2-55

STATE: Kansas	COMPANY: Empire Drlg
COUNTY: Graham	FARM: Knoll — WELL NO.: 1
BLOCK	SURVEY
SEC. 16	
T. 10 — R. 25 W	TOTAL DEPTH 4523
	Ne-Ne-Ne
	COMMENCED
	COMPLETED
	REMARKS
ALTITUDE 2486	
PRODUCTION D&A	

CASING RECORD

DST 3790-3812/40", 15' mud BHP 1400#
DST 3746-64/30", 5' mud BHP 820#
DST 3840-55/1hr 1350' mdy Sur BHP 1210#
DST 3895-25/40", 10' mud
DST 3935-60/40", 5' mud

SHOT — QUARTS — BETWEEN

FORM 186 - In stock and for sale by Ross-Martin Co., Tulsa

DST 4213-29/1hr. 45' OCM BHP 980# Lost Circ @ 4517'

Samples Start @ 200'

gray mot. cstl. fos sh

Ostreg beds in part

thin beds gbt chalky impure lst

g, f.g, subv micac calc SST

g, mot, cstl, sh soft and subplastic

med to dk t, mottled calc fos sh

gbt, shaley fos ls.

g, calc. fos sh

Dakota Group 960

60' lt g, crg & fos sh 9' lt g, f.g. calc SS, interbedded with shaggy sand & sandy sh, pyritic & sideritic for most part

Morrison Fmn 1450

Permian Red Beds 1465

50 green red & brn shy sh with nodules 65 pink chalcedonic

reddish brn mottled sh with interbedded wht sdy sub rd SS in part.

streaks anhydrite & selenite

bright reddish brn & vermilion sh.

interbedded orange pink rounded & polished sub friable f.g. SS

Reddish brn sh. gritty & silty in part

Cim Anhyd 2105

65 wh & gray massive anhyd.

Reddish-brn & maroon streaks anhydrite

rd & anhydritic sh

c-tan f.suc, gypsif, dolo sh as above

lt, tan f.suc. dolo. rd & sh tan f.suc. dolo.

gbt, mottled, suc. for. dolo.

rd & sh.

g, vf-f, ay rd & sh

lt, tan f.suc. dolo. lst

gbt

lt, suc por ooc dolo lst

gbt, vf, ay lst rd & sh gbt, vf, ay lst

gbt, vf, fos rd & sh rd & micac sl sdy sh. rd & limey sh.

g, vf gbt, f, tight, shaley rd & sdy sh g, vf, sdy, por fos lt.

lt, g, vf

c, vf, fos g, vf, se Tp 3515

gbt, f. fos shaley lst

g, f, g, sdy micac. SST wh, vf, ay gray, fusulinida l. lst

lt, g, por. fos. lst. ay in part.

lt, g, por, fusulinida) lst.

lt, g, vf.

g, f, fos gbt, f, fse Abar Sh 3731

wh, vf-f, ay g, sdy, dolo. lt. LS 3772

lt, g, vf.

g, por, ooc lst.

lt, g, vf-f, fos. ay

lt, suc dolo. lst

wh to c, vf-f, fos ay por lt

rd & sh

lt, g, vf. ay. scat ooc. por & spotty

g, vf-f, ay, scat ooc. por & spotty

lt, g, vf, se

wh, vf-f, sh, spotty oil stn

c-g, vf-f, ay, ooc por & spots

lt, g, vf, ay in part

g-bf, vf-f. scat ooc por & spotty oil stn.

lt, g, vf.

lt, por, ooc. lst. spotty oil stn

lt, g, vf, fos lst.

g, por, vf, se

lt, g, vf ay at base

rd & sh.

wh, g, vf-f, ay lst

rd & sh

g, vf-f, fos

g, vf, se

lt, g, vf-f lst

dk g lst

g, por, ooc. oil lst, lst, g, stn is very gray sdy, g, stn is probably made by g, se c-g, vf-f. scat oil

lt g, sdy sh. lime pebbles

Gilmore City 4378

strawberry wh. f.g. glassy non micac. lst. sl. ay

Kas Sh Lst 4412

wh op to sub op fos rd & sh with some infiltrated sand sh

wh, dse c. ool. lst Viola 4429

g-bf, sub to f. xln. dolo

lt, g, vf, se

wh, f.g. glassy, non micac

Sh 4465

wh, sm, sub op & yellowish cast in sh

lt, g, vf-med. xln. ay dolo.

g, bf, lt-brn, f-m

co. xln. sandy, sh. dolo.

Arb 4485

g-bf, f-m xln. dolo.

Total Depth @ 4523