

JOH-A-1

Stiff "Black Creek" dark gray lignitic clay spun out of hole
only between 18 and 28 feet penetration. estimate from drill effort
that we hit stiff clay at 15-18 feet penetrated sand 18-20 feet
and stiff clay 20-24 feet. below this point sideritic sand and
sandy clays of unit F

ERG 11/8/83

Lithology
(described while drilling)

P1/2

Footage

Drilling Time

Drilling Remarks

6-9-83

Lithology

JOH-A-1-83

(described from pulled flights) elev. 185'

7829 00
351856

Bi horizon - sand

5

< 1/2 min

easy

X

tan sand
reddish orange sand

10

< 1/2 min

easy

X

reddish orange soupy sand

15

< 1/2 min

easy

X

contact brownish gray-black silty clay

20

1/4 min

harder
easy

flight nearly full
sample - clay close to stem middle of flight

few chunks of stiff gray black silty clay came up late in spin

25

2 min

harder
speed up

flight full
slightly sandy mud sample over whole flight

fragments of stiff gray black silty clay
soupy brownish gray sand

30

1 m

same, (sample)

soupy brownish gray sand

35

1 1/2 m

easy

same, no sample

soupy gray sand

40

1 1/2 m

easy

same, no sample

soupy slightly brownish gray sand

45

1 1/2 min

easy

same, sample
← sample

very soupy light gray fine sand silty clay

50

1/2 min

easy

same, no sample

Lithology P. 2/2
(described while drilling)

Footage
Drilling Time
Drilling Remarks

6-9-83 Lithology JOH-A-1-83
(described from pulled flights)

<p>very soupy light gray fine sand & clay</p>	<p>55</p>	<p>1 min (change drills)</p>	<p>time factor due to change in drills (lower bit pressure)</p>	<p>flight, half full same material X no sample</p>
<p>✓ same</p>	<p>60</p>	<p>1 min</p>		<p>" " " " sample</p>
<p>same</p>	<p>65</p>	<p>52 sec</p>	<p>easy</p>	<p>gravelly mud near bottom of flight, sample</p>
<p>same</p>	<p>70</p>	<p>47 sec</p>	<p>easy - last foot more pressure</p>	<p>same partially full flight sample</p>
<p>same thicker soup</p>	<p>75</p>	<p>49 sec</p>	<p>easy difficult spin</p>	<p>change in lithology partially full flight sand clay greenish gray also has (lean yellowish orange sands streaks) sample near top</p>
<p>✓ same thicker soup</p>	<p>80</p>	<p>1 min</p>	<p>easy difficult spin</p>	<p>sandy mud (no yellow streaks of sands above) partially full flight sampled throughout flight</p>
<p>no sample</p>	<p>85</p>	<p>1 1/4 min</p>	<p>easy easy spin</p>	<p>greenish gray sand with gravels w/ streaks of yellow sand sampled throughout flight partially full flight</p>
<p>no sample</p>	<p>90</p>	<p>1 1/4 min</p>	<p>harder drill easy drill</p>	<p>very gravelly sand & mud sampled throughout flight partially full flight</p>
<p>✓ thick mud and clots off flight - gray</p>	<p>95</p>	<p>2 1/2 min</p>	<p>← had to lift bit and drill slow</p>	<p>gravelly sandy mud green with reddish brown mottling sampled throughout flight partially full flight</p>
<p>no sample</p>	<p>100</p>	<p>1 1/4 min</p>	<p>chatter</p>	<p>same as above partially full flight sampled</p>
<p>no sample</p>	<p>105</p>		<p>difficult drill & spin</p>	<p>green sandy clay with red mottling partially full flight</p>

SAMPLE DESCRIPTION

Well # 504-A-1

TD 105

Examined by: SPB

Date 11/2/23

p. of

Key: A - Abundant C - Common M - Minor T - Trace R - Rare X - Major Constituent

Color	Texture			Minerals													Remarks								
	Grain Size	Grain Shape	Sorting	Quartz	Feldspar	Glauconite	Phosphate	Calcite	Shell Frag.	Mica	Pyrite	Lignite	Chalcedony	Amethyst	Rose Quartz	Tourmaline		Siderite	Limestone	Dolomite	M. Fossils	Fe-Stain	Oxides & Hematis	Limonic & Hematis	
crs	S ANy		A						R	M	M			M											
Med	S ANy		A R						T	R	R			T											
Med	ANy/S ANy		A						T	R															
Med	ANy		A M						T	R															
Med/Fine	ANy		A						T	T				T											
Med/crs	ANy S ANy		A						R	M				T											very gravelly
Med	S ANy/ANy		A						R	T				T											
Med/crs	S ANy/ANy		A R							R				R											
Med/crs	S ANy/ANy		A R						T	T				T											
Med/Fine	ANy/S ANy		A						T	T				T											
Med/crs		aa																							gravelly
Med/Fine		aa																							gravelly
Med/crs	ANy/S ANy		A						R	T				R											gravelly
Med/crs	ANy/S ANy		A						T	T				R											gravelly
crs	S ANy		A						R					T											
crs	S ANy		A						R	R				T											
Med	S ANy		A						R	M	R			T	R										
Med	S ANy		A						T	T	M			T											
Med/F	S ANy		A						T	T	T														

most med or trace of siderite that has very thin to med sized.

Examined - observed no appreciable difference

SAMPLE DESCRIPTION

Well # S04-A-1 TD 105 Examined by: SPB Date 11/2/23 p. of

Key: A - Abundant C - Common M - Minor T - Trace R - Rare X - Major Constituent

Interval	Rock Type	Color	Texture			Quartz	Feldspar	Glauconite	Phosphate	Calcite	Shell Frag.	Mica	Pyrite	Lignite	Chalcedony	Amethyst	Rose Quartz	Tourmaline	Siderite	Limestone	Dolomite	M. Fossils	Fe-Stain	Pyrites & Hemite	Limonite & Hemite	Remarks
			Grain Size	Grain Shape	Sorting																					
20 f			Crs	S Any	A					R	M	M		M								T	R			gravelly
25 f			Med	S Any	A R					T	R	R		T								R	R	R		
30 f			Med	AV / S Any	A M					T	R												T	T		
45 f			Med	AV	A M					T	R							T				R	T	T		
60 f			med/fin	AV	A					T	T			T								T	R	M		
65 f			Med/crs	AV - S Any	A					R	M			T								T	R	M		very gravelly
70 f			Med	S Any / AV	A					R	T			T								R	T	T		
75 f			Med crs	S Any / AV	A R						R			R								R	R	T		
80 f			Med/crs	S Any / AV	A R					T	T			T								R	R	T		
85 f			Med/fin	AV / S Any	A					T	T			T								R	R	T		gravelly
90 f			Med/crs		aa																					gravelly
95 f			Med/fin		aa																					gravelly
100 f			Med/crs	AV / S Any	A					R	T			R								R	R	T		gravelly
105 f			Med/crs	AV / S Any	A					T	T			R								R	R	M		gravelly
10 v			crs	S Any	A					R				T								R	R	T		
15 v			crs	S Any	A					R	R			T								R	R	T		
20 v			Med	S Any	A					R	M	R		T	R							T	R	T		
25 v			Med	S Any	A					T	T	M		T								T	R	T		
35 v			Med/f	S Any	A					T	T	T										R	R	R		
40 v	60 v	80 v	briefly examined - observed no appreciable difference																							

most med or fine of these 35-105 f but very very slow to react in acid.