Pages 25-243 of this report remain confidential under the terms of the Coal Act Regulation, Section 2(1), and have been removed from the public version.

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Teck

April 17, 2009

Mineral Titles
Ministry of Energy, Mines & Petroleum Resources
6th Floor, 1810 Blanshard Street
PO Box 9326 Stn Prov Govt
Victoria, BC
V8W 9N3

	TITLES DIVISION, MINERAL TITLES VICTORIA, 20
İ	APR 2 3 2009
	FILE NO.
L	LOG IN NO.

ATTN: Ms. Kim Stone, Coal Administrator

Dear Ms. Stone:

Please find enclosed one copy of the report entitled "Fording River Operations, Summary Report – 2008 Exploration Program."

I trust this submission will fulfill the requirements under the Coal Act and Coal Act Regulations.

Yours truly,

Barry F Musil P. Geo.

Senior Geologist, Supervisor

Fording River Operations | Teck Coal Limited

Phone: 250.865.5169 | cell: 250.425.5615 | fax: 250.865.5165

Email: barry.musil@teck.com

Fording River Operations

Summary Report

2008 Exploration Program

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 - iii) Deviation Logs(down hole survey)
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Statements of Author's Academic and Professional Qualifications

CERTIFICATE OF QUALIFIED PERSON

Name: Barry Musil, P.Geo.

Company: Teck Coal Limited

Address: Fording River Operations

P.O. Box 100 Elkford, BC VOB IHO

Phone: (250)865-5169

I, Barry Musil, P.Geo, am employed as a Senior Geologist, Supervisor at Fording River Operations. This certificate applies to the report titled "Fording River Operations, Summary Report, 2008 Exploration Program". I graduated from the University of British Columbia with a Bachelor of Science Degree in Geology, 1984. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (# 19361). Since 1986 I have been involved with coal mining projects at Fording River Operations. As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101).

Barry F. Musil, P.Geo.

by the

SCHEDULE C

PROVINCE OF BRITISH COLUMBIA

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES TITLE PAGE OF ASSESSMENT REPORT

GENERAL NATURE OF WORK	TOTAL COST
Exploration	\$3,414,539.00
Author of Landsman Signa	ture (s)
B. Musil (P. Geo.)	
Date Report Filed Yea	ur of Work2008
Property Name <u>Fording River Operations</u>	
Coal Type (if applicable) Medium to High V	olatile Bituminous
Mining Division <u>Fort Steele</u> Longitude _ Latitude _	114° 52' 50°12'
Coal License Numbers; Coal Leases; Freehold	BC Coal Lease #16 Lot #4588
	Coal License, #327991
Owner (s) (1) Teck Coal Limited	
PO Box 100, Elkford, BC, V0b 1H0	
Operator (s) (a) Same	
References to Previous Work Annual Assessment Reports Since 1970	

Fording River Operations

Summary Report

2008 Exploration Program

I. Introduction

1. General Geography and History

The Fording River Coal property is located in the Fording River and Upper Elk Valleys, approximately 25 kilometers north of Elkford, BC. Access is by paved road north from Elkford along the Fording River Valley, or north along the Elk River Valley via the Forestry Service gravel road or the Kan-Elk Powerline road.

The Fording River minesite is situated within the front range of the southern Canadian Rocky Mountains. At least ten major coal seams, generally greater than four meters thick, are contained in the Mist Mountain Formation of the Kootenay Group.

The Elk River portion of the property was actively explored by the Canadian Pacific Railway Company in the period 1902-1908. Until 1947, the property was comprised of 10,276 hectares in 40 Crown Granted Lots. In that year, the holdings were reduced to 2,979 hectares in 15 Crown Granted Lots. In 1967 and 1968, Canadian Pacific Oil and Gas reacquired part of the coal lands which had been abandoned in 1947. An additional nine Coal Licenses located at the south end of the property were acquired in 2001. At the present time, the Fording River Property consists of 22,635 hectares, held on seven Coal Leases, 9 Coal Licenses, and 15 Crown Granted Lots.

Mining operations, which commenced in 1971, have produced more than 205 million tonnes of clean metallurgical and thermal coal for markets in North and South America, Africa, Europe, and Asia.

Reference:

i) Illustration No. 1A: Index Map - Coal Properties

2. Geology

i) Stratigraphy

The general stratigraphic succession on the Fording River Property is summarized in the following table:

Table 1 - Fording River Stratigraphy

Period		Litho-	Stratigraphic Units	Principal Rock Types		
Recent				Colluvium		
Quaternary				Clay, silt, sand, gravel, cobbles		
Lower Cretaceous		Blairmore Group		Massive bedded sandstones and		
	<u> </u>			conglomerates		
		Elk Formation		Sandstone, siltstone, shale, mudstones,		
	Ιĸ			chert pebble conglomerate, minor coal		
	0	Mist	Mountain Formation	Sandstone, siltstone, shale, mudstones,		
	0			thick coal seams		
	T		Moose Mountain	Medium to coarse-grained quartz-chert		
Lower	E	M F	Member	sandstone		
Cretaceous	N	0 0		,		
to	A	R R				
Upper	Y	R M				
Jurassic	ĺ	I A	Weary Ridge	Fine to coarse-grained, slight ferruginous		
	G	ST	Member	quartz-chert sandstone		
	R	s i				
	0	E O				
	U	Y N				
	P					
Jurassic		Fe	rnie Formation	Shale, siltstone, fine-grained sandstone		
Triassic		Spray River Formation		Sandy shale, shale quartzite		
		Rocky M	Mountain Formation	Quartzite		
Mississippian		- 1	Rundle Group	Limestone		

The oldest rocks present on the Fording River property are the Rundle Group limestone, located on the west bank of the Fording River, near the southern property boundary. They are in faulted contact with the Kootenay Group to the west, and unconformable contact with Rocky Mountain Formation quartzites to the north. The latter are best exposed on the eastern slope of the Brownie Creek valley.

The Fernie Formation shales occur throughout the area, generally along the sides of the valleys on the lower flanks of the mountains. The shales are recessive and, generally poorly exposed. However there are some good exposures of Fernie Formation strata on the lower western slopes of Eagle Mountain in some creek drainages. The Fernie Formation is in conformable contact with the Morrissey through the "Passage Beds," which are a transitional zone from marine to non-marine sedimentation.

The Morrissey Formation, which is the "basal sandstone" of the Kootenay Group, is a prominent cliff-forming marker horizon in many locations. On the Fording River property, the top of the Moose Mountain member (Morrissey Formation) is in sharp contact with 010 seam, the lowermost bed of the Mist Mountain Formation.

The Mist Mountain Formation contains all of the economic coal seams, and is the most widely occurring formation on the Fording River property. This economically important formation is an interbedded sequence of sandstones, siltstones, silty shales, mudstones, and medium to high volatile bituminous coal seams. The volatile content of the coal increases up section, with decreasing rank. Lenticular sandstones comprise about 1/3 of the Mist Mountain sediments at Fording River, but very few laterally extensive sandstone beds exist.

The sandstone above and below seam 040 and above 090, are the most persistent units, and are often cliff-forming marker horizons.

The Mist Mountain Formation is generally overlain conformably by strata of the Elk Formation. On the Fording property, this formation is commonly a succession of sandstones, siltstones, shales, mudstones, chert pebble conglomerates, and sporadic, thin, high volatile bituminous coal seams. The coal seams are characterized by high alginate content and referred to as "Needle" coal. The Elk Formation is observed near the tops of the mountains, mainly on the east side of the Elk Valley on the Greenhills Range, and northward to the Mount Tuxford areas.

The top of the Elk Formation marks the upper boundary of the Kootenay Group, which is uncomformably overlain by the basal member of the Blairmore Group. This thick

bedded, cliff-forming sandstone and conglomerate unit is observed on the upper slopes of Mount Tuxford.

ii) Structure

Subsequent to deposition, the sediments were involved in the mountain building movements of the late Cretaceous to early Tertiary Laramide orogeny. The major structural features of the Fording River property are the north-south trending synclines with near horizontal to steep westerly dipping thrust faults, and a few high angle normal faults. Some of the thrust faults were probably folded late in the tectonic cycle.

The formation of the major fold structures began early in the tectonic cycle. In the current mining area, two asymmetric synclines are evident: the Greenhills Syncline to the west, and the Alexander Creek Syncline to the east of the Fording River.

The thrust faulting (ie: the Ewin Pass and Brownie Ridge Thrusts), was probably contemporaneous with the later stages of folding. The intervening anticline was subsequently faulted (Erickson Fault), then eroded.

The Alexander Creek Syncline can be traced from the southern property boundary on Castle Mountain to the northern end of the property on Weary Ridge. The strata of the west limb, on the west face of Eagle Mountain, dip easterly at 20 to 25°, decreasing gradually to zero as the axis is approached. The east limb, however, attains a 20° westerly dip within a much shorter (500m) distance of the axis. This asymmetry is possibly due, at least in part, to the influence of the Ewin Pass Thrust which subcrops 600 to 800 meters east of the synclinal axis.

Further to the east, on Brownie Ridge, the strata dip westerly at a mean dip of 42°. The Brownie Ridge Thrust, which subcrops near the crest of the ridge, probably contributes to this steepening.

Within the mining area, the axis of the Alexander Creek Syncline plunges to the north at an average of 4° . Turnbull Mountain exhibits a localized series of en echelon fold structure, plunging both to the north and to the south. These subsidiary folds may be

related to thrust faulting. From the south end of Mount Tuxford, the synclinal axis continues north-northwest along the base of Mount Veits and into the Elk River Valley near Aldridge Creek.

On Mount Tuxford, the beds exposed are those of the Elk Formation and the overlying (non-coal bearing) Cadomin Formation. The area has not been extensively explored. The stratigraphic sequence of the east limb, in the more extensively explored Mist Mountain strata near Aldridge Creek (Elco property), closely resembles the east limb strata found on Henretta Ridge, ten kilometers to the south.

On the northwest corner of Eagle Mountain, the lower Kootenay-upper Fernie section is the locus for a zone of near horizontal thrust faulting. The effect is to cause a double repetition of the lower coal seams and basal sandstone on the west synclinal limb. This fault zone is synclinal in form and continuous with the Ewin Pass Thrust zone found in the east limb.

The Greenhills Syncline in the mining area is essentially a "mirror-image" of the Alexander Creek structure. The east limb of the asymmetric syncline dips westerly at 15 to 25°, except in areas near the Erickson Fault, where 45 to 55° dips are common. The west limb exhibits much steeper dips, commonly in the 35 to 45° range. The Greenhills Syncline plunges northward (340 to 350°), at less than 5°, and then appears to die out to the north in the area of the Osborne Creek Depression.

The Erickson Fault, which locally runs along the base of the Greenhills Range, west of the Fording River, is one of the major regional faults. From south to north, this westerly dipping (40 to 70°) normal fault, brings Mist Mountain strata progressively into contact with Rundle, Rock Mountain, Spray River, Fernie, and Morrissey strata. The downthrown block is to the west.

Near the south end of Lake Mountain, the Erickson Faults begins to "splay" into two zones. The main fault runs along the eastern margin of Lake Mountain, and the subsidiary fault runs to the west and appears to "die out" northward. The steep northward dip exhibited in the Lake Mountain strata could be due to influence from

these flanking "splays" of the fault. The flat lying region to the north of Lake Mountain (Osborne Creek Depression area) is completely void of outcrop, and the Erickson Fault has not been traced either through or to the north of this area.

Reference:

i) Illustration No. 1B: General Geology Map

3. Summary of Work Done in 2008

A total of 44 reverse circulation drill holes were completed for 13,854 metres. Rotary drilling was done by Boart Longyear, SDS Division (Calgary, AB) using two Ingersol Rand TH100 truck mounted rigs. All holes were geophysically logged through the rods using the gamma-neutron method. Holes that remained open after the rods were pulled were logged for down hole deviation, and for gamma-density. Geophysical logging was done by Century Wireline (Penhold, AB).

Coal seams encountered by rotary drilling were sampled in 0.5m intervals. Representative composite samples for each coal seam encountered in the hole were prepared at Fording River Operation's process plant laboratory. Each seam composite was tested for proximate analysis, % Sulphur, and Free Swelling Index. Samples from selected seam composites were sent to David E. Pearson and Associates (Victoria, B.C.) for petrographic analysis.

Bulk sampling was also undertaken using the Large Diameter Reverse Flood (LDRF) method. The bulk sampling was done by Northwest Sequoia Drilling Ltd. (Crossfield AB). Seven sites (approximately 21 holes) were sampled. In all 15 bulk samples were taken for a total of approximately 55 tonnes. The individual seam bulk samples were taken to Teck Coal's Coal Mountain Operation and processed in the pilot plant to obtain a clean coal sample. Raw proximate analysis was done prior to processing the coal. The clean sample was sent to Canmet Laboratories (Ottawa, ON) for analysis. At Canmet

carbonization was achieved using a Carbolite Pilot Coke Oven. Full coke analysis was carried out on the product. Prior to carbonization a representative clean coal sample was split off and the following tests were conducted: proximate analysis, rheological / thermoplastic properties, mineral ash analysis, petrography (Pearson), and sizing. Preliminary results are encouraging, final results are still pending at this time.

Fording environmental staff laid out the access roads and drillsite locations. Prelogging was carried out by Trucut Logging (Sparwood BC). Road and drillsite construction was done by Barrie MacKay Contracting Ltd (Cranbrook BC). Fording staff surveyors provided the required survey control and drillhole pickups.

The following table shows the drillhole locations with respect to Coal Lease and License boundaries:

Table 2 - Drillhole Locations

<u>Lease/License</u>	<u>Drillholes</u>
L4588 (freehold)	RH # 2956, 2953, 2967, 2948, 2946, BK-0005
BC Coal Lease #16	RH # 2961, 2958, 2954, 2950, 2951, 2945, 2944, 2942, 2941, 2939, 2938, 2937, 2935, 2931, 2930, 2929, 2928, 2927, 2926, 2925, 2924, 2922, 2918, 2917, 2916, 2920, 2921, BK-0001, 0002, 0003, 0004, 0006
Coal License #327991	RH # 2986, 2984, 2981, 2985, 2983, 2982, 2980, 2978, 2971, 2970, 2964, 2969, BK-0007

Geological field mapping was conducted but not completed due to inclement fall weather by Fording staff geologists on Castle Mountain. This work is to be completed in the summer of 2009.

Reference:

II. Individual Area Programs

1. Castle Mountain

i) Objective

A recent economic evaluation of the mining potential on the southwest flank of Castle Mountain indicated a good potential for large scale mining in this area. Prior to 2007, approximately 50% of the project area had been drilled to a density sufficient for inclusion in reserves.

The objective of the 2008 drilling, bulk sampling, and field mapping program was to provide additional seam location, thickness, and quality data above what was achieved with the 2007 drilling and mapping program. The primary goal was to achieve data point information at a density sufficient to upgrade this area to reserves status. This can be accomplished in two to four years, depending on the size of subsequent programs.

ii) Summary of Work Done

As above 44 reverse circulation rotary drillholes were completed in 2008 for a total of 13,854 metres. Some seam exposures on new access roads were mapped. However, the majority of mapping and seam exposure sampling was not completed due to a shortage of Fording River staff, and early inclement fall weather. Exposed seams will be sampled and analyzed for Ro max. Mapping will be completed in the summer 2009.

All holes were geophysically logged through drill rods using the gamma-neutron method. Holes that remained open after the drill rods were pulled, were open hole logged for gamma-density and hole deviation.

As above bulk sampling was also undertaken using the LDRF method. Seven sites (approximately 21 holes) were sampled. In all 15 bulk samples were taken for a total of approximately 55 tonnes. These samples subsequently underwent full coke analysis,

proximate analysis, mineral ash analysis, rheological / thermoplastic properties, and petrography.

iii) Results and Conclusions

The 2008 drilling program concentrated on the north, central and southern portions of Castle Mountain biased to the west.

The northern project area (145900N - 147600N) included thirteen reverse circulation drill holes and intersected the entire section from 160 seam down to 010 seam and basal sandstone. There were also two LDRF bulk sample sites in North Castle. BK-0001 which sampled 070, 072, 051, and 040 seams, and BK-0002 which sampled 091/090, 071, and 070 seams. The central/southern portion of the program included 31 reverse circulation drillholes and was a continuation of the 2007 drill program intersecting primarily seams 140 to 054. As in previous holes seams, 140, 130, 110, 071, 070, 051, 050, and 054 are the only seams that maintain a thickness exceeding 5 metres with reasonable continuity. Seam 070 is exceptionally thick and continuous in the north central area. A drillhole density of 200m has now been achieved in some of the reserve area. The primary goal in subsequent programs on Castle will be to achieve better than 200m density throughout the entire reserve area. There were also five LDRF bulk sample sites included in the central/southern area. BK-0003 sampled 050 seam, BK-0004 sampled 146, 130, 111, and 110 seams, BK-0005 sampled 110 seam, BK-0006 sampled 160, and 150 seams, and BK-0007 sampled 140 seam.

The project area is structurally dominated by the Alexander Creek syncline; primarily the west limb. Several minor thrust faults affect the area resulting in localized repetitions of many of the coal seams. The regional Ewin Pass thrust fault forms the eastern boundary of the project area.

Results from the 2008 drilling program have been incorporated into the Castle Mountain 3D Block Model. The 2007 and 2008 programs necessitated significant structural revisions to the 2006 geological model. Economic evaluation is currently

underway and will be complete by the summer of 2009. It is expected to differ notably from previous evaluations.

2. Bare Mountain

i) Objective

A regional study conducted in 2000 combined with data from 32 reverse circulation rotary drillholes completed since 2001 indicated some potential for large scale open pit mining exists on Bare Mountain.

The objective of the 2007 exploration program was to provide additional seam location, thickness, and quality information required to update a 3D block model for the northern portion of Bare Mountain. The three most southerly holes drilled in 2006 did not show a southward extension of any mining potential.

ii) Summary of Work Done

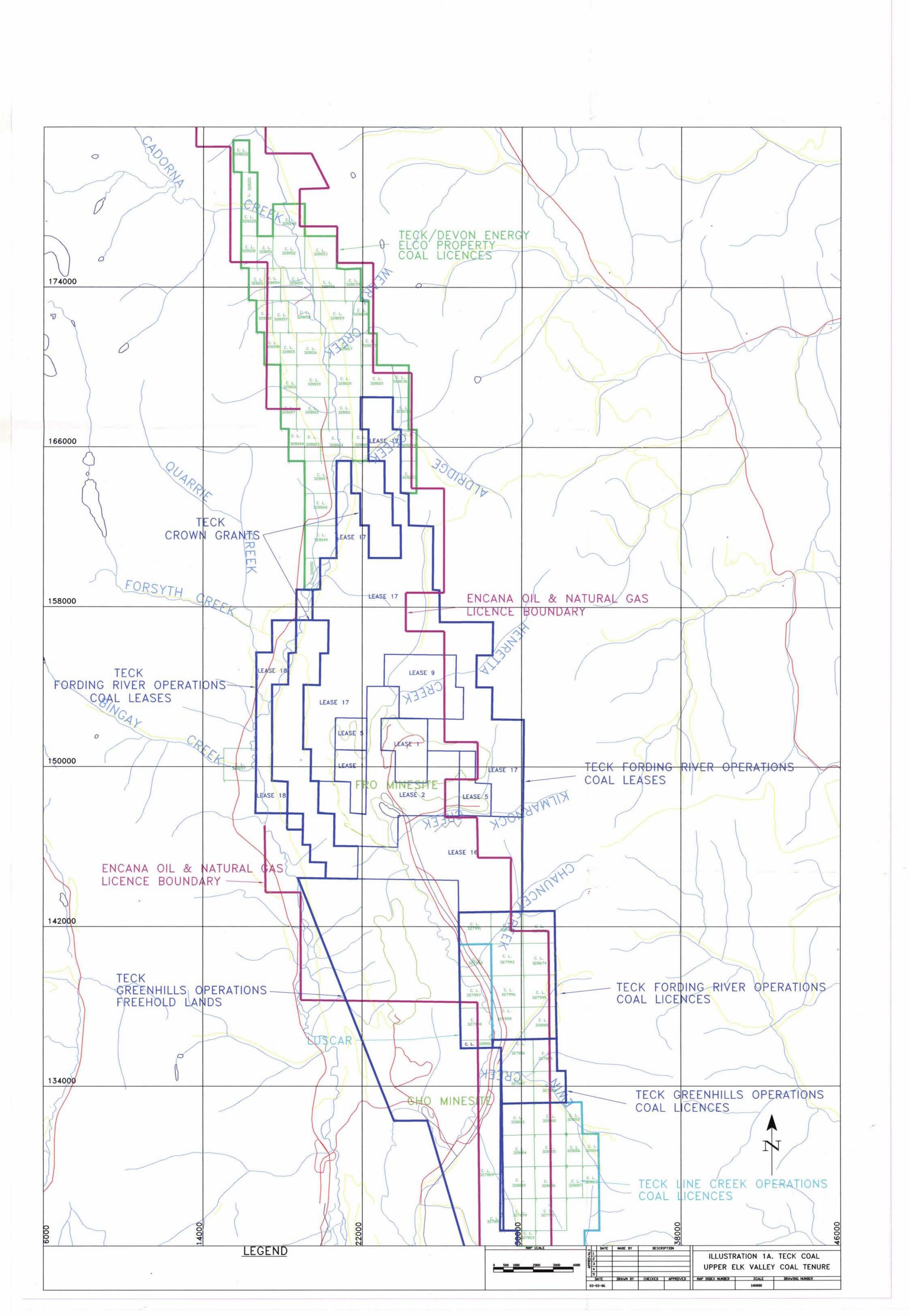
No field work was done on Bare Mountain in 2008. Bare Mountain is included in this report as the analysis was not complete at the time the 2007 Report was submitted.

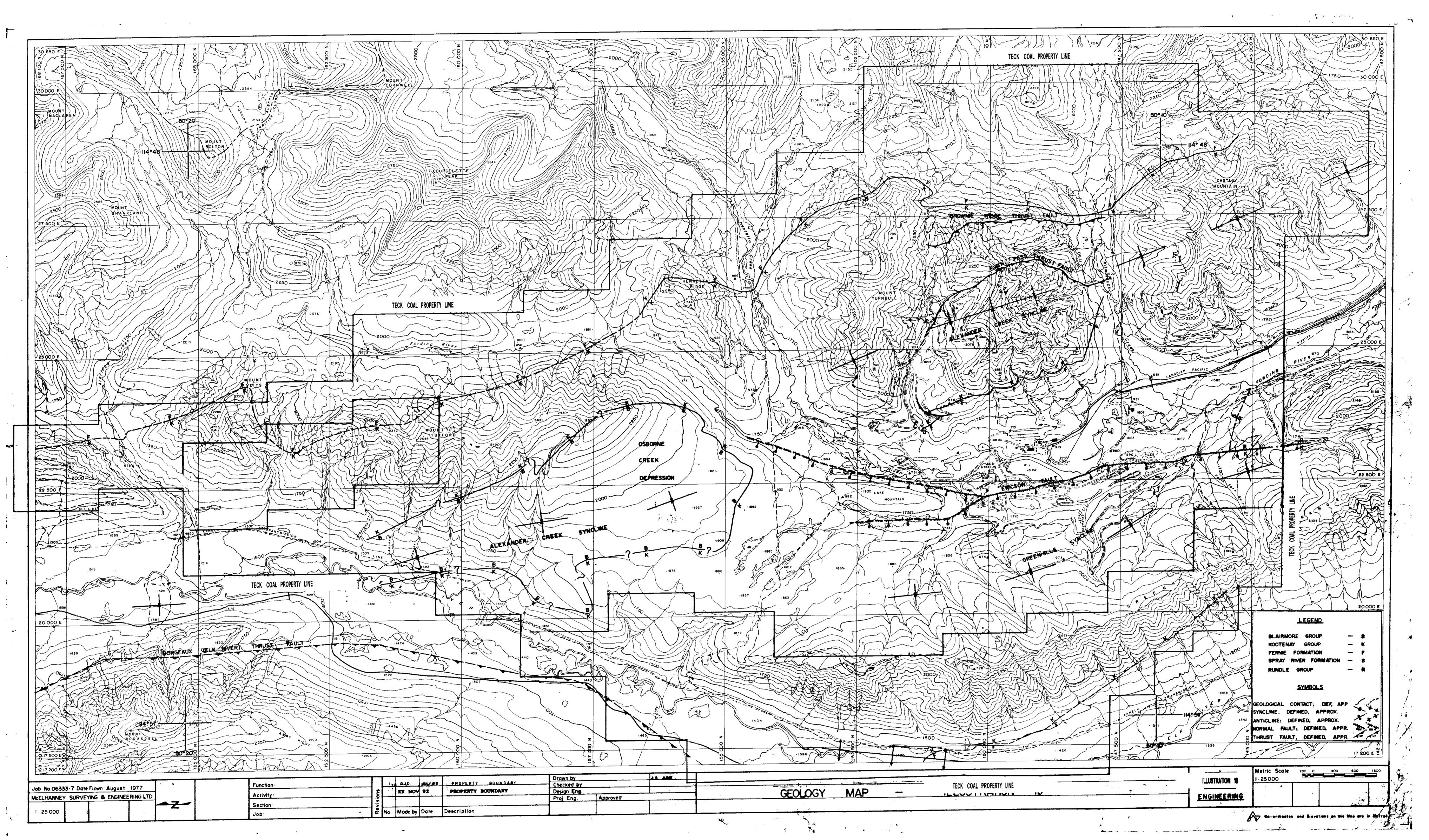
iii) Results and Conclusions

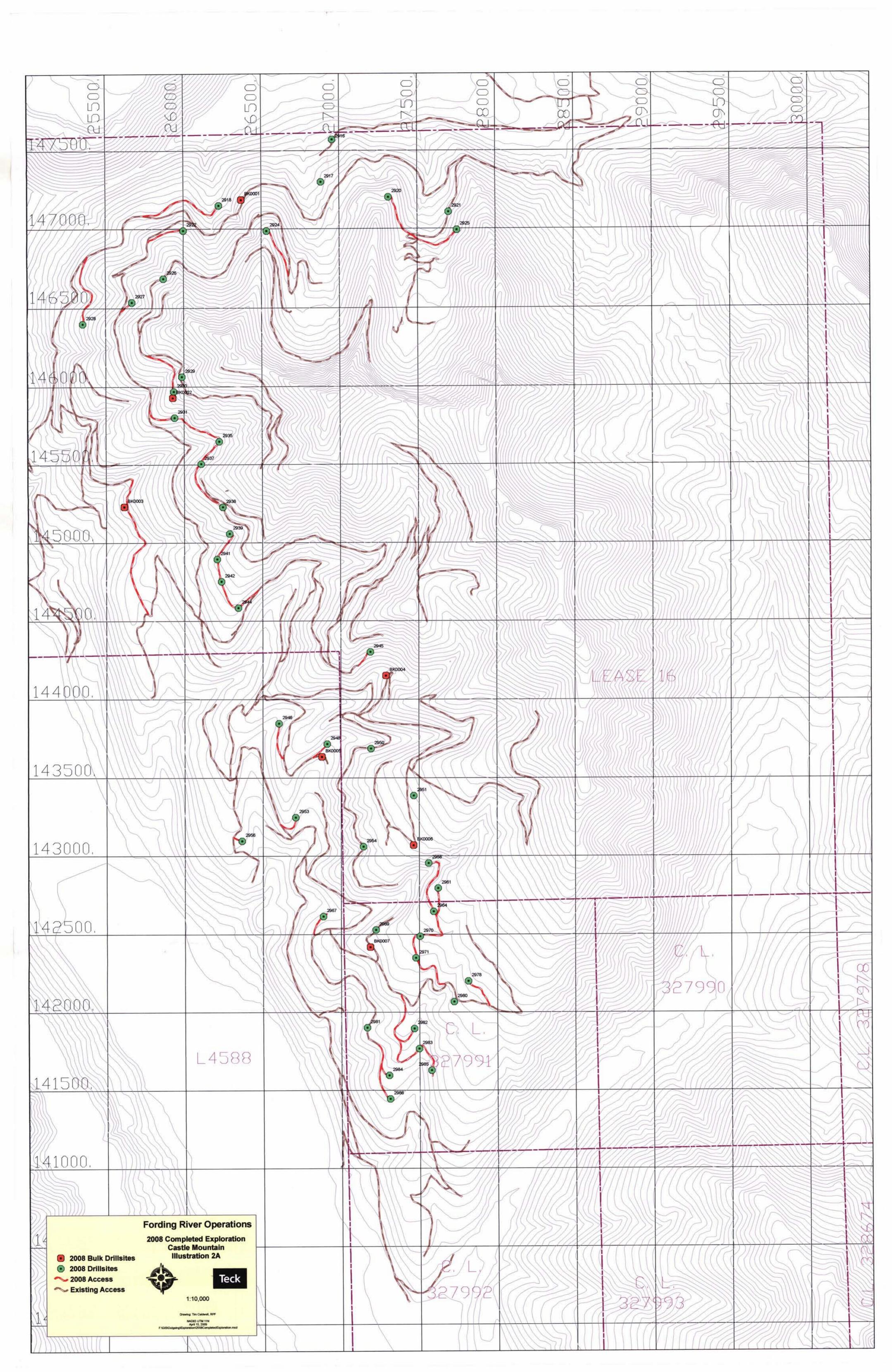
The 2007 drilling and field mapping program concentrated on the north and northwest portions of Bare Mountain. The area is characterized by very steep westerly dipping bedding (45 to 75 degrees) on the east limb of the Alexander Creek syncline; beneath the Ewin Pass thrust fault. Several minor thrust faults also affect the area; the eastern most of which is likely the southern extension of the Brownie Ridge thrust seen on Eagle Mountain.

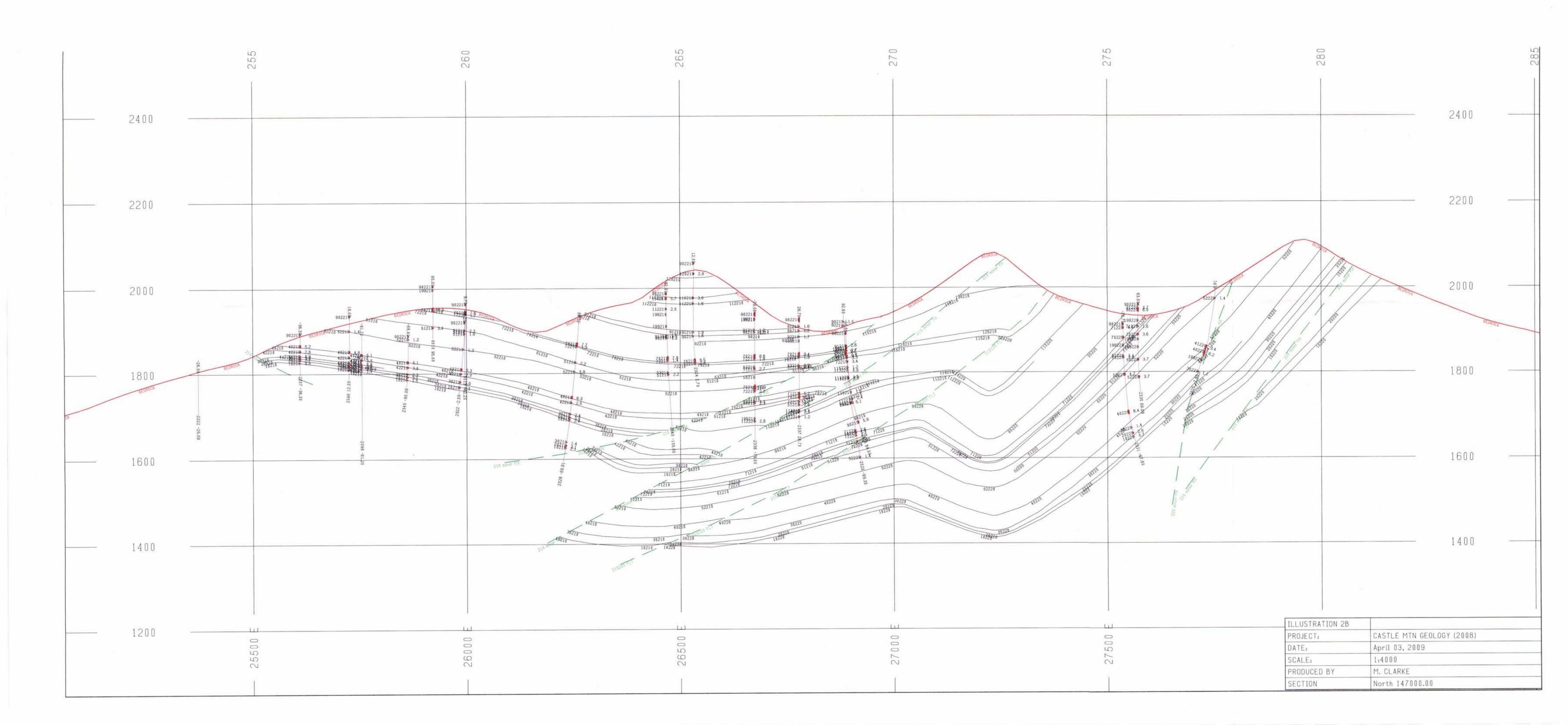
The entire sequence of Mist Mountain Formation was intersected in several of the deeper holes, with Elk Formation 200m thick in RH #2849 (drilled 2006). The Mist Mountain Formation on Bare Mountain contains three dominant coal seams (050, 070, and 110) which are consistently greater than ten meters in thickness, and often significantly thicker. The remaining seams are inconsistent but often thinner than five metres.

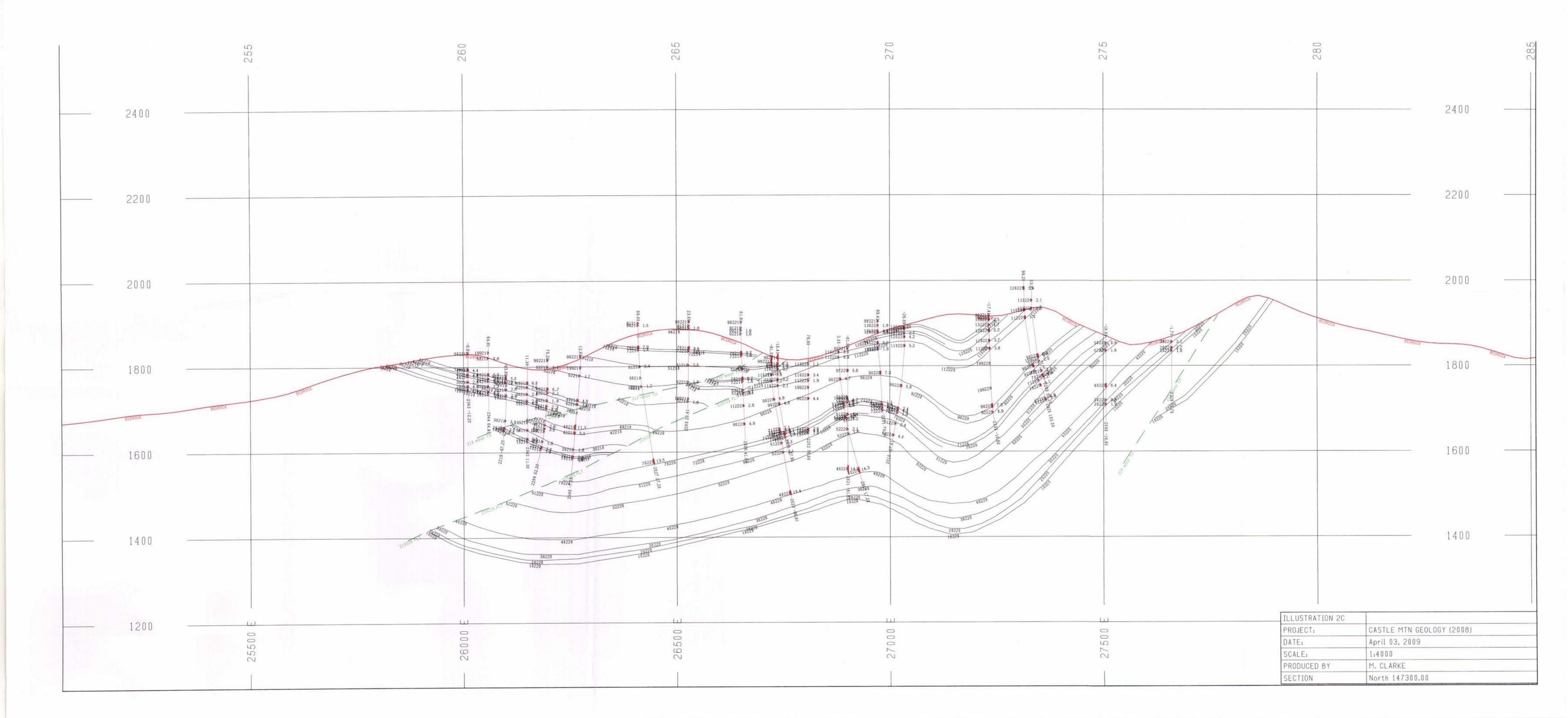
An economic analysis to show economic feasibility for open pit mining using 2007 costs and revenue has shown North Bare Mountain to be feasible when mined in conjunction with South Castle.









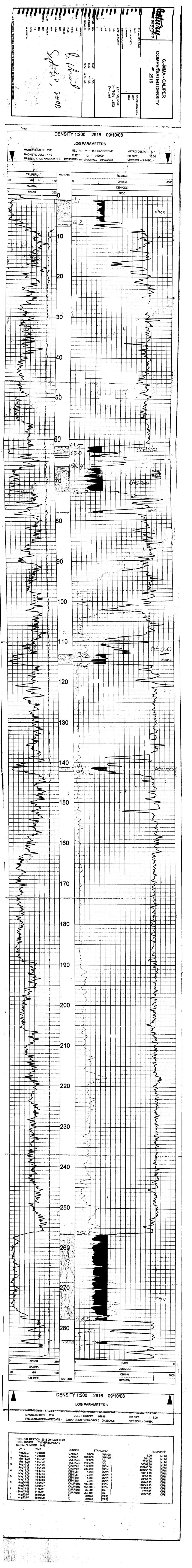


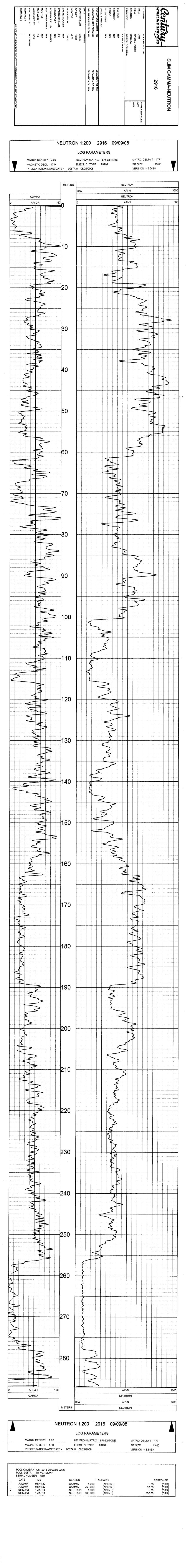
i) Hole collar survey

DH	2938	26244.798	145229.510	2023.394 0.207	0.165	1.400
DH	2941	26208.822	144895.129	1965.655 0.020	0.027	1.400
DH	2942	26235.533	144751.797	1951.469 0.316	0.546	1.400
DH	2916	26954.680	147571.382	1794.251 0.020	0.020	1.400
				1852.031 0.030	0.036	1.400
DH	2917	26880.767	147298.001			
DH	2918	26225.044	147149.149	1855,286 0.021	0.016	1.450
			147201.198	1998.032 0.018	0.018	1.400
DH	2920	27314.524				
DH	2921	27698.683	147108.003	1935.862 0.024	0.050	1.400
		25998.854	146990.297	1964.179 0.019	0.014	1.450
DH	2922					
DH	2924	26532.196	146987.930	2058.994 0.021	0.013	1.400
DH	2925	27751.808	146993.015	1995.456 0.024	0.047	1.400
DH	2926	25868.887	146687.246	2077.253 0.034	0.039	1.400
DH	2927	25666.662	146537.482	2015.875 0.020	0.015	1.400
DH	2927	25666.895	146537.351	2015.993 0.023	0.023	1.450
DH	2928	25352.712	146400.157	1916.870 0.029	0.036	1.450
					0.019	1.400
DH	2929	25985.536	146063.727	2145.041 0.023		
DH	2930	25933.354	145969.867	2095.449 0.058	0.103	1.400
					0.033	1.400
DH	2931	25937.993	145800.777			
DH	2935	26224.983	145648.666	2027.730 0.020	0.015	1.400
		26224.140	145648.942	2028.621 0.549	0.307	2.050
DH	2935					
DH	2937	26107.631	145505.473	2018.441 0.456	0.260	2.050
DH	2937	26107.817	145505.539	2017.632 0.034	0.029	2.050
DH	2939	26288.439	145058.874	1980.492 0.022	0.024	1.400
DH	2941	26209.162	144895.329	1965.696 0.048	0.046	2.050
DH	2942	26235.098	144752.180	1951.529 0.053	0.059	2.050
DH	2942	26234.908	144751.954	1951.449 0.035	0.039	2.050
					0.023	1.400
ĎΉ	2944	26343.281	144585.593	1936.321 0.020		
DH	2945	27188.005	144303.339	2017.010 0.053	0.043	1.400
			143849.091	1823.567 0.028	0.056	1.400
DH	2946	26602.277				
DH	2948	26910.858	143716.742	1835.611 0.022	0.032	1.400
DH	2950	27191.839	143686.276	1891.482 1.751	0.872	1.400
DH	2950	27191.755	143686.901	1891.241 0 <i>.</i> 035	0.024	2.050
DH	2951	27464.678	143387.190	1995.983 0.027	0.026	1.400
					0.019	2.050
DΉ	2951	27464.349	143387.092	1996.070 0.022		
DH	2954	27141.439	143059.974	1861.455 0.409	0.976	1.400
			143097.885	1746.277 0.024	0.027	1.400
DH	2956	26368.500				
DH	2958	27558.510	142955.796	1905.971 0.0 1 8	0.016	1.400
		27619.500	142795.940	1939.354 0.028	0.057	1.400
DH	2961					
DH	2964	27590.588	142647.174	1922.054 0.024	0.015	1.400
DH	2967	26884.532	142616.082	1746.894 0.277	0.271	1.400
DH	2953	26708.295	143248.467	1782.686 0.054	0.067	1.400
DH	2969	27221.060	142529.388	1841.713 0.022	0.021	1.400
				1893.244 0.025	0.022	1.400
DH	2970	27503.750	142487.757			
DH	2971	27477.174	142343.016	1874.898 0.027	0.018	1.400
		27812.703	142200.187	1896.687 0.050	0.036	1.400
DH	2978					
DH	2980	27721.067	142067.852	1870 <i>.</i> 671 0.02 1	0.016	1.400
DH	2981	27163.356	141903.126	1754.186 0.031	0.025	1.400
	2901					
${ t ELEV}$		27439.045	141997.909	1817.735 0.032	0.029	1.400
DH	2982	27460.711	141891.942	1800.883 0.044	0.070	1.400
DH	2983	27496.227	141767.418	1768.874 0.030	0.047	1.400
DH	2984	27303.657	141596.203	1757.725 0.020	0.020	1.400
DH	2983	27496.255	141767.536	1768.939 0.031	0.048	1.400
DH	2985	27575.491	141628.725	1773.796 0.034	0.028	1.400
DH	2984	27303.598	141596.298	1757.697 0.027	0.019	1.400
DH	2986	27309.567	141445.788	1729.095 0.017	0.014	1.400
DH	BK0001	26369.697	147185.896	1908.268 0.041	0.059	1.400
DH	BK0002	25927.253	145922.819	2095.989 0.022	0.025	1.400
DH	BK0002	25927.086	145925.521	2095.813 0.034	0.061	1.400
				2095.715 0.034	0.061	1.400
DH	BK0002	25926.645	145928.510			
DH	bk0004	27287.910	144152.299	1961.264 0.028	0.028	1.400
	bk0006	27464.700	143067.602	1955.768 0.367	0.366	1.400
DН						
DH	bk0006	27463.047	143069.767	1955.828 0.353	0.355	1.400
DH	bk0003	25610.817	145236.237	1820.265 0.034	0.060	1.400
DĦ	bk0003	25612.082	145233.419	1820.396 0.034	0.060	1.400
DH	bk0007	27192.964	142412.437	1826.181 0.022	0.021	1.400
DH	bk0007	27189.263	142415.675	1826.251 0.023	0.022	1.400
DH	bk0007	27185.984	142418.553	1826.291 0.023	0.022	1.400
				1814.581 0.022	0.047	1.400
DH	bk0005	26876.720	143635.057			
DH	2922	25998.828	146990.603	1964.109 0.017	0.012	1.400
						

Pages 25-243 of this report remain confidential under the terms of the Coal Act Regulation, Section 2(1), and have been removed from the public version.

http://www.bclaws.ca/EPLibraries/bclaws new/document/ID/freeside/10 251 2004





PLAN VIEW COMPU-LOG DEVIATION

CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

HOLE ID: 2916

DATE OF LOG: 09/10/08

PROBE: 9055A

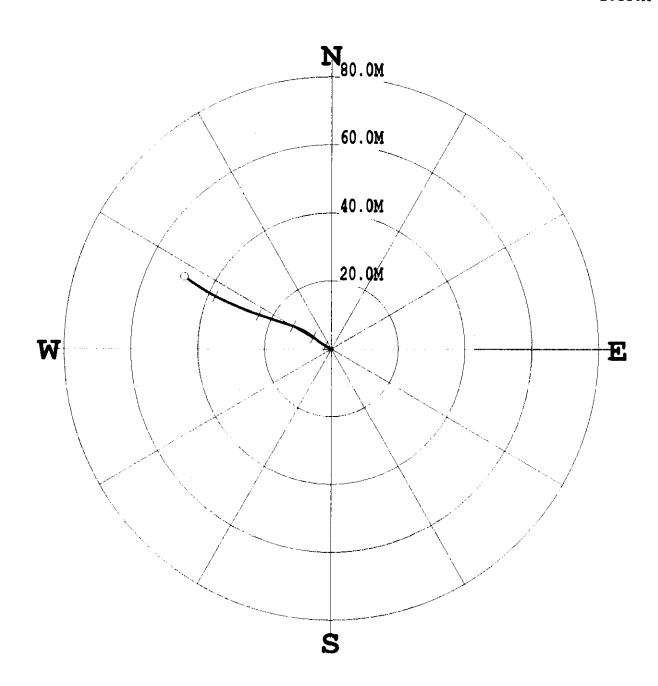
MAG DECL: 17.0

SCALE: 10 M/CM

TRUE DEPTH: 281.85 M

AZIMUTH: 295.8 DISTANCE: 48.7 M + = 50 M INCR

= BOTTOM OF HOLE



* * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

: ELK VALLEY COAL

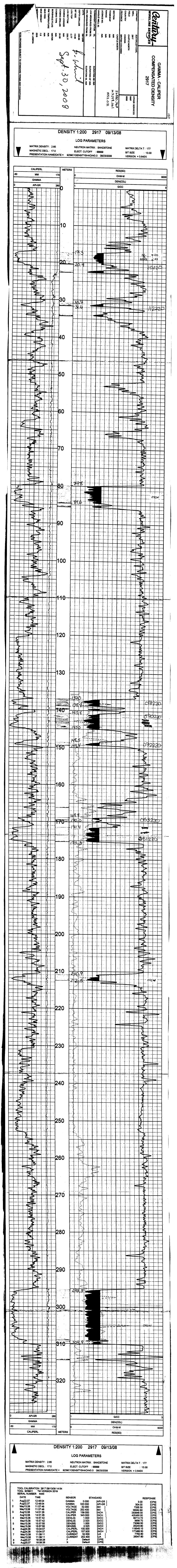
FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/10/08 DATA FROM : N/A MAG. DECL. : 17.000 PROBE : 9055A 72 DEPTH UNITS : METERS LOG: 2916_09-10-08_12-32_9055A_.02_14.00_287.52_DEVI.log CABLE DEPTH TRUE DEPTH NORTH DEV. EAST DEV. DISTANCE AZIMUTH SANG SANGB 14.02 14.02 0.00 -0.00 1.4 298.8 0.0 298.8 2.6 301.4 3.1 298.5 24.00 23.99 0.20 -0.35 0.4 299.4 34.00 33.98 299.8 0.46 -0.81 0.9 44.00 43.96 0.77 -1.35 1.6 299.7 3.7 299.1 54.00 53.93 1.12 -1.98 299.6 4.4 301.0 4.9 302.3 2.3 64.00 -2.67 63.90 1.53 3.1 299.8 74.00 73.86 1.99 ~3.39 3.9 300.4 5.0 307.7 4.8 301.6 5.4 308.5 -4.84 94.00 93.78 3.14 5.8 303.0 5.4 310.0 104.00 103.72 -5.66 3.77 6.8 303.6 6.1 306.9 114.00 113.66 4.41 -6.56 6.6 7.9 303.9 302.5 -7.59 124.00 123.59 5.05 9.1 303.6 7.4 301.0 134.00 133.49 5.67 -8.84 10.5 302.7 8.7 295.8 144.00 143.36 6.31 301.4 -10.33 12.1 9.7 292.1 154.00 153.20 6.93 -11.98 13.8 285.2 300.1 10.5 164.00 -13.86 163.00 7.54 15.8 298.5 11.5 287.1 174.00 172.80 8.14 -15.78 17.8 297.3 287.6 11.8 184.00 182.57 8.77 -17.79 12.2 19.8 296.2 288.0 194.00 192.33 9.47 -19.88 22.0 295.5 13.4 288.9 * 204.00 202.04 -22.14 10.22 24.4 294.8 14.0 288.8 214.00 211.74 11.01 -24.44 26.8 294.2 14.4 290.1 224.00 221.42 11.90 -26.80 29.3 293.9 15.0 292.7 234.00 231.04 12.96 -29.31 32.1 293.8 16.5 292.5 244.00 35.0 240.60 14.14 -32.00293.8 17.4 293.5 250.13 294.0 254.00 15.44 38.0 -34.73 18.0 297.1 259.62 264.00 -37.47 16.95 41.1 294.3 18.5 301.4 274.00 18.63 269.10 -40.19 44.3 294.9 301.7 18.6 284.00 278.54 -42.90 20.49 47.5 295.5 20.0 305.5 287 281.81 48.7 295.8 21.17 -43.87 19.9 306.0

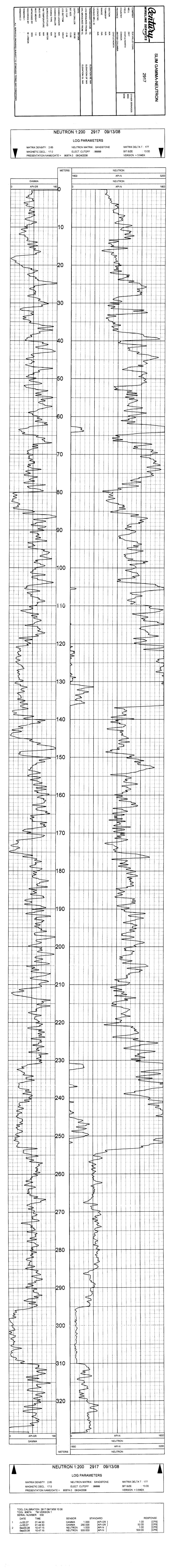
HOLE ID.

: 2916



CLIENT





PLAN VIEW COMPU-LOG DEVIATION

CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

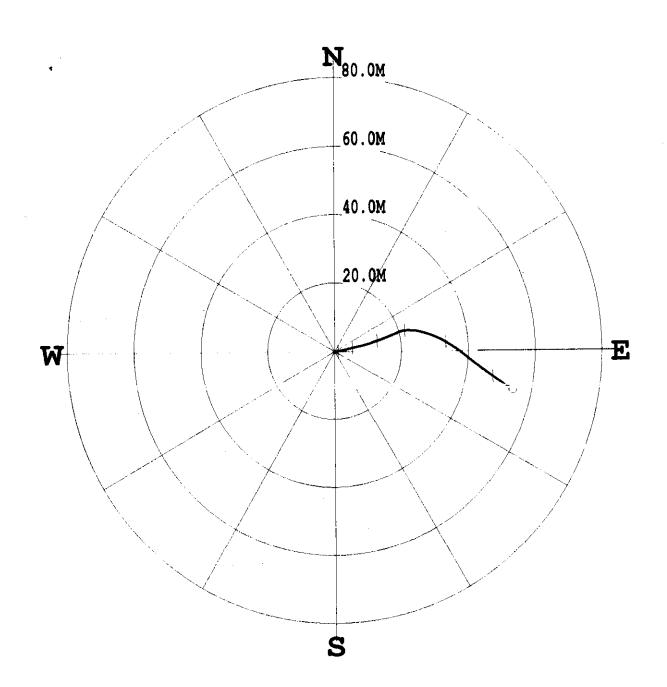
HOLE ID: 2917

DATE OF LOG: 09/13/08 PROBE: 9055A 72 **A**

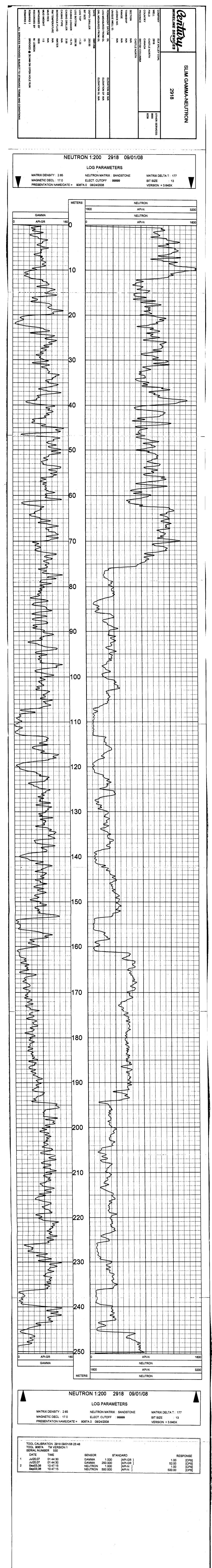
MAG DECL: 17.0

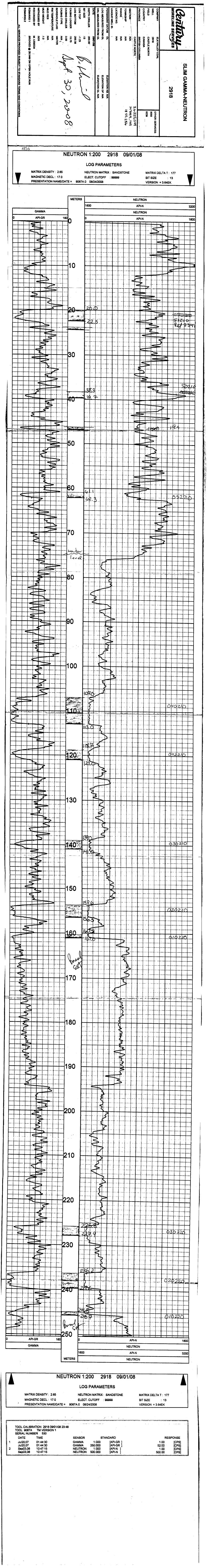
SCALE: 10 M/CM
TRUE DEPTH: 321.29 M
AZIMUTH: 102.2
DISTANCE: 54.4 M
+ = 50 M INCR

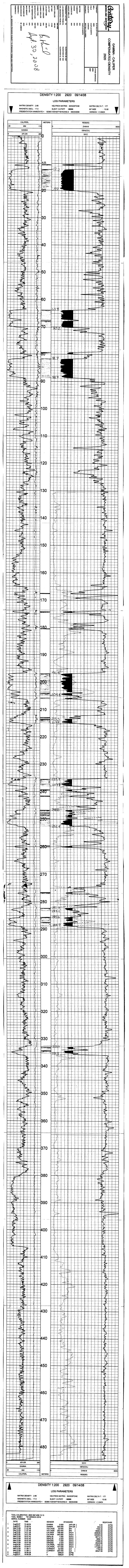
○ = BOTTOM OF HOLE

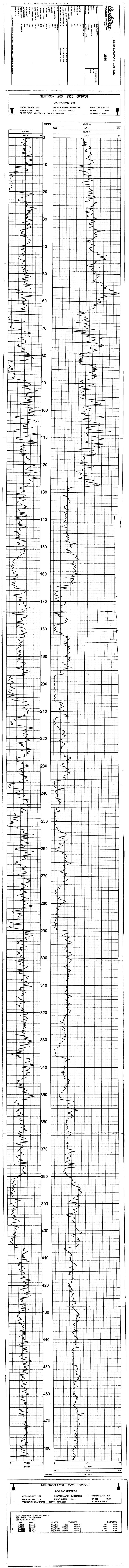


* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *							
DATA FROM	ice : Centur : : N/A	00	DATE OF PROBE DEPTH U	LOG : 09/ 905 : MET NITS : MET	13/08 5 a , ERS	72	
CABLE DEPTH	MOLLE DEDUCT	NORTH DEV.	EAST DEV	DISTANCE	AZIMUTH	SANG S	ANGB
30.00	30.00		0.02	0.0	85.8	1.4	87.4
40.00	30.00	0.02	0.46			2.8	77.1
50.00	39.99 49.97	0.02	0.00	1 0	94 N	2 5	89.6
60.00	13.31 ED 05	0.20	1.65	1.7	82.5	4.0	76.4
70.00	69.93	0.10 0.22 0.38 0.56 0.80	2.36	2.4	80.9	4.2	74.4
80.00	70 80	0.56	3.21	3.3	80.2	5.5	77.3
90.00	99.03	0.80	4.17	4.2	79.1	6.2	72.5
100.00	99.03	1.10	5.32	5.4	78.4	7.8	75.0
110.00							
120.00	119 55	1.71 2.07 2.50 3.01	8.09	8.3	78.1	8.5	75.8
130.00	129 44	2.07	9.53	9.8	77.8	8.4	74.4
140.00	139 33	2.50	10.97	11.2	77.2	8.7	71.0
150.00	149 21	3.01	12.44	12.8	76.4	9.3	70.3
160.00	159 07	3.01 3.56	17 98	14.4	75.7	9.0	70.2
170.00	159.07 168.93	4.14	15.54	16.1	75.1	9.9	69.2
180.00	178.77	4 70	17 21	17 0	74 4	10.6	67.6
190.00	188.62	5.45	18.80	19.6	73.8	10.1	64.5
200.00	198.46	5.92	20.49	21.3	73.9	11.1	80.5
210.00	208.26	5.99	18.80 20.49 22.47 24.67 27.02	23.3	73.8 73.9 75.1	16.0	139.5
220.00	217.99	5.80	24.67	25.3	76.8	14.4	97.8
230.00	227.68	5.21	27.02	27.5	79.1	15.3	
240.00	227.68 237.31	4.41	29.40	29.7	81.5		133.3
250.00	246.84	3.17	32.13	32.3	84.4	18.3	117.2
260.00		1.54	34.93	35.0	87.5	19.0	
270.00	265.73	-0.24	37.53	37.5	90.4	19.6	
280.00	275.16	-2.31	40.15	40.2	87.5 90.4 93.3	19.5	
290.00	284.58	-4.36	37.53 40.15 42.80 45.47	43.0	95.8	19.5	
300.00	294.01	-6.34	45.47	45.9	97.9	19.1	125.6
310.00	294.01 303.47	-8.22	48.12	48.8	99.7	18.9	
320.00	312.94	-10.01	50.79	51.8	101.1	18.5	
328 82	321.26		53.16	54.4	102.2	18.8	119.9









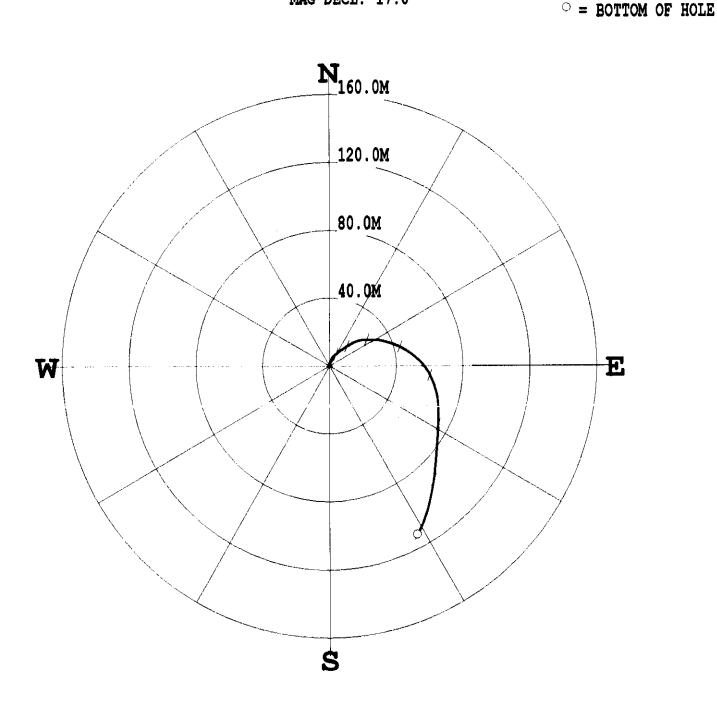
CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

HOLE ID: 2920

DATE OF LOG: 09/14/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 20 M/CM
TRUE DEPTH: 442.70 M
AZIMUTH: 152.2
DISTANCE: 111.9 M
+ = 50 M INCR



* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2920

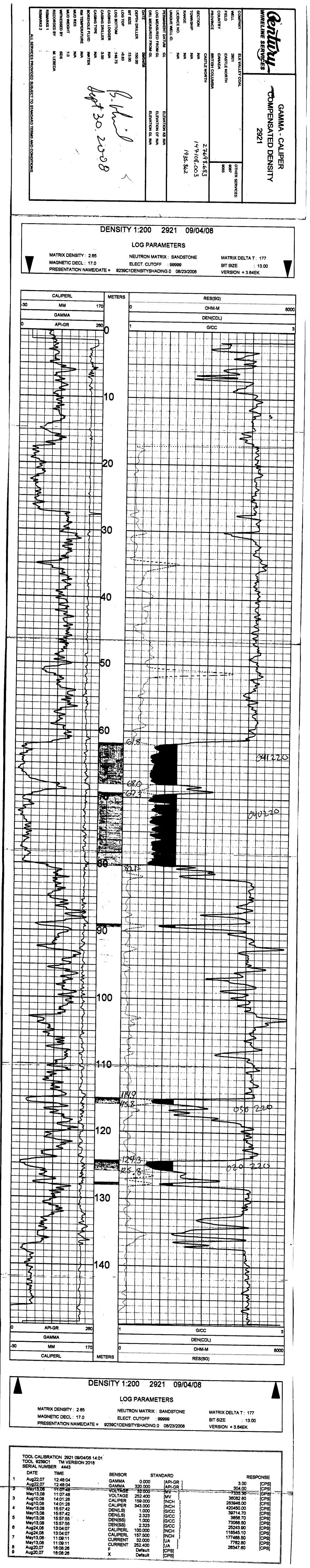
FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/14/08

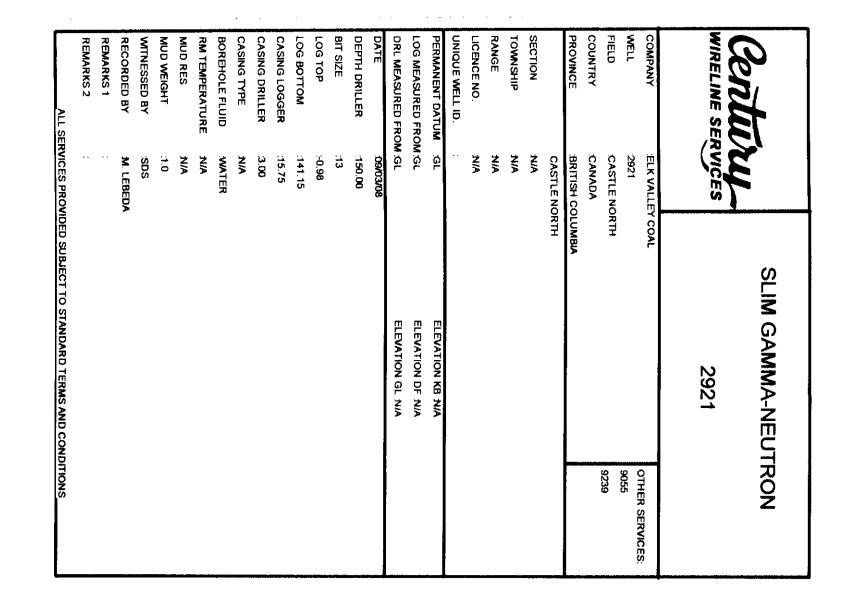
DATA FROM : N/A PROBE : 9055A , 72

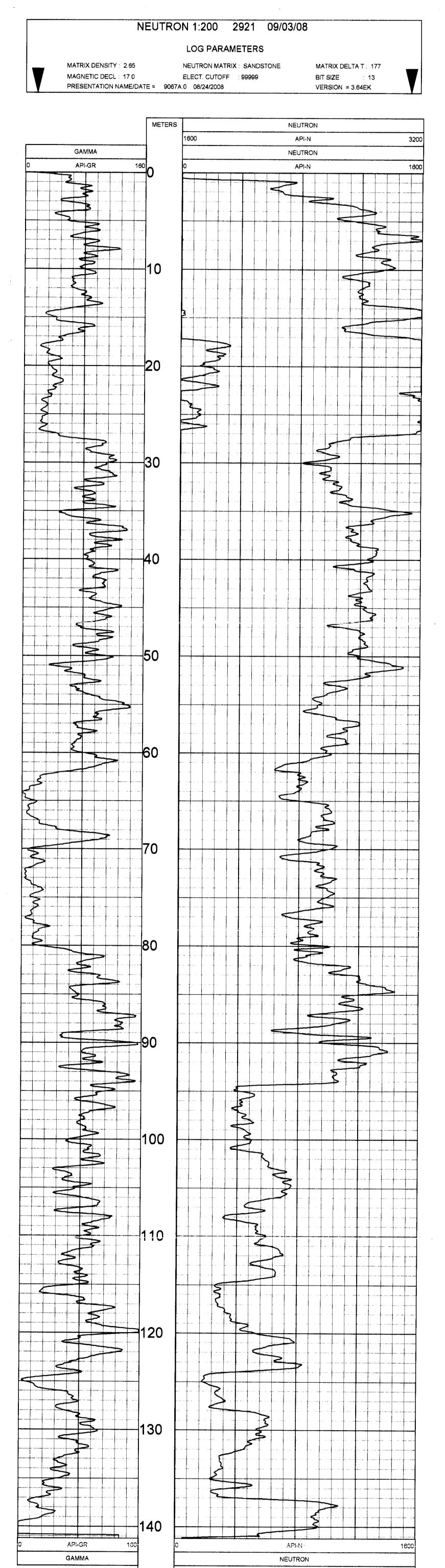
MAG. DECL. : 17.000 DEPTH UNITS : METERS

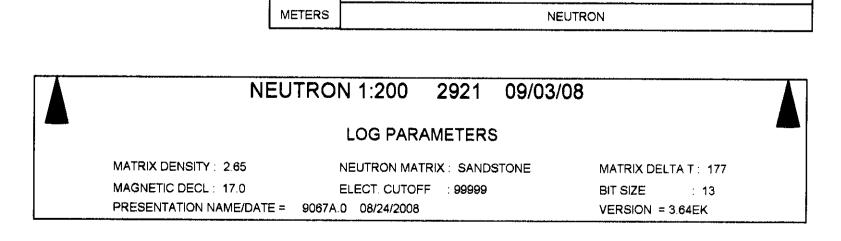
LOG: 2920 09-14-08 08-58 9055A .02 7.44 485.26 DEVI.log

MAG. DECL	. : 17.0	OO -EO OOEEN O		NITS : MET			
TOG: 5350	_09-14-08_08	-58_9055 A_ .0	2_/.44_465.	26_DEVI.10	y		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	DNAS	SANGB
10.00	10.00	0.03	-0.01	0.0	339.9	1.4	
20.00	20.00	0.31	-0.05	0.3	351.2	2.6	
30.00	29.98	0.78	-0.03	0.8	358.0	5.5	
40.00	39.95	1.56	0.04	1.6	1.3	5.0	
50.00	49.91	2.47	0.26	2.5	1.3 6.1	6.0	
60.00	59.85	3.46	0.68	3.5	11.2	6.5	
70.00	69.78	4.40	1.24	4.6	15.8	6.5	
80.00	79.72	5.30	1.99	5.7	20.6	6.7	
90.00	89.64	6.13	2.84	6.8	24.8	7.1	
100.00	99.57	6.96	3.77	7.9	28.5 31.5	7.6	
110.00	109.47	7.83	4.79	9.2	31.5	8.7	
120.00	119.36	8.69	5.98	10.5	34.5	8.6	
130.00	129.23	9.58	7.28	12.0	37.3	9.3	
140.00	139.09	10.52	8.66	13.6	39.5	9.9	56.5
150.00	148.92	11.50	10.21	15.4	41.6	10.6	57.4
160.00	158.73	12.50	11.87	17.2	43.5	11.4	59.2
170.00	168.49	13.52	13.70	19.2	45.4	7.8	
180.00	178.19	14.55	15.81	21.5	47.4	18.6	
190.00	187.80	15.27	18.38	23.9	50.3	16.7	82.3
200.00	197.34	15.48	21.36	26.4	54.1	18.8	86.9
210.00	206.79	15.58	24.63	29.1	57.7		
220.00	216.18	15.51	28.06	32.1	61.1 64.7	20.4	
230.00	225.51	14.96	31.63	35.0	64.7	22.2	
240.00	234.70	13.90	35.41	38.0	68.6	23.5 24.0	
250.00	243.85	12.54	39.21	41.2	72.3		
260.00	252.95	10.81	42.97	44.3	75.9 79.5	24.8	
270.00	261.99	8.66	46.66	47.5			
280.00	270.96	6.07	50.25	50.6	83.1 86.7	26.2	
290.00	279.92	3.12	53.57	53.7	90.2	27.2	
300.00	289.85	-0.20	56.58	56.6 59.3	90.2	28.4	
310.00	297.69	-4.08 -8.49	59.17 61.25	61.8	93.9 97.9	30.0	
320.00	306.42		63.01	64.4	101.8	30.6	
330.00	315.06	-13.20 -18.12	64.25	66.8	105.7	30.4	
340.00	323.68	-23.21	64.80	68.8	109.7		
350.00	332.26	-23.21 -28.38	64.90	70.8	113.6	31.4	
360.00	340.82 349.30	-33.67	64.83	73.0	117.4	32.3	
370.00 380.00	357.74	-39.02	64.56	75.4	191 9	32 5	
390.00	366.17	-44.39	64.19	78.0	124.7	32.2	
400.00	374.59	-49.77	63.81	80.9	129.0	32.	
410.00	382.98	-55.18	63.38	84.0	131.0	33.	
420.00	391.29	-60.71	62.87	87.4	134.0	34.2	
430.00	399.52	-66.35	62.17	90.9	136.9	35.3	
440.00	407.66	-72.05	61.15	94.5	139.7	35.9	
450.00	415.71	-77.86	60.00	98.3	142.4	37.4	
460.00	423.56	-83.88	58.60	102.3	145.1	38.6	
470.00	431.31	-89.84	56.53	106.1	147.8	40.3	
480.00	438.84	-95.81	54.00	110.0	150.6	42.	
485.26	442.67	-98.89	52.27	111.9	152.1	43.2	
400.20	225.01	50.05					









API-N

	TOOL CALIBR TOOL 9067A SERIAL NUMB	ATION 2921 09/03/08 13 TM VERSION 1 BER 530	i:20				
	DATE	TIME	SENSOR	STA	NDARD	RES	SPONSE
1	Jul20,07	01:44:30	GAMMA	1.000	[API-GR]	1.00	[CPS]
	Jul20,07	01:44:30	GAMMA	250.000	[API-GR]	52.00	[CPS]
2	Sep03,06	10:47:15	NEUTRON	1.000	[API-N]	1.00	[CPS]
	Sep03,06	10:47:15	NEUTRON	500.000	[API-N]	500.00	[CPS]

CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

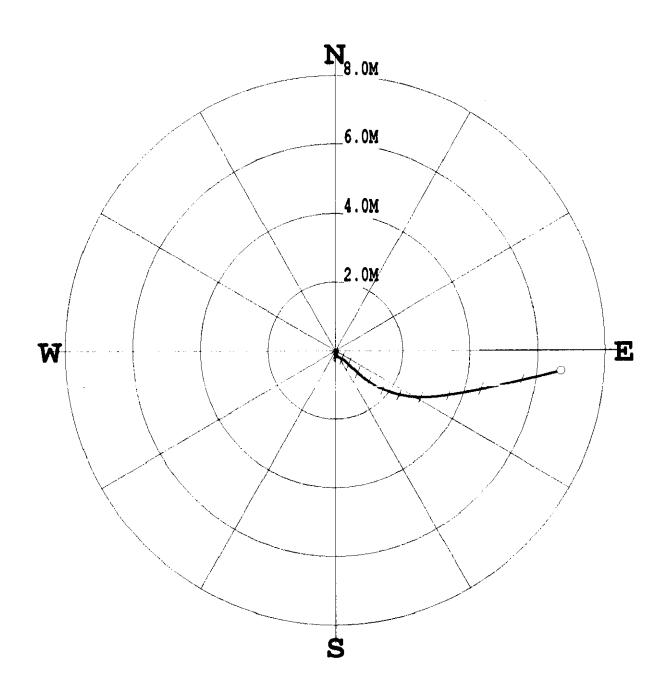
HOLE ID: 2921

DATE OF LOG: 09/04/08 PROBE: 9055A 72 4

MAG DECL: 17.0

SCALE: 1 M/CM
TRUE DEPTH: 148.67 M
AZIMUTH: 95.0

DISTANCE: 6.7 M + = 10 M INCR = BOTTOM OF HOLE



* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2921

FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/04/08

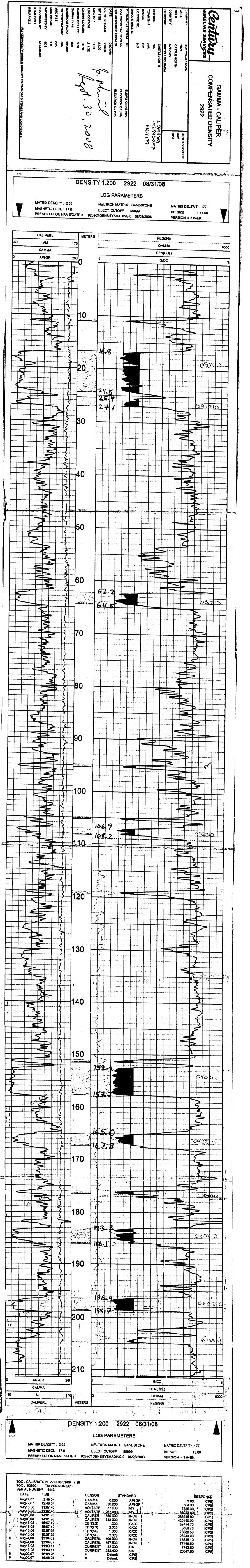
DATA FROM : N/A PROBE : 9055A ,

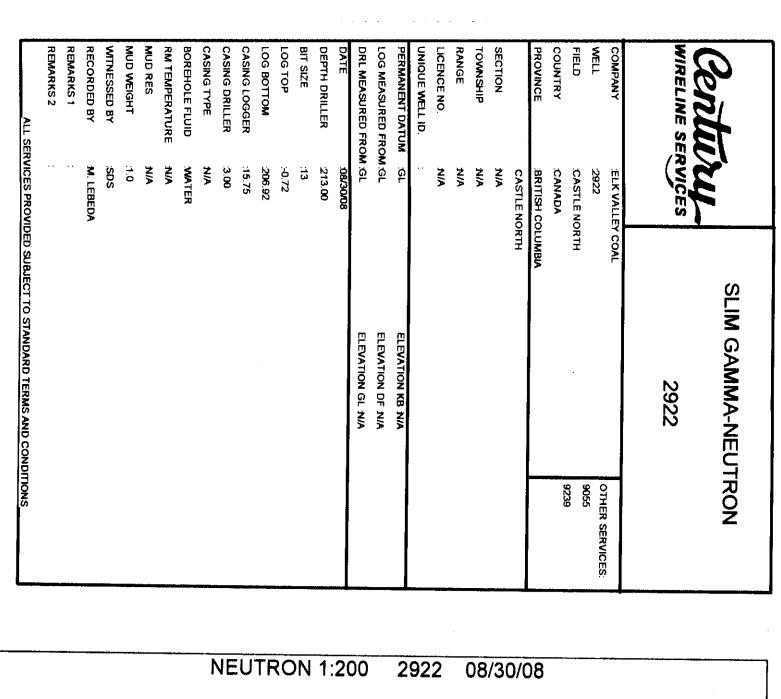
MAG. DECL. : 17.000 DEPTH UNITS : METERS

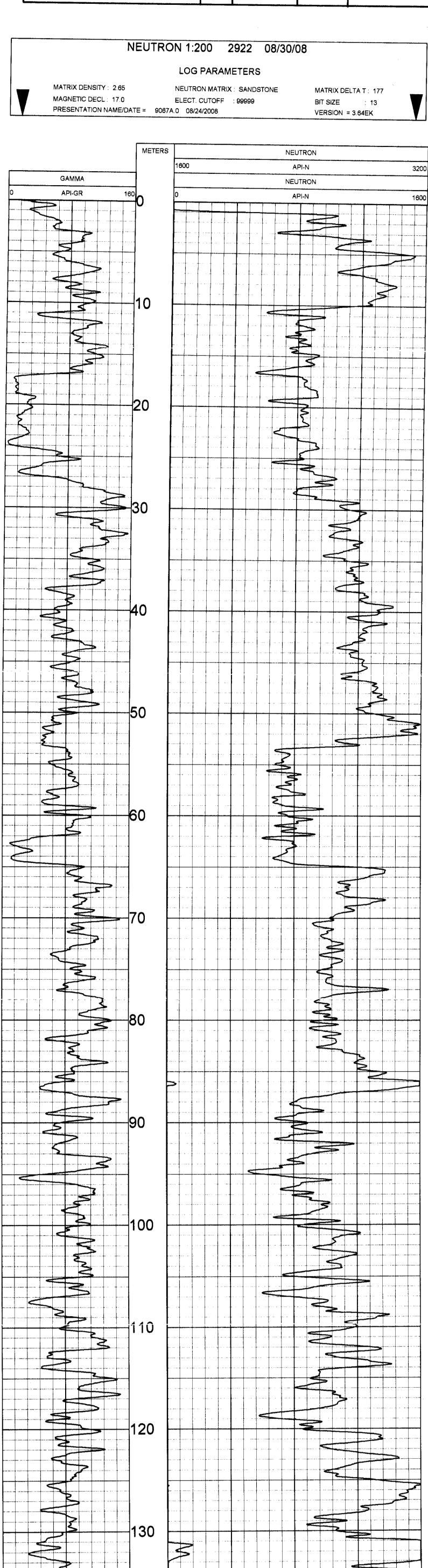
LOG: 2921 09-04-08 13-25_9055A_.02_11.00_148.97_DEVI.log

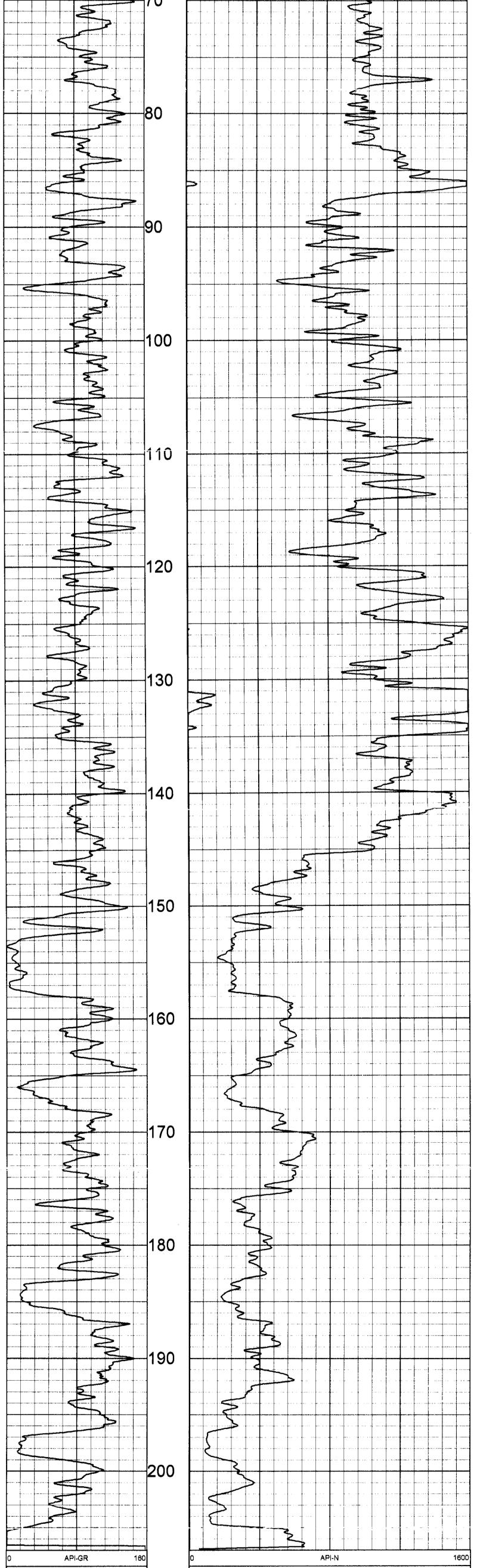
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	HTUMISA	SANG S	BANGB
11.02	11.02	-0.00	-0.00	0.0	180.2	0.7	180.2
21.00	21.00	-0.10	-0.01	0.1	183.8	0.2	230.
31.00	31.00	-0.12	0.01	0.1	173.6	0.2	141.3
41.00	41.00	-0.16	0.04	0.2	165.7	0.6	114.
51.00	51.00	-0.25	0.21	0.3	139.5	1.3	105.
61.00	60.99	~0.41	0.42	0.6	134.6	2.2	130.
71.00	70.99	-0.66	0.67	0.9	134.3	2.1	147.
81.00	80.98	-0.92	1.02	1.4	132.1	3.0	100.
91.00	90.96	-1.13	1.45	1.8	128.1	2.7	114.
101.00	100.95	-1.29	1.94	2.3	123.7	3.4	102.
111.00	110.93	-1.35	2.60	2.9	117.5	4.5	91.4
121.00	120.89	-1.28	3.42	3.6	110.5	5.0	82.
131.00	130.84	-1.11	4.40	4.5	104.1	6.3	79.
141.00	140.77	-0.85	5.61	5.7	98.6	7.3	79.
148.98	148.63	-0.59	6.67	6.7	95.1	8.6	75.

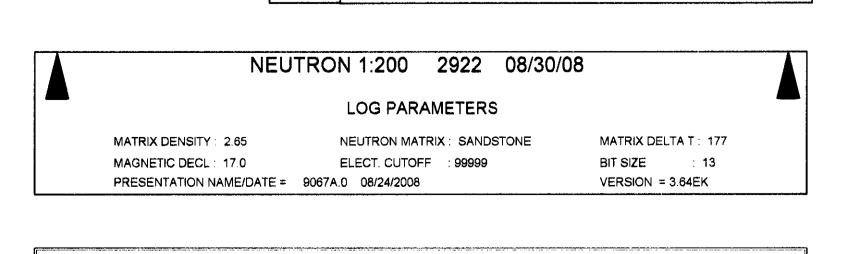
72











1600

METERS

GAMMA

TOOL CALIBRATION 2922 08/30/08 16:34 TOOL 9067A TM VERSION 1

TIME

SERIAL NUMBER 530

DATE

NEUTRON

API-N NEUTRON 3200

RESPONSE

01:44:30 1.000 1 Jul20,07 GAMMA [API-GR] 1.00 [CPS] [CPS] 250.000 [API-GR] 52.00 Jul20,07 01:44:30 GAMMA Sep03,06 2 10:47:15 NEUTRON 1.000 [API-N] 1.00 500.00 [CPS] Sep03,06 NEUTRON 500.000 [API-N] 10:47:15

STANDARD

SENSOR

CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

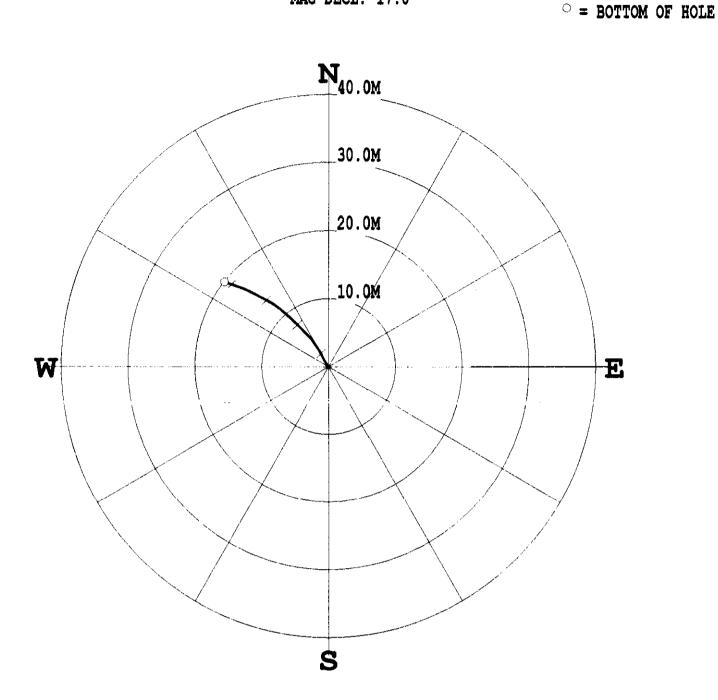
HOLE ID: 2922

DATE OF LOG: 08/31/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 210.18 M
AZIMUTH: 308.6
DISTANCE: 19.9 M
+ = 50 M INCR



* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2922

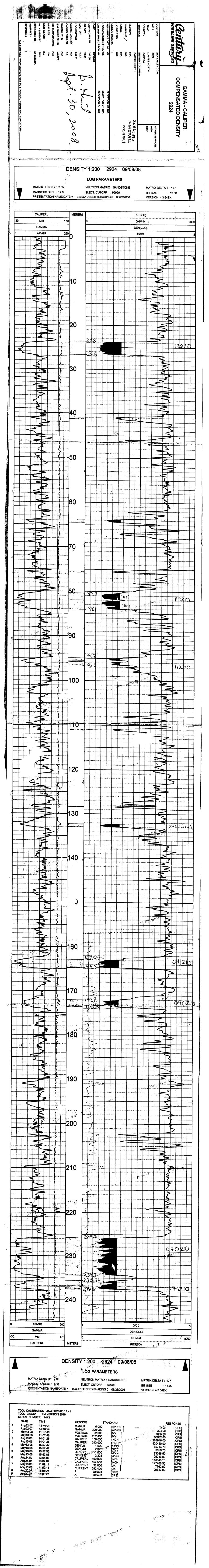
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/31/08

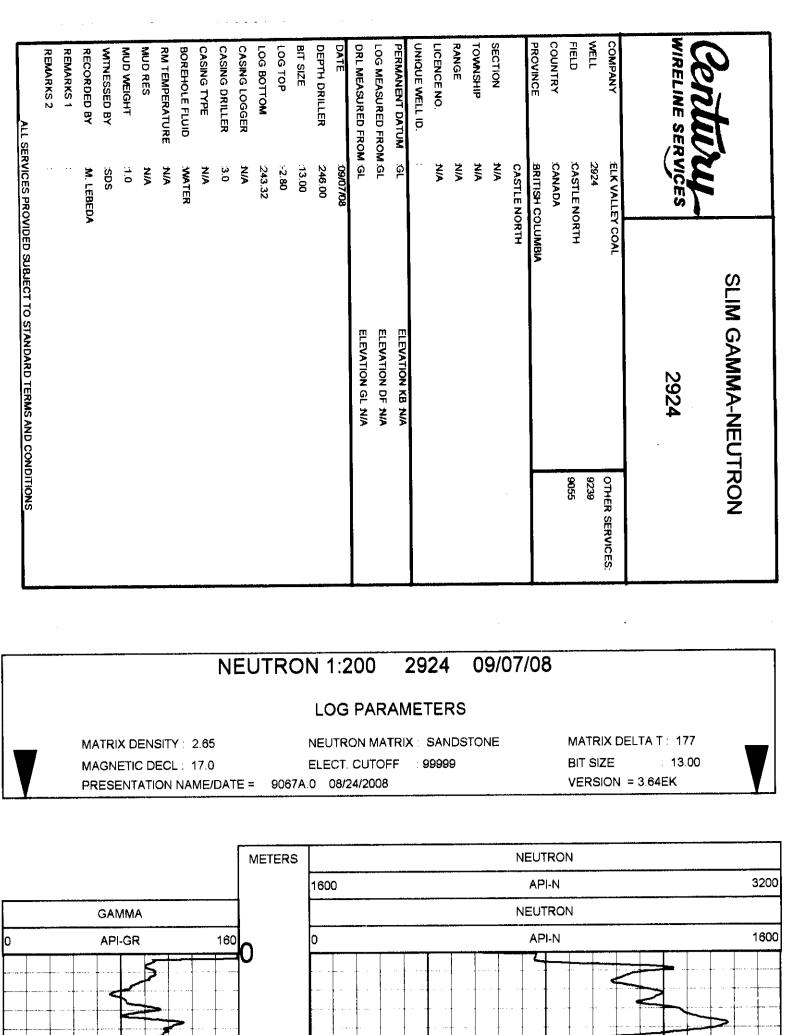
DATA FROM : N/A PROBE : 9055A , 72

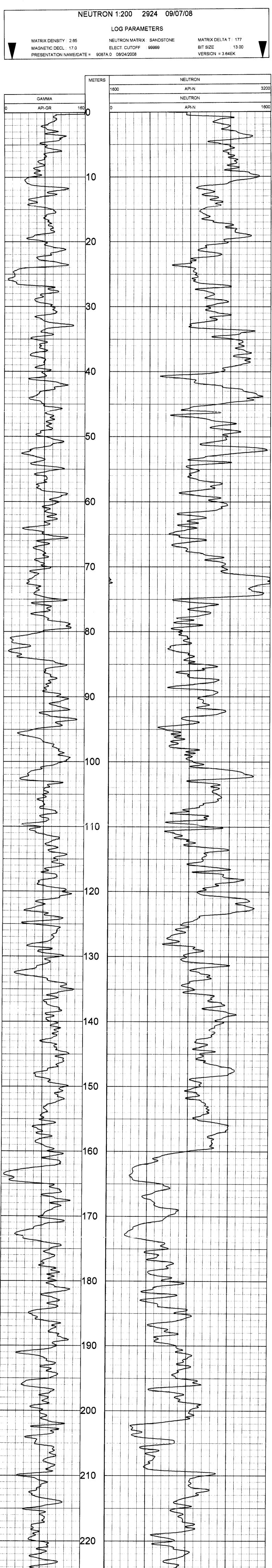
MAG. DECL. : 17.000 DEPTH UNITS : METERS

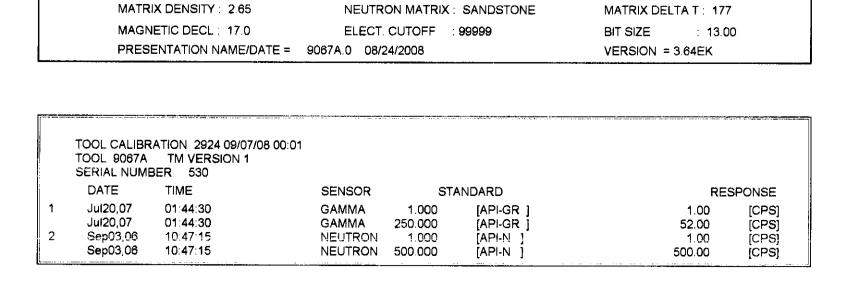
LOG: 2922_08-31-08_16-39_9055A_.02_7.04_211.30_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SA	NGB
10.00	10.00	0.03	-0.01	0.0	332.9	1.3	334.2
20.00	19.99	0.33	-0.20	0.4	329.1	2.1	324.4
30.00	29.98	0.69	-0.45	0.8	327.0	2.8	325.3
40.00	39.97	1.16	-0.74	1.4	327.7	3.4	332.4
50.00	49.93	1.92	-1.12	2.2	329.7	5.9	326.8
60.00	59.87	2.84	-1.70	3.3	329.1	6.5	326.2
70.00	69.81	3.77	-2.34	4.4	328.2	6.9	326.4
80.00	79.75	4.58	-3.03	5.5	326.6	6.2	312.8
90.00	89.69	5. 36	-3.80	6,6	324.7	6.5	314.2
100.00	99.62	6.15	-4.61	7.7	323.1	6.4	313.6
110.00	109.55	6.98	-5.48	8.9	321.8	7.1	313.9
120.00	119.47	7.83	-6.44	10.1	320.5	7.4	310.4
130.00	129.39	8.61	-7.39	11.3	319.3	7.2	307.5
140.00	139.33	9.22	-8.28	12.4	318.1		299.7
150.00	149.27	9.75	-9.21	13.4	316.7		294.9
160.00	159.21	10.25	-10.19	14.5	315.2		295.9
170.00	169.15	10.77	-11.22	15.6	313.8		296.0
180.00	179.08	11.26	-12.23	16.6	312.6		293.4
190.00	189.01	11.69	-13.33	17.7	311.3		287.2
200.00	198.95	12.06	-14.41	18.8	309.9		288.7
210.00	208.89	12.38	-15.42	19.8	308.8		285.2
211.30	210.14	12. 4 2	-15.54	19.9	308.6	5.8	286.9









. . - . .

NEUTRON 1:200 2924 09/07/08

LOG PARAMETERS

API-N

NEUTRON

API-N

NEUTRON

1600

3200

230

240

METERS

1600

160

API-GR

GAMMA

CLIENT: ELK VALLEY COAL

LOCATION: CASTLE NORTH

HOLE ID: 2924

DATE OF LOG: 09/08/08 PROBE: 9055A 72

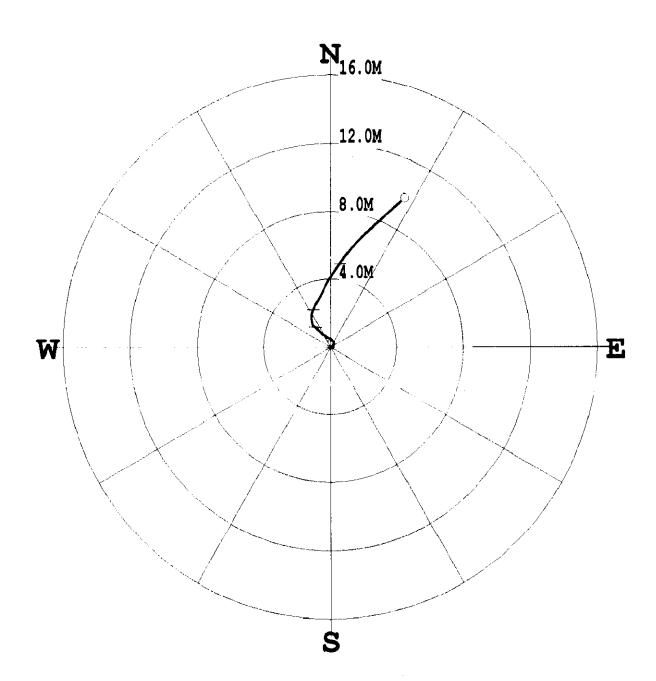
MAG DECL: 17.0

SCALE: 2 M/CM

TRUE DEPTH: 244.37 M

AZIMUTH: 26.9 DISTANCE: 9.9 M + = 50 M INCR

○ = BOTTOM OF HOLE



* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2924

FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/08/08

DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

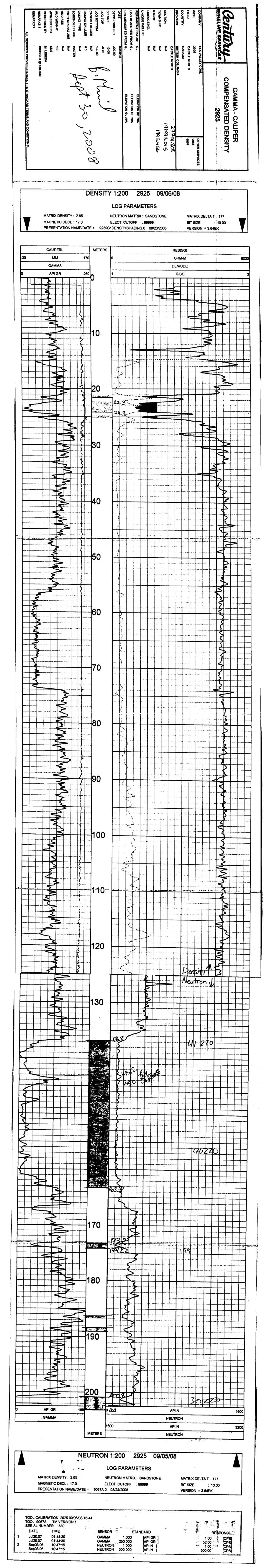
LOG: 2924_09-08-08_16-54_9055A_.02_7.73_244.89_DEVI.log

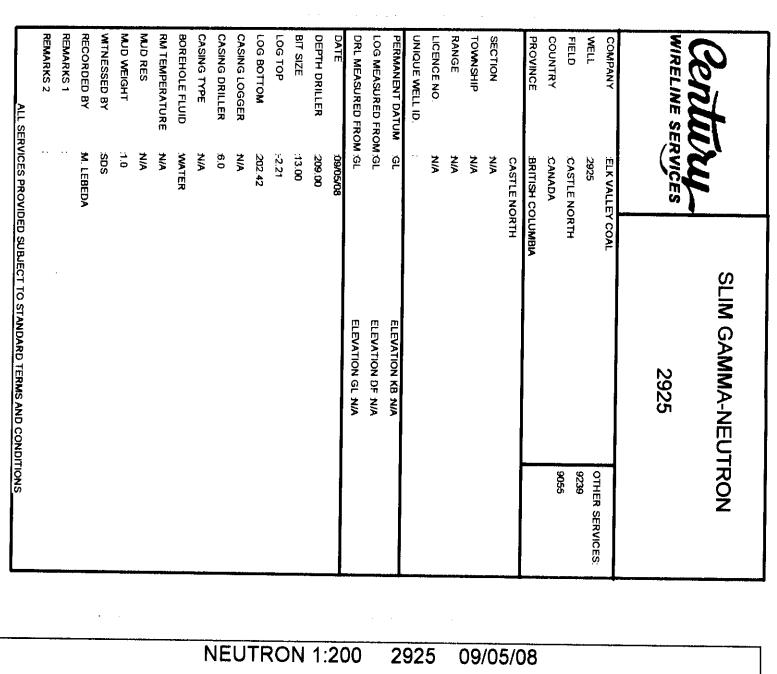
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S.	ANGB
10.00	9.99	-0.00	0.00	0.0	163.7	0.2	149.5
20.00	19.99	0.01	0.06	0.1	76.0	1.1	59.8
30.00	29.99	0.08	0.16	0.2	62.5	0.9	39.7
40.00	39.99	0.19	0.20	0.3	46.8	1.2	329.4
50.00	49.99	0.36	0.15	0.4	23.0	1.3	322.3
60.00	59.98	0.53	-0.07	0.5	352.4	2.1	292.8
70.00	69.97	0.71	-0.38	0.8	331.7	1.9	298.2
80.00	79.97	0.88	~0.64	1.1	324.2	1.6	312.7
90.00	89.97	1.08	~0.81	1.3	323 2	1.1	340 4
100.00	99.96	1.18	-0.91	1.5	322.4	0.5	293.1
110.00	109.96	1.27	-1.02	1.6	321.2	0.6	321.8
120.00	119.96	1.40	-1.09	1.8	322 2	1.3	345.5
130.00	129.96	1.61	-1.13	2.0	324.9	1.2	357.1
140.00	139.96	1.87	-1.14	2.2	328.6	1.6	4.7
150.00	149.95	2.19	-1.04	2.4	334.5	1.9	10.4
160.00	159.94	2.59	-0.87	2.7	341.5	2.9	24.4
170.00	169.92	3.06	-0.61	3.1	348.8	3.5	26.1
180.00	179.90	3.64	-0.29	3.7	355.4	4.0	29.3
190.00	189.87	4.27	0.09	4.3	1.2	₂ 4.5	33.4
200.00	199.84	4.92	0.53	4.9	6.2	4.6	35.2
210.00	209.80	5.66	1.10	5.8	11.0	97 6.0	37.2
220.00	219.74	6.48	1.85	6.7	16.0	6.5	45.5
230.00	229.65	7.36	2.83	7.9	21.1	7.6	49.5
240.00	239.54	8.32	3.92	9.2	25.2	8.4	49.0
244.88	244.33	8.79	4.46	9.9	26.9	8.8	47.0

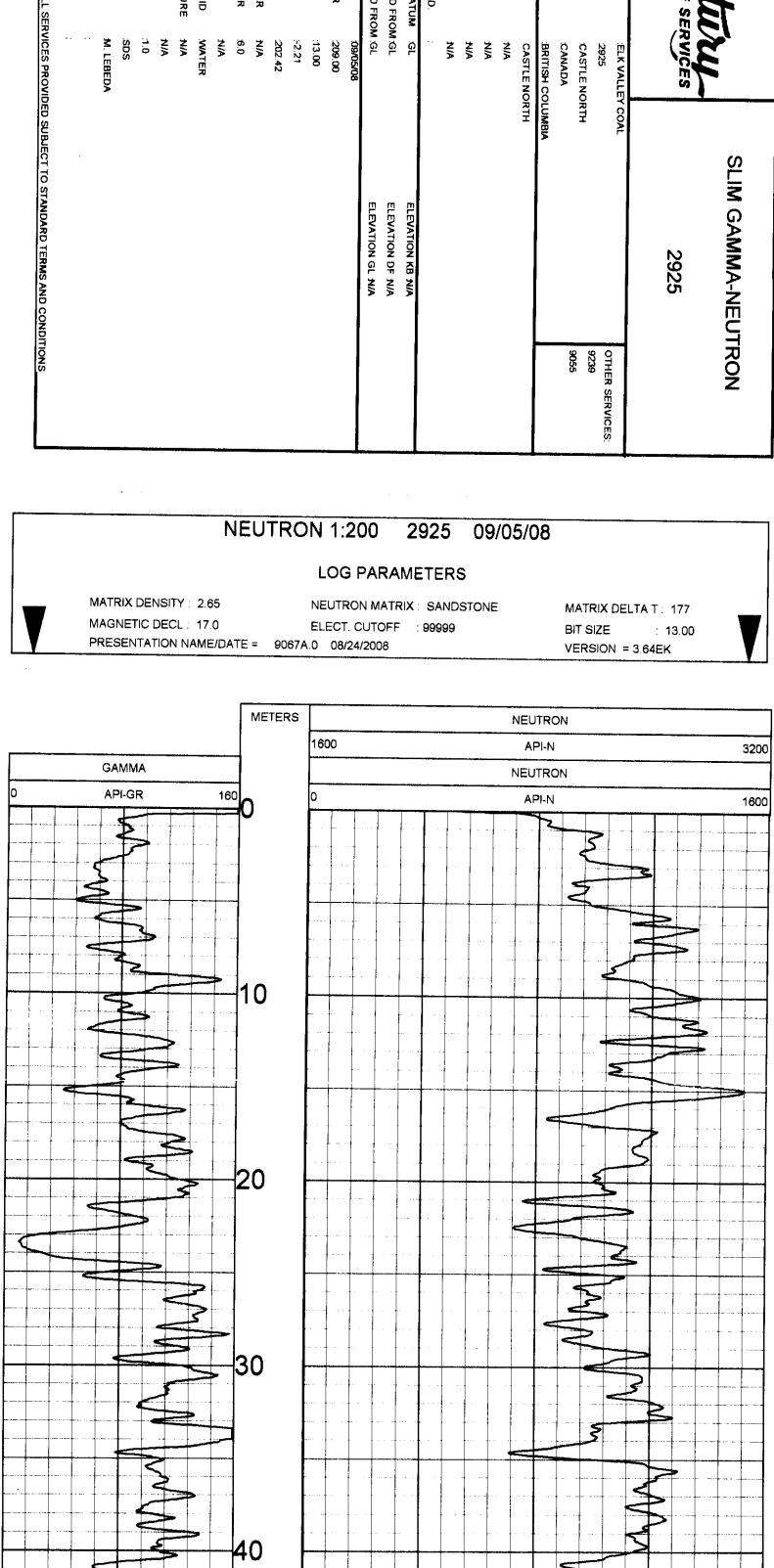


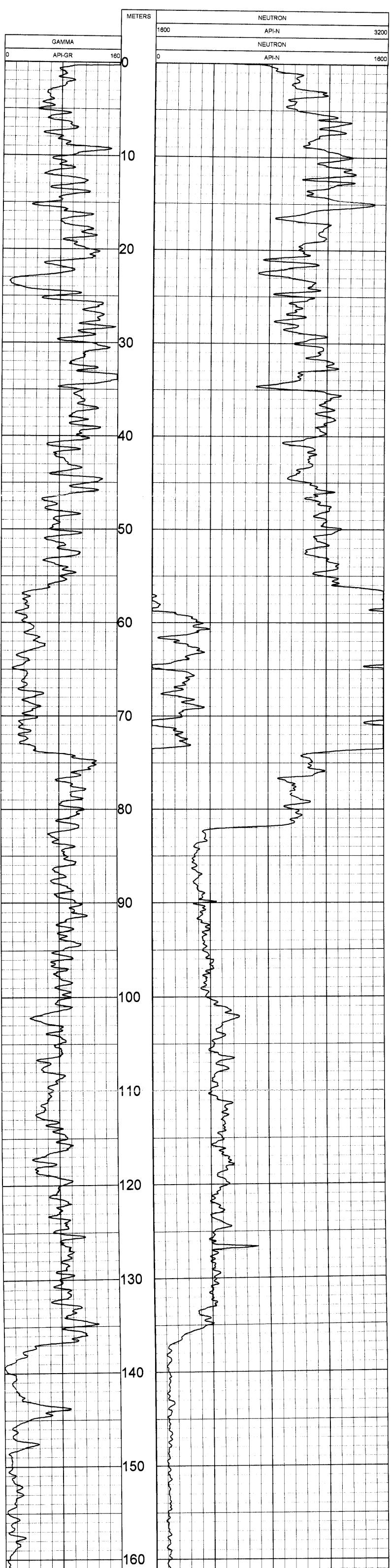


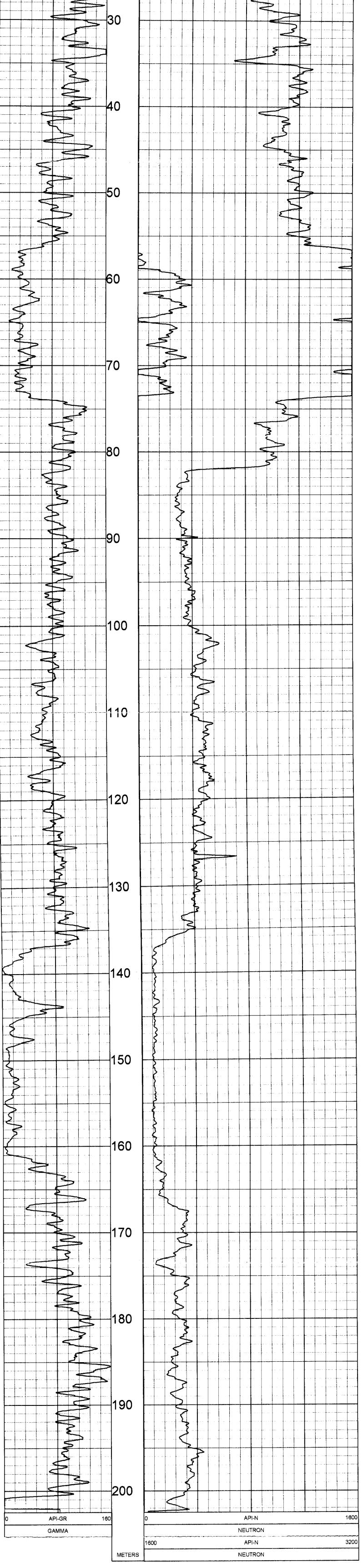


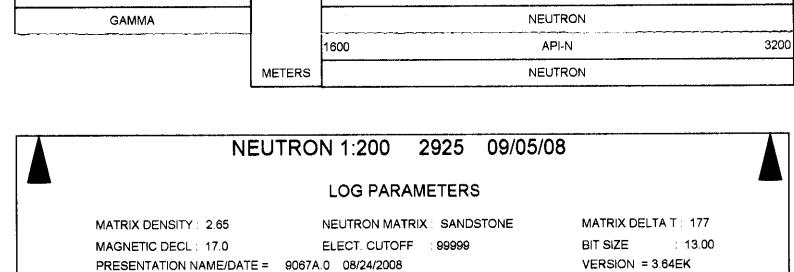












	DATE	TIME	SENSOR	STA	ANDARD	RE	SPONSE
1	Jul20,07	01:44:30	GAMMA	1.000	[API-GR]	1.00	[CPS]
	Jul20,07	01:44:30	GAMMA	250.000	[API-GR]	52.00	[CPS]
2	Sep03,06	10:47:15	NEUTRON	1.000	[API-N]	1.00	[CPS]
	Sep03.06	10:47:15	NEUTRON	500,000	[API-N]	500.00	[CPS]

CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

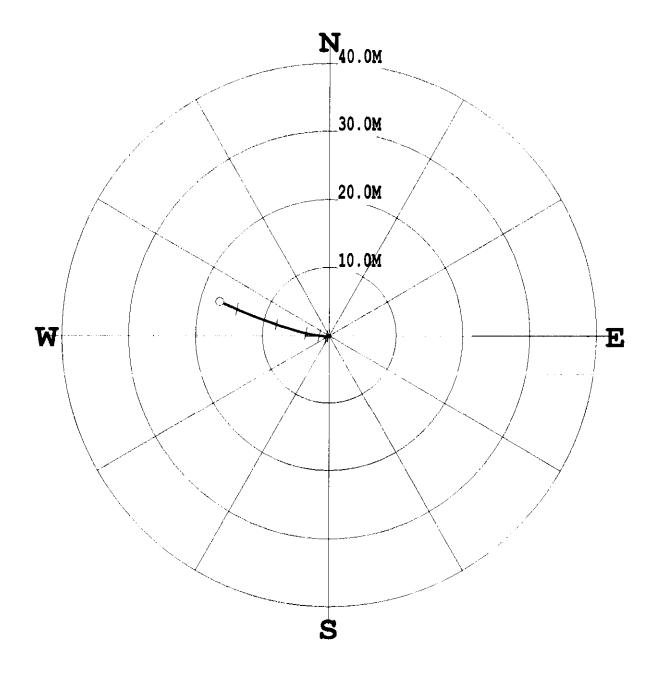
HOLE ID: 2925

DATE OF LOG: 09/06/08 PROBE: 9055A 72 4

MAG DECL: 17.0

SCALE: 5 M/CM
TRUE DEPTH: 128.17 M
AZIMUTH: 286.8

DISTANCE: 17.1 M + = 20 M INCR = BOTTOM OF HOLE



* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2925

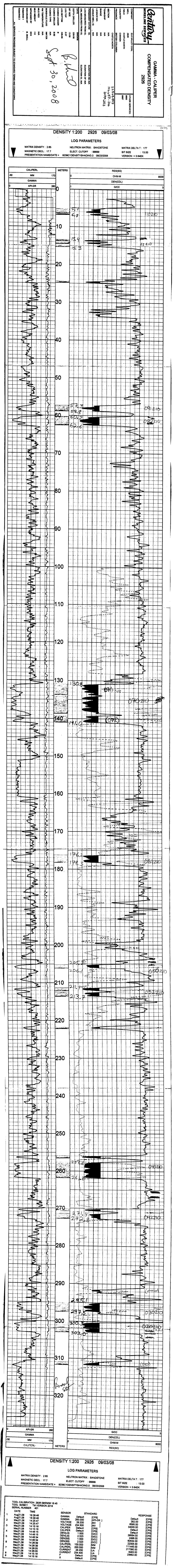
FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/06/08

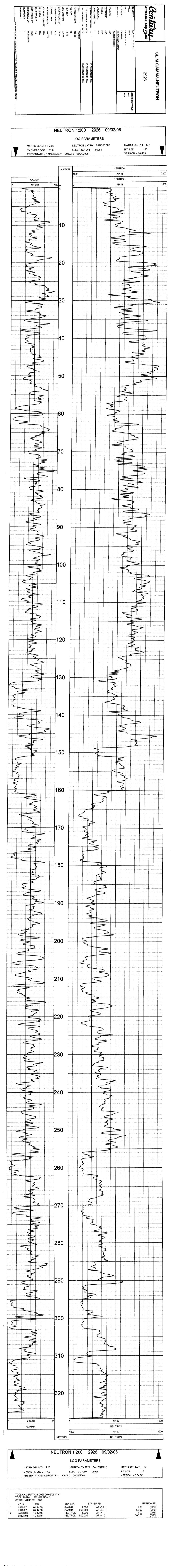
DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2925_09-06-08_16-20_9055A_.02_10.00_130.29_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S.	ANGB
10.00	10.00	-0.00	-0.00	0.0	253.6	0.3	253.6
20.00	20.00	-0.05	-0.12	0.1	245.7	0.9	244.3
30.00	30.00	-0.10	-0.22	0.2	244.8	1.3	252.0
40.00	40.00	-0.10	-0.42	0.4	256.2	1.5	273.2
50.00	49.99	-0.05	-0.86	0.9	266.6	2.7	270.4
60.00	59.96	0.02	-1.50	1.5	270.9	4.2	275.4
70.00	69.93	0.15	-2.35	2.4	273.5	5.4	279.9
80.00	79.86	0.36	-3.47	3.5	275.9	8.3	277.7
90.00	89.67	0.85	-5.29	5.4	279.2	13.2	287.0
100.00	99.34	1.60	-7.72	7.9	281.7	16.7	290.1
110.00	108.90	2.58	-10.49	10.8	283.8	17.1	287.7
120.00	118.42	3.69	-13.34	13.8	285.4	18.2	291.7
130.00	127.90	4.91	-16.28	17.0	286.8	19.0	291.9
130.28	128.13	4.94	-16.35	17.1	286.8	18.7	291.8





CLIENT: ELK VALLEY COAL LOCATION: FORDING RIVER

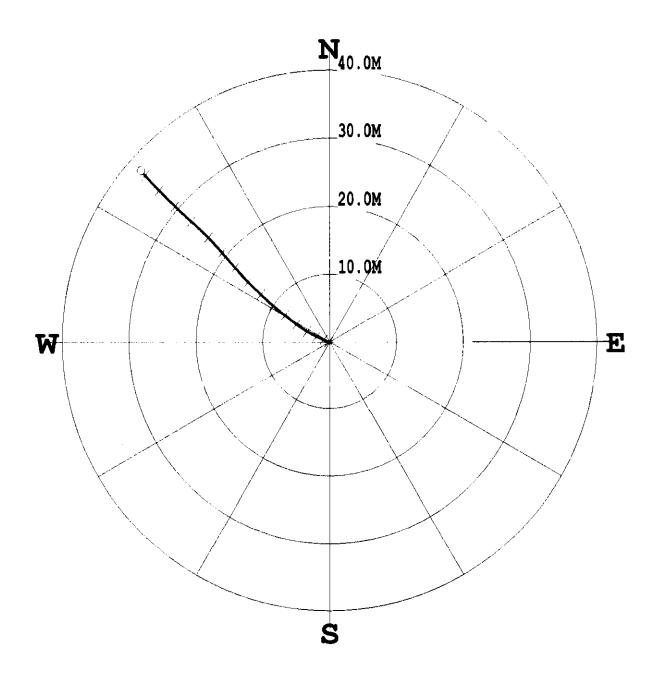
HOLE ID: 2926

DATE OF LOG: 09/03/08 PROBE: 9055A 59

MAG DECL: 17.7

SCALE: 5 M/CM
TRUE DEPTH: 326.03 M
AZIMUTH: 311.8
DISTANCE: 37.8 M

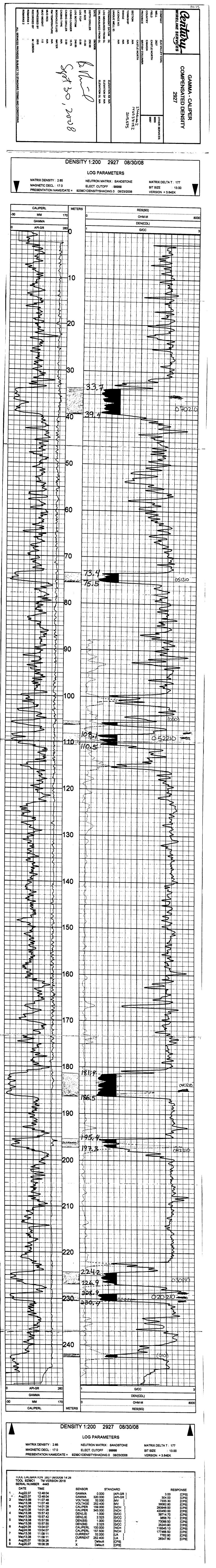
+ = 20 M INCR
= BOTTOM OF HOLE

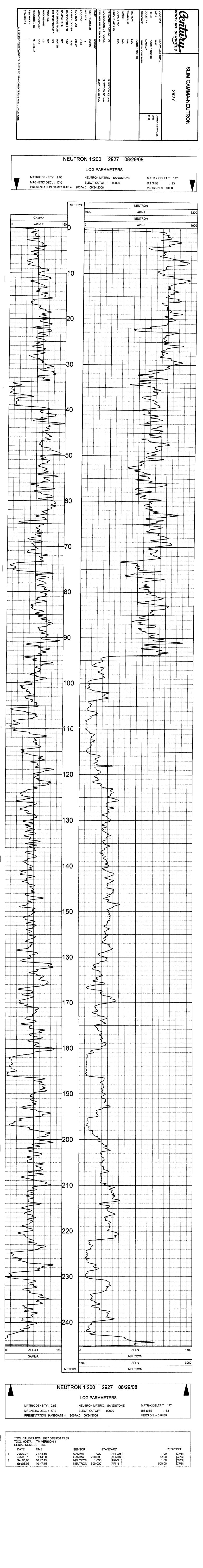


* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2926
FIELD OFFICE : PENHOLD DATE OF LOG : 09/03/08
DATA FROM : N/A PROBE : 9055A , 59
MAG. DECL. : 17.700 DEPTH UNITS : METERS
LOG: 2926 09-03-08 15-54 9055A .02 13.00 328.59 DEVI.log

•	_03-03-00_13				_		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.			SANG	Sangb
13.02	13.02	-0.00	-0.00	0.0	254.9	0.8	
23.00	23.00	0.02	-0.25	0.3	275.4	2.2	290.2
33.00	32.99	0.18	-0.61	0.6	286.4	2.2	303.4
43.00	42.98	0.40	-1.05	1.1	290.7	2.9	295.0
53.00	52.96	0.62	-1.53	1.7	292.2		296.2
63.00	62.94	0.91	-2.14	2.3	293.0	4.2	
73.00	72.91	1.28	-2.83	3.1	294.3	4.7	298.3
83.00	82.87	1.70	-3.57	4.0	295.5	5.2	301.2
93.00	92.83	2.21	-4.37	4.9	295.5 296.8	5.6	
103.00	102.78	2.60	-5.18	5.9	298.4	5.8	
113.00	112.72	3.44	-6.01	6.9	299.8	6.3	308.0
123.00	122.66	4.11	-6.89	8.0	300.8	6.7	305.6
133.00	132.59	4.83	-7.81	9.2	301.8	6.7	311.2
143.00	142.52	5.59	-8.69	10.3	302.7	6.8	311.1
153.00	152.45	6.38	-9.59	11.5			313.1
163.00	162.37	7.23	-10.48		304.6	7.3	312.2
173.00	172.29	8.13	-11.43		305.4	8.1	311.2
183.00	182.20	9.08	-12.40	15.4	306.2 307.1	7.6	315.6
193.00	192.10	10.10	-13.35	16.7	307.1	7.9	316.1
203.00	201.99	11.17	-14.32	18.2	308.0	8.4	317.1
213.00	211.89	12.27	-15.29	19.6	308.8	8.3	
223.00	221.78	13.34	-16.24	21.0	309.4	8.2	318.1
233.00	231.67	14.43	-17.22	22.5	310.0	9.0	317.8
243.00	241.55	15.58	-18.30	24.0	310.4	9.6	316.9
253.00	251.40	16.77	-19.56	25.8	310.6	10.2	313.7
263.00	261.25	17.94	-20.84	27.5	310.7	9.8	312.2
273.00	271.11	19.05	-22,06	29.1	310.8	9.3	313.3
283.00	280.98	20.14	-23.19		311.0	9.2	313.8
293.00	290.85	21.29	-24.39		311.1	9.5	
303.00	300.71	22.43	-25.54	34.0	311.3		
313.00	310.60	23.51	-26.60		311.5		
323.00	320.49	24.59	-27.61	37.0			
328.60	325.99	25.20	-28.16	37.8			





CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

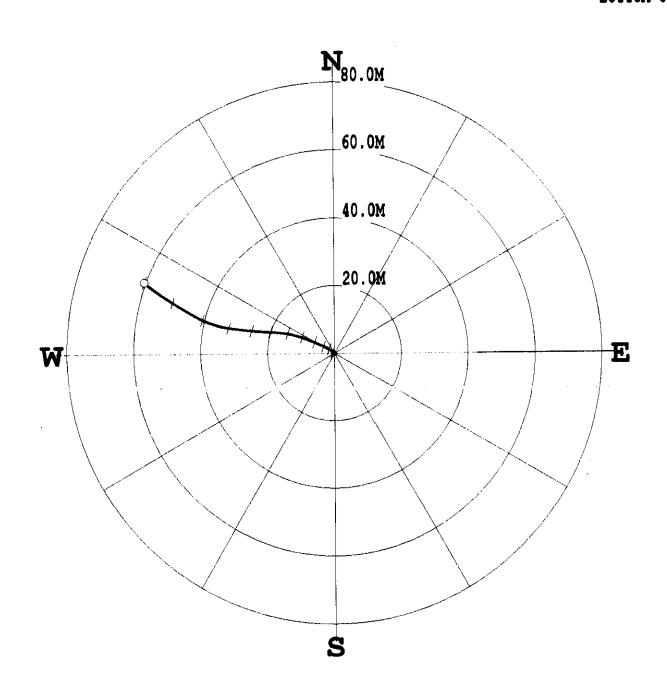
HOLE ID: 2927

DATE OF LOG: 08/30/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 10 M/CM
TRUE DEPTH: 237.88 M
AZIMUTH: 290.4

DISTANCE: 60.4 M + = 20 M INCR = BOTTOM OF HOLE



* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2927

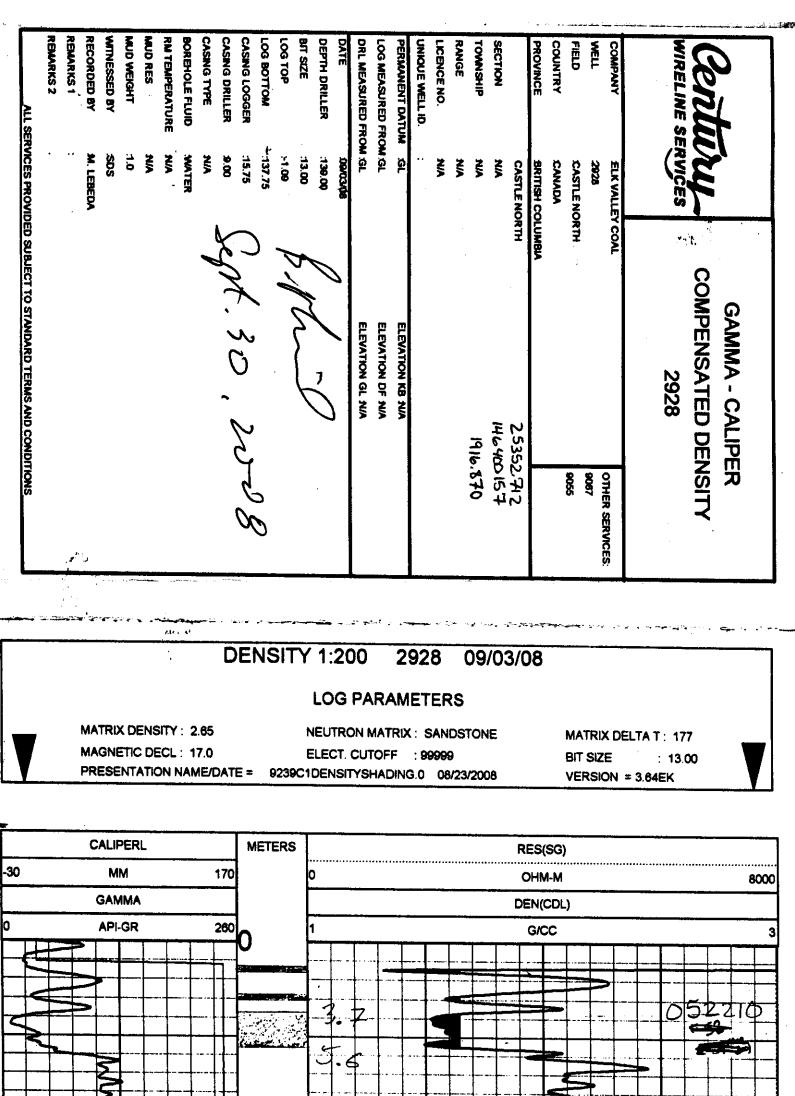
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/30/08

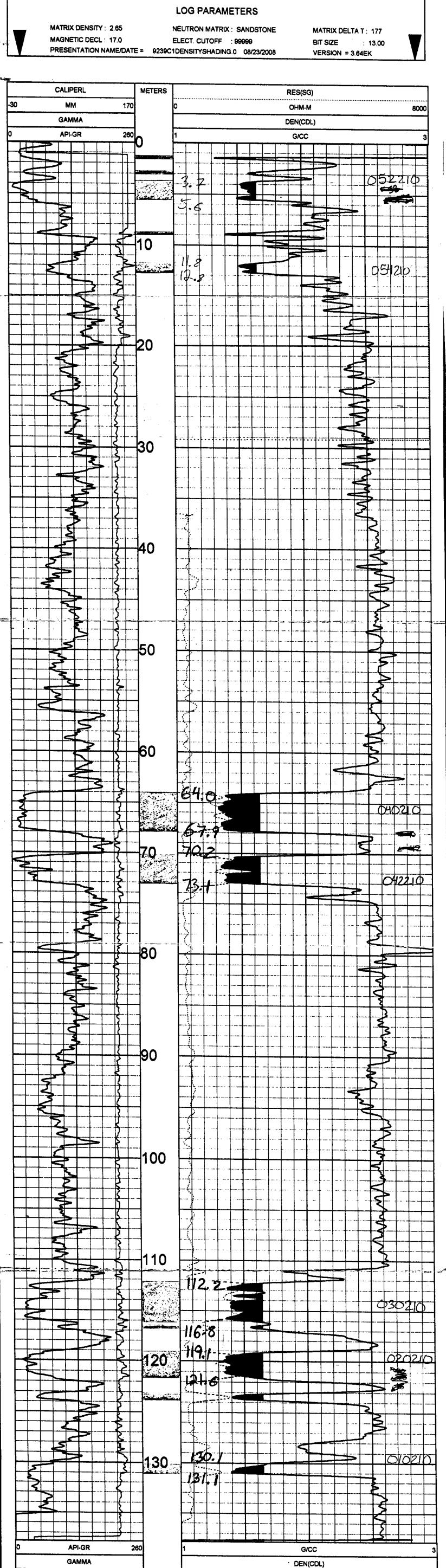
DATA FROM : N/A PROBE : 9055A , 72

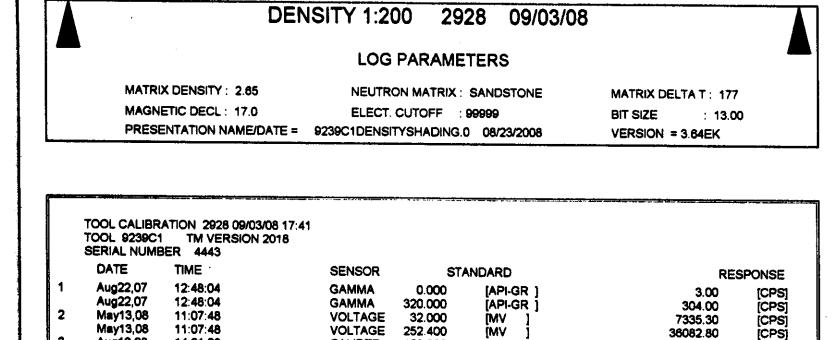
MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2927_08-30-08_13-30_9055A_.02_4.09_248.69_DEVI.log

LOG: 2927	_08-30-08_13	-30_9055 A_ .0	2_4.09_248.	69_DEVI.lo	g		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S.	ANGB
10.00	9.99	0.07	-0.10	0.1	305.6	2.0	307.2
20.00	19.98	0.36	-0.47	0.6	307.3	3.2	309.1
30.00	29.95	0.77	-0.99	1.3	307.9	4.6	311.8
40.00	39.93	1.22	-1.57	2.0	307.8	4.3	302.7
50.00	49.89	1.68	-2.31	2.9	306.0	6.0	294.7
60.00	59.84	2.11	-3.19	3.8	303.5	5.9	295.1
70.00	69.75	2.59	-4.34	5.1	300.9	8.7	294.1
80.00	79.62	3.24	-5.82	6.7	299.1	10.1	292.1
90.00	89 43	3 97	-7.56	8.5	297.7	11.3	294.1
100.00	99.21	4.66	-9.44	10.5	296.3	12.2	291.6
110.00	108.97	5.30	-11.49	12.7	294.8	12.8	288.6
120.00	118.72	5.82	-13.69	14.9	293.0	13.8	281.8
130.00	128.42	6.11	-15.89	17.0	291.0	14.3	278.6
140.00	138.07	6.34	-16.51	19.6	288.9	15.7	
150.00	147.71	6.50	-21.16	22.1	287.1	15.7	275.2
160.00	157.31	6.72	-23.79	24.7	285.8	17.3	277.0
170.00	166.80	7.06	-26.92	27.8	284.7	19.0	276.6
100.00	176.24	7.46	-30.19	31.1	283.9	19.7	278.4
190.00	185.61	8.07	-33.64	34.6	283.5	21.5	284.7
200.00	194.85	9.21	-37.29	38.4	283.9	23.3	291.7
210.00	203.95	10.93	-41.06	42.5	284.9	25.9	298.5
220.00	212.85	13.21	-45.01	46.9	286.4	28.0	300.3
230.00	221.65	15.67	-49.05	51.5	287.7	28.6	301.2
240.00	230.37	18.37	-53.13	56.2	289.1	29.7	306.0
248.70	237.85	21.00	-56.62	60.4	290.3	31.0	308.2







159.000

343.000

1.000

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1.000

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100.000

157.500

252.400

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283946.00

420450.00

39714.70

73088.50

25243.90

118545.10

177468.50

7762.80

26347.60

3656.70

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170

METERS

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Aug10,08

Aug10,08

May13,08

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May13,08

May13,08

Aug24,08

Aug24,08

May13,08

May13,08

Aug20.07

Aug20,07

14:01:28

14:01:28

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15:57:55

15:57:55

13:04:07

13:04:07

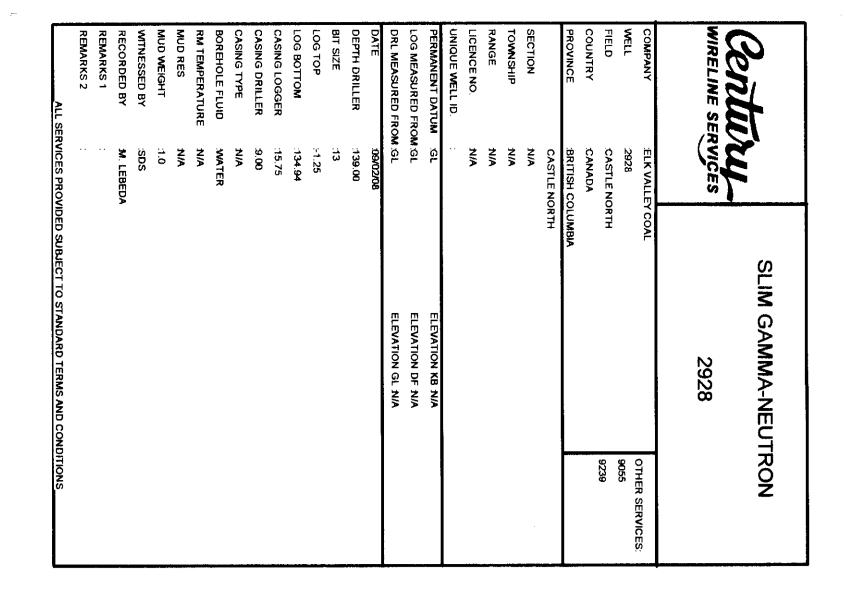
11:09:11

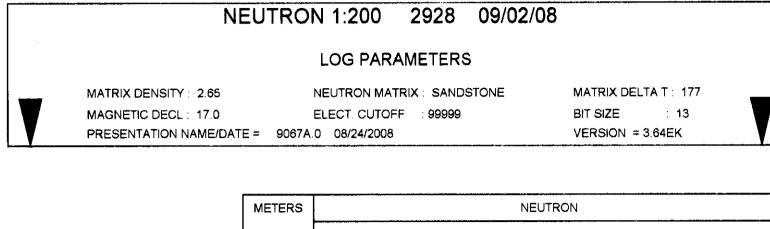
11:09:11

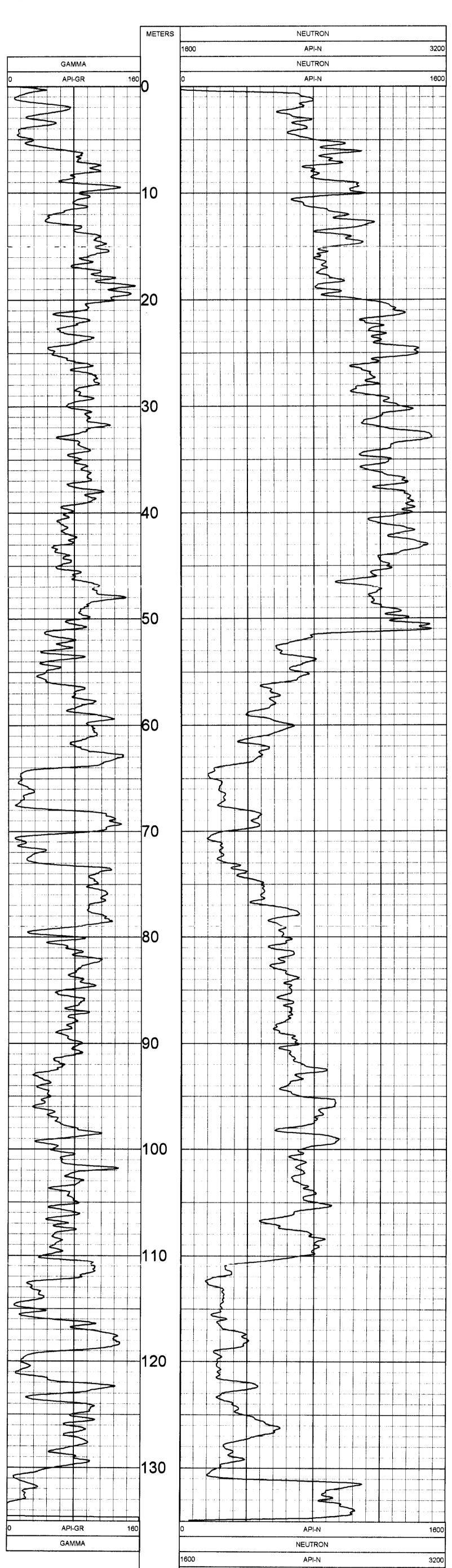
16:08:26

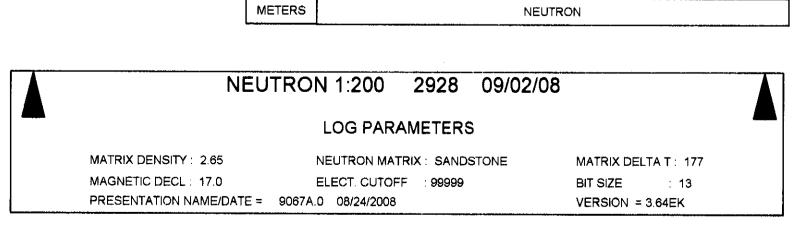
16:08:26

CALIPERL









	TOOL 9067A SERIAL NUME	TM VERSION 1 BER 530					
	DATE	TIME	SENSOR	STA	ANDARD	RE:	SPONSE
1	Jul20,07	01:44:30	GAMMA	1.000	[API-GR]	1.00	[CPS]
	Jul 20 ,07	01:44:30	GAMMA	250.000	IAPI-GR 1	52.00	[CPS]
2	Sep03,06	10:47:15	NEUTRON	1.000	[API-N]	1.00	iCPSi
	Sep03,06	10:47:15	NEUTRON	500.000	[API-N]	500.00	[CPS]

CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

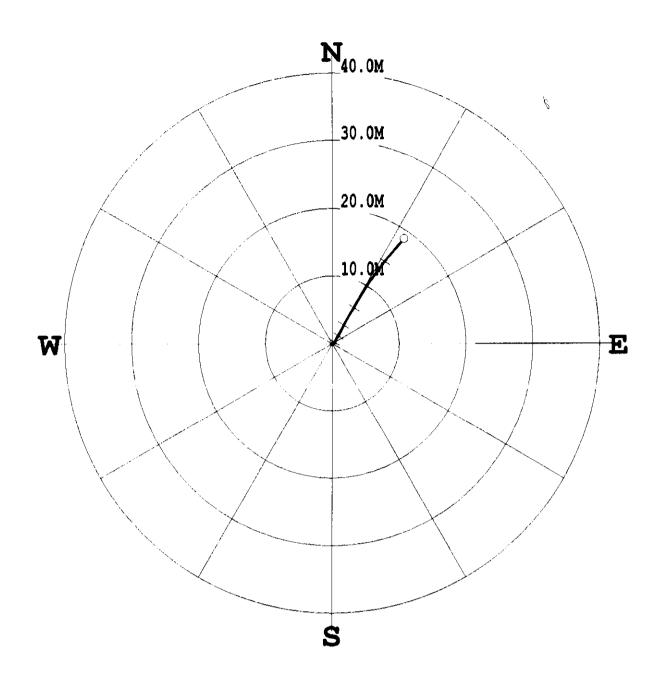
HOLE ID: 2928

DATE OF LOG: 09/03/08 PROBE: 9055A

MAG DECL: 17.0

SCALE: 5 M/CM TRUE DEPTH: 135.86 M AZIMUTH: 34.6

DISTANCE: 18.8 M + = 20 M INCR○ = BOTTOM OF HOLE

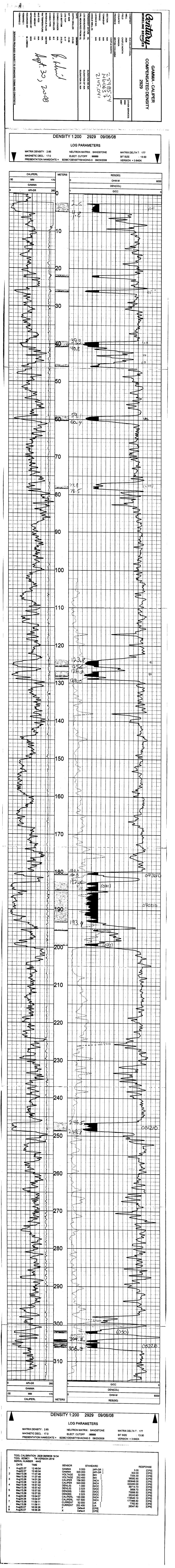


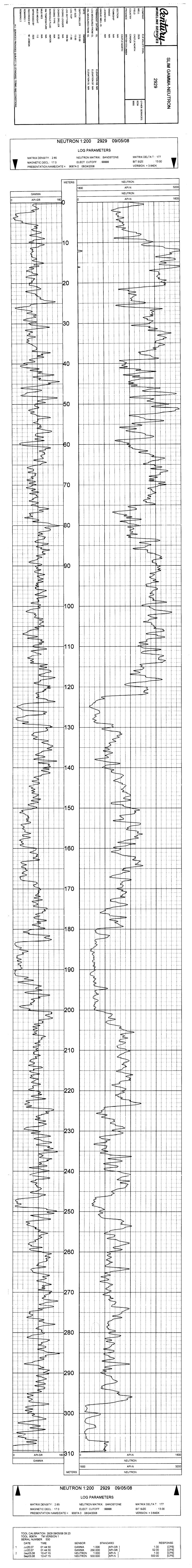
* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2928 FIELD OFFICE : CENTURY GEO **DATE OF LOG** : 09/03/08 DATA FROM : N/A MAG. DECL. : 17.000 72 : 9055A PROBE DEPTH UNITS : METERS LOG: 2928_09-03-08_16-50_9055A_.02_12.00_137.67_DEVI.log

CABLE DEPTH TRUE DEPTH NORTH DEV. EAST DEV. DISTANCE AZIMUTH SANG SANGB 12.00 12.00 0.0 0.00 45.9 0.00 2.6 45.9 21.99 22.00 0.34 0.32 0.5 43.0 2.6 32.00 31.97 0.76 0.63 1.0 39.7 3.3 41.96 42.00 1.27 37.4 0.97 1.6 3.8

43.1 36.4 30.4 52.00 **51**.92 1.95 1.35 2.4 34.7 5.7 27.9 62.00 61.86 2.94 1.B3 3.5 31.8 7.4 24.4 72.00 71.77 30.2 4.14 2.51 4.8 31.3 8.8 82.00 81.63 5.54 3.38 6.5 31.4 9.6 29.5 10.7 92.00 91.47 7.10 4.29 8.3 31.2 32.2 102.00 101.28 31.2 12 2 8.72 10.2 5.29 31.€ 111.06 31.7 12.8 112.00 10.47 6.47 12.3 35.8 122.00 120.78 12.30 7.89 14.6 32.7 13.9 40.2 132.00 130.42 14.30 9.63 17.2 34.0 16.1 41.6 15.48 34.6 137.66 135.82 10.69 18.8 16.4 41.6





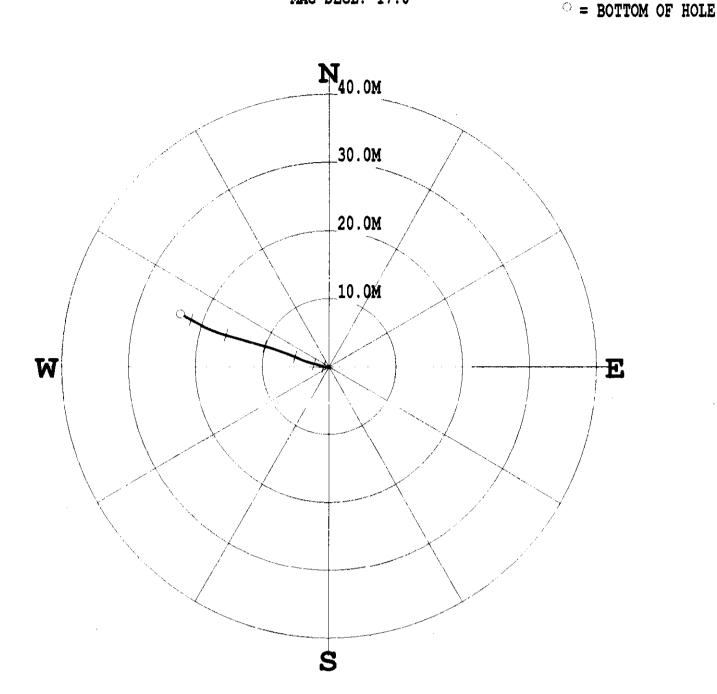
CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

HOLE ID: 2929

DATE OF LOG: 09/06/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 5 M/CM
TRUE DEPTH: 314.52 M
AZIMUTH: 289.2
DISTANCE: 23.5 M
+ = 50 M INCR



* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2929

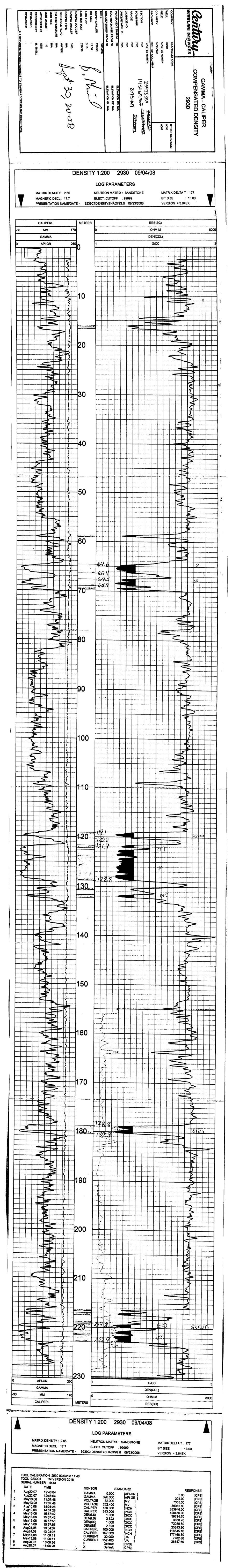
FIELD OFFICE : CENTURY GEO DATE OF LOG : 09/06/08

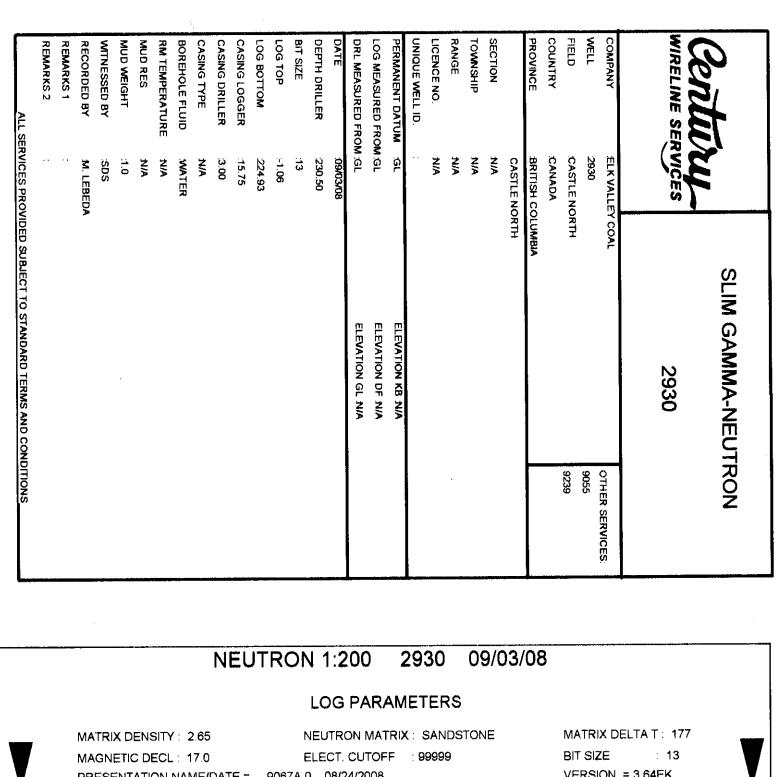
DATA FROM : N/A PROBE : 9055A , 72

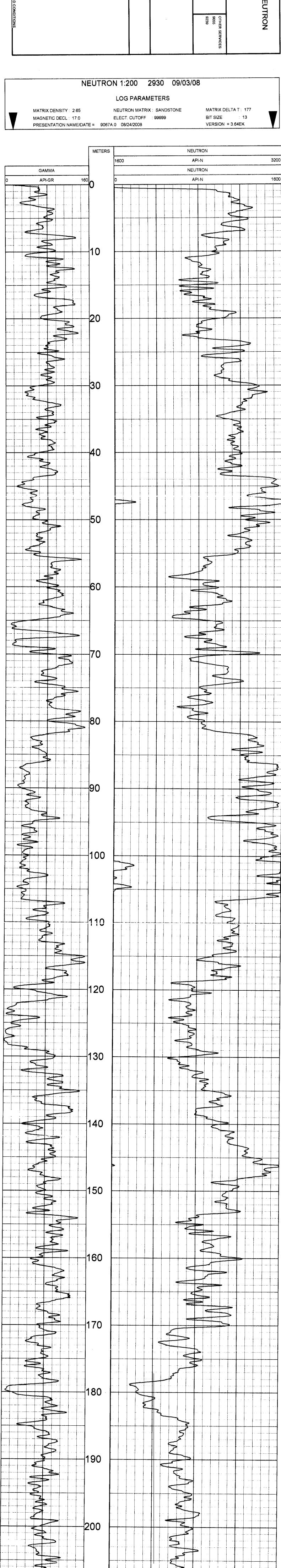
MAG. DECL. : 17.000 DEPTH UNITS : METERS

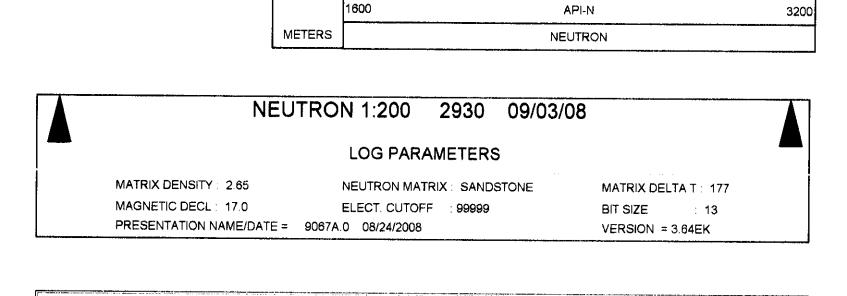
LOG: 2929_09-06-08_20-39_9055A_.02_13.00_315.68_DEVI.log

200. 2525		33_303380	2_13.00_313	. 00_D#41.1	.og	
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SANGB
13.02	13.02	0.00	-0.00	0.0	280.9	0.6 280.9
23.00	23.00	-0.00	-0.17	0.2	268.6	1.8 274.9
33.00	32.99	~ 0.00	-0.42	0.4	269.8	1.1 282.2
43.00	42.99	0.02	-0.66	0.7	272.1	1.4 274.7
53.00	52.99	0.05	-0.85	0.8	273.3	1.1 249.0
63.00	62.99	0.12	-1.03	1.0	276.9	
73.00	72.98	0.19	-1.24	1.3	278.7	
83.00	82.98	0.27	-1.53	1.6	280.1	2.0 284.5
93.00	92.97	0.38	-1.91	1.9	281.2	2 4 285 6
103.00	102.96	0.50	-2.37	2.4	261.8	3.1 284.9
113.00	112.95	0.64	-2.89	3.0	282.4	3.1 293.7
123.00	122.93	0.80	-3.42	3.5	283.2	3.3 289.3
133.00	132.91	0.99	-3.97	4.1	284.0	4.1 296.7
143.00	142.89	1.27	-4 .60	4.8	285.4	4.6 292.9
153.00	152.86	1.56	-5.30	5.5	2 86.4	4.6 289.8
163.00	162.82	1.85	~6 .07	6.3	287.0	4.8 290.5
173.00	172.78	2.16	-6.94	7.3	287.3	5.7 292.4
183.00	182.73	2.51	-7.92	8.3	287.6	5.9 288.6
193.00	192.68	2.83	-8.89	9.3	287.7	5.7 290.4
203.00	202.62	3.10	-9.91	10.4	287.4	
213.00	212.56	3.41	-10.97		287.2	6.5 286.4
223.00	222.49	3.72	-12.12	12.7	287.1	7.3 288.0
233.00	232.41	4.05	-13.28	13.9	287.0	7.2 287.1
243.00	242.33	4.39	-14.48	15.1	286.9	7.2 284.5
253.00	252.26	4.72	-15.67	16.4	286.8	6.8 287.8
263.00	262.19	5.07	-16.79	17.5	286.8	6.8 292.2
273.00	272.12	5.49	-17.86	18.7	287.1	6.6 292.9
283.00	282.06	5.94	-18.83	19.7	287.5	6.0 297.6
293.00	292.00	6.45	-19.82	20.8	288.0	6.3 297.8
303.00	301.93	7.01	-20.85		288.6	6.9 296.4
313.00	311.86	7.56	-21.90	23.2	289.0	7.0 296.6
315.68	314.48	7.70	-22.18	23.5	289.2	7.0 297.8









API-N

NEUTRON

1600

210

220

160

API-GR

GAMMA

TOOL CALIBRATION 2930 09/03/08 15:28 TOOL 9067A TM VERSION 1 SERIAL NUMBER 530 DATE TIME SENSOR STANDARD RESPONSE Jul20,07 01:44:30 1 GAMMA 1.000 [API-GR] 1.00 [CPS] Jul20,07 01:44:30 GAMMA [CPS] 250.000 [API-GR] 52.00 2 Sep03,06 10:47:15 [API-N] NEUTRON 1.000 1.00 Sep03,06 10:47:15 NEUTRON 500.000 500.00 [CPS]

CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

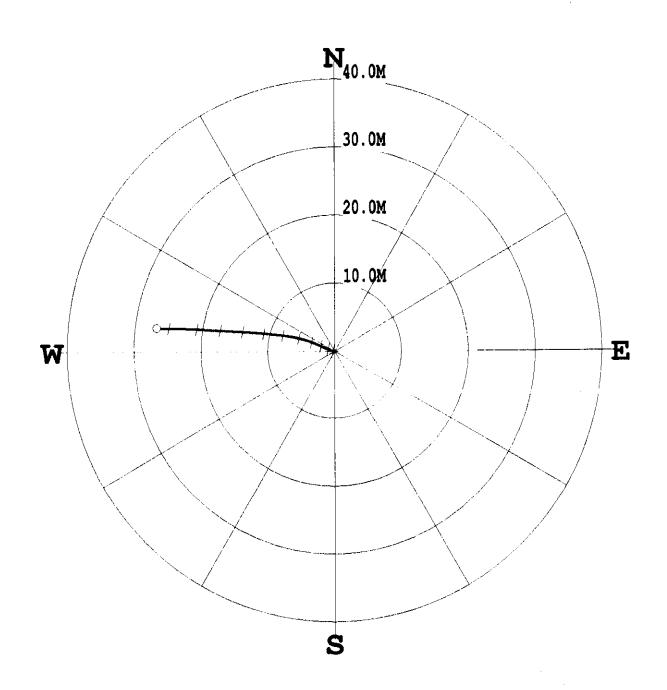
HOLE ID: 2930

DATE OF LOG: 09/04/08 PROBE: 9055A 72 4

MAG DECL: 17.7

SCALE: 5 M/CM
TRUE DEPTH: 228.11 M
AZIMUTH: 277.5
DISTANCE: 26.8 M

+ = 20 M INCR
○ = BOTTOM OF HOLE



* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2930

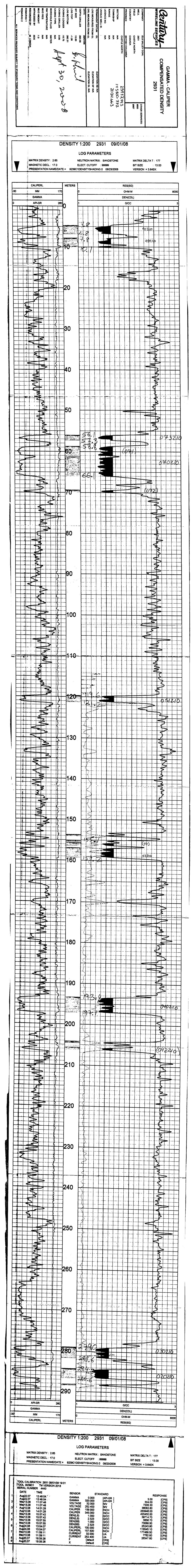
FIELD OFFICE : PENHOLD DATE OF LOG : 09/04/08

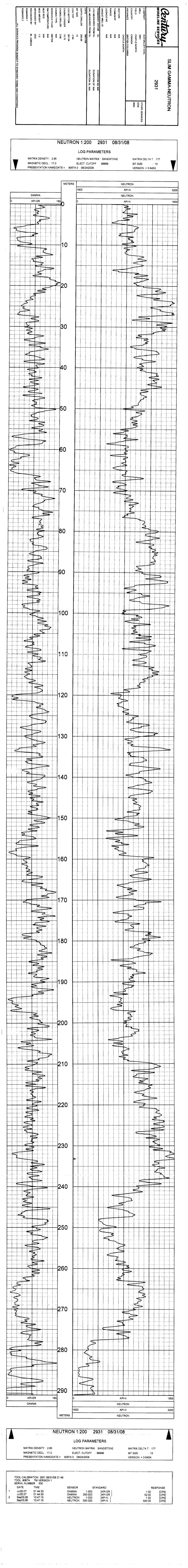
DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.700 DEPTH UNITS : METERS

LOG: 2930_09-04-08_10-51_9055A_.02_10.00_230.14_DEVI.log

					-		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SI	MGB
10.02	10.02	0.00	-0.00	0.0	310.5	0.7	310.5
20.00	20.00	0.06	-0.22	0.2	286.2	2.8	264.9
30.00	29.99	0.17	-0.59	0.6	285.8	2.0	292.3
40.00	39.98	0.30	-0.96	1.0	287.4	2.2	322.7
50.00	49.96	0.51	-1.48	1.6	288.9	3.4	295.4
60.00	59.95	0.77	-2.03	2.2	290.8	3.6	298.0
70.00	69.92	1.06	-2.67	2.9	291.7	4.2	293.8
80.00	79.89	1.37	-3.45	3.7	291.7	5.2	288.4
90.00	89.84	1.66	-4.32	4.6	291.1	5.6	288.1
100.00	99.79	1.93	0 ئى . ئ∹	5.6	290.0	6.3	285.0
110.00	109.72	2.18	-6.42	6.8	288.8	6.9	279.4
120.00	119.64	2.39	-7.68	8.0	287.3	7.7	278.0
130.00	129.55	2.54	~9.04	9.4	285.7	8.0	276.9
140.00	139.44	2.68	-10.48	10.8	284.3	8.5	274.6
150.00	149.33	2.80	-11.97	12.3	283.2	9.3	278.3
160.00	159.20	2.91	-13.59	13.9	282.1	9.5	273.7
170.00	169.06	3.00	-15.24	15.5	281.1	9.9	275.1
180.00	178.92	3.10	-16.92	17.2	280.4	9.6	272.9
190.00	188.77	3.21	-18.61	18.9	279.8	9.8	274.3
200.00	198.62	3.33	-20.35	20.6	279.3	10.3	273.5
210.00	208.43	3.42	-22.27	22.5	278.7	11.3	273.3
220.00	218.21	3.47	-24.37	24.6	278.1	12.3	269.0
230.00	227.97	3.49	-26.55	26.8	277.5	13.1	269.8
230.14	228.07	3.49	-26.57	26.8	277.5	13.1	270.4





CLIENT: ELK VALLEY COAL

LOCATION: CASTLE NORTH

HOLE ID: 2931

DATE OF LOG: 09/01/08

PROBE: 9055A 72

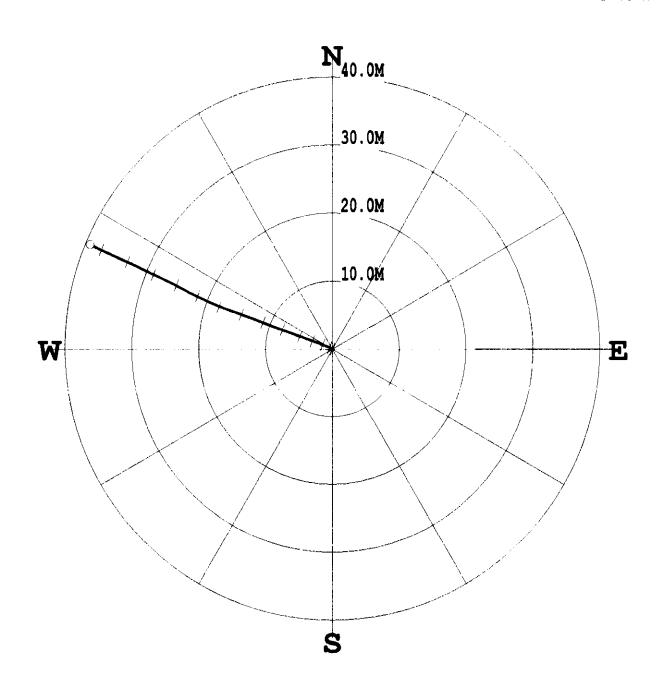
MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 289.05 M

AZIMUTH: 292.9 DISTANCE: 39.3 M + = 20 M INCR

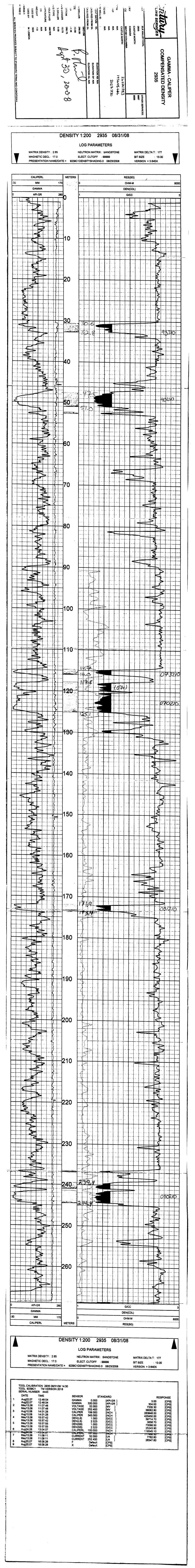
○ = BOTTOM OF HOLE

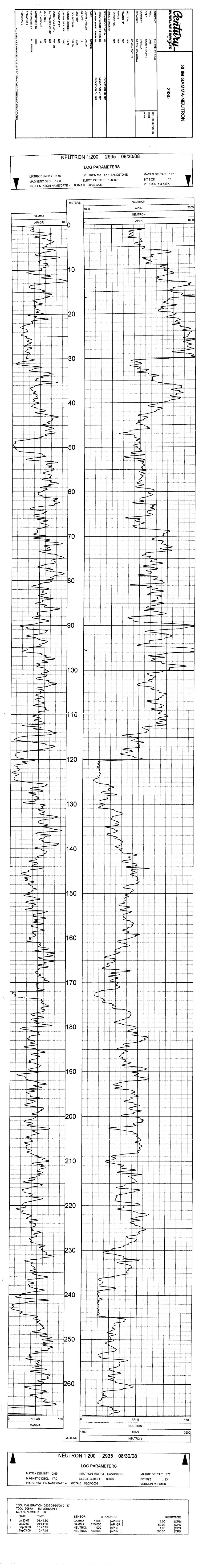


* * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

HOLE ID. : 2931 DATE OF LOG : 09/01/08 : ELK VALLEY COAL CLIENT FIELD OFFICE : CENTURY GEO : 9055A , DATA FROM : N/A PROBE 72 MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2931_09-01-08_17-37_9055A02_6.23_292.37_DEVI.log								
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB	
10.00	9.99	0.01	0.00	0.0	42.0	0.2	51.4	
20.00	19.99	0.02	0.02	0.0	42.8	0.4	41.9	
30.00	29.99	0.11	-0.08	0.1	323.3	2.3	297.6	
40.00	39.98	0.27	-0.41	0.5	303.6	2.4	282.0	
50.00	49.97	0.43	-0.85	1.0	296.6	3.4	290.7	
60.00	59.95	0.66	-1.45	1.6	294.4	4.0	290.8	
70.00	69.92	0.94	-2.15	2.3	293.6	6.0	348.6	
80.00	79.88	1.23	-2.95	3.2	292.7	5.0	291.9	
90.00	89.84	1.54	-3.82	4.1	292 .0	5.8	286.2	
100.00	99.78	1.91	-4.84	5.2	291.6	6.9		
110.00	109.70	2.35	-6.04	6.5	291.2	7.9	289.1	
120.00	119.59	2.82	-7.40	7.9	290.9	8.6	290.4	
130.00	129.48	3.33	-8.82	9.4	290.7	8.8	290.1	
140.00	139.36	3.88	-10.27	11.0	290.7	9.2	293.4	
150.00	149.22	4.49	-11.83	12.7	290.8	9.8	291.1	
160.00	159.07	5.07	-13.46	14.4	290.6	9.9	290.1	
170.00	168.91	5.64	-15.10	16.1	290.5	9.8	290.0	
180.00	178.76	6.23	-16.72	17.8	290.4	10.4		
190.00	188.61	6.91	-18.34	19.6	290.6	10.1	293.9	
200.00	198.46	7.62	-19.91	21.3	290.9	9.9	296.3	
210.00	208.31	8.37	-21.46	23.0	291.3	9.8	296.2	
220.00	218.15	9.17	-23.02	24.8	291.7	10.6	297.6	
230.00	227.99	9.97	-24.63	26.6	292.0	10.5	294.3	
240.00	237.81	10.77	-26.33	28.4	292.2	11.7	295.6	
250.00	247.60	11.64	-28.18	30.5	292.4	12.2	296.7	
260.00	257.38	12.53	-30.10	32.6	292.6	12.1	293.3	
270.00	267.15	13.39	-32.03	34.7	292.7	12.3	293.4	
280.00	276.92	14.26	-33.95	36.8	292.8	12.0	295.3	
290.00	286.72	15.11	-35.78	38.8	292.9	11.4	295.9	
292.38	289.02	15.30	-36.19	39.3	292.9	11.0	294.6	





CLIENT: ELK VALLEY COAL

LOCATION: CASTLE NORTH

HOLE ID: 2935

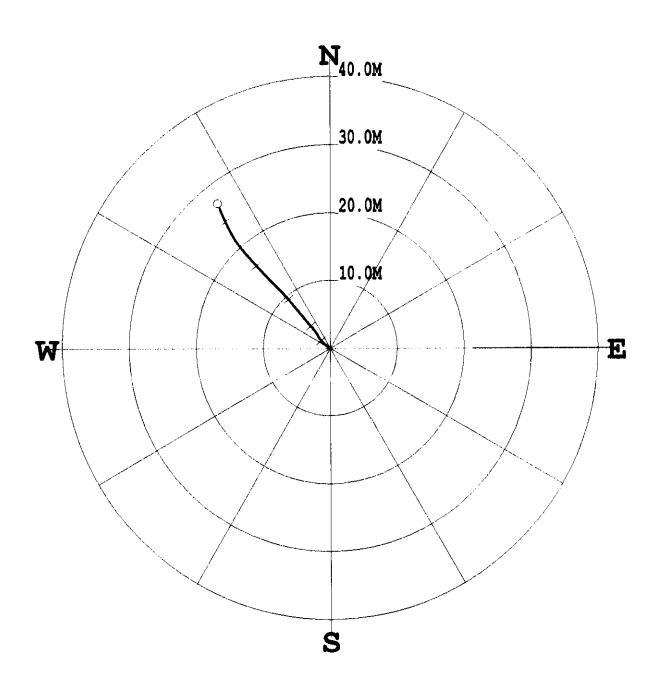
DATE OF LOG: 08/31/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 267.26 M

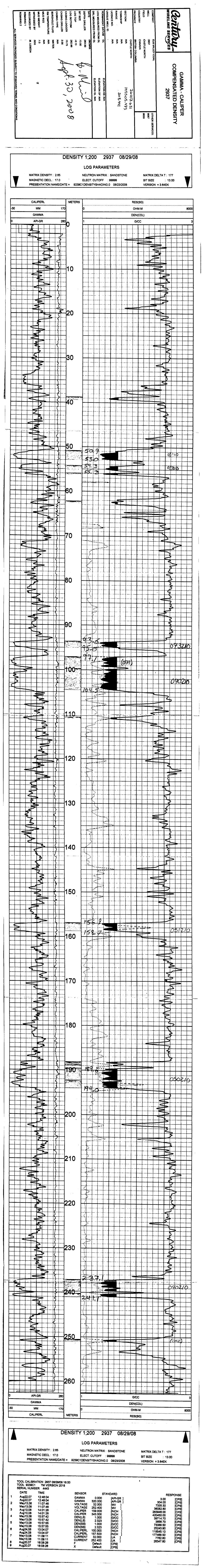
AZIMUTH: 321.7 DISTANCE: 27.1 M + = 50 M INCR○ = BOTTOM OF HOLE

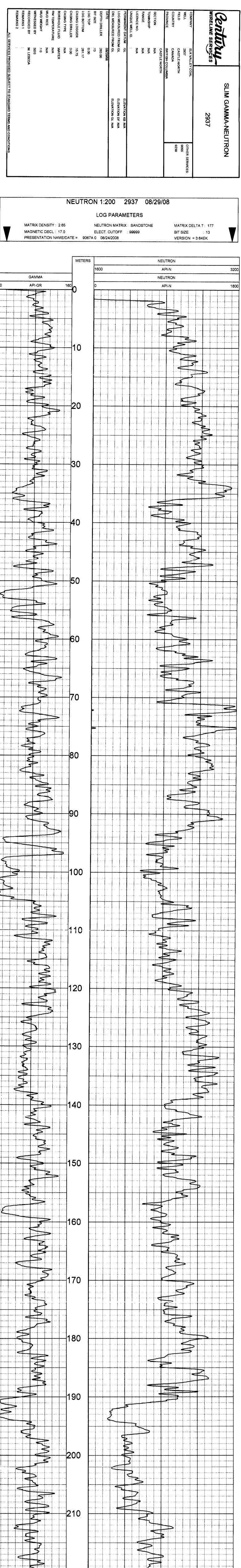


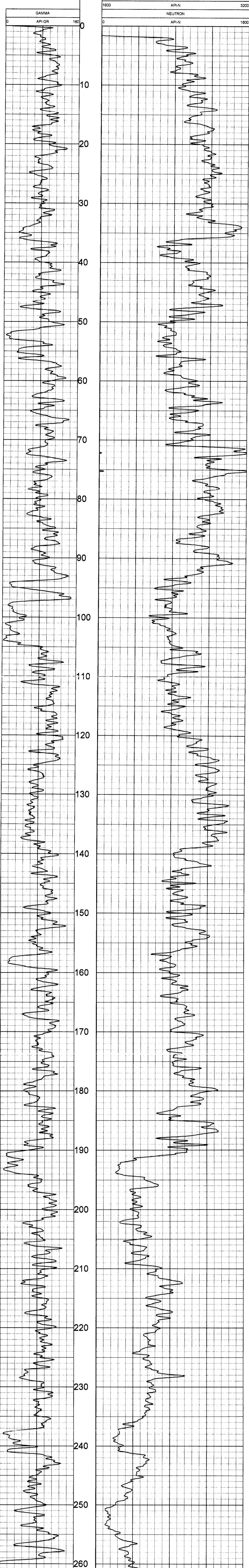
* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

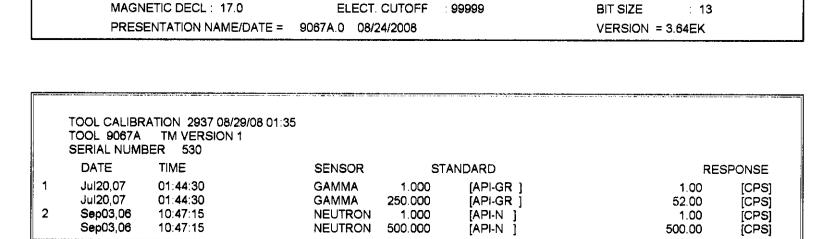
CLIENT : ELK VALLEY COAL FIELD OFFICE : CENTURY GEO HOLE ID. : 2935 DATE OF LOG : 08/31/08 DATA FROM : N/A PROBE : 9055A MAG. DECL. : 17.000 DEPTH UNITS : METERS LOG: 2935 08-31-08 12-37 9055A .02 7.12 268.99 DEVI.log : 9055A 72

BLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	Azimuth		Sangb
10.00	10.00	0.03	-0.02	0.0	321.4	1.2	
20.00	19.99	0.28	-0.34	0.4	309.0	3.0	
30.00	29.98	0.55	-0.74	0.9	306.7	2.6	
40.00	39.97	0.85	-1.06	1.4	308.5	3.2	314.
50.00	49.96	1.15	-1.35	1.8	310.5	2.3	
60.00	59.95	1.47	-1.63	2.2	312.2		
70.00	69.94	1.84	-1.82	2.6	315.3	2.6	
80.00	79.93	2.26	-2.07	3.1	317.5	3.0	
90.00	89.91	2.73	-2.43	3.7	318.3	3.8	323.
100.00	99.89	3.24	-2.88	4.3	318.4		
110.00	109.85	3.89	-3.47	5.2	318.3	5.3	323.
120.00	119.80	4.65	-4.08	6.2	318.7		
130.00	129.75	5.44	-4.73	7.2	319.0	5.9	320.
140.00	139.69	6.27	-5.42	8.3	319.2		
150.00	149,62	7.16	-6.19	9.5	319.2	6.8	318.
160.00	159.54	8.07	-7.03	10.7	318.9	7.4	316.
170.00	169.45	9.05	-7.97	12.1	318.6	7.6	
180.00	179.36	10.01	-8.92	13.4	318.3	7.8	313.
190.00	189.26	11.00	-9.91	14.8	318.0	8.1	315.
200.00	199.15	12.06	-10.92	16.3	317.8	8.6	317.
210.00	209.04	13.18	-11.93	17.8	317.9	9.2	317.
220.00	218.91	14.38	-12.98	19.4	317.9	9.0	321.
230.00	228.78	15.63	-13.95	20.9	318.3	9.2	325.
240.00	238.65	17.01	-14.79	22.5	319.0	9.2	330.
250.00	248.52	18.46	-15.52	24.1	319.9	9.4	336.
260.00	258.38	19.94	-16.20	25.7	320.9	9.5	336.
269.00	267.22	21.29	-16.79	27.1	321.7	9.9	336.









NEUTRON 1:200 2937 08/29/08

LOG PARAMETERS

NEUTRON MATRIX: SANDSTONE

API-N

NEUTRON

API-N

NEUTRON

MATRIX DELTA T: 177

1600

3200

API-GR

GAMMA

MATRIX DENSITY: 2.65

160

1600

METERS

CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

HOLE ID: 2937

200.00

210.00

220.00

230.00

240.00

250.00

260.00

197.61

207.27

216.93

226.59

236.26

245.98

255.71

258.53

DATE OF LOG: 08/29/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 10 M/CM TRUE DEPTH: 258.57 M AZIMUTH: 311.3 DISTANCE: 41.0 M

+ = 50 M INCR○ = BOTTOM OF HOLE

25.2

4.1

327.3

326.1

323.9

322.1

321.9

314.1

315.0

312.8

310.9

309.6

303.6

302.0

300.6

301.5

301.0

300.2

300.3

303.0

302.7

14.8

15.1

15.0

15.1

14.2

13.3

13.2

317.3

315.7

314.5

313.4

312.5 311.8

311.5

25.7

28.2

30.7

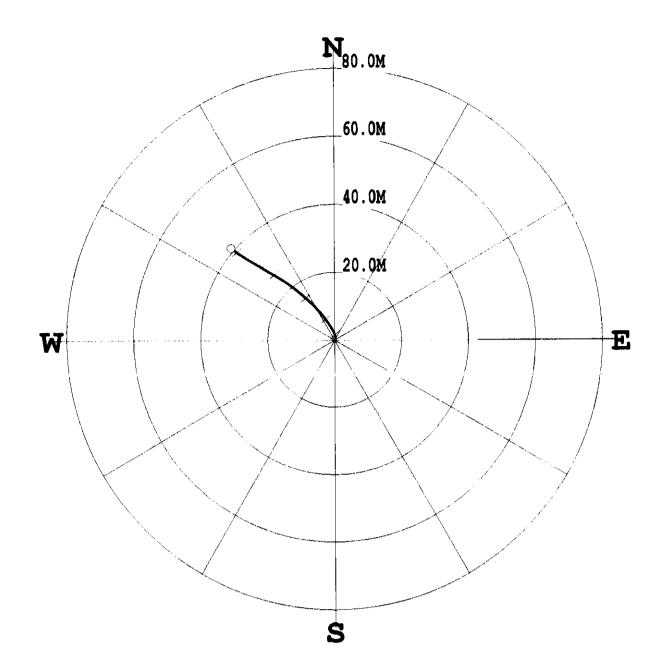
33.2

35.7

38.1

40.3

41.0



* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * * : ELK VALLEY COAL HOLE ID. : 2937 CLIENT FIELD OFFICE : CENTURY GEO **DATE OF LOG:** 08/29/08 : 9055A : N/A : 17.000 72 PROBE DATA FROM MAG. DECL. : 17.000 DEPTH UNITS : METER LOG: 2937_08-29-08_16-56_9055A_.02_6.55_262.94_DEVI.log DEPTH UNITS : METERS CABLE DEPTH TRUE DEPTH NORTH DEV. EAST DEV. DISTANCE AZIMUTH SANG SANGB 91.3 0.7 51.3 9.99 -0.00 0.03 0.0 10.00 44.3 0.2 1.7 20.00 19.99 0.17 0.16 29.98 0.24 30.00 0.56 0.6 23.4 2.5 0.99 2.5 356.6 39.97 0.22 1.0 12.5 40.00 3.5 350.8 5.1 337.2 50.00 49.95 1.56 0.09 1.6 3.3 -0.17 2.2 355.7 60.00 59.93 2.21 6.1 327.1 3.07 -0.58 3.1 349.3 70.00 69.88 6.4 7.7 80.00 4.02 343.8 5.04 89.74 -1.83 5.4 340.0 90.00 -2.62 336.9 7.9 99.65 6.14 6.7 100.00 334.4 8.5 110.00 -3.47 8.0 109.55 7.26 8.41 9.65 119.43 129.28 -4.44 -5.57 332.2 9.5 9.4 120.00 11.1 330.0 10.5 130.00 327.7 11.2 140.00 139.10 10.97 -6.93 13.0 148.90 12.31 -8.39 14.9 325.7 11.9 150.00 12.4 13.1 323.9 158.68 13.67 -9.96 16.9 160.00 322.2 -11.65 19.0 170.00 168.44 15.05 -13.46 -15.39 16.36 17.65 21.2 178.18 320.6 13.0 180.00 23.4 318.9 13.5 187.91 190.00

18.90

20.21

21.54

22.85

24.14

25.39

26.71

27.05

-17.47

-19.71

-21.93

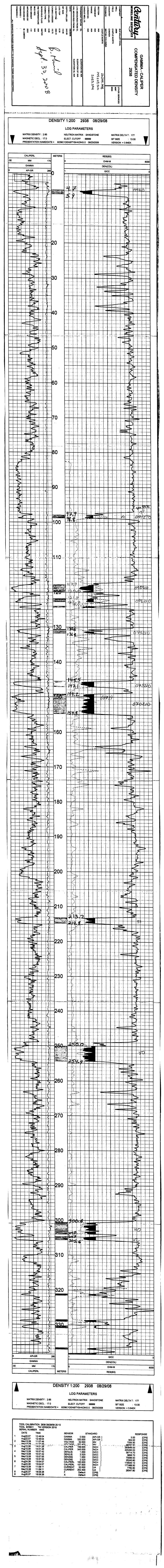
-24.15

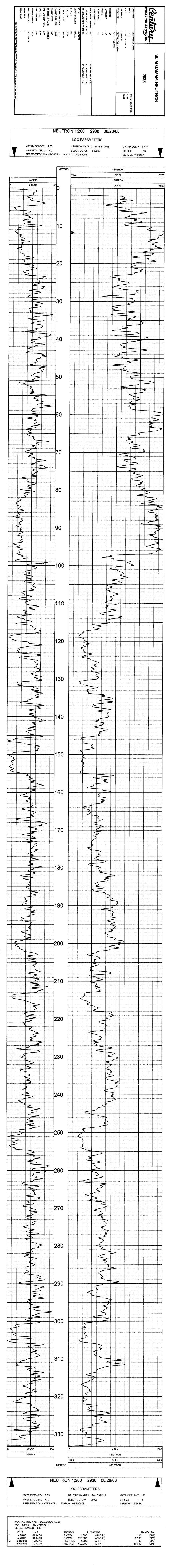
-26.34

-28.36

-30.20

-30.74





CLIENT: ELK VALLEY COAL LOCATION: CASTLE NORTH

HOLE ID: 2938

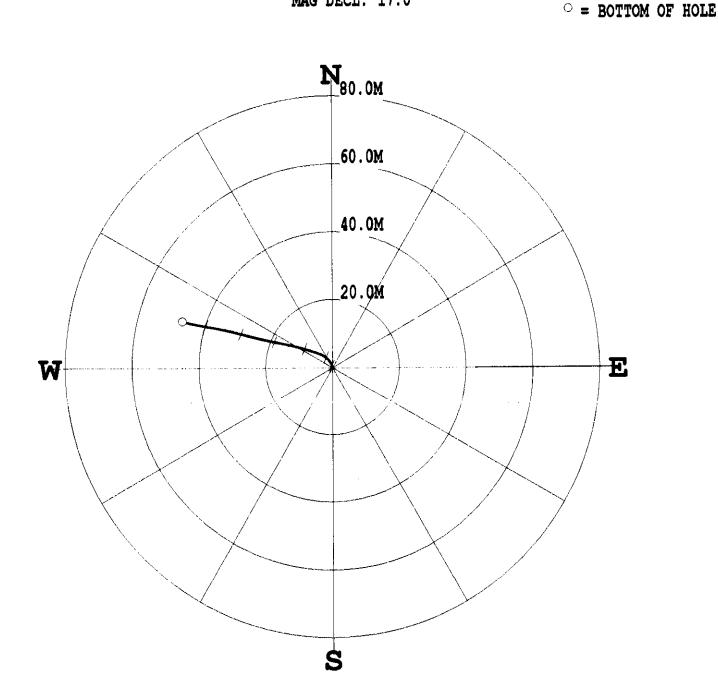
DATE OF LOG: 08/29/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 10 M/CM

TRUE DEPTH: 333.95 M AZIMUTH: 286.8 DISTANCE: 46.8 M

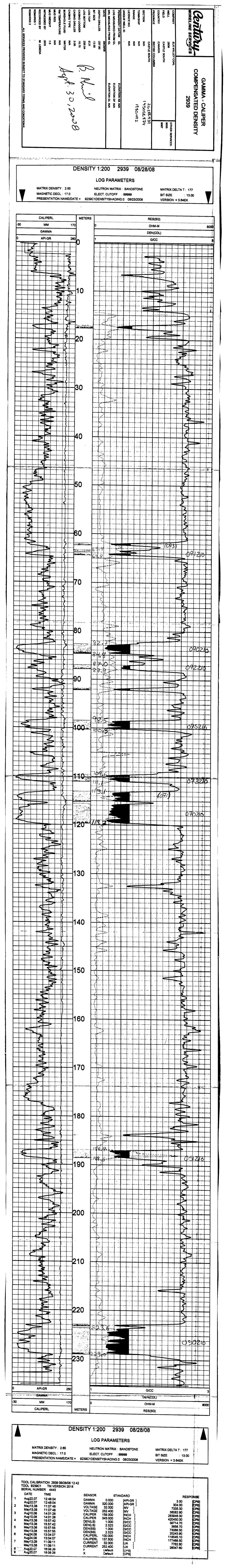
+ = 50 M INCR

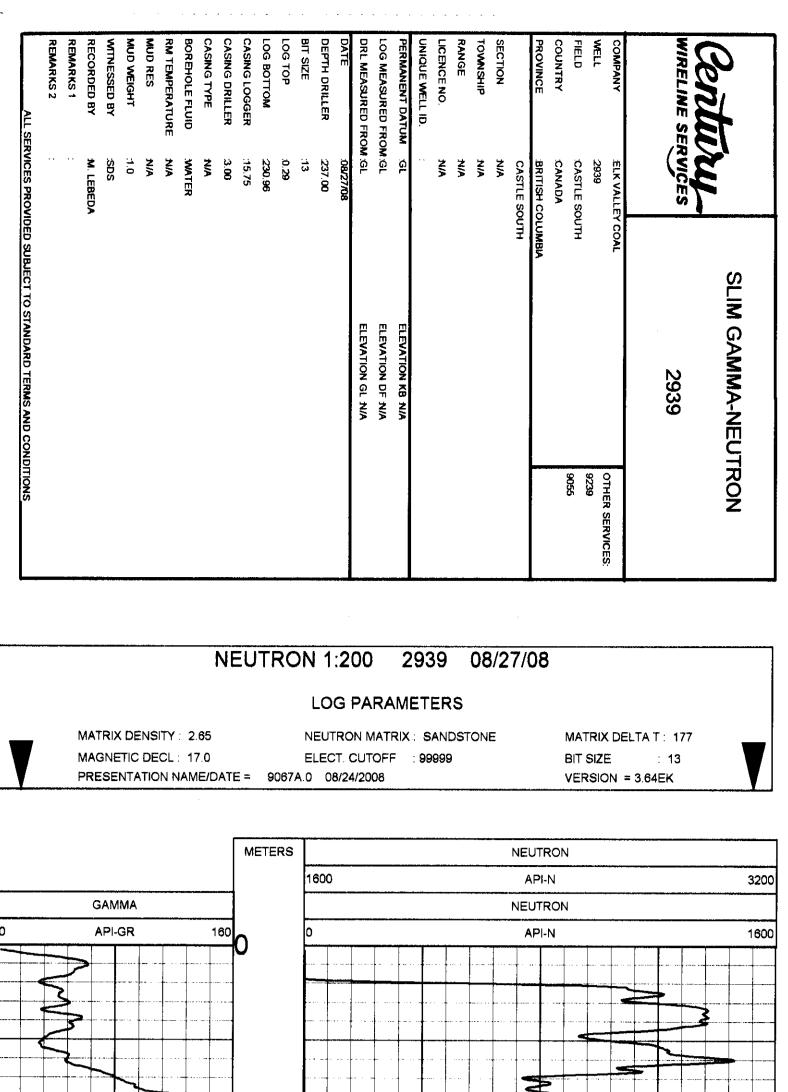


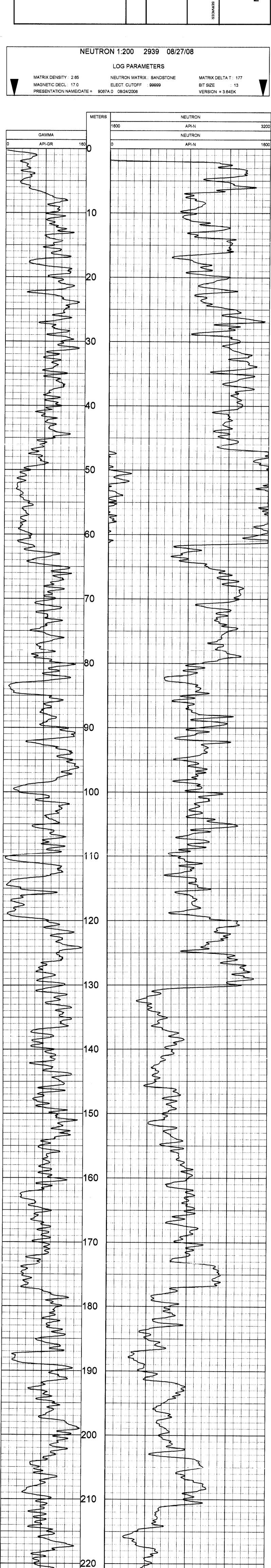
* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

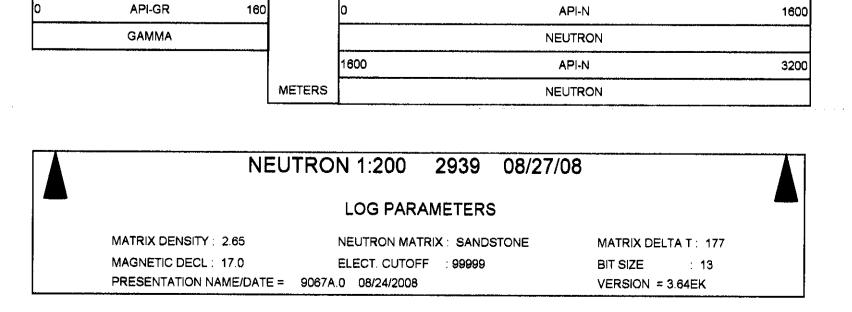
HOLE ID. : 2938 CLIENT : ELK VALLEY COAL FIELD OFFICE : CENTURY GEO DATE OF LOG: 08/29/08 PROBE : 9055A DEPTH UNITS : METERS 72 DATA FROM : N/A MAG. DECL. : 17.000 MAG. DECL. : 17.000 DEPTH UNITS : METER LOG: 2938_08-29-08_19-15_9055A_.02_7.27_338.36_DEVI.log

10G. 2936		-13_9033#0					
CABLE DEPTH	TRUE DEPTH			DISTANCE			angb
10.00	10.01	-0.00	-0.00	0.0	188.9	0.5	
20.00	20.01	0.03	0.03		39.4	0.9	
30.00	30.01	0.16	0.01	0.2	1.8	1.3	
40.00	40.01	0.35	-0.07	0.4	348,9	1.6	
50.00	50.00	0.68	-0.12	0.7	349.6	2.6	
60.00	59.9 9	1.12	-0.32	1.2	344.0	2.7	
70.00	69.97	1.59	-0.61	1.7	339.1	3.4	
80.00	79.96	2.04	-0.96	2.3	334.7	4.1	
90.00	89.93	2.54	-1.39	2.9	331.2	3.8	
100.00	99.91	3.02	-1.91	3.6	327.7	4.6	
110.00	109.86	3.51	-2.69	4.4	322.5	6.0	
120.00	119.79	4.03	-3.77	5.5	316.9		
130.00	129.69	4.49	-5.00	6.7	311.9		
140.00	139.57	4.96	-6.53	8.2	307.2	9.6	
150.00	149.41	5.47	-8.22	9.9	303.6	10.3	
160.00	159.25	5.92	-9.86	11.5	301.0	10.1	
170.00	169.09	6.35	-11.52	13.2	298.9	10.7	
180.00	178.91	6.74	-13.36	15.0	296.8	11.0	
190.00	188.73	7.12	-15.21	16.8		11.0	
200.00	198.54	7.49	-17.10	18.7	293.7		
210.00	208.34	7.90	-19.04	20.6	292.5		
220.00	218.15	8.32	-20.94	22.5	291.7		
230.00	227.96	8.77	-22.84	24.5	291.0		
240.00	237.75	9.28	-24.80	26.5	290.5		
250.00	247.53	9.81	-26.83	28.6	290.1		
260.00	257.31	10.32	-28.85	30.6	289.7		
270.00	267.10	10.79	-30.83	32.7			
280.00	276.88	11.24	-32.88	34.7	288.9		
290.00	286.64	11.66	-34.99	36.9	288.4		
300.00	296.39	12.04	-37.19	39.1	287.9		
310.00	306.15	12.41	-39.33	41.2	287.5	12.2	
320.00	315.94	12.81	-41.34	43.3			
330.00	325.74	13.23		45.2			
338.36	333.91	13.57	-44.82	46.8	286.8	11.0	282.4









1	DATE Jul20,07	TIME 01:44:30	SENSOR GAMMA	1.000	ANDARD		SPONSE
,	Jul20,07	01:44:30	GAMMA	250.000	[API-GR] [API-GR]	1.00 52.00	[CPS]
2	Sep03,06	10:47:15	NEUTRON	1.000	[API-N]	1.00	[CPS]
	Sep03,06	10:47:15	NEUTRON	500.000	(API-N j	500.00	[CPS]

CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2939

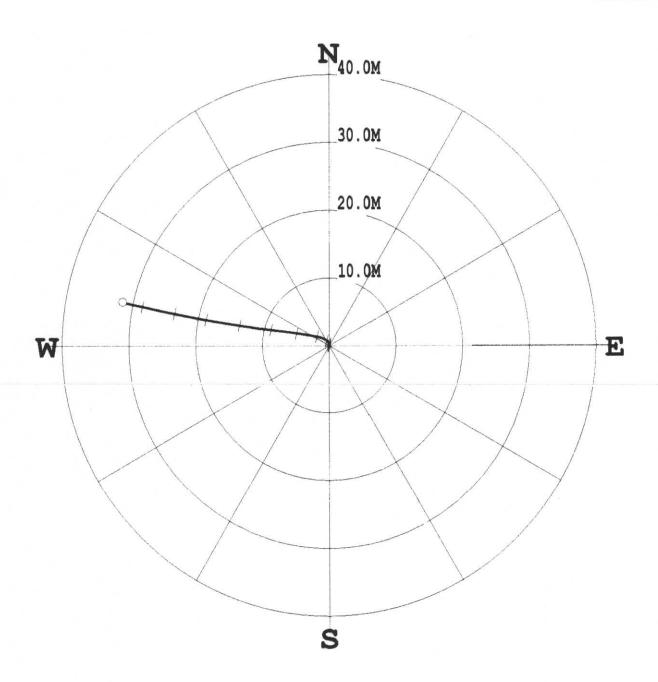
DATE OF LOG: 08/28/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 232.26 M AZIMUTH: 281.8

DISTANCE: 31.6 M + = 20 M INCR = BOTTOM OF HOLE



* * * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2939

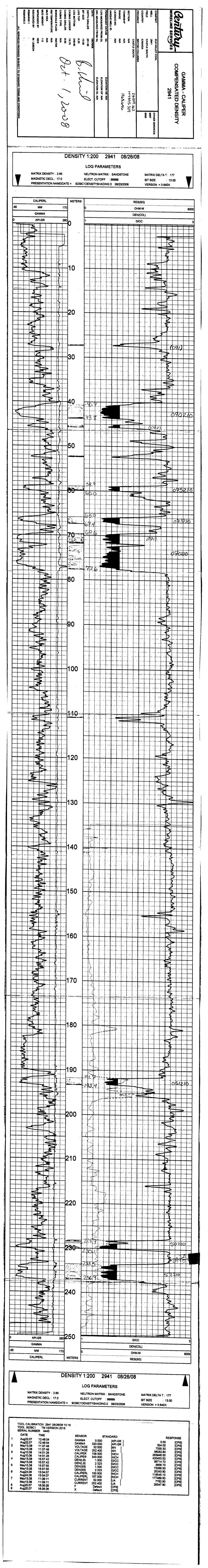
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/28/08

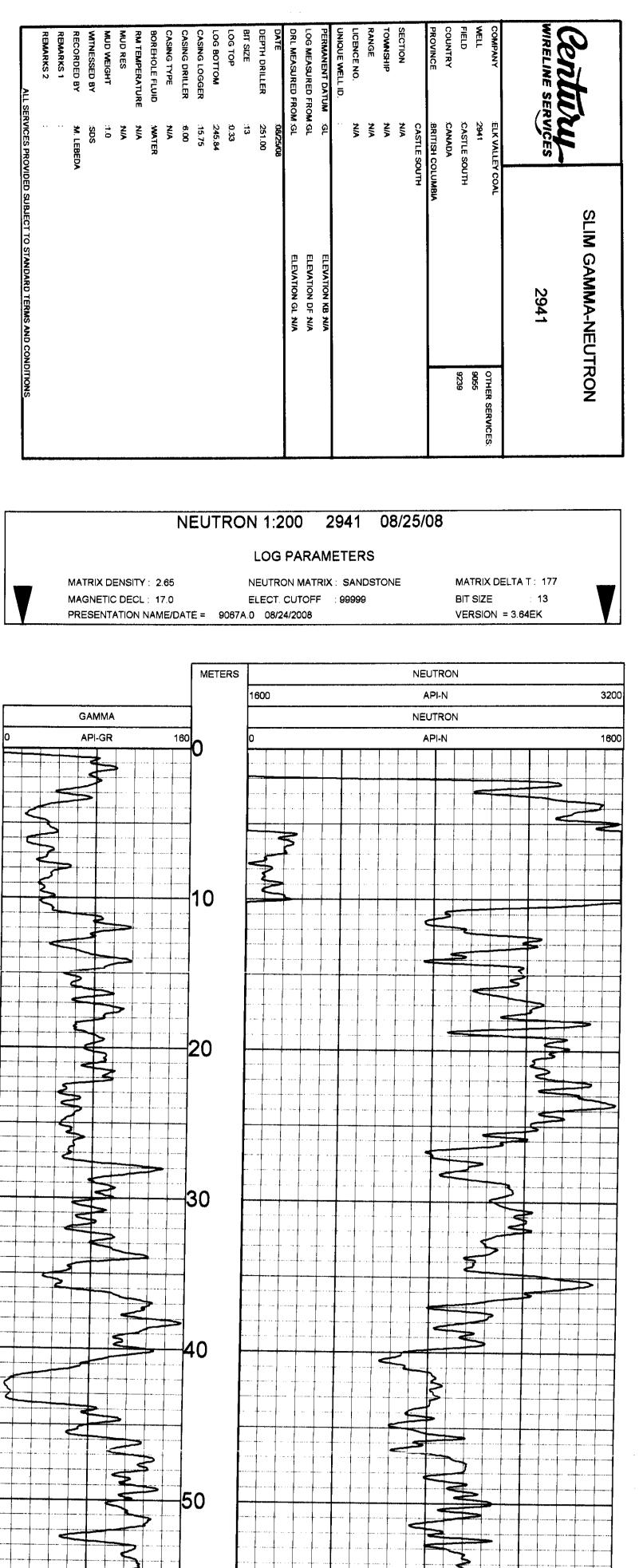
DATA FROM : N/A PROBE : 9055A , 72

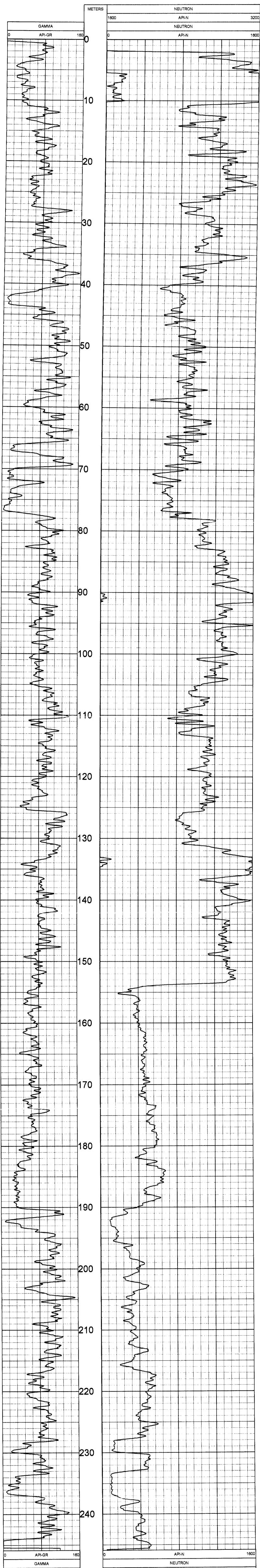
MAG. DECL. : 17.000 DEPTH UNITS : METERS

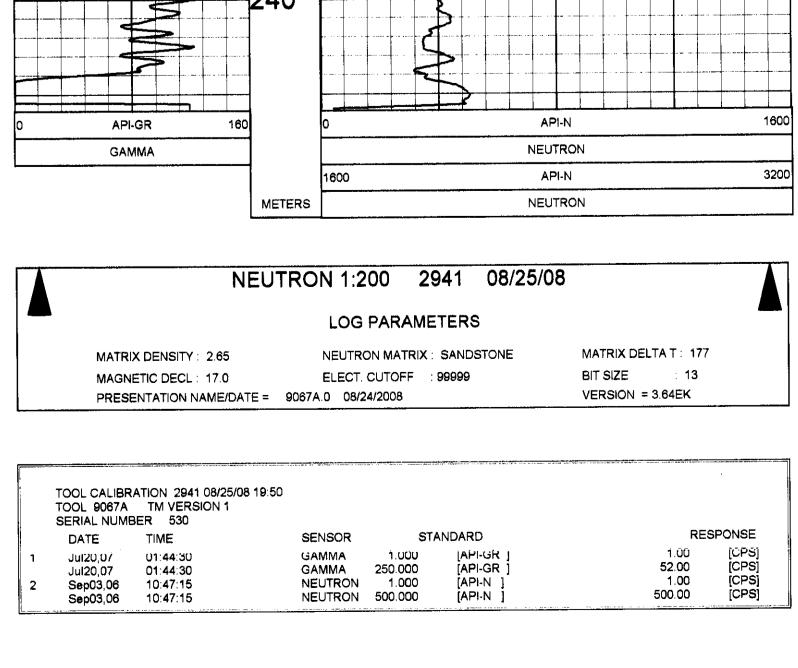
LOG: 2939 08-28-08 11-51 9055A .02 5.67 235.72 DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB	
10.00	9.99	-0.00	0.01	0.0	109.5	0.2	103.7	
20.00	19.99	0.01	0.04	0.0	73.7	0.2	340.2	
30.00	29.99	0.06	0.04	0.1	31.1	0.3	343.7	
40.00	39.99	0.10	0.03	0.1	16.1	0.4	11.6	
50.00	49.99	0.17	0.06	0.2	20.9	0.7	23.0	
60.00	59.99	0.33	0.05	0.3	9.3	1.3	339.9	
70.00	69.98	0.55	-0.09	0.6	350.7	2.1	306.2	
80.00	79.98	0.80	-0.36	0.9	335.6	2.8	303.7	
90.00	89.96	1.07	-0.86	1.4	321.4	4.2	289.9	
100.00	99.91	1.36	-1.81	2.3	306.9	6.8	281.0	
110.00	109.81	1.61	-3.21	3.6	296.7	8.8	279.9	
120.00	119.67	1.86	-4.82	5.2	291.1	9.5	277.6	
130.00	129.51	2.11	-6.58	6.9	287.7	11.1	276.3	
140.00	139.31	2.34	-8.56	8.9	285.3	12.0	277.0	
150.00	149.06	2.60	-10.76	11.1	283.6	13.2	275.9	
160.00	158.78	2.96	-13.11	13.4	282.7	14.1	279.0	
170.00	168.47	3.35	-15.55	15.9	282.2	14.4		
180.00	178.16	3.76	-17.97	18.4	281.8	14.1		
190.00	187.87	4.18	-20.28	20.7	281.6	14.6		
200.00	197.58	4.64	-22.56	23.0	281.6	13.7		
210.00	207.28	5.12	-24.92	25.4	281.6	13.7	281.6	
220.00	216.99	5.63	-27.25	27.8	281.7	13.4		
230.00	226.71	6.14	-29.55	30.2	281.7	13.7		
235.72	232.23	6.44	-30.88	31.5	281.8	14.3	284.9	









CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

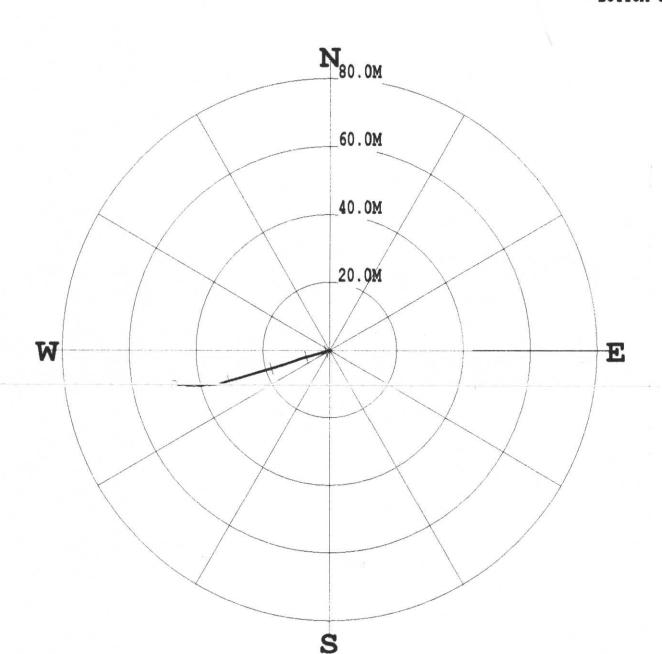
HOLE ID: 2941

DATE OF LOG: 08/26/08 PROBE: 9055A 72 MAG DECL: 17.0

SCALE: 10 M/CM

TRUE DEPTH: 243.30 M

AZIMUTH: 257.7
DISTANCE: 47.8 M
+ = 50 M INCR
= BOTTOM OF HOLE



* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2941

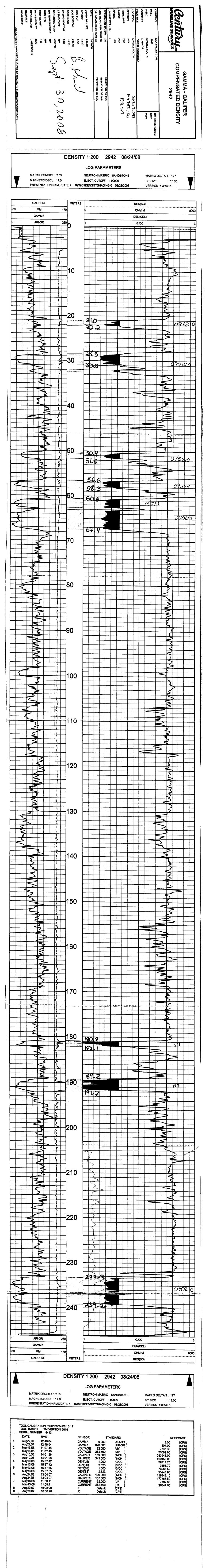
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/26/08

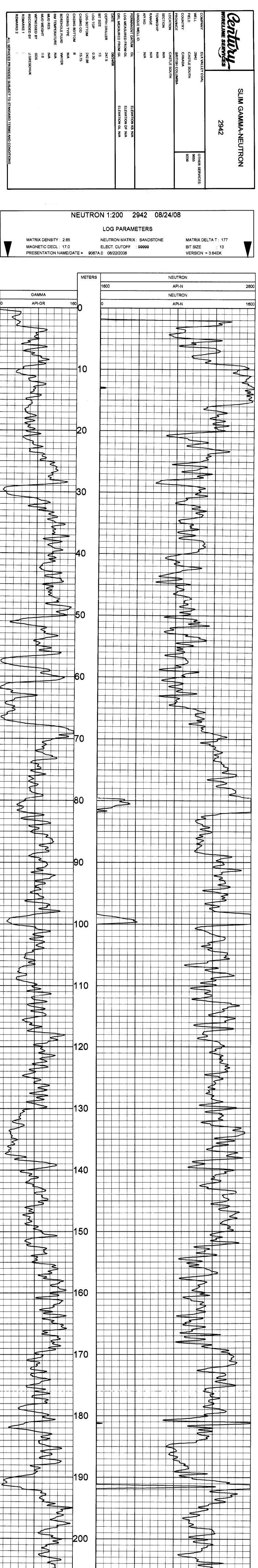
DATA FROM : N/A PROBE : 9055A , 72

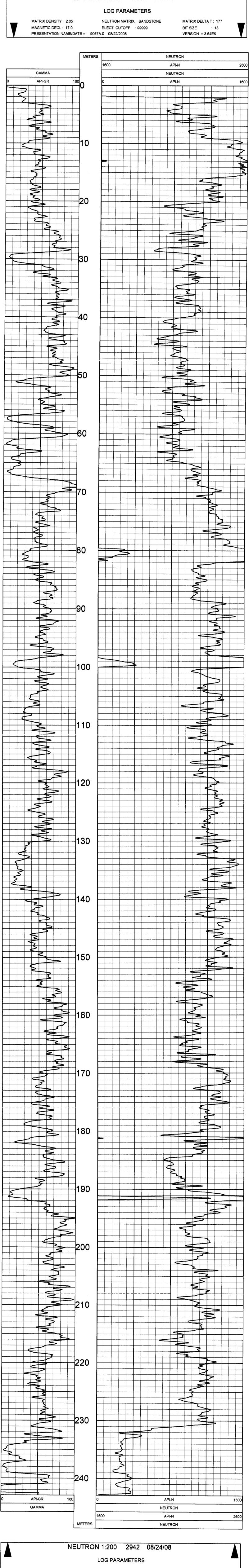
MAG. DECL. : 17.000 DEPTH UNITS : METERS

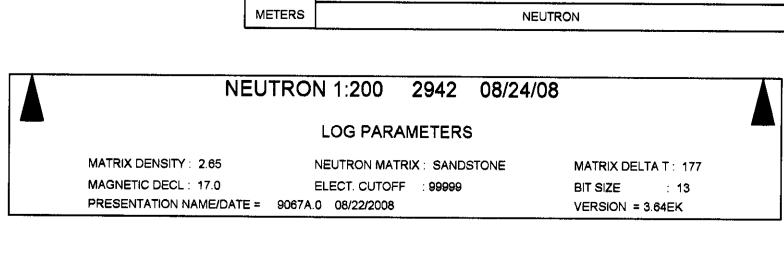
LOG: 2941_08-26-08_09-22_9055A_.02_7.87_249.88_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SANGB	
10.00	9.99	-0.00	-0.00	0.0	184.9	0.4 181.0	
20.00	19.99	-0.03	0.01	0.0	156.6	0.3 141.6	
30.00	29.99	-0.03	-0.05	0.1	239.9	1.0 268.5	
40.00	39.98	-0.08	-0.46	0.5	260.7	3.3 251.5	
50.00	49.96	-0.25	-1.08	1.1	256.9	4.3 251.1	
60.00	59.92	-0.53	-1.95	2.0	254.8	5.2 226.3	
70.00	69.84	-0.86	-3.07	3.2	254.4	7.1 253.5	
80.00	79.76	-1.17	-4.26	4.4	254.7	7.5 253.0	
90.00	89.67	-1.56	-5.55	5.8	254.3	8.1 252.1	
100.00	99.56	-1.93	-6.95	7.2	254.4	8.4 254.3	
110.00	109.44	-2.37	-8.48	8.8	254.4	10.0 251.5	
120.00	119.24	-3.03	-10.31	10.7	253.6	12.0 249.3	
130.00	128.98	-3.76	-12.46	13.0	253.2	13.7 252.6	
140.00	138.68	-4.50	-14.76	15.4	253.1	13.9 252.2	
150.00	148.39	-5.20	-17.07	17.8	253.1	13.8 253.3	
160.00	158.10	-5.86	-19.35	20.2	253.2	13.5 253.7	
170.00	167.81	-6.54	-21.63	22.6	253.2	14.0 252.6	
180.00	177.50	-7.26	-24.01	25.1	253.2	14.7 253.4	
190.00	187.15	-8.02	-26.53	27.7	253.2	15.9 252.8	
200.00	196.75	-8.80	-29.20	30.5	253.2	16.5 252.9	
210.00	206.32	-9.64	-32.00	33.4	253.2	17.6 253.4	
220.00	215.80	-10.30	-35.10	36.6	253.6	19.5 262.5	
230.00	225.15	-10.53	-38.63	40.0	254.8	21.7 268.8	
240.00	234.36	-10.52	-42.52	43.8	256.1	23.8 271.1	
249.88	243.27	-10.22	-46.69	47.8	257.6	26.3 276.4	









TOOL CALIBR	ATION 2942 08/24/08 02:15					
TOOL 9067A	TM VERSION 1					
SERIAL NUME						
DATE	TIME	SENSOR	STA	ANDARD	RE	SPONSE
Jul20,07	01:44:30	GAMMA	1.000	[API-GR]	1.00	[CPS]
Jul20,07	01:44:30	GAMMA	250.000	[API-GR]	52.00	[CPS]
Sep03.06	10:47:15	NEUTRON	1.000	[API-N]	1.00	[CPS]
Sep03,06	10:47:15	NEUTRON	500.000	[API-N]	500.00	[CPS]

CLIENT: ELK VALLEY COAL

LOCATION: CASTLE SOUTH

HOLE ID: 2942

DATE OF LOG: 08/24/08 PROBE: 9055A 72 4

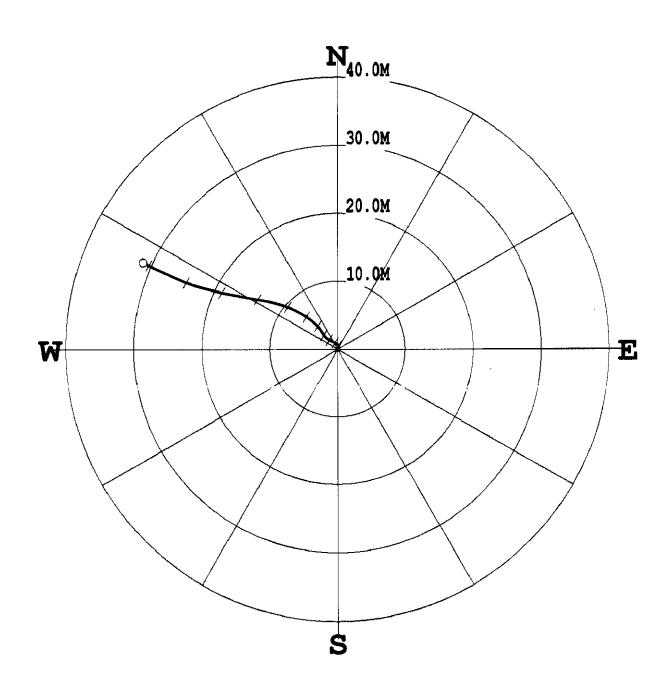
MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 242.85 M

AZIMUTH: 293.9
DISTANCE: 31.3 M
+ = 20 M INCR

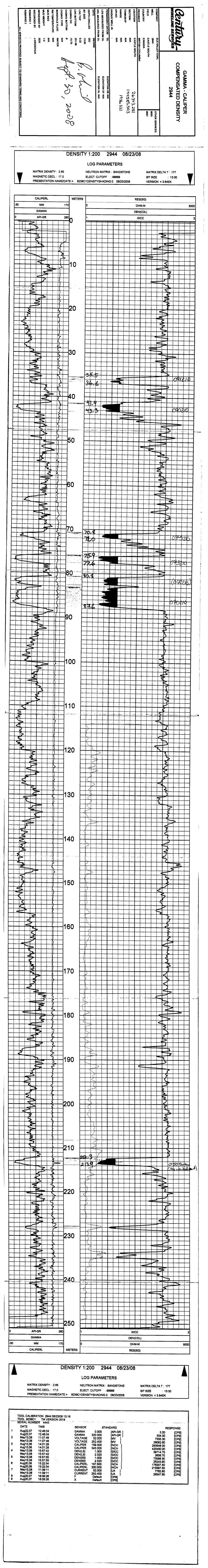
= BOTTOM OF HOLE

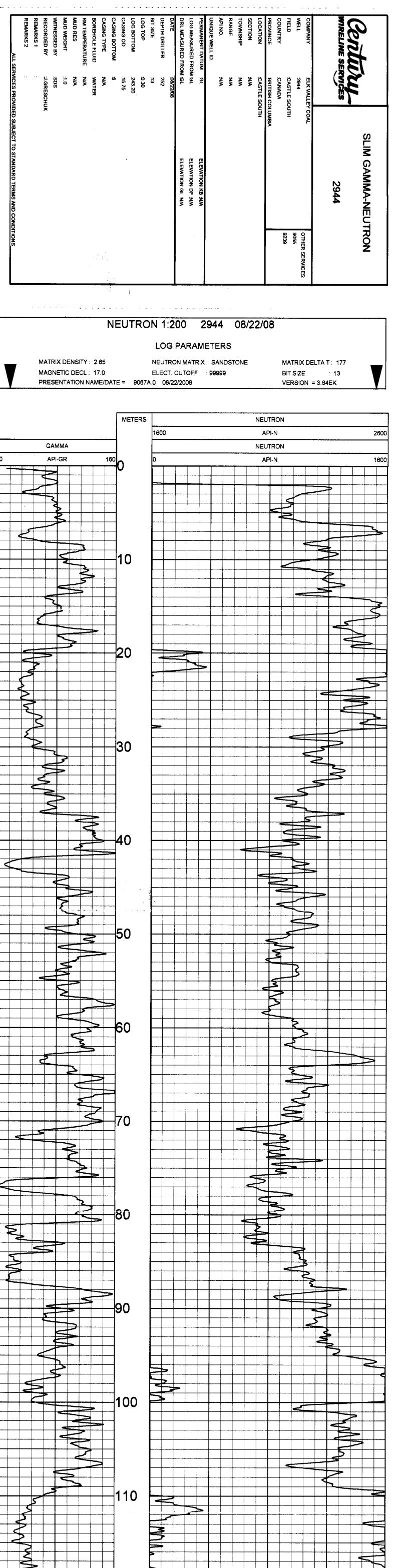


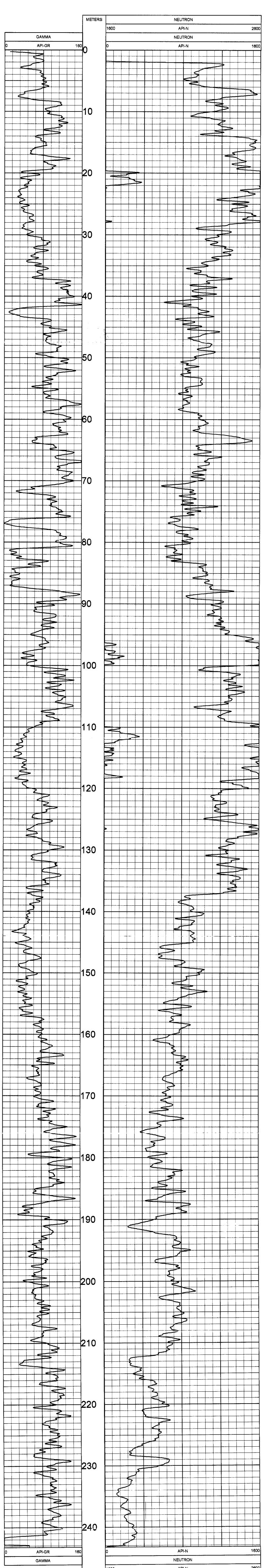
* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

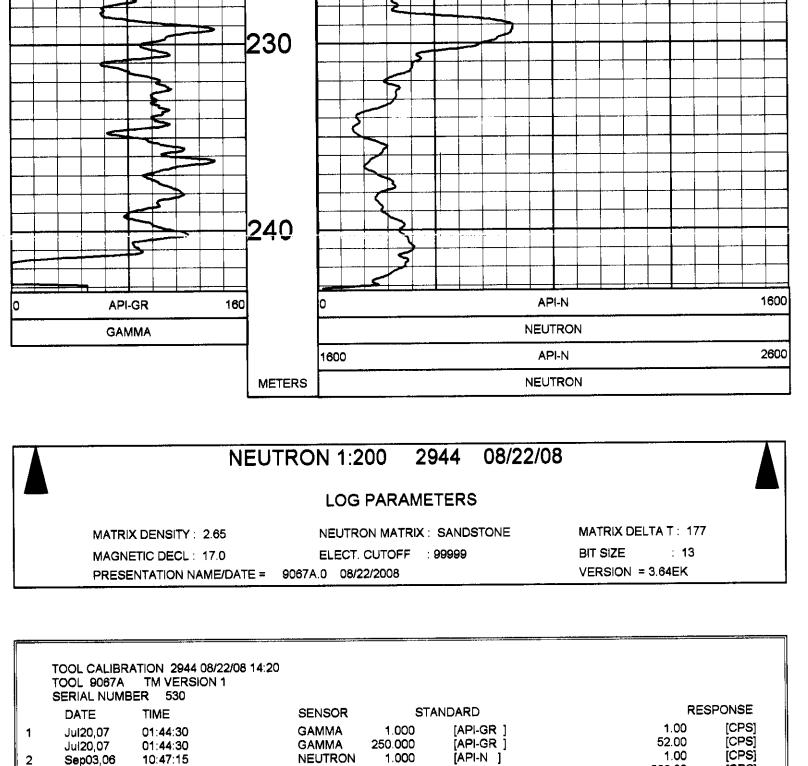
CLIENT : ELK VALLEY COAL HOLE ID. : 2942
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/24/08
DATA FROM : N/A PROBE : 9055A , 72
MAG. DECL. : 17.000 DEPTH UNITS : METERS

MAG. DECL				NITS : MET			
LOG: 2942	_08-24-08_12	-23_9055 A_ .0	2 _8 .26_246.	34_DEVI.lo	a		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB
10.00	10.00	0.01	0.00	0.0	29.0	1.0	38.1
20.00	20.00	0.18	0.10	0.2	28.9	1.1	22.6
30.00	30.00	0.34	0.15	0.4	24.5	0.8	12.9
40.00	39.99	0.50	0.14	0.5	16.0	1.3	331.6
50.00	49.99	0.72	-0.06	0.7	355.5	2.2	307.6
60.00	59.98	0.94	-0.39	1.0	337.7	2.4	294.1
70.00	69.97	1.14	-0.79	1.4	325.3	2.6	288.5
80.00	79.96	1.35	-1.24	1.8	317.4	3.0	293.9
90.00	89.95	1.62	-1.66	2.3	314.3	2.8	300.4
100.00	99.93	2.07	-2.05	2.9	315.2	4.1	320.5
110.00	109.90	2.66	-2.46	3.6	317.3	4.3	327.4
120.00	119.87	3.33	-2.93	4.4	318.6	5.1	320.7
130.00	129.82	4.01	-3.64	5.4	317.8	6.4	307.7
140.00	139.75	4.70	-4.56	6.5	315.9	7.3	303.8
150.00	149.65	5.43	-5.76	7.9	313.3	8.8	298.6
160.00	159.51	6.14	-7.26	9.5	310.2	10.3	290.9
170.00	169.31	6.76	-9.16	11.4	306.4	12.7	286.2
180.00	179.02	7.28	-11.51	13.6	302.3	14.8	279.8
190.00	188.67	7.72	-14.06	16.0	298.8		280.8
200.00	198.35	8.22	-16.55	18.5	296.4	14.8	281.7
210.00	208.00	8.83	-19.09	21.0	294.8	15.0	284.8
220.00	217.64	9.58	-21.62	23.6	293.9	15.6	289.1
230.00	227.25	10.64	-24.20	26.4	293.7	16.7	294.6
240.00	236.80	11.88	-26.88	29.4	293.8	17.1	295.2
246.34	242.81	12.70	-28.59	31.3	294.0	18.1	295.8









[API-N

NEUTRON 500.000

10:47:15

Sep03,06

[CPS]

500.00

CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2944

DATE OF LOG: 08/23/08 PROBE: 9055A 72 **A**

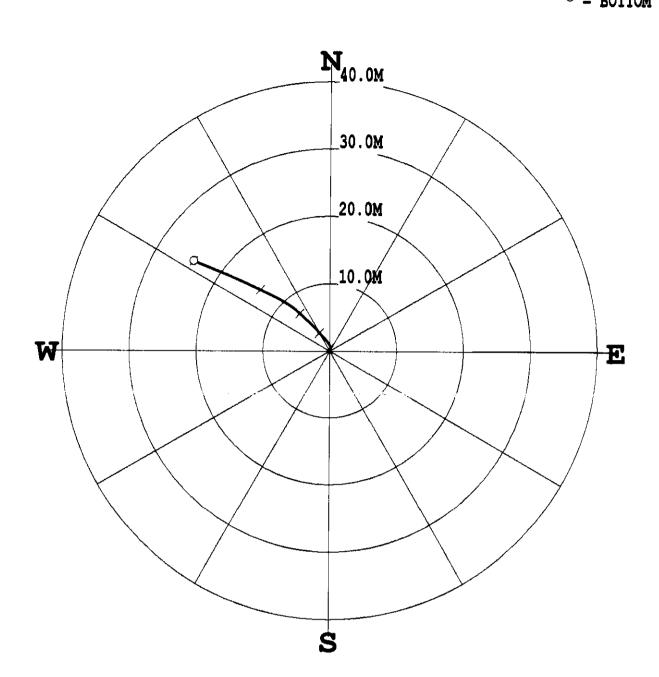
MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 249.02 M

AZIMUTH: 303.2
DISTANCE: 24.3 M
+ = 50 M INCR

= BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2944

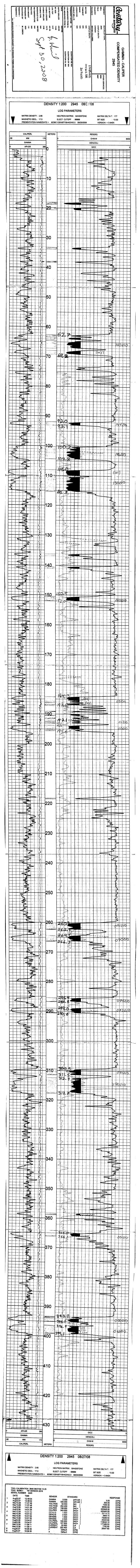
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/23/08

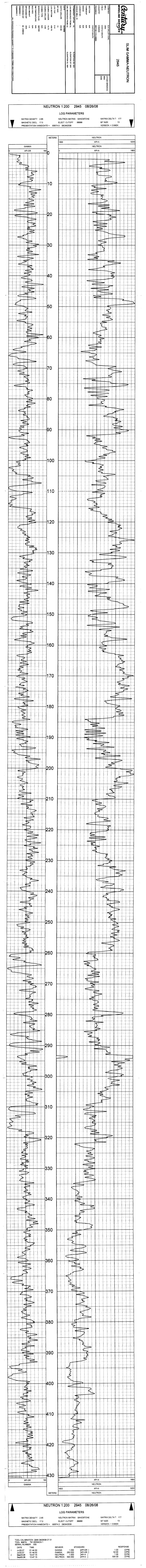
DATA FROM : N/A PROBE : 9055A ,

MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2944_08-23-08_12-14_9055A_.02_8.20_250.96_DEVI.log

				-	•		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SI	MGB
10.00	10.00	0.00	0.00	0.0	38.0	1.0	60.1
20.00	20.00	0.14	0.09	0.2	33.1	0.8	17.7
30.00	30.00	0.29	0.14	0.3	25.7	0.8	24.4
40.00	40.00	0.44	0.16	0.5	20.0	0.8	3.4
50.00	49.99	0.61	0.13	0.6	12.3	1.3	340.7
60.00	59.99	0.88	0.01	0.9	0.6	1.9	331.4
70.00	69.98	1.27	-0.25	1.3	348.7	2.9	315.4
80.00	79.96	1.71	-0.61	1.8	340.4	3.8	321.3
90.00	89.94	2.20	-1.06	2.4	334.3	3.9	316.3
100.00	99.91	2.70	-1.54	3.1	330.3	4.2	315.5
110.00	109.89	3.23	-2.05	3.8	327.6	4.7	317.8
120.00	119.86	3.81	-2.60	4.6	325.7	4.7	317.0
130.00	129.82	4.39	-3.21	5.4	323.9	5.0	313.8
140.00	139.78	4.95	-3.82	6.3	322.3	5.0	312.0
150.00	149.75	5. 54	-4.47	7.1	321.1	5.0	311.0
160.00	159.70	6.14	-5 . 18	8.0	319.9	6.0	307.9
170.00	169.64	6.80	-6.09	9.1	318.1	7.0	302.1
180.00	179.55	7.49	-7.22	10.4	316.1	8.3	300.3
190.00	189.43	8.21	-8.59	11.9	313.7	10.1	299.1
200.00	199.26	9.01	-10.26	13.7	311.3	10.7	295.3
210.00	209.07	9.82	-12.02	15.5	309.2	11.4	295.4
220.00	218.86	10.66	-13.87	17.5	307.5	12.1	292.9
230.00	228.61	11.51	-15.89	19.6	305.9	13.1	292.1
240.00	238.35	12.36	-18.01	21.8	304.5	13.4	290.9
250.00	248.08	13.22	-20.14	24.1	303.3	13.1	294.4
250.96	248.98	13.31	-20.33	24.3	303.2	13.0	293.5





CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2945

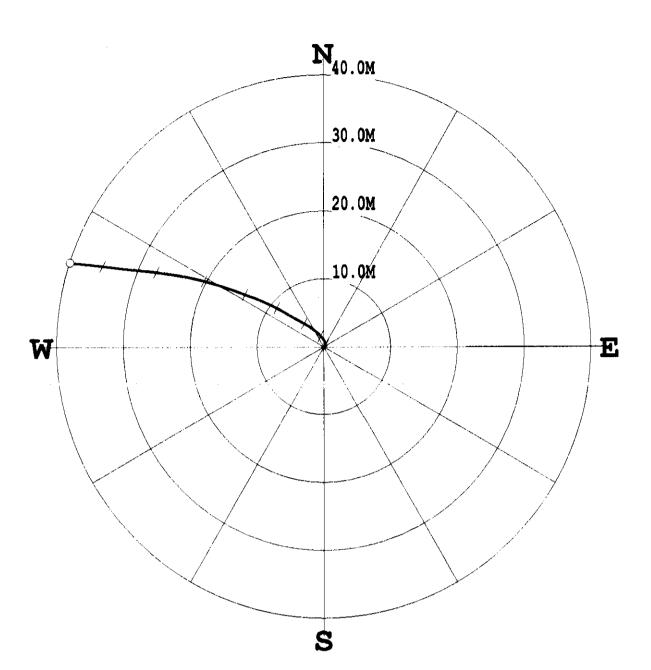
DATE OF LOG: 08/27/08 PROBE: 9055A 72 MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 429.13 M

AZIMUTH: 288.1
DISTANCE: 39.9 M
+ = 50 M INCR

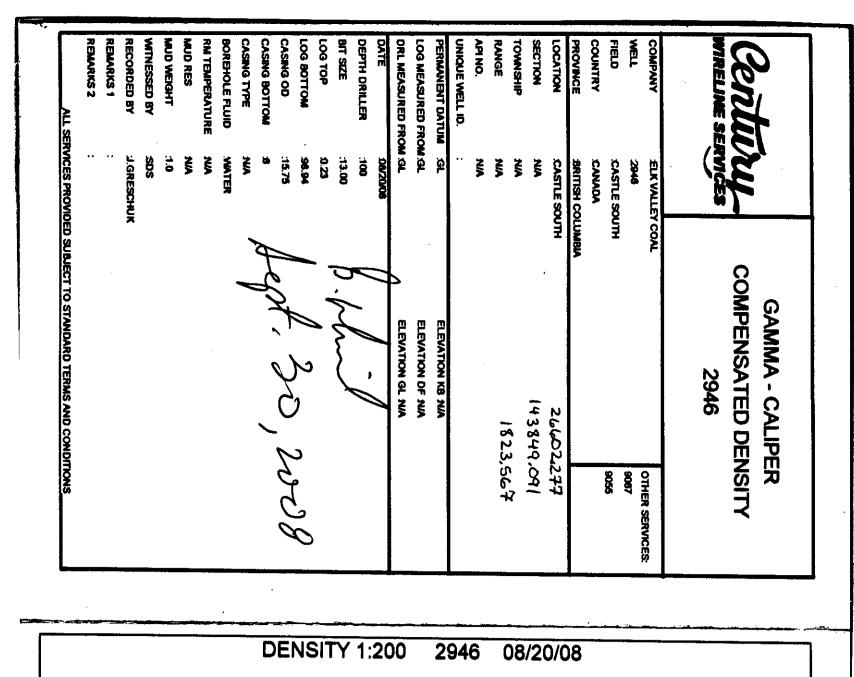
= BOTTOM OF HOLE



* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2945
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/27/08
DATA FROM : N/A PROBE : 9055A , 72
MAG. DECL. : 17.000 DEPTH UNITS : METERS
LOG: 2945 08-27-08 12-08 9055A .02 6.90 431.75 DEVI.log

LOG: 2945	_08-27-08_12	-08_9055A0	2_6.90_431.	75_DEVI.10	g	
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SANGB
10.00	10.00	-0.00	0.00	0.0	136.7	0.6 71.7
20.00	20.00	-0.00	0.07	0.1	93.3	0.5 55.2
30.00	30.00	0.01	0.16	0.2	86.7	0.7 65.2
40.00	40.00	0.10	0.24	0.3	68.0	1.0 19.0
50.00	50.00	0.26	0.28	0.4	47.3	1.1 6.4
60.00	59.99	0.44	0.27	0.5	31.7	1.2 350.4
70.00	69.99	0.66	0.22	0.7	18.4	2.3 343.3
80.00	79.99	0.94	0.08	0.9	5.0	2.3 328.6
90.00	89.98	1.26	-0. 16	1.3	353.0	2.3 321.6
100.00	99.97	1.61	-0.45	1.7	344.4	2.8 317.6
110.00	109.96	1.98	-0.80	2.1	337.9	3.1 312.2
120.00	119.94	2.34	-1.23	2.6	332.3	3.5 311.1
130.00	129.92	2.73	-1.75	3.2	327.3	3.7 305.5
140.00	139.90	3.09	-2.31 -2.00	3.9	323.2	3.8 302.7 4.3 294.8
150.00	149.87	3.42 3.78	-2.90 -3.56	4.5 5.2	319.8 316.7	4.3 294.8 5.3 302.4
160.00 170.00	159.84 169.80	4.21	-3.56 -4.35	6.1	314.1	5.1 298.8
180.00	179.75	4.68	-5.18	7.0	312.1	5.8 297.7
190.00	189.70	5.20	-6.09	8.0	310.5	6.1 300.4
200.00	199.64	5.69	-7.00	9.0	309.1	5.7 298.3
210.00	209.60	6.12	-7.87	10.0	307.9	5.4 293.3
220.00	219.55	6.52	-8.72	10.9	306.8	5.4 295.4
230.00	229.50	6.91	-9.63	11.9	305.6	6.0 288.4
240.00	239.44	7.28	-10.63	12.9	304.4	6.6 293.5
250.00	249.37	7.67	-11.71	14.0	303.3	6.8 290.3
260.00	259.30	8.09	-12.83	15.2	302.2	6.9 290.3
270.00	269.23	8.49	-13.96	16.3	301.3	7.1 289.0
280.00	279.14	8.88	-15.17	17.6	300.4	7.2 287.8
290.00	28 <i>9</i> °. 05	9.29	-16.44	18.9	299.5	7.8 288.4
300.00 🛊	298.96	9.67	-17.75	20.2	298.6	7.8 286.1
310.00	308.87	9.98	-19.08	21.5	297.6	7.9 283.3
320.00	318.77	10.27	-20.41	22.8	296.7	7.9 280.5
330.00	328.67	10.52	-21.80	24.2	295.8	8.2 280.5
340.00	338.57	10.74	-23.25	25.6	294.8	8.7 279.3
350.00	348.44	10.96	-24.79	27.1	293.9	9.5 278.3
360.00 **	3 8 . 32	11.14	-26.37	28.6	292.9	9.4 276.0
370.00	368.19	11.30	-27.94	30.1	292.0	9.2 276.0
380.00	378.06	11.47	-29.53	31.7	291.2	9.1 275.7
390.00	387.93	11.66	-31.14	33.3	290.5	9.9 277.6
400.00	397.80	11.84	-32.74	34.8	289.9	9.0 276.7
410.00	407.67	12.02	-34.32 -35.05	36.4	289.3	9.2 275.3
420.00	417.54	12.19	-35.95 -37.63	38.0	288.7	9.6 276.2 9.8 276.6
430.00	427.39	12.35	-37.63 -37.93	39.6	288.2	
431.76	429.09	12.37	-37.92	39.9	288.1	9.8 274.6





ELECT. CUTOFF : 99999

PRESENTATION NAME/DATE =

MATRIX DENSITY: 2.65

MAGNETIC DECL: 17.0

9239C1DENSITYSHADING.0 08/18/2008

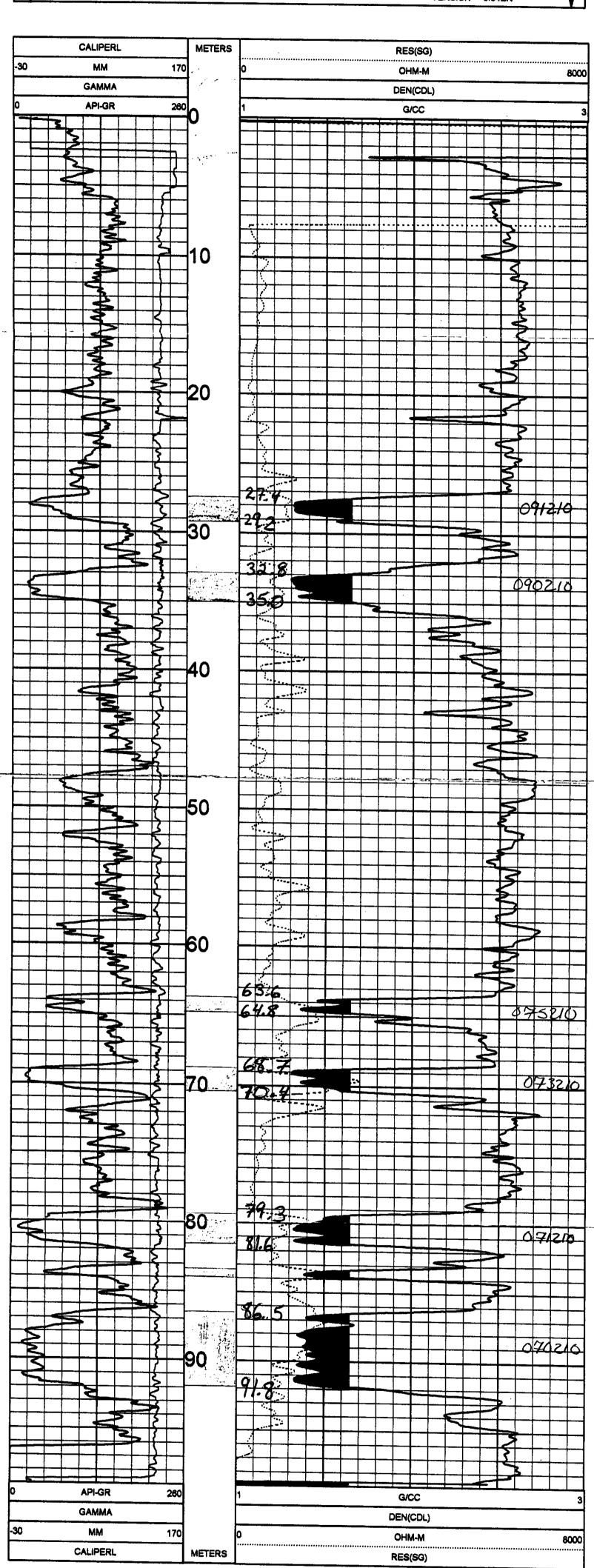
VERSION = 3.64EK

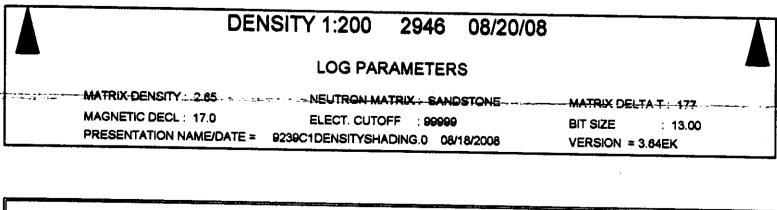
BIT SIZE

MATRIX DELTA T: 177

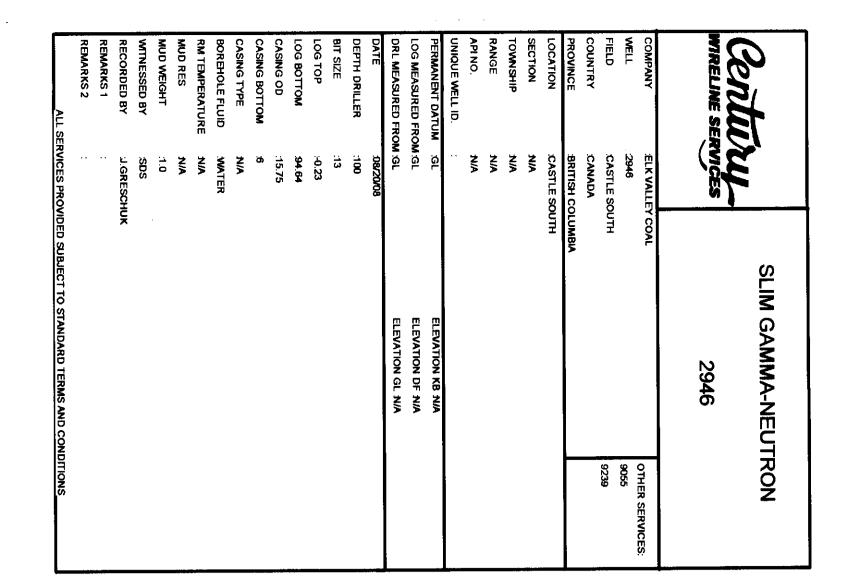
: 13.00

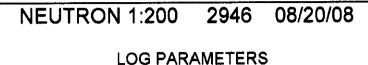
CALIPERL METERS





	TOOL CALIBR TOOL 9239C' SERIAL NUMI						•.	
	DATE	TIME	SENSOR	STA	ANDARD		DE	SPONSE
1	Aug22,07	12:48:04	GAMMA	0.000	[API-GR]	• .		
	Aug22,07	12:48:04	GAMMA	320.000	[API-GR]	gra.	3.00	[CPS]
2	May13,08	11:07:48	VOLTAGE	32.000	[MV]	• *	304.00	[CPS]
	May13,08	11:07:48	VOLTAGE	252.400	[MV]		7335.30	[CPS]
3	Aug10,08	14:01:28	CALIPER	159.000	(INCH)		36082.80	[CPS]
	Aug10,08	14:01:28	CALIPER	343.000			283946.00	[CPS]
4	May13,08	15:57:42	DEN(LS)	1.000	[INCH]		420450.00	[CPS]
	May13,08	15:57:42	DEN(LS)		[G/CC]		39714.70	[CPS]
5	May13,08	15:57:55		2.323	[G/CC]		3656.70	[CPS]
•	May13,08	15:57:55	DEN(SS)	1.000	[G/CC]		73088.50	[CPS]
6	May13,08	10:58:05	DEN(SS)	2.323	[G/CC]		25243.90	CPS
-	May13,08	10:58:05	CALIPERL	100.000	INCH]		112403.20	[CPS]
7	May13,08	11:09:11	CALIPERL	200.000	[INCH]		215587.50	[CPS]
•	May13,08	11:09:11	CURRENT	32.000	[UA]		7762.80	[CPS]
8	Aug20,07		CURRENT	252,400	[UA j		26347.60	[CPS]
•		16:08:26	F	Default	[CPS]			,
	Aug20,07	16:08:26	X	Default	[CPS]			





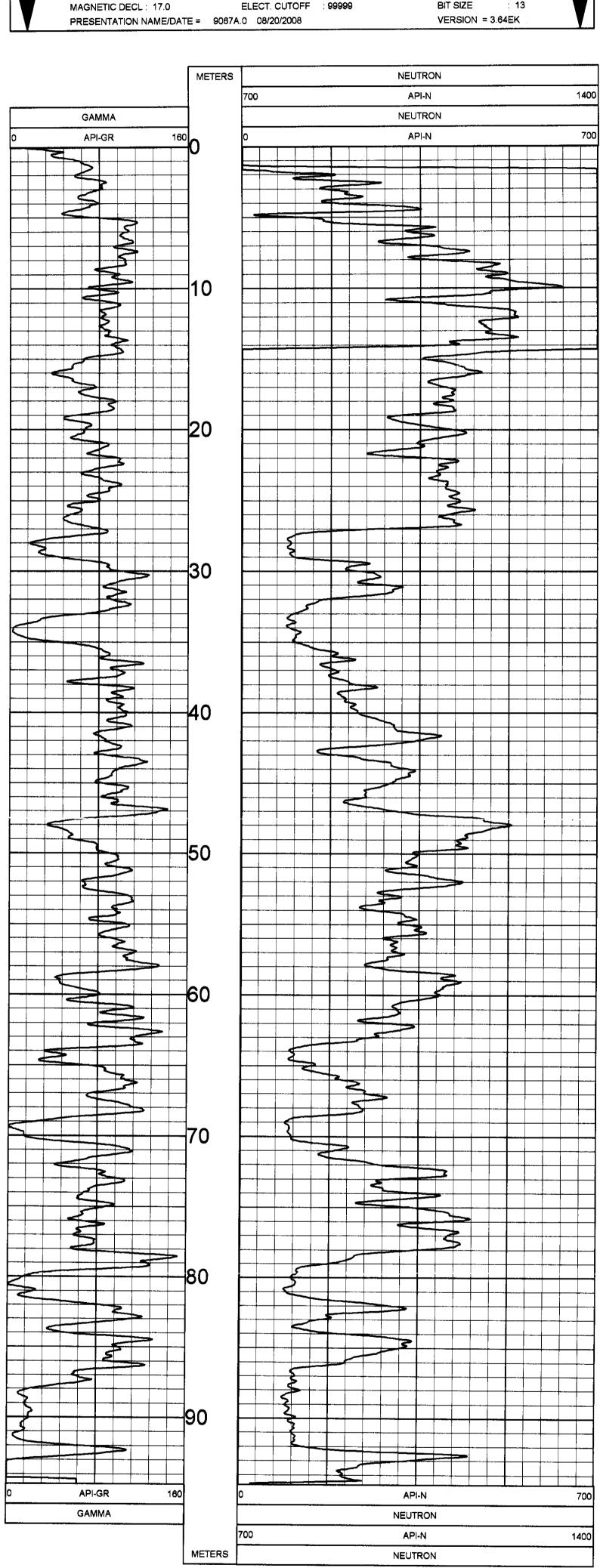
NEUTRON MATRIX: SANDSTONE

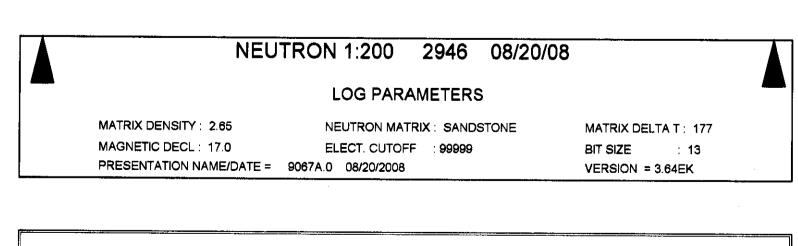
MATRIX DENSITY: 2.65

ELECT. CUTOFF : 99999

BIT SIZE : 13

MATRIX DELTA T: 177





1.000

250.000

1.000

STANDARD

[API-GR]

[API-GR]

[API-N]

[API-N]

RESPONSE

1.00

52.00

1.00

500.00

[CPS]

[CPS]

[CPS]

[CPS]

SENSOR

GAMMA

GAMMA

NEUTRON

NEUTRON 500.000

TOOL CALIBRATION 2946 08/20/08 01:26

01:44:30

01:44:30

10:47:15

10:47:15

TIME

TOOL 9067A TM VERSION 1 SERIAL NUMBER 530

DATE

1

2

Jul20,07

Jul20,07

Sep03,06

Sep03,06

CLIENT: ELK VALLEY COAL

LOCATION: CASTLE SOUTH

HOLE ID: 2946

DATE OF LOG: 08/20/08 PROBE: 9055A 72 **A**

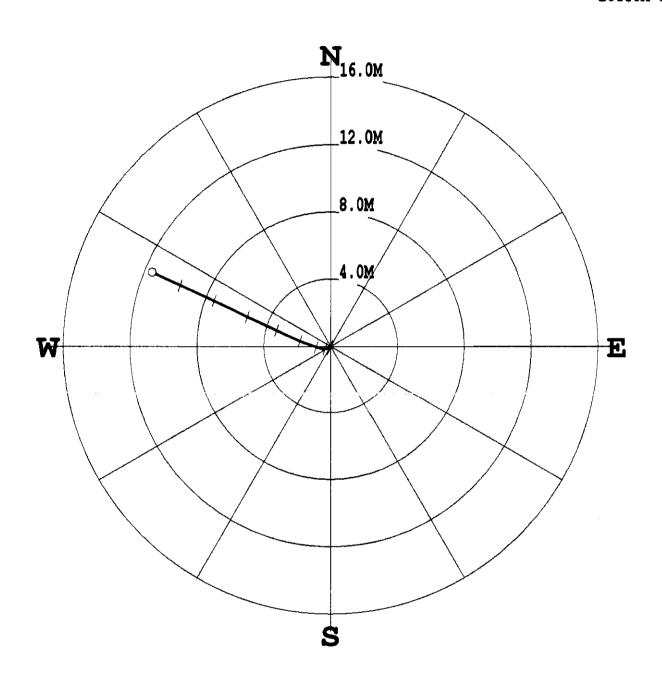
MAG DECL: 17.0

SCALE: 2 M/CM

TRUE DEPTH: 97.90 M

AZIMUTH: 292.3 DISTANCE: 11.5 M + = 10 M INCR

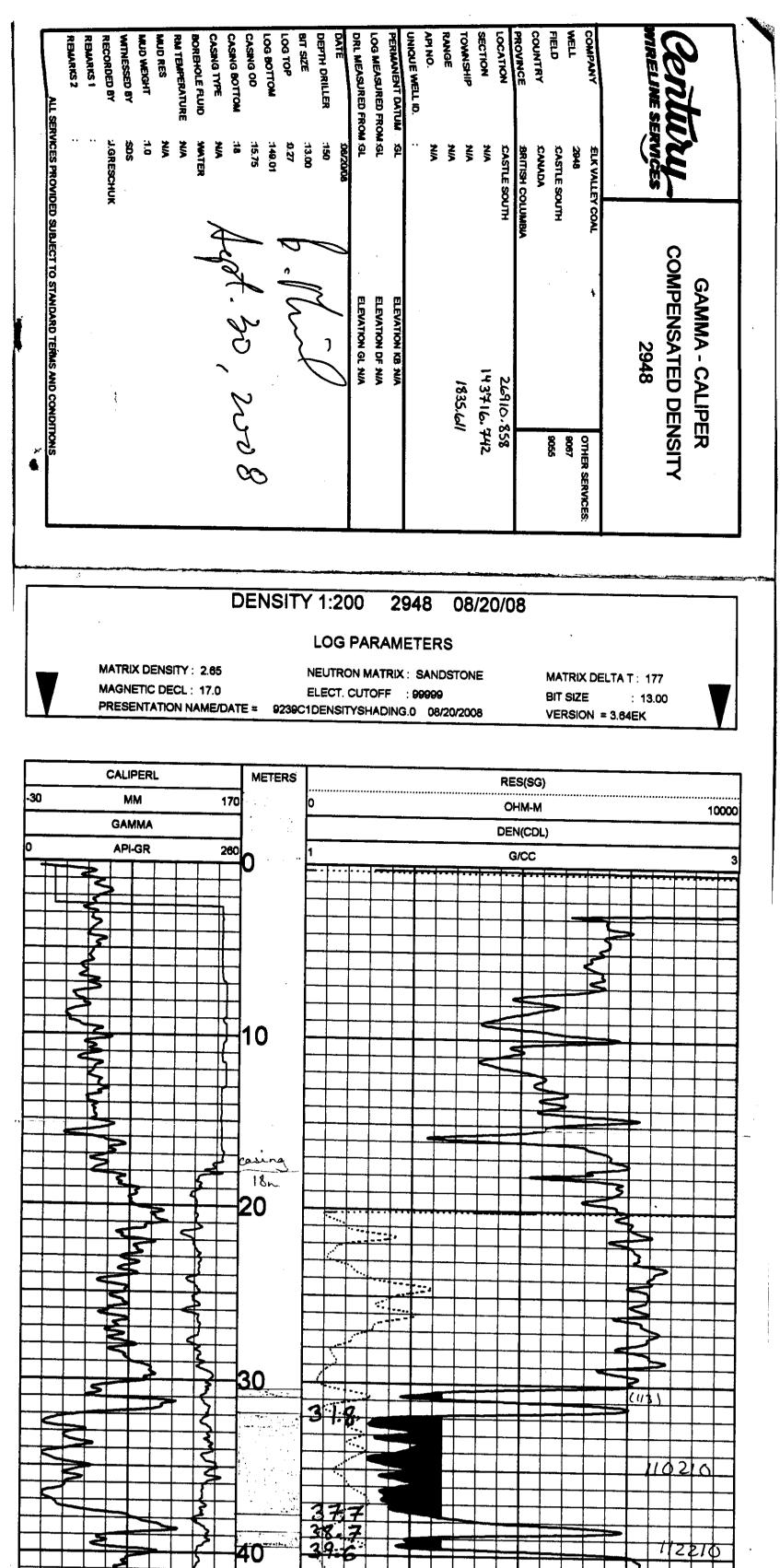
○ = BOTTOM OF HOLE

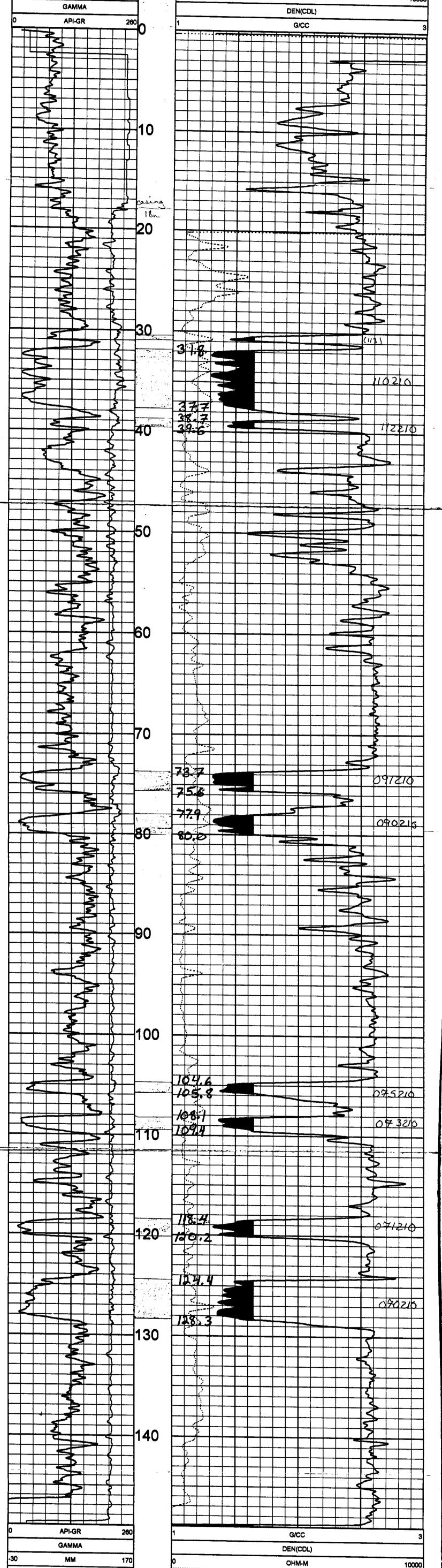


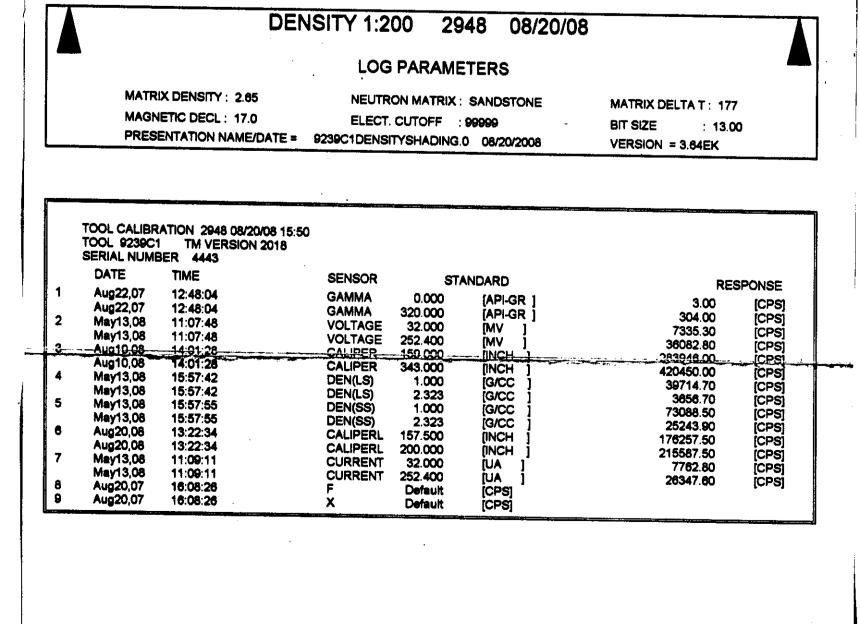
* * * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2946
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/20/08
DATA FROM : N/A PROBE : 9055A , 72
MAG. DECL. : 17.000 DEPTH UNITS : METERS
LOG: 2946_08-20-08_10-19_9055A .02 8.35_98.98 DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB
10.00	9.99	-0.00	-0.00	0.0	214.9	0.4	185.5
20.00	19.99	-0.11	-0.08	0.1	215.0	0.9	219.0
30.00	29.98	-0.15	-0.33	0.4	246.3	2.5	276.5
40.00	39.97	-0.03	-0.86	0.9	267.7	4.4	286.1
50.00	49.91	0.31	-1.83	1.9	279.7	7.1	293.1
60.00	59.80	0.93	-3.20	3.3	286.2	9.7	294.3
70.00	69.62	1.73	-4.93	5.2	289.3	11.0	295.1
80.00	79.39	2.64	-6.85	7.3	291.1	12.5	294.2
90.00	89.15	3.55	-8.83	9.5	291.9	12.5	293.7
98.98	97 RK	4 38	-10 66	11 5	292 3	13.5	293.5



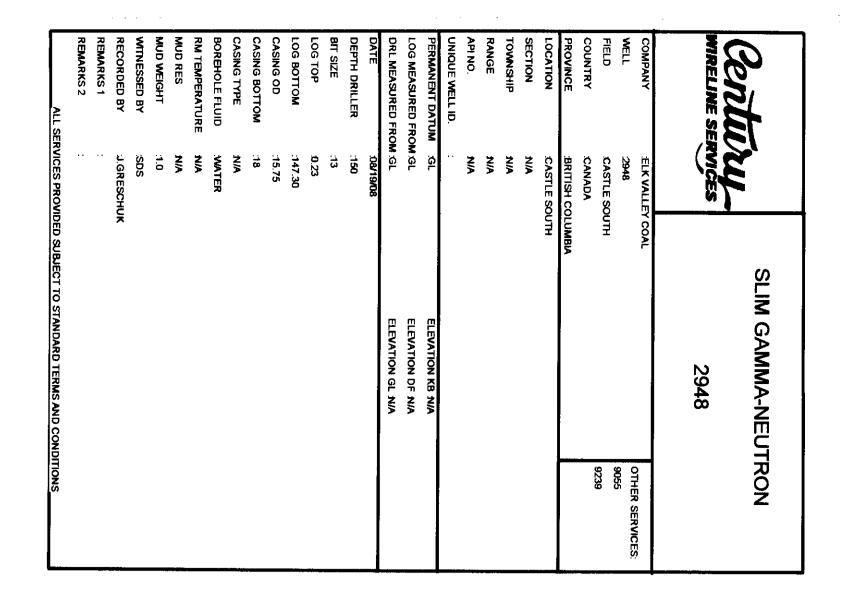




RES(SG)

CALIPERL

METERS

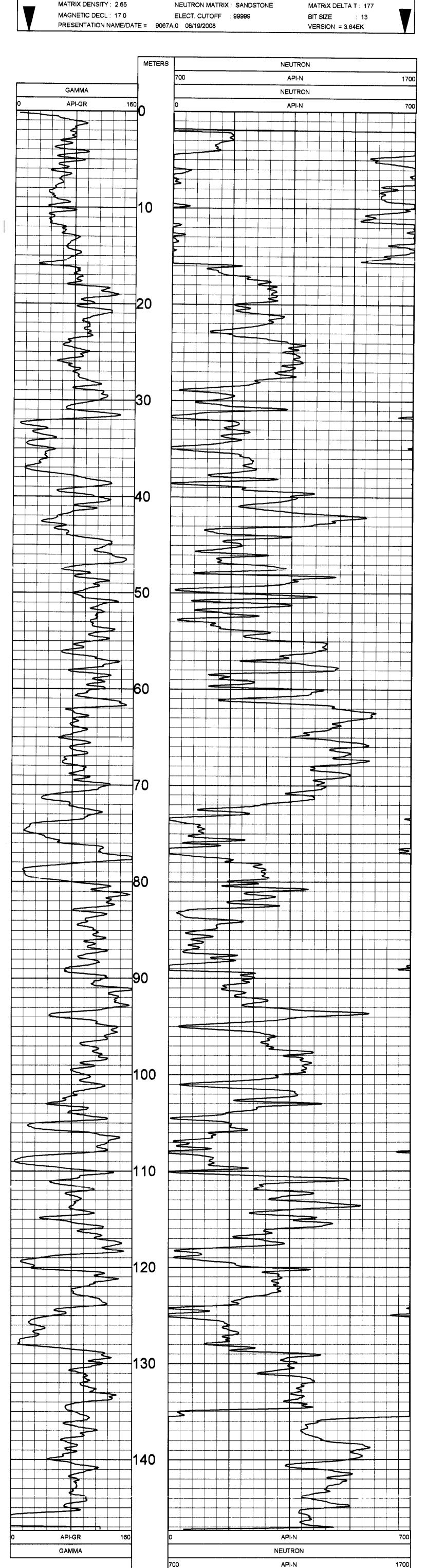


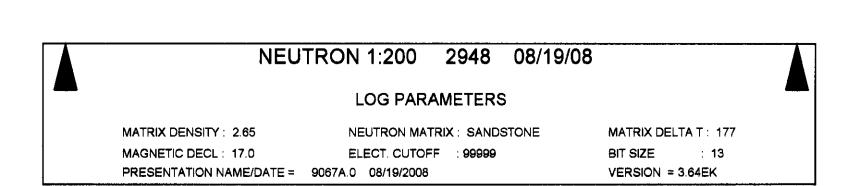


2948

08/19/08

NEUTRON 1:200





NEUTRON

METERS

	TOOL CALIBR TOOL 9067A SERIAL NUMB	ATION 2948 08/19/08 13:12 TM VERSION 1 BER 530					
	DATE	TIME	SENSOR	STA	NDARD	RES	SPONSE
1	Jul20,07	01:44:30	GAMMA	1.000	[API-GR]	1.00	[CPS]
	Jul20,07	01:44:30	GAMMA	250.000	[API-GR]	52.00	[CPS]
2	Sep03,06	10:47:15	NEUTRON	1.000	[API-N]	1.00	(CPS)
	Sep03,06	10:47:15	NEUTRON	500.000	[API-N]	500.00	(CPS)

CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

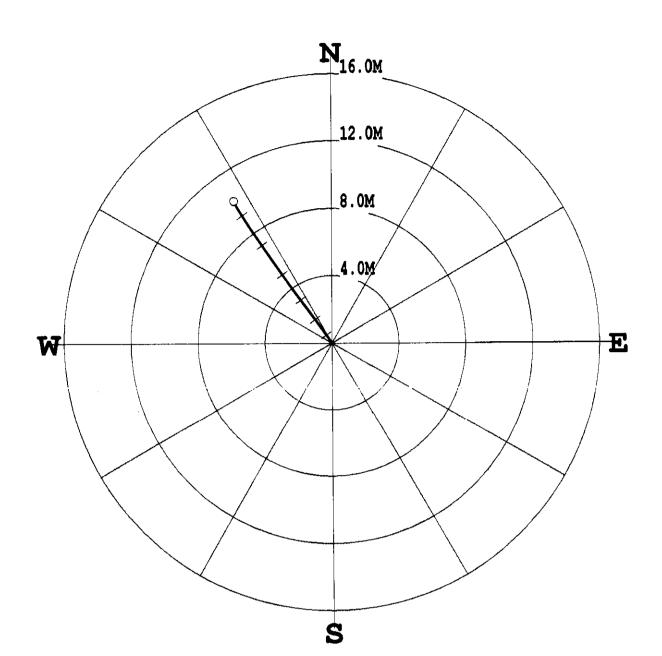
HOLE ID: 2948

DATE OF LOG: 08/20/08 PROBE: 9055A 72

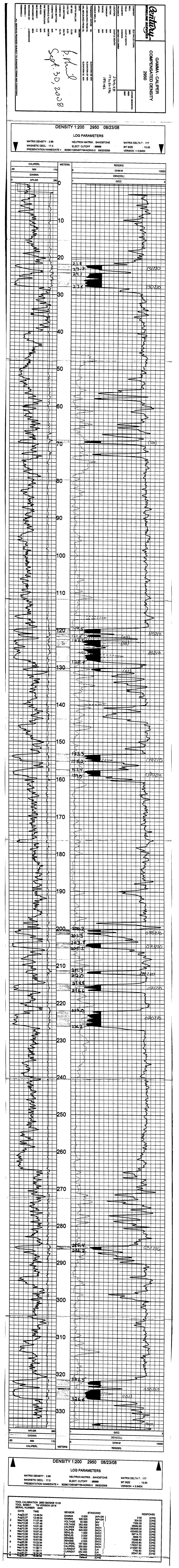
MAG DECL: 17.0

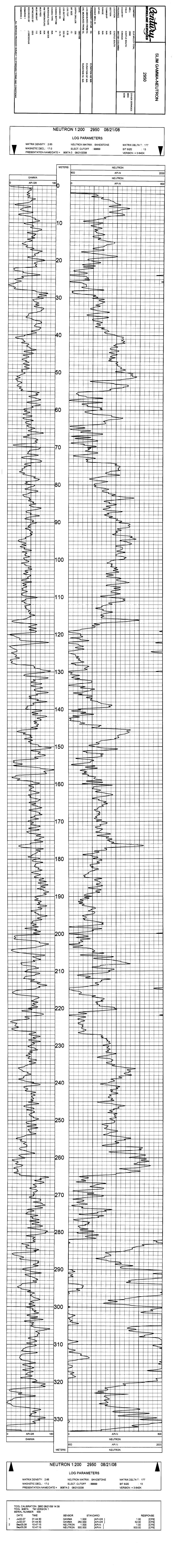
SCALE: 2 M/CM TRUE DEPTH: 148.75 M

AZIMUTH: 325.4 DISTANCE: 10.2 M + = 20 M INCR○ = BOTTOM OF HOLE



* * * * * *	* COMPU-LOG	- VERTICAL	DEVIATION *	* * * * *	*		
CLIENT	· RIK VA	LLEY COAL	HOLE ID	. : 294	8		
FIELD OFF			DATE OF		20/08		
		1 020	PROBE	: 905		72	
DATA FROM		••		NITS : MOET	•		
MAG. DECL	. : 17.0	00					
LOG: 2948	_08-20-08_15	-12_9055A0	2_22.69_149	. 51"DEAT. T	og		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB
	24.99	0.01	-0.01	0.0	326.7	1.2	316.9
25.00			-0.20	0.4	326.4	2.5	321.3
35.00	34.96	0.30		0.8			
45.00	44.97	0.66	-0.47				
55.00	54.96	1.13		1.4			
65.00	64.94	1.65	-1.19	2.0	324.2		
75.00	74.91	2.23	-1.62	2.8			
85.00	84.88	2.84	-2.09	3.5	323.7	4.8	323.1
95.00	94.84	3.61	-2.63	4.5	323.9	5.9	325.9
	104.78	4.47	-3.23	5.5	324.1	6.0	324.2
105.00		5.34	-3.84	6.6	324.3		324.7
115.00	114.72						
125.00	124.67	6.20	-4.43	7.6			
135.00	134.61	7.06	-5.01	8.7	324.6		
145.00	144.55	7.99	~5.60	9.8			
149.22	148.71	8.42	-5.81	10.2	325.4	6.8	334.2





CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

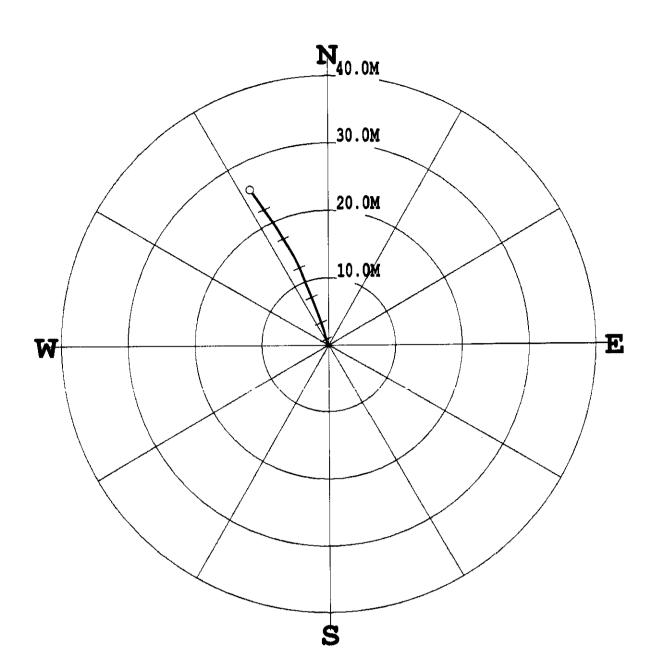
HOLE ID: 2950

DATE OF LOG: 08/22/08 PROBE: 9055A 72 MAG DECL: 17.0

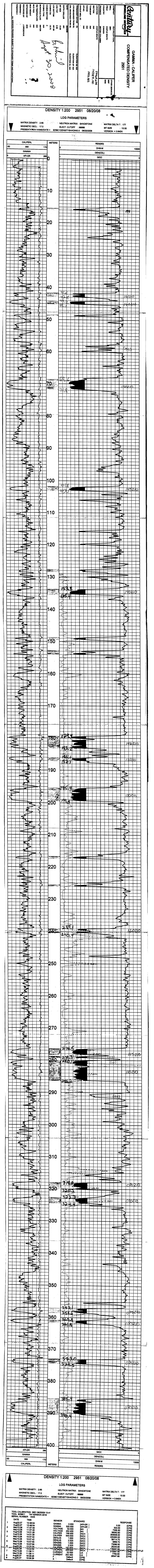
SCALE: 5 M/CM

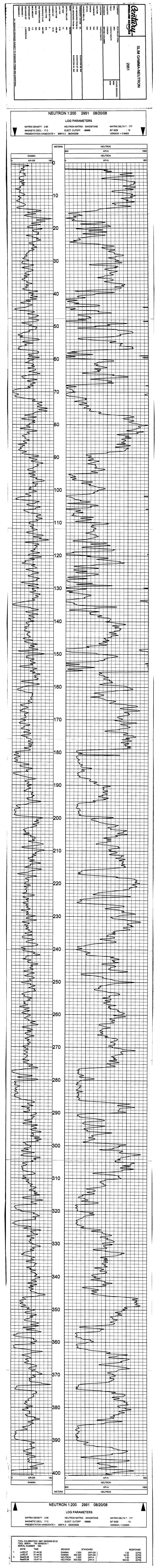
TRUE DEPTH: 333.78 M
AZIMUTH: 333.2
DISTANCE: 25.9 M
+ = 50 M INCR

= BOTTOM OF HOLE



CLIENT : ELK VALLEY COAL FIELD OFFICE : CENTURY GEO DATA FROM : N/A MAG. DECL. : 17.000			HOLE ID. : 2950 DATE OF LOG : 08/22/08 PROBE : 9055A , DEPTH UNITS : METERS				
						72	
LOG: 2950	_08-22-08_13	-03_9055 A 0	2_7.22_334.9	,0_DEVI.#0	Ψ.		
BLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH		Sangb
10.00	10.00	0.01	-0.01	0.0	294.0	0.6	-
20.00	20.00	0.06	-0.10	0.1	300.3	0.8	
30.00	30.00	0.21	-0.19	0.3	318.0	1.0	2 .
40.00	39.99	0.52	-0.27	0.6	332.0	1.8	
50.00	49.99	0.86	-0.37	0.9	336.8	1.9	345
60.00	59.98	1.21	-0.47	1.3	338.7 340.9	2.3	349
70.00	69.97	1.65	-0.57	1.7	340.9	2.7	343
80.00	79.96	2.14	-0.71	2.3	341.8	3.3	344
90.00	89.94	2.72	-0.89	2.9	341.8	3.7	
100.00	99.92	3.33	-1.10	3.5	341.8 341.7	3.7	
110.00	109.89	3.99	-1.33	4.2	341.6	4.2	
120.00	119.86	4.72	-1.60	5.0	341.3	4.4	
130.00	129.83	5.47	-1.88	5.8	341.0 340.7	4.8	337
140.00	139.79	6.25	-2.19	6.6	340.7	4.9	
150.00	149.75	7.09	-2.51	7.5	340.5	4.9	
160.00	159.71	7.92	-2.86	8.4	340.2 339.9 339.7	5.1	
170.00	169.67	8.76	-3.21	9.3	339.9	5.5	
180.00	179.62	9.63	-3.56	10.3	339.7	5.4	
190.00	189.58	10.53	-3.91	11.2	339.6	5.6	
200.00	199.53	11.45	-4.29	12.2	339.5 339.2	5.6	
210.00	209.48	12.34	-4.69	13.2	339.2	5.4	
220.00	219.44	13.18	-5.13	14.1	338.7	5.5	330
230.00	229.39	14.01	-5.61	15.1	338.2	5.5	
240.00	239.34			16.1	337.5 336.9	5.7	
250.00	249.29	14.86 15.70 16.54	-6.69	17.1	336.9	5.8	
260.00	259.24	16.54	-7.19	18.0	336.5	5.6	
270.00	269.18	17.42	-7.73	19.1	336.1	6.1	
280.00	279.13	18.32	-8.34	20.1	335.5	6.3	
290.00	289.07	19.19	-8.96	21.2		6.0	
300.00	299.02	20.01	-9.54	22.2	334.5	6.3	
310.00	308.97	20.84	-10.10	23.2	334.1	5.9	
320.00	318.91	21.74	-10.73	24.2	333.7	6.2	
330.00	328.85	22.63	-11.35	25.3	333.4	6.3	
334.96	333.74	23.07	-11.65	25.8	333.2	6.0	324





CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2951

DATE OF LOG: 08/20/08

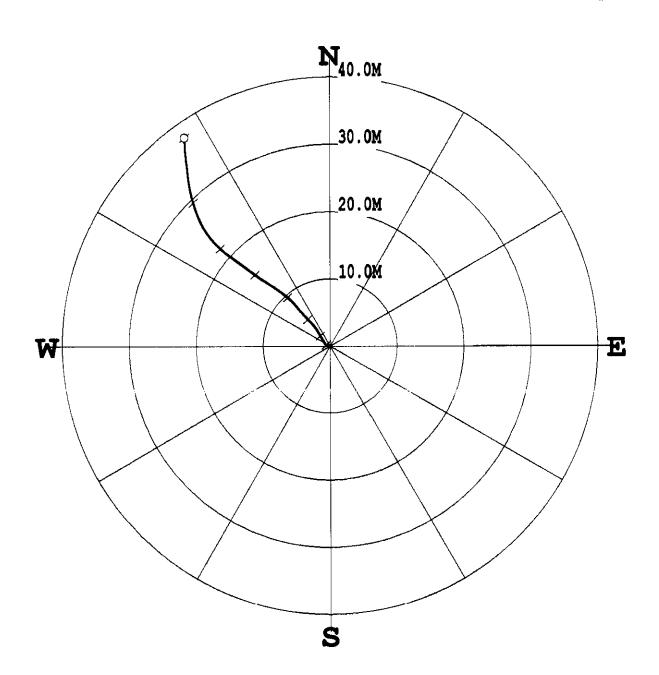
PROBE: 9055A

MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 398.10 M

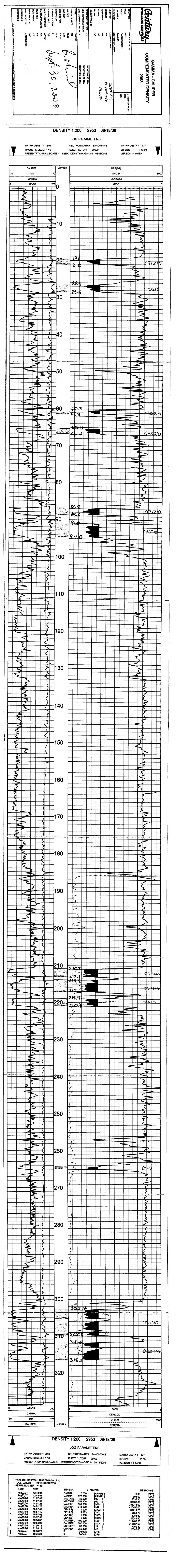
AZIMUTH: 325.0 DISTANCE: 37.8 M + = 50 M INCR○ = BOTTOM OF HOLE

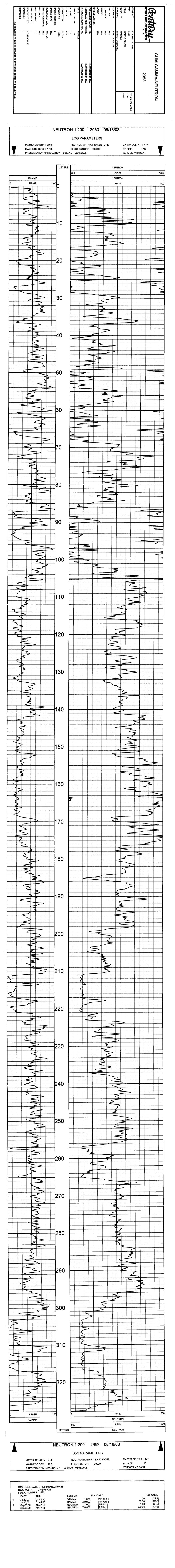


* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

HOLE ID. : 2951 : ELK VALLEY COAL CLIENT **DATE OF LOG:** 08/20/08 FIELD OFFICE : CENTURY GEO PROBE : 9055A 72 DATA FROM : N/A 17.000 DEPTH UNITS : METERS MAG. DECL.

LOG: 2951_08-20-08_12-31_9055A_.02_8.06_400.81_DEVI.log CABLE DEPTH TRUE DEPTH NORTH DEV. EAST DEV. DISTANCE AZIMUTH SANG SANGB 0.7 250.8 10.00 10.00 -0.00 -0.00 0.0 246.5 1.2 264.6 -0.08 281.8 20.00 20.00 0.02 0.1 1.0 291.0 0.8 274.4 0.06 283.5 0.2 -0.23 30.00 30.00 0.09 40.00 40.00 -0.40 0.4 282.5 0.6 1.6 292.7 50.00 -0.57 287.6 49.99 0.18 -0.76 323.0 0 . B 295.3 1.7 59.99 0.36 60.00 1.8 310.8 -0.92 303.0 70.00 69.99 0.60 1.1 1.4 79.98 0.91 -1.09 309.8 1.7 313.8 80.00 313.0 1.18 -1.27 90.00 89.97 -1.46 316.0 330.8 2.5 99.97 1.51 2.1 100.00 330.9 109.96 318.5 2.7 110.00 1.88 -1.672.5 120.00 -1.92 320.2 3.7 342.1 119.95 2.31 3.0 324.1 2.86 321.1 -2.30 4.2 130.00 129.92 3.7 -2.78 4.5 140.00 139.90 318.7 3.41 4.4 320.8 -3.31 3.98 5.2 320.3 4.6 315.9 150.00 149.86 -3.88 4.59 6.0 319.9 5.1 318.9 159.83 160.00 319.7 6.9 5.1 169.79 -4.45 324.8 170.00 5.24 -5.01 -5.60 179.75 5.93 7.8 319.B 5.1 320.6 180.00 8.6 317.2 6.59 319.7 5.4 190.00 189.71 -6.30 5.6 310.0 9.6 318.9 200.00 199.67 7.23 -7.10 209.62 7.86 10.6 317.9 6.2 305.6 210.00 219.55 -8.02 316.7 6.7 303.9 8.52 11.7 220.00 -9.02 -10.07 303.6 315.5 7.0 9.18 12.9 230.00 229.48 7.1 240.00 239.40 9.84 14.1 314.3 302.0 249.32 313.5 10.55 -11.10 15.3 7.5 306.8 250.00 -12.12 7.3 305.7 16.6 313.0 260.00 259.24 11.29 269.16 12.04 -13.15 17.8 312.5 7.3 306.7 270.00 -14.18 19.1 7.4 308.3 12.80 312.1 280.00 279.08 7.3 309.4 13.58 -15.23 20.4 311.7 290.00 288.99 313.0 298.91 14.42 -16.24 21.7 311.6 7.7 300.00 310.00 -17.25 311.8 8.9 308.80 15.43 23.1 316.4 -18.21 8.9 319.7 320.00 16.61 24.6 312.4 318.69 328.56 17.92 -19.06 26.2 313.2 10.1 313.4 330.00 338.42 9.9 337.2 19.41 -19.75 27.7 314.5 340.00 -20.31 9.6 343.5 29.2 316.0 350.00 348.28 21.02 358.12 22.76 -20.77 30.8 317.6 10.6 348.2 360.00 367.94 -21.10 319.4 353.4 370.00 24.62 32.4 11.7 377.73 34.1 321.3 352.6 26.63 11.8 -21.33 380.00 390.00 307.51 28.67 -21.56 35.9 323.1 12.0 354.1 -21.56 -21.67 -21.68 397.30 324.8 11.6 357.8 30.74 37.6 400.00 398.06 11.9 400.82 37.7 325.0 30.90





CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2953

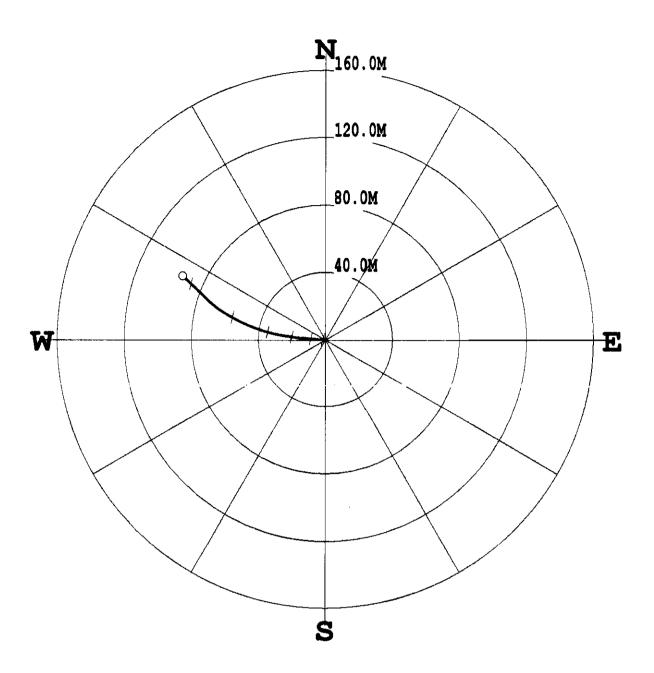
DATE OF LOG: 08/18/08 PROBE: 9055A 72 **A**

MAG DECL: 17.0

SCALE: 20 M/CM
TRUE DEPTH: 308.42 M
AZIMUTH: 293.9

AZIMUTH: 293.9
DISTANCE: 93.0 M
+ = 50 M INCR

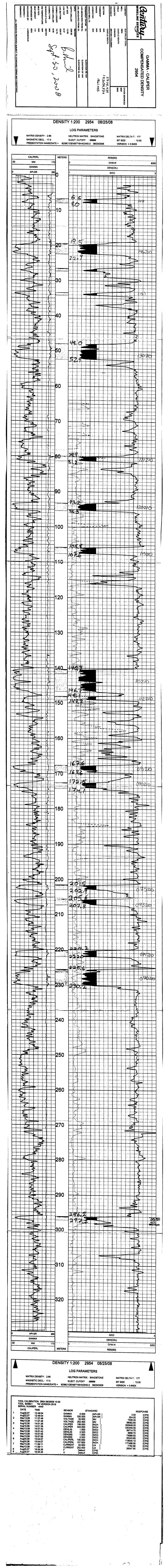
= BOTTOM OF HOLE

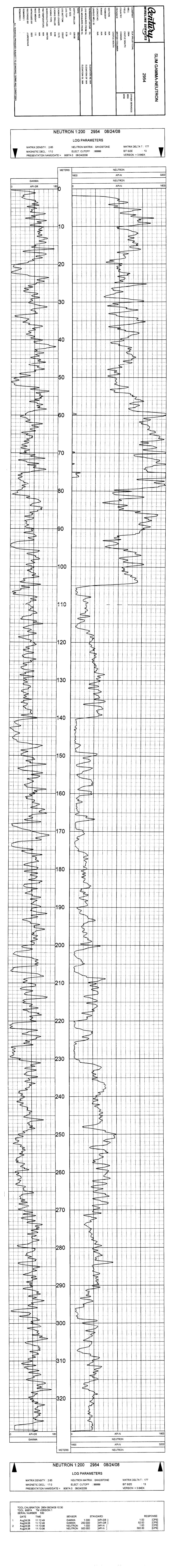


* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2953
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/18/08
DATA FROM : N/A PROBE : 9055A ,
MAG. DECL. : 17.000 DEPTH UNITS : METERS
LOG: 2953_08-18-08_14-03_9055A_.02_13.22_329.05_DEVI.log

		200. 1995_00 10 00_14-03_9055A02_13.22_329.03_DEVI.10g									
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SANGB					
15.00	15.00	0.01	0.00	0.0	13.5	0.6 348.6					
25.00	25.00	0.09	-0.22	0.2	292.9	1.5 296.6					
35.00	34.99	0.20	-0.66	0.7	287.3	2.7 285.1					
45.00	44.97	0.33	-1.20	1.2	285.5	3.5 280.4					
55.00	54.95	0.41	-1.88	1.9	282.4	4.9 278.2					
65.00	64.88	0.40	-2.97	3.0	277.6	7.6 264.7					
75.00	74.79	0.41	-4.35	4.4	275.4	8.8 273.1					
85.00	84.65	0.51	-5.98	6.0	274.9	9.4 275.9					
95.00	94.50	0.69	-7.68	7.7	275.1	10.2 276.6					
105.00	104.32	0.87	-9.58	9.6	275.2	11.4 274.4					
115.00	114.10	0.99	-11.64	11.7	274.9	12.8 274.3					
125.00	123.86	1.10	-13.82	13.9	274.6	13.1 273.8					
135.00	133.60	1.31	-16.10	16.2	274.7	13.5 278.1					
145.00	143.32	1.62	-18.42	18.5	275.0	13.8 278.4					
15,5.00	153.01	1.97	-20.84	20.9	275.4	14.6 276.9					
165.00	162.68	2.31	-23.39	23.5	275.6	14.9 278.3					
175.00	172.33	2.74	-25.98	26.1	276.0	15.5 280.3					
185.00	181.93	3.28	-28.71	28.9	276.5	16.7 282.0					
195.00	191.47	3.97	-31.63	31.9	277.2	18.2 284.1					
205.00	200.92	4.79	-34.80	35.1	277.8	20.4 285.9					
215.00	210.22	5.84	-38.33	38.8	278.7	22.7 289.6					
225.00	219.41	7.13	-42.03	42.6	279.6	23.5 289.8					
235.00	228.53	8.63	-45.86	46.7	280.7	25.0 293.3					
245.00	237.53	10.42	-49.83	50.9	281.8	26.3 295.9					
255.00	246.44	12.50	-53.87	55.3	283.1	27.6 298.1					
265.00	255.2 4	14.80	-58.02	59.9	284.3	29.1 299.6					
275.00	263.92	17.33	-62.29	64.7	285.5	30.3 302.1					
285.00	272.53	20.32	-66.40	69.4	287.0	31.0 309.7					
295.00	281.02	23.63	-70.34	74.3	288.7	33.2 313.7					
305.00	289.29	27.74	-74.39	79.4	290.5	35.0 311.1					
315.00	297.37	31.74	-78.70	84.9	292.0	36.5 311.7					
325.00	305.25	35.94	-83.21	90.6	293.4	38.8 314.0					
329.06	308.39	37.66	-85.03	93.0	293.9	38.9 312.8					





CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2954

DATE OF LOG: 08/25/08

PROBE: 9055A 72

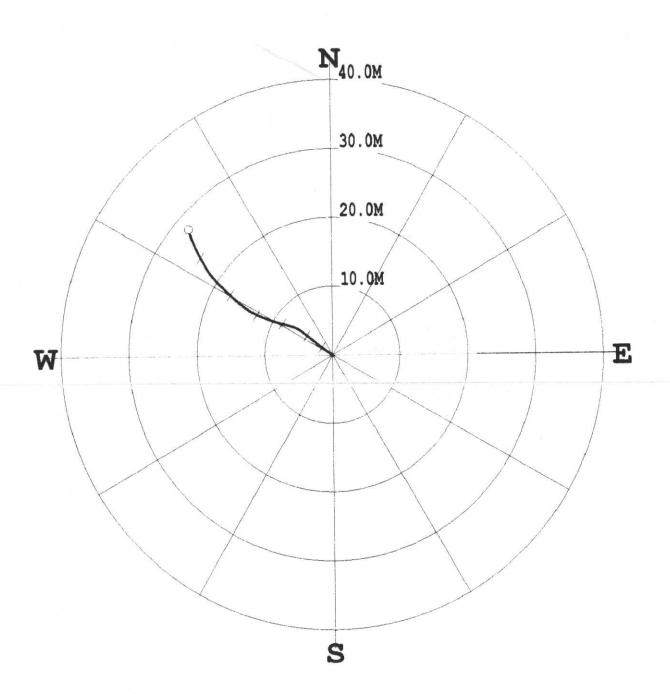
A

MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 327.43 M

AZIMUTH: 311.1 DISTANCE: 27.9 M + = 50 M INCR = BOTTOM OF HOLE



*	*	*	*	*	*	*	COMPU-LOG	-	VERTICAL	DEVIATION	*	*	*	*	*	*	*
										UAT P 1	n				20	354	4

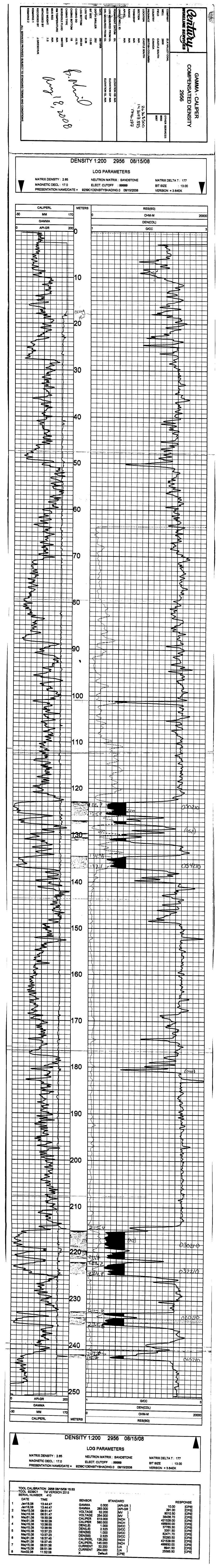
CLIENT : ELK VALLEY COAL HOLE ID. : 2954

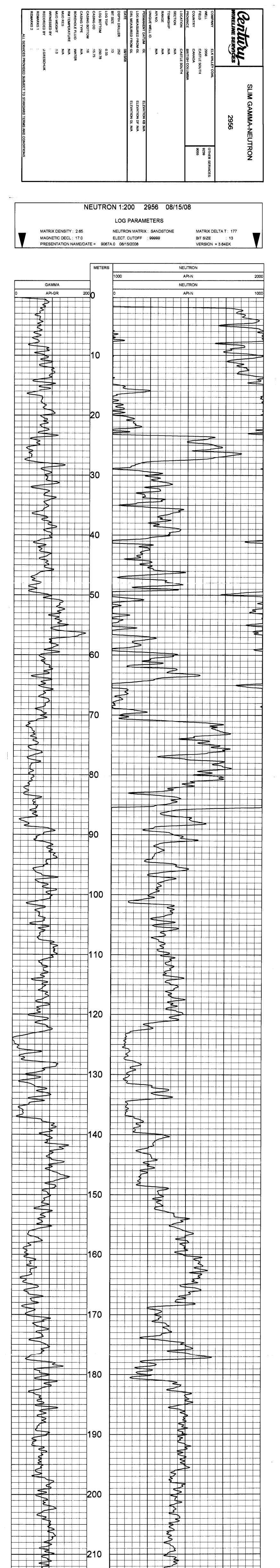
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/25/08

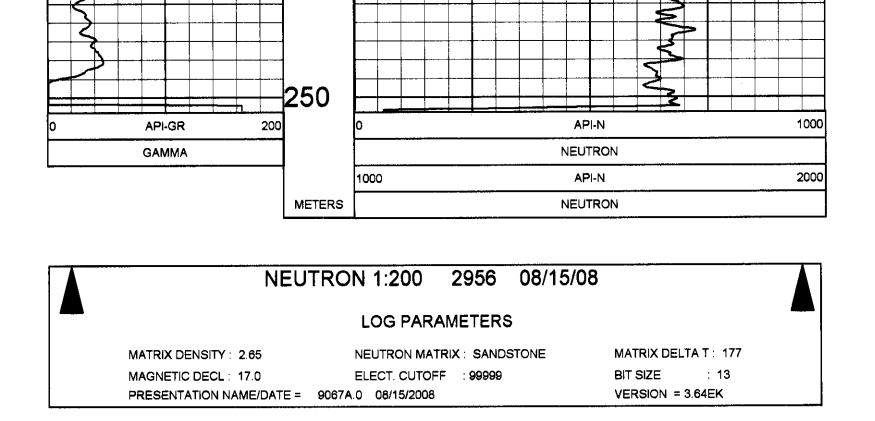
DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

ABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.		AZIMUTH		ANGB
10.00	9.99	0.02	-0.01	0.0	319.0	2.1	
20.00	19.98	0.25	-0.30	0.4	309.7	2.8	
30.00	29.97	0.50	-0.71	0.9	305.3	2.8	303.7
40.00	39.96	0.78	-1.12	1.4	305.1	2.8	303.0
50.00	49.94	1.11	-1.56	1.9	305.4	3.1	308.5
60.00	59.93	1.45	-1.99		306.0		307.8
70.00	69.91	1.81	-2.42		306.8	3.4	321.5
80.00	79.90	2.13	-2.92	3.5			310.3
90.00	89.88	2.48		4.1	307.5		307.5
100.00	99.87	2.85		4.7	307.6		307.8
110.00	109.84	3.26	-4.25		307.5		305.0
120.00	119.81	3.68	-4.86		307.1		299.4
130.00	129.78	4.03	-5.61	6.9	305.7		288.5
140.00	139.74	4.29	-6.45		303.6		287.0
150.00	149.70	4.54	-7.30		301.9		285.8
160.00	159.66	4.76	-8.11		300.4		
170.00	169.63	5.01	-8.88		299.4		
180.00	179.60	5.29					
190.00	189.56	5.58		11.8			
200.00	199.53	5.90			298.0		
210.00	209.50	6.27			298.0	4.6	
220.00	219.46	6.75			298.3	5.3	
230.00	229.42	7.33			298.9	5.7	
240.00	239.36	7.98				6.2	
250.00	249.30	8.70	-14.92				
260.00	259.23	9.55	-15.79		301.2		
270.00	269.14	10.51	-16.72		302.2		315.9
280.00	279.04	11.57	-17.65		303.2	8.2	319.9
290.00	288.93	12.76	-18.48			8.8	330.1
300.00	298.82	14.07	-19.24		306.2	8.8	331.3
310.00	308.70	15.44	-19.93		307.8		335.1
320.00	318.57	16.92	-20.56		309.5		
328.98	327.39	18.34	-20.99	27.9	311.1	9.4	346.1







STANDARD

1.000

250.000

500.000

1.000

[API-GR] [API-GR]

[API-N]

SENSOR

GAMMA

GAMMA

NEUTRON

NEUTRON

RESPONSE

1.00

52.00

1.00

500.00

[CPS] [CPS] [CPS] [CPS]

220

230

240

TOOL CALIBRATION 2956 08/15/08 06:20

HME

01:44:30

01:44:30 10:47:15

10:47:15

SERIAL NUMBER 530

DAIL

1

2

Jul20,07

Jul20,07 Sep03,06

Sep03,06

CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2956

DATE OF LOG: 08/15/08 PROBE: 9055A 72

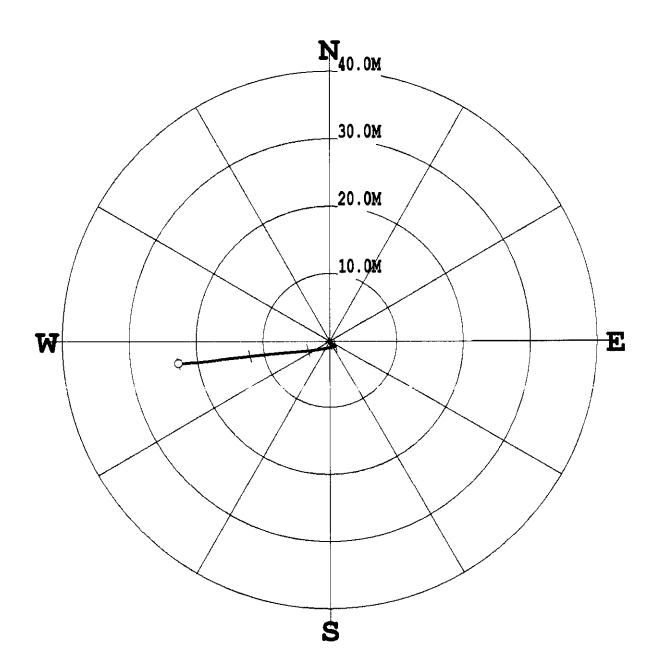
MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 248.82 M

AZIMUTH: 261.6 DISTANCE: 22.8 M + = 50 M INCR

○ = BOTTOM OF HOLE

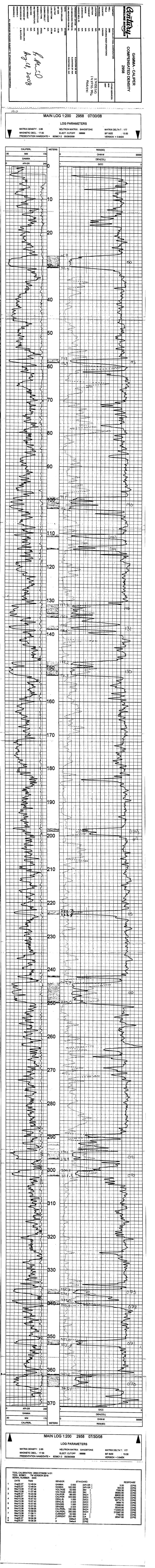


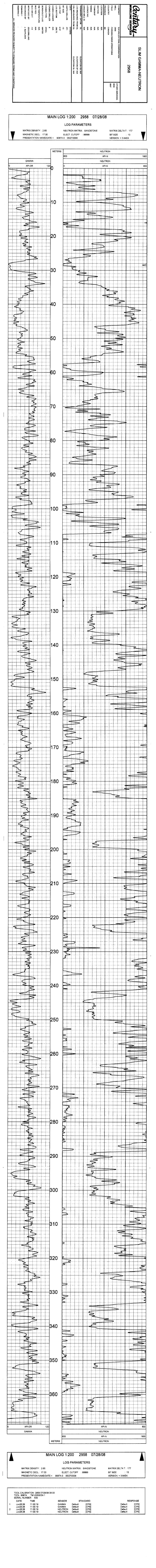
* * * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * * *

HOLE ID. : 2956 CLIENT : ELK VALLEY COAL FIELD OFFICE : CENTURY GEO
DATA FROM : N/A DATE OF LOG : 08/15/08 PROBE : 9055A DEPTH UNITS : METERS DATA FROM : N/A MAG. DECL. : 17.000 72

LOG: 2956_08-15-08_14-56_9055A_.02_22.27_251.02_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	angb
25.00	24.99	-0.02	0.01	0.0	151.4	1.1	169.6
35.00	34.99	-0.14	-0.01	0.1	184.0	0.8	202.6
45.00	44.99	-0.27	0.01	0.3	177.9	1.4	127.7
55.00	54.98	-0.44	0.18	0.5	157.8	1.8	121.8
65.00	64.98	-0.58	0.45	0.7	141.8	1.4	114.8
75.00	74.98	-0.67	0.73	1.0	132.2	1.5	108.4
85.00	84.97	-0.71	0.88	1.1	128.8	0.5	67.2
95.00	94.97	-0.70	0.89	1.1	128.4	0.3	339.2
105.00	104.97	-0.72	0.81	1.1	131.5	1.3	245.6
115.00	114.96	-0.82	0.45	0.9	151.3	3.3	255.4
125.00	124.93	-0.99	-0.29	1.0	196.5	5.3	258.0
135.00	134.88	-1.16	-1.30	1.7	228.2	6.6	261.3
145.00	144.81	-1.34	-2.49	2.8	241.7	7.4	263.4
155.00	154.71	-1.49	-3.86	4.1	248.9	8.4	264.4
165.00	164.59	-1.62	-5.39	5.6	253.3	9.2	266.3
175.00	174.46	-1.75	-7.05	7.3	256.1	10.1	265.2
185.00	184.29	-1.92	-8.86	9.1	257.8	11.0	265.0
195.00	194.10	-2.11	-10.75	11.0	258.9	10.9	264.6
205.00	203.91	-2.33	-12.69	12.9	259.6	11.5	264.1
215.00	213.71	-2.53	-14.69	14.9	260.2	11.7	264.1
225.00	223.48	-2.81	-16.78	17.0	260.5	12.6	261.6
235.00	233.23	-3.08	-18.98	19.2	260.B	13.0	263.1
245.00	242.97	-3.25	-21.19	21.4	261.3	13.6	267.2
251.02	248.78	-3.34	-22.59	22.8	261.6	13.2	263.4





CLIENT: ELK VALLEY COAL CORPORATION

LOCATION: FORDING RIVER OPERATIONS

HOLE ID: 2958

DATE OF LOG: 07/30/08 PROBE: 9055A 72

A

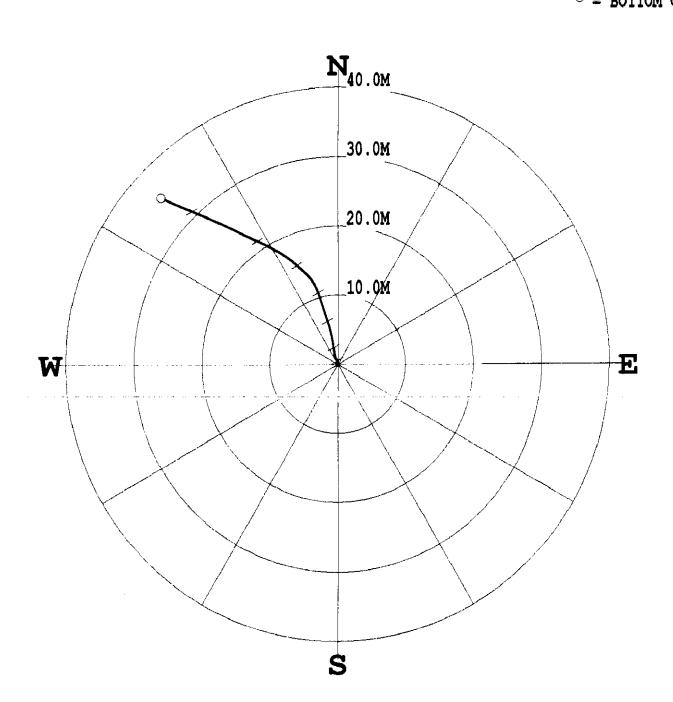
MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 368.15 M

AZIMUTH: 312.8
DISTANCE: 35.4 M
+ = 50 M INCR

= BOTTOM OF HOLE



* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL COR HOLE ID. : 2958

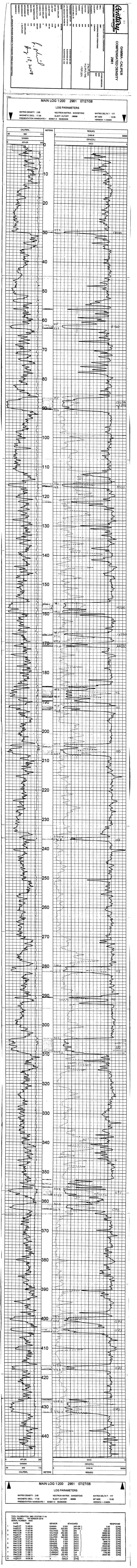
FIELD OFFICE : CENTURY GEO DATE OF LOG : 07/30/08

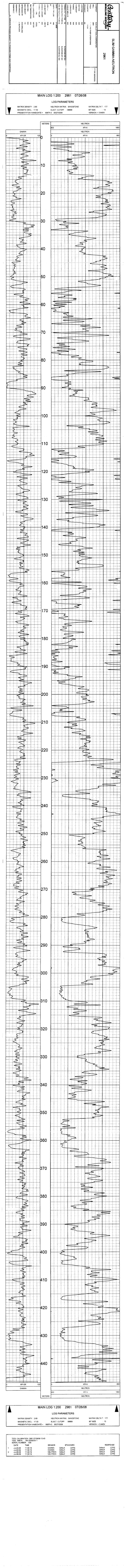
DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2958 07-30-08 13-34 9055A , 02 1.34 371.06 DEVI.log

LOG: 2958_07-30-08_13-34_9055A02_1.34_371.06_DEVI.log								
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB	
10.00	10.00	-0.01	-0.02	0.0	242.7	0.5	8.4	
20.00	20.00	0.09	-0.01	0.1	352.5	0.8	8.3	
30.00	30.00	0.20	-0.00	0.2	359.8	0.7	9.8	
40.00	40.00	0.37	-0.03	0.4	355.3	0.9	341.0	
50.00	50.00	0.50	-0.08	0.5	350.4	1.1	339.3	
60.00	59.99	0.63	-0.18	0.7	344.2	1.0	319.2	
70.00	69.99	0.84	-0.32	0.9	339.3	1.5	333.1	
80.00	79.98	1.19	-0.45	1.3	339.3	2.5	342.5	
90.00	89.97	1.75	-0.53	1.8	343.1	3.3	355.3	
100.00	99.94	2.43	-0.63	2.5	345.5	4.0	352.3	
110.00	109.92	3.12	-0.72	3.2	347.0	3.9	350.2	
120.00	119.89	3.85	-0.85	3.9	347.5	4.3	348.9	
130.00	129.86	4.59	-1.02	4.7	347.5	4.8	346.3	
140.00	139.83	5.40	-1.23	5.5	347.2	4.9	347.0	
150.00	149.79	6.23	-1.49	6.4	346.6	4.8	341.4	
160.00	159.75	7.08	-1.78	7.3	345.9	5.4	341.7	
170.00	169.70	7.94	-2.07	8.2	345.4	5.1	341.1	
180.00	179.67	8.77	-2.34	9.1	345.0	5.1	342.1	
190.00	189.63	9.56	-2.61	9.9	344.7	4.6	342.2	
200.00	199.60	10.30	~2.89	10.7	344.3	4.5	337.3	
210.00	209.56	11.09	-3.22	11.6	343.8	5.2	335.5	
220.00	219.51	11.94	-3.72	12.5	342.7	6.1	324.3	
230.00	229.46	12.78	-4.40	13.5	341.0	6.4	317.3	
240.00	239.40	13.55	-5.18	14.5	339.1	5.8	314.6	
250.00	249.34	14.24	-5.95	15.4	337.3	6.0	308.7	
260.00	259.28	14.92	-6.78	16.4	335.5	6.4	307.7	
270.00	269.21	15.61	-7.74	17.4	333.6	7.7	303.3	
280.00	279.12	16.33	-8.89	18.6	331.4	8.0	299.8	
290.00	289.00	17.04	-10.22	19.9	329.0	9.1	296.8	
300.00	298.88	17.73	-11.66	21.2	326.7	9.4	295.7	
310.00	308.74	18.44	-13.16	22.6	324.5	10.1	294.9	
320.00	318.57	19.22	-14.81	24.3	322.4	11.0	295.7	
330.00	328.36	20.09	-16.67	26.1	320.3	12.5	295.1	
340.00	338.10	21.02	-18.72	28.1	318.3	13.3	292.5	
350.00	347.82	21.92	-20.89	30.3	316.4	14.1	293.0	
360.00	357.49	22.88	-23.24	32.6	314.6	15.3	293.3	
370.00	367.13	23.91	-25.69	35.1	312.9	15.9	292.2	
371.06	368.11	24.01	-25.95	35.4	312.8	15.8	292.8	





CLIENT: ELK VALLEY COAL CORPORATION LOCATION: FORDING RIVER OPERATIONS

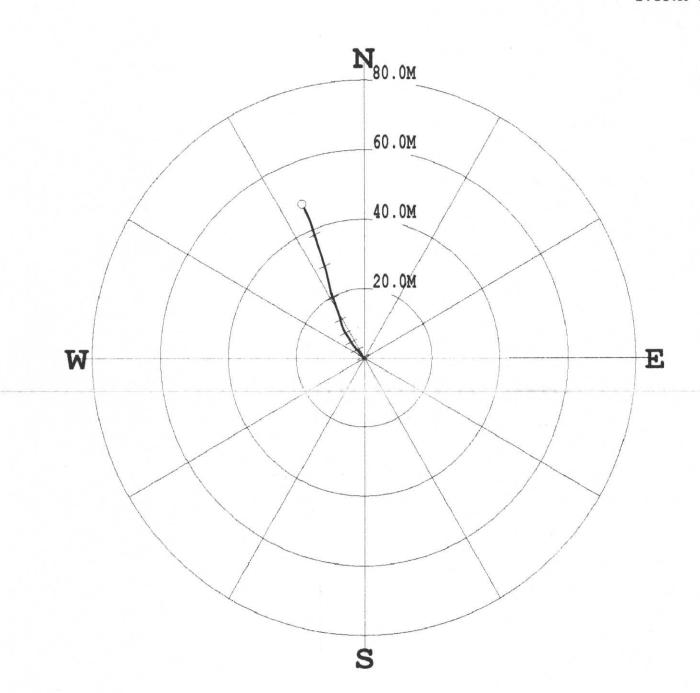
HOLE ID: 2961

DATE OF LOG: 07/27/08 PROBE: 9055A 72 MAG DECL: 17.0

SCALE: 10 M/CM

TRUE DEPTH: 443.48 M

AZIMUTH: 337.6
DISTANCE: 47.8 M
+ = 50 M INCR
= BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

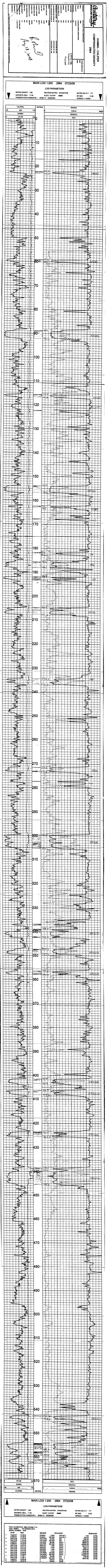
CLIENT : ELK VALLEY COAL COR HOLE ID. : 2961

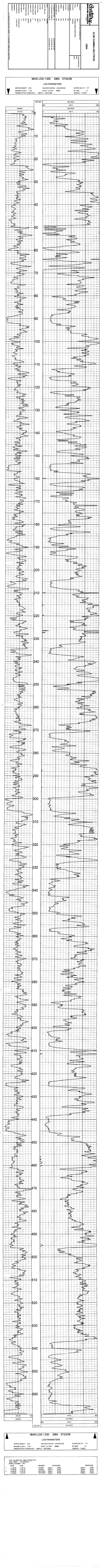
FIELD OFFICE : CENTURY GEO DATE OF LOG : 07/27/08

DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

MAG. DECL LOG: 2961		-18_9055A0		NITS : MET 19_DEVI.lo			
CABLE DEPTH		NORTH DEV.		DISTANCE			ANGB
10.00	10.00	0.00	-0.02	0.0	280.2	0.2	230.0
20.00	20.00	-0.02	-0.05	0.1	244.3	0.4	
30.00	30.00	-0.05	-0.08	0.1	238.2	0.2	
40.00	40.00	0.05	-0.15	0.2	288.5	1.4	
50.00	49.99	0.30	-0.31	0.4	314.5	2.0	
60.00	59.99	0.58	-0.53	0.8	317.9	2.2	
70.00	69.98	0.95	-0.84	1.3			
80.00	79.96	1.39	-1.25	1.9	318.1	3.5	
90.00	89.94	1.87	-1.65	2.5	318.6	3.7	
100.00	99.92	2.35	-2.07	3.1	318.7 318.6	3.6	
110.00	109.90	2.82	-2.49	3.8	318.6	3.4	
120.00	119.88	3.26	-2.88	4.3	318.5 318.8	3.0	
130.00	129.87	3.64	-3.19	4.8	318.8	2.7	
140.00	139.85	4.10	-3.50	5.4	319.5 320.4	3.7	
150.00	149.83	4.64	-3.83	6.0	320.4	3.3	
160.00	159.81	5.16	-4.15	6.6	321.2 321.7	3.6	
170.00	169.79	5.69	-4.50	7.3	321.7	4.0	
180.00	179.77	6.23	-4.87	7.9	322.0 322.4	3.3	
190.00	189.75	6.73	-5.19	8.5	322.4	3.5	
200.00	199.73	7.27	-5.54	9.1	322.7 323.1	3.9	
210.00	209.71	7.87	-5.90	9.8	323.1	4.0	
220.00	219.68	8.49	-6.19	10.5	323.9 325.0	4.7	
230.00	229.65	9.27	-6.50	11.3	325.0	5.2	
240.00	239.61	10.12	-6.78	12.2	326.2 327.3	5.3	
250.00	249.56	11.00	-7.06	13.1	327.3	5.6	
260.00	259.52	11.95	-7.30	14.0	328.6 329.7 330.5 331.3	6.1	
270.00	269.45	13.03	-7.62	15.1	329.7	6.9	
280.00	279.36	14.27	-8.08	16.4	330.5	8.1	
290.00	289.24	15.71	-8.61	17.9	331.3	9.3	
300.00	299.10	17.30	-9.19	19.6	332.0	10.0	
310.00	308.95	18.94	-9.74	21.3	332.8		
320.00	318.78	20.70	-10.14	23.1	333.9		
330.00	328.60	22.53	-10.56	24.9	334.9	11.2	
340.00	338.42	24.38	-11.02	26.8	335.7	10.5	
350.00	348.23	26.21	-11.51	28.6	336.3	11.0	
360.00	358.06	27.97	-12.09	30.5	336.6	10.4	
370.00	367.90	29.67	-12.64	32.3	336.9	10.6	
380.00	377.72	31.45	-13.24	34.1	337.2	10.7	
390.00	387.54	33.23	-13.86	36.0	337.4	10.9	
400.00	397.35	35.08	-14.46		337.6	11.2	
410.00	407.16	36.91	-15.07	39.9	337.8	11.3	
420.00	416.95	38.84	-15.74		337.9		
430.00	426.71	40.82	-16.54	44.0	337.9	12.8	
440.00	436.47	42.79	-17.53		337.7		
447.20	443.44	44.21	-18.25	47.8	337.6	13.6	332.0





CLIENT: ELK VALLEY COAL CORPORATION

LOCATION: FORDING RIVER OPERATIONS

HOLE ID: 2964

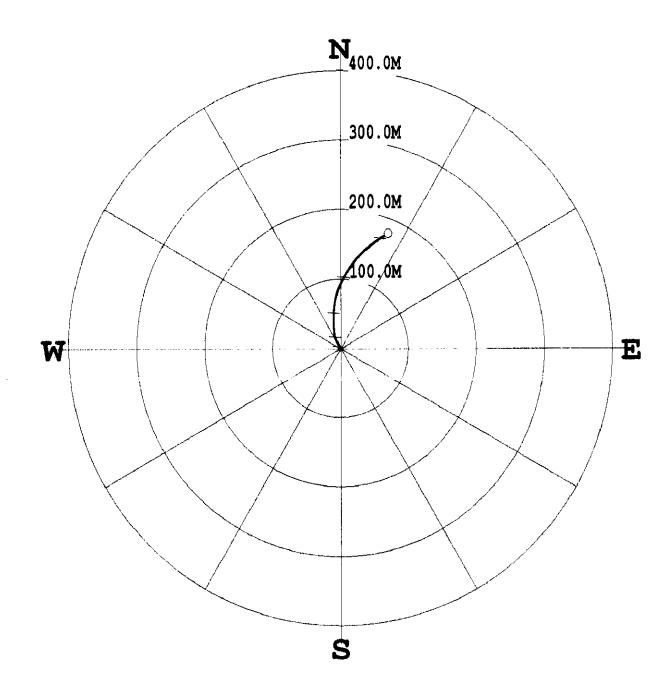
DATE OF LOG: 07/23/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 50 M/CM
TRUE DEPTH: 515.39 M
AZIMUTH: 23.2

AZIMUTH: 23.2
DISTANCE: 179.3 M
+ = 100 M INCR

O = BOTTOM OF HOLE



* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL COR HOLE ID. : 2964

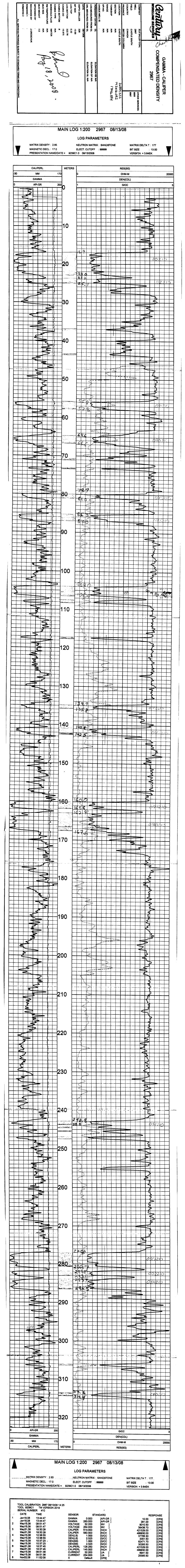
FIELD OFFICE : CENTURY GEO DATE OF LOG : 07/23/08

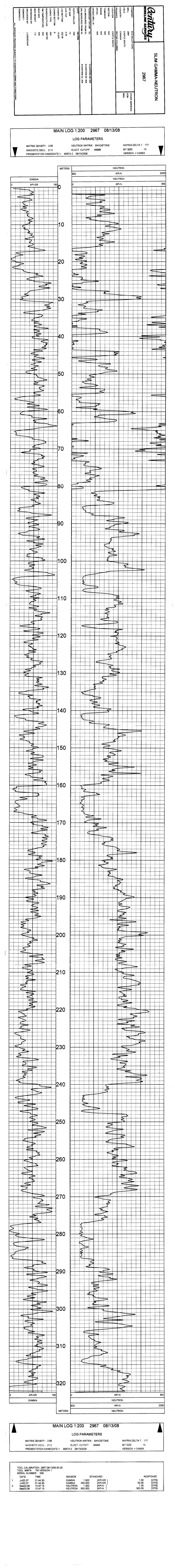
DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2964_07-23-08_16-25_9055A_.02_1.36_569.14_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SANGB	
10.00	10.00	0.02	0.04	0.0	64.2	0.7 27.8	2
20.00	20.00	0.10	0.08	0.1	38.2	0.5 346.5	
30.00	30.00	0.19	0.09	0.2	25.9	1.3 13.9	
40.00	40.00	0.38	0.03	0.4	4.2	1.2 336.4	
50.00	49.99	0.58	-0.10	0.6	349.9	1.5 329.7	
60.00	59.99	0.87	-0.32	0.9	339.6	2.9 329.0	
70.00	69.97	1.28	-0.64	1.4	333.6	3.2 341.2	
80.00	79.96	1.77	-0.92	2.0	332.5	3.3 354.8	
90.00	89.93	2.35	-1.27	2.7	331.7	4.1 330.7	
100.00	99.90	3.03	-1.63	3.4	331.7	4.4 330.5	
110.00	109.87	3.72	-2.01	4.2	331.6	4.4 331.2	
120.00	119.84	4.45	-2.40	5.1	331.7	5.1 336.2	
130.00	129.79	5.34	-2.86	6.1	331.8	6.3 332.8	
140.00	139.71	6.41	-3.43	7.3	331.8	7.9 332.0)
150.00	149.61	7.68	-4.15	8.7	331.6	8.3 332.4	1
160.00	159.48	9.04	-4.90	10.3	331.5	9.4 331.8	3
170.00	169.34	10.53	-5.70	12.0	331.6	10.4 333.7	
180.00	179.15	12.31	-6.50	13.9	332.2	12.0 338.3	
190.00	188.91	14.33	-7.25	16.1	333.2	12.9 340.1	
200.00	198.63	16.57	-7.95	18.4	334.4	13.7 343.8	
210.00	208.31	18.99	-8.59	20.8	335.7	14.9 346.5	
220.00	217.95	21.61	-9.10	23.5	337.2	15.9 351.0	
230.00	227.53	24.44	-9.46	26.2	338.8	17.3 354.3	
240.00	237.05	27.50	-9.69	29.2	340.6	18.4 356.8	
250.00	246.51	30.72	-9.88	32.3	342.2	19.6 357.0	
260.00	255.92	34.12	-10.00	35.6	343.7	20.0 358.7	
270.00	265.31	37.56	-10.10	38.9	344.9	20.3 358.5	
280.00	274 . 67	41.07	-10.16	42.3	346.1	20.8 359.6	
290.00	283.98	44.72	-10.13	45.9	347.2	21.9 1.1	
300.00	293.24	48.50	-10.06	49.5	348.3	22.2 0.8	
310.00	302.50	52.27	-9.96	53.2	349.2	22.4 2.2	
320.00	311.70	56.18	-9.74	57.0	350.2	23.6 3.4	
330.00	320.82	60.27	-9.33	61.0	351.2	25.1 6.9	
340.00	329.81	64.61	-8.73	65.2	352.3	26.9 9.3	
350.00	338.67	69.16	-7.92	69.6	353.5	28.0 11.6	
360.00 370.00	347.50 356.30	73.75 78.36	-6.91 -5.78	74.1 78.6	354.6 355.8	28.1 13.3 28.9 15.8	
380.00	356.30 365.02	83.05	-4.38	83.2	355.6 357.0	29.7 17.4	
390.00	373.67	87.77	-2.67	87.8	358.3	30.3 21.5	
400.00	382.27	92.47	-0.69	92.5	359.6	30.9 24.8	
410.00	390.79	97.14	1.67	97.2	1.0	32.2 28.3	
420.00	399.20	101.84	4.33	101.9	2.4	33.4 31.7	
430.00	407.51	106.58	7.25	106.8	3.9	34.1 32.0	
440.00	415.73	111.38	10.33	111.9	5.3	34.7 29.3	
450.00	423.78	116.31	13.61	117.1	6.7	37.4 39.2	
460.00	431.71	121.24	17.17	122.5	8.1	37.7 36.9	
470.00	439.60	126.12	20.91	127.8	9.4	38.2 38.4	
480.00	447.44	130.81	24.97	133.2	10.8	38.3 44.6	
490.00	455.30	135.22	29.30	138.4	12.2	38.1 47.5	
500.00	463.19	139.47	33.74	143.5	13.6	38.3 47.7	
510.00	470.99	143.52	38.51	148.6	15.0	39.8 50.2	
520.00	478.68	147.50	43.50	153.8	16.4	40.0 53.4	
530.00	486.28	151.44	48.65	159.1	17.8	41.3 53.3	3
540.00	493.78	155.27	54.05	164.4	19.2	41.7 55.6	
550.00	501.18	158.93	59.42	169.7	20.5	42.0 59.6	5
560.00	508.62	162.10	65.29	174.8	21.9	41.2 63.5	5
569.14	515.36	164.83	70.49	179.3	23.2	41.7 64.8	3





CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

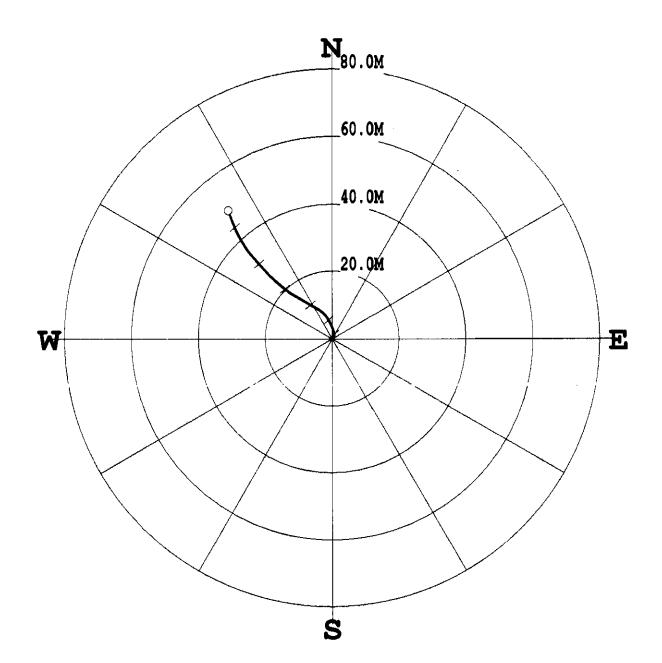
HOLE ID: 2967

DATE OF LOG: 08/13/08 PROBE: 9055A 72 *****

MAG DECL: 17.0

SCALE: 10 M/CM
TRUE DEPTH: 317.72 M
AZIMUTH: 320.9
DISTANCE: 49.0 M

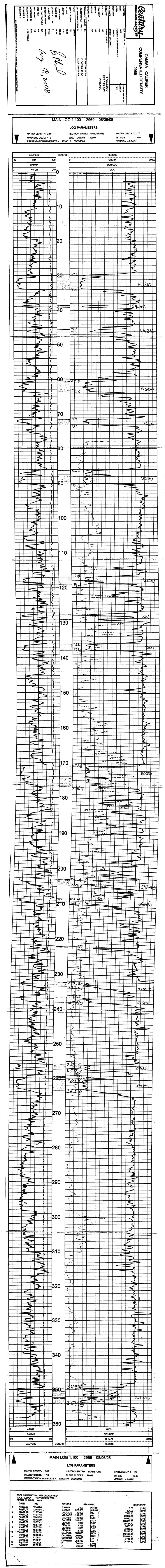
+ = 50 M INCR
○ = BOTTOM OF HOLE

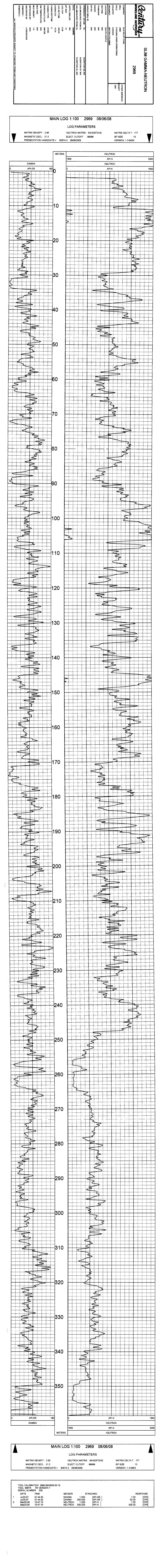


* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2967
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/13/08
DATA FROM : N/A PROBE : 9055A , 72
MAG. DECL. : 17.000 DEPTH UNITS : METERS
LOG: 2967_08-13-08_13-08_9055A_.02_8.25_322.96_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB
10.00	9.99	0.00	0.01	0.0	76.5	1.6	67.0
20.00	19.99	0.12	0.26	0.3	65.9	1.9	63.0
30.00	29.98	0.41	0.50	0.6	50.6	2.6	33.7
40.00	39.97	0.86	0.64	1.1	36.4	3.2	8.0
50.00	49.95	1.44	0.63	1.6	23.7	3.5	354.0
60.00	59.92	2.13	0.47	2.2	12.4	4.4	344.1
70.00	69.89	2.89	0.22	2.9	4.3	5.0	338.1
80.00	79.85	3.73	-0.13	3.7	358.0	5.4	331.2
90.00	89.80	4.66	-0.55	4.7	353.3	5.8	334.9
100.00	99.74	5.57	-1.04	5.7	349.4	6.2	329.3
110.00	109.68	6.50	-1.63	6.7	345.9	6.7	320.4
120.00	119.61	7.37	-2.40	7.7	342.0	7.1	313.3
130.00	129.53	8.21	-3.40	8.9	337.5	8.1	306.5
140.00	139.39	9.10	-4.75	10.3	332.4	8.8	296.1
150.00	149.24	9.97	-6.29	11.8	327.8	10.1	299.0
160.00	159.08	10.83	-7.84	13.4	324.1	10.6	297.8
170.00	168.92	11.70	-9.40	15.0	321.2	10.1	299.3
180.00	178.77	12.55	-10.91	16.6	319.0	9.6	300.3
190.00	188.61	13.46	-12.40	18.3	317.3	10.3	303.7
200.00	198.44	14.51	-13.80	20.0	316.4	10.5	305.8
210.00	208.27	15.68	-15.26	21.9	315.8	11.3	309.1
220.00	218.06	17.00	-16.BO	23.9	315.3	11.7	312.3
230.00	227.84	18.40	-18.34	26.0	315.1	12.3	314.7
240.00	237.61	19.94	-19.85	28.1	315.1	12.7	318.2
250.00	247.34	21.66	-21.37	30.4	315.4	13.7	319.0
260.00	257.04	23.47	-22.95	32 . B	315.6	13.9	318.7
270.00	266.74	25.33	-24.56	35.3	315.9	14.5	318.9
280.00	276.41	27.37	-26.03	37.8	316.4	14.6	325.4
290.00	286.08	29.55	-27.36	40.3	317.2	14.6	330.6
300.00	295.71	31.93	-28.59	42.9	318.2	15.7	334.3
310.00	305.32	34.48	-29.67	45.5	319.3	16.3	338.3
320.00	314.89	37.19	-30.67	48.2	320.5	17.5	342.3
322.96	317.68	38.02	-30.94	49.0	320.9	17.8	342.9





CLIENT: ELK VALLEY COAL

LOCATION: FORDING RIVER OPERATIONS

HOLE ID: 2969

360.86

358.73

DATE OF LOG: 08/06/08 PROBE: 9055A

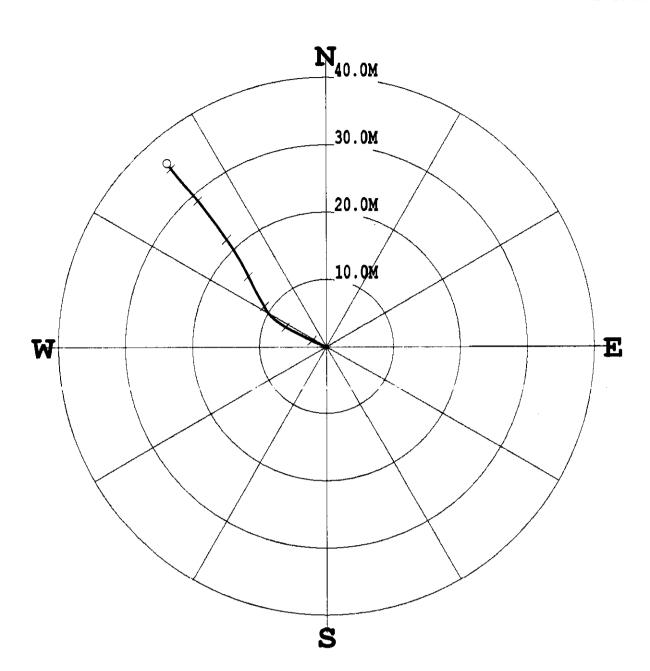
MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 358.77 M

AZIMUTH: 319.0 DISTANCE: 36.1 M + = 50 M INCR

○ = BOTTOM OF HOLE



* * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * * *

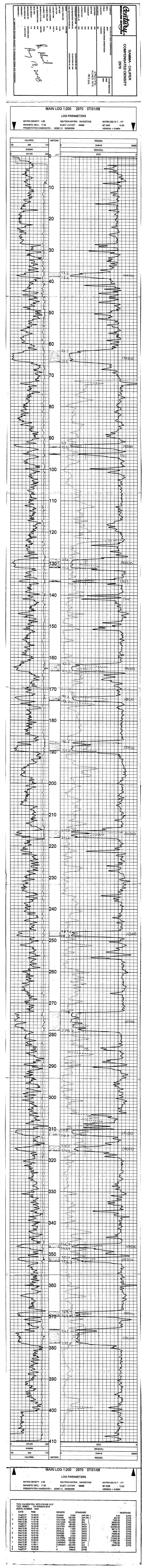
HOLE ID. : ELK VALLEY COAL : 2969 CLIENT **DATE OF LOG: 08/06/08** FIELD OFFICE : CENTURY GEO DATA FROM : N/A MAG. DECL. : 17.000 : 9055ሕ PROBE DEPTH UNITS : METERS MAG. DECL.

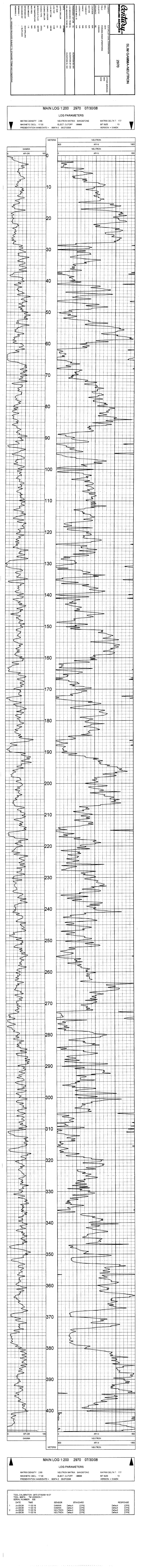
LOG: 2969_08-06-08_14-25_9055A_.02_8.30_360.85_DEVI.log CABLE DEPTH TRUE DEPTH NORTH DEV. EAST DEV. DISTANCE AZIMUTH SANG SANGB -0.01 281.5 10.00 10.00 0.00 0.0 2.5 294.6 2.6 286.3 0.16 -0.42 291.3 20.00 19.99 0.5 3.0 288.9 4.0 292.2 291.9 1.0 30.00 0.36 -0.90 29.98 292.1 40.00 39.96 0.59 -1.46 1.6 5.1 296.7 4.9 296.2 5.2 295.8 -2.16 292.8 50.00 49.93 0.91 2.3 59.89 -2.91 293.9 1.29 3.2 60.00 1.68 -3.70 70.00 69.85 4.1 294.5 294.9 2.09 -4.50 5.0 4.8 296.7 80.00 79.81 89.77 -5.31 295.3 2.51 5.9 5.2 298.0 90.00 -6.07 295.7 300.2 100.00 6.7 4.4 99.73 2.92 305.2 110.00 109.70 3.35 -6.75 7.5 296.4 4.7 3.86 119.66 -7.44 8.4 297.4 5.0 307.0 120.00 -8.15 298.6 5.3 313.2 130.00 129.62 4.45 9.3 139.58 5.15 -8.74 10.1 300.5 5.3 326.5 140.00 5.97 302.9 149.53 -9.23 11.0 5.6 332.0 150.00 305.2 -9.75 159.48 6.0 331.7 160.00 6.87 11.9 169.43 7.72 -10.24 12.8 307.0 5.6 332.0 170.00 8.55 13.7 179.38 -10.67 308.7 5.2 332.5 180.00 5.8 333.5 310.4 190.00 189.33 9.45 -11.11 14.6 15.6 200.00 199.28 10.41 -11.58 312.0 6.3 333.6 11.41 16.6 209.21 -12.09 332.1 313.3 6.5 210.00 17.7 6.8 330.9 12.44 -12.64 314.5 220.00 219.14 229.06 19.0 315.5 230.00 13.55 -13.29 8.2 330.5 20.3 325.6 240.00 238.97 14.69 -14.01 316.4 7.8 7.9 -14.78 324.1 21.7 316.9 250.00 248.88 15.82 258.77 16.98 -15.60 23.1 317.4 B . 4 324.6 260.00 18.13 317.8 323.0 270.00 268.67 -16.41 24.5 8.4 -17.28 8.3 323.0 25.9 318.1 280.00 278.57 19.29 288.46 -18.15 324.4 290.00 20.45 27.3 318.4 8.0 28.7 300.00 21.55 -18.99 318.6 7.6 321.7 298.37 7.2 -19.92 308.28 22.54 318.7 320.6 310.00 30.0 320.00 318.20 23.48 -20.5 31.3 318.7 7.1 318.7 -21.47 32.5 24.43 318.7 7.4 317.9 330.00 328.13 7.2 318.7 319.5 340.00 338.05 25.38 -22.29 33.8 -23.01 35.0 318.8 6.5 321.7 350.00 347.98 26.31 -23.67 27.19 36.0 319.0 6.1 320.3 360.00 357.91 319.0 5.9 322.7

-23.71

27.26

36.1





CLIENT: ELK VALLEY COAL CORPORATION LOCATION: FORDING RIVER OPERATIONS

HOLE ID: 2970

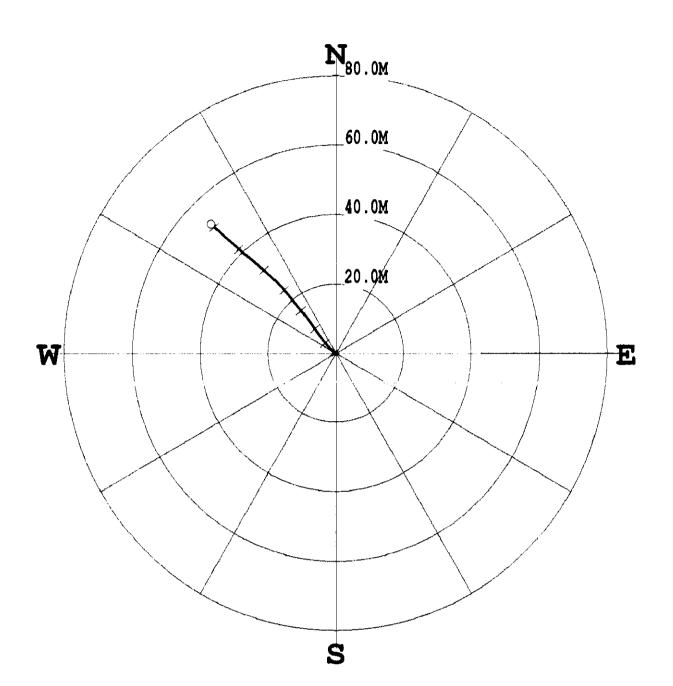
DATE OF LOG: 07/31/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 10 M/CM

TRUE DEPTH: 405.98 M

AZIMUTH: 315.3
DISTANCE: 52.2 M
+ = 50 M INCR
= BOTTOM OF HOLE



* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL COR HOLE ID. : 2970

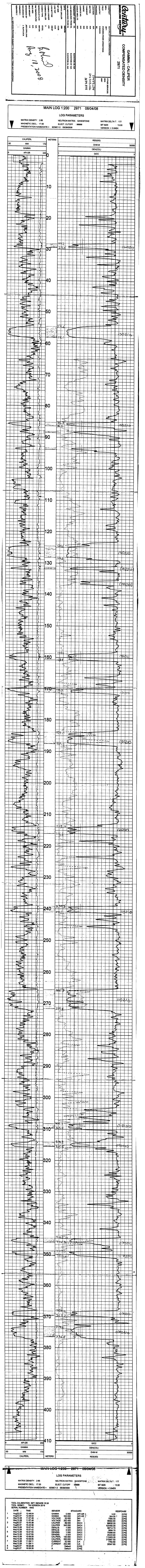
FIELD OFFICE : CENTURY GEO DATE OF LOG : 07/31/08

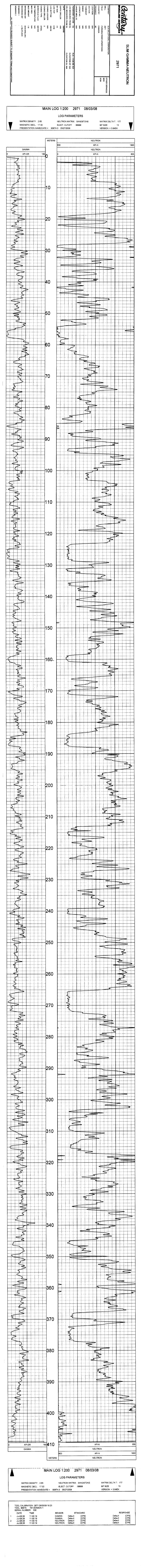
DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2970 07-31-08 14-22 9055A .02 1.40 410.08 DEVI.log

100: 2970_07-31-06_14-22_9055A02_1.40_410.06_DEV1.100								
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH		ANGB	
10.00	10.00	-0.04	-0.01	0.0	192.8	0.9	265.3	
20.00	20.00	0.00	0.04	0.0	90.0	0.3	35.2	
30.00	30.00	0.03	0.05	0.1	55.3	0.2	276.3	
40.00	40.00	0.07	-0.06	0.1	317.0	1.6	290.7	
50.00	49.99	0.30	-0.43	0.5	304.9	2.7	306.0	
60.00	59.97	0.65	-0.87	1.1	306.8	3.9	310.0	
70.00	69.95	1.11	-1.39	1.8	308.6	4.4	314.8	
80.00	79.91	1.69	-1.96	2.6	310.8	5.3	312.3	
90.00	89.88	2.32	-2.54	3.4	312.4	5.0	319.0	
100.00	99.84	2.99	-3.11	4.3	313.9	4.9	319.3	
110.00	109.80	3.66	-3.65	5.2	315.1	5.1	319.5	
120.00	119.76	4.39	-4.23	6.1	316.1	5.7	320.2	
130.00	129.70	5.22	-4.89	7.2	316.9	6.1	320.9	
140.00	139.64	6.10	-5.57	8.3	317.6	6.7	323.8	
150.00	149.57	7.01	-6.24	9.4	318.3	6.2	322.8	
160.00	159.51	7.94	-6.88	10.5	319.1	7.0	326.5	
170.00	169.43	8.93	-7.57	11.7	319.7	7.5	326.9	
180.00	179.34	9.98	-8.35	13.0	320.1	8.0	323.8	
190.00	189.24	11.12	-9.24	14.5	320.3	8.3	320.1	
200.00	199.13	12.25	-10.18	15.9	320.3	8.6	320.5	
210.00	209.02	13.39	-11.13	17.4	320.3	9.0	319.3	
220.00	218.90	14.54	-12.10	18.9	320.2	8.9	316.7	
230.00	228.79	15.65	-13.05	20.4	320.2	8.8	319.9	
240.00	238.67	16.85	-14.02	21.9	320.2	9.2	321.2	
250.00	248.54	18.08	-15.06	23.5	320.2	9.4	318.9	
260.00	258.41	19.27	-16.15	25.1	320.0	9.0	315.3	
270.00	268.28	20.37	-17.26	26.7	319.7	9.0	312.4	
280.00	278.16	21.43	-18.43	28.3	319.3	9.0	310.9	
290.00	288.03	22.51	-19.61	29.8	318.9	9.3	313.1	
300.00	297.88	23.65	-20.89	31.6	318.5	10.4	311.7	
310.00	307.70	24.85	-22.33	33.4	319.1	10.7	308.5	
320.00	317.53	26.00	-23.76	35.2	317.6	10.4	309.4	
330.00	327.36	27.20	-25.18	37.1	317.2	10.5	309.5	
340.00	337.18	28.39	-26.63	38.9	316.8	10.8	308.7	
350.00	347.00	29.62	-28.07	40.B	316.5	11.0	309.8	
360.00	356.81	30.88	-29.53	42.7	316.3	11.1	310.4	
370.00	366.63	32.12	-30.99	44.6	316.0	10.9	309.9	
380.00	376.45	33.33	-32.43	46.5	315.8	10.7	310.2	
390.00	386.27	34.56	-33.83	48.4	315.6	10.7	311.4	
400.00	396.09	35.80	-35.24	50.2	315.5	11.3	311.6	
410.00	405.90	37.10	-36.70	52.2	315.3	11.3	311.9	
410.08	405.94	37.10	-36.71	52.2	315.3	11.3	311.9	





CLIENT: ELK VALLEY COAL CORPORATION LOCATION: FORDING RIVER OPERATIONS

HOLE ID: 2971

DATE OF LOG: 08/04/08

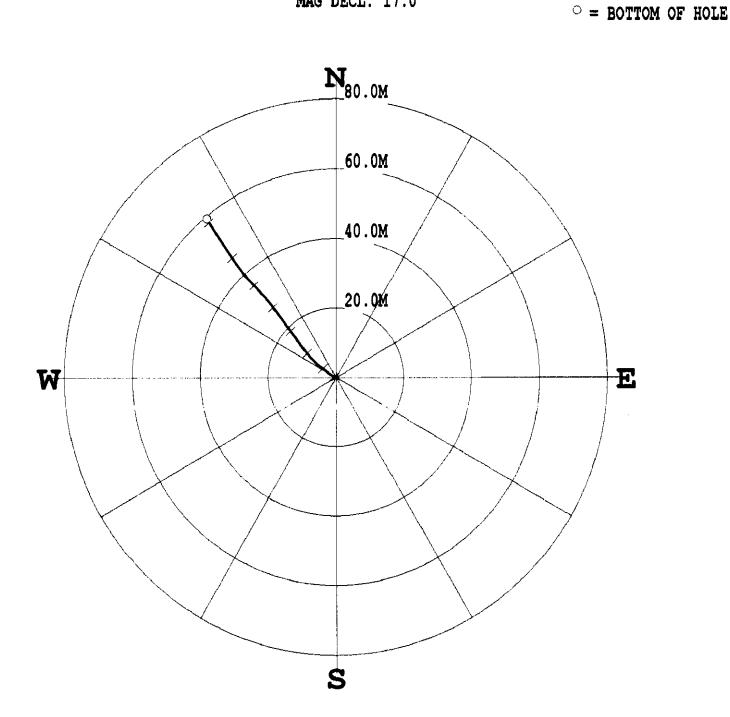
PROBE: 9055A 72

4

MAG DECL: 17.0

SCALE: 10 M/CM TRUE DEPTH: 404.50 M

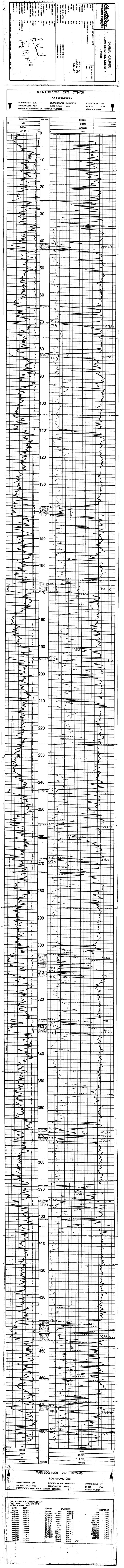
AZIMUTH: 320.3 DISTANCE: 59.3 M + = 50 M INCR

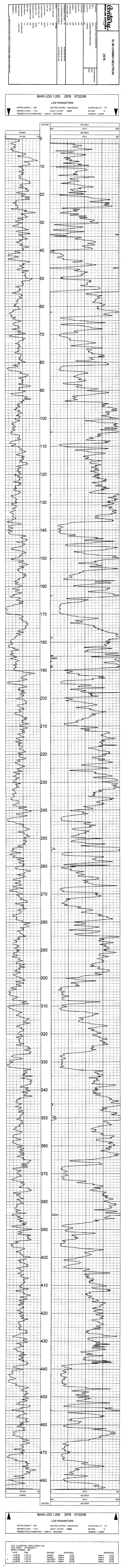


* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL COR HOLE ID. : 2971
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/04/08
DATA FROM : N/A PROBE : 9055A , 72
MAG. DECL. : 17.000 DEPTH UNITS : METERS

MAG. DECL	. : 17.0		DEPTH U	NITS : MET	ERS		
LOG: 2971	_08-04-08_14	-56_9055A0	2_1.26_409.	88_DEVI.10	g		
							4 4 5 4 4 4 4
CABLE DEPTH		NORTH DEV.		DISTANCE	AZIMUTH		ANGB
10.00	10.00	-0.03	0.03	0.0	138.2	0.6	189.8
20.00	20.00	-0.10	-0.01	0.1	187.7	0.4	236.3
30.00	30.00	-0.11	-0.07	0.1	210.1	0.1	
40.00	40.00	-0.00	-0.24	0.2	269.5	1.7	
50.00	49.99	0.24	-0.53	0.6	294.2	2.8	307.9
60.00	59.97	0.55	-1.02	1.2	298.2	3.8	
70.00	69.95	0.94	-1.59	1.8	300.5 301.9	4.2	
80.00	79.91	1.40	-2.25	2.7			
90.00	89.87	1.94	-2,98	3.6	303.1	5.6	
100.00	99.B1	2.59	-3.84	4.6	304.0 304.3	6.1	
110.00	109.74	3.27	-4.79	5.8	304.3	6.9	307.1
120.00	119.67	4.01	-5.71	7.0	305.1	6.4	
130.00	129.60	4.86	-6.59	8.2	306.4 307.8	7.4	
140.00	139.50	5.84	-7.52	9.5	307.8	7.9	
150.00	149.40	6.92	-8.44	10.9	309.4	8.2	
160.00	159.30	8.07	-9,33	12.3	310.9 312.1	9,6	
170.00	169.17	9.24	-10.24	13.8	312.1	9.1	
180.00	179.04	10.52	-11.20	15.4	313.2	9.3	
190.00	188.90	11.83	-12.20	17.0	314.1 314.8	9.8	
200.00	198.76	13.16	-13.23	18.7	314.8	9.8	
210.00	208.62	14.49	-14.25	20.3	315.5	9.4	
220.00	218.48	15.81	-15.26	22.0	316.0 316.6	9.6	
230.00	228.33	17.17	-16.24	23.6	316.6	9.9	
240.00	238.19	18.55	-17.24	25.3	317.1	9.4	
250.00	248.03	19.92	-18.29	27.0	317.4	9.7	
260.00	257.88	21.27	-19.34	28.8	317.7	9.5	
270.00	267.74	22.56	-20.39	30.4	317.9	9.3	
280.00	277.61	23.77	-21.49	32.0	317.9	9.7	
290.00	287.47	24.96	-22.63	33.7		9.5	
300.00	297.34	26.14	-23.77	35 . 3	317.7	9.5	
310.00	307.19	27.35	-24.96	37.0	317.6	10.3	
320.00	317.02	28.70	-26.22	38.9	317.6	11.1	
330.00	326.82	30.22	-27.47	40.8	317.7	11.8	321.8
340.00	336.60	31.90	-28.73	42.9	318.0	12.5	
350.00	346.35	33.70	-30.01	45.1	318.3	12.9	
360.00	356.09	35.55	-31.30	47.4	318.6	13.1	
370.00	365.83	37.45	-32.61	49.7	318.9	13.5	326.4
380.00	375.54	39.41	-33.92	52.0	319.3	13.8	
390.00	385.25	41.44	-35.22	54.4	319.6	14.2	
400.00	394.94	43.53	-36.54	56.8			
409.88	404.46	45.62	-37.86	59.3	320.3	14.8	327.8





CLIENT: ELK VALLEY COAL CORPORATION LOCATION: FORDING RIVER OPERATIONS

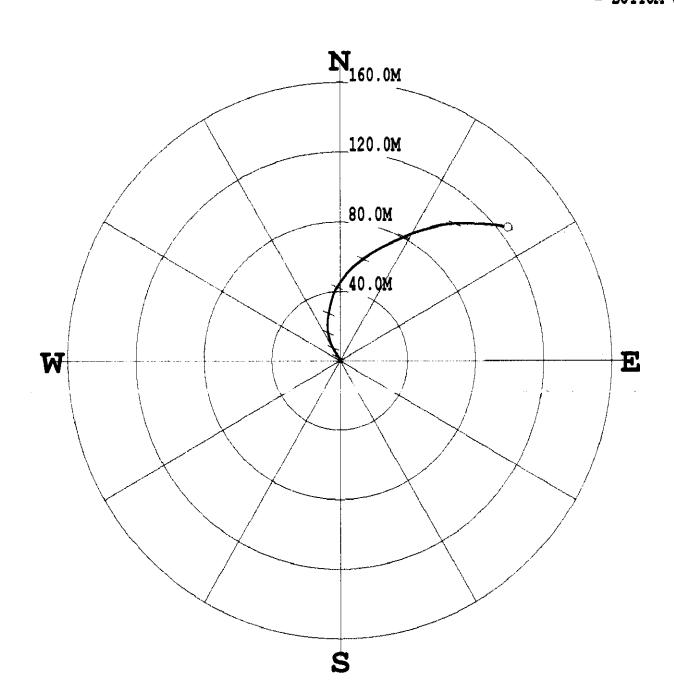
HOLE ID: 2978

DATE OF LOG: 07/24/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 20 M/CM TRUE DEPTH: 451.60 M

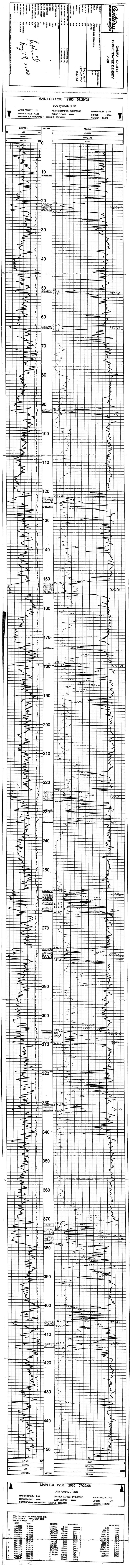
AZIMUTH: 52.2 DISTANCE: 125.2 M + = 50 M INCR = BOTTOM OF HOLE

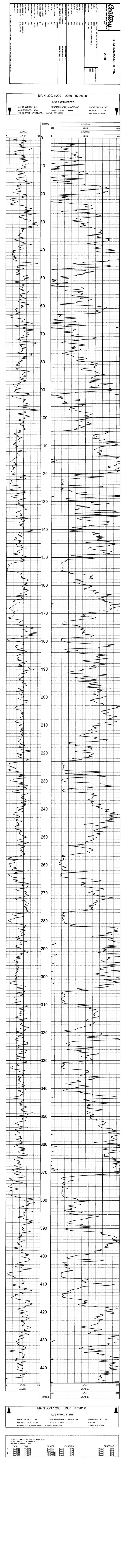


* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL COR HOLE ID. : 2978
FIELD OFFICE : CENTURY GEO DATE OF LOG : 07/24/08
DATA FROM : N/A PROBE : 9055A , 72
MAG. DECL. : 17.000 DEPTH UNITS : METERS

CABLE DEPTH TRUE DEPTH NORTH DEV. CAST DEV. DISTANCE AZIMUTH SANG SANGE 10.00 19.99 0.34 -0.18 0.4 332.3 1.0 322.5 3 0.00 29.88 0.81 -0.35 0.99 336.8 3.334.0 10.01 0.00 19.99 0.34 -0.18 0.4 332.3 1.7 348.2 3 336.7 33	MAG. DECL		00	DEPTH U	NITS : MET	ERS		
10.00	LOG: 2978	_07-24-08_13	-02_9055 A 0	2_1.46_486.	40_DEVI.lo	g		
10.00	CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB
20.00								322.5
30.00 29.98 0.81 -0.35 0.9 336.8 3.3 339.8 40.00 39.96 1.38 -0.57 1.5 337.6 3.7 336.7 50.00 49.93 2.05 -0.91 2.2 336.0 5.6 331.0 60.00 59.88 2.93 -1.45 3.3 333.7 6.5 311.0 60.00 79.72 5.02 -2.73 5.7 331.4 7.4 330.9 90.00 89.64 6.16 -3.34 7.0 331.5 8.0 332.5 100.00 99.54 7.38 -3.98 8.4 331.7 8.1 331.8 9.0 333.6 333.8 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 8.1 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 333.6 9.0 334.5 9.0								
40.00 39.96 1.38 -0.57 1.5 337.6 3.7 336.0 5.6 331.0 60.00 5.6 331.0 60.00 5.6 331.0 60.00 5.6 331.4 70.00 69.80 3.85 -2.11 4.5 3.3 333.7 6.5 311.4 70.00 69.80 3.85 -2.17 4.5 331.8 6.9 324.6 80.00 79.72 5.02 -2.73 5.7 331.4 7.4 330.9 90.00 89.64 6.16 -3.34 7.0 331.5 8.0 332.7 110.00 109.43 8.69 -4.66 9.9 331.8 9.0 333.7 110.00 110.24 -5.30 11.5 332.6 10.2 341.5 130.00 129.12 11.99 -5.86 13.3 334.0 10.0 341.5 130.00 148.73 15.79 -6.89 15.2 335.2 11.4 343.8 150.00 158.51 17.84 -7.15 19.2 338.2 12.4								
50.00 49.93 2.05 -0.91 2.2 336.0 5.6 331.0 60.00 59.80 3.95 -1.45 3.3 333.7 6.5 311.4 70.00 69.80 3.95 -2.73 5.7 331.8 6.9 328.6 80.00 79.72 5.02 -2.73 5.7 331.8 6.9 330.9 90.00 89.64 6.16 -3.34 7.0 331.8 9.0 332.5 100.00 199.54 7.38 -3.98 8.4 331.7 8.1 331.7 110.00 109.43 8.69 -4.66 9.9 331.8 9.0 333.6 120.00 119.29 10.24 -5.30 11.5 332.6 10.2 341.5 130.00 129.12 11.99 -5.86 13.3 334.0 10.0 341.5 140.00 138.93 13.85 -6.39 15.2 335.2 11.4 434.8 15.79 -6.87 <								
60.00								
80.00 79.72 5.02 -2.73 5.70 331.4 7.4 330.9 90.00 89.64 6.16 -3.34 7.0 331.5 8.0 332.5 100.00 99.54 7.38 8.69 -4.66 9.9 331.8 9.0 333.6 120.00 119.29 10.24 -5.30 11.5 332.6 10.2 341.5 130.00 129.12 11.99 -5.86 13.3 334.0 10.8 342.5 140.00 138.93 13.85 -6.39 15.2 335.2 11.4 343.8 150.00 148.73 15.79 -6.87 17.2 336.5 11.7 349.6 160.00 158.51 17.84 -7.15 19.2 336.5 11.7 349.6 160.00 168.28 20.00 -7.29 21.3 340.0 12.5 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 282.23 352.87 6.61 53.3 7.1 255.8 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 31.7 7.5 1.2 20.00 283.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 325.46 43.89 35.7 76.5 3.9 43.8 350.0 16.9 14.1 30.00 30.07 58.53 352.8 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 282.23 352.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 31.0 00 300.07 58.53 35.2 37.78 3.94 38.0 354.1 19.0 19.3 350.00 369.4 61.15 17.45 63.6 11.9 28.1 13.1 27.4 55.1 320.00 369.4 61.15 17.45 63.6 11.9 28.1 13.1 27.4 55.1 320.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.3 300.00 325.63 77.9 30.23 74.3 24.0 29.3 66.7 340.00 335.2 16.77 53.1 48.83 89.8 33.0 32.1 73.3 40.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 771.4 390.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 40.00 403.63 78.86 69.80 105.3 41.5 50.8 30.5 89.4						333.7	6.5	
80.00 79.72 5.02 -2.73 5.70 331.4 7.4 330.9 90.00 89.64 6.16 -3.34 7.0 331.5 8.0 332.5 100.00 99.54 7.38 8.69 -4.66 9.9 331.8 9.0 333.6 120.00 119.29 10.24 -5.30 11.5 332.6 10.2 341.5 130.00 129.12 11.99 -5.86 13.3 334.0 10.8 342.5 140.00 138.93 13.85 -6.39 15.2 335.2 11.4 343.8 150.00 148.73 15.79 -6.87 17.2 336.5 11.7 349.6 160.00 158.51 17.84 -7.15 19.2 336.5 11.7 349.6 160.00 168.28 20.00 -7.29 21.3 340.0 12.5 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 282.23 352.87 6.61 53.3 7.1 255.8 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 31.7 7.5 1.2 20.00 283.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 325.46 43.89 35.7 76.5 3.9 43.8 350.0 16.9 14.1 30.00 30.07 58.53 352.8 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 282.23 352.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 31.0 00 300.07 58.53 35.2 37.78 3.94 38.0 354.1 19.0 19.3 350.00 369.4 61.15 17.45 63.6 11.9 28.1 13.1 27.4 55.1 320.00 369.4 61.15 17.45 63.6 11.9 28.1 13.1 27.4 55.1 320.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.3 300.00 325.63 77.9 30.23 74.3 24.0 29.3 66.7 340.00 335.2 16.77 53.1 48.83 89.8 33.0 32.1 73.3 40.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 771.4 390.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 39.9 30.00 369.8 2 75.31 48.83 89.8 33.0 32.1 73.4 40.00 403.63 78.86 69.80 105.3 41.5 50.8 30.5 89.4						331.8	6.9	
90.00 89.64 6.16 -3.34 7.0 331.5 8.0 332.5 100.00 99.54 7.38 -3.98 8.4 331.7 8.1 331.7 110.00 109.43 8.69 -4.66 9.9 331.8 9.0 333.6 120.00 129.12 11.99 10.24 -5.30 11.5 332.6 10.2 341.5 130.00 129.12 11.99 -5.86 13.3 334.0 10.8 342.5 140.00 138.93 13.85 -6.39 15.2 335.2 11.4 343.8 150.00 148.73 15.79 -6.87 17.2 336.5 11.7 349.6 160.00 158.51 17.84 -7.15 19.2 336.5 11.7 349.6 180.00 178.04 22.18 -7.25 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 344.5 9 14.0 9.9 210.00 207.17 29.23 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 27.16 19.2 27.16 40.9 325.0 20.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 257.3 16.9 12.5 356.3 20.0 226.34 34.80 25.8 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 253.95 46.78 1.26 46.8 1.26 46.8 1.5 22.5 37.3 280.00 27.3 16 49.82 37.78 -3.94 38.0 358.9 20.4 32.6 270.00 273.16 49.82 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 253.95 46.78 1.26 46.8 1.5 22.5 37.3 30.0 226.34 350.0 30.0 253.95 46.78 1.26 46.8 1.5 22.5 37.3 30.0 226.34 350.0 30.0 273.16 49.82 37.78 -3.94 38.0 354.1 19.0 19.3 30.0 30.0 373.16 49.82 37.78 -3.94 38.0 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 30.0 30.0 30.0 30.0 58.53 13.65 60.1 13.1 27.4 55.1 320.0 30.0 30.0 30.0 58.53 13.65 60.1 13.1 27.4 55.1 320.0 30.0 30.0 30.0 58.53 13.65 60.1 13.1 27.4 29.3 63.5 30.0 335.2 1 67.91 30.2 37.79 31.9 81.9 28.6 30.1 66.7 330.0 352.6 49 65.86 25.78 70.7 21.4 29.3 63.5 30.0 352.1 73.3 30.0 352.2 1 67.91 30.2 37.9 30.2 37.9 30.0 352.2 50.						331.4	7.4	
100.00 99.54 7.38 -3.98 8.4 331.7 8.1 331.8 9.0 333.6 120.00 119.29 10.24 -5.30 11.5 332.6 10.2 341.5 130.00 129.12 11.99 -5.86 13.3 334.0 10.8 342.5 140.00 138.93 13.85 -6.39 15.2 335.2 11.4 343.8 150.00 148.73 15.79 -6.87 17.2 336.5 11.7 349.6 160.00 158.51 17.84 -7.15 19.2 338.2 12.4 354.9 170.00 168.28 20.00 -7.29 21.3 340.0 12.5 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 <td></td> <td></td> <td></td> <td></td> <td></td> <td>331.5</td> <td>8.0</td> <td></td>						331.5	8.0	
110.00 109.43 8.69 -4.66 9.9 331.8 9.0 334.5 120.00 119.29 10.24 -5.30 11.5 332.6 10.2 341.5 130.00 129.12 11.99 -5.86 13.3 334.0 10.8 342.5 140.00 138.93 13.85 -6.39 15.2 335.2 11.4 343.8 150.00 148.73 15.79 -6.87 17.2 336.5 11.7 349.6 160.00 158.51 17.84 -7.15 19.2 336.2 12.4 354.9 170.00 168.28 20.00 -7.26 23.3 341.9 12.6 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 <td></td> <td>99.54</td> <td></td> <td></td> <td></td> <td>221 7</td> <td>8 1</td> <td></td>		99.54				221 7	8 1	
120.00 119.29 10.24 -5.30 11.5 332.6 10.2 341.5 130.00 129.12 11.99 -5.86 13.3 334.0 10.8 342.5 140.00 138.93 13.85 -6.39 15.2 335.2 11.4 343.8 150.00 156.51 17.84 -7.15 19.2 336.5 11.7 349.6 170.00 168.28 20.00 -7.29 21.3 340.0 12.5 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 227.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>331.8</td> <td>9.0</td> <td></td>						331.8	9.0	
130.00 129.12 11.99 -5.86 13.3 334.0 10.8 342.5 140.00 138.93 13.95 -6.39 15.2 335.2 11.4 343.8 150.00 158.51 17.84 -7.15 19.2 336.5 11.7 349.6 170.00 168.28 20.00 -7.26 23.3 340.0 12.5 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 <td></td> <td></td> <td></td> <td></td> <td></td> <td>332.6</td> <td>10.2</td> <td></td>						332.6	10.2	
140.00 138.93 13.85 -6.39 15.2 335.2 11.4 343.8 150.00 148.73 15.79 -6.87 17.2 336.5 11.7 349.6 160.00 158.51 17.84 -7.15 19.2 338.2 12.4 354.9 170.00 168.28 20.00 -7.29 21.3 340.0 12.5 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 <td></td> <td></td> <td></td> <td>-5.86</td> <td></td> <td></td> <td>10.8</td> <td>342.5</td>				-5.86			10.8	342.5
150.00 148.73 15.79 -6.87 17.2 336.5 11.7 349.6 160.00 158.51 17.84 -7.15 19.2 338.2 12.4 354.9 170.00 168.28 20.00 -7.29 21.3 340.0 12.5 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
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170.00 168.28 20.00 -7.29 21.3 340.0 12.5 356.6 180.00 178.04 22.18 -7.26 23.3 341.9 12.6 3.0 190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 225.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 280.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 291.19 55.76 9.98 56.6 10.1 27.1 55.1 <								354.9
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190.00 187.78 24.40 -7.05 25.4 343.9 13.1 6.5 200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 71.25.8 46.0				-7.26	23.3	341.9	12.6	3.0
200.00 197.50 26.73 -6.69 27.6 345.9 14.0 9.9 210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 310.00 300.77 58.53 13.65 60.1 13.1 27.4 45.1				-7.05	25.4	343.9	13.1	
210.00 207.17 29.23 -6.21 29.9 348.0 15.3 12.1 220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 310.00 300.07 58.53 13.65 60.1 13.1 27.4 55.1						345.9	14.0	9.9
220.00 216.79 31.91 -5.61 32.4 350.0 16.9 14.1 230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 310.00 300.07 58.53 13.65 60.1 13.1 27.4 55.1 320.00 308.94 61.15 17.45 63.6 15.9 28.1 56.3					29.9		15.3	12.1
230.00 226.34 34.78 -4.86 35.1 352.0 17.8 16.1 240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 310.00 300.07 58.53 13.65 60.1 13.1 27.4 55.1 320.00 317.76 63.57 21.48 67.1 18.7 28.3 60.7 340.00 326.49 65.86 25.78 70.7 21.4 29.3 65.6			31.91	-5.61	32.4	350.0	16.9	14.1
240.00 235.83 37.78 -3.94 38.0 354.1 19.0 19.3 250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 310.00 300.07 58.53 13.65 60.1 13.1 27.4 55.1 320.00 317.76 63.57 21.48 67.1 18.7 28.3 60.7 340.00 326.49 65.86 25.78 70.7 21.4 29.3 63.5 350.00 335.21 67.91 30.23 74.3 24.0 29.3 65.6				-4.86	35.1	352.0	17.8	16.1
250.00 245.25 40.85 -2.61 40.9 356.3 20.0 29.1 260.00 254.64 43.80 -0.85 43.8 358.9 20.4 32.6 270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 310.00 300.07 58.53 13.65 60.1 13.1 27.4 55.1 320.00 308.94 61.15 17.45 63.6 15.9 28.1 56.3 330.00 317.76 63.57 21.48 67.1 18.7 28.3 60.7 340.00 326.49 65.86 25.78 70.7 21.4 29.3 63.5 350.00 335.21 67.91 30.23 74.3 24.0 29.3 65.6		235.83	37.78	-3.94	38.0	354.1	19.0	
270.00 263.95 46.78 1.26 46.8 1.5 22.5 37.3 280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 310.00 300.07 58.53 13.65 60.1 13.1 27.4 55.1 320.00 308.94 61.15 17.45 63.6 15.9 28.1 56.3 330.00 317.76 63.57 21.48 67.1 18.7 28.3 60.7 340.00 326.49 65.86 25.78 70.7 21.4 29.3 63.5 350.00 343.93 69.93 34.69 78.1 26.4 29.3 66.1 360.00 343.93 69.93 34.69 78.1 26.4 29.3 65.6 370.00 352.63 71.95 39.19 81.9 28.6 30.1 66.7 <t< td=""><td></td><td></td><td></td><td>-2.61</td><td>40.9</td><td>356.3</td><td>20.0</td><td></td></t<>				-2.61	40.9	356.3	20.0	
280.00 273.16 49.82 3.70 50.0 4.3 24.1 40.6 290.00 282.23 52.87 6.61 53.3 7.1 25.8 46.0 300.00 291.19 55.76 9.98 56.6 10.1 27.1 52.9 310.00 300.07 58.53 13.65 60.1 13.1 27.4 55.1 320.00 308.94 61.15 17.45 63.6 15.9 28.1 56.3 330.00 317.76 63.57 21.48 67.1 18.7 28.3 60.7 340.00 326.49 65.86 25.78 70.7 21.4 29.3 63.5 350.00 335.21 67.91 30.23 74.3 24.0 29.3 66.1 360.00 343.93 69.93 34.69 78.1 26.4 29.3 65.6 370.00 352.63 71.95 39.19 81.9 28.6 30.1 66.7 380.00 361.25 73.77 43.92 85.9 30.8 31.0 71.4	260.00	254.64		-0.85		358.9		
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310.00 300.07 58.53 13.65 60.1 13.1 27.4 55.1 320.00 308.94 61.15 17.45 63.6 15.9 28.1 56.3 330.00 317.76 63.57 21.48 67.1 18.7 28.3 60.7 340.00 326.49 65.86 25.78 70.7 21.4 29.3 63.5 350.00 335.21 67.91 30.23 74.3 24.0 29.3 66.1 360.00 343.93 69.93 34.69 78.1 26.4 29.3 65.6 370.00 352.63 71.95 39.19 81.9 28.6 30.1 66.7 380.00 361.25 73.77 43.92 85.9 30.8 31.0 71.4 390.00 369.82 75.31 48.83 89.8 33.0 32.1 73.3 400.00 378.31 76.77 53.91 93.8 35.1 32.3 76.1 410.00 395.14 78.74 64.51 101.8 39.3 32.2 85.5 <td>290.00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	290.00							
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410.00 386.73 77.99 59.16 97.9 37.2 32.9 79.1 420.00 395.14 78.74 64.51 101.8 39.3 32.2 85.5 430.00 403.63 78.86 69.80 105.3 41.5 30.8 91.1 440.00 412.23 78.87 74.90 108.8 43.5 30.5 89.4 450.00 420.78 78.82 80.08 112.4 45.5 31.8 92.1 460.00 429.29 78.53 85.32 116.0 47.4 31.6 93.9 470.00 437.80 78.12 90.56 119.6 49.2 32.3 94.3 480.00 446.23 77.37 95.72 123.1 51.1 32.2 102.9								
420.00 395.14 78.74 64.51 101.8 39.3 32.2 85.5 430.00 403.63 78.86 69.80 105.3 41.5 30.8 91.1 440.00 412.23 78.87 74.90 108.8 43.5 30.5 89.4 450.00 420.78 78.82 80.08 112.4 45.5 31.8 92.1 460.00 429.29 78.53 85.32 116.0 47.4 31.6 93.9 470.00 437.80 78.12 90.56 119.6 49.2 32.3 94.3 480.00 446.23 77.37 95.72 123.1 51.1 32.2 102.9								
430.00 403.63 78.86 69.80 105.3 41.5 30.8 91.1 440.00 412.23 78.87 74.90 108.8 43.5 30.5 89.4 450.00 420.78 78.82 80.08 112.4 45.5 31.8 92.1 460.00 429.29 78.53 85.32 116.0 47.4 31.6 93.9 470.00 437.80 78.12 90.56 119.6 49.2 32.3 94.3 480.00 446.23 77.37 95.72 123.1 51.1 32.2 102.9								
440.00 412.23 78.87 74.90 108.8 43.5 30.5 89.4 450.00 420.78 78.82 80.08 112.4 45.5 31.8 92.1 460.00 429.29 78.53 85.32 116.0 47.4 31.6 93.9 470.00 437.80 78.12 90.56 119.6 49.2 32.3 94.3 480.00 446.23 77.37 95.72 123.1 51.1 32.2 102.9						39.3		
450.00 420.78 78.82 80.08 112.4 45.5 31.8 92.1 460.00 429.29 78.53 85.32 116.0 47.4 31.6 93.9 470.00 437.80 78.12 90.56 119.6 49.2 32.3 94.3 480.00 446.23 77.37 95.72 123.1 51.1 32.2 102.9								
460.00 429.29 78.53 85.32 116.0 47.4 31.6 93.9 470.00 437.80 78.12 90.56 119.6 49.2 32.3 94.3 480.00 446.23 77.37 95.72 123.1 51.1 32.2 102.9								
470.00 437.80 78.12 90.56 119.6 49.2 32.3 94.3 480.00 446.23 77.37 95.72 123.1 51.1 32.2 102.9								
480.00 446.23 77.37 95.72 123.1 51.1 32.2 102.9	-							
486.40 451.56 76.72 98.96 125.2 52.2 33.4 100.1								
	486.40	451.56	76.72	98.96	125.2	52.2	33.4	100.1





CLIENT: ELK VALLEY COAL CORPORATION LOCATION: FORDING RIVER OPERATIONS

HOLE ID: 2980

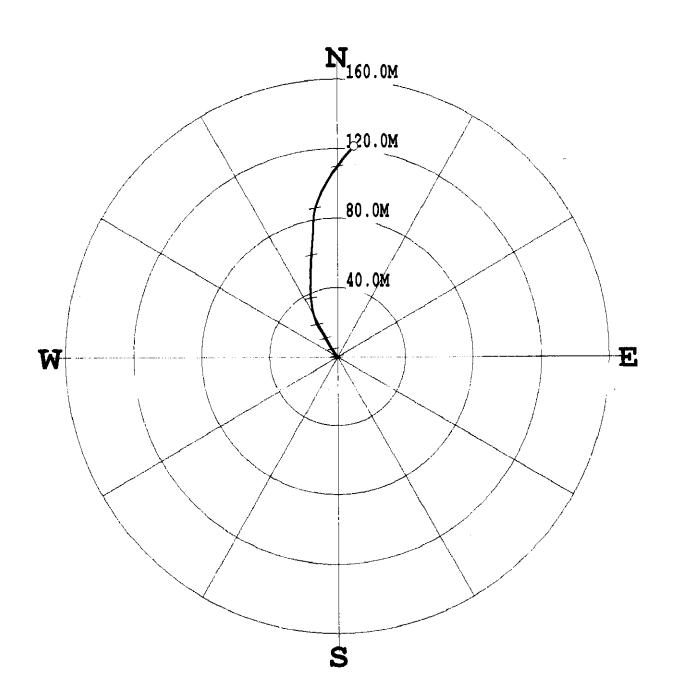
DATE OF LOG: 07/29/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 20 M/CM

TRUE DEPTH: 425.26 M

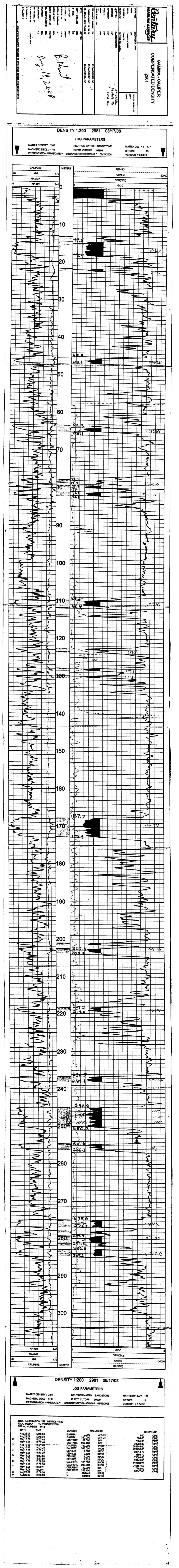
AZIMUTH: 4.7 DISTANCE: 121.6 M + = 50 M INCR○ = BOTTOM OF HOLE

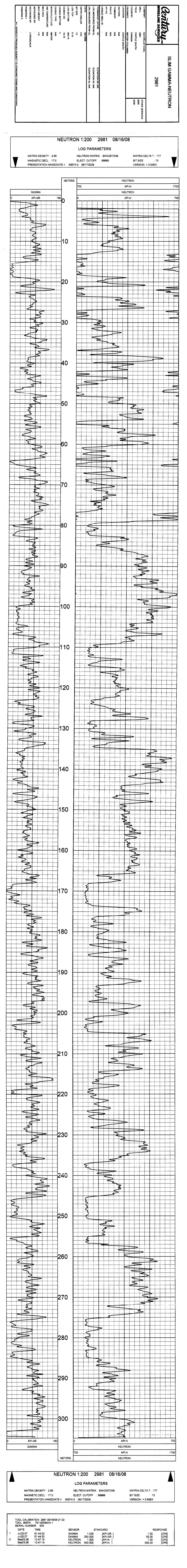


* * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL COR HOLE ID. : 2980
FIELD OFFICE : CENTURY GEO DATE OF LOG : 07/29/08
DATA FROM : N/A PROBE : 9055A , 72
MAG. DECL. : 17.000 DEPTH UNITS : METERS

MAG. DECL	MAG. DECL. : 17.000 DEPTH UNITS : METERS							
LOG: 2980	_07-29-08_20	-09_9055A0	2_1.2 1_45 3.	38_DEVI.lo	g			
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB	
10.00	9.99	-0.00	-0.02	0.0	266.4	0.6	126.3	
20.00	19.99	-0.03	0.06	0.1	115.7	0.4	73.9	
30.00	29.99	0.02	0.09	0.1	78.6	1.3	337.2	
40.00	39.98	0.30	-0.10	0.3	340.8	2.7	322.8	
50.00	49.97	0.69	-0.45	0.8	326.6	3.8		
60.00	59.94	1.17	-0.94	1.5	321.3			
70.00	69.91	1.77	-1.48	2.3	320.2	4.7		
80.00	79.86	2.54	-2.05	3.3	321.1	5.9		
90.00	89.81	3.42	-2.67	4.3	322.0			
100.00	99.74	4.40	-3.33	5.5	322.9	6.6		
110.00	109.64	5.54	-4.05	6.9	323.9	7.8		
120.00	119.54	6.77	-4.79	8.3	324.7	8.5		
130.00	129.42	8.08	-5.56	9.8	325.5	8.6		
140.00	139.30	9.42	-6.33	11.4	326 1	Ω Ω		
150.00	149.19	10.74	-7.11	12.9	326.5	9.0		
160.00	159.06	12.08	-7.90	14.4	326.8	9.7		
170.00	168.92	13.55	-8.76	16.1	326.5 326.8 327.1 327.2 327.0	10.0		
180.00	178.75	15.09	-9.74	18.0	327.2	10.8		
190.00	188.57	16.67	-10.81	19.9	327.0	11.4		
200.00	198.34	18.52	-11.82	22.0	327.4	13.1		
210.00	208.06	20.65	-12.83	24.3	328.2	14.2		
220.00	217.69	23.17	-13.70	26.9	328.2 329.4	16.5		
	227.23	26.07	-14.50	29.8	330.9	18.2		
230.00	236.70	29.24	-15.11	32.9	332.7	19.5		
240.00	246.10	32.60	-15.54	36.1	334.5	20.0		
250.00	255.42	36.20	-15.89	39.5	336.3	22.2	356.2	
260.00		40.14	-16.06	43.2	338.2	24.6		
270.00	264.61 273.60	44.52	-15.96	47.3	340.3	26.4	1.4	
280.00	282.51	49.06	-15.80	51.5	342.1	27.4	1.8	
290.00		53.76	-15.64	56.0	343.8	28.6	3.1	
300.00	291.33	58.62	-15.35	60.6	345.3	29.6	5.5	
310.00	300.07	63.56	-14.90	65.3	346.8	29.7	4.4	
320.00	308.75	68.45	-14.53	70.0	348.0	28.7	4.1	
330.00	317.46	73.19	-14.25	74.6	349.0	27.6	2.5	
340.00	326.27	77.83	-14.25	79.1	349.8	27.5	2.3	
350.00	335.12		-13.69	83.6	350.6	28.2	10.0	
360.00	343.98	82.45	-12.49	88.0	350.8	29.6	20.3	
370.00	352.76	87.08		92.3	353.3	29.5	19.1	
380.00	361.46	91.68	-10.74	92.3 96.5	354.9	29.5	29.0	
390.00	370.18	96.08	-8 .60		356.5	28.3	30.1	
400.00	378.97	100.17	-6.16	100.4		28.6	32.8	
410.00	387.78	104.19	-3.67	104.3	358.0	28.6 29.5	34.6	
420.00	396.54	108.21	-1.00	108.2	359.5	30.3	39.0	
430.00	405.20	112.22	2.00	112.2	1.0	30.3	40.1	
440.00	413.80	116.15	5.23	116.3	2.6	31.3	45.3	
450.00	422.36	119.96	8.74	120.3	4.2		45.3 45.9	
453.38	425.22	121.17	9.96	121.6	4.7	30.8	4 0.7	





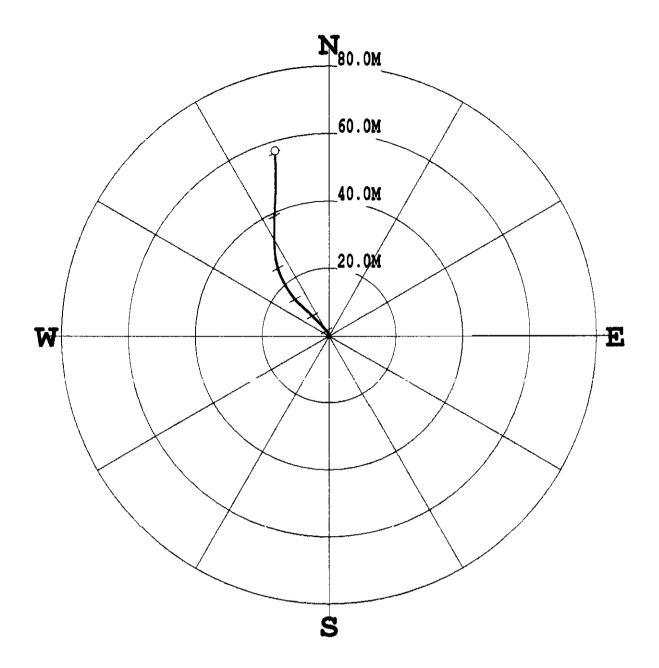
CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2981

DATE OF LOG: 08/17/08 PROBE: 9055A 72 MAG DECL: 17.0

SCALE: 10 M/CM TRUE DEPTH: 301.31 M AZIMUTH: 343.5 DISTANCE: 57.2 M

+ = 50 M INCR
○ = BOTTOM OF HOLE



* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2981

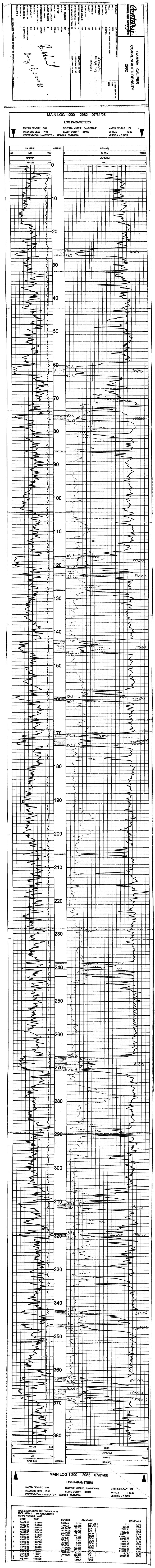
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/17/08

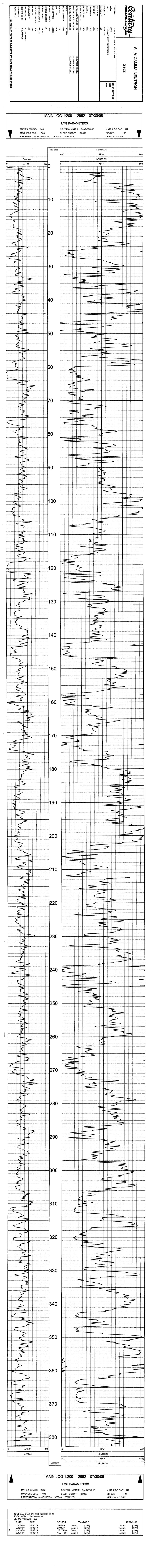
DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2981_08-17-08_13-19_9055A_.02_8.20_309.31_DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	A ZIMUTH	Sang Sangb
10.00	10.00	0.00	-0.00	0.0	354.4	0.6 347.4
20.00	20.00	0.18	-0.01	0.2	356.4	1.9 355.5
30.00	29.99	0.52	-0.12	0.5	347.2	2.6 328.6
40.00	39.98	0.99	-0.34	1.0	341.2	4.3 335.3
50.00	49.95	1.60	-0.74	1.8	335.1	4.7 319.7
60.00	59.91	2.26	-1.35	2.6	329.2	5.6 317.3
70.00	69.84	3.09	-2.14	3.8	325.3	7.3 316.4
80.00	79.75	4.05	-3.07	5.1	322.9	8.1 315.5
90.00	89.66	5.00	-4.03	6.4	321.2	7.9 314.4
100.00	99.57	5.95	-4.98	7.8	320.1	7.6 315.8
110.00	109.49	6.88	-5.88	9.0	319.5	7.7 312.7
120.00	119.40	7.76	-6.87	10.4	318.5	7.6 311.3
130.00	129.30	8.66	-7.90	11.7	317.6	8.0 311.4
140.00	139.20	9.59	-8.98	13.1	316.9	8.5 310.3
150.00	149.07	10.74	-10.07	14.7	316.8	8.9 317.2
160.00	158.92	12.09	-11.15	16.4	317.3	10.4 323.4
170.00	168.74	13.66	-12.23	18.3	318.1	10.4 318.1
180,00	178.53	15.39	-13.27	20.3	319.2	12.6 328.8
190.00	188.28	17.33	-14.31	22.5	320.4	12.9 334.9
200.00	198.01	19.50	-15.16	24.7	322.1	14.2 341.9
210.00	207.69	21.87	-15.80	27.0	324.1	15.9 348.4
220.00	217.31	24.59	-16.24	29.5	326.6	16.5 353.7
230.00	226.86	27.52	-16.39	32.0	329.2	17.9 357.9
240.00	236.35	30.67	-16.46	34.8	331.8	18.8 359.3
250.00	245.79	33.98	-16.43	37.7	334.2	19.5 1.9
260.00	255.19	37.38	-16.29	40.8	336.4	20.3 2.9
270.00	264.56	40.86	-16.13	43.9	338.5	20.3 2.6
280.00	273.93	44.35	-16.03	47.2	340.1	20.5 1.1
290.00	283.28	47.90	-15.99	50.5	341.5	21.4 359.0
300.00	292.60	51.51	-16.09	54.0	342.7	21.1 357.4
309.32	301.28	54.61	-16.20	57.2	343.5	20.3 358.4





CLIENT: ELK VALLEY COAL CORPORATION LOCATION: FORDING RIVER OPERATIONS

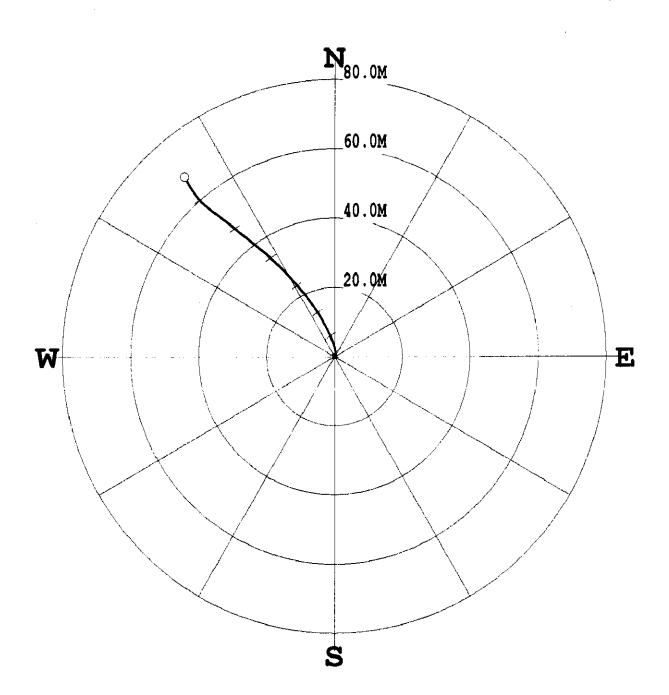
HOLE ID: 2982

DATE OF LOG: 07/31/08 PROBE: 9055A 72

MAG DECL: 17.0

SCALE: 10 M/CM TRUE DEPTH: 375.51 M AZIMUTH: 319.6

AZIMUTH: 319.6
DISTANCE: 68.0 M
+ = 50 M INCR
= BOTTOM OF HOLE



* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL COR HOLE ID. : 2982

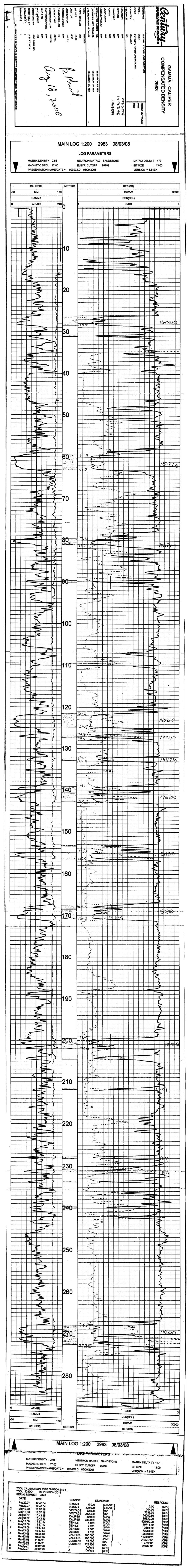
FIELD OFFICE : CENTURY GEO DATE OF LOG : 07/31/08

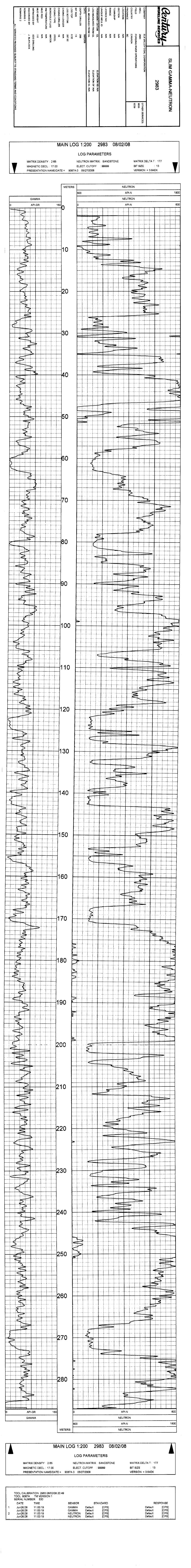
DATA FROM : N/A PROBE : 9055A , 72

MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2982_07-31-08_16-45_9055A_.02_1.38_383.31_DEVI.log

TOG: 2982	_0/-31-08_16	-45_9055A0	2_1.38_383.	31_DEAT : 10	g		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S.	ANGB
10.00	10.00	0.08	0.01	0.1	10.4	1.3	21.6
20.00	20.00	0.22	0.06	0.2	14.2	1.6	
30.00	30.00	0.41	0.11	0.4	14.9	1.5	19.5
40.00	39.99	0.79	0.21	0.8	15.1	2.8	9.5
50.00	49.97	1.36	0.20	1.4	15.1 8.3 2.5	2.8 4.5	0.7
60.00	59.94	2.05	0.09	2.1	2.5	4.2	349.3
70.00	69.91	2.84	~0.10	2.8	358.1	6.2	
90.00	79.86	3.83	-0.40	3.8	354.0	5.2	341.3
90.00	89.79	4.90	-0.80	5.0	350.7 348.3	6.8	
100.00	99.71	6.04	-1.26	6.2	348.3	7.1	
110.00	109.63	7.23	-1.78	7.4	346.1	7.7	
120.00	119.53	8.47	-2.41	8.8	344.1	8.2	
130.00	129.42	9.78	-3.14	10.3	342.2	8.6	338.3
140.00	139.27	11.26	-3.95	11.9	340.7 339.0	10.0	327.6
150.00	149.12	12.74	-4.88	13.6	339.0	10.7	328.1
160.00	158.94	14.28	-5.99	15.5	337.2	11.3	323.0
170.00	168.74	15.85	-7.16	17.4	335.7	11.0	
180.00	178.56	17.38	-8.31	19.3	334.4	11.0	322.7
190.00	188.38	18.86	-8.31 -9.50 -10.78	21.1	333.3	11.5	
200.00	198.18	20.34	-10.78	23.0	332.1	11.4	
210.00	207.96	21.68	-12.13	25.0	331.0	12.0	
220.00	217.74	23.44	-13.58	27.1	329.9		
230.00	227.51	24.95	-15.07	29.2	328.9		313.1
240.00	237.26	26.48	-16.66	31.3	327.8		
250.00	247.00	28.04	-18.31	33.5	326.9	13.2	313.4
260.00	256.71	29.63	-20.08	35.8	325.9	14.6	
270.00	266.36	31.23	-22.14	38.3	324.7		
280.00	276.01	32.86	-24.20	40.8	323.6		308.8
290.00	285.65	34.51	-26.28	43.4	322.7		308.8
300.00	29 5.31	36.13	-28.32	45.9	321.9	14.8	306.6
310.00	304.97	37.73	-30.34	48.4	321.2	14.8	
320.00	314.64	39.27	-32.38	50.9	320.5		
330.00	324.30	40.81	-34.44	53.4	319.8	14.6	307.3
340.00	333.97	42.35	-36.47	55.9	319.3	14.7	306.3
350.00	343.64	43.94	-38.47	58.4	318.8	15.0	311.2
360.00	353.27	45.90	-40.31	61.1	318.7	16.9	322.7
370.00	362.84	48.25	-42.04	64.0	318.9	17.0	324.8
380.00	372.35	50.87	-43.63	67.0	319.4	18.4	
383.32	375.47	51.79	-44.10	68.0	319.6	18.7	334.3





CLIENT: ELK VALLEY COAL CORPORATION

LOCATION: FORDING RIVER OPERATIONS

HOLE ID: 2983

DATE OF LOG: 08/03/08

PROBE: 9055A 72

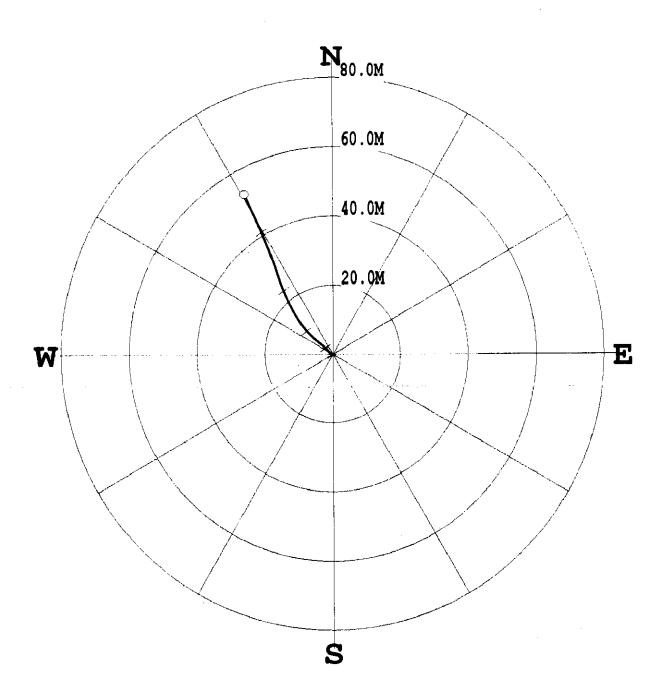
4

MAG DECL: 17.0

SCALE: 10 M/CM TRUE DEPTH: 279.60 M

AZIMUTH: 330.7 DISTANCE: 53.0 M + = 50 M INCR

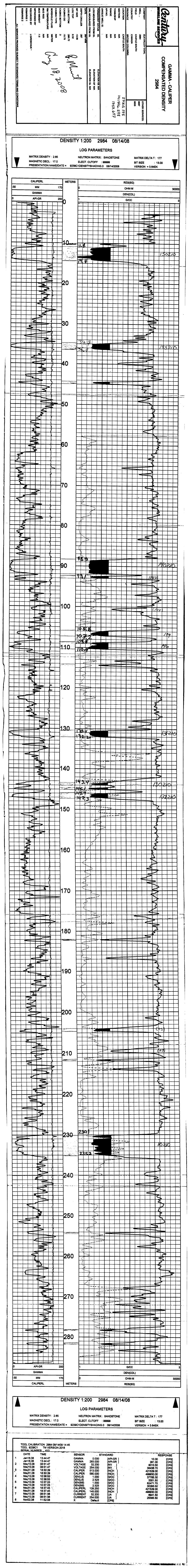
○ = BOTTOM OF HOLE

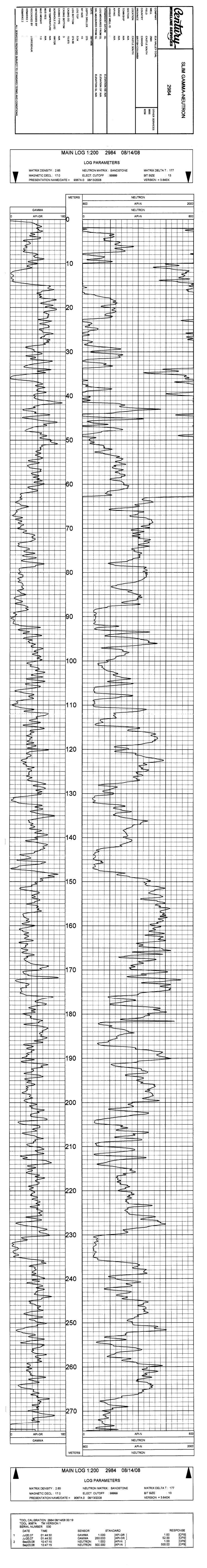


* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL COR HOLE ID. : 2983
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/03/08
DATA FROM : N/A PROBE : 9055A , 72
MAG. DECL. : 17.000 DEPTH UNITS : METERS
LOG: 2983 08-03-08 20-42 9055A .02 1.34 287.69 DEVI.log

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	angb
10.00	10.00	0.02	-0.01	0.0	321.3	0.3	322.0
20.00	20.00	0.02	-0.01	0.0	317.2	0.6	227.9
30.00	30.00	-0.04	-0.06	0.1	231.2	0.6	215.4
40.00	40.00	-0.09	-0.09	0.1	223.3	0.4	183.7
50.00	50.00	-0.16	-0.09	0.2	210.0	0.4	196.2
60.00	60.00	-0.15	-0.20		233.7	1.4	300.5
70.00	69.99	0.06	-0.48	0.5	276.9	3.2	314.5
80.00	79.97	0.50	~0.91	1.0	298.5	4.0	319.8
90.00	89.94	1.10	-1.44	1.8	307.2	5.5	317.7
100.00	99.89	1.81	-2.1 4	2.8	310.2	6.1	314.5
110.00	109.83	2.54	-2.94	3.9	310.8	6.5	309.2
120.00	119.75	3.30	-3.92	5.1	310.1	7.7	307.4
130.00	129.64	4.21	-5.05	6.6	309.8	9.0	306.0
140.00	139.51	5.27	-6.26	8.2	310.1	9.9	313.5
150.00	149.32	6.59	-7.58	10.0	311.0	11.6	314.8
160.00	159.10	8.17	-8.92	12.1	312.5	12.8	322.5
170.00	168.81	10.17	-10.23	14.4	314.8	14.6	328.1
180.00	178.45	12.45	-11.57	17.0	317.1	16.0	330.7
190.00	188.04	14.97	-12.89	19.8	319.3	16.8	333.5
200.00	197.58	17.66		22.6	321.3	17.5	336.8
210.00	207.10	20.49		25.6	323.2	18.0	339.9
220.00	216.57	23.54	-16.36	28.7	325.2	19.7	340.9
230.00	225.97	26.76	-17.47	32.0	326.9	20.2	340.4
240.00	235.33	30.05	-18.71	35.4	328.1	21.0	338.5
250.00	244.66	33.40	-20.08	39.0	329.0	21.0	336.0
260.00	253.98	36.71	-21.54	42.6	329.6	21.4	335.6
270.00	263.26	40.09		46.3	330.1	22.1	335.0
280.00	272.50	43.57			330.5	22.4	334.9
287.70	279.56	46.26	-25.94	53.0	330.7	22.9	335.1





CLIENT: ELK VALLEY COAL LOCATION: CASTLE SOUTH

HOLE ID: 2984

DATE OF LOG: 08/14/08 PROBE: 9055A 72 **A**

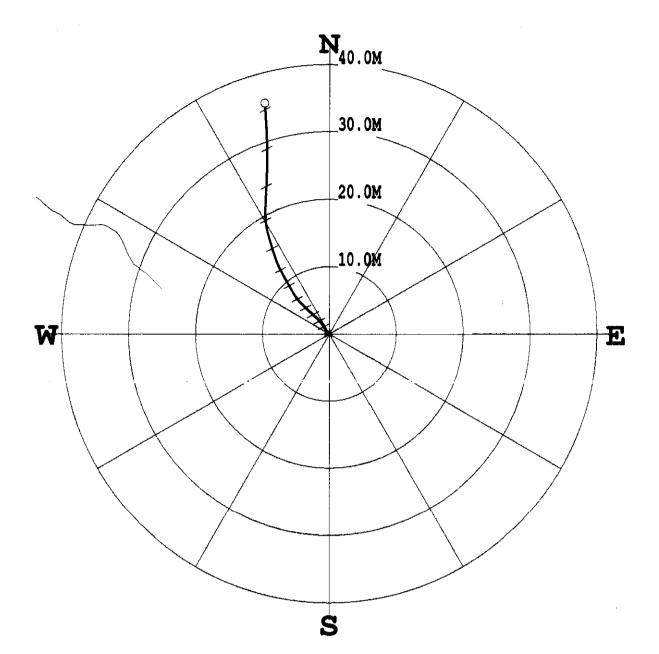
MAG DECL: 17.0

SCALE: 5 M/CM

TRUE DEPTH: 283.19 M

AZIMUTH: 344.2
DISTANCE: 35.6 M
+ = 20 M INCR

= BOTTOM OF HOLE

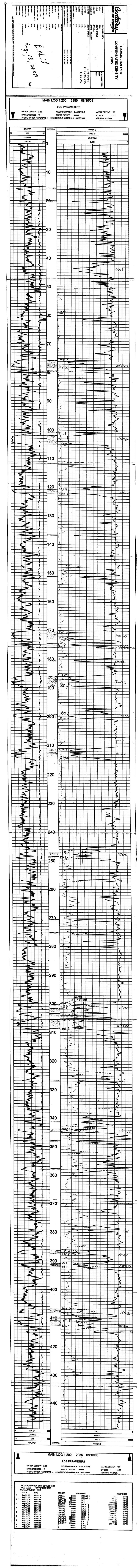


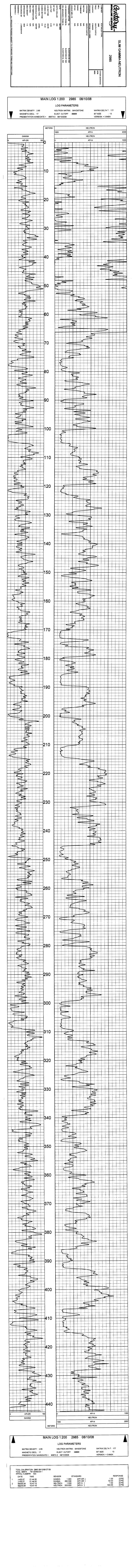
* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2984
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/14/08
DATA FROM : N/A PROBE : 9055A ,
MAG. DECL. : 17.000 DEPTH UNITS : METERS
LOG: 2984_08-14-08_13-51_9055A_.02_8.24_286.86_DEVI.log

	_				-		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG :	BANGB
10.00	10.00	0.00	-0.00	0.0	297.2	0.4	323.9
20.00	20.00	0.05	0.01	0.1	11.8	0.2	332.7
30.00	30.00	0.12	-0.05	0.1	336.3	0.9	298.7
40.00	39.99	0.32	-0.27	0.4	320.0	2.5	313.4
50.00	49.98	0.67	-0.57	0.9	319.5	2.4	320.9
60.00	59.97	1.08	-0.85	1.4	321.8	2.9	329.3
70.00	69.96	1.51	-1.15	1.9	322.7	3.3	327.3
80.00	79.94	1.94	-1.48	2.4	322.6	3.4	319.6
90.00	89.92	2.39	-1.92	3.1	321.2	4.1	313.2
100.00	99.90	2.87	-2.43	3.8	319.7	4.1	312.0
110.00	109.87	3.36	-2.97	4.5	318.5	4.3	311.4
120.00	119.84	3.67	-3.53	5.2	317.7	4.3	293.4
130.00	129.81	4.44	-4.11	6.1	317.2	5.0	313.9
140.00	139.76	5.15	-4.76	7.0	317.3	6.2	318.6
150.00	149.69	6.09	-5.39	8.1	318.5	6.8	329.6
160.00	159.62	7.11	-5.98	9.3	319.9	6.8	330.1
170.00	169.55	8.18	-6.60	10.5	321.1	7.4	330.0
180.00	179.45	9.41	-7.27	11.9	322.3	8.6	331.4
190.00	189.32	10.87	-7.93	13.5	323.9	9.8	341.9
200.00	199.16	12.55	-8.49	15.2	325.9	10.8	341.8
210.00	208.96	14.44	-9.06	17.0	327.9	11.8	344.5
220.00	218.73	16.54	-9.51	19.1	330.1	13.3	353.4
230.00	228.44	18.91	-9.59	21.2	333.1	14.4	1.8
240.00	238.12	21.41	-9.47	23.4	336.1	14.8	2.3
250.00	247.78	24.02	-9.37	25.8	338.7	15.4	0.8
260.00	257.41	26.72	-9.34	28.3	340.7	15.9	0.1
270.00	267.01	29.50	-9.40	31.0	342.3	16.3	357.5
280.00	276.60	32.31	-9.55	33.7	343.5	15.9	356.6
286.86	283.16	34.20	-9.68	35.5	344.2	16.3	355.6

72





CLIENT: ELK VALLEY COAL LOCATION: SOUTH CASTLE

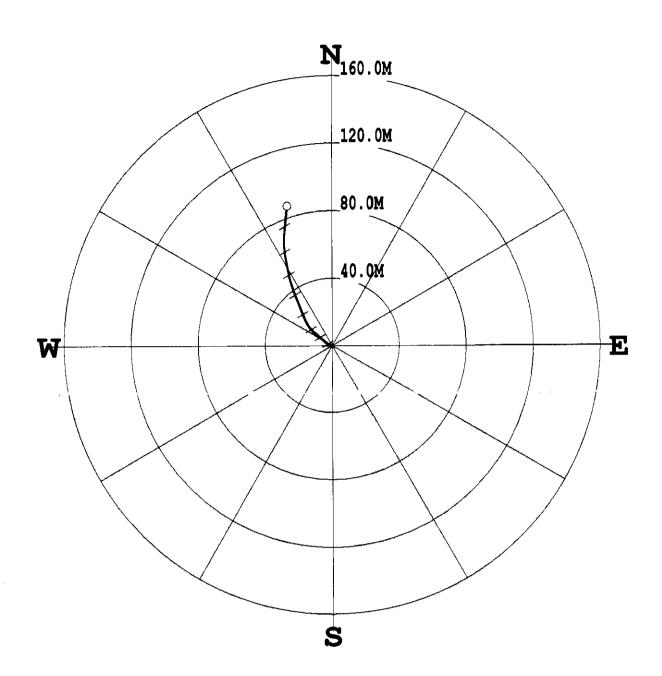
HOLE ID: 2985

DATE OF LOG: 08/10/08 PROBE: 9055A

MAG DECL: 17.0

SCALE: 20 M/CM TRUE DEPTH: 438.07 M AZIMUTH: 342.1 DISTANCE: 86.7 M

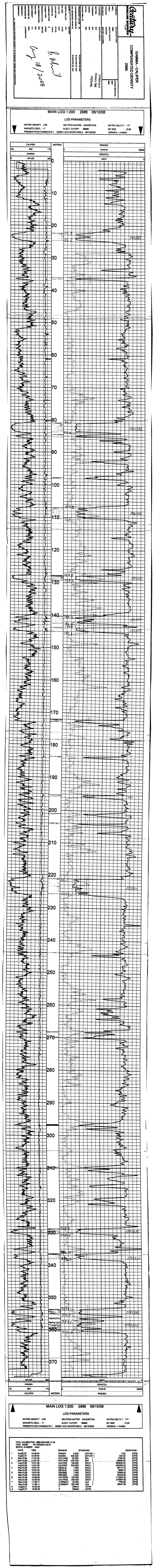
+ = 50 M INCR○ = BOTTOM OF HOLE

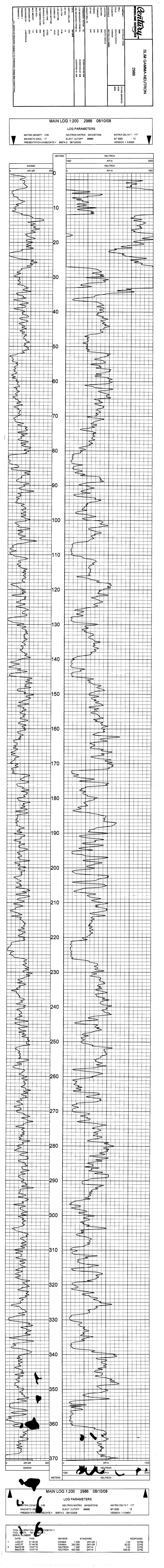


* * * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2985
FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/10/08
DATA FROM : N/A PROBE : 9055A ,
MAG. DECL. : 17.000 DEPTH UNITS : METERS
TOG: 2985 08-10-08 18-01 9055A .02 8.18 449.20 DEVI.log 72

LOG: 2985	_08-10-08_18	-01_9055 x 0	2_8.18 _44 9.	20_DEVI.10	g		
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG S	ANGB
10.00	10.00	-0.01	-0.01	0.0	235.1	1.4	245.6
20.00	19.99	-0.08	-0.32	0.3	255.4	2.0	256.3
30.00	29.98	0.08	-0.85	0.9		4.4	
40.00	39.94	0.45	-1.59	1.7	295.8	4.6	
50.00	49.89	0.94	-2.42	2.6	291.2	5.9	
60.00	59.84	1.52	-3.24	3.6	295.2	5.6	305.3
70.00	69.78	2.17	-4.08	4.6	298.0	6.9	
80.00	79.70	2.97	-5.0 4	5.8	300.5	7.6	
90.00	89.61	3.86	-6.09	7.2	302.3	7.7	
100.00	99.51	4.74	-7.09	8.5	303.7	8.0	
110.00	109.43	5.60	-8.10	9.8	304.7	7.6	
120.00	119.34	6.45	-9.10 -10.12	11.2 12.5	305.3	7.4	
130.00	129.25	7.26	-10.12	12.5	305.6	7.5 8.7	
140.00	139.15	8.20	-11.18	13.9 15.4	306.2	9.2	
150.00	149.03	9.29	-12.32 -13.42	15.4 17.1	307.0	10.5	322.0
160.00	158.67	10.60 12.17	-13.42 -14.46	18.9	306.3	11.3	329.0
170.00	168.68	13.94	-15.44	20.8	275.5 285.8 291.2 295.2 298.0 300.5 302.3 305.3 305.6 306.2 307.0 312.1 314.2 316.2 318.0	12.1	
180.00	178.47 188.24	15.88	-16.33	22.8	314.2	12.6	
190.00 200.00	197.98	17.95	-17.24		316.2	13.7	
210.00	207.69	20.16	-18.15	27.1	318.0	14.0	
220.00	217.38	22.45	-18.15 -19.05	29.4	318.0 319.7	14.1	
230.00	227.08	24.71	-19.93	31.7	321.1	14.2	
240.00	236.79	26.93	-20.84	34.1	321.1 322.3	13.9	
250.00	246.50	29.13	-21.73	36.3	323.3	13.6	338.2
260.00	256.21	31.40	-22.58	38.7	323.3 324.3	14.1	
270.00	265.91	33.68	-23.36		325.3 326.2	13.7	
280.00	275.62	35.95	-24.10	43.3	326.2	13.6	
290.00	285.33	38.26	-24.81	45.6	327.0	14.1	
300.00	295.02	40.63	-25.43	47.9	328.0	14.2	
310.00	304.71	43.04	-25.43 -25.95	50.3	326.2 327.0 328.0 328.9 329.9 330.8	14.7	
320.00	314.37	45.57	-26.44	52.7	329.9	15.0	
330.00	324.02	48.17	-26.92	55.2	330.8	15.4	
340.00	333.66	50.77	-27.43 -27.93	57.7	331.6 332.4	15.5	
350.00	343.29	53.43	-27.93	60.3	332.4	15.9 16.3	
360.00	352.90	56.18	-28.30	62.9 65.5	333.3	16.5	
370.00	362.49	58.99	-28.51	68.2	334.2	17.3	
380.00	372.06	61.88	-28.64 -28.52			17.5	4.0
390.00	381.62	64.83 67.83	-28.52 -28.27		330.3	17.4	
400.00	391.15 400.70	70.78	-27.95		337.4 338.5	17.0	6.0
410.00 420.00	410.26	70.76 73.69		78.7	339.4	17.3	
430.00	419.81		-27.34	81.4			
440.00	429.33	76.65 79.70	-27.04	84.2		18.2	
449.20	438.03	82.52	-26.64	86.7	342.1	18.0	9.3
777.47	430.03	42.32	#4+4#				





CLIENT: ELK VALLEY COAL LOCATION: SOUTH CASTLE

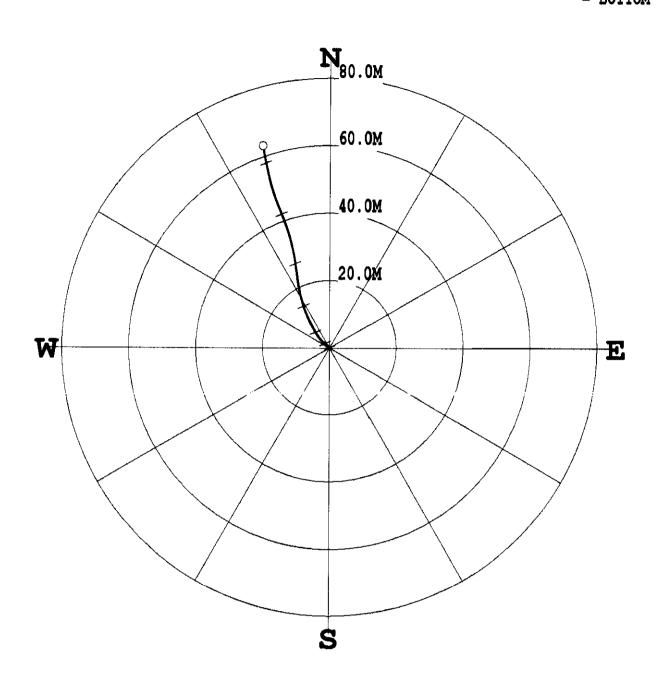
HOLE ID: 2986

DATE OF LOG: 08/10/08 PROBE: 9055A 72 MAG DECL: 17.0

SCALE: 10 M/CM
TRUE DEPTH: 366.73 M
AZIMUTH: 341 5

AZIMUTH: 341.5
DISTANCE: 63.1 M
+ = 50 M INCR

= BOTTOM OF HOLE



72

* * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * *

CLIENT : ELK VALLEY COAL HOLE ID. : 2986

FIELD OFFICE : CENTURY GEO DATE OF LOG : 08/10/08

DATA FROM : N/A PROBE : 9055A

MAG. DECL. : 17.000 DEPTH UNITS : METERS

LOG: 2986_08-10-08_13-11_9055A_.02_8.32_374.88_DEVI.log

					'	
CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG SANGB
10.00	10.00	0.00	-0.00	0.0	284.0	0.2 327.6
20.00	20.00	-0.03	0.02	0.0	145.6	0.5 120.9
30.00	30.00	-0.08	0.07	0.1	138.1	0.4 118.3
40.00	40.00	-0.04	0.10	0.1	113.4	0.3 36.2
50.00	50.00	0.05	0.09	0.1	62.1	0.3 5.8
60.00	60.00	0.19	-0.00	0.2	358.9	1.3 318.3
70.00	69.99	0.38	-0.20	0.4	332.4	1.7 306.0
80.00	79.98	0.64	-0.52	0.8	321.3 318.9 315.8	2.5 332.6
90.00	89.97	0.98	-0.86	1.3	318.9	2.8 308.4
100.00	99.96	1.33	-1.29	1.9	315.8	3.7 309.4
110.00	109.93	1.74	-1.80	2.5	314.0	
120.00	119.91	2.24	-2.36	3.3	313.5	4.6 315.1
130.00	129.87	2.86	-2.92	4.1	314.4	6.1 318.3
140.00	139.82	3.70	-3.54	5.1	316.3 318.6	6.4 326.0
150.00	149.75	4.70	-4.14	6.3	318.6	7.0 330.5
160.00	159.65	5.87	-4.81	7.6	320.7	
170.00	169.54	7.18	-5.54	9.1	322.4	9.0 330.9
180.00	179.41	8.63	-6.29	10.7	323.9	9.9 334.7
190.00	189.24	10.31	-7.01	12.5	325.8	11.3 335.8
200.00	199.03	12.19	-7.69		327.8	15.3 339.3
210.00	208.81	14.21	-8.31	16.5	329.7	12.8 343.1
220.00	218.52	16.49	-8.92	18.8	331.6	
230.00	228.19	19.00	-9.41	21.2	333.7	15.0 351.4
240.00	237.84	21.61	-9.78	23.7	335.6	15.6 352.1
250.00	247.47	24.28	-10.17	26.3	337.3	15.8 352.1
260.00	257.08	27.02	-10.59	29.0	338.6	16.5 349.8
270.00	266.65	29.83	-11.19	31.9	339.4	16.7 346.5
280.00	276.23	32.62	-11.91	34.7	339.9	
290.00	285.79	35.40	-12.80	37.6	340.1	16.8 341.1
300.00	295.33	38.21	-13.85	40.6	340.1	17.6 339.2
310.00	304.84	41.07	-15.02	43.7	339.9	17.7 336.8
320.00	314.34	43.97	-16.17	46.9	339.8	18.3 338.8
330.00	323.86	46.88	-17.16	49.9	339.9	17.7 342.4
340.00	333.39	49.81	-17.97		340.2	17.7 345.5
350.00	342.93	52.71	-18.67	55.9	340.5	17.0 346.7
360.00	352.50	55.55	-19.28	58.8	340.9	17.1 347.8
370.00	362.06	58.43	-19.81	61.7	341.3	16.9 351.1
374.88	366.69	59.83	-20.02	63.1	341.5	16.9 351.7