



GEOSEARCH LOGGING INC.

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

Well Name: PIONEER RESOURCES TURLINGTON # 22-28
Location: SEC: 28, T-31S---R-65W-----LAS ANIMAS CO, COLORADO
Licence Number: AFE: # 020083 Region: RATON-SPANISH PEAK
Spud Date: 07/16/2011 Drilling Completed: 07/19/2011
Surface Coordinates: 2337' FNL & 1,705' FWL
SE/NW Sec: 28, T31S--R65W ____ MERIDIAN: 6
Bottom Hole VERTICAL HOLE
Coordinates:
Ground Elevation (ft): 7,132' K.B. Elevation (ft): 7,136'
Logged Interval (ft): 785' To: 1,585" Total Depth (ft): 1,585' T.D.
Formation: Raton Coal, Raton Cong, Vermejo, Trinidad
Type of Drilling Fluid: DRILLING WITH AIR

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

OPERATOR

Company: PIONEER NATURAL RESOURCES USA INC..
Address: 1401 17th ST. STE 1200
DENVER, COLORADO 80202
PHONE: (303) 675-2611 FAX: (303) 294-1251

GEOLOGIST

Name: Beau Tinnin & Neal Dannemiller
Company: PIONEER NATURAL RESOURCES USA INC..
Address: 1401 17th ST. STE 1200
DENVER, COLORADO 80202
NEAL: (303) 675-2645 & BEAU: (303) 675-2734

DRILLING CONTRACTOR

PIONEER RESOURCES RIG #3
FIELD #: 70830--RATON BASIN-SPANISH PEAKS
API # : 05-071-09820-0000

WELL SITE GEOLOGIST

WAYNE NIX Cell----(870) 826-6197
BETTY NIX Cell----(870) 826-6196
GEOSEARCH LOGGING INC.
P.O. Box 6005
Edmond, OK. 73083-60
PHONE: (405) 340-5545
FAX: (405) 348-8303

COMPANY MAN

BILL VIGIL & DERRICK BERRY
PIONEER NATURAL RESOURCES USA INC..
 27000 HWY 12
 TRINIDAD, COLORADO 81082
 PHONE: (303) 675-2611

Additional Comments:

2 Manned Logging Service
 Start Date: 07/16/2011
 SET 8 5/8" SURFACE CASING
 TO 770' ON THE 07/18/2011
 (DRILLED ON AERATED WATER)
 T.D. @ 1,585' on the 07/19/2011
 RELEASED: 07/19/2011.....

ROCK TYPES

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

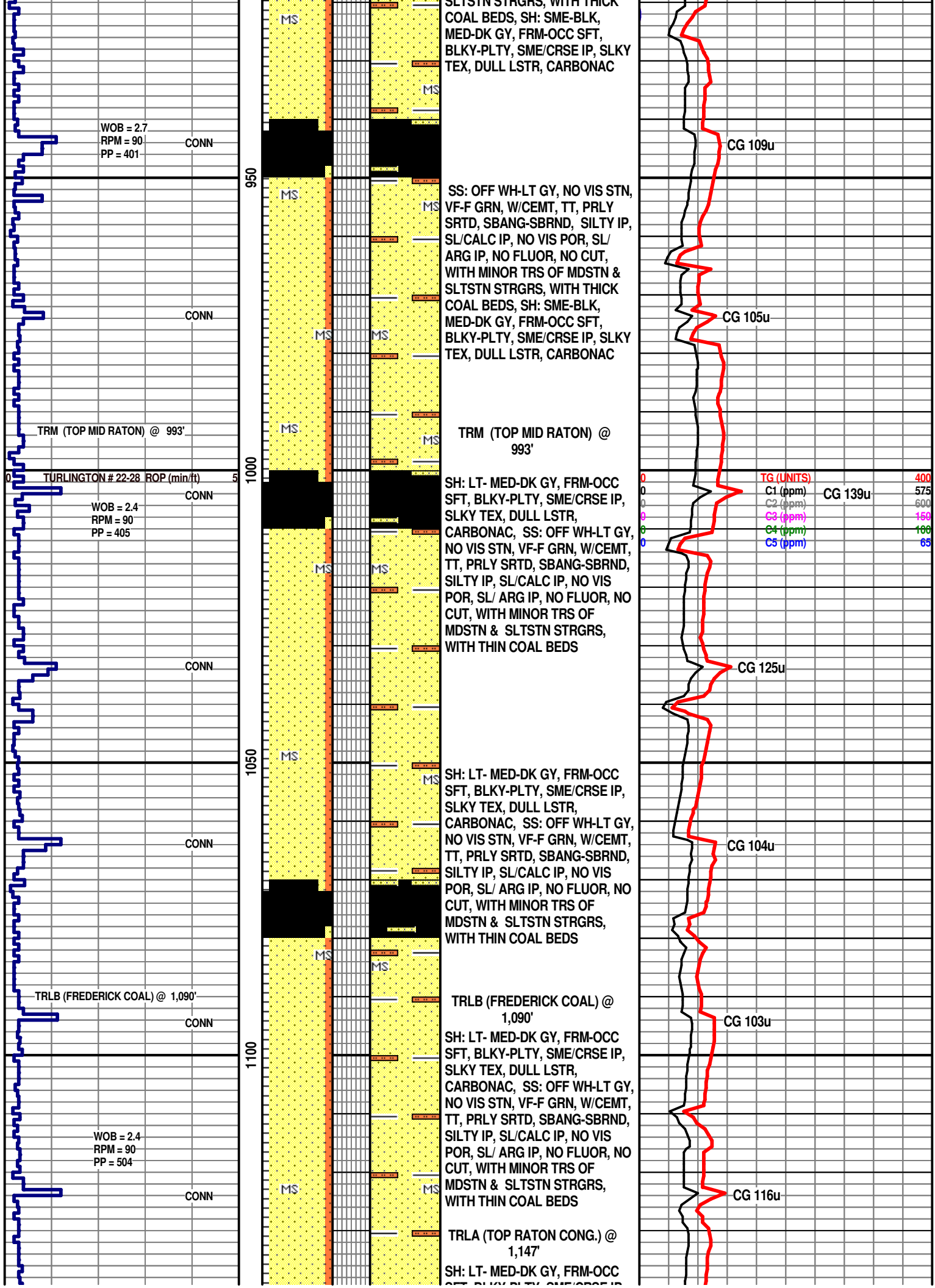
ACCESSORIES

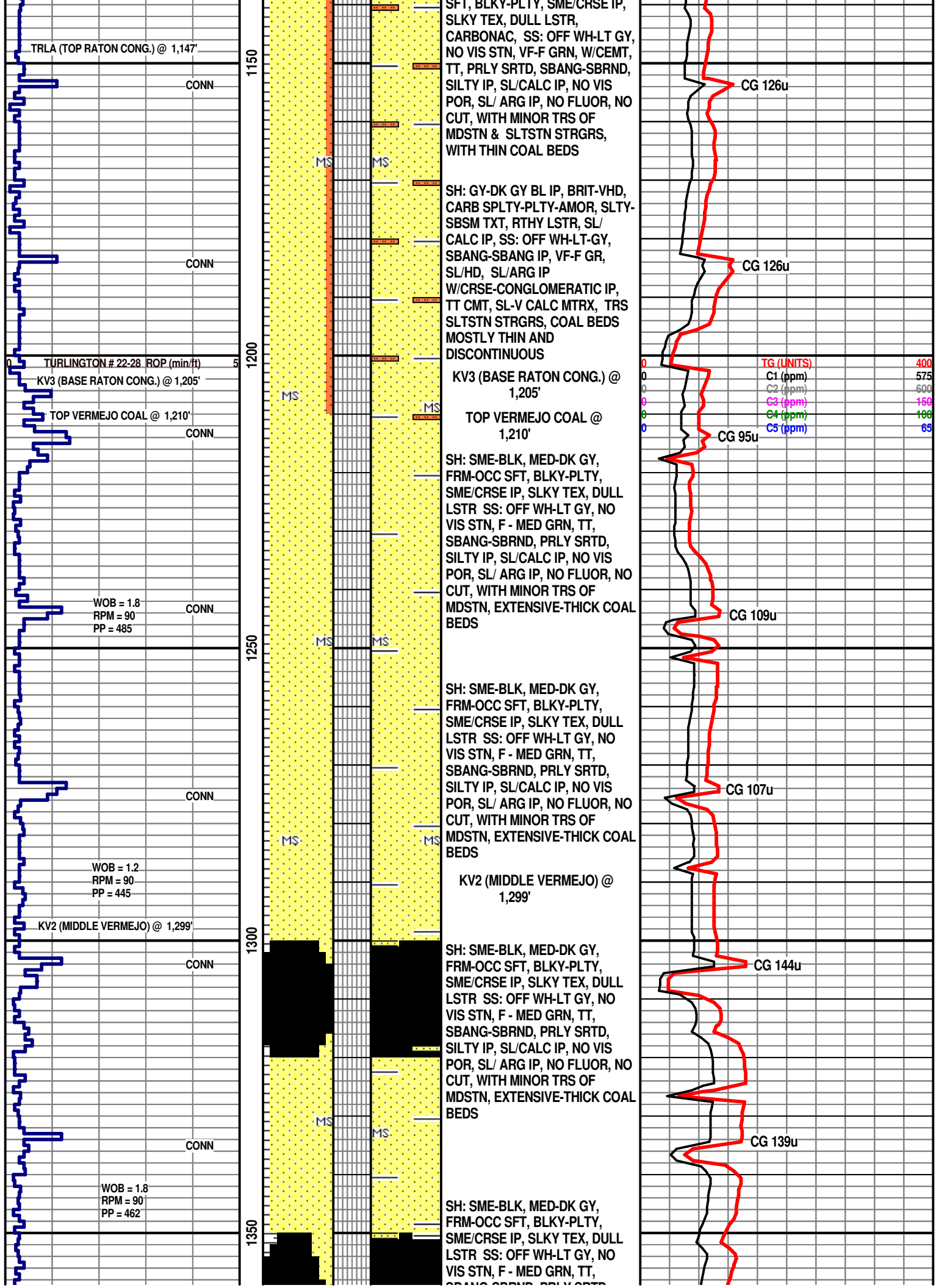
FOSSIL	Ostra	Chtdk	Sandy	Ssstrg
Algae	Pelec	Chtlt	Silt	TEXTURE
Amph	Pellet	Dol	Sil	Boundst
Belm	Pisolite	Feldspar	Sulphur	Chalky
Bioclst	Plant	Ferrpel	Tuff	Cryxln
Brach	Strom	Ferr	STRINGER	Earthy
Bryozoa	MINERAL	Glau	Anhy	Finexln
Cephal	Anhy	Gyp	Arg	Grainst
Coral	Arggrn	Hvymin	Bent	Lithogr
Crin	Arg	Kaol	Coal	Microxln
Echin	Bent	Marl	Dol	Mudst
Fish	Bit	Minxl	Gyp	Packst
Foram	Brecfrag	Nodule	Ls	Wackest
Fossil	Calc	Phos	Mrst	
Gastro	Carb	Pyr	Sltstrg	
Oolite		Salt		

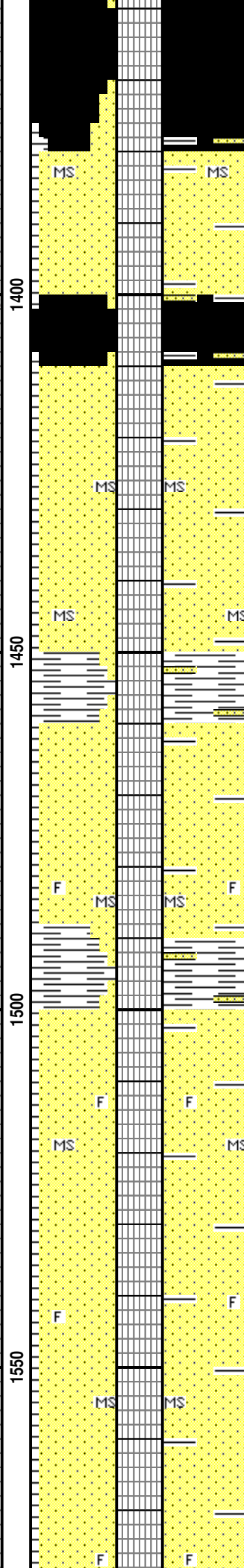
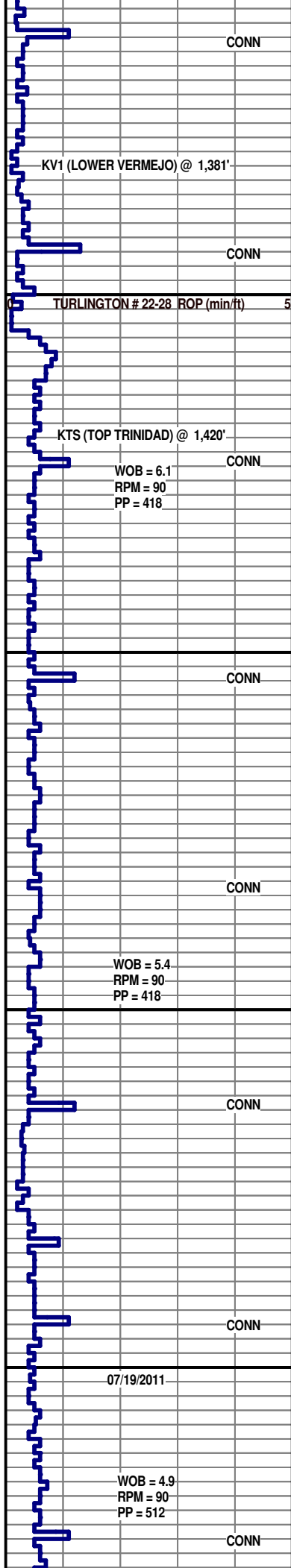
OTHER SYMBOLS

INTERVALS	Sidewall	Moldic	Moderate	Angular
Core	POROSITY TYPE	Organic	Poor	OIL SHOWS
Dst	Earthy	Pinpoint	ROUNDING	Even
Slide	Fenest	Vuggy	Rounded	Spotted
EVENTS	Fracture	SORTING	Subrnd	Ques
Rft	Inter	Well	Subang	Dead

[illegible]







SBANG-SBRND, PRLY SRTD, SILTY IP, SL/CALC IP, NO VIS POR, SL/ ARG IP, NO FLUOR, NO CUT, WITH MINOR TRS OF MDSTN, EXTENSIVE-THICK COAL BEDS

KV1 (LOWER VERMEJO) @ 1,381'

SH: SME-BLK, MED-DK GY, FRM-OCC SFT, BLKY-PLTY, SME/CRSE IP, SLKY TEX, DULL LSTR SS: OFF WH-LT GY, NO VIS STN, F - MED GRN, TT, SBANG-SBRND, PRLY SRTD, SILTY IP, SL/CALC IP, NO VIS POR, SL/ ARG IP, NO FLUOR, NO CUT, WITH MINOR TRS OF MDSTN, EXTENSIVE-THICK COAL BEDS

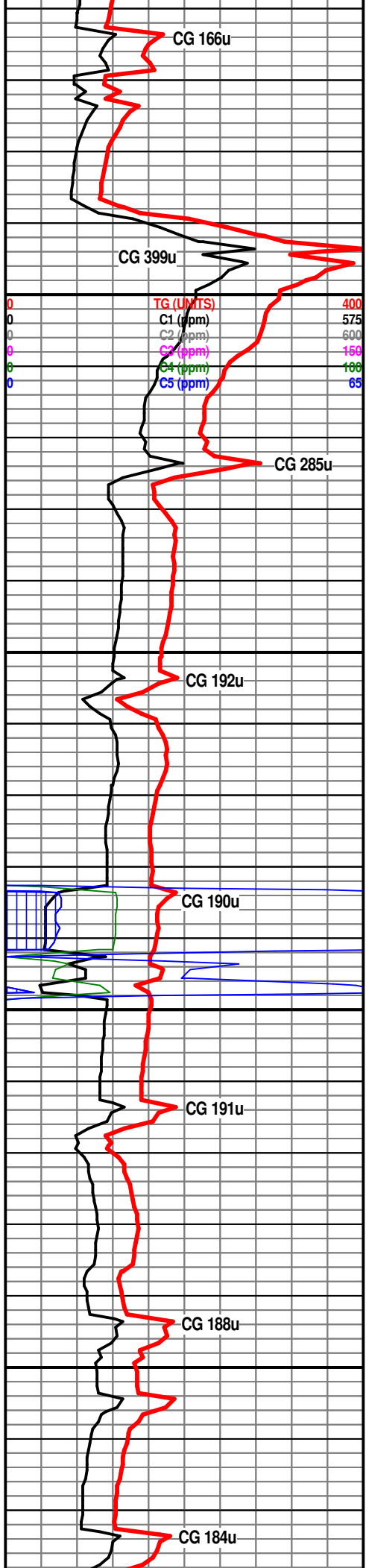
KTS (TOP TRINIDAD) @ 1,420'

SS: WH-GY-LT TAN, F-MED GR, W/SL-CRSE-CONGLOMERATIC IP, SEDIMENT CONTAINS NO OPALINE SILICA MATRIX, SL-V CALC MTRX, SBANG- SBRND IP, SL/V-HD IP, COAL BEDS WITH MOSTLY THIN AND DISCONTINUOUS, BLADE-SHAPED FOSSIL, SILICA CEMENT-OPHIOMORPHA, (SOME V/SL UPPER HOLE DEBRE IN SAMPLE)

SH: DK GY, BLK IP, SLI FRM-HD, OCC SFT, FN-MED, DULL LSTR, BLKY, SPLTY IP, MICAC IP, V/CARBONAC IP, CALC IP, SS: WH-GY-LT TAN, F-MED GR, W/SL-CRSE-CONGLOMERATIC IP, SEDIMENT CONTAINS NO OPALINE SILICA MATRIX, SL-V CALC MTRX, SBANG- SBRND IP, SL/V-HD IP, BLADE-SHAPED FOSSIL, SILICA CEMENT-OPHIOMORPHA

SH: DK GY, BLK IP, SLI FRM-HD, OCC SFT, FN-MED, DULL LSTR, BLKY, SPLTY IP, MICAC IP, V/CARBONAC IP, CALC IP, SS: WH-GY-LT TAN, F-MED GR, W/SL-CRSE-CONGLOMERATIC IP, SEDIMENT CONTAINS NO OPALINE SILICA MATRIX, SL-V CALC MTRX, SBANG- SBRND IP, SL/V-HD IP, BLADE-SHAPED FOSSIL, SILICA CEMENT-OPHIOMORPHA

SH: DK GY, BLK IP, SLI FRM-HD, OCC SFT, FN-MED, DULL LSTR, BLKY, SPLTY IP, MICAC IP, V/CARBONAC IP, CALC IP, SS: WH-GY-LT TAN, F-MED GR, W/SL-CRSE-CONGLOMERATIC IP, SEDIMENT CONTAINS NO OPALINE SILICA MATRIX, SL-V CALC MTRX, SBANG- SBRND IP, SL/V-HD IP, BLADE-SHAPED



**FOSSIL, SILICA
CEMT-OPHIOMORPHA**

--T.D. @ 1,585'

07/19/2011.

RUNNING E-LOGS @ 1,585'

TURLINGTON # 22-28 ROP (min/ft)	
1	1.0
2	1.0
3	1.0
4	1.0
5	1.0
6	1.0
7	1.0
8	1.0
9	1.0
10	1.0
11	1.0
12	1.0
13	1.0
14	1.0
15	1.0
16	1.0
17	1.0
18	1.0
19	1.0
20	1.0
21	1.0
22	1.0
23	1.0
24	1.0
25	1.0
26	1.0
27	1.0
28	1.0

NB # 2, HAMMER BIT, 7
7/8" JETS, IN @ 785'
OUT @ 1,585

1600

50

T.D. @ 1,585' CIRCULATING
WITH AIR

**BOTTOM-UP GAS 210u
MAX @ 1,585'**

TG (UNITS)

C1 (ppm)

[illegible]

C3 (ppm)

C4 (ppm)

C5 (ppm)