



Well file

April 18, 1958

Mr. Frank De Allen, Jr.  
Allen and Allen  
Box A, Akron, Colorado

Re: McDermott and Most # 1 Kejr  
Washington County, Colorado  
Twp. 3S, 56 W-sec. 26 SE SE

Your letter of April 16, 1958

Gentlemen:

All the necessary forms required by the  
Commission are on file in our office and therefore bond  
# S 398298 may be released as of April 18, 1958.

Very truly yours,  
Oil and Gas Conservation Commission

~~D.V. Rogers, Deputy Director~~

LD/s  
CC: McDermott and Most



GENERAL INFORMATION

Company	McDermott & Most
Well	Kejr #1
Location	C 5th St Sec. 35, T. 3-S, R. 56-W Washington County, Colorado
Elevation	4813 Ground 4822 Kelly Bushing
Contractor	Brinkerhoff Drilling Company
Toolpusher	Mr. Harry Forbes
Coring Program	"J" sand was diamond cored
Testing Program	Drill stem test was run in top of "J" sand
Date Started	March 26, 1958
Date Completed	April 1, 1958
Status	Dry & Abandoned

SCHLUMBERGER TOPS

Niobrara	4090
Fort Hayes	4494
Carlile	4542
Greenhorn	4612
Bentonite	4838
"D" Sand	4936
"J" Sand	4980 (-158)
TOTAL DEPTH	5030 Driller's 5031 Schlumberger

## DISCUSSION

The McDermott & Most #1 Kejr was drilled in the C  $SE\frac{1}{4}$   $SE\frac{1}{4}$  of Section 35, Township 3-South, Range 56-West, Washington County, Colorado, on the west edge of the Last Chance Field.

The Last Chance Field has two producing wells, the New Drilling Company #1 Schreiber in  $SW\frac{1}{4}$   $SW\frac{1}{4}$  of Section 25, Township 3-South, Range 56-West and the Continental Oil Company #1 Schreiber in  $NW\frac{1}{4}$   $SW\frac{1}{4}$  of Section 25, Township 3-South, Range 56-West. Both of the above wells produce from the top of the "J" sand.

The top of the "J" sand was cored in the McDermott & Most #1 Kejr and good shows of oil were recovered. However, the sand appeared wet and a 1-1/2 hour drill stem test of the top portion of the sand recovered only 45 feet of water, 135 feet of slightly oil and mud cut water, and 965 feet of water. The thirty minute shut in pressure was only 775 pounds.

*James L. Walker*  
James L. Walker, Geologist

### SAMPLE DESCRIPTION

Sample description begins at 3950 feet in the Pierre Shale.

3950 - 4090	Shale, black, very finely micaceous, soft, traces of silt, traces of bentonite.
4090	TOP OF NIobrARA
4090 - 4120	Shale, dark gray with tan calcareous specks, traces of bentonite, traces of silt.
4120 - 4200	Shale as above, becoming more calcareous than above.
4200 - 4250	Shale, tan, speckled, very calcareous, traces of bentonite, traces of aragonite.
4250 - 4300	Shale as above, becoming very calcareous.
4300 - 4494	Shale as above, becoming very calcareous, traces of white, very soft, chalky limestone.
4494	TOP OF FORT HAYES
4494 - 4542	Limestone, white, very fine, evenly textured, contains many micro-fossils, traces of light gray silt in bottom few feet.
4542	TOP OF CARLILE
4542 - 4612	Shale, black, fissile, with traces of silt.
4612	TOP OF GREENHORN
4612 - 4700	Limestone, light brown, rather silty, many fossil fragments, much black, calcareous shale, traces of limey silt.
4700 - 4838	Interbedded, light brown silty limestone, dark gray siltstone and black, calcareous shale with streaks of bentonite throughout.
4838	TOP OF BENTONITE MARKER
4838 - 4841	Bentonite, white, very soft, pastey.
4841 - 4936	Shale, black, fissile, with traces of dark gray silt.
4936	TOP OF "D" SAND
4936 - 4946	Shale, black silty and siltstone, dark gray, with traces of gray fine grained sandstone.

4946 - 4950

Sandstone, gray, fine grained, very hard and tight,  
very low porosity and permeability, no shows.

4950 - 4980

Shale, black, fissile

TOP OF "J" SAND 4980 (-158)

- Core #1 4980 - 4981 $\frac{1}{2}$  - Recovered 1 $\frac{1}{2}$  feet  
1 $\frac{1}{2}$ ' Sandstone, gray, fine grained, fairly clean sand, poor porosity and permeability, few thin black shale partings throughout, good odor, good fluorescence, very light staining, top 6" slightly reworked.
- Core #2 4981 $\frac{1}{2}$  - 4983 - Recovered 1' foot  
1' Sandstone, fine grained, clean sand, good porosity and permeability, sub-angular to sub-rounded, well sorted grains, very slightly glauconitic, good odor and fluorescence.
- Core #3 4983 - 5030 - Recovered 47 feet  
4983 - 4988 (5') Sandstone, fine grained, friable, slightly silty, fair to good porosity and permeability, thin black shale partings, appears wet scattered throughout, good taste and odor and fluorescence, few black, carbonaceous particles throughout.
- 4988 - 4996 (8') Reworked sand and shale, very soft and friable, thin black shale partings throughout, appears wet, good taste and odor, scattered fluorescence.
- 4996 - 4997 (1') Siltstone, dark gray, with thin black carbonaceous shale partings throughout, very low porosity and permeability, no shows.
- 4997 - 5003 (6') Sandstone, gray, fine grained, fair porosity and permeability, slightly silty, good taste and odor and fluorescence, appears wet.
- 5003 - 5004 (1') Interbedded, dark gray siltstone and black, fissile shale, very hard and tight, no shows.
- 5004 - 5005 (1') Sandstone, gray, fine grained, highly clay filled, very wet, no shows.
- 5005 - 5014 (9') Siltstone, dark gray, very hard and tight, reworked in part, few thin black shale partings, no shows
- 5014 - 5020 (6') Shale, black, carbonaceous, with thin silt lenses at 5016-5017.
- 5020 - 5023 (3') Reworked sandstone and shale, very hard and tight, very low porosity and permeability, no shows.
- 5023 - 5028 (5') Sandstone, white, fine grained, very highly clay filled, very wet, no shows.
- 5028 - 5030 (2') Interbedded, reworked sandstone and shale with white fine grained sandstone lenses.

DRILL STEM TEST INFORMATION

DST #1 4979 - 4986

Open 1½ hours, shut in 30 minutes, fair blow  
for 30 minutes, weak blow remainder of test.

No gas to surface

Recovered 45' oil

135' slightly oil and mud cut water

965' fresh water

IFP	150#
FYP	590#
SIP	775#
Hydrostatic	2700#

BIT RECORD

<u>Run No.</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Depth</u>	<u>Footage</u>	<u>Hours Run</u>
1	6 3/4	HTC	OSC3J	108-1997	1889	6 3/4
2	6 3/4	HTC	OSC3J	1997-3333	1336	11 1/2
3	6 3/4	HTC	OSC3J	3333-4296	963	9 1/2
4	6 3/4	HTC	OSC3	4296-4979	683	9 1/4

CORING TIME RECORD

Core #3 4983 - 5030

Coring time in minutes per foot

29 - 15 - 16 - 12 - 13 - 12 - 3 - 2 - 4 - 7 - 8 - 4 - 2 -  
 7 - 6 - 9 - 10 - 6 - 8 - 8 - 7 - 5 - 5 - 8 - 5 - 6 - 5 -  
 8 - 8 - 2 - 8 - 10 - 15 - 15 - 12 - 13 - 15 - 10 - 9 - 7 -  
 4 - 5 - 6 - 9 - 7 - 5 - 5



CORE ANALYSIS

Sample Number	Depth Feet	Permeability Millidarcys		Porosity Percent	Oil % Pore	Total Water % Pore
		Horizontal	Vertical			
1	4880-81	79	47	19.2	13.0	66.7
2	4881-82	106	86	18.3	12.6	71.0
3	4882-83	351	197	19.2	15.6	65.6
4	4883-84	299	150	19.8	14.2	64.1
5	4884-85	162	142	21.5	12.1	65.8
6	4885-86	99	74	20.7	12.6	54.3
7	4886-87	106	48	23.4	11.5	62.0
8	4887-88	48	0.0	18.2	15.4	55.0
9	4888-89	180	116	19.7	9.1	63.1
10	4889-90	106	63	18.1	5.5	68.6
11	4891-92	174	140	21.2	11.3	52.8
12	4892-93	381	215	16.0	12.5	45.0
13	4893-94	48	21	14.7	11.5	43.5
14	4894-95	33	18	19.2	6.5	72.0