



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 4020

P. O. BOX 1599 WICHITA, KANSAS 67201
PHONE (316) 262-5861

Elevation 1334RB Formation Viola Eff. Pay Ft.

District Augusta Ks Date 3-29-87 Customer Order No.

COMPANY NAME Incline Reserves Inc

ADDRESS 1607 S. 21. 37th St Topeka Ks 66611

LEASE AND WELL NO. Hill #1 COUNTY Nemaha STATE Ks Sec. 3 Twp. 5S Rge. 13E

Mail Invoice To #1 Hill Co. Name Address No. Copies Requested 1

Mail Charts To Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 3643 ft. to 3648 ft. Total Depth 3648 ft.

Packer Depth 3643 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 3638 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) ft. Recorder Number 10979 Cap. 4100

Bottom Recorder Depth (Outside) ft. Recorder Number 13265 Cap. 3975

Below Saddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Glacier Drilling #6 Drill Collar Length 276 I. D. 2 1/2 in.

Mud Type Chem Viscosity Chem Weight Pipe Length I. D. in.

Weight 9.5 Water Loss 10 cc. Drill Pipe Length 3335 I. D. 3.5 in.

Chlorides 3500 P.P.M. Test Tool Length 32 ft. Tool Size 5 1/2 00 in.

Jars: Make Serial Number Anchor Length 5 ft. Size 5 1/2 00 in.

Did Well Flow? Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size in.

Main Hole Size 7 1/8 in. Tool Joint Size 4FH in.

Blow:

Recovered ft. of

Chlorides P.P.M. Sample Jars used Remarks: Misrun tool would not go to bottom

Tool stopped 90' off bottom 200 miles oneway from Augusta Ks

Time On Location 11:00 3-29-87 A.M. Time Pick Up Tool 2:30 P.M. Time Off Location A.M. P.M.

Time Set Packer(s) A.M. Time Started Off Bottom P.M. Maximum Temperature

Initial Hydrostatic Pressure (A) P.S.I.

Initial Flow Period (B) Minutes P.S.I. to (C) P.S.I.

Initial Closed In Period (D) Minutes P.S.I.

Final Flow Period (E) Minutes P.S.I. to (F) P.S.I.

Final Closed In Period (G) Minutes P.S.I.

Final Hydrostatic Pressure (H) P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature] Signature of Customer or his authorized representative

Western Representative Norman Allen

0150

FIELD INVOICE

Table with 2 columns: Item, Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, TOTAL.

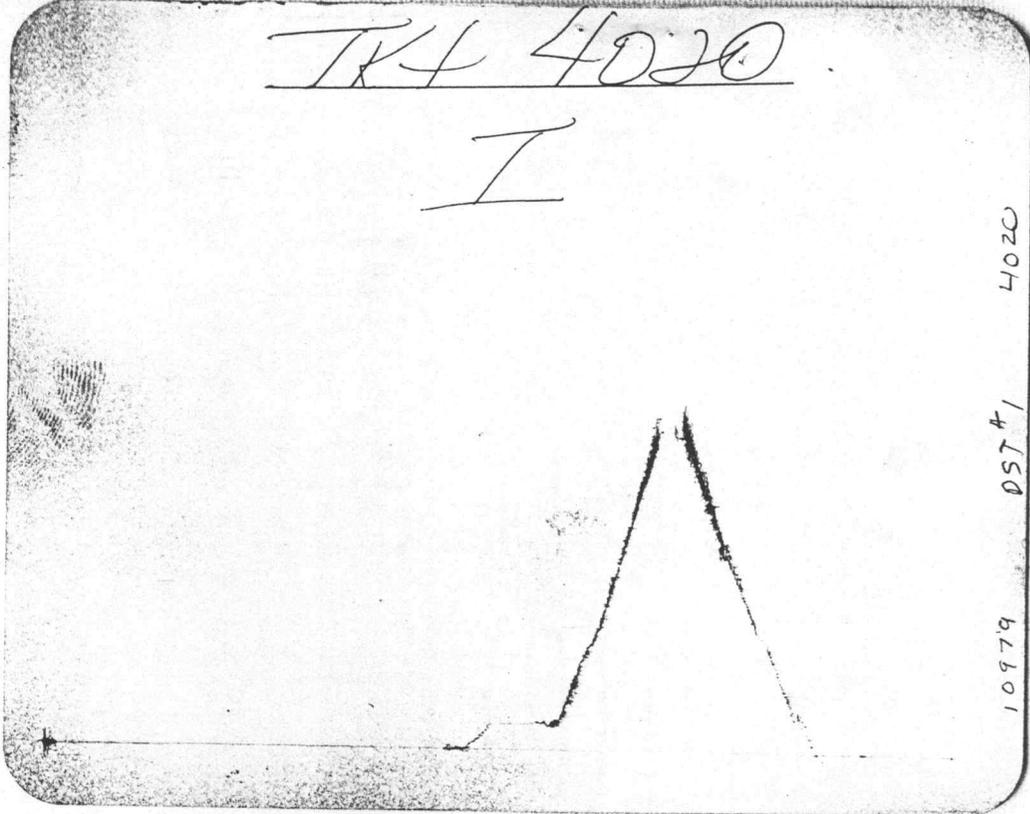
TK4 4020

I

4020

DST #1

10979



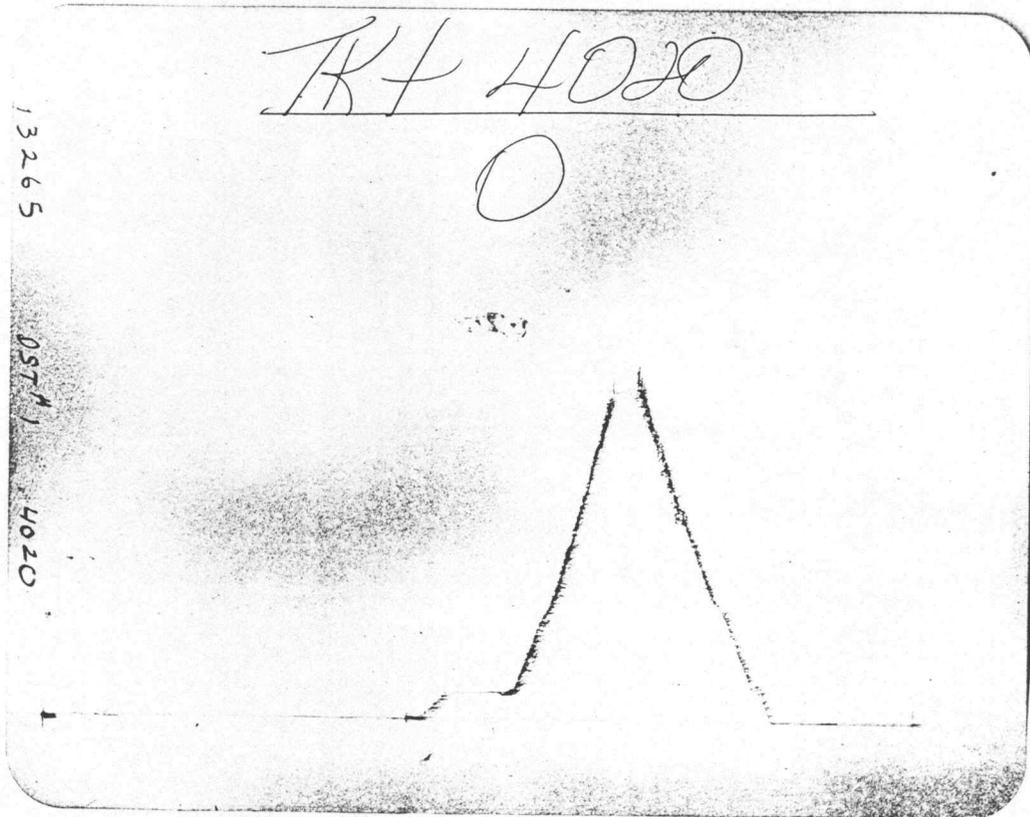
TK4 4020

O

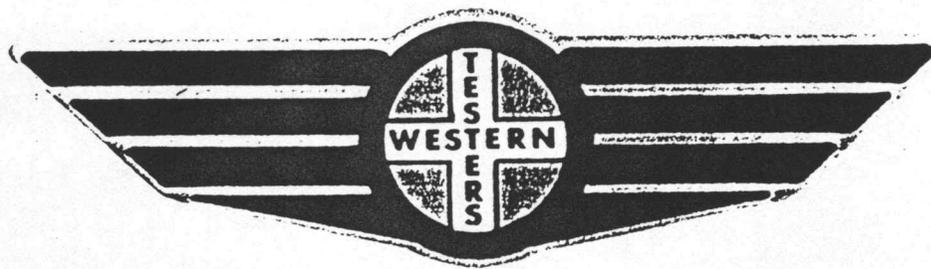
13265

DST #1

4020



# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY INCLINE RESERVES, INC. LEASE & WELL NO. #1 HILL SEC. 3 TWP. 5S RGE. 13E TEST NO. 1 DATE 3/29/87

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 3/29/87  
CUSTOMER : INCLINE RESERVES INC.  
WELL : 1 TEST: 1  
ELEVATION : 1334 KB  
SECTION : 3  
RANGE : 13E COUNTY : NEMAHA  
GAUGE SN# : 10979 RANGE : 4100  
TICKET : 4020  
LEASE : HILL  
GEOLOGIST : OWEN  
FORMATION : VIOLA  
TOWNSHIP : 5S  
STATE : KANSAS  
CLOCK : 12

INTERVAL FROM : 3643 TO : 3648 TOTAL DEPTH : 3648  
DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 3643 SIZE : 6.75  
PACKER DEPTH : 3638 SIZE : 6.75  
PACKER DEPTH : SIZE :  
PACKER DEPTH : SIZE :

DRILLING CON. : GLACIER DRLG #6  
MUD TYPE : CHEMICAL VISCOSITY :  
WEIGHT : 9.5 WATER LOSS (CC) : 10.  
CHLORIDES (PPM) : 3500  
JARS-MAKE : SERIAL NUMBER :  
DID WELL FLOW ? : REVERSED OUT ? :

DRILL COLLAR LENGTH : 276 FT I.D. inch : 2.25  
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
DRILL PIPE LENGTH : 3335 FT I.D. inch : 3.50  
TEST TOOL LENGTH : 32 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 5 FT ANCHOR SIZE : 5.50  
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75  
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4FH

BLOW COMMENT #1 :  
BLOW COMMENT #2 :  
BLOW COMMENT #3 :  
BLOW COMMENT #4 :

RECOVERED : 0 FT OF:

Total Barrels Fluid = 0.00  
Total Fluid Prod Rate = 0.00 BFPD

REMARK 1 : MISRUN  
REMARK 2 : TOOL WOULD NOT GO TO BOTTOM-STOPPED 90 FEET OFF BOTTOM.  
REMARK 3 :  
REMARK 4 :

SET PACKER(S) :				TIME STARTED OFF BOTTOM :			
WELL TEMPERATURE :	0						
INITIAL HYDROSTATIC PRESSURE			(A)	0			
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)	0			



WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET No 4021

P. O. BOX 1599 PHONE (316) 262-5861  
WICHITA, KANSAS 67201

Elevation 1334KB Formation Viola Eff. Pay - Ft.

1001 District Augusta Date 3-30-87 Customer Order No. -

COMPANY NAME Incline Reserves Inc

ADDRESS 1607 S 24 37th St Topeka, Ks

LEASE AND WELL NO. Hill #1 COUNTY Nemaha STATE Mo Sec. 3 Twp. 5 Rge. 13E

Mail Invoice To Same #1 Hill Co. Name Address No. Copies Requested 1

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 2 Interval Tested From 3645 ft. to 3650 ft. Total Depth 3650 ft.

Packer Depth 3645 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3640 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3633 AP ft. Recorder Number 10979 Cap. 41

Bottom Recorder Depth (Outside) 3646 ft. Recorder Number 13265 Cap. 3975

Below Saddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Glacier Drilling #6 Drill Collar Length 276 I. D. 2 1/2 in.

Mud Type Chem Viscosity 110 Weight Pipe Length - I. D. - in.

Weight 9.5 Water Loss 10 cc. Drill Pipe Length 3337 I. D. 3.5 in.

Chlorides 3500 P.P.M. Test Tool Length 32 ft. Tool Size 5 1/2 in.

Jars: Make WTS Serial Number 411 Anchor Length 5 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 1/8 in. Tool Joint Size 4FH in.

Blow: Strong diminishing slightly @ end of test

Recovered 840 ft. of Freeoil 33 Gravity

Recovered 120 ft. of Gilbert saltwater 10% oil 90% water 108

Recovered 960 ft. of Saltwater .85 Res @ 44 OF

Recovered 920 ft. of

Recovered - ft. of

Chlorides 27000 P.P.M. Sample Jars used 8 Remarks: 1068 water

Time On Location 11:00 3:29 A.M. P.M. Time Pick Up Tool 10:55 A.M. P.M. Time Off Location 9:00 A.M. P.M.

Time Set Packer(s) 1:15 A.M. P.M. Time Started Off Bottom 3:25 A.M. P.M. Maximum Temperature 117

Initial Hydrostatic Pressure (A) 1845 P.S.I.

Initial Flow Period Minutes 30 (B) 95 P.S.I. to (C) 410 P.S.I.

Initial Closed In Period Minutes 15 (D) 1240 P.S.I.

Final Flow Period Minutes 60 (E) 485 P.S.I. to (F) 815 P.S.I.

Final Closed In Period Minutes 30 (G) 1280 P.S.I.

Final Hydrostatic Pressure (H) 1845 P.S.I. 10979

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Greg Owen Signature of Customer or his authorized representative

Western Representative Norman Allen

FIELD INVOICE

Open Hole Test	\$ 450
Misrun	\$
Straddle Test	\$
Jars	\$ 150
Selective Zone	\$
Safety Joint	\$ 3250
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage	\$
Fluid Sampler	\$
Extra Charts	\$
Insurance	\$ 75
Telecopier	\$
TOTAL	\$

0/50

WESTERN TESTING CO., INC.

Pressure Data

Date 3 30 87 Test Ticket No. 4021  
 Recorder No. 10979 Capacity 400 Location \_\_\_\_\_ Ft.  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature 117 °F

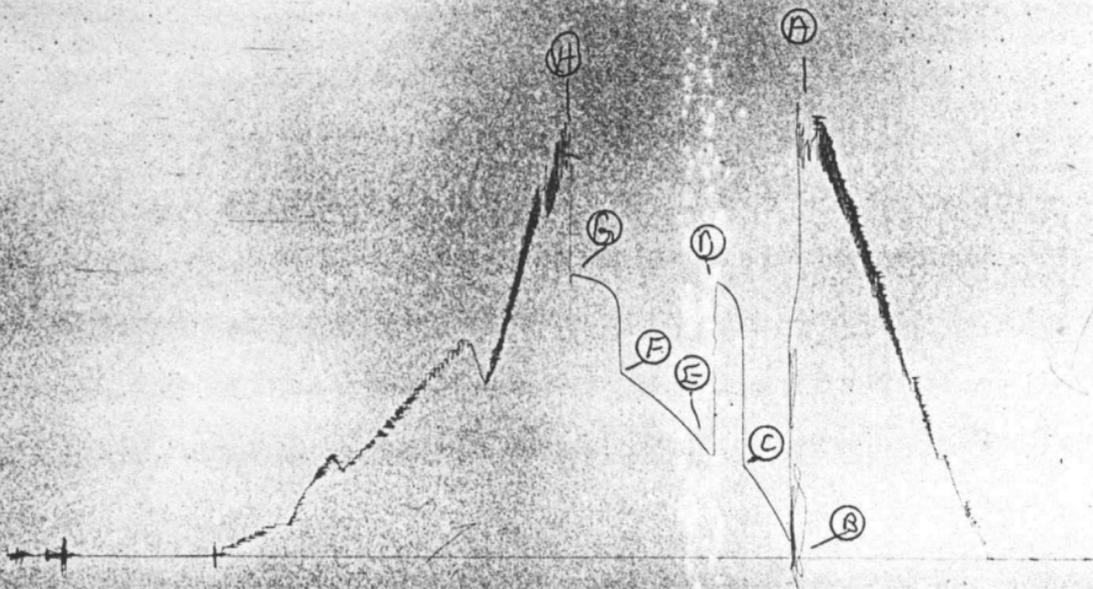
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1859</u>	P.S.I.	<u>1:15</u> M	
B First Initial Flow Pressure	<u>77</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>409</u>	P.S.I.	<u>15</u> Mins.	<u>18</u> Mins.
D Initial Closed-in Pressure	<u>1209</u>	P.S.I.	<u>600</u> Mins.	<u>600</u> Mins.
E Second Initial Flow Pressure	<u>456</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>813</u>	P.S.I.		
G Final Closed-in Pressure	<u>1240</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1839</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>77</u>	0	<u>409</u>	0	<u>456</u>	0	<u>813</u>
P 2 5	<u>137</u>	3	<u>996</u>	5	<u>480</u>	3	<u>1121</u>
P 3 10	<u>202</u>	6	<u>1105</u>	10	<u>525</u>	6	<u>1167</u>
P 4 15	<u>263</u>	9	<u>1149</u>	15	<u>563</u>	9	<u>1186</u>
P 5 20	<u>315</u>	12	<u>1176</u>	20	<u>602</u>	12	<u>1201</u>
P 6 25	<u>367</u>	15	<u>1195</u>	25	<u>637</u>	15	<u>1209</u>
P 7 30	<u>409</u>	18	<u>1209</u>	30	<u>669</u>	18	<u>1219</u>
P 8 35		21		35	<u>699</u>	21	<u>1224</u>
P 9 40		24		40	<u>727</u>	24	<u>1231</u>
P10 45		27		45	<u>755</u>	27	<u>1236</u>
P11 50		30		50	<u>780</u>	30	<u>1240</u>
P12 55		33		55	<u>806</u>	33	
P13 60		36		60	<u>813</u>	36	
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

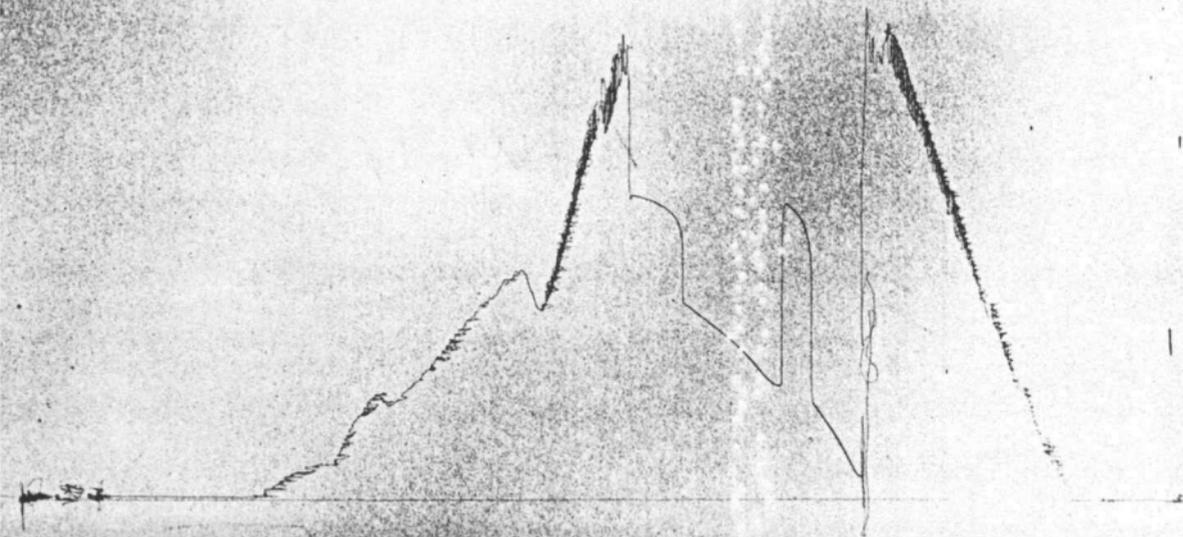
TK + 4021

I

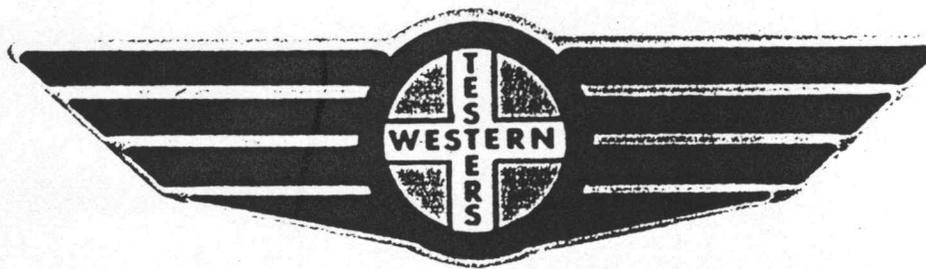


TKF 4021

0



# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY INCLINE RESERVES, INC. LEASE & WELL NO. #1 HILL SEC. 3 TWP. 5S RGE. 13E TEST NO. 2 DATE 3/30/87

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 3/30/87  
CUSTOMER : INCLINE RESERVES INC.  
WELL : 1 TEST: 2  
ELEVATION : 1334 KB  
SECTION : 3  
RANGE : 13E COUNTY : NEMAHA  
GAUGE SN# : 10979 RANGE : 4100  
TICKET : 4021  
LEASE : HILL  
GEOLOGIST : OWEN  
FORMATION : VIOLA  
TOWNSHIP : 5S  
STATE : KANSAS  
CLOCK : 12

INTERVAL FROM : 3645 TO : 3650 TOTAL DEPTH : 3650  
DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 3645 SIZE : 6.75  
PACKER DEPTH : 3640 SIZE : 6.75  
PACKER DEPTH : SIZE :  
PACKER DEPTH : SIZE :

DRILLING CON. : GLACIER DRLG #6  
MUD TYPE : CHEMICAL VISCOSITY : 110  
WEIGHT : 9.5 WATER LOSS (CC) : 10.  
CHLORIDES (PPM) : 3500  
JARS-MAKE : WTC SERIAL NUMBER : 411  
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 276 FT I.D. inch : 2.25  
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
DRILL PIPE LENGTH : 3337 FT I.D. inch : 3.50  
TEST TOOL LENGTH : 32 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 5 FT ANCHOR SIZE : 5.50  
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75  
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4FH

BLOW COMMENT #1 : STRONG BLOW DIMINISHING SLIGHTLY AT END OF TEST.  
BLOW COMMENT #2 :  
BLOW COMMENT #3 :  
BLOW COMMENT #4 :



WESTERN TESTING CO. INC.  
WICHITA - KANSAS

Pressure Transient Report  
-----

COMPANY : INCLINE RESERVES INC.  
RIG : NEMAHA-KANSAS  
FIELD : HILL  
WELL : 1  
DATE : 3/30/87  
GAUGE NO : 10979

OPERATIONAL COMMENTS

COMPANY : INCLINE RESERVES INC.

FIELD : HILL

WELL # : 1

JOB # : 4021

GAUGE # : 10979

DEPTH : 3650

DATE : 30/ 3/87

TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	1:15: 0	0.000	77.000	117.00	0.000
2	1:19:59	0.083	137.000	117.00	60.000
3	1:25: 0	0.167	202.000	117.00	65.000
4	1:30: 0	0.250	263.000	117.00	61.000
5	1:34:59	0.333	315.000	117.00	52.000
6	1:40: 0	0.417	367.000	117.00	52.000
7	1:45: 0	0.500	409.000	117.00	42.000
8	1:48: 0	0.550	996.000	117.00	587.000
9	1:51: 0	0.600	1105.000	117.00	109.000
10	1:54: 0	0.650	1149.000	117.00	44.000
11	1:57: 0	0.700	1176.000	117.00	27.000
12	2: 0: 0	0.750	1195.000	117.00	19.000
13	2: 3: 0	0.800	1209.000	117.00	14.000
14	2: 4: 0	0.817	456.000	117.00	-753.000
15	2: 7:59	0.883	480.000	117.00	24.000
16	2:13: 0	0.967	525.000	117.00	45.000
17	2:18: 0	1.050	563.000	117.00	38.000
18	2:22:59	1.133	602.000	117.00	39.000
19	2:28: 0	1.217	637.000	117.00	35.000
20	2:33: 0	1.300	669.000	117.00	32.000
21	2:37:59	1.383	699.000	117.00	30.000
22	2:43: 0	1.467	727.000	117.00	28.000
23	2:48: 0	1.550	755.000	117.00	28.000
24	2:52:59	1.633	780.000	117.00	25.000
25	2:58: 0	1.717	806.000	117.00	26.000
26	3: 3: 0	1.800	813.000	117.00	7.000
27	3: 5:59	1.850	1131.000	117.00	318.000
28	3: 9: 0	1.900	1167.000	117.00	36.000
29	3:12: 0	1.950	1186.000	117.00	19.000
30	3:15: 0	2.000	1201.000	117.00	15.000
31	3:18: 0	2.050	1209.000	117.00	8.000
32	3:21: 0	2.100	1219.000	117.00	10.000
33	3:23:59	2.150	1224.000	117.00	5.000
34	3:27: 0	2.200	1231.000	117.00	7.000
35	3:30: 0	2.250	1236.000	117.00	5.000
36	3:33: 0	2.300	1240.000	117.00	4.000

WESTERN TESTING CO. INC.