

CITIES SERVICE RESEARCH AND DEVELOPMENT COMPANY

CORE ANALYSIS REPORT

25 - 115 - 8E

Company: Cities Service Oil Company (Del)

Well: #4 Yaege

Location: Riley County, Kansas

Footage Cored:	Core #1	1650'-75'	Rec. 16'	Core #5	1720'-44'	Rec. 24'
	Core #2	1676'-98.5'	Rec. 21.5'	Core #6	1744'-59.5'	Rec. 15'
	Core #3	1700'-1702.5'	Rec. 28'	Core #7	1761'-65'	Rec. 4'
	Core #4	1707'-17.5'	Rec. 10.5'	Core #8	1765'-76'	Rec. 7'

Samples: 8 saturation, permeability and porosity
 18 permeability and porosity

Date Received: July 6, 1959

Date Reported: July 31, 1959

Core Description

<u>Footage</u>	<u>Description</u>	<u>Min./Ft.</u>
<u>Core #1</u>		
1650'-1651.5'	Sh. brown	
-1653'	Sh. gry.	
-1658'	Sh. brown	
-1660'	Sh. grn., pyritic	
-1665.5'	Sdy., ls, sh. cgl., lt grn-gry w/dense ls. nodules	
-1666'	Sh. drk. grn., pyritic, sdy dol.	
-1675'	Lost core	
<u>Core #2</u>		
1676'-1683'	Sh., drk grn. w/imbedded rnd sd grs., NSO	
-1691'	Sh. varicolor, mostly grn.	
-1692.5'	Sdy., sh. cgl., grn., sdy	
-1694.5'	Sh., varicolor, mostly brown	
-1697'	Ls, gry-tan, dense-med xn, low por., fractured w/lt. grn. sh. in fractures.	
-1697.5'	Ls, gry, dense-fin Xn, low por. shaly sly stained, sl odor, VSSO	
1698.5'	Lost core	
<u>Core #3</u>		
1700'-1702'	Chert, lt. gry., hard, opaque, pyritic highly fractured w/shale and S.O. in fractures leached and weathered in part.	
<u>Core #4</u>		
1707'-1711'	Ls. lt. gry-tan, dense-fin Xn, low med. por. highly fractured broken into 3" to 4" size pieces. Good bleeding core. GSFO	
-1717.5'	Dol. lt. gry-tan, dense-fin Xn, low med por. w/scat. vuggy por, highly fractured. 80% dol., w/NSO 20% dol. w/GSFO	
<u>Core #5</u>		
1720'-1728'	Limy dol. cyl. lt gry-brown, dense-fine Xn, low por. NSO	
-1731'	Limy dol. gry, pink and tan, dense-fin Xn, low por. focs. NSO	
-1743'	Dol, lt gry, dense-fin Xn, low por. <u>Not</u> Fractured, NSO	
-1744'	Ls. lt. gry, dense-fin Xn, low por. <u>Not</u> fractured, NSO	
<u>Core #6</u>		
1744'-1755.5'	Dol, lt gry, sly limy, dense, tight low por. no perm. NSO	
-1757'	Dolomitic cherty cgl. gry, dense, tight, low por, NSO	
-1759	Dolomitic cherty cgl., gry-tan, dense, scat vuggy por. FSFO	
-1759.5'	Lost core	
<u>Core #7</u>		
1761'-1765'	Dol. lt. gry., dense, tight w/scat. vuggy por., fractures filled w/bright grn. sh.	

Core #8

1765'-1776'

Dol. lt. gry, dense-coarse Xn, low med por., some good inter Xn,
por. scat. vuggular por., w/show of oil in vuggs, fractured,
VSSO Poss water.

Test Data

<u>Sample Number</u>	<u>Depth Feet</u>	<u>Perm., md.</u>	<u>Por., %</u>	<u>Saturation, %</u>	
				<u>Oil</u>	<u>Water</u>
P-1	1651	broken	14.0		
P-2	54	"	---		
P-3	1660	0.09	2.9		
P-4	62	0.06	3.9		
P-5	65	0.03	3.3		
P-6	1687	broken	---		
P-7	1691	"	10.5		
P-8	95	0.10	1.0		
P-9	97	0.03	0.3		
P-10	1702	0.03	0.3		
S-1	1708	930	9.7	29	48
S-2	09	46	8.3	31	43
S-3	1710	0.68	4.2	38	54
S-4	11	broken	8.3	13	48
S-5	12	"	21.7	7	22
S-6	13	0.83	5.5	6	94
S-7	14	0.90	4.6	31	69
S-8	15	0.03	1.5	30	70
P-11	1723	0.07	9.9		
P-12	25	0.04	7.2		
P-13	27	0.03	4.7		
P-14	29	0.02	1.5		
P-15	1732	0.02	4.9		
P-16	35	0.13	11.2		
P-17	1740	0.25	14.3		
P-18	42	0.04	8.3		

Summary of Data

<u>Est. Represented</u>				<u>Weighted Averages</u>	
<u>Footage</u>	<u>Feet</u>	<u>Perm. md.</u>	<u>Por. %</u>	<u>Saturation, %</u>	
				<u>Oil</u>	<u>Water</u>
1708'-15'	17'	163	8.0	23	56

Analyzed by: J. Bivins and R. Perkins

Reported by: J. Bivins