



PAUL R. BUEHLER

PETROLEUM GEOLOGIST

3699 ESTES STREET

WHEATRIDGE, COLORADO

PH. HA 4-7303

October 11, 1955

SW SW

8-2N -54W

Mr. Marvin Davis
Davis Oil Co.
721 Midland Savings Bldg.
Denver, Colorado.

Dear Sir:

Enclosed herewith are a descriptive sample log, core descriptions, bit record, coring time and drilling time from your No. 1-Mitchell, Washington Co., Colo. The formation tops and other data are as follows:

DAVIS OIL CO., & CIMARRON WESTERN DRILG. CO., NO. 1-MITCHELL
C SW SW Sec. 8, R2N, T51N.
Washington Co., Colo.

Elev : 4468' grd; 4476' K.B.
Comm : Oct 4, 1955
Comp : Oct 11, 1955
Csg : 120' of 8 5/8"
Contr: Schafer Drilg. Co.
Lud : Oil-Emulsion
Hole Size: 7 7/8"

Top	Horara		Schlum meas.
"	Ft. Hays	4369'	" "
"	Carlile	4423'	" "
"	Greenhorn	4515'	" "
"	Brown Ls	4754'	" "
"	"D" Sand	4832'	" "
"	"J" Sand	4904'	" "
"	Skull Creek	5078'	" "
T.D.	in Skull Creek	5097'	" "

Schlumberger measure was 3 feet deeper than driller at the "D" sand, 4 feet deeper than driller at the "J" sand and 6 feet deeper than driller at total depth.

No shows of oil or gas were encountered in the "D" sand.

The "J" sand contained a slight show of oil in a very tight shaley sand from 1510-12' Drlr; 4914-16' Schlum. Core analysis confirmed that the permeability in the zone

BEST IMAGE
AVAILABLE

Davis Oil Co.

No. 1-Mitchell

October 11, 1955

of show was less than 10 millidarcys, therefore this slight show was not drill stem tested.

No further shows were encountered, therefore the No. 1-Mitchell was abandoned.

Very truly yours,

Paul R. Buchler
Paul R. Buchler,
Geologist

PRB/j

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SAMPLE DESCRIPTIONS

Samples examined and logged by P. R. Buehler, geologist on location. Samples begin at 3950' in the Pierre shale.

3950-4010 Sh, gry, fiss.

TOP NIOBRARA 4033' Schlum

- 4010 Sh, gry, fiss, waxy, soft.
- 70 Sh, gry, fiss, w/calc spec.
- 4100 Sh, gry, fiss, w/calc spec.
- 4200 Sh, gry, fiss, w/calc spec.
- 4300 Sh, gry, fiss, w/calc spec.
- 40 Sh, gry, fiss, w/calc spec; Tr ls, gry, f. xln.
- 60 Same.

TOP FT. HAYS 4369' Schlum

- 70 Ls, gry, f. xln, 10%; Sh, gry, fiss, w/calc spec, 90%.
- 80 Same; Tr ls, wh, f. xln, foram.
- 90 Ls, wh, f. xln, foram, 10%; Sh, gry, fiss, calc spec, 90%.
- 4400 Same.
- 10 Ls, wh, f. xln, foram, 50%.
- 20 Same.

TOP CARLILE 4423' Schlum

- 70 Same; Tr sltst, gry, s & p, dns.
- 80 Slstst, gry, dns, sfp.
- 4500 Sh, gry, fiss, slty.

TOP GREENHORN 4515' Schlum

- 20 Sh, gry, fiss, slty.
- 30 Ls, brn, m. xln, 20%; Sh, gry, fiss, 80%.
- 40 Ls, brn, m. xln, inoc.
- 70 Same.
- 80 Sh, gry-drk gry, calc.
- 4600 Same.
- 50 Sh, gry-drk gry, calc, inoc prisms common.
- 90 Same.
- 95 Ls, brn-wh, crs. xln, 5%; Sh, gry, fiss, 95%.
- 4710 Ls, brn-wh, crs. xln, 10%; Sh, gry, fiss, 90%.
- 40 Sh, drk, gry, fiss; Ltl ls, gry-brn, orb.

TOP BROWN Ls 4754' Schlum

- 70 Same
- 80 Ls, brn, crs. xln, fish frag, 10%; Sh, drk gry, fiss, 90%; Cons bent.
- 90 Ls, brn, crs. xln, fish frag, 15%; Sh, drk gry, fiss, 85%.
- 4800 Sh, gry-drk gry, fiss.

Davis Oil Co.-Cimarron Western Drlg. Co. #1-Mitchell, C SW SW, 8-2N-51W, Washington Co. Colo.

CORE RECORD

Core No. 1, 4827-4862' Drlr; 4830-4865' Schlum.

4827-29	(2')	Sh, blk, fiss.
-38 $\frac{1}{2}$	(9 $\frac{1}{2}$)	Ss, f.g. gry, dirty, reworked. No perm. No show.
-41	(2 $\frac{1}{2}$)	Sh, gry-blk, soft, bent.
-46	(5')	Sh, gry, w/ss blebs.
-48 $\frac{1}{2}$	(2 $\frac{1}{2}$)	Sh, blk, fiss.
-57	(8 $\frac{1}{2}$)	Ss, wh-gry, m.g. mica, w/sh lam. Occasional strk w/low perm, Remainder, No perm. No show.
-62	(5')	Ss, f.g. gry, v. shly. No perm. No show.

Core No. 2, 4900-4950' Drlr; 4904-4954' Schlum

4900-4900 1/3	(1/3')	Sh, blk, fiss.
-4907	6 2/3'	Ss, f.g. gry, shly, reworked. No perm. No show.
-4910	(3')	Sh, gry, slty, w/ss blebs.
-4912	(2')	Ss, f.g. gry, shly, carb, pyritic, sply brn oil stain, weak oil odor, sply fluor. Low to no perm.
-4914	(2')	Ss as above, No perm. No show.
-4916	(2')	Sh, gry, slty.
-4927	(11')	Ss, m.g. gry, v. shly, reworked. Low to no perm. No show.
-4929	(2')	Sh, gry, w/ss blebs.
-4934	(5')	Ss, wh, m.g. friable, w/wh cly fill. Med low perm. No show.
-4950	(16')	Ss, gry, m.g.-crs.g. sep, friable. Med high pe rm. No show.

Davis Oil Co.-Cimarron Western Drilg. Co. #1-Mitchell, 6 SW SW, 8-2N-54W, Washington Co., Colo.

BIT RECORD

1.	HRC	7 7/8"	OSC-3	120-2835'	2715'
2.	"	"	"	2835-4500'	1665'
3.	"	"	"	4500-4827'	327'
4.	"	"	OSC-3 (Rerun #3)	4862-4900'	30'
5.	"	"	OWV	4950-5091'	111'

DRILLING & CORING TIME

[illegible]

Davis Oil Co.-Cimarron Western Drilg. Co. #1-Mitchell, C SW SW, 8-24-54W, Washington Co. Colo.

- 4827 Sh, drk gry-blk, fiss.
- 27 (Circ 20 min) Sh, blk, fiss.
- 27 (Circ 60 min) Sh, blk, fiss.

CORE #1 4827-4862' Drlr.

TOP "D" Sand 4829' Drlr; 4832' Schlum

- 4862-4870 Sh, gry, fiss, slty.
- 80 Sh, gry-blk, fiss.
- 4900 Same
- 4900 (Circ 1 hr) Sltst, gry, dns, silic, 10%; Sh, blk, fiss, 90%.

CORE #2 4900-4950' Drlr.

TOP "J" Sand 4900' Drlr; 4904' Schlum

- 4950-4960 Ss, wh, w/wh cly fill, friable, m.g.-crs.g. Med perm. No show, 20%.
Sh, gry, fiss, 80%.
- 80 Ss, wh, w/wh cly fill, m-crs g. friable. Med perm. No show, 30%;
Sh, gry, fiss, 70%.
- 5000 Ss, wh-gry, w/ltl wh cly fill, m.g.-crs.g. friable. Med high perm.
No show, 30%; Sh, 70%.
- 40 Ss, wh, w/wh cly fill, m.g.-crs.g. friable. Med perm. No show.
- 50 Ss, gry, m.g. s & p. Med perm. No show, 25%.
- 60 Ss, gry, m.g. slp. Med low perm. No show, 25%.
- 70 Same.

TOP SKULL CREEK 5078' Schlum

- 80 Same.
- 86 Ss, gry, m.g. slp. Med low perm. No show, 25%.
- 91 Same
- 91 (Circ 1 hr) Same.
- T.D. 5091' Drlr; 5097' Schlum.

Paul H. Bushler
Paul H. Bushler,
Geologist