



15-135-24108

23-20s-24w

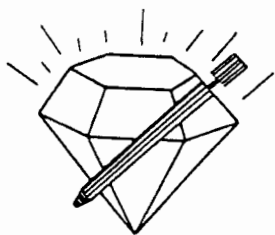
ORIGINAL

DIAMOND TESTING
P. O. Box 157
HOISINGTON, KANSAS 67544
(316) 653-7550

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Company Har-Ken Oil Company Lease & Well No. Petersilie No. 1
Elevation 2309 KB Formation Fort Scott Effective Pay -- Ft. Ticket No. 1492
Date 8-11-00 Sec. 23 Twp. 20S Range 24W County Ness State Kansas
Test Approved By Kim B. Shoemaker Diamond Representative Roger D. Friedly
Formation Test No. 1 Interval Tested from 4,270 ft. to 4,300 ft. Total Depth 4,300 ft.
Packer Depth 4,265 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.
Packer Depth 4,270 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.
Depth of Selective Zone Set -- ft.
Top Recorder Depth (Inside) 4,258 ft. Recorder Number Elec. Cap. 5,000 psi
Bottom Recorder Depth (Outside) 4,297 ft. Recorder Number 13556 Cap. 5,475 psi
Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. -- psi
Drilling Contractor L. D. Drilling, Inc. Drill Collar Length -- ft. I.D. -- in.
Mud Type Chemical Viscosity 51 Weight Pipe Length -- ft. I.D. -- in.
Weight 9.5 Water Loss 11.2 cc. Drill Pipe Length 4,245 ft. I.D. 3 1/4 in.
Chlorides 4,000 P.P.M. Test Tool Length 25 ft. Tool Size 3 1/2 - IF in.
Jars: Make Bowen Serial Number Not Run Anchor Length 30 ft. Size 4 1/2 - FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.
Blow: 1st Open: Weak, 1/8 in., blow increasing to 3 ins. No blow back during shut-in.
2nd Open: Fair, 3 in., blow increasing to 9 ins. No blow back during shut-in.
Recovered 120 ft. of gas in pipe with good free oil in tool.
Recovered 25 ft. of slightly oil specked drilling mud = .256500 bbls. (Grind out: 2%-oil; 98%-mud)
Recovered 25 ft. of TOTAL FLUID = .256500 bbls.
Recovered -- ft. of --
Recovered -- ft. of --
Remarks --

Time Set Packer(s) 1:46 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 4:46 ~~P.M.~~ ^{A.M.} Maximum Temperature 119 °
Initial Hydrostatic Pressure (A) 2072 P.S.I.
Initial Flow Period Minutes 30 (B) 7 P.S.I. to (C) 15 P.S.I.
Initial Closed In Period Minutes 60 (D) 575 P.S.I.
Final Flow Period Minutes 30 (E) 13 P.S.I. to (F) 16 P.S.I.
Final Closed In Period Minutes 60 (G) 279 P.S.I.
Final Hydrostatic Pressure (H) 2053 P.S.I.



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FLUID SAMPLE DATA

Company Har-Ken Oil Company
Lease & Well No. Petersilie No. 1
Date 8-11-00 Sec. 23 Twp. 20 S Range 24 W
Formation Test No. 1 Interval Tested From 4,270 ft. to 4,300 ft. Total Depth 4,300 ft.
Formation Fort Scott

	MUD PIT	RECOVERY
Viscosity	<u>51</u> CP	<u>100</u> CP
Weight	<u>9.5</u>	<u>8.0</u>
Water Loss	<u>11.2</u> CC	<u>8.0</u> CC
PH Factor	<u>10.5</u>	<u>9.0</u>

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	<u>--</u> @ <u>--</u> °F. <u>--</u> ppm	
Recovery Mud	<u>1.20</u> @ <u>69</u> °F. <u>5,000</u> ppm	
Recovery Mud Filtrate	<u>.86</u> @ <u>71</u> °F. <u>7,000</u> ppm	
Mud Pit Sample	<u>1.10</u> @ <u>70</u> °F. <u>5,500</u> ppm	
Mud Pit Sample Filtrate	<u>1.00</u> @ <u>72</u> °F. <u>5,800</u> ppm	

Sample Taken By ROGER D. FRIEDLY

Witness By Kim B. Shoemaker

Remarks Pit filtrate triton dish chlorides were 4,000 Ppm.
Recovery filtrate triton dish chlorides were 6,000 Ppm.

Well LSD: DST #1 FT SCOTT 4270'-4300'

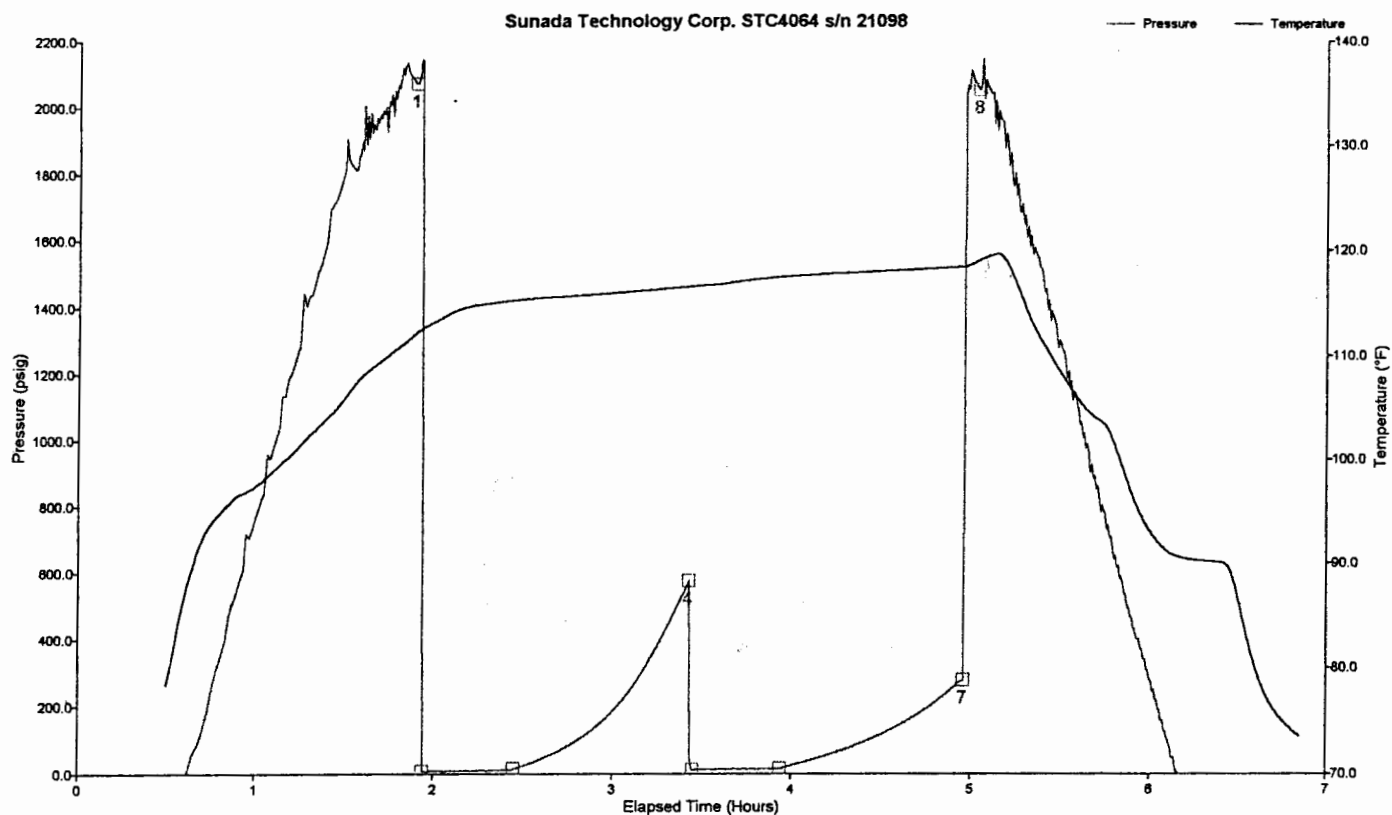
Well Name: PETERSILIE 1

Company: HAR-KEN OIL

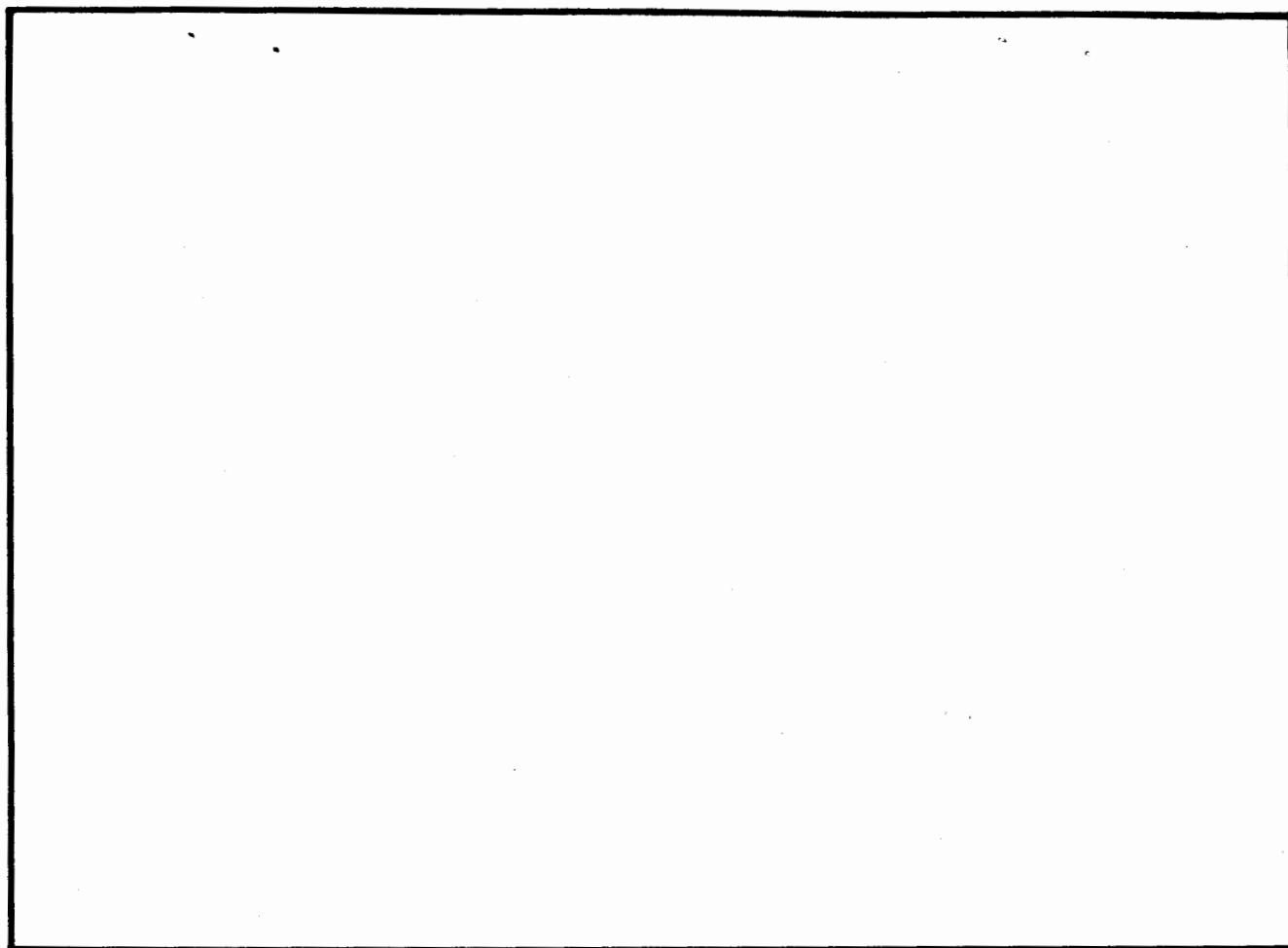
Battery on: Aug 10, 2000 at 23:50:00

Notes: RECOVERED 25' SOSDM (2% OIL 98% MUD) WITH 120' GAS IN PIPE AND GOOD FREE OIL IN TOOL.

ORIGINAL



Tag	Pressure	Temperature	Comment
1	2072.10 psig	112.22 °F	2000-08-11 01:44:00
2	7.14 psig	112.75 °F	2000-08-11 01:46:30
3	14.72 psig	115.31 °F	2000-08-11 02:17:00
4	575.10 psig	116.60 °F	2000-08-11 03:15:30
5	12.64 psig	116.63 °F	2000-08-11 03:17:00
6	16.39 psig	117.52 °F	2000-08-11 03:46:30
7	279.04 psig	118.47 °F	2000-08-11 04:47:30
8	2052.86 psig	119.07 °F	2000-08-11 04:52:30



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Elec. Office Reading
(A) Initial Hydrostatic Mud	2072	2072
(B) First Initial Flow Pressure.....	7	7
(C) First Final Flow Pressure	15	15
(D) Initial Closed-in Pressure	575	575
(E) Second Initial Flow Pressure	13	13
(F) Second Final Flow Pressure.....	16	16
(G) Final Closed-in Pressure	279	279
(H) Final Hydrostatic Mud	2053	2053



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ORIGINAL

Page 1 of 5 Pages

Company Har-Ken Oil Company Lease & Well No. Petersilie No. 1
Elevation 2309 KB Formation Mississippi Effective Pay 10 Ft. Ticket No. 1493
Date 8-11-00 Sec. 23 Twp. 20S Range 24W County Ness State Kansas
Test Approved By Kim B. Shoemaker Diamond Representative Roger D. Friedly

Formation Test No. 2 Interval Tested from 4,382 ft. to 4,395 ft. Total Depth 4,395 ft.

Packer Depth 4,377 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Packer Depth 4,382 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.

Depth of Selective Zone Set -- ft.

Top Recorder Depth (Inside) 4,370 ft. Recorder Number Elec. Cap. 5,000 psi

Bottom Recorder Depth (Outside) 4,392 ft. Recorder Number 13556 Cap. 5,475 psi

Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. -- psi

Drilling Contractor L. D. Drilling, Inc. Drill Collar Length -- ft. I.D. -- in.

Mud Type Chemical Viscosity 48 Weight Pipe Length -- ft. I.D. -- in.

Weight 9.5 Water Loss 14.4 cc. Drill Pipe Length 4,357 ft. I.D. 3 1/2 in.

Chlorides 4,500 P.P.M. Test Tool Length 25 ft. Tool Size 3 1/2 - IF in.

Jars: Make Bowen Serial Number Not Run Anchor Length 13 ft. Size 4 1/2 - FH in.

Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: 1st Open: Weak, 1/8 in., blow increasing. Off bottom of bucket in 30 mins. No blow back during shut-in.

2nd Open: Weak, surface blow increasing. Off bottom of bucket in 28 1/2 mins. Weak blow back during shut-in.

Recovered 188 ft. of gas in pipe with good free oil in tool

Recovered 122 ft. of clean oil = 1.251720 bbls. (Gravity: 38 @ 60°)

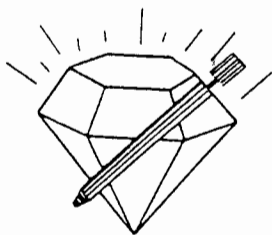
Recovered 31 ft. of muddy oil = .318060 bbls. (Grind out: 4%-water; 22%-mud; 74%-oil)

Recovered 31 ft. of muddy oil = .318060 bbls. (Grind out: 7%-water; 7%-mud; 25%-gas; 61%-oil)

Recovered 184 ft. of TOTAL FLUID = 1.887840 bbls.

Remarks

Time Set Packer(s) 9:08 ~~XXX~~ P.M. Time Started Off Bottom 12:08 ~~XXX~~ A.M. Maximum Temperature 124°
Initial Hydrostatic Pressure (A) 2127 P.S.I.
Initial Flow Period Minutes 30 (B) 9 P.S.I. to (C) 38 P.S.I.
Initial Closed In Period Minutes 45 (D) 1224 P.S.I.
Final Flow Period Minutes 45 (E) 40 P.S.I. to (F) 76 P.S.I.
Final Closed In Period Minutes 60 (G) 1140 P.S.I.
Final Hydrostatic Pressure (H) 2126 P.S.I.



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FLUID SAMPLE DATA

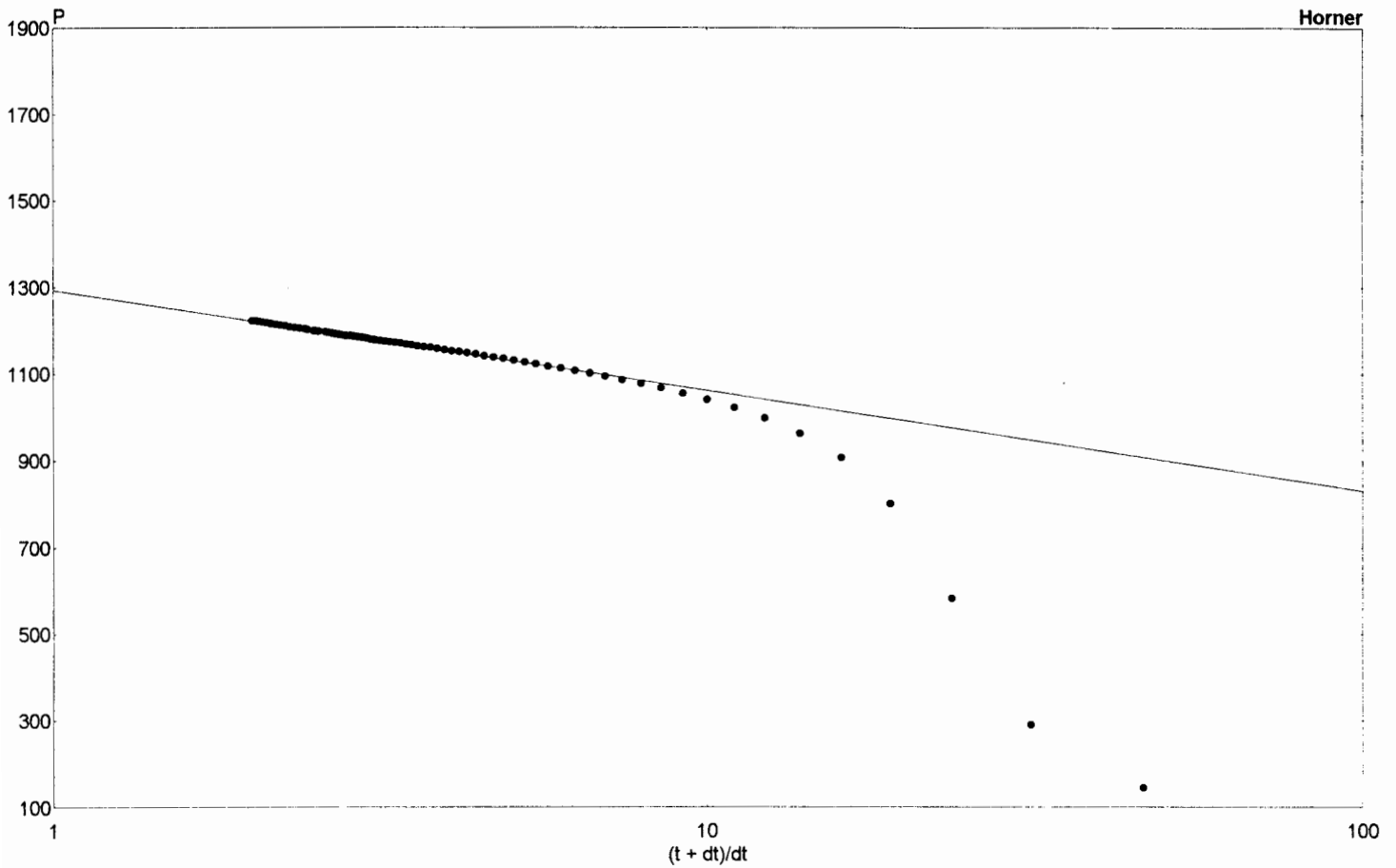
Company Har-Ken Oil Company
Lease & Well No. Petersilie No. 1
Date 8-11-00 Sec. 23 Twp. 20 S Range 24 W
Formation Test No. 2 Interval Tested From 4,382 ft. to 4,395 ft. Total Depth 4,395 ft.
Formation Mississippi

	<u>MUD PIT</u>	<u>RECOVERY</u>	
Viscosity	<u>48</u> CP	<u>--</u> CP	
Weight	<u>9.5</u>	<u>--</u>	
Water Loss	<u>14.4</u> CC	<u>--</u> CC	TOO OILY TO CHECK.
PH Factor	<u>9.0</u>	<u>--</u>	

	<u>RESISTIVITY</u>	<u>CHLORIDE CONTENT</u>
Recovery Water	<u>--</u> @ <u>--</u> °F. <u>--</u> ppm	
Recovery Mud	<u>--</u> @ <u>--</u> °F. <u>--</u> ppm	
Recovery Mud Filtrate	<u>--</u> @ <u>--</u> °F. <u>--</u> ppm	
Mud Pit Sample	<u>.70</u> @ <u>93</u> °F. <u>6,500</u> ppm	
Mud Pit Sample Filtrate	<u>.75</u> @ <u>92</u> °F. <u>6,500</u> ppm	

Sample Taken By ROGER D. FRIEDLY
Witness By Kim B. Shoemaker
Remarks Pit filtrate triton dish chlorides were 4,500 Ppm.

Har-Ken Oil Co DST #2 ISP



Har-Ken Oil Co DST #2 ISP

Analysis Results: Horner

Parameters:

Slope = -230.74

$m(1 \text{ hr}) = 1238.21$

Prd Time: = 0.75 hr

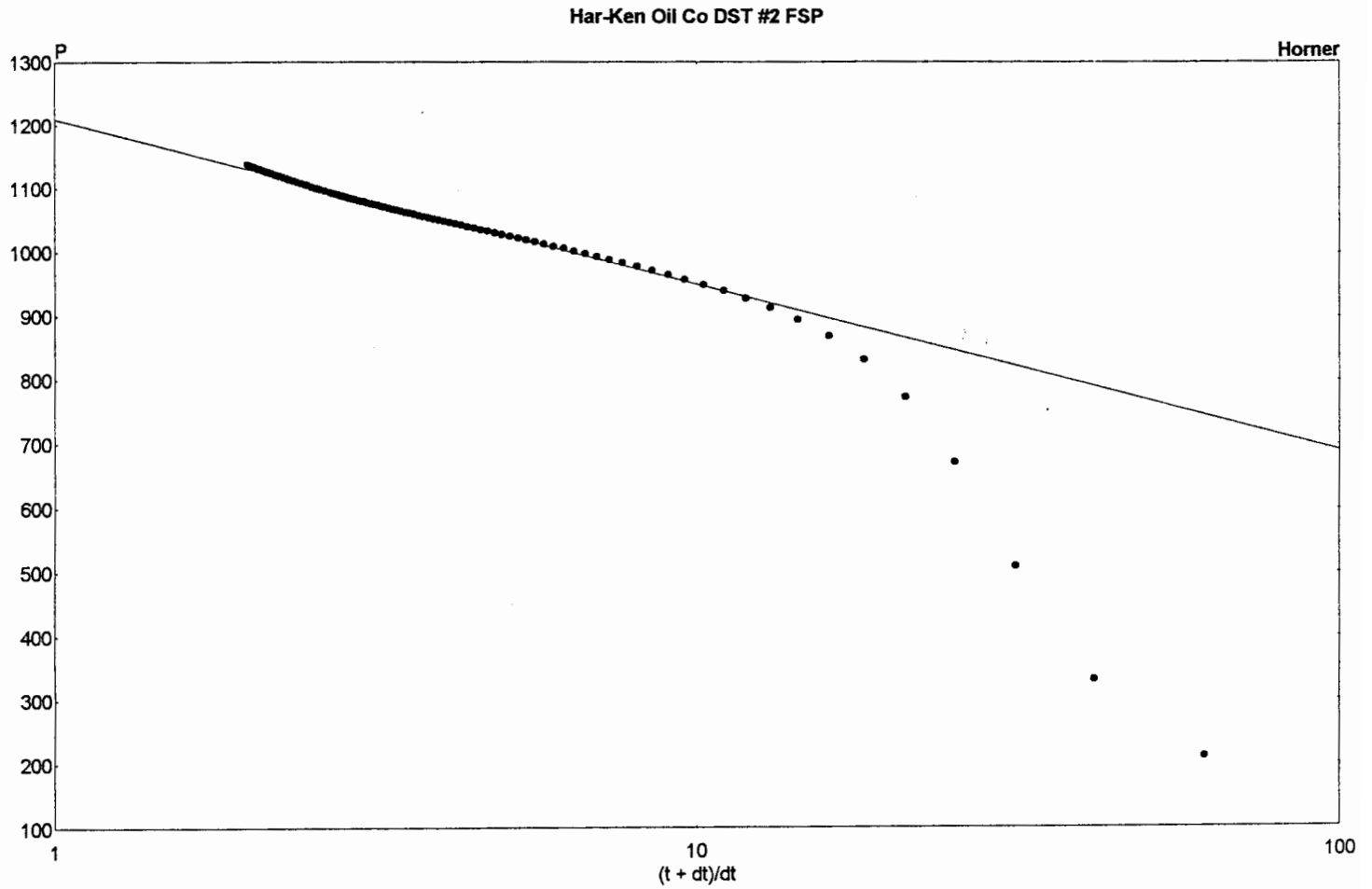
Calculated Values:

$kh = 158.523 \text{ md-ft}$

$k = 15.8523 \text{ md}$

Skin = 4.68742

$P^* = 1294.3 \text{ psi}$



Har-Ken Oil Co DST #2 FSP

Analysis Results: Horner

Parameters:

Slope = -259.601
 $m(1 \text{ hr}) = 1131.64$
 Prd Time: = 1 hr

Calculated Values:

$kh = 140.9 \text{ md-ft}$
 $k = 14.09 \text{ md}$
 $Skin = 5.63931$
 $P^* = 1209.8 \text{ psi}$

Har-Ken Oil Co DST #2 Miss. 4382'-4395'

DESCRIPTION	SECOND READING	FIRST READING	PRESSURE CHANGE	PIPE SIZE	FLUID GRADIENT	TIME CHANGE	BARRELS	TOTAL TIME	DAILY PRODUCTION
FINAL FLOW PERIOD	58	50	8	0.0142	0.362	5	1.81	1440	90.37790055

Well LSD: DST #2 NISS. 4382'-4395'

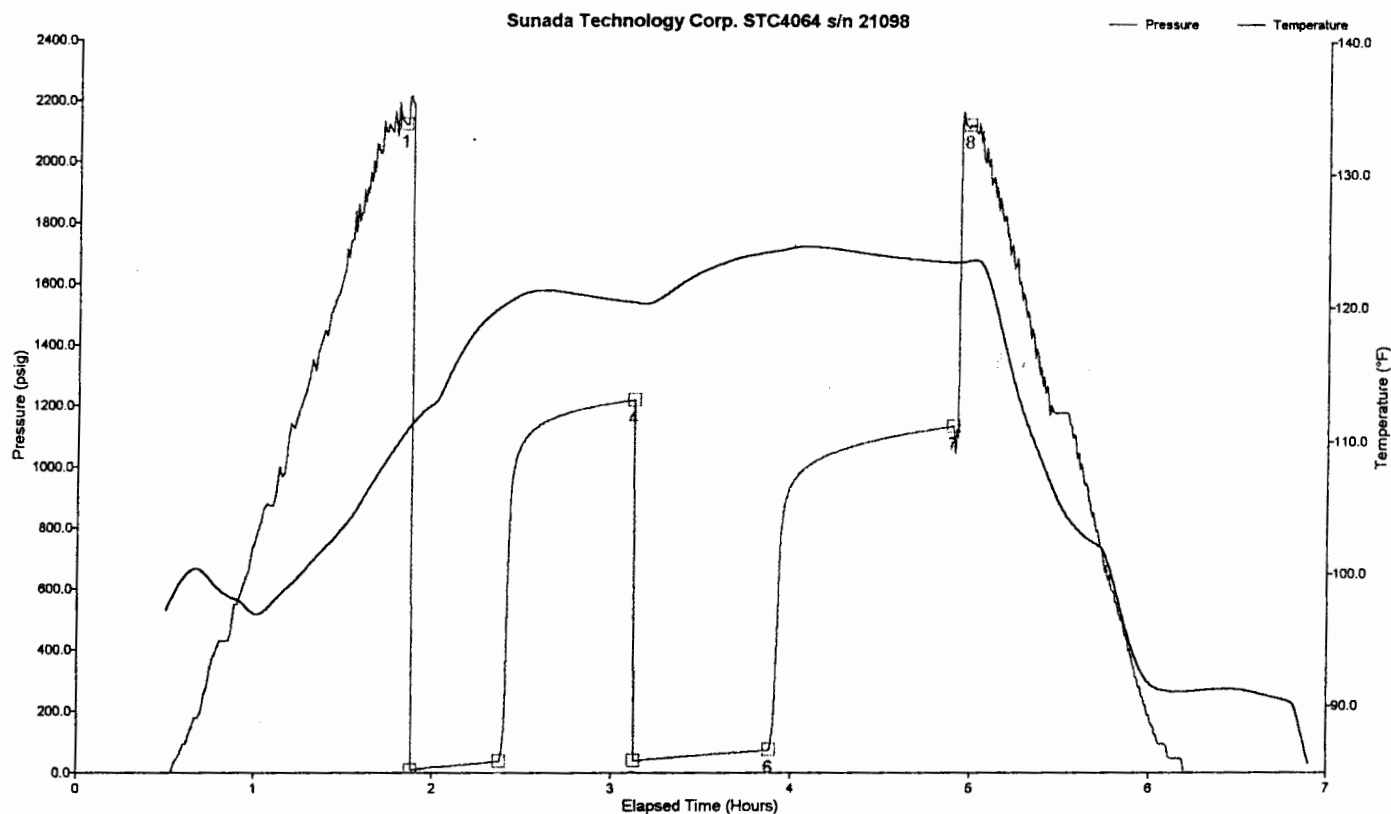
Well Name: PETERSILIE 1

Company: HAR-KEN OIL CO

Battery on: Aug 11, 2000 at 19:15:00

Notes: RECOVERED 122' CLEAN OIL, 62' HOCM WITH 188' GIP.

ORIGINAL



Tag	Pressure	Temperature	Comment
1	2126.61 psig	110.45 °F	2000-08-11 21:05:00
2	9.08 psig	111.33 °F	2000-08-11 21:08:00
3	37.89 psig	120.08 °F	2000-08-11 21:37:30
4	1224.23 psig	120.35 °F	2000-08-11 22:22:00
5	40.34 psig	120.33 °F	2000-08-11 22:22:30
6	76.18 psig	124.18 °F	2000-08-11 23:08:00
7	1140.23 psig	123.37 °F	2000-08-12 00:09:00
8	2125.76 psig	123.50 °F	2000-08-12 00:14:00