

MUD LOG
WellSight Systems

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Frank Cerrow 23-42A
Location: Sec. 23 ;Twnsp. 9 s.; Rge. 19 w.
License Number: 34110
Spud Date: 4-26-2013
Surface Coordinates: NW SE NE Sec. 23 Rge. 9s Twp. 19w
1650' FNL & 990' FEL
Region: Rooks County, KS
Drilling Completed: 5-1-2013
Bottom Hole Coordinates:
Ground Elevation (ft): 2109 K.B. Elevation (ft): 2116
Logged Interval (ft): 2800 To: 3855 Total Depth (ft): 3609
Formation: Arbuckle
Type of Drilling Fluid: Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: CAERUS KANSAS LLC
Address: 600 17th St., STE 1600 N
Denver, CO 80202

GEOLOGIST

Name: Mike Bair
Company: Basin Resources L.L.C.
Address: Longmont, CO.

FORMATION TOPS

FORMATION	LOG TOP	SAMPLE TOP
Anhydrite		1505 (+611)
Topeka	3045 (-929)	3043 (-927)
Heebner	3250 (-1134)	3253 (-1137)
Toronto	3271 (-1155)	3273 (-1157)
LSG	3291 (-1175)	3294 (-1178)
BKC	3508 (-1392)	3509 (-1393)
Arbuckle	3530 (-1414)	3531 (-1415)
TD	3610 (-1494)	3609 (-1493)

DSTs

No DST's

Comments

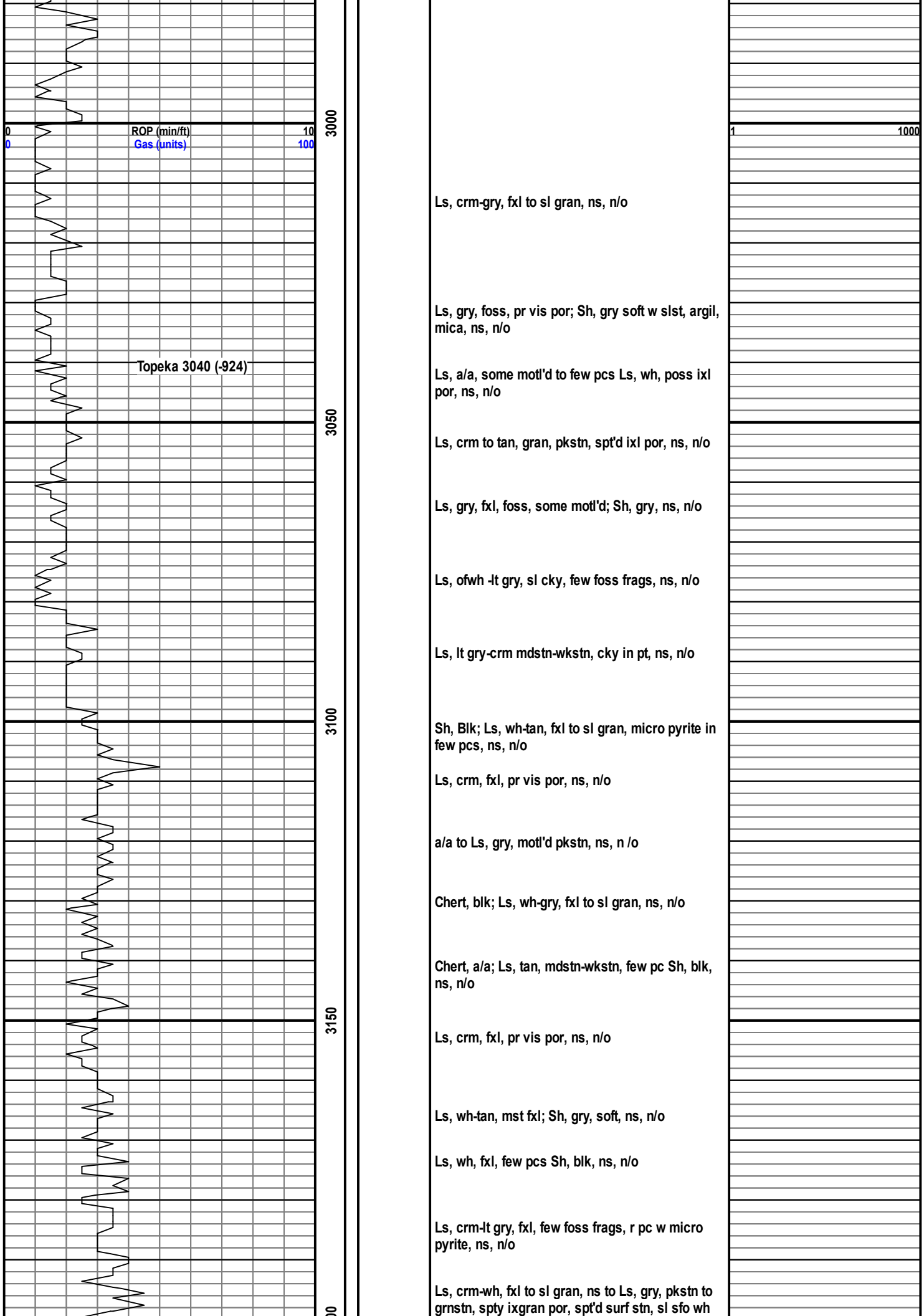
Production casing was ran to further test the economic potential of the Arbuckle and L-KC.

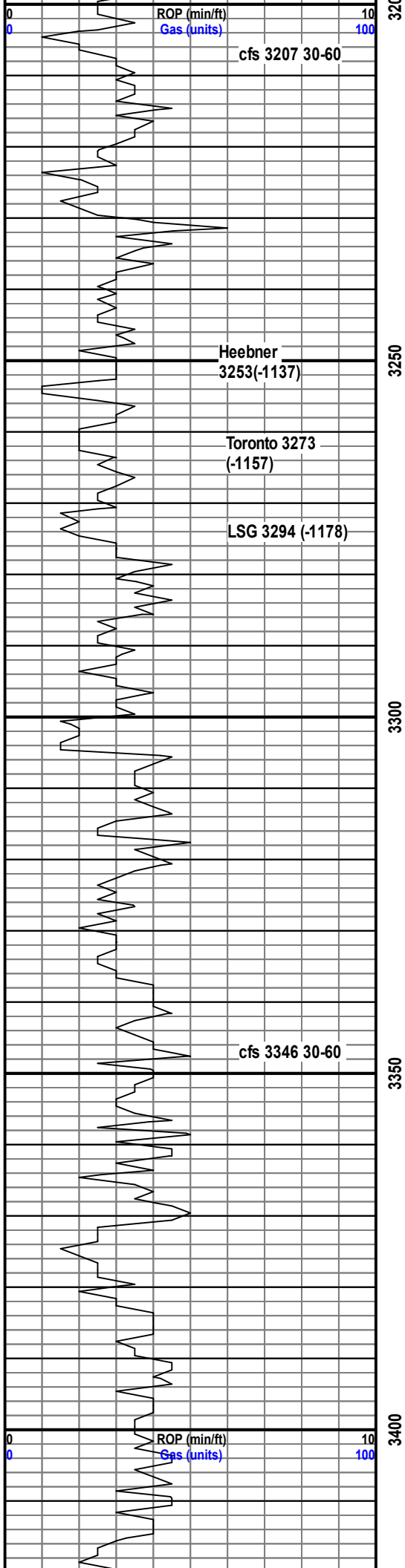
	Anhy		Clyst		Gyp		Mrlst		Shgy
	Bent		Coal		Igne		Salt		Slstg
	Brec		Congl		Lmst		Shale		Ss
	Cht		Dol		Meta		Shcol		Till

[illegible]

POROSITY	Vuggy	ROUNDING	Spotted	EVENT
Earthy		Rounded	Ques	Rft
Fenest	SORTING	Subbrnd	Dead	Sidewall
Fracture	Well	Subang		
Inter	Moderate	Angular	INTERVAL	
Moldic	Poor		Core	
Organic		OIL SHOW	Dst	
Pinpoint		Even		

[illegible]





bxn, low rep, poss v wk od 3207 60 min sample

Ls, crm, r pc gran, v sl ixgran por, spt'd surf stn, v sl sfo wh bxn, low rep, n/o

Ls, gry, fgran, pr - sl ixgran por, sl sfo, low rep, lt odor 3230 sample

Ls, a/a r pc a/a fgran w L-fr ixgran por, L-fr sfo wh bxn, sl odor wh bxn

Ls, crm-gry, mdst-pkstn, ns, r pc Chert, gry-brn, fresh, dense, ns, n/o 3250

Ls, wh, foss to fxl, some cal rexln, cky in pt; Chert, tan, op, blk, ns, n/o

Ls, tan, fxl to wkstn, r pc w spt'd surf stn, r sfo, n/o; Sh, blk 3270

Ls, crm-tan, few foss, fxl to sl gran, pr vis por; Slst, gry-grn, argil, to Ls, r pc crm, f gran, sl-Lfr ixgran por, sl sfo wh bxn, sl cky, n/o

Ls, wh-crm, fxl, sl cky to f gran, lt even stn sl sfo wh bxn, sl to L-fr ingran por, poss v wk odor, r pc w spt'y vg por, poss v wk odor, fr rep 3290

Ls, few pc a/a to Ls, wh, fxl to sl ool, pr vis por, spt'd stn, r pc gil stn, v sl sfo wh bxn, low rep, n/o

Ls, wh, fxl to ool, pr vis por few pcs spt'd surf stn, v sl sfo wh bxn, low rep, n/o

Ls, a/a to Ls, flesh, cherty, spt'd trip por, spt'd surf stn, sl sfo wh bxn, Chert, op-crm, foss, fresh, dense, n/o 3320

Ls, wh, fxl, spt'd pp por, spt'd surf stn, few pc w xls on frac face, spt'd surf stn, poss fracture to Ls, tan, f gran, sl ixgran por, sl sfo, v sl odor 3330

Ls, wh, fxl-f gran to some ool, pr-sl por, r vy por, sl sfo wh bxn, v wk odor 3346

Ls, crm, gran, pr vis por, r sat'd stn, v sl sfo wh bxn, poss v wk odor, 3345 60 min

Ls, wh, fxl to ool, pr ixool por, r pc spt'd vy por, spt'd surf stn, low rep, n/o

Ls, fxl to f gran, few w even sat'd stn, pr-sl por, v sl sfo few pc Ls, wh, fxl, hvy blk stn, L-fr odor 3370

Ls, wh, fxl, few pcs surf stn, nsfo, n/o

Ls, wh, few pc fxl, pr vis por, brn stn, nsfo, n/o

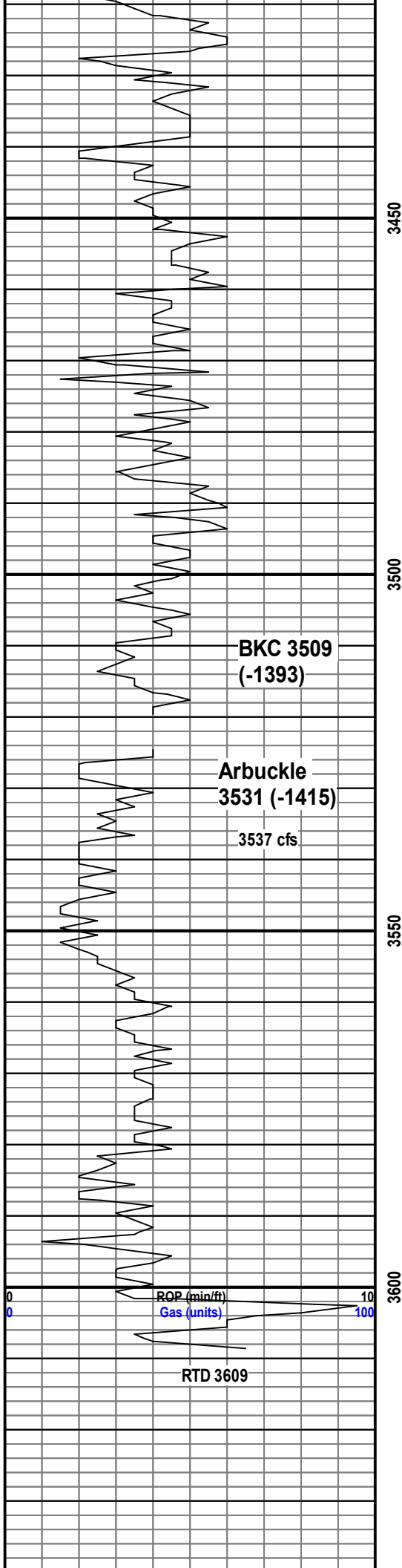
Ls, wh, fxl, pr por, nsfo, sl cky, few pc spt'd surf stn, n/o 3400

L, wh, fxl, cky, ns, n/o

Ls, wh, fxl, some cky, ns, couple pcs Ls, crm, f gran, ssat'd stn, nsfo, n/o

Bit Trip 3207
Dev 1 deg
Strap .59 short

Andy's Mud
Ck 3329
Wt. 9.0
Vis 47
WL 8.0
Chlr 2000
LCM 4#



SH, blk, Ls, wh-tan, fxl, ns, n/o 3430

Chert, op, wh, fresh, dse; Ls, wh-crm fxl, sl cky, spt'd surf stn, nsfo to Ls, crm, gran, sl ixgran to sl pp por, sat'd stn, sl sfo, low rep, sl odor wh bxn 3450

Ls, crm-wh, f gran, sl ixgran por, sat'd stn, v sl sfo wh bxn to r pc Ls, wh, hvy blk stn, sl sfo r pc sat'd surf stn on frac plane, wk odor 3460

Ls, crm-tan, a/a to m gran, sl-fr por, sl sfo, cal xl w hvy brn oil stn, v wk odor

Ls, tan, ool, sl-fr ixool por, sat'd stn, sl sfo to Ls, tan, ool-oom, fr oom por, fr sfo wh bxn, few gs bbls wh bxn, lt odor 3480

Sh,blk; Ls a/a, lower rep, sl odor 3490

Ls, wh, fxl to Ls, tan, sl gran, lt even sat'd stn, nsfo, pr vis por, n/o

Ls, crm, fxl, sl cky, ns, n/o

Ls, wh, mst fxl, sct'd cky, couple pcs Ls, oom w sat'd stn, fr oom por (sluff); SS, qtz, fgrn, fri, ns, n/o 3535

Dolo, crm, f gran, fr ixgran por, fr-gd sfo wh bxn; Dolo, tan, f-mxl, spt'd ixl por, sct'd pp por, surf stn to sat'd stn; Dolo, tan-crm, dse, sl vg por, oil stn on frac plane; v wk odor 3537 30 min

Dolo, crm, incr dse, spt'd vg por, surf stn on frac face, decr in f grn, sat'd stn, fr odor 3537 60 min

Dolo, a/a, decr show, decr odor, incr barren 3531

Dolo, wh-tan, mxl to m-Lxl, gd ixl por, sct'd gd vy por, fr-gd SFO, incr show, incr odor, fr odor 3551 20 min

Dolo, a/a poss sl decr in show/odor, incr in Cherty dolo 3551 40 min

Dolo, crm, a/a, incr f-mxl, pr vis por to sct'd vg por, spt'd surf stn, incr barren; ft odor 3560

Dolo, a/a to f-mxl, spt'd surf stn, lt-fr sfo wh bxn, fr ixl por, oil brn-sl less lively, wk odor 3580

Dolo, wh-crm, pr vis por, mst barren, poss v wk odor 3590

a/a, most barren 3600

10 Stand Short
Trip 3510

Geograph not
kicked in--est 4'

cfs 3537(e) 30-60
to measure kelly

cfs 3551 20-40-60

3609 Lost Returns

[illegible]