

Schlumberger

Company: CHESAPEAKE APPALACHIA L.L.C.

Well: ALTMAN 1

Field: VICTORY

County: MARSHALL

State: WEST VIRGINIA

CONTINUOUS DIRECTIONAL SURVEY

626530

County: MARSHALL
 Field: VICTORY
 Location: LATITUDE 39.73 N
 Well: ALTMAN 1
 Company: CHESAPEAKE APPALACHIA L.L.C.

LOCATION

LATITUDE 39.73 N
 LONGITUDE 80.66 W

Elev.: K.B. 1487 ft
 G.L. 1471 ft
 D.F. 1486 ft

Permanent Datum:
 Log Measured From:
 Drilling Measured From:

GROUND LEVEL
 GROUND LEVEL
 GROUND LEVEL

Elev.: 1471 ft
 16.0 ft above Perm. Datum

API Serial No.
 47-051-01038

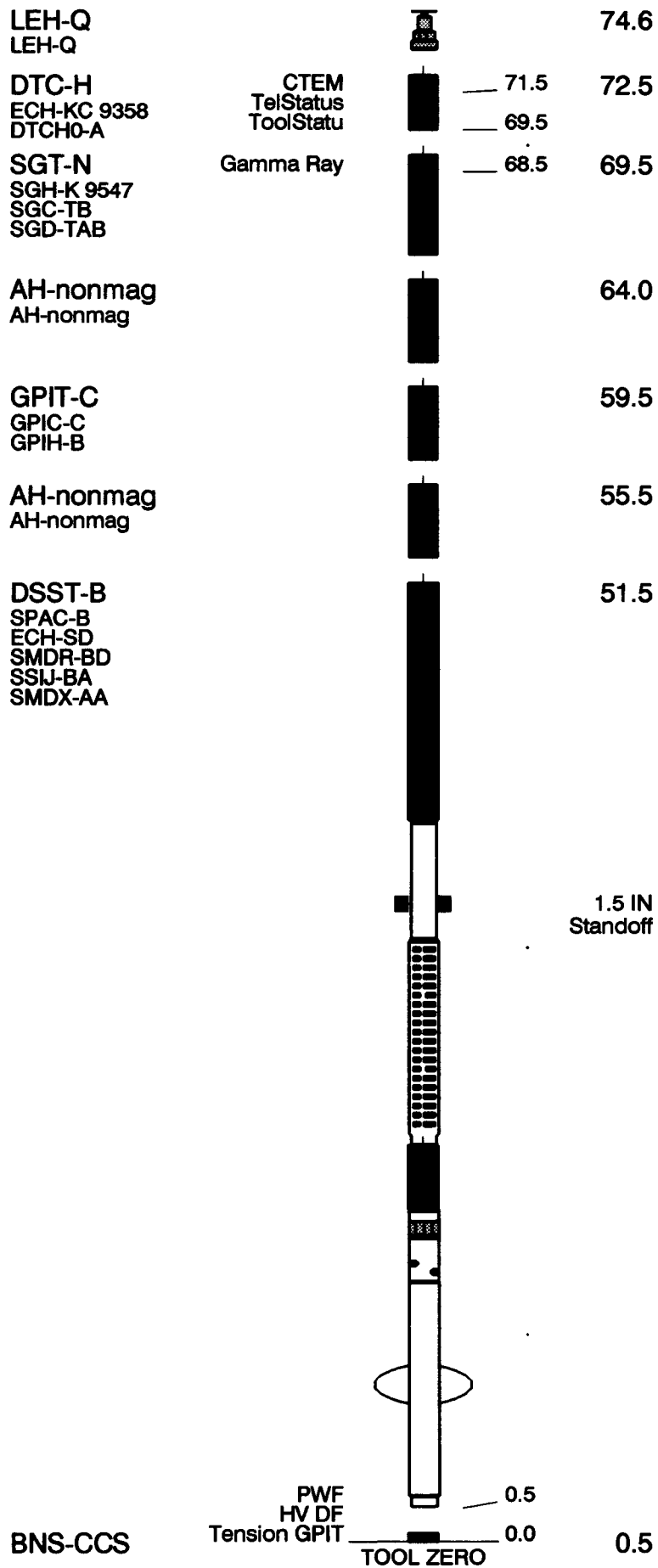
DISTRICT
 LIBERTY

WATERSHED
 YNN CAMP RUN

QUADRANGLE
 WILEYVILLE 7.5'

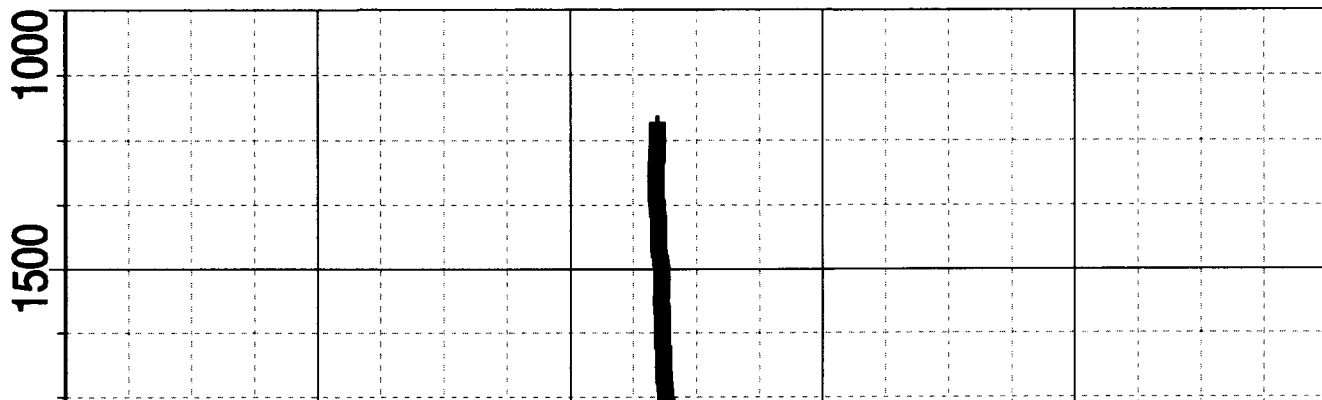
Logging Date	12-Oct-2006			
Run Number	1			
Depth Driller	3412 ft			
Schlumberger Depth	3404 ft			
Bottom Log Interval	3406 ft			
Top Log Interval	1324 ft			
Casing Driller Size @ Depth	16.000 in @ 1324 ft			
Casing Schlumberger	1324 ft			
Bit Size	14.750 in			
Type Fluid In Hole	brine water			
Density	9.1 lbm/gal			
Fluid Loss	PH 8			
Source Of Sample				
RM @ Measured Temperature	@	@	@	@
RMF @ Measured Temperature	@	@	@	@
RMC @ Measured Temperature	@	@	@	@
Source RMF	RMC			
RM @ MRT	RMF @ MRT	@ 87	@ 87	@
Maximum Recorded Temperatures	87 degF			
Circulation Stopped	Time			
Logger On Bottom	12-Sep-2006	6:00		
Unit Number	3046	WESTON, WV		
Recorded By	THOMAS BALL			
Witnessed By	FLOYD DAVIS			

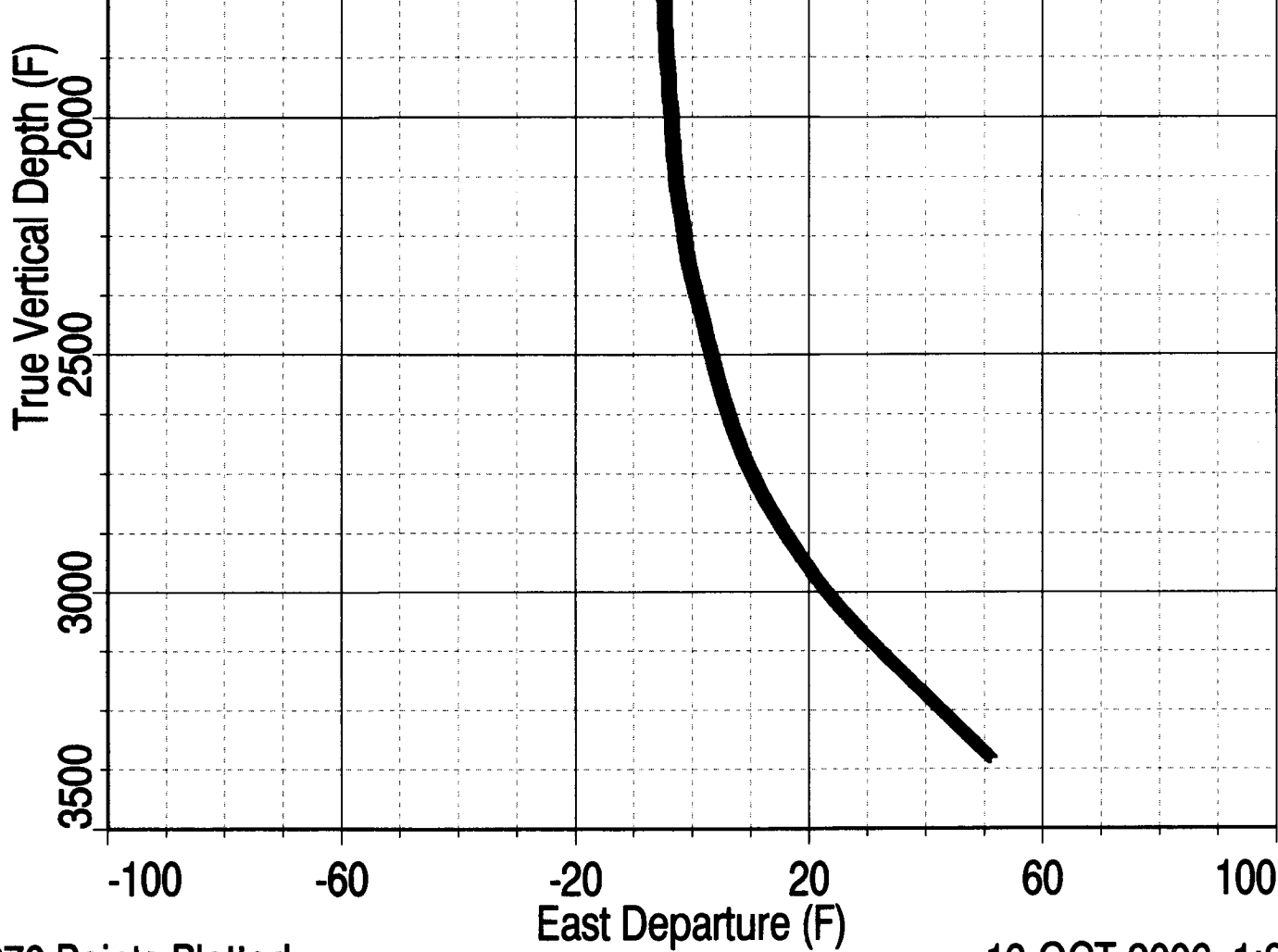
Logging Date					Run 1	Run
Run Number						
Depth Driller						
Schlumberger Depth						
Bottom Log Interval						
Top Log Interval						
Casing Driller Size @ Depth						
Casing Schlumberger						
Bit Size						
Type Fluid In Hole						
Density						
Fluid Loss						
Source Of Sample						
RM @ Measured Temperature						
RMF @ Measured Temperature						
RMC @ Measured Temperature						
Source RMF						
RM @ MRT						
RMF @ MRT						
Maximum Recorded Temperatures						
Circulation Stopped						
Logger On Bottom						
Unit Number						
Recorded By						
Witnessed By						



MAXIMUM STRING DIAMETER 6.63 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN FEET

Index: 3351.5 - 1141.0 FT

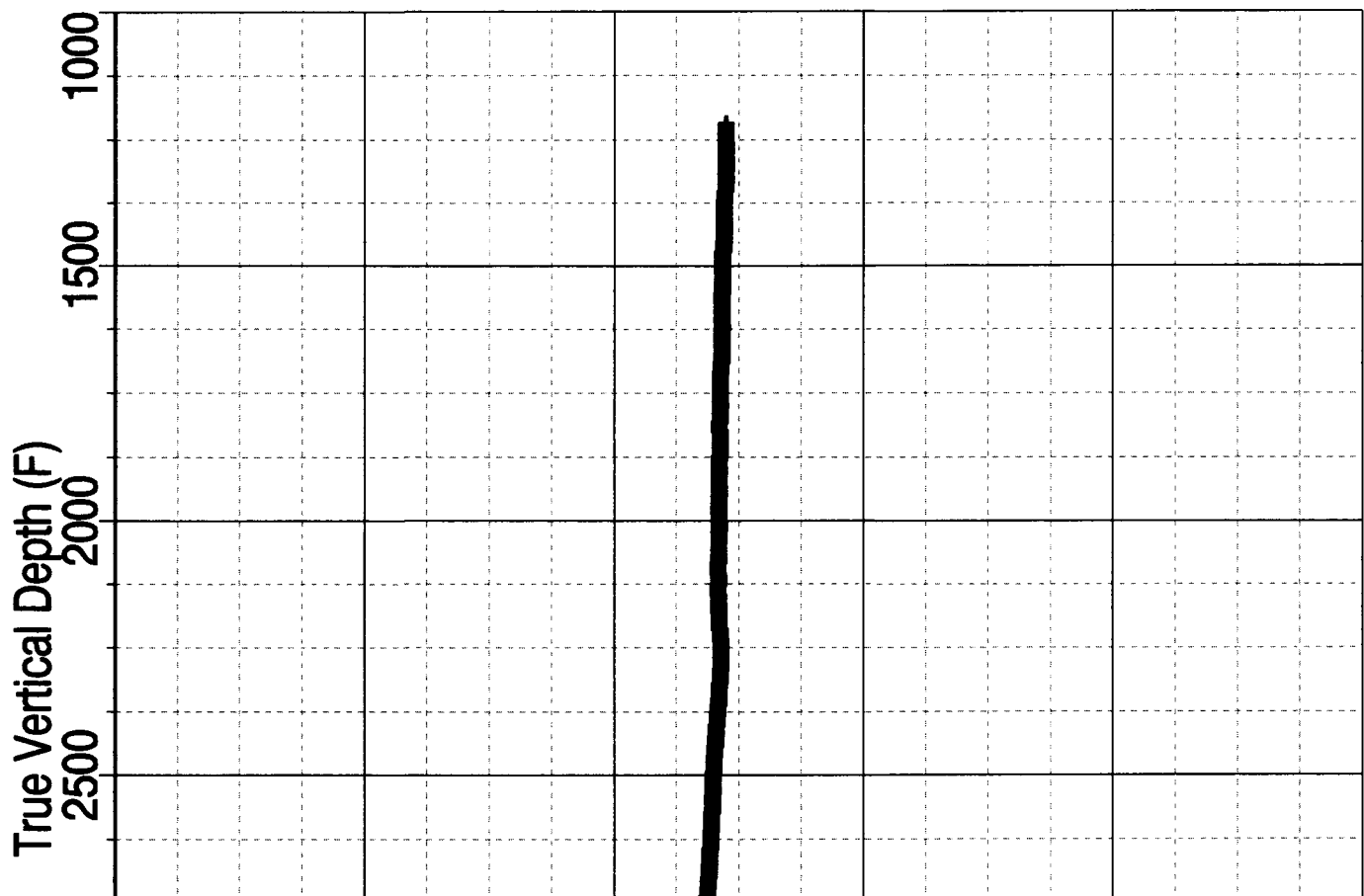


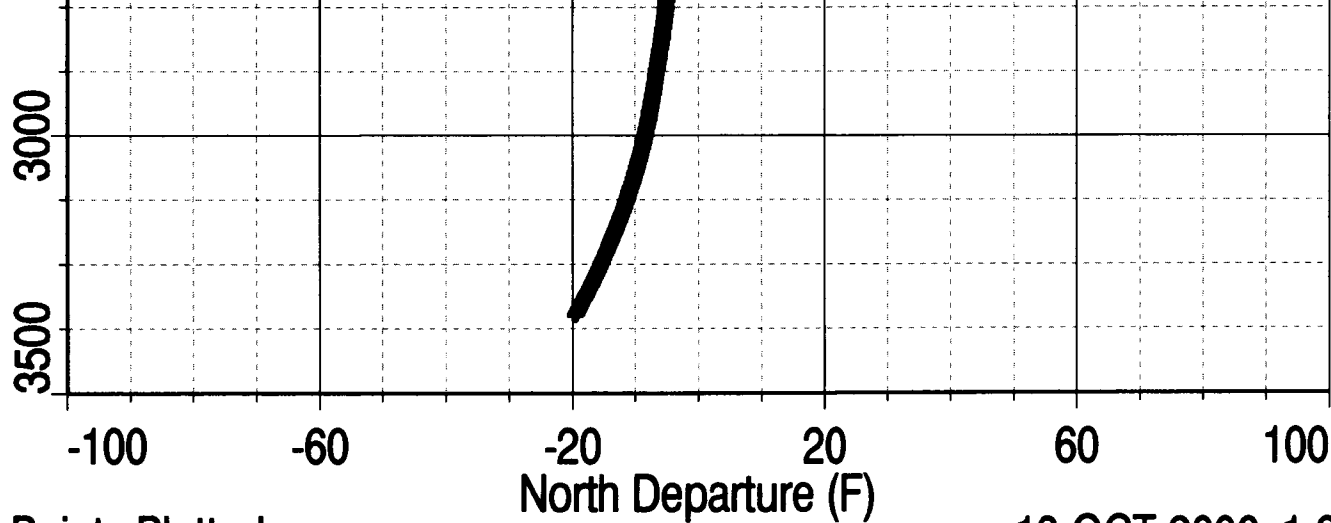


4270 Points Plotted

13-OCT-2006 1:26

Index: 3351.5 - 1141.0 FT

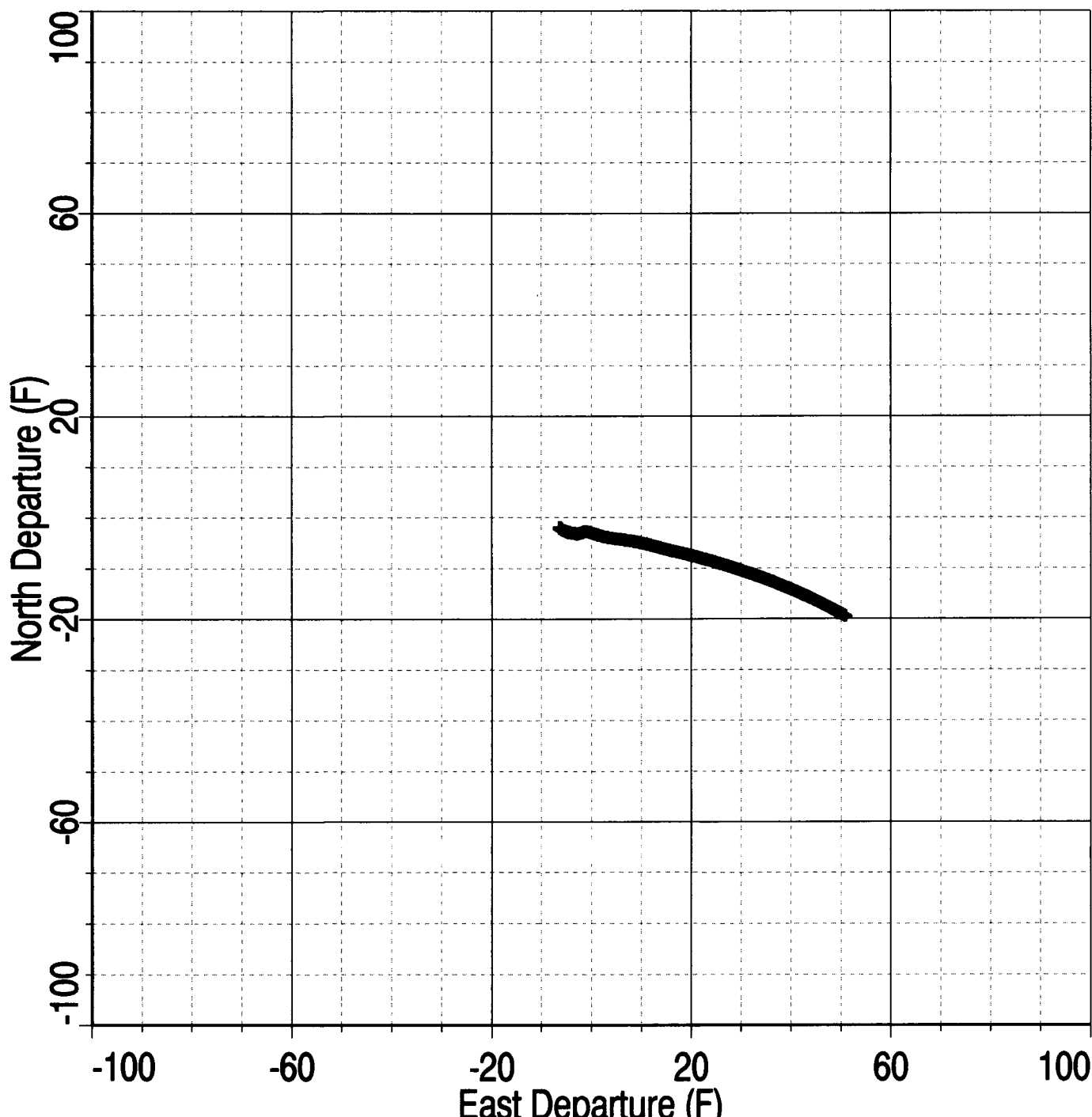




4270 Points Plotted

13-OCT-2006 1:26

Index: 3351.5 - 1141.0 FT



~VERSION INFORMATION

VERS. 2.0 :CWLS Log ASCII Standard - VERSION 2.0
 WRAP. NO :One Line per depth step
 PROD. Schlumberger :LAS Producer
 PROG. DLIS to ASCII 14CO-302 :LAS Program name and version
 CREA. 2006/10/13 01:27 :LAS Creation date {YYYY/MM/DD hh:mm}
 DLIS CREA. 2006-Oct-13 01:18 :DLIS Creation date and time {YYYY-MMM-DD hh:mm}
 SOURCE. DSI 031PUP.DLIS :DLIS File Name
 FILE-ID. DSI_031PUP :File Identification Number

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~WELL INFORMATION

#MNEM.UNIT	DATA	DESCRIPTION
STRT .F	3350.0	:START DEPTH
STOP .F	1150.0	:STOP DEPTH
STEP .F	-50.0	:STEP
NULL .	-999.25	:NULL VALUE
COMP .	CHESAPEAKE APPALACHIA L.L.C.	:COMPANY
WELL .	ALTMAN 1	:WELL
FLD .	VICTORY	:FIELD
LOC .	LATITUDE 39.73 N	:LOCATION
CNTY .	MARSHALL	:COUNTY
STAT .	WEST VIRGINIA	:STATE
CTRY .		:COUNTRY
API .	47-051-01038	:API NUMBER
UWI .	47-051-01038	:UNIQUE WELL ID
DATE .	12-Oct-2006	:LOG DATE {DD-MMM-YYYY}
SRVC .	Schlumberger	:SERVICE COMPANY
LATI .DEG		:LATITUDE
LONG .DEG		:LONGITUDE
GDAT .		:GeoDetic Datum
SECT .	LIBERTY	:Section
RANG .	WILEYVILLE 7.5'	:Range
TOWN .	LYNN CAMP RUN	:Township

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~PARAMETER INFORMATION

#MNEM.UNIT	VALUE	DESCRIPTION
RUN .	1	:RUN NUMBER
PDAT .	GROUND LEVEL	:Permanent Datum
EPD .F	1471.000000	:Elevation of Permanent Datum above Mean Sea Level
EPD .F	1471.000000	:Elevation of tool zero above Mean Sea Level
LMF .	GROUND LEVEL	:Logging Measured From (Name of Logging Elevation Reference)
APD .F	16.000000	:Elevation of Depth Reference (LMF) above Permanent Datum

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~CURVE INFORMATION

#MNEM.UNIT	API CODE	DESCRIPTION
DEPT .F		:DEPTH (BOREHOLE) {F10.1}
ED .F		:East Departure {F13.4}

ND .F
HAZI .DEG
GR .GAPI

:North Departure {F13.4}
:Hole Azimuth {F13.4}
:Gamma Ray {F13.4}

~A

DEPT	ED	ND	HAZI	GR
3350.0	50.8961	-19.4271	116.9086	124.0946
3300.0	46.7672	-17.3304	113.7779	124.0946
3250.0	42.6628	-15.3444	111.4824	108.5790
3200.0	38.5366	-13.5737	110.0933	102.2716
3150.0	34.3687	-11.9792	108.2653	131.8047
3100.0	30.3839	-10.5766	106.9392	122.5425
3050.0	26.6791	-9.3883	104.7807	121.2856
3000.0	23.2308	-8.3834	103.8129	73.2864
2950.0	20.1109	-7.5830	103.6275	110.4666
2900.0	17.2757	-6.8907	104.8995	102.8338
2850.0	14.6867	-6.2406	104.6743	113.8764
2800.0	12.3444	-5.6138	102.1126	116.9422
2750.0	10.2882	-5.1058	99.3563	106.5096
2700.0	8.5249	-4.7521	98.2961	115.9039
2650.0	7.0138	-4.5362	97.2215	88.1521
2600.0	5.6602	-4.3429	99.8346	49.5250
2550.0	4.4650	-4.1776	94.0836	75.8271
2500.0	3.4050	-4.0132	107.1986	46.5805
2450.0	2.3525	-3.7929	106.0960	106.4297
2400.0	1.3326	-3.4937	106.2469	60.0475
2350.0	0.2534	-3.1751	105.9984	42.2376
2300.0	-0.6563	-2.9045	65.0313	111.2854
2250.0	-1.2418	-2.7972	75.5354	102.5502
2200.0	-1.8592	-3.0621	77.1955	102.5184
2150.0	-2.5378	-3.2374	95.0781	84.2814
2100.0	-2.9331	-3.2701	95.2530	123.8442
2050.0	-3.2420	-3.2049	64.8288	109.1643
2000.0	-3.4606	-3.1239	153.6886	59.4935
1950.0	-3.9003	-3.1169	111.0686	117.9290
1900.0	-4.0871	-3.1005	10.7257	107.8439
1850.0	-4.3818	-2.9004	140.4283	68.2046
1800.0	-4.6767	-2.9845	80.3993	32.0024
1750.0	-4.7714	-2.9679	142.5147	51.9591
1700.0	-5.1272	-2.8211	140.0951	99.9491
1650.0	-5.2657	-2.7435	72.7650	94.2629
1600.0	-5.2991	-2.6788	237.1463	58.4688
1550.0	-5.4918	-2.6123	85.7100	82.7772
1500.0	-5.4435	-2.5205	201.3000	62.7271
1450.0	-5.9468	-2.3387	82.2980	88.3699
1400.0	-5.9882	-2.3011	176.5184	109.7152
1350.0	-6.3311	-2.1164	278.7911	97.6668
1300.0	-6.2724	-1.9814	27.0603	63.2289
1250.0	-6.0610	-1.9981	183.2369	44.1359
1200.0	-6.0533	-1.9953	183.2369	68.6950
1150.0	-6.0533	-1.9953	183.2369	68.6950

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