



# OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

July 9, 1979

James E. Russell Petroleum, Inc.  
P.O. Box 2618  
Abilene, Texas 79604

Gentlemen:

Attached hereto is a log of the rotary core taken from the Sprague Lease, Well No. 4, located 1320' EWL & 1100' SNL, NE $\frac{1}{4}$ , in Sec. 9-T23S-R19E, Anderson County, Kansas, and submitted to our laboratory on June 25, 1979.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

  
Benjamin R. Pearman

BRP:km

3 c to Abilene, Texas

2 c to Chanute, Kansas

## OILFIELD RESEARCH LABORATORIES

## LOG

Company James E. Russell  
Petroleum, Inc. Lease Sprague Well No. 4

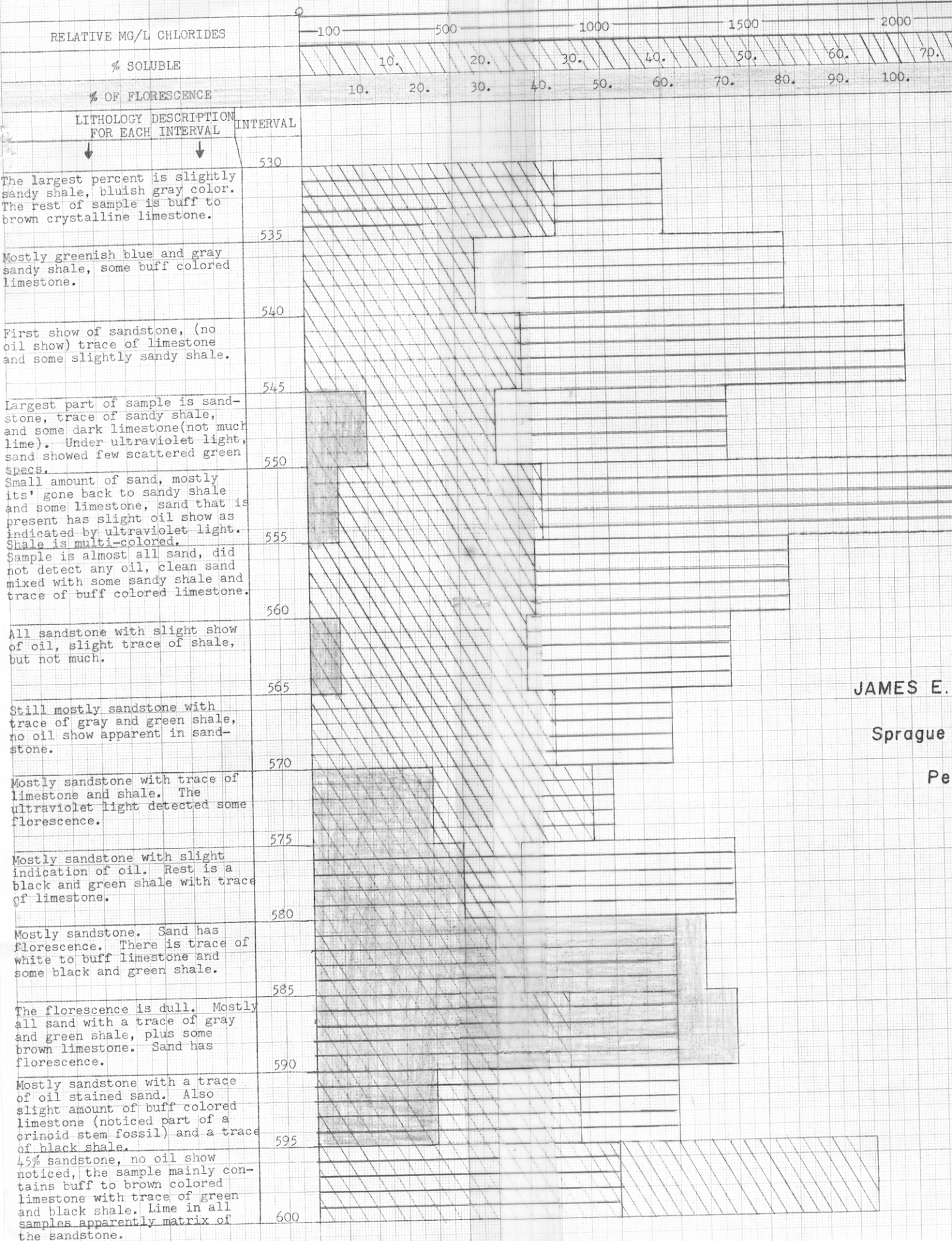
<u>Depth Interval, Feet</u>	<u>Description</u>
735.0 - 742.5	Silty shale - More shale than silt.
742.5 - 751.0	Pure gray shale.
751.0 - 754.5	Silty shale.
754.5 - 760.7	Gray shale.
760.7 - 762.6	Coal.
762.6 - 764.0	Gray shale.
764.0 - 766.2	Conglomeratic shale.
766.2 - 770.7	Gray shale.
770.7 - 772.1	Limestone.
772.1 - 774.1	Very black, fine shale with lime concretions mixed in shaly conglomerate.
774.1 - 776.0	Coal.

## JAMES E. RUSSELL PETROLEUM, INC.

Sprague Lease      Well No. 4      Peru Sand  
 Relative\* Mg/l Chlorides and Acid Solubilities

<u>Sample #</u>	<u>Depth</u>	<u>Relative* Mg/l Cl</u>	<u>% Soluble</u>
1	530 - 535	1200	28.
2	535 - 540	1600	19.
3	540 - 545	2000	24.
4	545 - 550	1400	21.
5	550 - 555	2400	26.
6	555 - 560	1600	25.
7	560 - 565	1400	24.
8	565 - 570	1200	27.
9	570 - 575	1000	31.
10	575 - 580	1400	23.
11	580 - 585	1200	23.
12	585 - 590	1200	28.
13	590 - 595	1200	29.
14	595 - 600	1000	62.

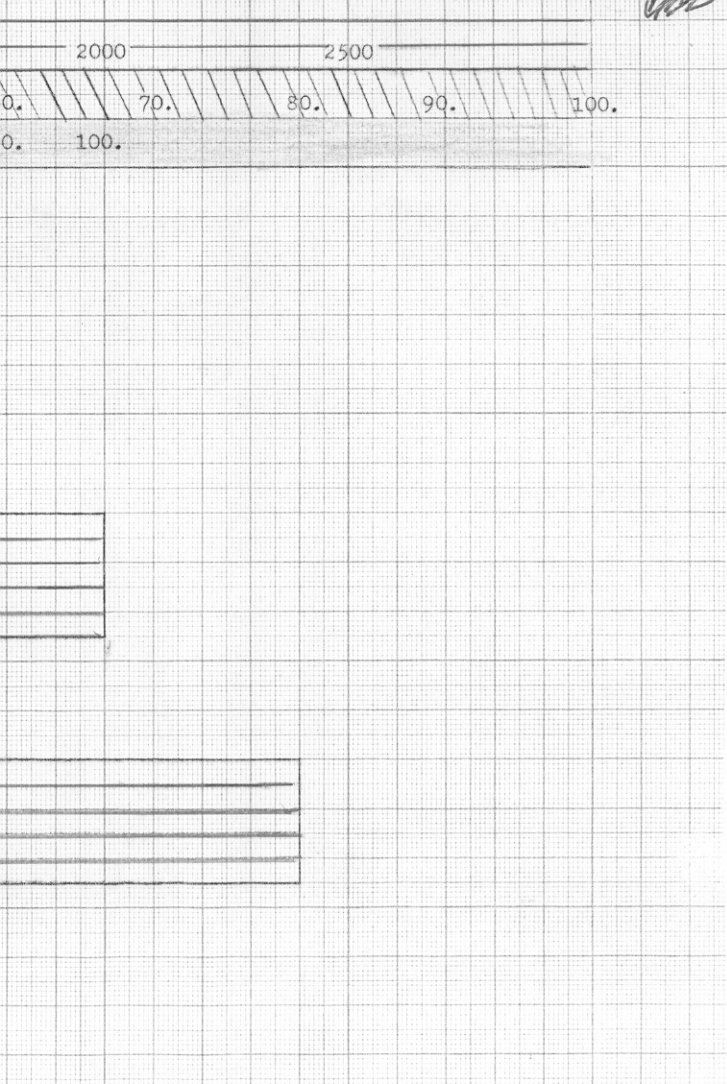
\* These values are not absolute but are only relative to each other.



JAMES E.

Sprague

Pe



JAMES E. RUSSELL PETROLEUM INC.

Sprague Lease Well No. 04

Peru Sand Data

7-12-79