T. 29 R.38W Sec. 32

13628 Gamma Road • Dallas, Texas 75244 • (214) 960-8777 • WATS (800) 338-3182 • FAX (214) 960-2939

ARCO OIL & GAS COMPANY

Well:	Lora Hickok #2	State:	Kansas	Date:	25-OCT-1991
Field:	Big Bow	County:	Grant	TTCS File #:	5043
Drilling fluid:	Water Base	Location:		Elevation:	

PLUG DEAN-STARK ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	Porosity %	Saturation Oil %	Saturation H2O %	Grain Density (gm/cc)	Lithology
St. Louis Formation								
1	5650.0-51.0	<.01		1.4	0.0	86.0	2.69	Sd,vfgr,slty,calc
2	5651.0-52.0*	<.01		1.2	0.0	76.5	2.69	Sd,vfgr,slty,v/calc
3	5652.0-53.0	<.01		1.1	0.0	86.4	2.69	Sd,vfgr,slty,v/calc
4	5653.0-54.0	<.01		0.8	0.0	76.3	2.70	Ls,vfxl,slty & sdy
5	5654.0-55.0	17.+		1.7	0.0	92.6	2.72	Ls,vfxl,shy,fos,pyr
6	→5655.0-56.0	<.01		.0.7	0.0	62.3	2.70	Ls,vfxl,sl/ool
7	5656.0-57.0	12.+		0.9	0.0	95.0	2.70	Ls,vfxl,ool,sty
8	5657.0-58.0*	<.01		1.3	0.0	91.0	2.70	Ls,vfxl,ool,sty
9	5658.0-59.0	<.01		1.3	0.0	85.9	2.70	Ls,vfxl,ool,sty
10	5659.0-60.0	<.01		0.8	0.0	86.7	2.70	Ls,fxl,ool,sty
11	5660.0-61.0	<.01		1.4	8.7	83.6	2.70	Ls,mic-fxl,ool
12	5661.0-62.0	3.8		6.2	10.9	73.9	2.64	Ls,mic-fxl,ool,vgy
13	5662.0-63.0	1.0		7.7	5.5	60.0	2.69	Ls,mic-fxl,ool,vgy
14	5663.0-64.0	.77		8.5	6.2	70.3	2.71	Ls,fxl,ool,pp vgs
15	5664.0-65.0	.81		8.1	2.9	78.5	2.70	Ls,fxl,ool,pp vgs
16	5665.0-66.0	3.6		7.9	2.1	92.3	2.68	Ls,mic-fxl,ool,vgy
17	5666.0-67.0*	5.0		9.3	5.0	92.8	2.69	Ls,mic-fxl,ool,vgy
18	5667.0-68.0*	2.2		9.3	2.5	89.1	2.70	Ls,mic-fxl,ool,pp vgs
19	5668.0-69.0	3.6		9.1	9.2	78.2	2.71	Ls,mic-fxl,ool,pp vgs

* Fracture affecting permeability

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ARCO OIL & GAS COMPANY
Well: Lora Hickok #2

Date: 25-OCT-1991

TICS File #: 5043

PLUG DEAN-STARK ANALYSIS

Sample Number	Depth (feet)	Permeability Horz (md)	Permeability Vert (md)	Porosity %	Saturation Oil %	Saturation H2O %	Grain Density (gm/cc)	Lithology
20	5669.0-70.0	.56		5.6	5.6	72.6	2.69	Ls,mic-fxl,ool,pp vgs
21	5670.0-71.0	.01		4.1	5.2	83.3	2.69	Ls,vf-fxl,calc str
22	5671.0-72.0	.20		4.0	5.2	75.5	2.69	Ls,vf-fxl,pp vgs
23	5672.0-73.0	<.01		0.8	0.0	85.1	2.67	Ls,fxl,slty
24	5673.0-74.0	<.01		1.2	0.0	92.0	2.66	Ls,fxl,ool,calc str