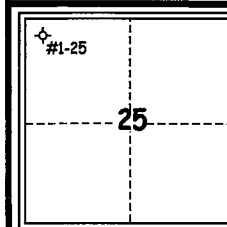


KITT NOAH

PETROLEUM GEOLOGIST
Kansas License #229



ELEVATION:
KB: 3176
GL: 3165
MEASURED FROM:
KB



#15-193-20,915

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

OPERATOR: Russell Oil, Inc.
LEASE: Dumler WELL NO: #1-25
LOCATION: 330'FN & 330'FW
SEC: 25 TWP: 10S RNG: 34W
COUNTY: Thomas STATE: Kansas

CASING RECORD:
SURFACE: 8 5/8" set at 320' w/225 sx.
PRODUCTION: D&A
DV TOOL: _____

FORMATION	LOG	
	TOP	DATUM
Anhydrite	2668	(+508)
B/Anhydrite	2696	(+480)
Heebner	4056	(-880)
Toronto	4078	(-902)
Lansing	4094	(-918)
Stark	4328	(-1152)
B/KC	4403	(-1227)
Marmaton	4424	(-1248)
Pawnee	4520	(-1344)
Cherokee	4602	(-1426)
Mississippian	4706	(-1530)
RTD	4760	(-1584)
LTD	4762	(-1586)

CONTRACTOR: H2 Drilling Rig #2
COMM: 3-30-2014 COMPL: 4-9-2014
RTD: 4760 LTD: 4762
SAMPLES SAVED FROM: 3800 to TD
DRILLING TIME SAVED FROM: 3800 to TD
SAMPLES EXAMINED FROM: 3800 to TD
GEOLOGICAL SUPERVISION FROM: 3850 to TD
MUD UP: 3487 MUD TYPE: chemical
Mudco - Reid Atkins
DRILL STEM TESTS TAKEN: 3
Trilobite - Bradley Walters

SURVEYS: Pioneer Energy Services
Dual Compensated Porosity
Dual Induction
Microlog

LEGEND

- Anhydrite
- Chert
- Carb Shale
- Shale
- Sandstone
- Dolomite
- Ool Lime
- Limestone

DRILLING TIME IN MINUTES PER FOOT

Rate of penetration increases

5" 10" 15" 20"

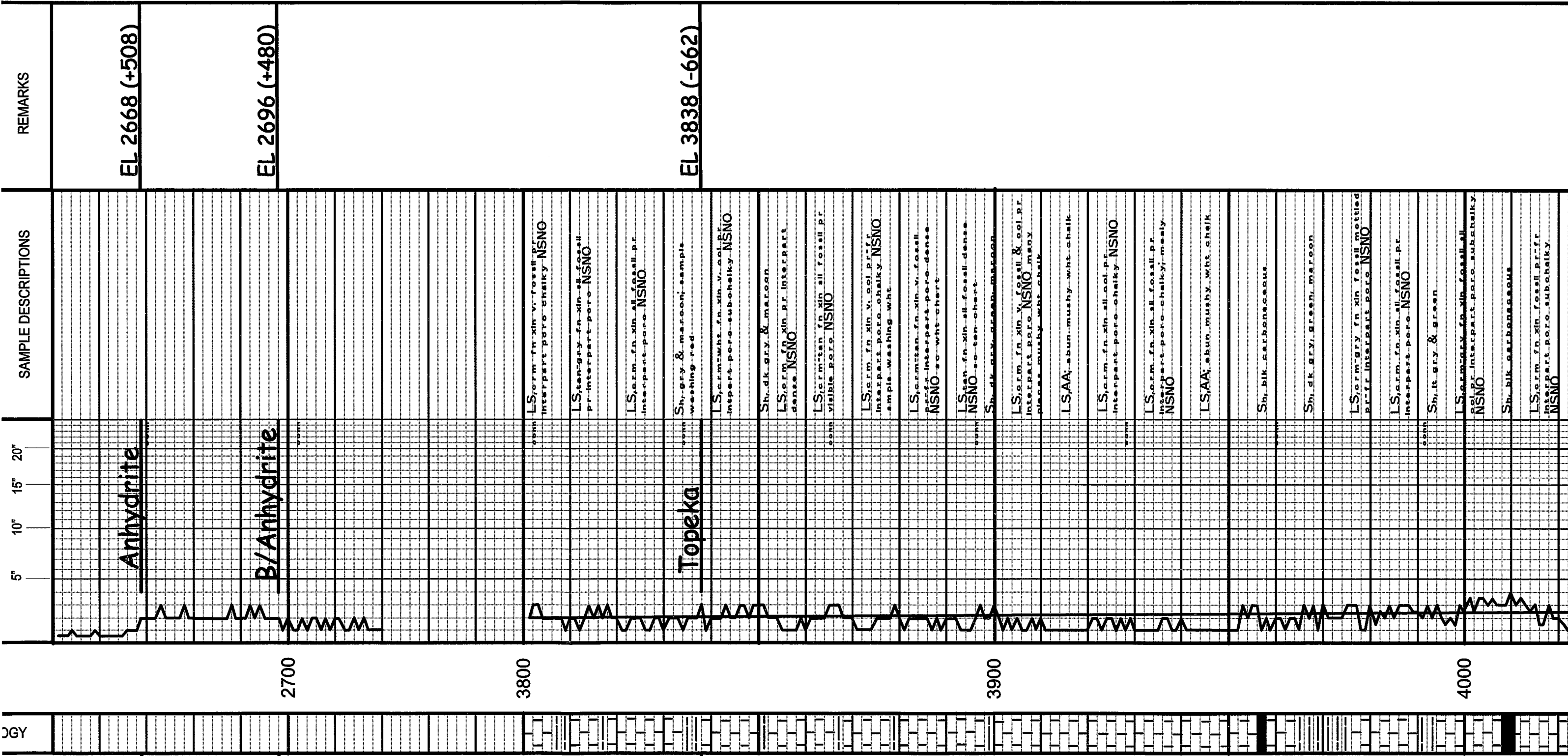
DEPTH

LITHOLOGY

SAMPLE DESCRIPTIONS

REMARKS

Lost Circulation at 1888' - 150 bbls.



REMARKS

SAMPLE DESCRIPTIONS

EL 2668 (+508)

EL 2696 (+480)

EL 3838 (-662)

Anhydrite

B/Anhydrite

Topoka

2700

3800

3900

4000

OGY

LS,erm fn xin v. fossil pr
interpart poro chalky NSNO

LS,ten-gry fn xin all fossil
pr-interpart poro NSNO

LS,erm fn xin all fossil pr
interpart poro NSNO

Sh, gry & maroon; sample
washing red

LS,erm-wht fn xin v. fossil
interpart poro sub-chalky NSNO

Sh, dk gry & maroon

LS,erm fn xin pr interpart
dense NSNO

LS,erm ten fn xin all fossil pr
visible poro NSNO

LS,erm fn xin v. fossil pr
interpart poro chalky NSNO
sample washing wht

LS,erm ten fn xin v. fossil
pr-interpart poro dense
NSNO so wht chert

LS,ten fn xin all fossil-dense
NSNO so ten chert

Sh, dk gry, green, maroon

LS,erm fn xin v. fossil & ool pr
interpart poro NSNO many
places muddy wht chalk

LS,AA abun-mushy wht chalk

LS,erm fn xin all ool pr
interpart poro chalky NSNO

LS,erm fn xin all fossil pr
interpart poro chalky; mealy
NSNO

LS,AA abun-mushy wht chalk

Sh, blk carbonaceous

Sh, dk gry, green, maroon

LS,erm-gry fn xin fossil mottled
pr-fr interpart poro NSNO

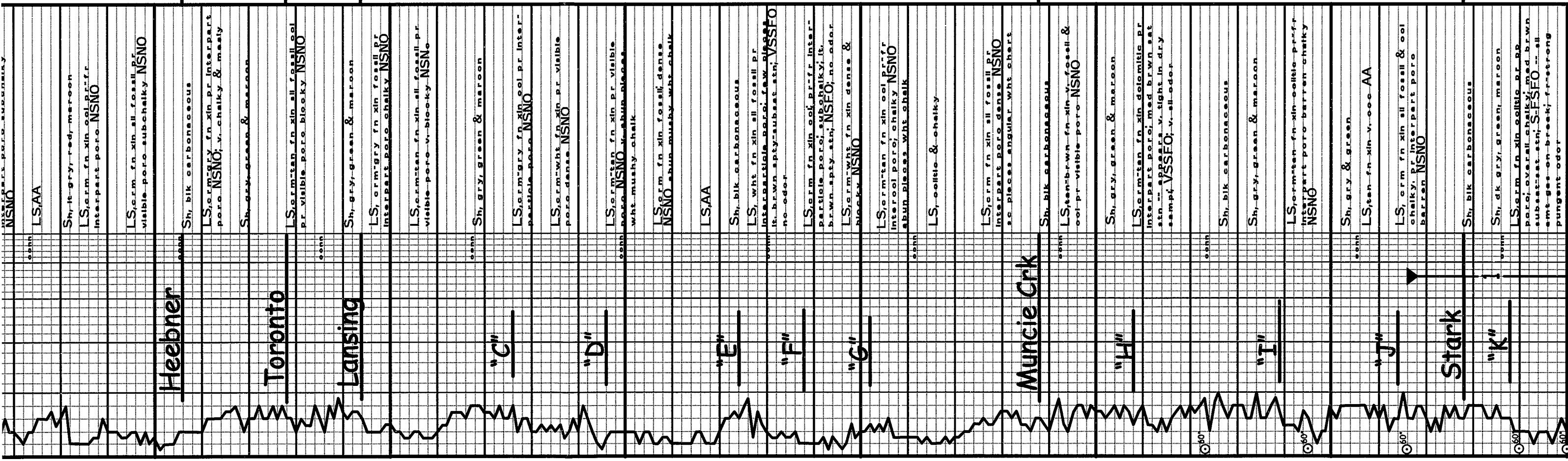
LS,erm fn xin all fossil pr
interpart poro NSNO

Sh, lt gry & green

LS,erm-gry fn xin fossil all
ool pr interpart poro sub-chalky
NSNO

Sh, blk carbonaceous

LS,erm fn xin fossil pr-fr
interpart poro sub-chalky
NSNO



EL 4056 (-880)

EL 4078 (-902)

EL 4094 (-918)

4100

4200

4300

EL 4239 (-1063)

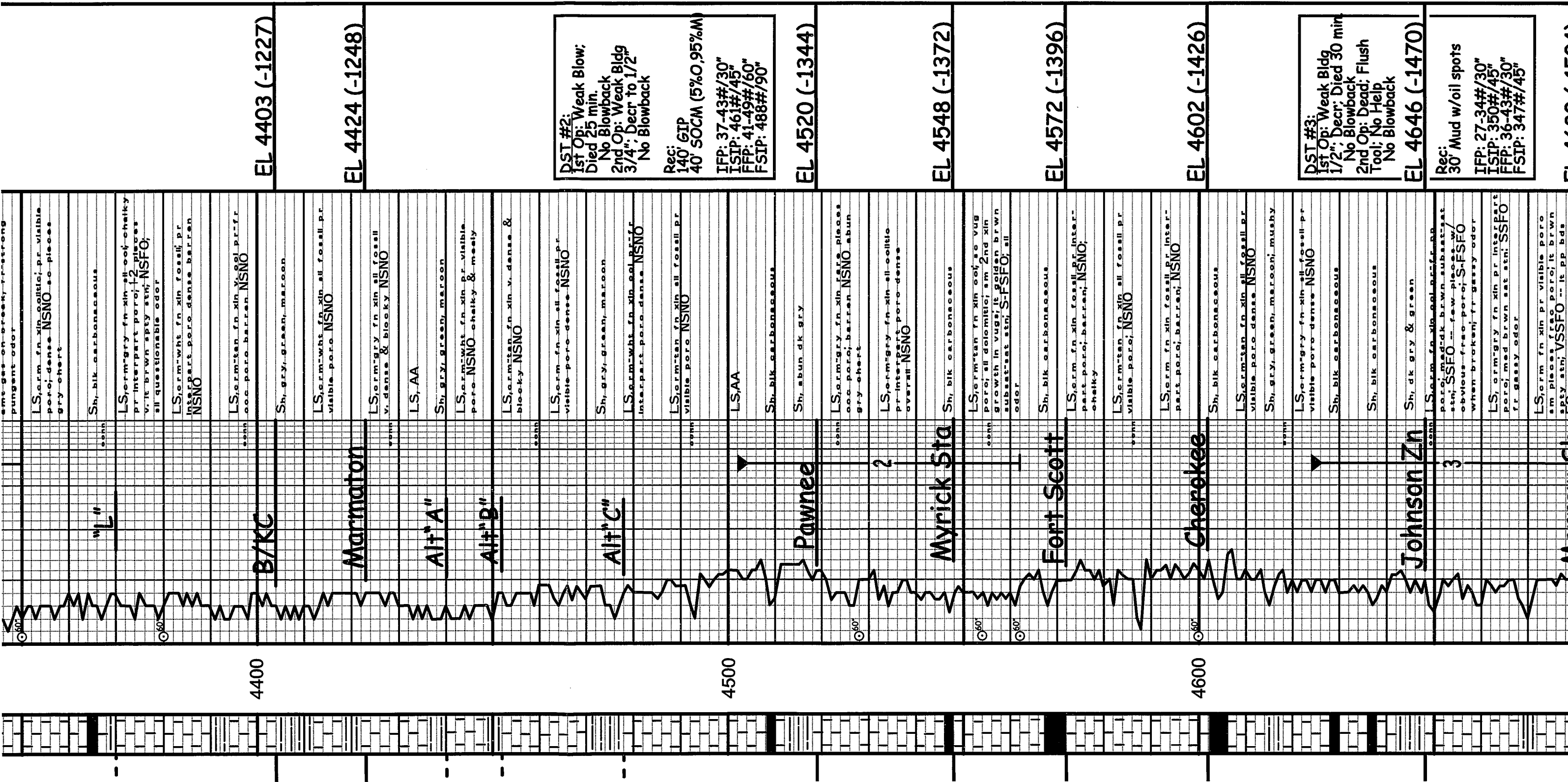
DST #1:
 1st Op: BOB 30"
 No Blowback
 2nd Op: Fair Bldg 9"
 No Blowback

Rec:
 120' WCM w/oil spots
 (40%W, 60%M)
 380' ACW
 (90%W, 10%M)
 500' Total Fluid

IFP: 29-177#/45"
 ISIP: 1135#/45"
 FFP: 182-254#/45"
 FSIP: 1102#/45"
 Chlor: 71,000 ppm

EL 4328 (-1152)

Pipe Strap at 4350'
 1.74 Board Short



EL 4403 (-1227)

EL 4424 (-1248)

DST #2:
 1st Op: Weak Blow;
 Died 25 min.
 No Blowback
 2nd Op: Weak Bldg
 3/4": Decr to 1/2"
 No Blowback

 Rec:
 140' GIP
 40' SOCM (5%O,95%M)

 IFP: 37-43#/30"
 ISIP: 461#/45"
 FFP: 41-49#/60"
 FSIP: 488#/90"

EL 4520 (-1344)

EL 4548 (-1372)

EL 4572 (-1396)

EL 4602 (-1426)

DST #3:
 1st Op: Weak Bldg
 1/2": Decr; Died 30 min
 No Blowback
 2nd Op: Dead; Flush
 Tool; No Help
 No Blowback

 EL 4646 (-1470)

Rec:
 30' Mud w/oil spots

 IFP: 27-34#/30"
 ISIP: 350#/45"
 FFP: 36-43#/30"
 FSIP: 347#/45"

<p>EL 4680 (-1504)</p>	<p>4700</p>
<p>EL 4706 (-1530)</p>	<p>LITHOLOGY</p>
<p>Merrow Sh</p> <p>Mississippian</p>	<p>am pieces f. fac. poro; it brwn sdy sh; VSSFO --- it pp bds FO on break; all quest odor Sh, gry & bright green SS, wht fn-gr rare clusters; pr intgran poro; friable-well-sorted NSNO Sh, abun, varicolored SS, wht, gry, f. med, f. fine pr-f. r. intgran-poro; NSNO LS, crm fn xin v. sdy matrix pr interpart poro NSNO am lg unconsolidated sd grains LS, crm-wht fn xin pr interpart poro; am, sdy matrix; sc pieces wht abast NSNO LS, crm-wht fn xin pr visible poro; f. 2 pieces w/ sdy matrix; NSNO; predom dense & blocky LS, wht fn xin pr interpart poro sdy matrix; NSNO barren; abun pieces bushy wht chalk; flood dk gry Sh LS, crm-tan fn xin dense pr visible-poro; subchalky; am pieces with sdy matrix NSNO</p>
<p>© 60'</p>	<p>© 60'</p>
<p>Rate of penetration increases</p> <p>DRILLING TIME IN MINUTES PER FOOT</p> <p>5" 10" 15" 20"</p>	<p>SAMPLE DESCRIPTIONS</p>
<p>OPERATOR: <u>Russell Oil, Inc.</u> LEASE: <u>Dumler</u> WELL NO: <u>#1-25</u> API: <u>15-193-20,915</u> FIELD: <u>Wildcat</u></p>	<p>ELEVATION: <u>KB 3176</u> LOCATION: <u>330'FN & 330'FW</u> SEC: <u>25</u> TWP: <u>10S</u> RNG: <u>34W</u> COUNTY: <u>Thomas</u> STATE: <u>Kansas</u></p>

