No. : 10715

Company : GLOBAL NATURAL RESOURCES

Well Name & No. : TOLAND #1-16

DST No. 5

County : SEWARD

State : KANSAS

Sampler No. :

Test Interval : 5315-5415

=====

Pressure in Sampler	160 PSIG	BHT	128	Deg F
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Total Volume of Sampler :	3150	cc
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Total Volume of Sample :	3100	cc
--------------------------	------	----

Oil: --	cc
---------	----

Water: --	cc
-----------	----

Mud: --	cc
---------	----

Gas: 15.05cu	ft
--------------	----

Other:	cc
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RESITIVITY

Water	@	Deg F	Chloride Content	ppm
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Mud Pit Sample 1.8	@	80 Deg F	Chloride Content	3100 ppm
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Gas/Oil Ratio	Gravity	API @	Deg F
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Where was sample drained RIG

Remarks: NO FLUID RECOVERED IN SAMPLER.

WESTERN TESTING CO. INC.
WICHITA KANSAS.

Pressure Transient Report

COMPANY : GLOBAL NATURAL RESOURCES
RIG : SEWARD-KANSAS
FIELD : TOLAND
WELL : #1-16
DATE : 9-28-86
GAUGE NO : 13400

OPERATIONAL COMMENTS

CHLORIDES: 37000 PPM

GAS FLOW REPORT

Date : 9-28-86 Ticket # : 10715
 Customer : GLOBAL NSTURAL RESOURCES Lease : TOLAND
 Well : #1-16 Test : 5 Geologist : DAVID F???
 Elevation (KB) : 2902 Formation : MORROW
 Section : 16 Township : 31S
 Range : 33W County : SEWARD State : KANSAS
 Gauge SN # : 13400 Range : 3950 Clock : 12

TIME GAUGE (MIN)	TESTER TYPE	ORFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

5				GAS TO SURFACE
10	MERLA	1/2"	29	226000 CFPD
20	MERLA	1/2"	32	243000 CFPD
30	MERLA	1/2"	39	279000 CFPD

SECOND FLOW

10	MERLA	1/2"	29	226000 CFPD
20	MERLA	1/2"	36	265000 CFPD
30	MERLA	1/2"	36	265000 CFPD
40	MERLA	1/2"	36	265000 CFPD
50	MERLA	1/2"	36	265000 CFPD
60	MERLA	1/2"	36	265000 CFPD

Gas Bottle SN # : 47
 Date Bottle Filled : 9-28-86
 Date to be Invoiced :

COMPANY : GLOBAL NATURAL RESOURCES FIELD : TOLAND
 WELL : #1-16 JOB # : 10715
 GAUGE # : 13400 DEPTH : 5415
 DATE : 28/ 9/86 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	15:19: 0	3.150	1605.000	53.33	1.000
54	15:22: 0	3.200	1606.000	53.33	1.000
55	15:25: 0	3.250	1607.000	53.33	1.000
56	15:28: 0	3.300	1608.000	53.33	1.000
57	15:31: 0	3.350	1609.000	53.33	1.000
58	15:34: 0	3.400	1610.000	53.33	1.000
59	15:37: 0	3.450	1611.000	53.33	1.000
60	15:40: 0	3.500	1612.000	53.33	1.000
61	15:43: 0	3.550	1613.000	53.33	1.000
62	15:46: 0	3.600	1614.000	53.33	1.000
63	15:49: 0	3.650	1615.000	53.33	1.000
64	15:52: 0	3.700	1616.000	53.33	1.000
65	15:55: 0	3.750	1617.000	53.33	1.000
66	15:58: 0	3.800	1617.000	53.33	0.000
67	16: 1: 0	3.850	1617.000	53.33	0.000
68	16: 4: 0	3.900	1617.000	53.33	0.000
69	16: 7: 0	3.950	1617.000	53.33	0.000
70	16:10: 0	4.000	1618.000	53.33	1.000
71	16:13: 0	4.050	1619.000	53.33	1.000
72	16:16: 0	4.100	1620.000	53.33	1.000
73	16:19: 0	4.150	1621.000	53.33	1.000
74	16:22: 0	4.200	1622.000	53.33	1.000
75	16:25: 0	4.250	1623.000	53.33	1.000
76	16:28: 0	4.300	1624.000	53.33	1.000
77	16:31: 0	4.350	1625.000	53.33	1.000
78	16:34: 0	4.400	1626.000	53.33	1.000
79	16:37: 0	4.450	1627.000	53.33	1.000
80	16:40: 0	4.500	1628.000	53.33	1.000

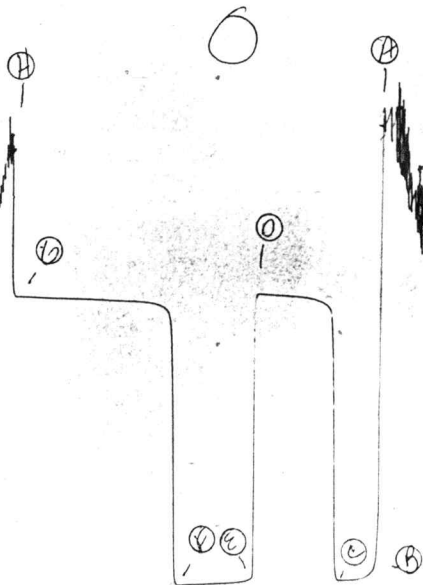
WESTERN TESTING CO. INC.

COMPANY : GLOBAL NATURAL RESOURCES FIELD : TOLAND
 WELL : #1-16 JOB # : 10715
 GAUGE # : 13400 DEPTH : 5415
 DATE : 28/ 9/86 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	11:10: 0	0.000	203.000	53.33	0.000
2	11:15: 0	0.083	203.000	53.33	0.000
3	11:20: 0	0.167	203.000	53.33	0.000
4	11:25: 0	0.250	193.000	53.33	-10.000
5	11:30: 0	0.333	189.000	53.33	-4.000
6	11:35: 0	0.417	189.000	53.33	0.000
7	11:40: 0	0.500	189.000	53.33	0.000
8	11:43: 0	0.550	1406.000	53.33	1217.000
9	11:46: 0	0.600	1561.000	53.33	155.000
10	11:49: 0	0.650	1584.000	53.33	23.000
11	11:52: 0	0.700	1596.000	53.33	12.000
12	11:55: 0	0.750	1606.000	53.33	10.000
13	11:58: 0	0.800	1612.000	53.33	6.000
14	12: 1: 0	0.850	1617.000	53.33	5.000
15	12: 4: 0	0.900	1620.000	53.33	3.000
16	12: 7: 0	0.950	1623.000	53.33	3.000
17	12:10: 0	1.000	1626.000	53.33	3.000
18	12:13: 0	1.050	1628.000	53.33	2.000
19	12:16: 0	1.100	1630.000	53.33	2.000
20	12:19: 0	1.150	1632.000	53.33	2.000
21	12:22: 0	1.200	1634.000	53.33	2.000
22	12:25: 0	1.250	1636.000	53.33	2.000
23	12:28: 0	1.300	1637.000	53.33	1.000
24	12:31: 0	1.350	1638.000	53.33	1.000
25	12:34: 0	1.400	1639.000	53.33	1.000
26	12:37: 0	1.450	1640.000	53.33	1.000
27	12:40: 0	1.500	1640.000	53.33	0.000
28	12:41: 0	1.517	176.000	53.33	-1464.000
29	12:45: 0	1.583	176.000	53.33	0.000
30	12:50: 0	1.667	176.000	53.33	0.000
31	12:55: 0	1.750	174.000	53.33	-2.000
32	13: 0: 0	1.833	173.000	53.33	-1.000
33	14: 5: 0	1.917	172.000	53.33	-1.000
34	14:10: 0	2.000	171.000	53.33	-1.000
35	14:15: 0	2.083	170.000	53.33	-1.000
36	14:20: 0	2.167	169.000	53.33	-1.000
37	14:25: 0	2.250	168.000	53.33	-1.000
38	14:30: 0	2.333	167.000	53.33	-1.000
39	14:35: 0	2.417	166.000	53.33	-1.000
40	14:40: 0	2.500	165.000	53.33	-1.000
41	14:43: 0	2.550	1388.000	53.33	1223.000
42	14:46: 0	2.600	1543.000	53.33	155.000
43	14:49: 0	2.650	1565.000	53.33	22.000
44	14:52: 0	2.700	1579.000	53.33	14.000
45	14:55: 0	2.750	1586.000	53.33	7.000
46	14:58: 0	2.800	1590.000	53.33	4.000
47	15: 1: 0	2.850	1593.000	53.33	3.000
48	15: 4: 0	2.900	1596.000	53.33	3.000
49	15: 7: 0	2.950	1599.000	53.33	3.000
50	15:10: 0	3.000	1602.000	53.33	3.000
51	15:13: 0	3.050	1603.000	53.33	1.000
52	15:16: 0	3.100	1604.000	53.33	1.000

13400

JK # 10715

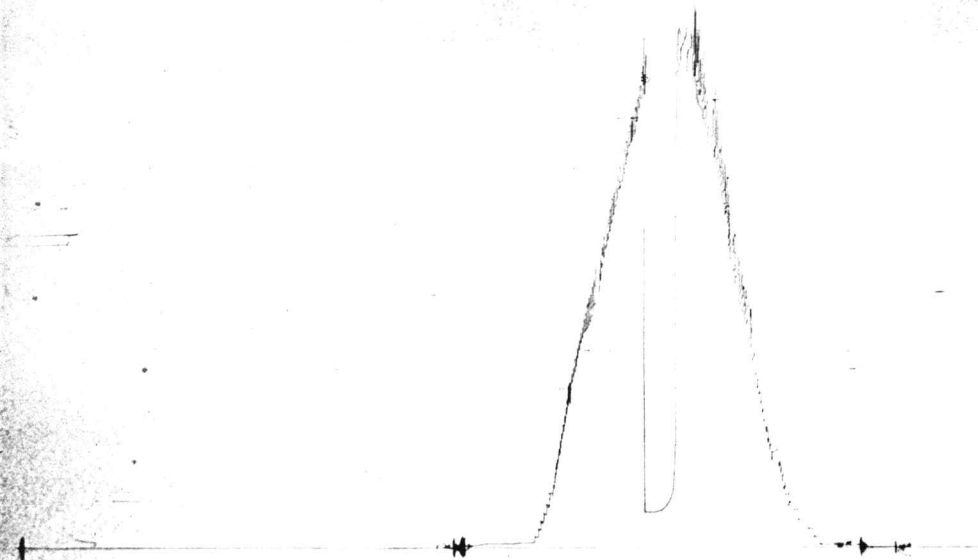


Test #5

6233

44 # 10715

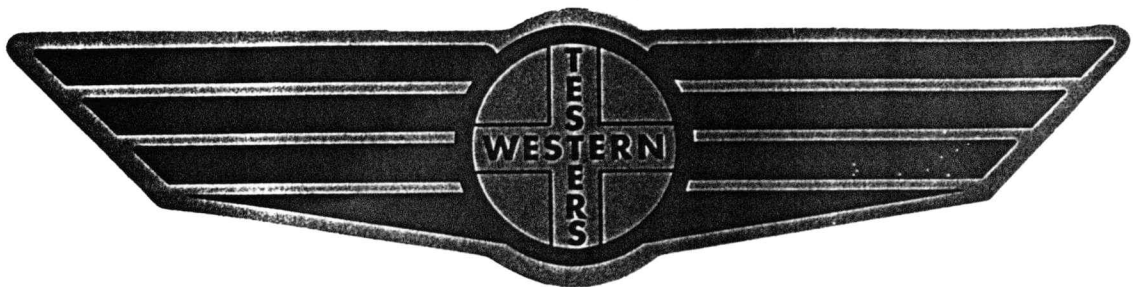
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY GLOBAL NATURAL RESOURCES

LEASE & WELL NO. #1-16 TOLAND

SEC. 16 TWP. 31S RGE. 33W

TEST NO. 6

DATE 9/28/86

WESTERN TESTING CO INC.
SUBSURFACE PRESSURE SURVEY

DATE	: 9-28-86	TICKET	: 10716
CUSTOMER	: GLOBAL NATURAL RESOURCES	LEASE	: TOLAND
WELL	: #1-16 TEST: 6	GEOLOGIST	: DAVID F??
ELEVATION	: 2902	FORMATION	: CHESTER
SECTION	: 16	TOWNSHIP	: 31S
RANGE	: 33W	COUNTY	: SEWARD
GAUGE SN#	: 6233	STATE	: KANSAS
		CLOCK	: 12
		RANGE	: 4000

INTERVAL FROM	: 5484	TO	: 5505	TOTAL DEPTH	: 5505
DEPTH OF SELECTIVE ZONE	:				
PACKER DEPTH	: 5479	SIZE	: 6.75		
PACKER DEPTH	: 5484	SIZE	: 6.75		
PACKER DEPTH	:	SIZE	:		
PACKER DEPTH	:	SIZE	:		

DRILLING CON.	: BEREDCO RIG #5		
MUD TYPE	: CHEMICAL	VISCOSITY	: 60
WEIGHT	: 8.8	WATER LOSS (CC)	: 7.8
CHLORIDES (PPM)	: 2300		
JARS-MAKE	: WTC	SERIAL NUMBER	: 420
DID WELL FLOW ?	: NO	REVERSED OUT ?	:

DRILL COLLAR LENGTH	: 610	FT	I.D. inch	: 2.20
WEIGHT PIPE LENGTH	: 0	FT	I.D. inch	: 0.00
DRILL PIPE LENGTH	: 4840	FT	I.D. inch	: 3.80
TEST TOOL LENGTH	: 34	FT	TOOL SIZE	: 5.50
ANCHOR LENGTH	: 21	FT	ANCHOR SIZE	: 5.50
SURFACE CHOKE SIZE	: .75	IN	BOTTOM CHOKE SIZE	: .75
MAIN HOLE SIZE	: 7.875	IN	TOOL JOINT SIZE	: 4.5 XH

BLOW COMMENT #1 : INITIAL FLOW-STRONG BLOW OFF BOTTOM OF BUCKET IN
BLOW COMMENT #2 : 10 MINUTES.
BLOW COMMENT #3 : FINAL FLOW-STRONG BLOW-12" IN WATER.
BLOW COMMENT #4 :

RECOVERED : 5 FT OF: OIL
RECOVERED : 30 FT OF: OIL CUT MUD(25%OIL-75%M)
RECOVERED : 20 FT OF: MUD

Total Barrels Fluid = 0.26
Total Fluid Prod Rate = 4.14 BFPD
Indicated Oil Rate = 0.94 BOPD
Indicated Wtr Rate = 2.86 BWPD
Corrected Oil Rate = 2.97 BOPD
Corrected Wtr Rate = 9.04 BWPD

REMARK 1 :
REMARK 2 : RECOVERED 100 FEET OF GAS ABOVE FLUID.
REMARK 3 : CHLORIDES: 4000 PPM
REMARK 4 :

SET PACKER(S) : 5:15 PM
WELL TEMPERATURE : 128
INITIAL HYDROSTATIC PRESSURE (A) 2670
INITIAL FLOW PERIOD MIN: 30 (B) 66 PSI TO (C) : 74
INITIAL CLOSED IN PERIOD MIN: 60 (D) 247
FINAL FLOW PERIOD MIN: 60 (E) 77 PSI TO (F) : 81
FINAL CLOSED IN PERIOD MIN: 123 (G) 290
FINAL HYDROSTATIC PRESSURE (H) 2580
TIME STARTED OFF BOTTOM : 10:45 PM

FLUID SAMPLE REPORT

Date : 9-29-86 Ticket No. : 10716

Company : GLOBAL NATURAL RESOURCES

Well Name & No. : TOLAND #1-16

DST No. 6

County : SEWARD

State : KANSAS

Sampler No. :

Test Interval : 5484-5505

=====

Pressure in Sampler 60 PSIG BHT 128 Deg F

Total Volume of Sampler : 3150 cc

Total Volume of Sample : 2800 cc

Oil: 1520 cc

Water: -- cc

Mud: 280 cc

Gas: -- cu ft

Other: cc

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RESITIVITY

MUD 2.0 @ 70 Deg F Chloride Content 4000 ppm

Mud Pit Sample 2.5 @ 65 Deg F Chloride Content 2300 ppm

Gas/Oil Ratio Gravity 35 API @ 60 Deg F

Where was sample drained RIG

Remarks: THERE WAS NO GAS IN SAMPLE CHAMBER.

WESTERN TESTING CO INC.
WICHITA KANSAS

Pressure Transient Report

COMPANY : GLOBAL NATURAL RESOURCES
RIG : SEWARD-KANSAS
FIELD : TOLAND
WELL : #1-16
DATE : 9-28-86
GAUGE NO : 6233

OPERATIONAL COMMENTS

RECOVERED 100 FEET OF GAS ABOVE FLUID.
CHLORIDES: 4000 PPM

COMPANY : GLOBAL NATURAL RESOURCES FIELD : TOLAND
WELL : #1-16 JOB # : 10716
GAUGE # : 6233 DEPTH : 5505
DATE : 28/ 9/86 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	6:15: 0	0.000	66.000	53.33	0.000
2	6:20: 0	0.083	66.000	53.33	0.000
3	6:25: 0	0.167	66.000	53.33	0.000
4	6:30: 0	0.250	66.000	53.33	0.000
5	6:35: 0	0.333	66.000	53.33	0.000
6	6:40: 0	0.417	66.000	53.33	0.000
7	6:45: 0	0.500	74.000	53.33	8.000
8	6:48: 0	0.550	75.000	53.33	1.000
9	6:51: 0	0.600	79.000	53.33	4.000
10	6:54: 0	0.650	89.000	53.33	10.000
11	6:57: 0	0.700	100.000	53.33	11.000
12	7: 0: 0	0.750	111.000	53.33	11.000
13	7: 3: 0	0.800	122.000	53.33	11.000
14	7: 6: 0	0.850	134.000	53.33	12.000
15	7: 9: 0	0.900	142.000	53.33	8.000
16	7:12: 0	0.950	152.000	53.33	10.000
17	7:15: 0	1.000	160.000	53.33	8.000
18	7:18: 0	1.050	170.000	53.33	10.000
19	7:21: 0	1.100	180.000	53.33	10.000
20	7:24: 0	1.150	190.000	53.33	10.000
21	7:27: 0	1.200	197.000	53.33	7.000
22	7:30: 0	1.250	206.000	53.33	9.000
23	7:33: 0	1.300	215.000	53.33	9.000
24	7:36: 0	1.350	223.000	53.33	8.000
25	7:39: 0	1.400	230.000	53.33	7.000
26	7:42: 0	1.450	239.000	53.33	9.000
27	7:45: 0	1.500	247.000	53.33	8.000
28	7:46: 0	1.517	77.000	53.33	-170.000
29	7:50: 0	1.583	77.000	53.33	0.000
30	7:55: 0	1.667	77.000	53.33	0.000
31	8: 0: 0	1.750	77.000	53.33	0.000
32	8: 5: 0	1.833	77.000	53.33	0.000
33	8:10: 0	1.917	77.000	53.33	0.000
34	8:15: 0	2.000	77.000	53.33	0.000
35	8:20: 0	2.083	77.000	53.33	0.000
36	8:25: 0	2.167	77.000	53.33	0.000
37	8:30: 0	2.250	78.000	53.33	1.000
38	8:35: 0	2.333	79.000	53.33	1.000
39	8:40: 0	2.417	80.000	53.33	1.000
40	8:45: 0	2.500	81.000	53.33	1.000
41	8:48: 0	2.550	84.000	53.33	3.000
42	8:51: 0	2.600	87.000	53.33	3.000
43	8:54: 0	2.650	93.000	53.33	6.000
44	8:57: 0	2.700	101.000	53.33	8.000
45	9: 0: 0	2.750	108.000	53.33	7.000
46	9: 3: 0	2.800	113.000	53.33	5.000
47	9: 6: 0	2.850	118.000	53.33	5.000
48	9: 9: 0	2.900	124.000	53.33	6.000
49	9:12: 0	2.950	129.000	53.33	5.000
50	9:15: 0	3.000	134.000	53.33	5.000
51	9:18: 0	3.050	140.000	53.33	6.000
52	9:21: 0	3.100	144.000	53.33	4.000

COMPANY : GLOBAL NATURAL RESOURCES FIELD : TOLAND
 WELL : #1-16 JOB # : 10716
 GAUGE # : 6233 DEPTH : 5505
 DATE : 28/ 9/86 TEST :

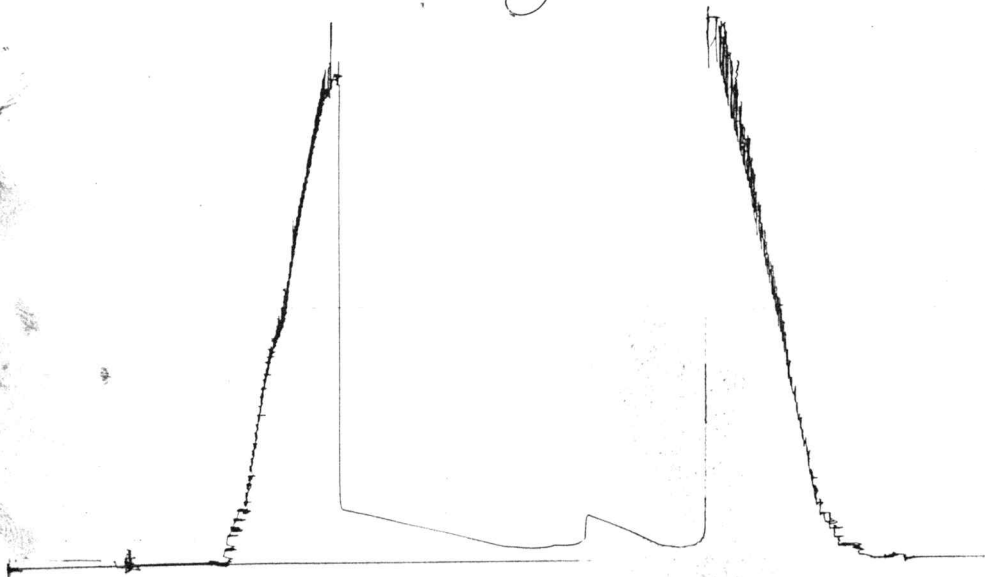
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	9:24: 0	3.150	148.000	53.33	4.000
54	9:27: 0	3.200	153.000	53.33	5.000
55	9:30: 0	3.250	158.000	53.33	5.000
56	9:33: 0	3.300	165.000	53.33	7.000
57	9:36: 0	3.350	170.000	53.33	5.000
58	9:39: 0	3.400	175.000	53.33	5.000
59	9:42: 0	3.450	180.000	53.33	5.000
60	9:45: 0	3.500	185.000	53.33	5.000
61	9:48: 0	3.550	190.000	53.33	5.000
62	9:51: 0	3.600	196.000	53.33	6.000
63	9:54: 0	3.650	202.000	53.33	6.000
64	9:57: 0	3.700	207.000	53.33	5.000
65	10: 0: 0	3.750	213.000	53.33	6.000
66	10: 3: 0	3.800	219.000	53.33	6.000
67	10: 6: 0	3.850	224.000	53.33	5.000
68	10: 9: 0	3.900	229.000	53.33	5.000
69	10:12: 0	3.950	233.000	53.33	4.000
70	10:15: 0	4.000	237.000	53.33	4.000
71	10:18: 0	4.050	243.000	53.33	6.000
72	10:21: 0	4.100	249.000	53.33	6.000
73	10:24: 0	4.150	254.000	53.33	5.000
74	10:27: 0	4.200	258.000	53.33	4.000
75	10:30: 0	4.250	262.000	53.33	4.000
76	10:33: 0	4.300	267.000	53.33	5.000
77	10:36: 0	4.350	272.000	53.33	5.000
78	10:39: 0	4.400	276.000	53.33	4.000
79	10:42: 0	4.450	280.000	53.33	4.000
80	10:45: 0	4.500	285.000	53.33	5.000
81	10:48: 0	4.550	290.000	53.33	5.000

WESTERN TESTING CO INC.

1340

IR #10716

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6133

Sta # 10716

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