

PENNZOIL COMPANY
Van Bremmer 3019-312E (Well B)
Vermejo Ranch Coal Bed Methane Pilot

Geologic Summary
C. Hillenbrand 7/18/89

Raton Formation

Coals:

<u>Depth</u>	<u>Thickness</u>	
364	1.5	Show #1 @ 603' 1 unit/6 units/ 6 units/1 unit in coal
402.5	1.5'	
434.5	1.5'	
436.5	1.5'	Show #2 @ 617 1/unit/8 units/ 4 units in coal
442.5	1.5'	
468	1.5'	
500.5	2'	Show #3 @ 1547 4 units/10 units/ 3 units in coal
503.25	2.5'	
510	1.5'	
516	1'	
529	1'	
536	1'	
543	1'	
584.5	1.5'	
608.5	1.25'	
624.5'	.75'	
640.25'	.75'	
697.5'	2'	
720	1.75'	
731	1'	
805	1'	
812.75	2'	
848.5	2'	
866.75	1.5'	
923	2'	
938	1.5	
944	1'	
1135	1'	
1526	1.5'	
1539.25	1.75'	
1552	2'	
1582	1.5'	
1585.25	2'	
1628'	1.5'	
Total Raton Fm Coal	50.25'	

Vermejo Formation

Coals:		
	<u>Depth</u>	<u>Thickness</u>
	1901	4'
	1908.5	2'
	2071.75	.75'
	2086	2'
	2100	3.25'
	2128.75	1.5'
	1939.75	.5'
	<u>2140.25</u>	<u>3'</u>
Total Vermejo Fm Coal	16.5'	
		Show #4 @ 2030' 1 unit/35 units/ 3 units in coaly shale
		Show # 5 @ 2082' 4 units/8 units/ 4 units in coal
		Show #6 @ 2095' 4 units/25 units/ 8 units in coal
		Show #7 @ 2125' 8 units/16 units 8 units/ in coal
		Show #8 @ 2136' 9 units/30 units/ 10 units in coal

Lower Raton Formation neutron-density crossover was noted at:

1764-66	1827-39
1771-78	1842-62
1790-1808	1864-67
1810-24	1874-81

Trinidad Sandstone

Top at 2149 (+5641)	Show #9 @ 2271' 6 units/140 units/ 8 units in sand
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Total coal encountered in the Van Bremmer 3019-312E (Well B) was 66.75 feet.

CJH50

cc: W. H. Schell
R. D. Osterhout
L. G. Guckert
L. D. Williamson
H. W. Hollingshead