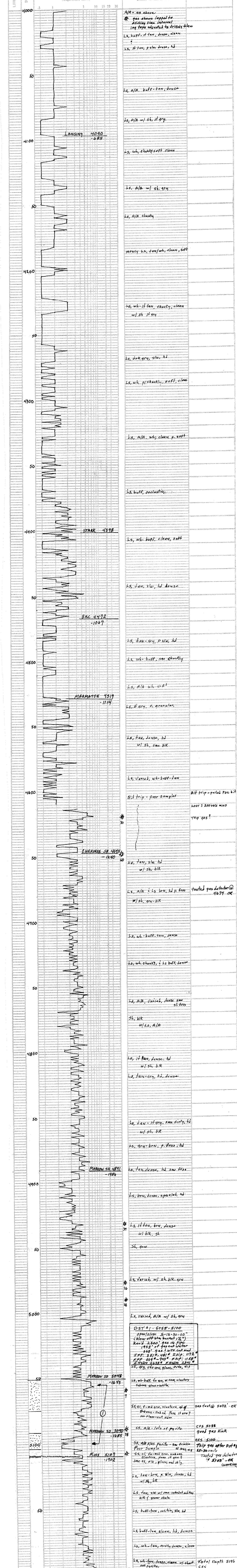


GEOLOGICAL REPORT

DRILLING TIME
AND
SAMPLE LOG

COMPANY: **WHITE EXPLORATION, INC.**
 LEASE: **Oldham** WELL NO: **1**
 FIELD: **W. Leaf** DEPTH: **394** FEET
 LOCATION: **935 FN., 1815 FN.** MEASUREMENTS AND ALL FROM **KB**
 SECTION: **22** TOWNSHIP: **18S** RANGE: **88W**
 COUNTY: **Wichita** STATE: **KANSAS**
 CONTRACTOR: **MURFIN DRILLING CO., INC.** NO. **2**
 COMMENCED DRILLING: **9/9/12 (4:30 PM)**
 COMPLETED DRILLING: **9/16/12 (4:00 PM)**
 RIG: **5196** FEET: **5195** FEET
 MUD UP AT: **3100** FEET MUD TYPE: **Chemical**
 MUD LOG AT: **3100** FEET MUD TYPE: **Chemical**
 SAMPLES SAVED FROM: **3950** FEET TO **TD** FEET
 DRILLING TIME FROM: **4000** FEET TO **TD** FEET
 SAMPLES EXAMINED FROM: **4000** FEET TO **TD** FEET
 GEORIGINAL SUPERVISION FROM: **4610** FEET TO **TD** FEET
 GEOLOGIST: **TOM G. ROBINSON**
 NOTES: **Earth Tech gas detector**
pulled PDC bit @ 4610'
 SCALE: 8" = 100'
 SHEET NO: **22**



LITHOLOGIC DESCRIPTION
LITHOLOGIC NOT ADJUSTED FOR LOG

REMARKS

A/A = as above
 * gas shows lagged to drilling time interval log tops adjusted to drilling time

Ls, buff-tan, dense, clean

Ls, ft-tan, p. vln dense, hd

Ls, A/A buff-tan, tan

Ls, A/A w/ sh, ft gry

Ls, wh, chunky soft clean

Ls, A/A w/ sh, gry

Ls, A/A chunky

mostly Ls, tan/wh, clean, soft

Ls, wh-ftan, chunky, clean w/ sh ft gry

Ls, drk gry, vln, hd

Ls, wh, p. chunky, soft, clean

Ls, A/A, wh, clean, p. soft

Ls, buff, oolitic

Ls, wh-buff, clean, soft

Ls, tan, xln, hd dense

Ls, tan-gry, p. xln, hd

Ls, wh-buff, s. chunky

Ls, A/A wh, soft

Ls, ft gry, p. granular

Ls, tan, dense, hd w/ sh, sme blk

Ls, varieg, wh-buff-tan

Bit trip - poor samples

Bit trip - pulled PDC bit

lost 2000 lbs mud

trip gas?

Ls, tan, xln, hd w/ sh, blk

Ls, A/A c Ls brn, hd p. foss

tested gas detector @ 4674' - OK

w/ sh, gry-blk

Ls, wh-buff-tan, dense

Ls, wh, chunky, c Ls buff, dense

Ls, A/A, varieg, dense sme sil foss

Sh, blk w/ Ls, A/A

Ls, ft tan, dense, hd w/ sh, blk

Ls, tan-gry, hd, dense

Ls, tan-ft gry, sme dirty, hd w/ sh, blk

Ls, gry-brn, p. foss, hd

Ls, tan, dense, hd sme foss

Ls, brn, dense, speckled, hd

Ls, ft tan, brn, dense w/ blk, sh

Sh, gry

Ls, varieg, w/ sh, blk, gry

Ls, varieg, A/A w/ sh, gry

DST #1 - 5055-5100
 Open/close 5-15-30-60"
 (blow off bit bucket 1/2")
 Read 2300' gas in pipe
 1953' P gas cut water
 1953' gas 3 w/ cut mud
 I.F.P. 3.51# 481" I.S.P. 1172"
 F.F.P. 564# 943" F.S.P. 1158"
 F.H.V.D. 2435# F.H.V.D. 2341"
 SS, gry, vln, glauc, r. vln, N/S

SS, wh-buff, fin, con, clusters subms glauc, white

SS, cl, f. m. l. gry, clusters, q. of subms - sub wd. foss. ft gry? no floor-cut clay

943 test @ 5072' - OK

SS, A/A - lots of pyrite

CFB 5088 good gas kick

CFB 5100 Trip gas after DST #1 25-30 min. Tested gas detector @ 5103' - OK (working)

SS, A/A plus pyrite - sm. f. m. l. Peer Sample

SS, cl, f. m. l. gry, subms, clusters, foss. ft gry? sme ss, A/A, glauc, and sil.

Ls, tan-brn, p. vln, dense, hd w/ sh, blk

Ls, tan, vln w/ sme imbedded white blk i green shale

Ls, buff-tan, oolitic, vln, hd

Ls, buff-tan, clean, hd, dense

Ls, wh-tan, mostly dense, clean

Ls, wh-tan, dense, clean w/ chunky sub pyrite

Total Depth 5196 CFS

Ls, tan, oolitic, vln, hd dense

DRILLER TD 5196' LOG TD 5195'