

PENNZOIL COMPANY
Van Bremmer 3019-321K (Well A)
Vermejo Ranch Coal Bed Methane Pilot

Geologic Summary
C. Hillenbrand 7/17/89

Raton Formation

Coals:

<u>Depth</u>	<u>Thickness</u>	
393.5	2'	Show #1 @ 579' 2 units/12 units/ 8 units in sandstone
426.5	2'	
429.5	2.25'	
433	2'	
450	1.5'	Show #2 @ 600' 8 units/26 units/ 10 units in coal
454.25	1.5'	
456	1.5'	
459.5	.75'	Show #3 @ 661' 10 units/32 units/ 20 units in sand and shale
469.25	2'	
506	1.5'	
535.25	.75'	
571	1'	Show #4 @ 691' 18 units/26 units/ 15 units in coal
659.75	.5'	
661.5	1'	
689	1'	Show #5 @ 829' 22 units/26 units/ 23 units in coal
786.5	1.5'	
826	2'	
1163.5	2'	Show #6 @ 1100' 8 units/16 units/ 1109 units in sand
1192	1'	
1381	1.25'	
1393	1'	Show #7 @ 1411' 8 units/78 units in coal
1407.75	2'	
1437.75	1'	
Total Raton Fm Coal 33'		Show #8 @ 1448' 55 units/90 units/ 60 units in coal

Vermejo Formation

Coals:

<u>Depth</u>	<u>Thickness</u>	
1746	6'	Show #9 @ 1746' 32 units/60 units/ 34 units in coal
1811	2'	
1837	3'	
1926.5	1.5'	
1929	1'	Show #10 @ 1966' 41 units/63 units/ 44 units in coal
1936	3'	
1939.75	.5'	
1963	3.5'	
Total Vermejo Fm Coal 20.5'		

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Lower Raton Formation neutron-density crossover was noted at:

1586-88	1654-57	1708-18
1590-92	1670-80	1722-28
1604-09	1682-85	1732-36
1626-38	1686-1700	
1644-51	1702-06	

Trinidad Sandstone

Top at 1970 (+5681)

Total coal encountered in the Van Bremmer 3019-321K (Well A) was 53.5 feet.

CJH49

cc: W. H. Schell
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