

SCALE " = 100'

Lithology	Drilling time in minutes	DEPTH	Sample Description	Remarks, drill stem tests, etc.
		3600	Daily Penetration 2-27-12 - MFRM 2-28-12 - Mr. Premix 2-29-12 - 650' 3-1-12 - 335' 3-2-12 - 315' 3-3-12 - 315' 3-4-12 - 445' 3-5-12 - 480' RTD	
		50		
		3700	Light gray to tan shale, dense, dark at base, etc. Shy gray - blk Light gray to tan shale, dense, dark at base, etc., etc. Shy vari color	
		50		
		3800	Light gray to tan shale, dense, dark at base, etc., etc. Shy blk calc Shy vari color Light gray to tan shale, dense, dark at base, etc., etc. Light gray to tan shale, dense, dark at base, etc., etc. Shy gray - blk	
		50		
			Light gray to tan shale, dense, dark at base, etc., etc.	
			Light gray to tan shale, dense, dark at base, etc., etc.	

Horizon 3796
(-899)

Horizon 3800
(-797)

Leading 2000
(- 773)

50

Slugg-ssk

ls, cm-ty, fa-ss, dense, dorsal
lith, mostly var. large, p. sh. etc.

ls, cm-fa, dense, dorsal, p. sh. etc.
etc. etc., etc. etc.

Slugg-ssk

ls, cm-gly, fa-ss, dense, dorsal
lith, mostly var. large, p. sh. etc.

3900

ls, sh

Sl, vari color

ls, cm-fa, fa-ss, dorsal, p. sh. etc.
etc. etc.

50

ls, cm-gly, fa-ss, dense, dorsal
lith, mostly var. large, p. sh. etc.

Sl, gly-ssk

4000

ls, cm-ty, fa-ss, dense, dorsal,
p. sh. etc. etc.

Mud ✓ @ 3944'
UL-90A
Kis-43
UL-72
CH-1700
LKM-30

ls, cm-ty, fa-ss, dense, dorsal,
p. sh. etc. etc.

Sl, gly-ssk

ls, cm-gly, fa-ss, dense, dorsal,
lith, mostly var. large, p. sh. etc.

15 unit gas kick

Sl, blk carb

50

ls, sh

ls, cm-ty, fa-ss, dense, dorsal,
lith, mostly var. large, p. sh. etc.

15 unit gas kick

Sl, blk carb

4100

ls, cm-gly, fa-ss, dense, dorsal,
lith, mostly var. large, p. sh. etc.

10 unit gas kick

ls, cm-fa, fa-ss, dense, dorsal,
lith, mostly var. large, p. sh. etc.

Sl, vari color

light, a bit of air

Shy, blk carb

15 mit gas kick

4100

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

10 mit gas kick

lay, con - fine, grey, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

Shy, vari color

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

50

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

Shy, blk carb

5 mit gas kick

lay, blk carb at top of bench etc.

4200

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

lay, con - 1/2 grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

Gas Detector Not Working

Shy, grey - blk carb

lay, con - dark grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

50

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

Gas Detector Corrected

4300

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

Handwritten note in left margin

lay, con - dark grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

Shy, vari color

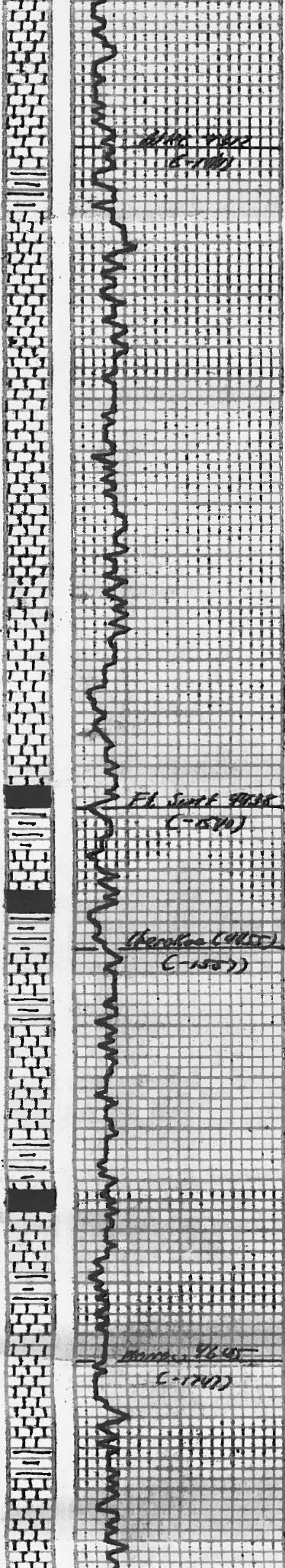
blk carb

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.

50

Shy, grey - blk

lay, con - grey, fine, dark, middle, a bit of bluish, - f. at top, g. at bottom, etc.



4300

Fl. Sand 9138
(-151)

50

4400

50

Fl. Sand 9138
(-151)

Shale (425)
(-150)

4500

50

Sand 9145
(-171)

Gas Detector Corrected

4300
 heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

Shaly calc

Calc

heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

Shaly calc

heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

4400
 heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

60 unit gas kick

Mud v @ 4420'
 WB - 9.3
 VI - 4.3
 WL - 8.0
 CHL - 1600
 LCM - 4"

Shaly calc

50
 Shaly calc

Shaly calc

60 units gas

heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

Shaly calc

4500
 heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

Shaly calc

Calc

Shaly calc

50
 heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

10 units gas

heavy - to fine - to coarse sand
 fine to oil is mostly in very shaly
 to calc, etc

Gas Detector Corrected

60 unit gas kick

Mud v @ 4420'
 WB - 9.3
 VI - 4.3
 WL - 8.0
 CHL - 1600
 LCM - 4"

60 units gas

10 units gas

4600

ls, con - in v. sh, densal little
a bit of unit, stat. in. sh, red, etc

Sh, vac color

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

Sh, blk carb

50

Sh, vac color w/ v. sh & 50 unit gas
stat. in. sh, red, etc, no oil, etc

60 unit gas kick

Sh, vac color w/ v. sh & 50 unit gas
stat. in. sh, red, etc, no oil, etc

Sh, vac color

Sh, vac color w/ v. sh & 50 unit gas
stat. in. sh, red, etc, no oil, etc

60+ unit gas kick

St. Louis 4600
(-1977)

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
it is a gas, oil, fat, etc

4700

St. Louis 4700
(-1977)

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
it is a gas, oil, fat, etc

60+ unit gas kick

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

60+ unit gas kick

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

30 unit gas kick

St. Louis 4700
(-1977)

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

60+ unit gas kick

50

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

60+ units gas

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

30 units gas

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

15 units gas

4800

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

50

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

ls, con - ls, v. sh, densal hard,
a bit of unit, stat. in. sh, red, etc,
no oil, etc

St. Louis 4800
(-1977)