

CORE ANALYSIS REPORT
FOR
MCCOY PETROLEUM CORPORATION
MILLER FARMS NO. 1-21 WELL
AMAZON DITCH EAST FIELD
FINNEY COUNTY, KANSAS

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom; and for whose exclusive and confidential use; this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories (all errors and omissions excepted); but Core Laboratories and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or formation in connection with which such report is used or relied upon.



CORE LABORATORIES

December 16, 1991

McCOY PETROLEUM CORPORATION
110 South Main
Suite 500
Wichita, Kansas 67202

Attn: Mr. Bob O'Dell

Subject: Core Analysis Data
Miller Farms No. 1-21 Well
Finney County, Kansas
CL File: 57182-13413

Dear Mr. O'Dell:

Core material obtained from the subject well was submitted to Core Laboratories' Oklahoma City, Oklahoma facility for analytical testing described on the following page of this report. This final report presents the following information:

1. Core Analysis Procedures
2. Tabular Core Analysis Results
3. Core Analysis Cross-Plot and Histograms
4. Core Photography UV & Daylight
5. Correlation Core Graph

Thank you for the opportunity to participate in this project. If you have questions concerning this report, or if we can be of additional service, please contact us at (405) 946-5422.

Sincerely,

Core Laboratories, a division of
WESTERN ATLAS INTERNATIONAL

Stacey Blackwell
Laboratory Supervisor

DISTRIBUTION OF FINAL REPORT

McCOY PETROLEUM CORPORATION
Miller Farms No. 1-21 Well
Finney County, Kansas
CL File: 57182-13413

3 cc - McCOY PETROLEUM CORPORATION
110 South Main
Suite 500
Wichita, Kansas 67202

Attention: Mr. Bob O'Dell

CORE LABORATORIES

Company : McCOY PETROLEUM CORPORATION
Well : MILLER FARMS NO. 1-21 WELL
Location : SEC 21, T:32, R:34
Co,State : FINNEY COUNTY, KANSAS

Field : AMAZON DITCH EAST FIELD
Formation : ~~ARBUCKLE~~
Coring Fluid : WATER BASE
Elevation :
File No.: 57182-13413
Date : 16-DEC-1991
API No. :
Analysts: SB,DF,TW

CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH ft	PERMEABILITY			POROSITY (HELIUM) %	SATURATION		GRAIN DENSITY gm/cc	DESCRIPTION
		(MAXIMUM) Kair md	(90 DEG) Kair md	(VERTICAL) Kair md		(PORE VOLUME) OIL % WATER %			
FULL DIAMETER ANALYSIS									
1	4295.0- 96.0	1.10	0.45	0.37	1.4	8.4	80.7	2.71	Ls lt gry foss vert Frac sh/lam
2	4296.0- 97.0	0.60	0.17	<.01	3.6	16.2	71.4	2.74	Ls lt gry foss shly vert Frac pyr
4297.0 - 4299.6 No Analysis - Shale gry-grn slily lmy									
4299.6 - 4302.0 No Analysis - Ls gry dns sh/lam									
3	4302.0- 03.0	5.50	0.07	5.10	9.2	26.7	50.3	2.76	Ls lt gry ool vert Frac slily dol
4	4303.0- 04.0	2.60	1.30	0.72	18.2	17.6	41.6	2.73	Ls lt gry ool vert Frac
5	4304.0- 05.0	18.0	16.0	3.00	20.6	17.0	29.2	2.75	Ls lt gry ool slily dol
6	4305.0- 06.0	9.80	7.00	32.0	18.1	25.1	44.5	2.72	Ls lt gry foss ool vert Frac
7	4306.0- 07.0	29.0	0.56	13.0	7.3	23.2	53.1	2.72	Ls lt gry foss ool vert Frac
8	4307.0- 08.0	0.08	<.01	0.76	3.1	8.3	64.1	2.72	Ls lt gry foss min Frac vert Frac
9	4308.0- 09.0	0.02	0.02	1.50	3.2	9.1	56.1	2.72	Ls lt gry foss vert Frac sh/lam
10	4309.0- 10.0	0.02	0.01	<.01	2.5	9.9	60.8	2.72	Ls lt gry foss vert Frac sh/lam styl
11	4310.0- 11.0	2.10	1.00	1.00	2.7	7.4	63.3	2.73	Ls lt gry foss min Frac sh/lam
12	4311.0- 12.0	0.03	0.03	<.01	2.2	0.0	85.0	2.72	Ls lt gry foss min Frac
* 13	4312.0- 13.0		<.01		5.0	0.0	80.5	2.74	Ls lt gry foss sh/lam slily pyr
14	4313.0- 14.0	2.80	0.42	<.01	2.3	0.0	92.2	2.72	Ls lt gry foss sh/lam
15	4314.0- 15.0	0.87	0.22	0.06	1.7	8.3	82.4	2.73	Ls lt gry foss vert Frac sh/lam styl
16	4315.0- 16.0	2.30	1.70	0.50	2.4	7.4	45.8	2.71	Ls lt gry foss vert Frac styl
17	4316.0- 17.0	0.99	0.61	0.02	1.6	4.4	68.8	2.71	Ls lt gry foss vert Frac styl
18	4317.0- 18.0	0.47	0.40	0.03	2.0	0.0	82.7	2.74	ls lt gry foss sh/lam
19	4318.0- 19.0	0.32	0.14	<.01	2.5	5.4	73.1	2.73	Ls lt gry foss frac

CORE LABORATORIES

Company : MccOY PETROLEUM CORPORATION
Well : MILLER FARMS NO. 1-21 WELL

Field : AMAZON DITCH EAST FIELD File No.: 57182-13413
Formation : ARBUCKLE Date : 16-DEC-1991

A N A L Y T I C A L P R O C E D U R E S A N D Q U A L I T Y A S S U R A N C E

HANDLING & CLEANING

Core Transportation : Core Laboratories Vehicle
Solvent : Toluene
Extraction Equipment : Dean Stark Apparatus - Vapor Phase
Extraction Time : 60 Hrs. D.S. - 3 Weeks Vapor Phase
Drying Equipment : Convection Oven
Drying Time : 48 Hrs.
Drying Temperature : 240 Deg. F.

ANALYSIS

Grain volume measured by Boyle's Law in a matrix cup using He
Bulk volume by Archimedes Principle
Water saturations by Dean Stark
Oil saturations by weight difference in Dean Stark
Core Gamma Composite

REMARKS

Air permeability measurements not Kilnkenberg corrected.
Core photographed under natural and UV light.
Temporary storage of core is in the Oklahoma City laboratory.

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File No.: 57182-13413
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CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH ft	PERMEABILITY			POROSITY (HELIUM) %	SATURATION		GRAIN DENSITY gm/cc	DESCRIPTION
		(MAXIMUM) Kair md	(90 DEG) Kair md	(VERTICAL) Kair md		(PORE VOLUME) OIL %	WATER %		
20	4319.0- 20.0	6.40	0.38	5.00	10.3	9.8	41.1	2.75	Ls lt gry vert frac slily pyr
21	4320.0- 21.0	1552.	0.71	309.	7.0	4.2	52.3	2.71	Ls lt gry brkn-vert Frac min Frac
4321.0 - 4335.6 No Analysis - Shale dk gry-blk slily lmy foss									
22	4335.6- 36.0	0.02	0.02	0.03	1.7	3.9	81.1	2.75	Ls lt gry min Frac slily pyr
23	4336.0- 37.0	0.89	0.79	0.84	11.0	20.0	37.5	2.74	Ls lt gry pp-vugs slily dol
24	4337.0- 38.0	3674.	2.80	1.20	13.8	29.5	28.3	2.75	Ls lt gry pp-vugs brkn-vert Frac slily dol
* 25	4338.0- 39.0		0.42		9.4	15.2	49.3	2.72	Ls lt gry foss pp sh/lam
26	4339.0- 40.0	0.28	0.25	0.06	9.7	14.3	52.4	2.74	Ls lt gry slily foss ool pp-vugs slily dol
27	4340.0- 41.0	1.00	0.67	0.33	16.7	14.5	64.7	2.72	Ls lt gry ool
28	4341.0- 42.0	1.20	1.10	0.52	17.2	17.7	45.7	2.71	Ls lt gry ool
29	4342.0- 43.0	0.30	0.26	0.10	11.2	2.9	56.6	2.76	Ls lt gry ool sh/lam slily dol
30	4343.0- 44.0	0.17	0.17	0.02	11.6	2.3	72.2	2.71	Ls lt gry ool sh/lam
31	4344.0- 45.0	0.06	0.05	0.01	8.3	0.0	60.5	2.77	Ls lt gry slily foss slily ool dol
32	4345.0- 46.0	0.03	0.02	0.01	4.8	0.0	66.6	2.75	Ls lt gry slily foss slily dol
33	4346.0- 47.0	0.01	0.01	0.01	5.0	0.0	70.5	2.76	Ls lt gry foss dol
4347.0 - 4351.5 No Analysis - Ls dk gry dns shly lam foss									
* Plug Analysis									

CORE LABORATORIES

Company : McCOY PETROLEUM CORPORATION
Well : MILLER FARMS NO. 1-21 WELL

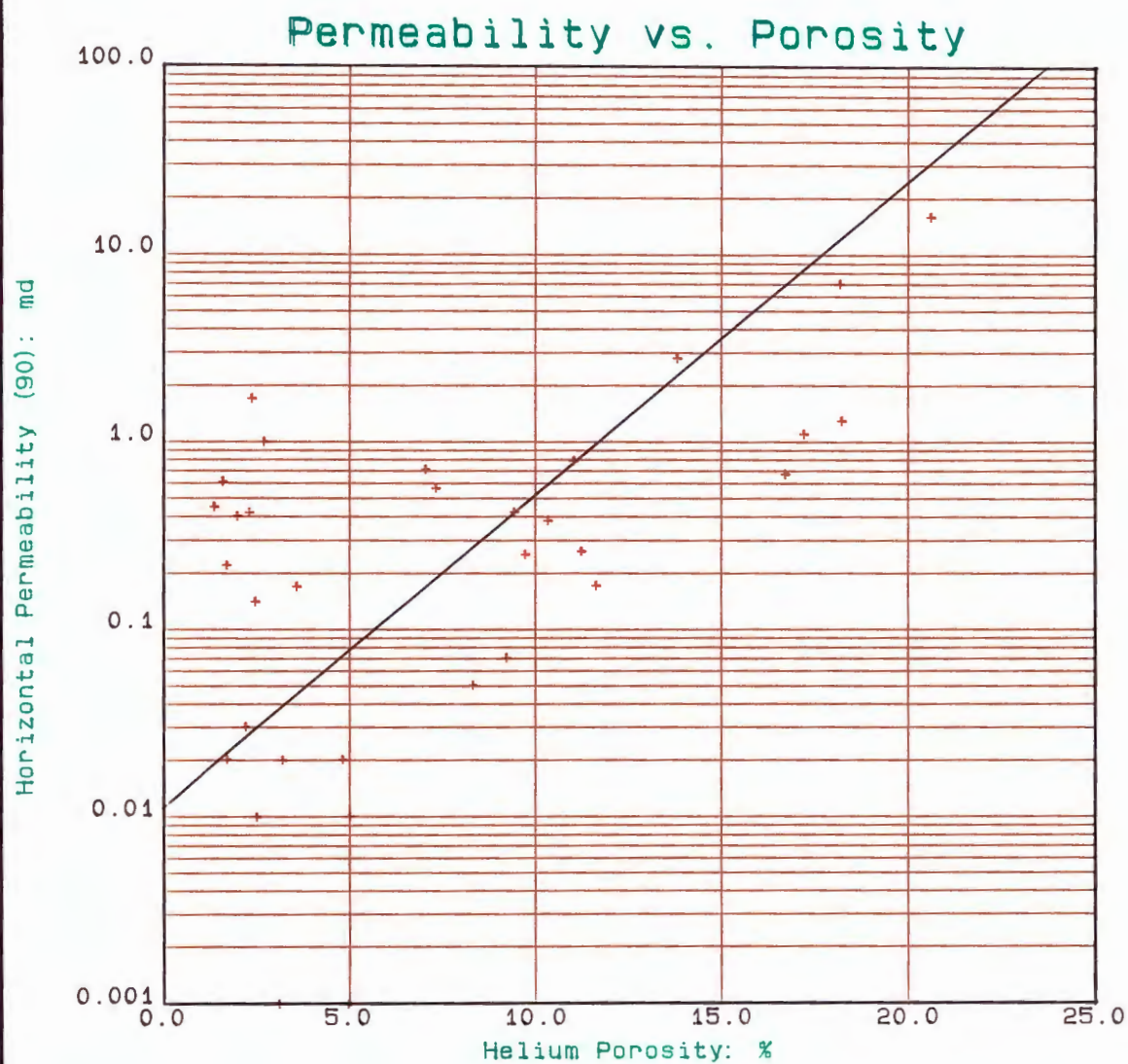
Field : AMAZON DITCH EAST FIELD
Formation : ARBUCKLE

File No.: 57182-13413
Date : 16-DEC-1991

TABLE I

SUMMARY OF CORE DATA

ZONE AND CUTOFF DATA		CHARACTERISTICS REMAINING AFTER CUTOFFS			
ZONE:		ZONE:		PERMEABILITY:	
Identification -----	ARBUCKLE	Number of Samples -----	33	Flow Capacity -----	5312.9 md-ft
Top Depth -----	4295.0 ft	Thickness Represented -	32.4 ft	Arithmetic Average ----	175. md
Bottom Depth -----	4347.0 ft	POROSITY:		Geometric Average -----	0.94 md
Number of Samples -----	33			Harmonic Average -----	0.09 md
DATA TYPE:				Minimum -----	0.01 md
Porosity -----	(HELIUM)	Storage Capacity -----	246.3 ϕ -ft	Maximum -----	3674. md
Permeability -----	(MAXIMUM) Kair	Arithmetic Average ----	7.6 %	Median -----	0.89 md
CUTOFFS:		Minimum -----	1.4 %	Standard Dev. (Geom) --	K $\cdot$ 10 $\pm$ 1.303 md
Porosity (Minimum) -----	0.0 %	Maximum -----	20.6 %	HETEROGENEITY (Permeability):	
Porosity (Maximum) -----	100.0 %	Median -----	5.0 %	Dykstra-Parsons Var. --	0.911
Permeability (Minimum) ---	0.0000 md	Standard Deviation ---	$\pm$ 5.8 %	Lorenz Coefficient ----	0.920
Permeability (Maximum) ---	100000. md	GRAIN DENSITY:		AVERAGE SATURATIONS (Pore Volume):	
Water Saturation (Maximum)	100.0 %	Arithmetic Average ----	2.73 gm/cc	Oil -----	13.8 %
Oil Saturation (Minimum) -	0.0 %	Minimum -----	2.71 gm/cc	Water -----	51.7 %
Grain Density (Minimum) --	2.00 gm/cc	Maximum -----	2.77 gm/cc		
Grain Density (Maximum) --	3.00 gm/cc	Median -----	2.73 gm/cc		
Lithology Excluded -----	NONE	Standard Deviation ---	$\pm$ 0.02 gm/cc		



McCOY PETROLEUM CORPORATION

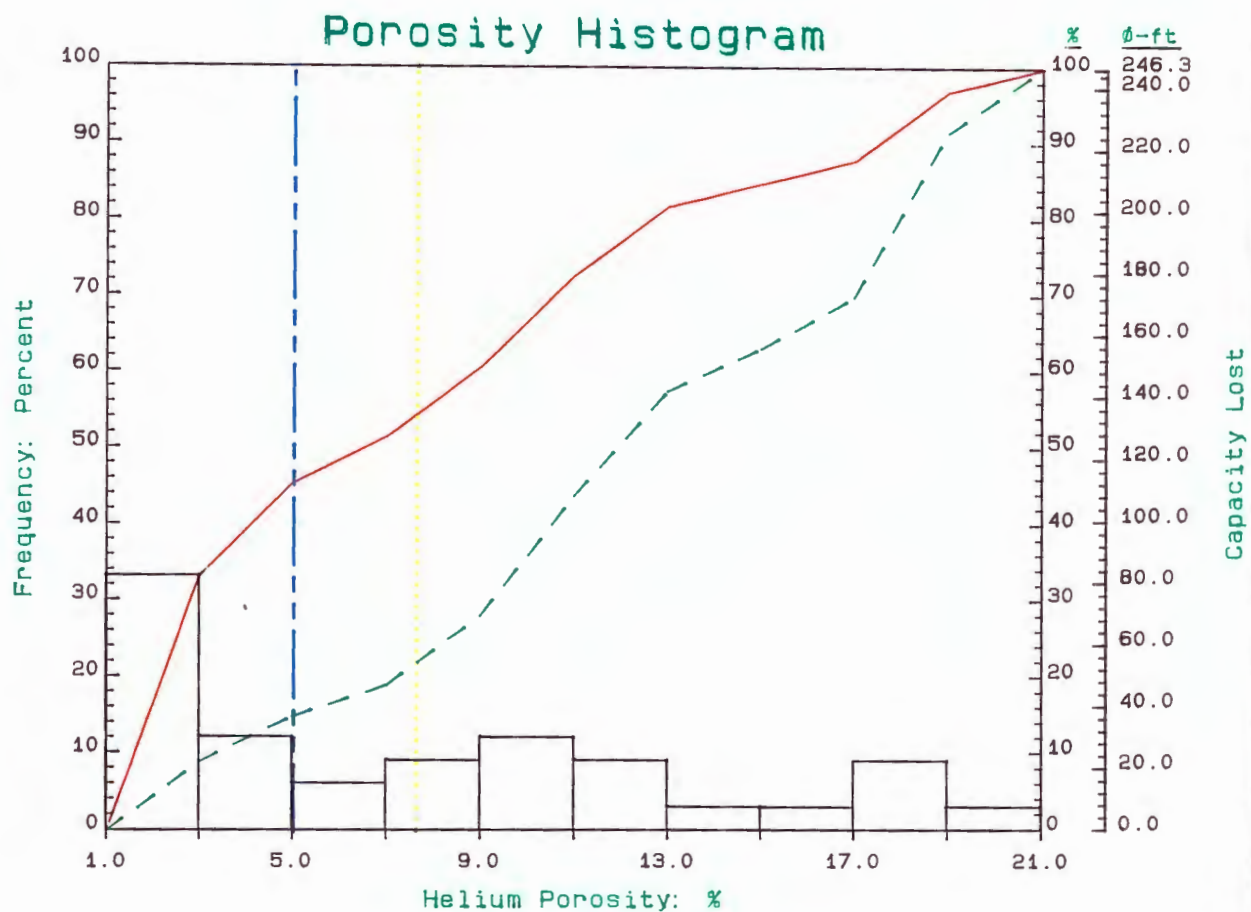
MILLER FARMS NO. 1-21 WELL
FINNEY COUNTY, KANSAS

ARBUCKLE (4295-4347 feet)

Core Laboratories

16-Dec-1991

- LEGEND -
ARBUCKLE



McCOY PETROLEUM CORPORATION

MILLER FARMS NO. 1-21 WELL
FINNEY COUNTY, KANSAS

ARBUCKLE (4295-4347 feet)

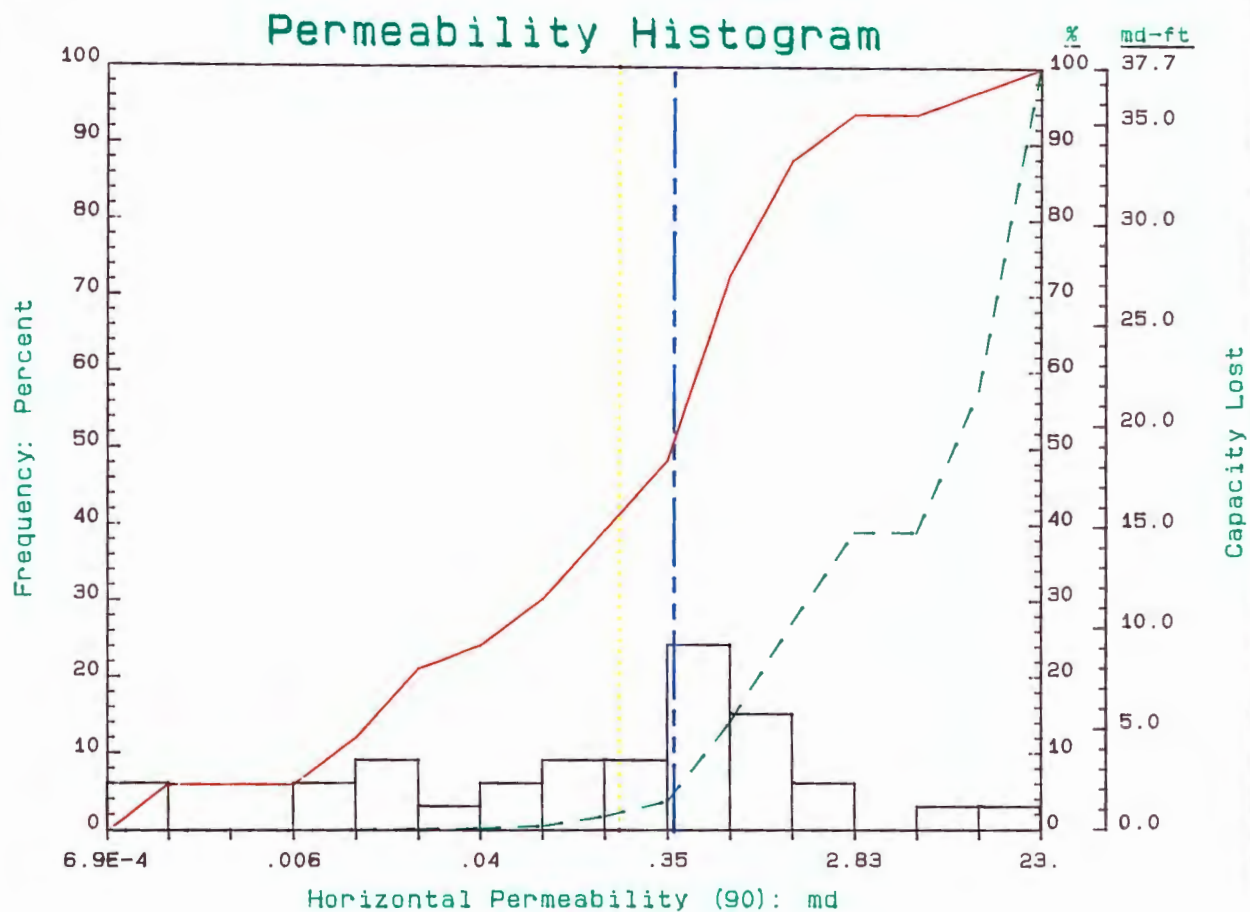
Core Laboratories

16-Dec-1991

- LEGEND -

- Median Value (5.0)
- Arith. Average (7.6)
- Cumulative Frequency
- - - Cumulative Capacity Lost

33 Samples



McCOY PETROLEUM CORPORATION

MILLER FARMS NO. 1-21 WELL
FINNEY COUNTY, KANSAS

ARBUCKLE (4295-4347 feet)

Core Laboratories

16-Dec-1991

- LEGEND -

- Median Value (0.380)
- Geom. Average (0.206)
- Cumulative Frequency
- - - Cumulative Capacity Lost

33 Samples

McCOY PETROLEUM CORPORATION

MILLER FARMS NO. 1-21 WELL

FINNEY COUNTY, KANSAS

(4295 - 4351.5 feet)

Core Laboratories

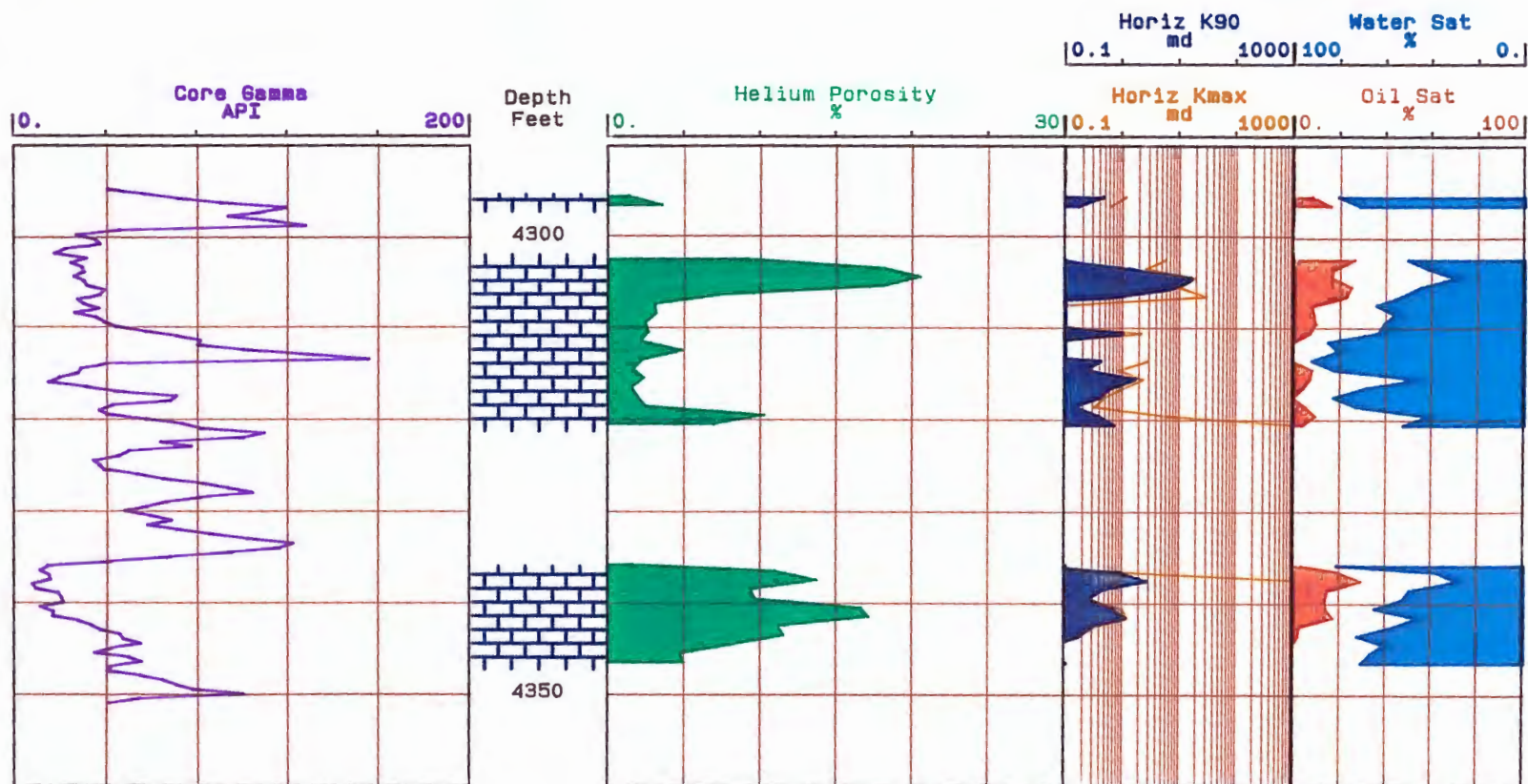
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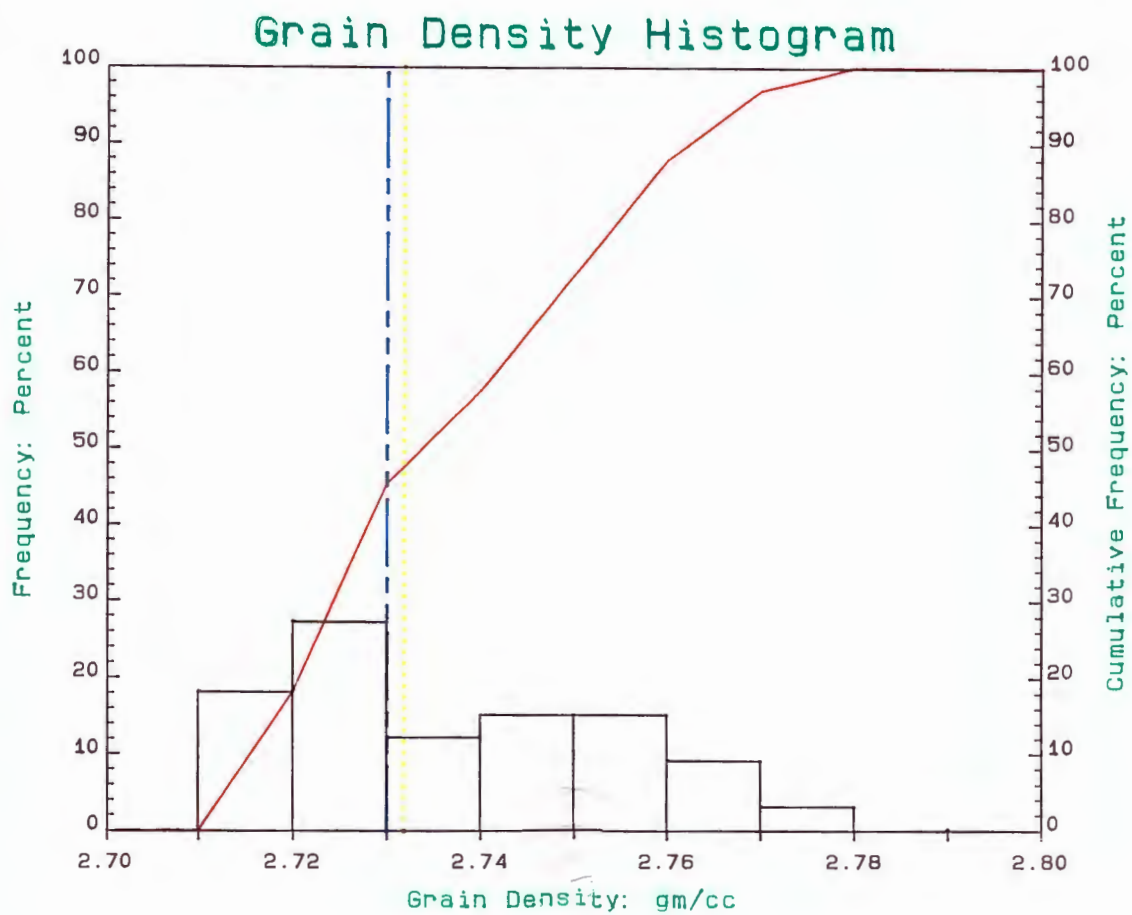
Vertical Scale
5.00 in = 100.0 ft

- Lithology Legend -



Limestone





McCOY PETROLEUM CORPORATION

MILLER FARMS NO. 1-21 WELL
FINNEY COUNTY, KANSAS

ARBUCKLE (4295-4347 feet)

Core Laboratories

16-Dec-1991

- LEGEND -

- Median Value (2.73)
- Arith. Average (2.73)
- Cumulative Frequency

33 Samples