

MACKLIN M. ARMSTRONG
Geologist

Falcon Exploration, Inc
Gleason No. 1-31 (NE)
1880' FNL & 2030' FEL
Sec 31 T30S R21W
Clark County, Kansas

Kansas License Number 743

316-209-5047

Scale 1:240 Imperial

Well Name: Gleason No. 1-31 (NE)
Surface Location: Sec 31 T30S R21W
Bottom Location: 1880' FNL and 2030' FEL
API: 15-025-21544
License Number: 5316
Spud Date: 6/13/2012 Time: 12:30 PM
Region: Clark County, Kansas
Drilling Completed: 6/25/2012 Time: 5:15 AM
Surface Coordinates:
Bottom Hole Coordinates:
Ground Elevation: 2285.00ft
K.B. Elevation: 2295.00ft
Logged Interval: 3300.00ft To: 5552.00ft
Total Depth: 5550.00ft
Formation:
Drilling Fluid Type: Chemical/Fresh Water Gel

OPERATOR

Company: Falcon Exploration, Inc.
Address: 125 North Market
Wichita, Kansas 67202
Contact Geologist: Brian Fisher
Contact Phone Nbr: 316-262-1378
Well Name: Gleason No. 1-31 (NE)
Location: Sec 31 T30S R21W API: 15-025-21544
Pool: Wildcat Field: Granger Creek
State: Kansas Country: Clark

CONTRACTOR

Contractor: Val Energy
Rig #: 1
Rig Type: mud rotary

Rig Type: mud rotary
Spud Date: 6/13/2012
TD Date: 6/25/2012
Rig Release: 6/26/2012

Time: 12:30 PM
Time: 5:15 AM
Time: 11:00 PM

ELEVATIONS

K.B. Elevation: 2295.00ft Ground Elevation: 2285.00ft
K.B. to Ground: 10.00ft

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: 99.65344 Latitude: 37.38977
N/S Co-ord:
E/W Co-ord:

NOTES

Date	Depth	Activity
6-13-12	MIRU	Spud at 12:30 pm
6-14-12	277	WOC
6-15-12	652	Drilling
6-16-12	830	WOC
6-17-12	2100	Drilling
6-18-12	2950	Drilling
6-19-12	3575	Drilling
6-20-12	4100	Drilling
6-21-12	4570	Drilling
6-22-12	4985	Drilling
6-23-12	5275	CFS
6-24-12	5310	TIH after DST No. 1
6-25-12	5550	TOH for Log
6-26-12	5550	OB with DST No. 2
6-27-12	5550	P & A

Surface Casing: 13 3/8" at 277', 8 5/8" 24# at 830'
Production Casing: None set

Deviation: 256 - 1°
800 - 3/4°
5310 - 1°

Bit Record:	Make	Type	Depth In	Depth Out	Hours
	JZ 7 7/8"	QX20	277	5310	145 1/4
	JZ 7 7/8"	HF39B	5310	5550	19 1/4

Drill Stem Tests:

DST No. 1 5232 to 5310 Formation: Morrow Sand
5-90-120-180

Gas flows: IFP: 5" - 1949 mcf
FFP: 10" - 2012 mcf, 20" - 1694 mcf, 30" - 1348 mcf, 40" - 1036 mcf, 50" - 654 mcf, 60" - 371 mcf
70" - 499 mcf, 80" - 283 mcf, 90" - 195 mcf, 100" - 147 mcf, 110" - 68.8 mcf, 120" - 33.9 mcf

Recovery: 4685' Gas in Pipe
10' Mud

505' GMWCO (12%G, 11%M, 25%W, 53%O) Chl 25,000 ppm

IHP 2515 FHP 2513
IFP 526-475 FFP 437-176
ISIP 820 FSIP 616
Temp 119°

DST No. 2 5226 to 5260 Straddle Test Formation: Morrow Sand
5-90-120-210

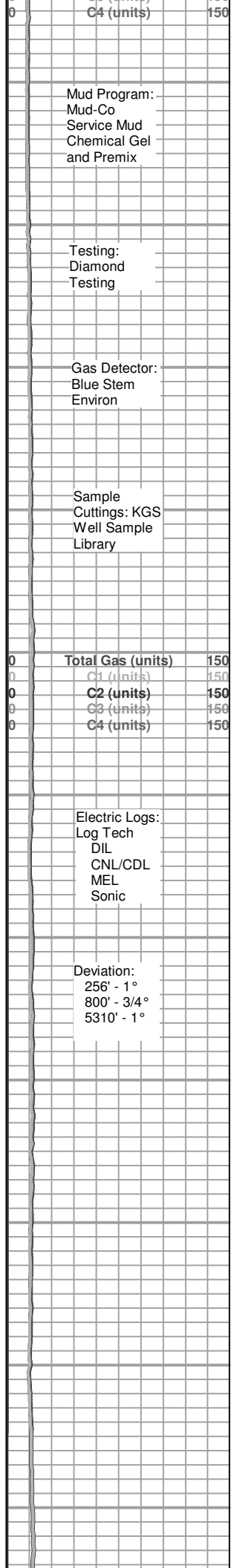
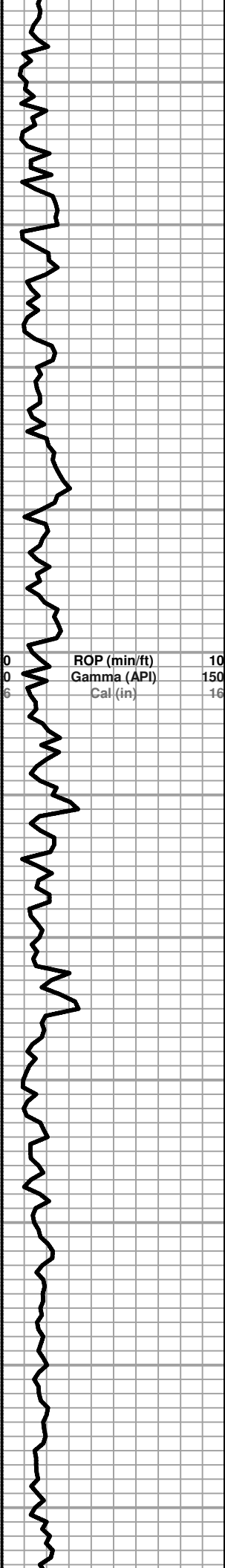
Gas flows: IFP: GTS in 5"
FFP: 10" - 558 mcf, 20" - 487 mcf, 30" - 384 mcf, 40" - 303 mcf, 50" - 245 mcf, 60" - 194 mcf
70" - 156 mcf, 80" - 101 mcf, 90" - 51.8 mcf, 100" - 47.1 mcf, 110" - 40.9 mcf, 120" - 37.6 mcf

Recovery: 4885' GIP

Falcon Exploration, Inc
 Gleason No. 1-31 (NE)
 1880' FNL & 2030' FEL
 Sec 31 T30S R21W
 Clark County, Kansas
 GL 2285 KB 2295

2520
 2540
 2560
 2580
 2600
 2620
 2640
 2660
 2680
 2700
 2720

ROP (min/ft) 10
 Gamma (API) 150
 Cal (in) 16



C4 (units) 150

Mud Program:
 Mud-Co
 Service Mud
 Chemical Gel
 and Premix

Testing:
 Diamond
 Testing

Gas Detector:
 Blue Stem
 Environ

Sample
 Cuttings: KGS
 Well Sample
 Library

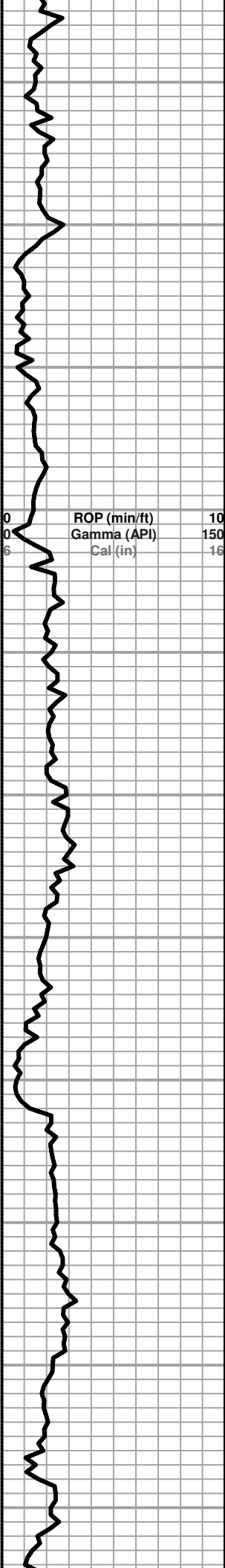
Total Gas (units) 150
 C1 (units) 150
 C2 (units) 150
 C3 (units) 150
 C4 (units) 150

Electric Logs:
 Log Tech
 DIL
 CNL/CDL
 MEL
 Sonic

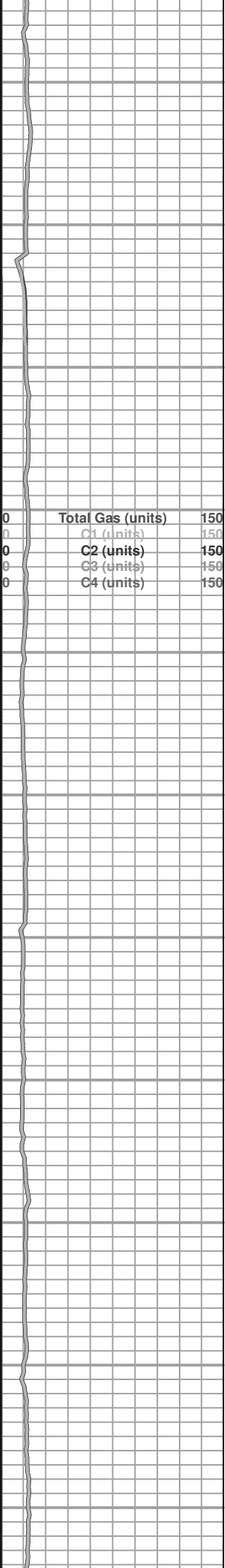
Deviation:
 256' - 1°
 800' - 3/4°
 5310' - 1°

2740
2760
2780
2800
2820
2840
2860
2880
2900
2920
2940

ROP (min/ft) 10
Gamma (API) 150
Cal (in) 16

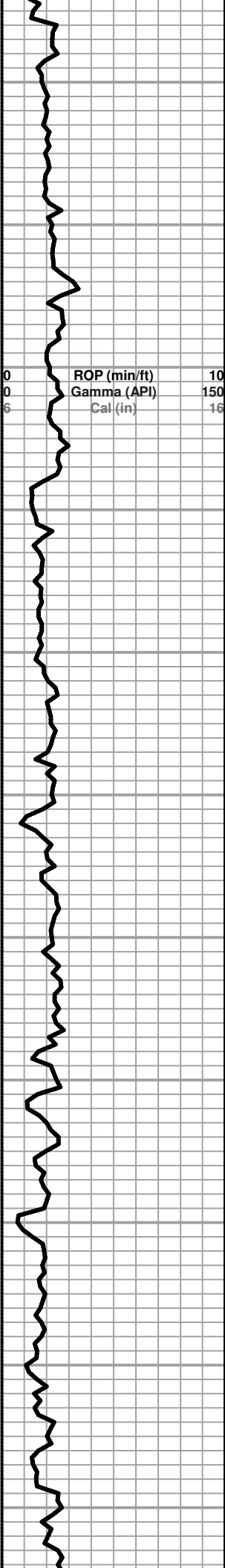


Total Gas (units) 150
C1 (units) 150
C2 (units) 150
C3 (units) 150
C4 (units) 150

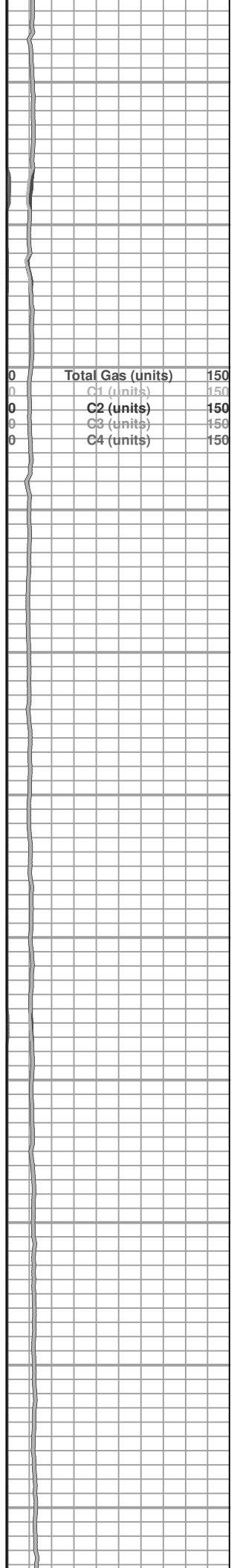


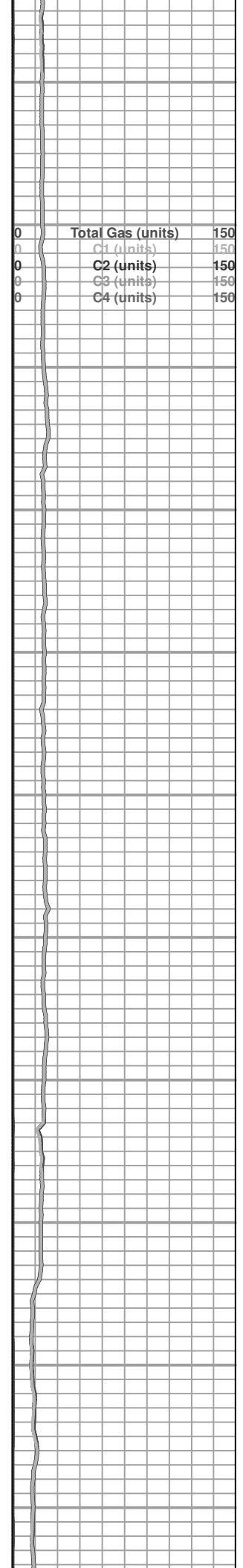
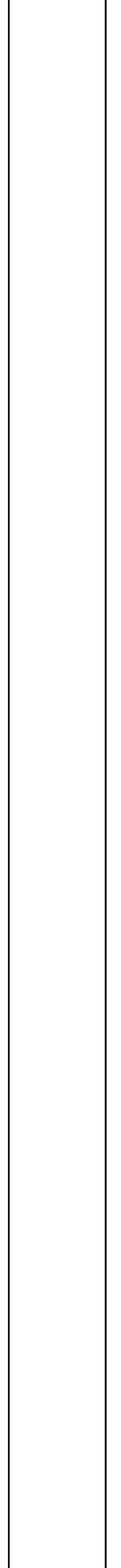
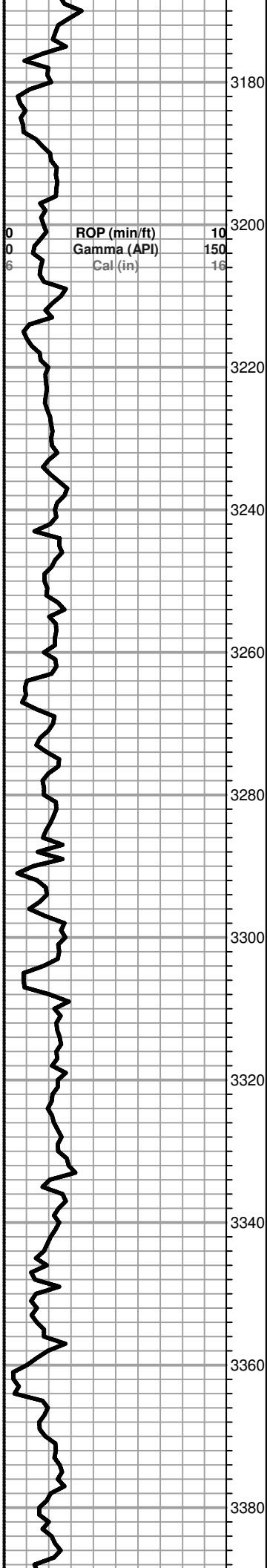
2960
2980
3000
3020
3040
3060
3080
3100
3120
3140
3160

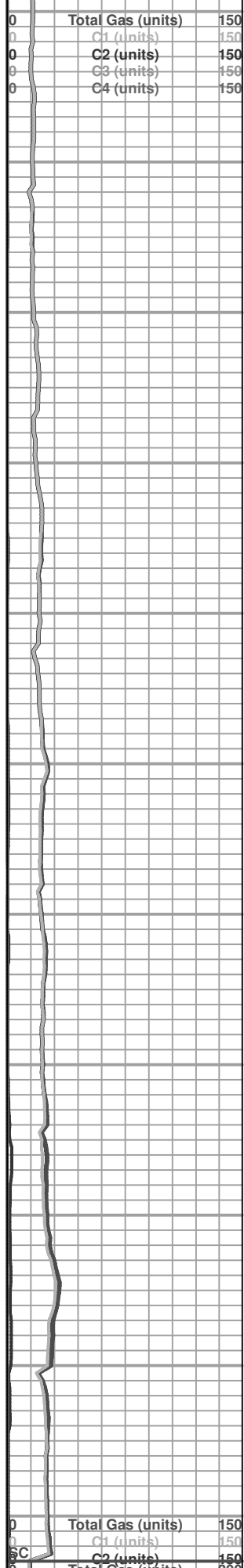
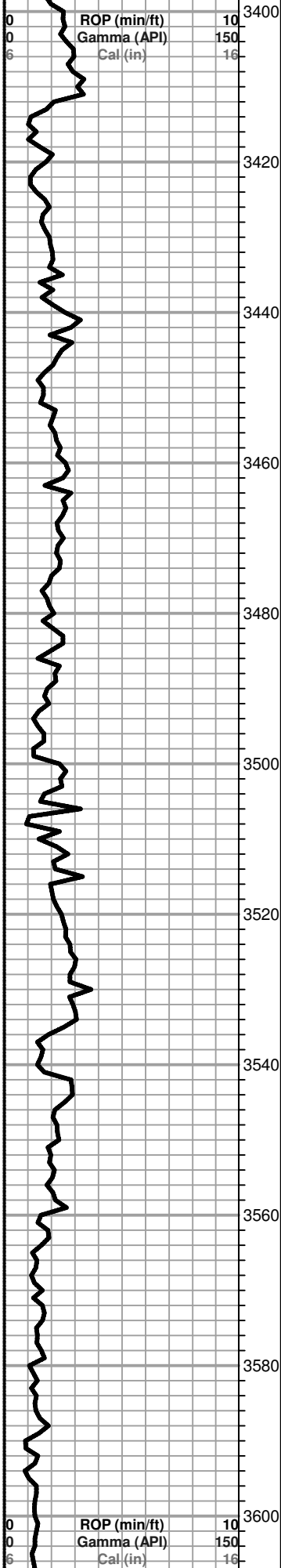
ROP (min/ft) 10
Gamma (API) 150
Cal (in) 16



Total Gas (units) 150
C1 (units) 150
C2 (units) 150
C3 (units) 150
C4 (units) 150



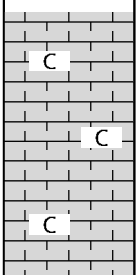




3620
3640
3660
3680
3700
3720
3740
3760
3780
3800
3820

C1 (units) 300
C2 (units) 300
C3 (units) 300
C4 (units) 300

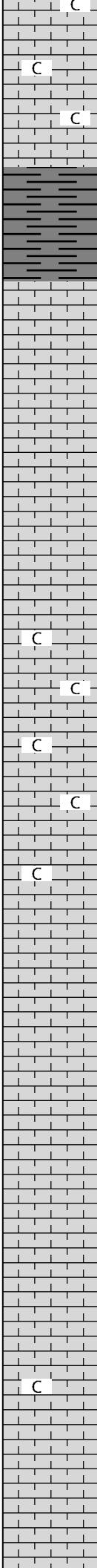
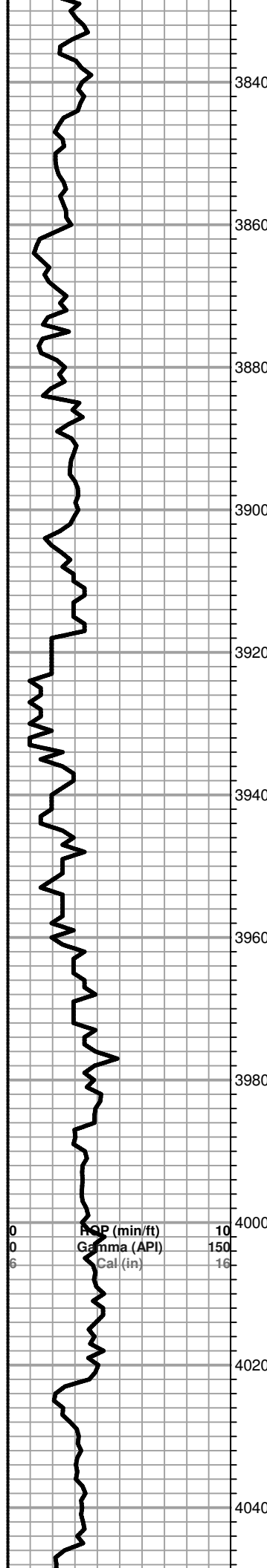
ROP (min/ft) 10
Gamma (API) 150
Cal (in) 16



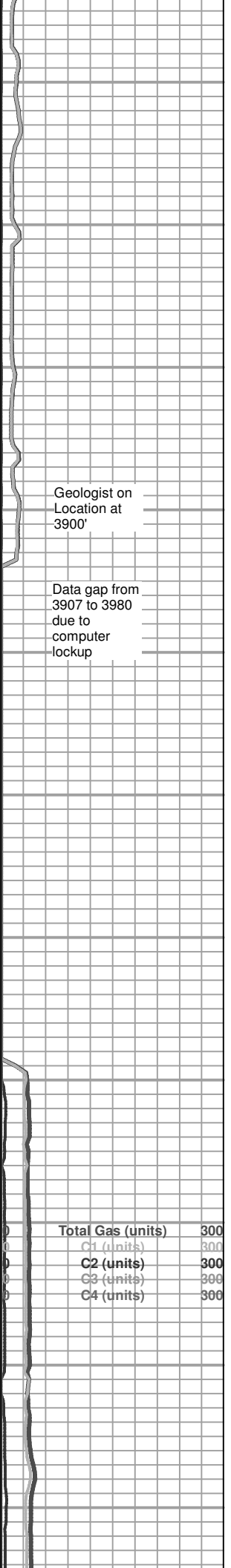
Ls-crm tan fxln mhd sl clky no por ns
Ls-AA
Ls-AA

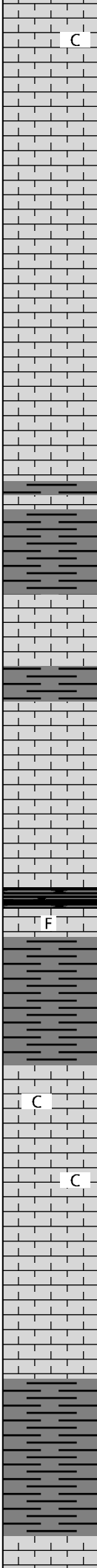
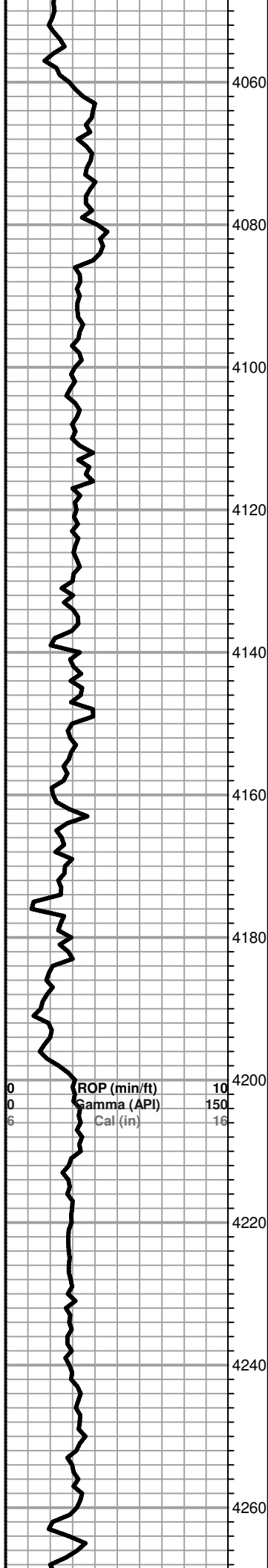
All formation tops on this geo log have been correlated back to the e-log for accuracy

Total Gas (units) 300
C1 (units) 300
C2 (units) 300
C3 (units) 300
C4 (units) 300



Ls-crm/lt gry fxln mhd/dns sl clky no pos
Ls-AA
Ls-AA
Sh-gry/dk gry
Sh-AA
Ls-crm/tan fxln mhd/dns no por
Sh-gry
Ls-crm/tan fxln mhd/dns no por
Ls-AA
Ls-crm/tan/lt gry fxln mhd/dns no por
Ls-AA
Ls-crm/tan fxln mhd sl clky no por
Ls-crm/tan fxln soft/mhd clky no por
Ls-AA
Ls-crm/tan fxln mhd sl clky no por
Ls-AA
Ls-AA
Ls-crm/tan/lt gry fxln dns no por
Ls-AA
Ls-AA
Ls-crm/tan fxln dns no por
Ls-AA
Ls-AA
Ls-crm/tan/lt gry fxln mhd sl clky no por
Ls-crm/tan/lt gry fxln dns no por
Ls-AA





C Ls-crm/ta/lt gry fxln mhd sl clky no por

Ls-crm/tan/ltgry fxln dns no por

Ls-AA

Ls-lt gry/tan fxln mhd/dns no por

Ls-AA

Ls-lt gry/tan dns fxln no por

Ls-AA

Sh-gry/dk gry

Sh-gry/dk gry

Ls-gry fxln dns no por

Sh-gry/dk gry

Ls-tan/lt gry fxln dns no por

Ls-AA

Ls-AA

-----King Hill 4163 -1868-----

F Ls-lt gry fxln dns sl fos no por

Sh-gry/dk gry

Sh-AA

C Ls-lt gry/crm fxln mhd sl clky no por

Ls-AA

Ls-gry/tan f/mxln dns no por

Ls-AA

Sh-gry/dk gry

Sh-AA

Mud Data at
 4134'
 9:30 am
 6-20-12
 Wt 9.35
 Vis 51
 WL 14
 pH 9
 Chl 6600
 Sol 6.7%
 YP 14
 LCM 0%

66 units

Total Gas (units)	300
C1 (units)	300
C2 (units)	300
C3 (units)	300
C4 (units)	300

4280
4300
4320
4340
4360
4380
4400
4420
4440
4460
4480

0 ROP (min/ft) 10
0 Gamma (API) 150
6 Cal (in) 16



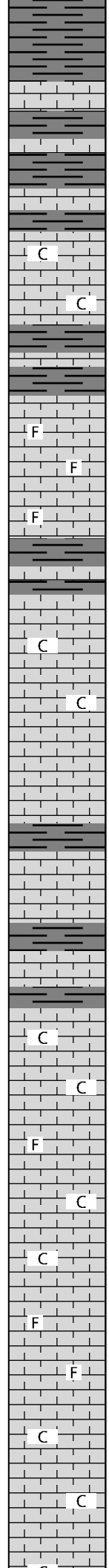
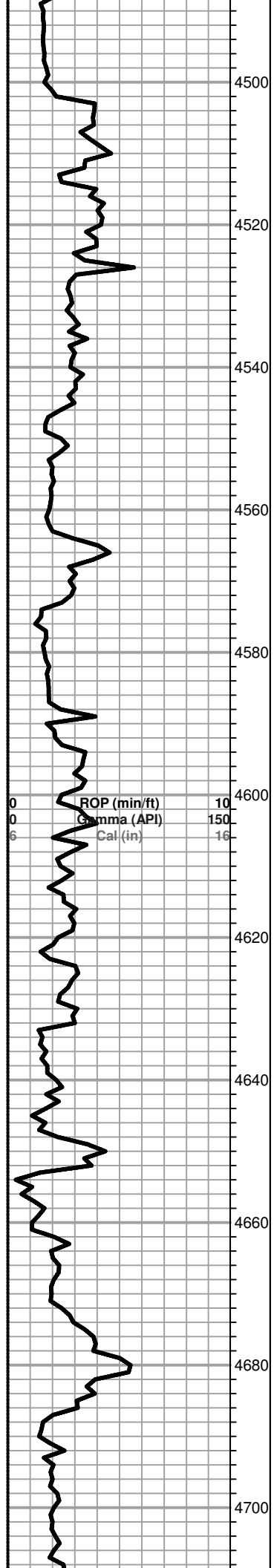
Ls-crm/lt gry fxln dns no por
Ls-AA
Ls-crm/tanf/mxln mhd/dns no por
Ls-AA
Sh-gry/dk gry
Sh-blk carb
F Ls-tan/gry f/mxln dns sl fos no por
Sh-gry
F Ls-AA
-----Heebner 4327 -2032-----
Sh-blk carb
F Ls-crm/tan/lt gry f/mxln dns sl fos no por
Sh-gry/dk gry
Ls-crm/lt gry fxln mhd/dns no por
F Ls-lt gry/crm f/mxln dns sl fos no por
-----Douglas 4363 -2068-----
Sh-gry/dk gry/blk
Sh-AA
Sh-gry/dk gry/blk
Sh-AA
Ls-crm/tan fxln dns no por
Sh-gry/dk gry
F Ls-crm/tan fxln mhd/dns sl fos no por
F Ls-AA
C Ls-crm/tan fxln soft/mhd sl clky no por
Ls-AA
C Ls-crm/tan fxln mhd/dns sl clky no por
Sh-gry/dk gry/dk grn
Sh-AA
Sh-AA
Sh-gry/dk gry

127 units

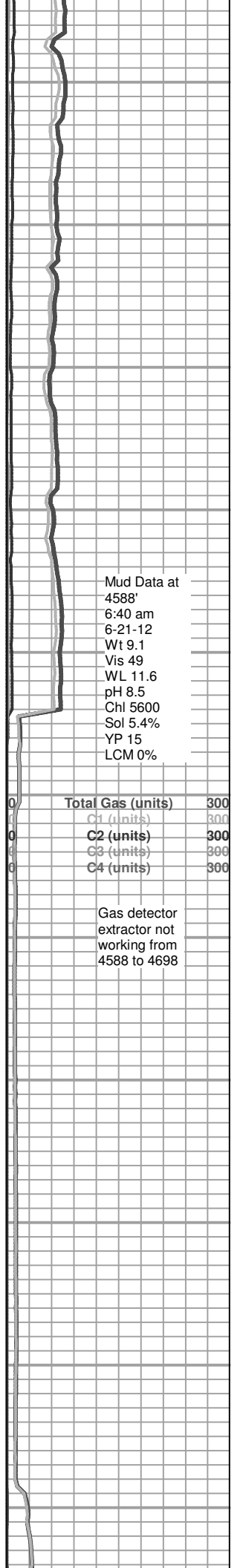
129 units

Total Gas (units) 300
C1 (units) 300
C2 (units) 300
C3 (units) 300
C4 (units) 300





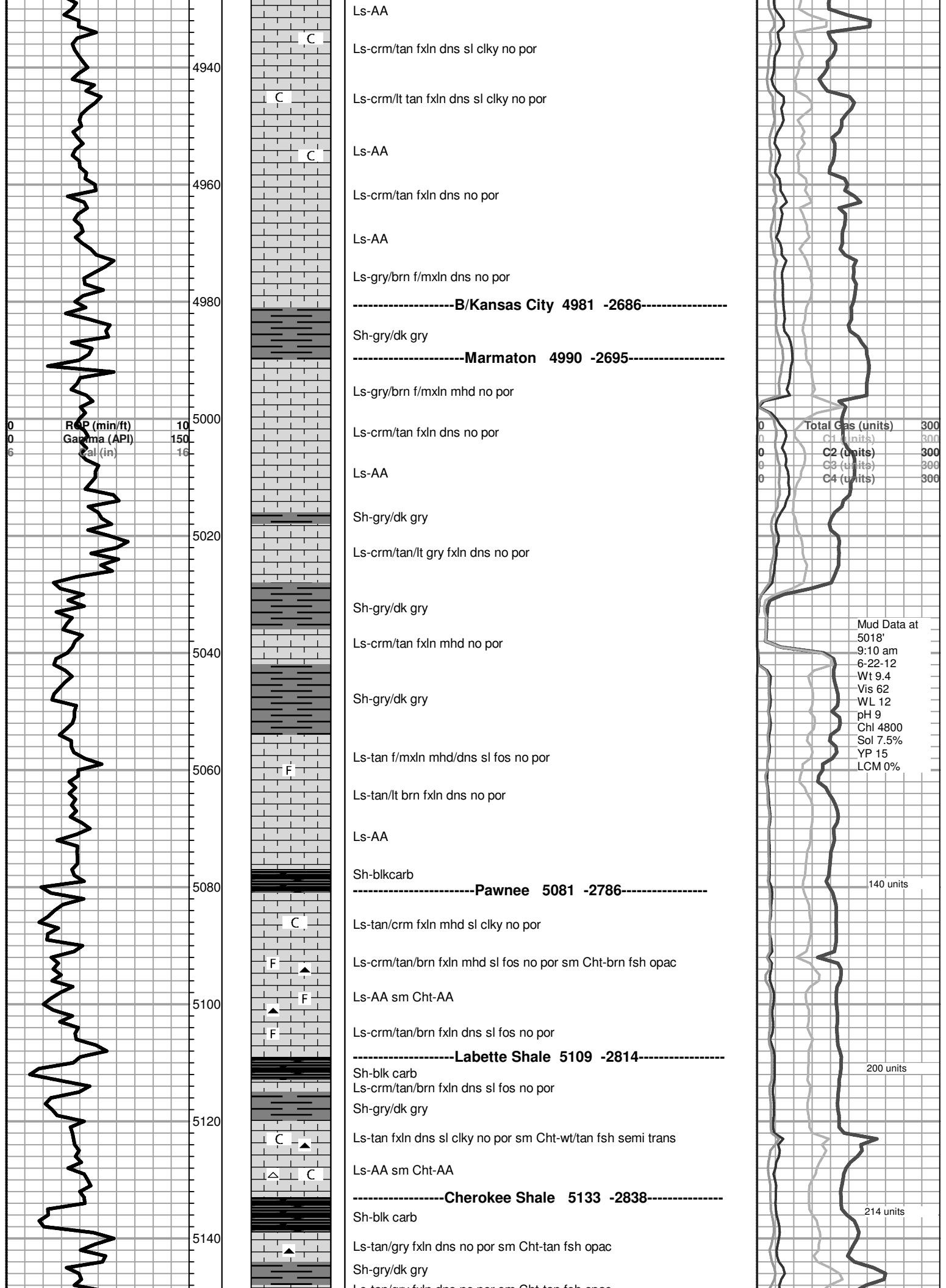
Sh-AA
-----**Brown Lime 4500 -2205**-----
Ls-brn fxln dns no por
Sh-gry/dk gry
Sh-gry/dk gry
Ls-tan/brn fxln dns no por
-----**Lansing 4521 -2226**-----
Ls-frm/tan fxln mhd sl clkly no por
Ls-AA
Sh-gry/dk gry
Sh-AA
Ls-tan/lt gry fxln mhd sl fos no por
F
F
Ls-AA
F
Sh-gry/dk gry
Sh-gry/dk gry
Ls-frm/tan fxln dns no por
Ls-frm/tan fxln mhd sl clkly no por
Ls-AA
Ls-tan/lt gry f/mxln mhd no por
Ls-tan/lt gry f/mxln dns no por
Sh-gry/dk gry
Ls-frm/lt gry fxln dns no por
Sh-gry/dk gry
Ls-lt gry fxln dns no por
Sh-gry/dk gry
C
Ls-frm fxln soft/mhd clkly no por
C
Ls-frm/lt gry fxln mhd sl clkly no por
F
Ls-frm/lt gry fxln dns sl fos no por
C
Ls-frm fxln soft clkly no por
C
Ls-frm/lt gry fxln mhd sl clkly no por
Ls-AA
F
Ls-tan/lt gry fxln dns sl fos no por
F
Ls-AA
C
Ls-tan/frm fxln mhd sl clkly no por
C
Ls-AA
Ls-frm/tan fxln mhd sl clkly no por with sm Ls-wt fxln soft clkly



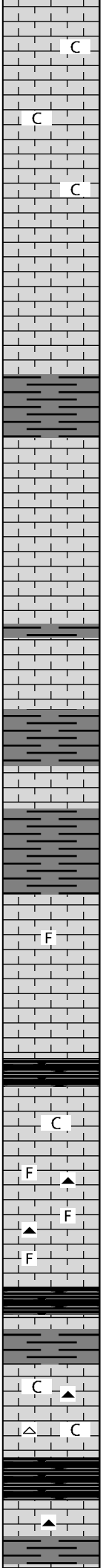
Mud Data at
4588'
6:40 am
6-21-12
Wt 9.1
Vis 49
WL 11.6
pH 8.5
Chl 5600
Sol 5.4%
YP 15
LCM 0%

Total Gas (units)	300
C1 (units)	300
C2 (units)	300
C3 (units)	300
C4 (units)	300

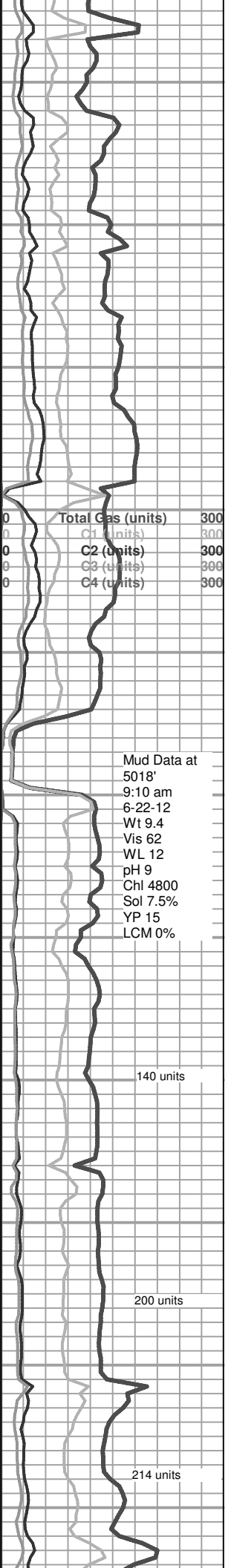
Gas detector
extractor not
working from
4588 to 4698



4940
4960
4980
5000
5020
5040
5060
5080
5100
5120
5140



Ls-AA
Ls-crm/tan fxln dns sl clky no por
Ls-crm/lt tan fxln dns sl clky no por
Ls-AA
Ls-crm/tan fxln dns no por
Ls-AA
Ls-gry/brn f/mxln dns no por
-----**B/Kansas City 4981 -2686**-----
Sh-gry/dk gry
-----**Marmaton 4990 -2695**-----
Ls-gry/brn f/mxln mhd no por
Ls-crm/tan fxln dns no por
Ls-AA
Sh-gry/dk gry
Ls-crm/tan/lt gry fxln dns no por
Sh-gry/dk gry
Ls-crm/tan fxln mhd no por
Sh-gry/dk gry
Ls-tan f/mxln mhd/dns sl fos no por
Ls-tan/lt brn fxln dns no por
Ls-AA
Sh-blkcarb
-----**Pawnee 5081 -2786**-----
Ls-tan/crm fxln mhd sl clky no por
Ls-crm/tan/brn fxln mhd sl fos no por sm Cht-brn fsh opac
Ls-AA sm Cht-AA
Ls-crm/tan/brn fxln dns sl fos no por
-----**Labette Shale 5109 -2814**-----
Sh-blk carb
Ls-crm/tan/brn fxln dns sl fos no por
Sh-gry/dk gry
Ls-tan fxln dns sl clky no por sm Cht-wt/tan fsh semi trans
Ls-AA sm Cht-AA
-----**Cherokee Shale 5133 -2838**-----
Sh-blk carb
Ls-tan/gry fxln dns no por sm Cht-tan fsh opac
Sh-gry/dk gry
Ls-tan/brn fxln dns no por sm Cht-tan fsh opac



Mud Data at
5018'
9:10 am
6-22-12
Wt 9.4
Vis 62
WL 12
pH 9
Chl 4800
Sol 7.5%
YP 15
LCM 0%

140 units

200 units

214 units

Ls-tan/gry fxlIn dns no por sm Cht-tan/brn fsh opac

Sh-gry/dk gry

Ls-tan/brn fxlIn dns no por sm Cht-tan/brn fsh opac

Sh-blk carb

Ls-tan/gry/brn fxlIn dns no por

Sh-gry/dk gry

Ls-tan/brn f/mxlIn dns no por

Sh-gry/dk gry

Sh-gry/dk gry

Ls-tan/brn f/mxlIn dns no por

Sh-gry/dk gry

Ls-tan/brn f/mxlIn dns no por

Sh-gry/dk gry

Ls-tan/gry/brn fxlIn dns no por

Sh-gry/dk gry

Ls-tan/gry/brn fxlIn dns no por sm Cht-brn fsh opac

-----Morrow Shale 5235 -2940-----

Sh-gry/dk gry/grn/mar

-----Morrow Sand 5246 -2951-----

Clusters of Ss-clr cgrn sub ang tite cemt galuc nsfo with few clusters of Ss-clr cgrn sub rnd to sub ang tite cemt to sl fri fsfo fr cut fr fluor

Clusters of Ss-clr cgrn sub ang tite cemt glauc mostly barren sl cut nsfo no odor one or two clusters with ssfo on brk fleet odor

Sh-gry/dk gry/grn

Sh-gry/dk gry/grn sm blk and yel

Sh-AA

Ss-clr cgrn sub ang sl glauc tite cemt with one or two clusters ssfo and gas on brk no odor

Ss-AA

-----Mississippi 5296 -3001-----

Cht-wt fsh and weat sm trip opac no por

Ch-AA with Ls-frm f/mxlIn mhd sl clky no por

Cht-AA and Ls-AA

Ls-frm/tan fxlIn mhd/dns sl clky no por sm Cht-wt fsh and weat

Ls-frm/tan mxlIn dns no por sm Cht-AA

Ls-frm/tan fxlIn dns no pr sm Cht-wt fsh opac

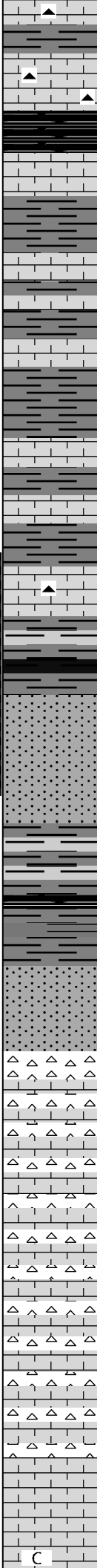
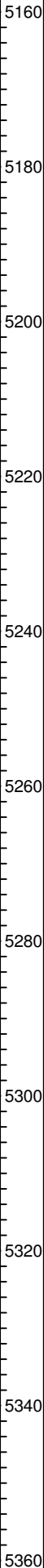
Ls-AA sm Cht-AA

Ls-frm/tan f/mxlIn dns sl clky no por trc Cht-wt/gry wt fsh opac

Ls-AA trc Cht-AA

Ls-tan mxlIn soft fos gd interxlIn por nsfo or gas

Ls-tan mxlIn dns clky and Ls-lt gry fxlIn to sl gran dns no por



ROP (min/ft) 10
Gamma (API) 150
Cal (in) 16

DST No. 2
5226-5260
Straddle Test

CFS at 5240'-60"

CFS at 5250'-60"

DST No. 1
5232-5310

CFS at 5275'-105"

CFS at 5295'-60"

CFS at 5310'-60"

163 units

Total Gas (units) 300
C1 (units) 300
C2 (units) 300
C3 (units) 300
C4 (units) 300

179 units

Pulled 20 stand short trip at 5240'

180 units

173 units

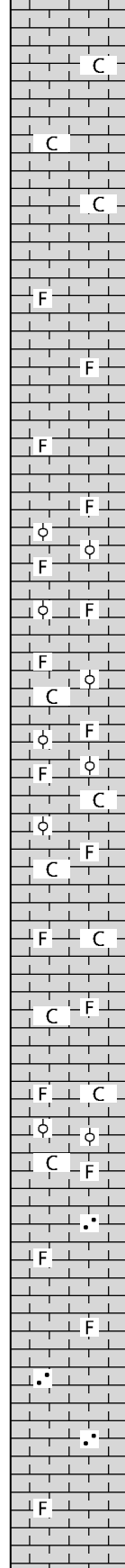
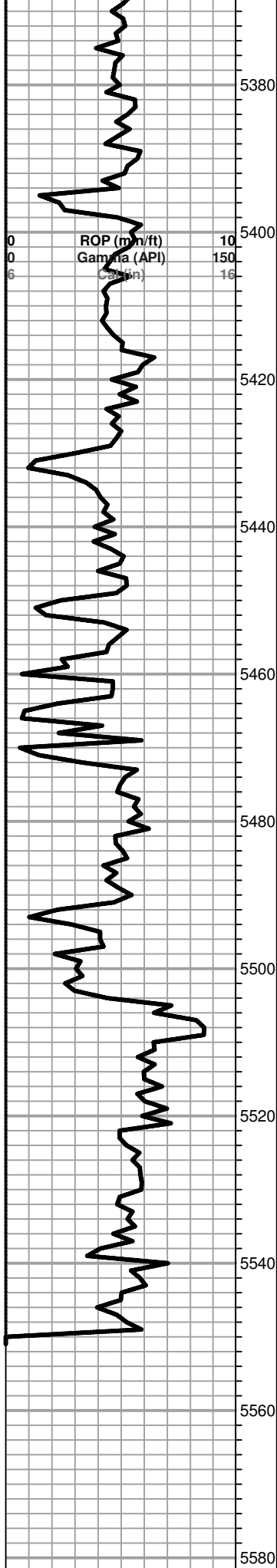
173 units

160 units

Mud Data at 5295'
10:20 am
6-23-12
Wt 9.2
Vis 58
WL 9.2
pH 11
Chl 4900
Sol 6.1%
YP 19
LCM 0%

DST No. 1
5232 to 5310
5-90-120-180
1st Open: BOB immediately.
GTS in 2 min
Gauged:
5" - 1949 mcf
2nd Open: GTS immediately
Gauged:
10" - 2012 mcf
20" - 1694 mcf
30" - 1348 mcf
40" - 1036 mcf
50" - 654 mcf
60" - 371 mcf
70" - 499 mcf
80" - 283 mcf
90" - 195 mcf
100" - 147 mcf
110" - 68.8 mcf

C



Ls-AA with sm Ls-wt fxln soft clky no por

Ls-crm/lt tan mxnd dns sl clky no por sm Ls-wt fxln soft clky no por

Ls-AA

Ls-brn cxln soft/mhd fos fr interxln por nsfo or gas

Ls-crm/tan f/mxln dns sl fos no por

Ls-AA

Ls-crm/tan f/mxln dns sl fos no por

Ls-AA

Ls-crm/lt tan/wt fxln soft clky no por sm Ls-brn to gry fxln soft fos clky sl ool

Ls-tan/brn f/mxlnmhd/dns fos sl ool no por

Ls-brn mxln soft sl clky fos sm ool mudstone

Ls-tan/brn mxln dns sl fos no por sm ool mudstone

Ls-brn mxln soft sl clky fos sm ool mudstone

Ls-AA

Ls-tan/gry f/mxln dns clky fos no por

Ls-AA

Ls-AA

Ls-gry/tan mxln soft/mhd clky fos sm ool mudstone no por

Ls-AA

Ls-crm/tan fxln to sl gran very dense no por

Ls-tan/crm fxln dns sl fos no por

Ls-AA

Ls-tan/crm fxln to sl gran dns no por

Ls-AA

Ls-crm/tan mxln to sl gran dns sl fos no por

-----RTD 5550 -3255-----

Finished Drilling at 5:15 am on 6-25-12. Cir for Log - 90"

Finished Logging at 6:15 pm on 6-25-12.

120" - 33.9 mcf		
Recovery:		
4685' GIP		
10' Mud		
505' GMWCO (12%G, 11%M, 25%W, 52%O)		
Chl 25,000 ppm		
IHP 2515		
IFP 526-475		
ISIP 820		
FFP 437-176		
FSIP 616		
FHP 2513		
Temp 119°		
	Total Gas (units)	300
	C1 (units)	300
	C2 (units)	300
	C3 (units)	300
		300
	Mud Data at 5350'	
	12:25 pm	
	6-24-12	
	Wt 8.9	
	Vis 68	
	WL 8.4	
	pH 11	
	Chl 5800	
	Sol 3.9%	
	YP 22	
	LCM 2%	
	DST No. 2	
	5226 to 5260	
	Straddle Test	
	5-90-120-210	
	1st Open: BOB immediately.	
	GTS	
	in 5 min:	
	2nd Open: GTS	
	immediately	
	Gauged:	
	10" - 558 mcf	
	20" - 487 mcf	
	30" - 384 mcf	
	40" - 303 mcf	
	50" - 245 mcf	
	60" - 194 mcf	
	70" - 156 mcf	
	80" - 101 mcf	
	90" - 51.8 mcf	
	100" - 47.1 mcf	
	110" - 40.9 mcf	
	120" - 37.6 mcf	
	Recovery:	
	4885' GIP	
	10' Mud	
	60' SOCM (5%G, 95%O)	
	190' GMWCO (12%G, 20%M, 30%W, 38%O)	
	65' SMWCO (5%M, 30%W, 65%O) Chl 26,000 ppm	
	IHP 2500	
	IFP 220-182	
	ISIP 620	
	FFP 179-132	
	ISIP 246	
	FHP 2495	
	Temp 117°	

