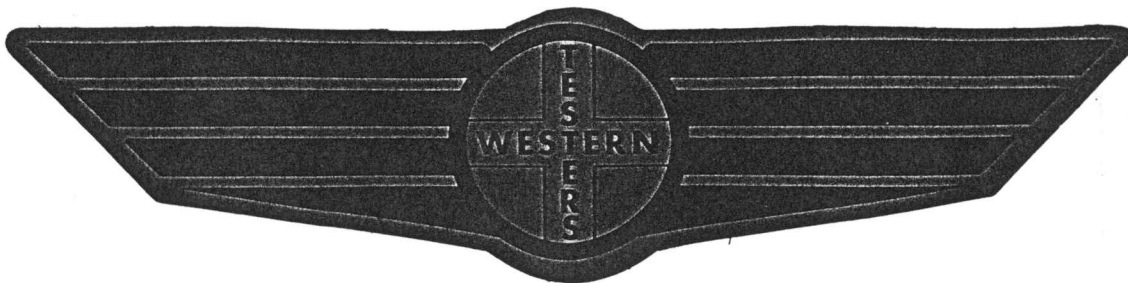


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

KCC

OCT 14 1991

COMPANY NORTH AMERICAN RESOURCES CO. LEASE & WELL NO. HERBERT 17-2 SEC. 17 TWP. 23S RGE. 30W TEST NO. 1 DATE 8/17/91

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 8-17-91 TICKET : 18131
CUSTOMER : NORTH AMERICAN RESOURCES CO. INC.
WELL : 17-2 TEST: 1 LEASE : HERBERT
ELEVATION : 2851 KB GEOLOGIST : ?
SECTION : 17 FORMATION : MORROW
RANGE : 30W COUNTY : FINNEY TOWNSHIP : 23S
GAUGE SN# : 3849 RANGE : 4200 STATE : KANSAS
CLOCK : 12

INTERVAL FROM : 4726 TO : 4760 TOTAL DEPTH : 4760
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4721 SIZE : 6.63
PACKER DEPTH : 4726 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG 10
MUD TYPE : CHEMICAL VISCOSITY : 42
WEIGHT : 9.0 WATER LOSS (CC) : 9.2
CHLORIDES (PPM) : 7800
JARS-MAKE : W.T.C. SERIAL NUMBER : 407
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 4694 FT I.D. inch : 3.80
TEST TOOL LENGTH : 32 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 34 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 : INITIAL FLOW PERIOD VERY WEAK 1/8 INCH BUCKET
BLOW COMMENT #2 : DIED IN 12 MINUTES.
BLOW COMMENT #3 : FINAL FLOW PERIOD NO BLOW.
BLOW COMMENT #4 :

RECOVERED : 12 FT OF: SLIGHTLY OIL CUT MUD-4%OIL;96%MUD

Total Barrels Fluid = 0.17
Total Fluid Prod Rate = 3.23 BFPD
Indicated Oil Rate = 0.13 BOPD
Indicated Wtr Rate = 0.31 BWPD
Corrected Oil Rate = 4.31 BOPD
Corrected Wtr Rate = 10.33 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 11:25 A.M.

TIME STARTED OFF BOTTOM : 4:40 A.M.

WELL TEMPERATURE : 126

INITIAL HYDROSTATIC PRESSURE

(A) 2251

INITIAL FLOW PERIOD MIN: 15

(B) 37 PSI TO (C) : 37

INITIAL CLOSED IN PERIOD MIN: 60

(D) 96

FINAL FLOW PERIOD MIN: 60

(E) 31 PSI TO (F) : 31

FINAL CLOSED IN PERIOD MIN: 180

(G) 87

FINAL HYDROSTATIC PRESSURE

(H) 2240

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : NORTH AMERICAN RESOURCES CO. INC.
RIG : FINNEY-KANSAS
FIELD : HERBERT
WELL : 17-2
DATE : 8-17-91
GAUGE NO : 3849

OPERATIONAL COMMENTS

COMPANY : NORTH AMERICAN RESOURCES CO. INC.

FIELD : HERBERT

WELL : 17-2

JOB # : 18131

GAUGE # : 3849

DEPTH : 4760

DATE : 17/ 8/91

TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
-----	-----	-----	-----	-----	-----
INITIAL FLOW PERIOD					
2	11:25: 0	0.000	37.000	126.00	0.000
3	11:29:59	0.083	37.000	126.00	0.000
4	11:35: 0	0.167	37.000	126.00	0.000
5	11:40: 0	0.250	37.000	126.00	0.000
INITIAL SHUT-IN PERIOD					
6	11:43: 0	0.300	37.000	126.00	0.000
7	11:46: 0	0.350	37.000	126.00	0.000
8	11:49: 0	0.400	38.000	126.00	1.000
9	11:52: 0	0.450	39.000	126.00	1.000
10	11:55: 0	0.500	42.000	126.00	3.000
11	11:58: 0	0.550	44.000	126.00	2.000
12	12: 1: 0	0.600	47.000	126.00	3.000
13	12: 4: 0	0.650	51.000	126.00	4.000
14	12: 7: 0	0.700	53.000	126.00	2.000
15	12:10: 0	0.750	56.000	126.00	3.000
16	12:13: 0	0.800	61.000	126.00	5.000
17	12:16: 0	0.850	65.000	126.00	4.000
18	12:19: 0	0.900	69.000	126.00	4.000
19	12:22: 0	0.950	73.000	126.00	4.000
20	12:25: 0	1.000	77.000	126.00	4.000
21	12:28: 0	1.050	81.000	126.00	4.000
22	12:31: 0	1.100	85.000	126.00	4.000
23	12:34: 0	1.150	89.000	126.00	4.000
24	12:37: 0	1.200	93.000	126.00	4.000
25	12:40: 0	1.250	96.000	126.00	3.000
FINAL FLOW PERIOD					
26	12:41: 0	1.267	31.000	126.00	-65.000
27	12:44:59	1.333	31.000	126.00	0.000
28	12:50: 0	1.417	31.000	126.00	0.000
29	12:55: 0	1.500	31.000	126.00	0.000
30	12:59:59	1.583	31.000	126.00	0.000
31	13: 5: 0	1.667	31.000	126.00	0.000
32	13:10: 0	1.750	31.000	126.00	0.000
33	13:14:59	1.833	31.000	126.00	0.000
34	13:20: 0	1.917	31.000	126.00	0.000
35	13:25: 0	2.000	31.000	126.00	0.000
36	13:29:59	2.083	31.000	126.00	0.000
37	13:35: 0	2.167	31.000	126.00	0.000
38	13:40: 0	2.250	31.000	126.00	0.000
FINAL SHUT-IN PERIOD					
39	13:43: 0	2.300	31.000	126.00	0.000
40	13:46: 0	2.350	31.000	126.00	0.000
41	13:49: 0	2.400	31.000	126.00	0.000
42	13:52: 0	2.450	31.000	126.00	0.000
43	13:55: 0	2.500	32.000	126.00	1.000
44	13:58: 0	2.550	34.000	126.00	2.000
45	14: 1: 0	2.600	34.000	126.00	0.000
46	14: 4: 0	2.650	35.000	126.00	1.000
47	14: 7: 0	2.700	36.000	126.00	1.000
48	14:10: 0	2.750	37.000	126.00	1.000

COMPANY : NORTH AMERICAN RESOURCES CO. INC.

WELL : 17-2
GAUGE # : 3849
DATE : 17/ 8/91

FIELD : HERBERT
JOB # : 18131
DEPTH : 4760
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	14:13: 0	2.800	38.000	126.00	1.000
50	14:16: 0	2.850	39.000	126.00	1.000
51	14:19: 0	2.900	39.000	126.00	0.000
52	14:22: 0	2.950	40.000	126.00	1.000
53	14:25: 0	3.000	41.000	126.00	1.000
54	14:28: 0	3.050	42.000	126.00	1.000
55	14:31: 0	3.100	42.000	126.00	0.000
56	14:34: 0	3.150	43.000	126.00	1.000
57	14:37: 0	3.200	44.000	126.00	1.000
58	14:40: 0	3.250	45.000	126.00	1.000
59	14:43: 0	3.300	46.000	126.00	1.000
60	14:46: 0	3.350	48.000	126.00	2.000
61	14:49: 0	3.400	50.000	126.00	2.000
62	14:52: 0	3.450	51.000	126.00	1.000
63	14:55: 0	3.500	52.000	126.00	1.000
64	14:58: 0	3.550	53.000	126.00	1.000
65	15: 1: 0	3.600	54.000	126.00	1.000
66	15: 4: 0	3.650	55.000	126.00	1.000
67	15: 7: 0	3.700	56.000	126.00	1.000
68	15:10: 0	3.750	57.000	126.00	1.000
69	15:13: 0	3.800	58.000	126.00	1.000
70	15:16: 0	3.850	59.000	126.00	1.000
71	15:19: 0	3.900	59.000	126.00	0.000
72	15:22: 0	3.950	60.000	126.00	1.000
73	15:25: 0	4.000	61.000	126.00	1.000
74	15:28: 0	4.050	62.000	126.00	1.000
75	15:31: 0	4.100	63.000	126.00	1.000
76	15:34: 0	4.150	64.000	126.00	1.000
77	15:37: 0	4.200	65.000	126.00	1.000
78	15:40: 0	4.250	66.000	126.00	1.000
79	15:43: 0	4.300	67.000	126.00	1.000
80	15:46: 0	4.350	68.000	126.00	1.000
81	15:49: 0	4.400	69.000	126.00	1.000
82	15:52: 0	4.450	70.000	126.00	1.000
83	15:55: 0	4.500	71.000	126.00	1.000
84	15:58: 0	4.550	72.000	126.00	1.000
85	16: 1: 0	4.600	73.000	126.00	1.000
86	16: 4: 0	4.650	74.000	126.00	1.000
87	16: 7: 0	4.700	75.000	126.00	1.000
88	16:10: 0	4.750	76.000	126.00	1.000
89	16:13: 0	4.800	77.000	126.00	1.000
90	16:16: 0	4.850	78.000	126.00	1.000
91	16:19: 0	4.900	79.000	126.00	1.000
92	16:22: 0	4.950	80.000	126.00	1.000
93	16:25: 0	5.000	81.000	126.00	1.000
94	16:28: 0	5.050	82.000	126.00	1.000
95	16:31: 0	5.100	83.000	126.00	1.000
96	16:34: 0	5.150	85.000	126.00	2.000
97	16:37: 0	5.200	86.000	126.00	1.000
98	16:40: 0	5.250	87.000	126.00	1.000

WESTERN TESTING CO. INC.

FLUID SAMPLE REPORT

Date : 8-17-91 Ticket No. : 18131
Company : NORTH AMERICAN RESOURCES CO. INC.
Well Name & No. : HERBERT 17-2
DST No. 1
County : FINNEY State : KANSAS
Sampler No. : 200 Test Interval : 4726-4760

=====

Pressure in Sampler	5	PSIG	BHT	126	Deg F
---------------------	---	------	-----	-----	-------

Total Volume of Sampler : 3150 cc
Total Volume of Sample : 2950 cc
Oil: 75 cc
Water: cc
Mud: 2875 cc
Gas: 13.52cu ft
Other: cc

=====

RESITIVITY

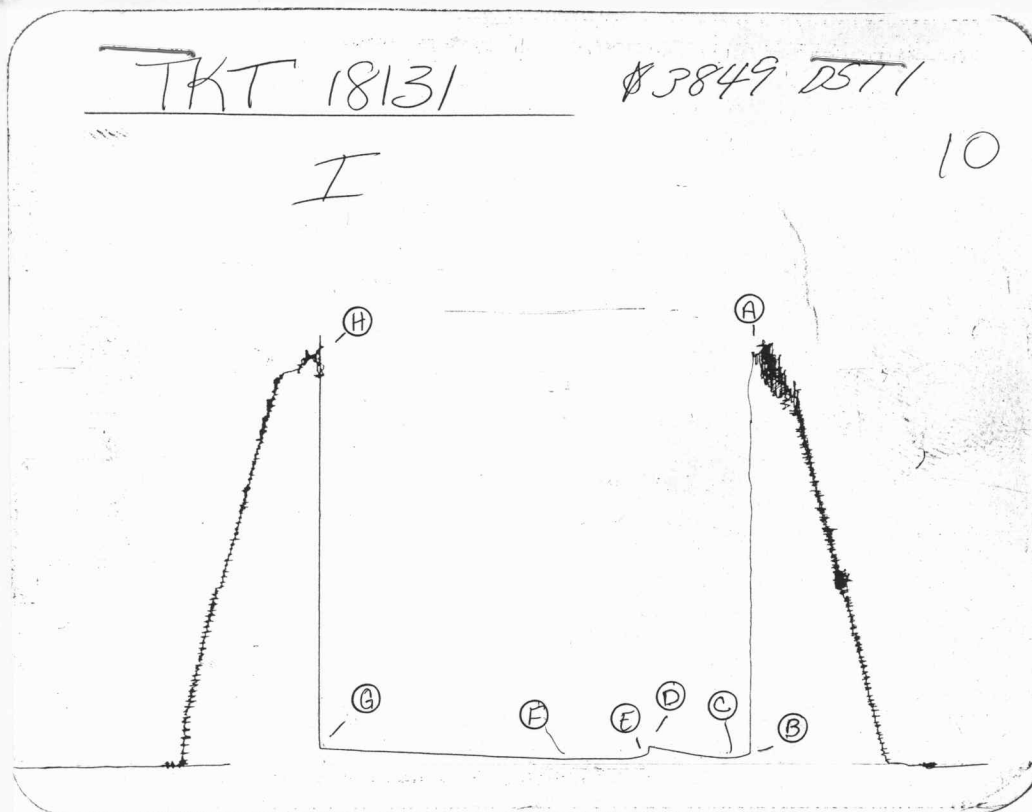
Drilling Mud	@	F	Chloride Content	ppm
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Mud Pit Sample 1.8 @ 72 F Chloride Content 4950 ppm

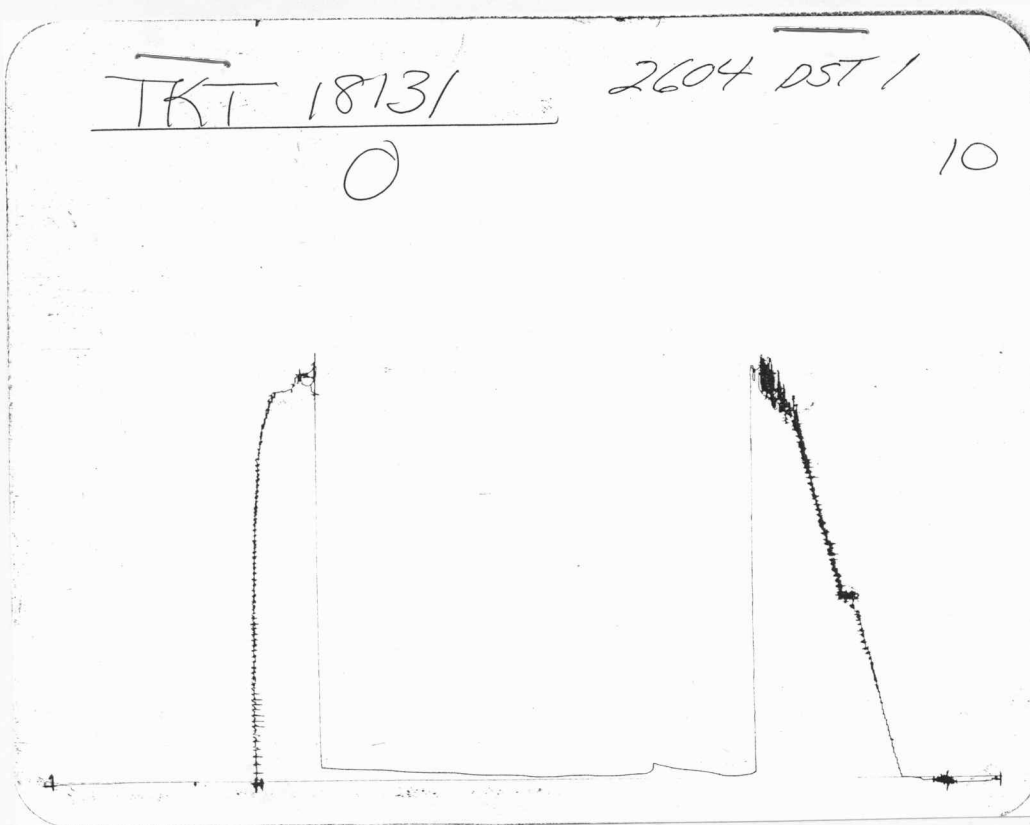
Gas/Oil Ratio	Gravity	API @	Deg F
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Where was sample drained ON LOCATION

Remarks:

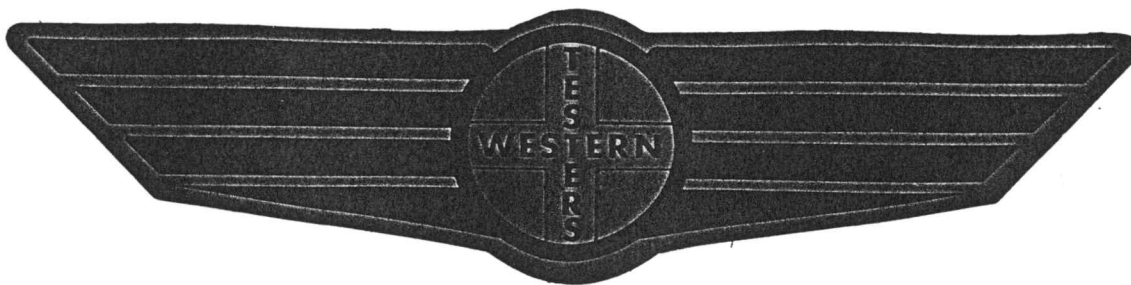


Inside Recorder



Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

KCC

OCT 14 1991

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	8-19-91	TICKET	:	18132
CUSTOMER	:	NORTH AMERICAN RESOURCES	LEASE	:	HERBERT
WELL	:	17-2 TEST: 2	GEOLOGIST	:	
ELEVATION	:	2851 K.B.	FORMATION	:	CHEROKEE
SECTION	:	17	TOWNSHIP	:	23S
RANGE	:	30W	STATE	:	KANSAS
GAUGE SN#	:	3849	CLOCK	:	12HR
		COUNTY :	FINNEY		
		RANGE :	4200		

INTERVAL FROM	:	4694	TO	:	4700	TOTAL DEPTH	:	4898
DEPTH OF SELECTIVE ZONE	:	NONE						
PACKER DEPTH	:	4689	SIZE	:	6.63			
PACKER DEPTH	:	4694	SIZE	:	6.63			
PACKER DEPTH	:	4720	SIZE	:	6.63			
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	RED TIGER RIG10			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	45
WEIGHT	:	9.1	WATER LOSS (CC)	:	9.6
CHLORIDES (PPM)	:	13000			
JARS-MAKE	:	W.T.C.	SERIAL NUMBER	:	407
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	0	FT	I.D. inch	:	0.00
DRILL PIPE LENGTH	:	4662	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	32	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	:	4.5XH

BLOW COMMENT #1	:	INITIAL FLOW PERIOD WEAK TO STRONG BLOW
BLOW COMMENT #2	:	OFF BOTTOM OF BUCKET IN 12 MIN.
BLOW COMMENT #3	:	FINAL FLOW PERIOD STRONG BLOW IN 2 MIN.
BLOW COMMENT #4	:	MAINTAINED THROUGHOUT

RECOVERED : 40 FT OF: MUD CUT GAS AND OIL
RECOVERED : 0 FT OF: 7%GAS 36%OIL 35%MUD
RECOVERED : 50 FT OF: SLIGHTLY MUD CUT GAS AND OIL
RECOVERED : 0 FT OF: 38%GAS 36%OIL 26%MUD

Total Barrels Fluid = 1.26
Total Fluid Prod Rate = 22.72 BFPD
Indicated Oil Rate = 10.60 BOPD
Indicated Wtr Rate = 0.25 BWPD
Corrected Oil Rate = 12.07 BOPD
Corrected Wtr Rate = 0.29 BWPD

REMARK 1 : 720 FT OF GAS ABOVE FLUID
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 6.25 P.M.

TIME STARTED OFF BOTTOM : 10:40 P.M.

WELL TEMPERATURE : 124

INITIAL HYDROSTATIC PRESSURE

(A) 2313

INITIAL FLOW PERIOD MIN: 20

(B) 36

PSI TO (C) : 36

INITIAL CLOSED IN PERIOD MIN: 48

(D) 1054

FINAL FLOW PERIOD MIN: 60

(E) 42

PSI TO (F) : 53

FINAL CLOSED IN PERIOD MIN: 117

(G) 1027

FINAL HYDROSTATIC PRESSURE

(H) 2292

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : NORTH AMERICAN RESOURCES
RIG : FINNEY-KANSAS
FIELD : HERBERT
WELL : 17-2
DATE : 8-19-91
GAUGE NO : 3849

OPERATIONAL COMMENTS

720 FT OF GAS ABOVE FLUID

COMPANY : NORTH AMERICAN RESOURCES
WELL : 17-2
GAUGE # : 3849
DATE : 19/ 8/91

FIELD : HERBERT
JOB # : 18132
DEPTH : 4898
TEST : 720 FT OF GAS ABOVE FLUID

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW PERIOD					
2	6:25: 0	0.000	36.000	124.00	0.000
3	6:29:59	0.083	36.000	124.00	0.000
4	6:35: 0	0.167	36.000	124.00	0.000
5	6:40: 0	0.250	36.000	124.00	0.000
6	6:44:59	0.333	36.000	124.00	0.000
INITIAL SHUT-IN PERIOD					
7	6:47:59	0.383	63.000	124.00	27.000
8	6:50:59	0.433	106.000	124.00	43.000
9	6:53:59	0.483	180.000	124.00	74.000
10	6:56:59	0.533	265.000	124.00	85.000
11	6:59:59	0.583	393.000	124.00	128.000
12	7: 2:59	0.633	531.000	124.00	138.000
13	7: 5:59	0.683	761.000	124.00	230.000
14	7: 8:59	0.733	866.000	124.00	105.000
15	7:11:59	0.783	918.000	124.00	52.000
16	7:14:59	0.833	949.000	124.00	31.000
17	7:17:59	0.883	985.000	124.00	36.000
18	7:20:59	0.933	1004.000	124.00	19.000
19	7:23:59	0.983	1018.000	124.00	14.000
20	7:26:59	1.033	1033.000	124.00	15.000
21	7:29:59	1.083	1041.000	124.00	8.000
22	7:32:59	1.133	1054.000	124.00	13.000
FINAL FLOW PERIOD					
23	7:34: 0	1.150	42.000	124.00	-1012.000
24	7:37:59	1.217	42.000	124.00	0.000
25	7:43: 0	1.300	42.000	124.00	0.000
26	7:47:59	1.383	42.000	124.00	0.000
27	7:52:59	1.467	42.000	124.00	0.000
28	7:58: 0	1.550	42.000	124.00	0.000
29	8: 2:59	1.633	42.000	124.00	0.000
30	8: 7:59	1.717	42.000	124.00	0.000
31	8:13: 0	1.800	48.000	124.00	6.000
32	8:17:59	1.883	48.000	124.00	0.000
33	8:22:59	1.967	48.000	124.00	0.000
34	8:28: 0	2.050	53.000	124.00	5.000
35	8:32:59	2.133	53.000	124.00	0.000
FINAL SHUT-IN PERIOD					
36	8:35:59	2.183	74.000	124.00	21.000
37	8:38:59	2.233	106.000	124.00	32.000
38	8:41:59	2.283	170.000	124.00	64.000
39	8:44:59	2.333	223.000	124.00	53.000
40	8:47:59	2.383	297.000	124.00	74.000
41	8:50:59	2.433	361.000	124.00	64.000
42	8:53:59	2.483	446.000	124.00	85.000
43	8:56:59	2.533	552.000	124.00	106.000
44	8:59:59	2.583	635.000	124.00	83.000
45	9: 2:59	2.633	698.000	124.00	63.000
46	9: 5:59	2.683	751.000	124.00	53.000
47	9: 8:59	2.733	792.000	124.00	41.000
48	9:11:59	2.783	824.000	124.00	32.000

COMPANY : NORTH AMERICAN RESOURCES
WELL : 17-2
GAUGE # : 3849
DATE : 19/ 8/91

FIELD : HERBERT
JOB # : 18132
DEPTH : 4898
TEST : 720 FT OF GAS ABOVE FLUID

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	9:14:59	2.833	845.000	124.00	21.000
50	9:17:59	2.883	866.000	124.00	21.000
51	9:20:59	2.933	880.000	124.00	14.000
52	9:23:59	2.983	893.000	124.00	13.000
53	9:26:59	3.033	903.000	124.00	10.000
54	9:29:59	3.083	914.000	124.00	11.000
55	9:32:59	3.133	945.000	124.00	31.000
56	9:35:59	3.183	933.000	124.00	-12.000
57	9:38:59	3.233	941.000	124.00	8.000
58	9:41:59	3.283	951.000	124.00	10.000
59	9:44:59	3.333	958.000	124.00	7.000
60	9:47:59	3.383	964.000	124.00	6.000
61	9:50:59	3.433	970.000	124.00	6.000
62	9:53:59	3.483	979.000	124.00	9.000
63	9:56:59	3.533	983.000	124.00	4.000
64	9:59:59	3.583	989.000	124.00	6.000
65	10: 2:59	3.633	993.000	124.00	4.000
66	10: 5:59	3.683	997.000	124.00	4.000
67	10: 8:59	3.733	1002.000	124.00	5.000
68	10:11:59	3.783	1006.000	124.00	4.000
69	10:14:59	3.833	1011.000	124.00	5.000
70	10:17:59	3.883	1015.000	124.00	4.000
71	10:20:59	3.933	1018.000	124.00	3.000
72	10:23:59	3.983	1021.000	124.00	3.000
73	10:26:59	4.033	1024.000	124.00	3.000
74	10:29:59	4.083	1027.000	124.00	3.000

WESTERN TESTING CO. INC.

FLUID SAMPLE REPORT

Date : 8-19-91 Ticket No. : 18132
Company : NORTH AMERICAN RESOURCES CO.
Well Name & No. : HERBERT 17-2
DST No. 2
County : FINNEY State : KANSAS
Sampler No. : 200 Test Interval : 4694-4720

=====

Pressure in Sampler	45	PSIG	BHT	124	Deg F
---------------------	----	------	-----	-----	-------

Total Volume of Sampler	:	3150	cc
Total Volume of Sample	:	2600	cc
Oil:		2100	cc
Water:			cc
Mud:		500	cc
Gas:		13.90cu	ft
Other:			cc

=====

RESITIVITY

Drilling Mud	@	F	Chloride Content	ppm
Mud Pit Sample 0.74	@	83 F	Chloride Content	11715 ppm
Gas/Oil Ratio		Gravity 30	API @	60 Deg F

Where was sample drained ON LOCATION

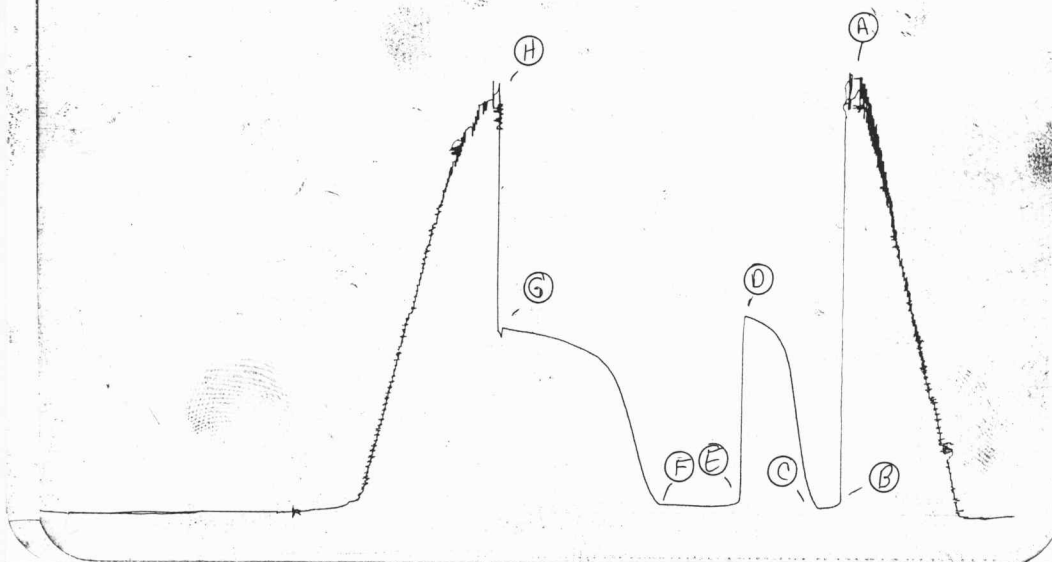
Remarks:

~~TKT~~ 18132

~~#3849~~ DST 2

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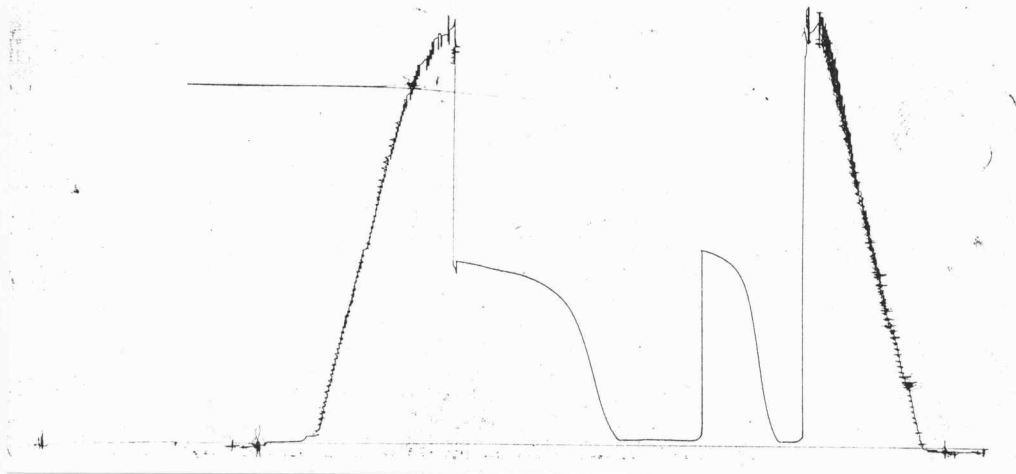
Inside Recorder

~~TKT~~ 18132

~~2004~~ DST 2

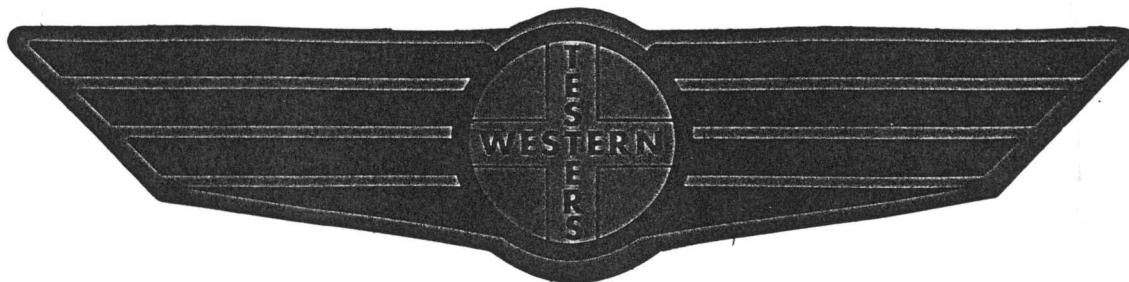
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Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688- 7021

KCC

OCT 14 1991

COMPANY NORTH AMERICAN RESOURCES CO. LEASE & WELL NO. HERBERT 17-2 SEC. 17 TWP. 23S RGE. 30W TEST NO. 3 DATE 8/20/91

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 8-20-91 TICKET : 18133
CUSTOMER : NORTH AMERICAN RESOURCES CO. INC.
WELL : 17-2 TEST: 3 LEASE : HERBERT
ELEVATION : 2851 KB GEOLOGIST : ?
SECTION : 17 FORMATION : ST. LOUIS
RANGE : 30W COUNTY : FINNEY TOWNSHIP : 23S
GAUGE SN# : 3849 RANGE : 4200 STATE : KANSAS
CLOCK : 12

INTERVAL FROM : 4810 TO : 4831 TOTAL DEPTH : 4898
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4805 SIZE : 6.63
PACKER DEPTH : 4810 SIZE : 6.63
PACKER DEPTH : 4831 SIZE : 6.63
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG 10
MUD TYPE : CHEMICAL VISCOSITY : 45
WEIGHT : 9.1+ WATER LOSS (CC) : 9.6
CHLORIDES (PPM) : 13000
JARS-MAKE : W.T.C. SERIAL NUMBER : 407
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 4778 FT I.D. inch : 3.80
TEST TOOL LENGTH : 32 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 : 4.5XH

BLOW COMMENT #1 : INITIAL FLOW PERIOD SURFACE BLOW-BUILT TO 6 INCH
BLOW COMMENT #2 : IN 15 MINUTES.
BLOW COMMENT #3 : FINAL FLOW PERIOD WEAK TO STRONG BOTTOM OF BUCKET
BLOW COMMENT #4 : IN 20 MINUTES-MAINTAINED THROUGHOUT.

RECOVERED : 35 FT OF: CLEAN OIL-29 GRAVITY AT 60 DEGREES
RECOVERED : 30 FT OF: MUDDY WATER
RECOVERED : 185 FT OF: WATER - R.W. 0.45 AT 82 DEGREES
RECOVERED : 0 FT OF: CHLORIDES 26400 P.P.M.

Total Barrels Fluid = 3.51
Total Fluid Prod Rate = 67.33 BFPD
Indicated Oil Rate = 9.43 BOPD
Indicated Wtr Rate = 53.86 BWPD
Corrected Oil Rate = 47.97 BOPD
Corrected Wtr Rate = 274.12 BWPD

REMARK 1 :
REMARK 2 : RECOVERED 500 FT. OF GAS ABOVE FLUID
REMARK 3 : TAIL PIPE=61 FT. OF 4 1/2" - 6 FT. OF 5 1/2" TOTAL=67 FT.
REMARK 4 :

SET PACKER(S) :	5:35 A.M.	TIME STARTED OFF BOTTOM :	9:50 A.M.
WELL TEMPERATURE :	128		
INITIAL HYDROSTATIC PRESSURE		(A)	2415
INITIAL FLOW PERIOD MIN:	15	(B)	57 PSI TO (C) : 59
INITIAL CLOSED IN PERIOD MIN:	60	(D)	1019
FINAL FLOW PERIOD MIN:	60	(E)	79 PSI TO (F) : 125
FINAL CLOSED IN PERIOD MIN:	120	(G)	1022
FINAL HYDROSTATIC PRESSURE		(H)	2392

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : NORTH AMERICAN RESOURCES CO. INC.
RIG : FINNEY-KANSAS
FIELD : HERBERT
WELL : 17-2
DATE : 8-20-91
GAUGE NO : 3849

OPERATIONAL COMMENTS

RECOVERED 500 FT. OF GAS ABOVE FLUID
TAIL PIPE=61 FT. OF 4 1/2" - 6 FT. OF 5 1/2" TOTAL=67 FT.

COMPANY : NORTH AMERICAN RESOURCES CO. INC.

WELL : 17-2
GAUGE # : 3849
DATE : 20/ 8/91

FIELD : HERBERT
JOB # : 18133
DEPTH : 4898
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW PERIOD					
2	5:35: 0	0.000	57.000	128.00	0.000
3	5:39:59	0.083	57.000	128.00	0.000
4	5:45: 0	0.167	57.000	128.00	0.000
5	5:50: 0	0.250	59.000	128.00	2.000
INITIAL SHUT-IN PERIOD					
6	5:53: 0	0.300	214.000	128.00	155.000
7	5:56: 0	0.350	580.000	128.00	366.000
8	5:59: 0	0.400	795.000	128.00	215.000
9	6: 2: 0	0.450	854.000	128.00	59.000
10	6: 5: 0	0.500	895.000	128.00	41.000
11	6: 8: 0	0.550	916.000	128.00	21.000
12	6:11: 0	0.600	934.000	128.00	18.000
13	6:14: 0	0.650	949.000	128.00	15.000
14	6:17: 0	0.700	963.000	128.00	14.000
15	6:20: 0	0.750	972.000	128.00	9.000
16	6:23: 0	0.800	982.000	128.00	10.000
17	6:26: 0	0.850	989.000	128.00	7.000
18	6:29: 0	0.900	995.000	128.00	6.000
19	6:32: 0	0.950	1001.000	128.00	6.000
20	6:35: 0	1.000	1006.000	128.00	5.000
21	6:38: 0	1.050	1010.000	128.00	4.000
22	6:41: 0	1.100	1013.000	128.00	3.000
23	6:44: 0	1.150	1016.000	128.00	3.000
24	6:47: 0	1.200	1018.000	128.00	2.000
25	6:50: 0	1.250	1019.000	128.00	1.000
FINAL FLOW PERIOD					
26	6:51: 0	1.267	79.000	128.00	-940.000
27	6:54:59	1.333	79.000	128.00	0.000
28	7: 0: 0	1.417	79.000	128.00	0.000
29	7: 5: 0	1.500	81.000	128.00	2.000
30	7: 9:59	1.583	88.000	128.00	7.000
31	7:15: 0	1.667	90.000	128.00	2.000
32	7:20: 0	1.750	95.000	128.00	5.000
33	7:24:59	1.833	102.000	128.00	7.000
34	7:30: 0	1.917	106.000	128.00	4.000
35	7:35: 0	2.000	108.000	128.00	2.000
36	7:39:59	2.083	112.000	128.00	4.000
37	7:45: 0	2.167	120.000	128.00	8.000
38	7:50: 0	2.250	125.000	128.00	5.000
FINAL SHUT-IN PERIOD					
39	7:53: 0	2.300	337.000	128.00	212.000
40	7:56: 0	2.350	615.000	128.00	278.000
41	7:59: 0	2.400	748.000	128.00	133.000
42	8: 2: 0	2.450	805.000	128.00	57.000
43	8: 5: 0	2.500	841.000	128.00	36.000
44	8: 8: 0	2.550	865.000	128.00	24.000
45	8:11: 0	2.600	883.000	128.00	18.000
46	8:14: 0	2.650	899.000	128.00	16.000
47	8:17: 0	2.700	910.000	128.00	11.000
48	8:20: 0	2.750	920.000	128.00	10.000

COMPANY : NORTH AMERICAN RESOURCES CO. INC.

WELL : 17-2
GAUGE # : 3849
DATE : 20/ 8/91

FIELD : HERBERT
JOB # : 18133
DEPTH : 4898
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	8:23: 0	2.800	929.000	128.00	9.000
50	8:26: 0	2.850	938.000	128.00	9.000
51	8:29: 0	2.900	945.000	128.00	7.000
52	8:32: 0	2.950	952.000	128.00	7.000
53	8:35: 0	3.000	961.000	128.00	9.000
54	8:38: 0	3.050	966.000	128.00	5.000
55	8:41: 0	3.100	970.000	128.00	4.000
56	8:44: 0	3.150	975.000	128.00	5.000
57	8:47: 0	3.200	980.000	128.00	5.000
58	8:50: 0	3.250	985.000	128.00	5.000
59	8:53: 0	3.300	988.000	128.00	3.000
60	8:56: 0	3.350	990.000	128.00	2.000
61	8:59: 0	3.400	993.000	128.00	3.000
62	9: 2: 0	3.450	995.000	128.00	2.000
63	9: 5: 0	3.500	997.000	128.00	2.000
64	9: 8: 0	3.550	998.000	128.00	1.000
65	9:11: 0	3.600	1000.000	128.00	2.000
66	9:14: 0	3.650	1002.000	128.00	2.000
67	9:17: 0	3.700	1004.000	128.00	2.000
68	9:20: 0	3.750	1006.000	128.00	2.000
69	9:23: 0	3.800	1009.000	128.00	3.000
70	9:26: 0	3.850	1012.000	128.00	3.000
71	9:29: 0	3.900	1013.000	128.00	1.000
72	9:32: 0	3.950	1015.000	128.00	2.000
73	9:35: 0	4.000	1016.000	128.00	1.000
74	9:38: 0	4.050	1018.000	128.00	2.000
75	9:41: 0	4.100	1019.000	128.00	1.000
76	9:44: 0	4.150	1020.000	128.00	1.000
77	9:47: 0	4.200	1021.000	128.00	1.000
78	9:50: 0	4.250	1022.000	128.00	1.000

WESTERN TESTING CO. INC.

FLUID SAMPLE REPORT

Date : 8-20-91 Ticket No. : 18133
Company : NORTH AMERICAN RESOURCES CO. INC.
Well Name & No. : HERBERT 17-2
DST No. 3
County : FINNEY State : KANSAS
Sampler No. : 200 Test Interval : 4810-4831

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Pressure in Sampler	90	PSIG	BHT	128	Deg F
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Total Volume of Sampler	:	3150	cc
Total Volume of Sample	:	2550	cc
Oil:		375	cc
Water:		2175	cc
Mud:			cc
Gas:		14.31cu	ft
Other:			cc

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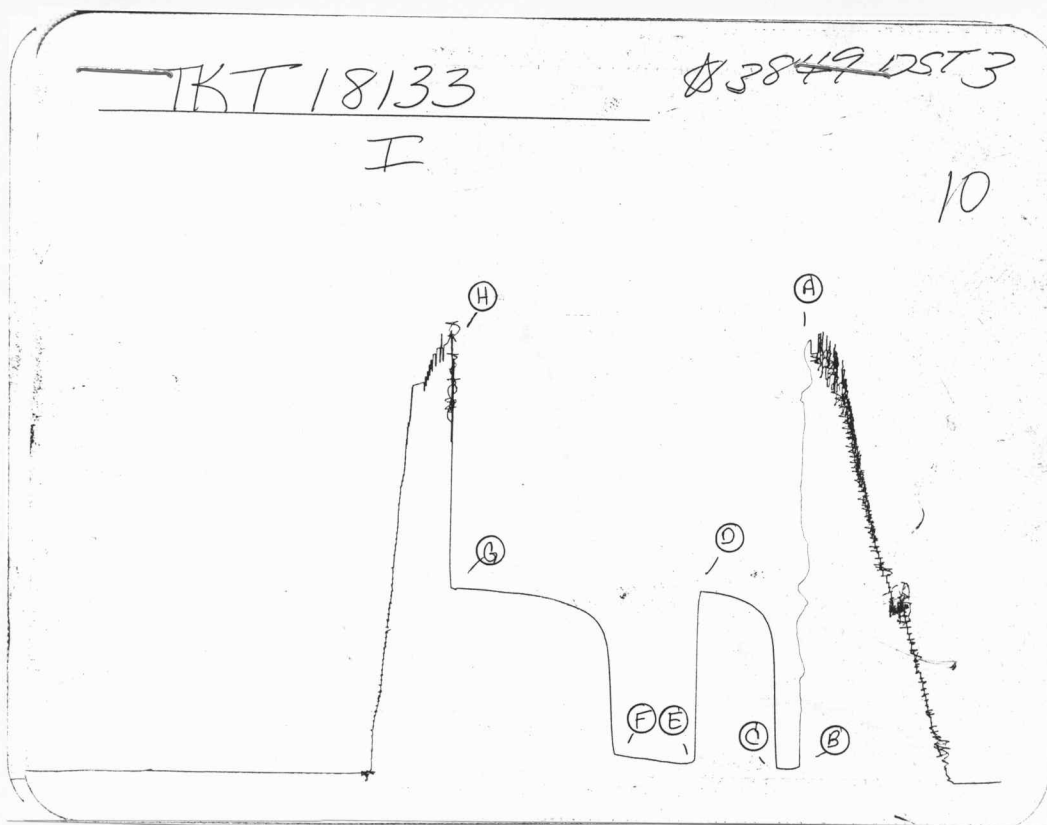
RESITIVITY

Drilling Mud	0.45	@	82 F	Chloride Content	26400 ppm
Mud Pit Sample	0.74	@	83 F	Chloride Content	11715 ppm

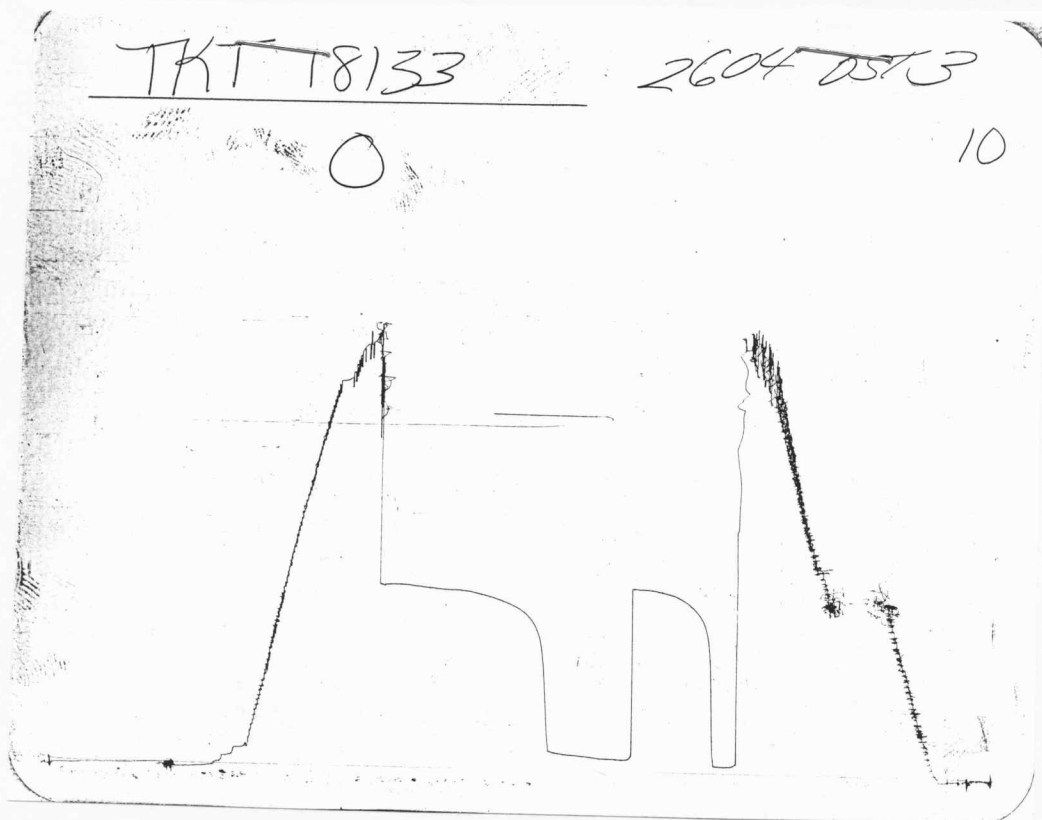
Gas/Oil Ratio Gravity 29 API @ 60 Deg F

Where was sample drained ON LOCATION

Remarks:



Inside Recorder



Outside Recorder