INTERVAL SHEET

Page 1 of 1

of 1 VDMR Well No: 2127

Date rec'd:

Sample Interval: from 10' to: 100'6"

PROP:

BLM A-050367

Hole No.: T1-7A

COMP:

Minerals Development Corp.

COUNTY:

Giles

Total Depth: 100'6"

Number of samples: 37

Oil or Gas: Water: Exploratory: X

From-To	From-To	From-To	From-To
10' - 16'3" (2 spls) 16'3" - 22' (2 spls) 22' - 26'8" (2 spls) 26'8" - 28'4"	86'9''- 87'1'' 87'1''- 88' 88' - 88'7'' 88'7''- 92'4''	- -	-
28'4" - 28'10"	92'4"- 97'11"	-	- <u>-</u>
28'10''- 31'2'' 31'2'' - 33'8'' 33'8'' - 34'7'' 34'7'' - 37'7''	97'11 <u>'</u> ' 99'11'' 99'11 <u>'</u> ' 100'6'' -	-	- - -
37'7'' - 37'11''	-	-	-
37'11"- 40'2" 40'2" - 43'7" 43'7" - 44'8" 44'8" - 47'0" 47'0" - 57' (2 spls)	- - - - -	- - -	- - - -
57' - 58'8''	-	-	-
58'8'' - 60'4'' 60'4'' - 61'2''	* =	·	-
61'2'' - 63' 63' - 66'8''	-		-
66'8'' - 68'4'' 68'4'' - 70' 70' - 72'9'' 72'9'' - 74'11''	- · ·	-	- - -
74'11''- 75'8''	2 2		e -
75'8'' - 77'2'' 77'2'' - 77'3'' 77'3'' - 81'5'' 81'5'' - 86'4''	 	-	
86'4'' - 86'9''	-	-	-

INTERVAL SHEET

VDMR Well No: 2127 of Page Sample Interval: from 10 to:1006 Dave rec'd: BLM A-050367 Number of samples: 37 PROP: Hole No. : TI-7A Total Depth: 100 6" Minerals Development Carp. Oil or Gas: Water: Exploratory: COUNTY: From-To From-To From-To From-To 10' -16'3"(25pl) 16'3" - 22' (25pl) 869"-871" 871" - 881 22' - 26'8"(2 mpls) 26'8" - 28'4" 881 - 88174 88/7" - 92'4" 28411 - 98/1011 92'4" - 97'11" 97/11" - 99/11" 2810" - 31'9" 31'9" - 33'8" 99/1111 - 100'6" 33'8"-3417" 34'7" - 37'7" 37/7" - 37/1" 37 11" - 40'2" 40 211 - 437 43'7" - 44'81 471 - 571 (2 ppls) 57' -58'8" 588" - 60 4" 60'411 -61'2" 61211-631 631 -66'8" 66'8"-68'4" 68'44 - 701 701 - 7219" 7899-7411" 74'11" -75'8" 75/8"-77/2" 77/211-77/311 77/37-81/51

81511 -861411 86/411 - 86/911

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VDMR No. : W-2127

HOLE NUMBER: T1-7A

Lessee or permittee: E. L. Keesling Exp.
Address: Bramwell, West Virginia
Driller: Vaughan Bowling, Cunningham Core Drilling & Grouting

Finished: 26 October 1961

State: Virginia

Method of drilling: Diamond core

Logged by: W. A. Moon S79E 14NE off vertical

Depth i	n feet		Description
From	То	Thickness	
0,00	10 1011	10 10 11	Overburden (Clinton formation)
10 1011	10 *8"	811	Sandstone, maroon, coarse grained, conglomeratic, highly ferruginous; contains quartz granules.
LO #8#	1719"	7"1"	Sandstone, maroon, fine to coarse grained, ferrug- inous; contains maroon shale partings parallel to the bedding planes.
171911	281011	10 13"	Sandstone, maroon, fine to medium grained ferruginous contains maroon clay galls (incl. 4" core loss).
2810"	2814#	4**	Sandstone, maroon, fine grained, ferruginous, contain maroon shale partings.
2814"	28'10"	01611	Shale, drab maroon.
28110"	3112"	21411	Sandstone, maroon, fine grained, highly ferruginous.
3112"	331811	21611	Sandstone, maroon, medium to coarse grained, highly ferruginous.
331811	34 14"	811	Shale, rust brown, contains black shale partings brok
341411	3417"	3"	Shale, pale olive drab.
341711	36 1711	21011	Shale and interbedded sandstone; shale grayish green to olive drab. Sandstone, maroon, fine to medium grained.
3617"	3717"	1:0#	Shale, pale grayish green glauconitic.
3717"	37'11"	4"	Sandstone, maroon, fine to medium grained; contains maroon shale partings.
"בניקי	4012"	21311	Shale, pale grayish green; contains intercalations of maroon, fine to medium grained sandstone; includes l' core loss.
012"	4315"	31311	Sandstone shaly, pale green, fine to coarse grained; contains irregular pale green sandy shale partings

and interbeds.

Depth i	n feet		Description
From	To	Thickness	
4315"	43 1611	1º	Shale, maroon.
43 16"	441211	811	Sandstone, grayish green, fine grained; lower 3" contains black shale partings.
441211	441811	611	Sandstone, gray, fine to coarse grained, conglomeratic contains black limestone granules and pebbles and irregular green shale partings.
441811	47 *	21411	Sandstone, pale green, fine grained; contains irregul green shale partings.
47'0"	5013"	313"	Sandstone, pale grayish green, fine grained, shaly; contains irregular green shale partings.
5013"	50'11"	811	Shale, green.
50'11"	5114"	5 ⁿ	Sandstone, pale grayish green, fine grained, shaly; contains irregular pale green shale partings.
5114"	5119"	5"	Shale, pale gray.
5119"	55 '7"	3'10"	Sandstone, pale grayish green, fine grained, shaly contains irregular pale green shale partings.
55 '7"	55 18"	1"	Shale, black.
55 18"	5610"	411	Sandstone, pale gray, fine grained, quartzitic.
5610"	56'1"	l"	Shale, grayish black.
56'1"	5612"	l"	Sandstone, pale gray, fine grained, quartzitic.
5612"	571	10"	Sandstone, grayish green, medium to coarse grained; contains quartz granules and irregular greenish shale partings.
571	5715"	5"	Shale, pale grayish green, sandy.
5715"	58'1"	8"	Shale grayish green; contains l' maroon shale at 57'8
5811"	58 18"	7"	Shale dark gray,
818"	60 1411	1'8"	Sandstone, gray fine grained, quartzitic; contains black shale partings.
601411	611211	10"	Sandstone, gray slight grayish hue, fine grained quartzitic.
112"	631	1'10"	Sandstone, rust brown to gray to pale olive drab, fine to medium grained; contains rust brown clay galls and greenish gray shale partings, vuggy.

Depth i	in feet		Description
From	То	Thickness	
631	661811	318"	Sandstone, maroon, coarse grained, ferruginous, conglomeratic; contains quartz granules and clay galls.
661811	681411	118"	Sandstone, maroon, fine grained, ferruginous,
6814"	69 14"	1,00	Shale, grayish green; contains maroon sandstone intercalations.
6914n	6917"	3"	Sandstone, grayish maroon, fine grained; contains grayish green shale partings.
6917"	701	5"	Sandstone, pale grayish green, fine grained; contain green shale intercalations.
701	7217"	217"	Sandstone, maroon, fine grained, ferruginous.
7217"	7219"	2"	Shale, greenish gray.
7219"	74 111"	212"	Sandstone, pale gray, fine grained; contains irregular greenish gray shale partings.
74'11"	751811	9#	Sandstone, maroon, fine grained, ferruginous; contain intercalations of greenish gray shale.
751811	7712"	1:6"	Shale and interbedded sandstone, shale grayish green sandstone, pale gray, fine grained.
77 1211	7713"	1"	Sandstone, maroon, fine grained.
7713"	8115"	4 *2"	Sandstone and interbedded shale, sandstone gray to grayish black, fine grained; shale grayish black to grayish green.
81.5"	861411	4*11"	Shale, dark grayish green, contains gray fine grained sandstone pebbles and galls.
36 1411	861911	5"	Sandstone, maroon, fine grained, ferruginous.
361911	87'1"	4"	Sandstone, gray, fine to coarse grained, conglomerat contains large brown clayey sandstone pebbles.
3711"	8718"	7"	Sandstone, pale gray, fine grained; contains black shale partings.
3718"	881	411	Shale, black.
381	88 17"	7"	Sandstone, gray, fine to coarse grained; congl. contains viens and stringers of pyrite.

Depth i	n feet		Description
From	То	Thickness	
8817"	918	21511	Sandstone, pale grayish green, fine grained.
91'	9214"	1,4"	Sandstone, pale grayish green, fine grained, contains irregular vienlets of maroon sandstone. (Includes 4" core loss).
9214"	92 17"	3"	Sandstone grayish maroon, fine grained.
9217"	97'11"	51411	Sandstone, pale gray to grayish green, fine grained; contains irregular partings of black shale.
97'11"	99 *11 **	210"	Sandstone, pale gray to grayish green, fine grained.
99'11"	100'6"	7"	Quartzite, grayish white, fine grained.
			Log of Split Core Tl-7A
0	10.		Overburden useable Clinton
			Sample 1 (10' - 17'9")
10;	1018"	811	Sandstone, maroon, coarse grained conglomeratic; highly ferruginous contains quartz granules.
10 18"	1719"	7*1"	Sandstone, maroon, fine to coarse grained, ferrugino contains scattered maroon shale partings parallel to the bedding planes.
			Sample 2 (17'9" - 28')
1719"	281	1013"	Sandstone, maroon, fine to medium grained, highly ferruginous contains maroon clay galls.
281	28'10"	10"	Shale drab maroon to gray not sampled.
			Sample 3 (28'10" - 34")
28110"	31'2"	214"	Sandstone, maroon, fine grained, highly ferruginous.
3112"	34*	2'10"	Sandstone, maroon, medium to coarse grained, ferrugi
			Sample 4 (63* - 68*4")
631	6618"	31811	Sandstone, maroon, coarse grained, ferruginous, conglomeratic, contains quartz granules and clay galls.
			Sample 5 (70' - 72'7")
70 *	7217"	21711	Sandstone, maroon, fine grained ferruginous.