

INTERVAL SHEET

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VDMR Well No: 2131

Date rec'd:

Sample Interval: from 4' to: 102'

PROP: BLM A-050368

Number of samples: 34

Hole No. T2-18A

COMP: Minerals Development Corp.

Total Depth: 102'

COUNTY: Giles

Oil or Gas: Water: Exploratory: X

From-To	From-To	From-To	From-To
4'0" - 14'10" (3 spls)	88'6" - 89'6"	-	-
14'10" - 16'10"	89'6" - 95'11" (3 spls)	-	-
16'10" - 17'3"	95'11" - 97'0"	-	-
17'3" - 19'8"	97'0" - 102'0" (2 spls)	-	-
19'8" - 19'10"	-	-	-
19'10" - 21'0"	-	-	-
21'0" - 21'6"	-	-	-
21'6" - 23'8"	-	-	-
23'8" - 35'10" (3 spls)	-	-	-
35'10" - 36'8"	-	-	-
36'8" - 37'6"	-	-	-
37'6" - 38'4"	-	-	-
38'4" - 39'1"	-	-	-
39'1" - 40'0"	-	-	-
40'0" - 40'1"	-	-	-
40'1" - 41'0"	-	-	-
41'0" - 42'11" (2 spls)	-	-	-
42'11" - 61'5" (6 spls)	-	-	-
61'5" - 61'8"	-	-	-
61'8" - 62'9"	-	-	-
62'9" - 64'0"	-	-	-
64'0" - 67'4" (2 spls)	-	-	-
67'4" - 70'0"	-	-	-
70'0" - 70'4"	-	-	-
70'4" - 74'0"	-	-	-
74'0" - 74'8"	-	-	-
74'8" - 75'0"	-	-	-
75'0" - 82'0" (3 spls)	-	-	-
82'0" - 86'10"	-	-	-
86'10" - 88'6"	-	-	-

INTERVAL SHEET

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VDMR Well No: 2131

Date rec'd:

Sample Interval: from 4' to 102'

PROP: BLM A-050368
Hole No. T2-18A

Number of samples: 34

COMP: Minerals Development Corp.

Total Depth: 102'

COUNTY: Giles

Oil or Gas: Water: Exploratory:

From-To	From-To	From-To	From-To
4'0" - 14'10" (3 spls)	88'6" - 89'6"	-	-
14'10" - 16'10"	89'6" - 95'11" (3 spls)	-	-
16'10" - 17'3"	95'11" - 97'0"	-	-
17'3" - 19'8"	97'0" - 102'0" (2 spls)	-	-
19'8" - 19'10"	-	-	-
19'10" - 21'0"	-	-	-
21'0" - 21'6"	-	-	-
21'6" - 23'8"	-	-	-
23'8" - 35'10" (3 spls)	-	-	-
35'10" - 36'8"	-	-	-
36'8" - 37'6"	-	-	-
37'6" - 38'4"	-	-	-
38'4" - 39'1"	-	-	-
39'1" - 40'0"	-	-	-
40'0" - 40'1"	-	-	-
40'1" - 41'0"	-	-	-
41'0" - 42'11" (2 spls)	-	-	-
42'11" - 61'5" (6 spls)	-	-	-
61'5" - 61'8"	-	-	-
61'8" - 62'9"	-	-	-
62'9" - 64'0"	-	-	-
64'0" - 67'4" (2 spls)	-	-	-
67'4" - 70'0"	-	-	-
70'0" - 70'4"	-	-	-
70'4" - 74'0"	-	-	-
74'0" - 74'8"	-	-	-
74'8" - 75'0"	-	-	-
75'0" - 82'0" (3 spls)	-	-	-
82'0" - 86'10"	-	-	-
86'10" - 88'6"	-	-	-

HOLE NUMBER: T2-18A

Hole alignment: N 52 E 15° SE off vertical

Date started: December 11, 1961

Date completed: December 18, 1961

Driller: M. C. Vaughan, Cunningham Core Drilling Co.

Depth in feet			Description
From	To	Thickness	
0	4'	4'	Overburden, Clinton SS not useable.
4'	4'2"	2"	Sandstone, grayish maroon to gray, quartzitic, slightly ferruginous, shaly, broken.
4'2"	4'5"	3"	Sandstone, brown, fine grained, quartzitic.
4'5"	6'	1'7"	Sandstone, grayish maroon, fine grained, slightly ferruginous, quartzitic. Includes 1' core loss.
6'	12'6"	6'6"	Sandstone, maroon, fine to medium grained, ferruginous, contains abundant maroon shale partings parallel to the bedding planes and clay galls. Quartzitic.
12'6"	13'8"	1'2"	Sandstone, maroon, fine grained, highly ferruginous, contains maroon clay galls.
13'8"	14'	4"	Sandstone, drab brownish maroon, fine grained, shaly, slightly ferruginous thin bedded.
14'	14'10"	10"	Sandstone, maroon, medium to coarse grained, ferruginous, contains brownish maroon clay galls.
14'10"	14'11"	1"	Shale, pale green to pale brown.
14'11"	16'10"	1'11"	Sandstone, grayish maroon, fine grained, slightly ferruginous, contains abundant irregular drab maroon shale partings parallel to the bedding planes.
16'10"	17'3"	5"	Shale, pale greenish gray.
17'3"	19'7"	2'4"	Sandstone, maroon to grayish maroon, fine to coarse grained, slightly ferruginous, contains abundant maroon shale partings parallel to the bedding planes.
19'7"	19'10"	3"	Shale, pale tan.
19'10"	21'	1'2"	Sandstone, maroon, coarse grained, ferruginous, contains maroon clay galls and quartz granules.
21'	39'1"	18'1"	Sandstone, grayish maroon to drab maroon, fine to medium grained, slightly ferruginous, shaly, thin bedded; contains abundant maroon, grayish maroon and gray shale partings parallel to the bedding planes.

Depth in feet			Description
From	To	Thickness	
39'1"	40'	11"	Sandstone, maroon to dark red, coarse grained, highly ferruginous, extremely friable, contains quartz granules.
40'	40'1"	1"	Shale, pale tan.
40'1"	41'	11"	Sandstone, maroon, fine grained, highly ferruginous, includes 3" core gain.
41'	42'11"	1'11"	Shale, pale green, contains partings and interbeds of pale rust brown sandy shale and sandstone.
42'11"	61'5"	19'6"	Shale, pale greenish gray, glauconitic; contains irregular lenses, partings and interbeds parallel to the bedding planes. These lenses contain pale gray, fine grained quartzitic sandstone.
61'5"	61'8"	3"	Sandstone, pale gray, fine grained, quartzitic.
61'8"	62'9"	1'1"	Shale, pale greenish gray.
62'9"	64'	2'3"	Sandstone, pale gray, fine grained, includes 1'1" core loss.
64'	67'4"	3'4"	Shale, pale gray, unctuous.
67'4"	69'8"	2'4"	Shale, gray to grayish brown, contains partings of rust brown silt and sandy shale parallel to the bedding planes. Includes 10" core loss.
69'8"	69'10"	2"	Shale, pale grayish brown, extremely unctuous.
69'10"	70'	2"	Shale, rust brown, sandy, broken, contains broken chips of maroon sandstone.
70'	70'4"	4"	Sandstone, drab grayish maroon, fine grained.
70'4"	74'	3'8"	Shale, maroon to pale grayish green, sandy, crumbly; includes 8'1" core loss.
74'	74'8"	8"	Sandstone, maroon, fine grained, ferruginous, broken. Note: Possible fault zone from 71' to 79'.
74'8"	74'10"	2"	Shale, pale green to lavender, broken.
74'10"	74'11"	1"	Sandstone, drab gray, fine grained.
74'11"	75'	1"	Shale, drab maroon.
75'	80'5"	5'5"	Sandstone, maroon, fine grained, ferruginous, contains partings and interbeds of pale brown to gray shale. Interval includes 3'1" core loss.

<u>Depth in feet</u>			Description
<u>From</u>	<u>To</u>	<u>Thickness</u>	
80'5"	80'9"	4"	Shale, lavender, broken.
80'9"	81'5"	8"	Sandstone, grayish purple, fine grained, shaly.
81'5"	81'7"	2"	Sandstone, maroon, coarse grained, ferruginous, contains quartz granules.
81'7"	82'	5"	Shale dark red to maroon, includes 2" core loss.
82'	86'10"	4'10"	Sandstone, maroon, fine to coarse grained, ferruginous, contains quartz granules and sporadic partings of rust brown and maroon shale, broken. Includes 2' core loss.
86'10"	88'6"	1'8"	Sandstone, maroon, fine grained, ferruginous, contains abundant maroon shale partings parallel to the bedding planes.
88'6"	89'6"	1'	Sandstone, maroon, medium to coarse grained, ferruginous, contains quartz granules.
89'6"	95'9"	6'3"	Sandstone, maroon, fine to coarse grained, ferruginous, contains maroon, green and rust brown shale partings parallel to the bedding planes.
95'9"	95'11"	2"	Sandstone, rust brown, fine grained.
95'11"	97'	1'1"	Shale, rust brown, crumbly. Includes 1' core loss.
97'	102'	5'	Shale, tan to pale rust brown, contains partings of pale rust brown silt and pale green shale. Includes 1'2" core loss.

End of hole.

Log of Split Core T2-18A

Date Logged: December 20, 1961

Depth in feet		Thickness	Description
From	To		
			Sample 1 (4' - 9'3")
4'	9'3"	5'3"	Sandstone, drab grayish brown to drab grayish maroon, fine grained, slightly ferruginous, weathered; contains pale rust brown to maroon shale partings.
			Sample 2 (9'3" - 13'8")
9'3"	10'3"	1'	Sandstone, drab maroon, fine grained, ferruginous.
10'3"	12'8"	2'5"	Sandstone, drab pale grayish maroon, fine grained, contains maroon shale partings parallel to the bedding planes.
12'8"	13'8"	1'	Sandstone, maroon, fine grained, ferruginous.
			Sample 3 (13'8" - 21')
13'8"	14'10"	1'2"	Sandstone, drab grayish brown to brownish maroon, fine to medium grained, slightly ferruginous.
14'10"	16'10"	2'	Sandstone, grayish maroon, fine grained, slightly ferruginous, contains abundant irregular drab maroon shale partings thin bedded.
16'10"	17'3"	5"	Shale, pale greenish gray.
17'3"	19'7"	2'4"	Sandstone, drab grayish maroon, fine to coarse grained, slightly ferruginous, contains abundant maroon shale partings parallel to the bedding planes.
19'7"	19'10"	3"	Shale, pale tan.
19'10"	21'	2"	Sandstone, maroon, coarse grained, ferruginous, contains maroon clay galls and quartz granules.
21'	23'5"	2'5"	SS grayish maroon shaly not sampled too poor.
			Sample 4 (23'5" - 37')
23'5"	37'	13'7"	Sandstone, grayish maroon to drab maroon, fine to medium grained, slightly ferruginous, shaly, thin bedded, contains abundant maroon, grayish maroon and gray shale partings parallel to the bedding planes.

Depth in feet			Description
From	To	Thickness	
37'	38'	1'	Shale, drab maroon, contains partings of maroon, fine grained ferruginous sandstone (not sampled). Sample 5 (38' - 41')
38'	39'1"	1'1"	Sandstone, maroon, fine grained, ferruginous, contains abundant maroon shale partings and interbeds parallel to the bedding planes.
39'1"	40'	11"	Sandstone, maroon to dark red, coarse grained, ferruginous, extremely friable, contains quartz granules.
40'	40'1"	1"	Shale pale tan.
40'1"	41'	11"	Sandstone, maroon, fine grained, highly ferruginous, includes 3" core gain. Sample 6 (74' - 79'10")
74'	74'8"	8"	Sandstone, maroon, fine grained, ferruginous, broken.
74'8"	74'10"	2"	Shale, pale green to lavender broken.
74'10"	74'11"	1"	Sandstone, drab gray, fine grained.
74'11"	75'	1"	Shale, drab maroon.
75'	79'10"	4'10"	Sandstone, maroon, fine grained, ferruginous, contains partings and interbeds of pale brown to gray shale. Interval includes 3'1" core loss. Sample 7 (81'5" - 88'6")
81'5"	81'7"	2"	Sandstone, maroon, coarse grained, ferruginous, contains quartz granules.
81'7"	82'	5"	Shale dark red to maroon. Includes 2" core loss.
82'	86'10"	4'10"	Sandstone, maroon, fine to coarse grained, ferruginous, contains quartz granules and sporadic partings of rust brown and maroon shale broken. Includes 2' core loss.
86'10"	88'6"	1'8"	Sandstone, maroon, fine grained ferruginous, contains abundant maroon shale partings parallel to the bedding planes.

<u>Depth in feet</u>			<u>Description</u>
<u>From</u>	<u>To</u>	<u>Thickness</u>	
			Sample 3 (88'6" - 95'9")
88'6"	89'6"	1'	Sandstone, maroon, medium to coarse grained, ferruginous, contains quartz granules.
89'6"	95'9"	6'3"	Sandstone, maroon, fine to coarse grained, ferruginous, contains maroon and green and rust brown shale partings parallel to the bedding planes.

End of log.