

CORE ANALYSIS REPORT
FOR
ATLAS MINERALS, ETAL
PHILLIPS NO. 1 WELL
YARNELL FIELD
SUMNER COUNTY, KANSAS

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

July 10, 1969

REPLY TO
8 N. W. 42ND ST.
OKLAHOMA CITY, OKLA.
73118

Atlas Minerals, Etal
707 National Bank of Tulsa Building
Tulsa, Oklahoma 74101

Attn: Mr. N. B. Gove

Subject: Core Analysis
Phillips No. 1 Well
Yarnell Field
Sumner County, Kansas
CLI File No. CP-1-6981

Gentlemen:

The Mississippian was diamond cored in the subject well from 3981 to 4060 feet. The core was preserved at the well-site and transported to the Oklahoma City Laboratory for analysis by whole core methods. The analysis results is presented in tabular form on the accompanying page of this report.

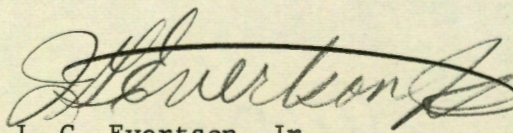
Vertical permeabilities were requested on all samples and are listed with the tabular data.

A Core-Gamma Surface Log was run to aid correlation with down hole electrical surveys and is attached to this report.

Thank you for this opportunity to be of service.

Yours very truly,

CORE LABORATORIES, INC.


J. G. Evertson, Jr.
District Manager

JGE:sh
12cc: Addressee

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering
DALLAS, TEXASPage No. 1

CORE ANALYSIS RESULTS

Company ATLAS MINERALS ETAL Formation MISSISSIPPI File CP-1-6981
 Well PHILLIPS NO. 1 Core Type DIAMOND Date Report 7-10-69
 Field YARNELL Drilling Fluid WATER EMULSION MUD Analysts BOYLE
 County SUMNER State KANSAS Elev. 1219' KB Location SW SE SECTION 12-32S-4W

Lithological Abbreviations

26-165-DWL

SAND-SD SHALE-SH LIME-LM		DOLOMITE-DOL CHERT-CH GYPSUM-GYP		ANHYRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS		SANDY-SDY SHALY-SHY LIMY-LMY		FINE-FN MEDIUM-MED COARSE-CSE		CRYSTALLINE-XLN GRAIN-GRN GRANULAR-GRNL		BROWN-BRN GRAY-GY VUGGY-VGY		FRACTURED-FRAC LAMINATION-LAM STYLOLITIC-STY		SLIGHTLY-SL/ VERY-V/ WITH-W/	
SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS		POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		VERT. PERM.	SAMPLE DESCRIPTION AND REMARKS									
		PERM. MAX.	PERM. 90°		OIL	TOTAL WATER											
WHOLE CORE ANALYSIS																	
1	3981.0-82.4	3.0	2.8	9.9	0.9	84.7	<0.1	Lm, few pp vugs, dnse									
2	82.4-83.9	0.3	0.3	7.8	3.0	73.2	<0.1	Lm, few pp vugs									
3	83.9-85.7	5.6	5.5	8.4	9.3	40.4	0.7	Lm, pp vugs									
4	85.7-87.4	3.2	3.0	7.9	4.7	55.8	0.5	Lm, pp vugs, vert frac									
5	87.4-89.3	0.4	0.4	7.8	1.4	83.8	<0.1	Lm, few pp vugs, dnse									
6	89.3-91.0	31	31	9.6	5.4	52.3	3.4	Lm, vuggy, fractured									
7	91.0-92.7	5.8	3.1	9.4	4.4	63.9	0.4	Lm, pp vugs									
8	92.7-94.7	8.0	7.6	11.2	8.5	45.2	0.6	Lm, pp vugs, vert frac									
9	94.7-96.3	32	3.1	11.5	5.0	65.0	1.2	Lm,few pp vugs,sl/chty, vf									
10	96.3-98.0	3.1	1.8	10.8	7.3	58.2	1.6	Lm, few pp vugs, vert frac									
11	98.0-99.2	1.5	1.5	11.2	4.1	68.3	0.3	Lm, few pp vugs, sl/chty									
12	99.2-00.4	8.1	1.6	10.1	2.2	73.4	2.2	Lm,few pp vugs, vf, sty									
13	4000.4-02.0	0.5	0.4	9.1	1.4	76.6	<0.1	Lm, few pp vugs, sl/chty									
14	02.0-03.3	0.8	0.8	9.1	2.8	79.3	<0.1	Lm, few pp vugs, sl/chty									
15	03.3-05.2	0.2	0.2	6.9	1.6	79.5	<0.1	Lm, sl/shy, chty									
16	05.2-06.8	0.4	0.3	8.8	2.1	84.9	<0.1	Lm, shy, chty									
17	06.8-08.0	44	0.1	10.6	2.1	82.4	14	Lm, sl/shy, sl/chty, v/f									
	08.0-09.8							Lm, sl/shy, sl/chty									
	09.8-15.0							Lm,few pp vugs,sty,v/f, sl/chty									
18	15 0-16.3	6.8	<0.1	3.9	1.3	76.1	<0.1	Lm,few pp vugs,v/f,sty									
19	16.3-18.0	6.5	4.9	2.8	4.9	83.3	<0.1	Lm,sl/chty,v/f,sty									
20	18.0-19.5	0.5	0.3	1.2	8.1	69.0	<0.1	Lm, sl/shy, vert frac									
21	19.5-20.9	<0.1*		1.5	6.5	66.7	<0.1	Lm, vert frac									
22	20.9-22.3	<0.1*		2.9	Tr	80.0	<0.1	Lm,few pp vugs,v/f,sty									
23	22.3-23.3	0.2	0.1	2.9	6.4	73.0	<0.1	Lm, pp vugs, v/f, sty									
24	23.3-24.7	1.2	0.3	2.1	3.1	75.0	<0.1	Lm, pp vugs, v/f, sty									
25	24.7-26.0	0.8	<0.1	2.6	8.0	77.1	<0.1	Lm, pp vugs, v/f, sty									
26	26.0-27.0	0.1	0.1	2.0	9.1	72.7	<0.1	Lm,few pp vugs,v/f,sty									
	27.0-39.2							Lm, sty, v/f, sl/chty									
	39.2-42.0							Lm, sl/shy, pp vugs									
27	42.0-43.5	0.4	0.4	8.3	2.1	73.1	0.2	Lm, sl/shy, pp vugs									
28	43.5-45.0	1.8	1.6	11.3	10.0	61.7	0.4	Lm, sl/shy, pp vugs									
29	45.0-46.5	0.8	0.7	8.7	1.7	75.5	0.2	Lm, sl/shy, pp vugs									
30	46.5-48.0	1.3	1.2	14.0	3.1	68.9	1.0	Lm, sl/shy, pp vugs									
31	48.0-49.6	2.2	2.0	17.6	0.9	80.8	1.6	Lm, few pp vugs									
32	49.6-51.0	4.8	2.4	16.4	1.0	80.1	2.1	Lm, few pp vugs, chty									
33	51.0-52.4	5.7	2.8	18.2	1.4	79.0	2.7	Lm, few pp vugs, sl/chty									
34	52.4-54.0	2.5	2.3	17.9	0.9	78.4	2.0	Lm, few pp vugs, sl/chty									
35	54.0-55.7	9.2	2.4	15.6	1.0	76.7	1.8	Lm, few pp vugs, chty									
36	55.7-56.8	0.4	0.3	11.5	0.7	72.9	0.2	Lm, few pp vugs, chty									
37	56.8-58.5	6.1	0.9	15.9	0.8	79.5	0.4	Lm, pp vugs, chty									
38	4058.5-60.0	1.0	0.8	14.7	1.4	79.2	0.5	Lm, pp vugs, chty									

THIS IS THE FINAL REPORT.

*DENOTES PLUG PERMEABILITY

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